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9 a.m.-12:30 p.m.

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Washington, DC 20002

RESERVATIONS: (202) 741-6008



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OFFICE OF GOVERNMENT ETHICS

5 CFR Part 2641

RIN 3209-AA14

Post-Employment Conflict of Interest Regulations; Exempted Senior Employee Positions

AGENCY: Office of Government Ethics (OGE).

ACTION: Final rule; revocation of exemptions.

SUMMARY: The Office of Government Ethics is issuing this final rule to provide notice of the revocation of certain regulatory exemptions of senior employee positions at the Securities and Exchange Commission from the one-year post-employment restrictions of 18 U.S.C. 207(c) and (f).

DATES: *Effective Date:* This action will be effective without further notice on January 2, 2014. The removal of the listing for the Securities and Exchange Commission (and all positions thereunder) from Appendix A to part 2641 of title 5 is effective January 2, 2014.

FOR FURTHER INFORMATION CONTACT: Christopher J. Swartz, Assistant Counsel, Ethics Law & Policy Branch, Office of Government Ethics; telephone: 202-482-9300; TTY: 800-877-8339; FAX: 202-482-9237.

SUPPLEMENTARY INFORMATION:

I. Substantive Discussion: Revocation of Exemptions for Certain Positions

18 U.S.C. 207(c) prohibits a former “senior employee” for a period of one year from knowingly making, with the intent to influence, any communication to or appearance before an employee of the department or agency in which he served in any capacity during the one-year period prior to termination from senior service, if that communication or appearance is made on behalf of any

other person, except the United States. For purposes of 18 U.S.C. 207(c), a “senior employee” includes, *inter alia*, any employee (other than an individual covered by the “very senior employee” one-year restriction in 18 U.S.C. 207(d)) who was employed in a position for which the rate of pay is specified in or fixed according to the Executive Schedule, in a position for which the rate of basic pay is equal to or greater than 86.5 percent of the rate of basic pay payable for level II of the Executive Schedule, or in a position which is held by an active duty commissioned officer of the uniformed services who is serving in a grade or rank for which the pay grade is O-7 or above.

The representational bar of 18 U.S.C. 207(c) usually applies to all senior positions. However, 18 U.S.C. 207(c)(2)(C) provides that the Director of OGE may exempt any position or category of positions from the one-year prohibition under 18 U.S.C. 207(c) (and consequently the prohibition of 18 U.S.C. 207(f)), if the Director determines, after a review requested by the department or agency concerned, that the imposition of the restrictions with respect to the particular position or positions would create an undue hardship on the department or agency in obtaining qualified personnel to fill such position or positions, and that granting the waiver would not create the potential for use of undue influence or unfair advantage.

The Director of OGE regularly reviews these position exemptions and, in consultation with the department or agency concerned, makes such additions and deletions as are necessary. As specified in 5 CFR 2641.301(j)(3)(ii), the Director must respond to exemption and revocation requests from agency ethics officials and maintain a compilation of all exempted positions or categories of positions. Once an exemption has been granted, the Designated Agency Ethics Official at the relevant agency may, at any time, request that the exemption be revoked. See 5 CFR 2641.301(j)(3)(i). Under 5 CFR 2641.301(j)(4), the revocation of a waiver becomes effective 90 days after OGE has published notice of the revocation in the **Federal Register**. If a revocation is granted, all employees occupying positions covered by the exemption will become subject to the prohibitions of 18 U.S.C. 207(c) and (f)

as of the effective date. However, any “[i]ndividual who formerly served in a position for which a waiver of restrictions was applicable will not become subject to 18 U.S.C. 207(c) (or section 207(f)) if the waiver is revoked *after* [the employee’s] termination from the position.” See 5 CFR 2641.301(j)(4) (emphasis added).

In 1991, the Securities and Exchange Commission (SEC) requested, and was granted, exemptions for the positions of Solicitor, Office of the General Counsel and Chief Litigation Counsel, Division of Enforcement. In 2003, the SEC requested and was granted additional exemptions for the position of Deputy Chief Litigation Counsel, Division of Enforcement, SK-17 Positions, SK-16 and lower-graded SK positions supervised by employees in SK-17 positions, and SK-16 and lower-graded SK positions not supervised by employees in SK-17 positions. These exemptions were predicated on recruitment and retention considerations resulting from the implementation of a new pay system that converted many GS-15 positions into “senior employee” positions above the statutory pay threshold.

Pursuant to the procedures prescribed in 5 CFR 2641.301(j), the SEC has now requested that the Director of OGE revoke the exemptions for these positions. In support of its request, the SEC explains that the original bases for these exemptions no longer exist. In particular, the SEC states that it is no longer experiencing undue hardship in obtaining qualified personnel to fill the covered positions. Furthermore, the SEC states that discontinuing the exemptions will create parity between SEC employees occupying the covered positions and employees in similar positions at other financial regulatory agencies who are currently subject to the one year cooling-off prohibitions of 18 U.S.C. 207(c) and (f). For these reasons, the SEC no longer believes these exemptions are necessary or desirable. Therefore, pursuant to 5 CFR 2641.301(j), OGE hereby gives notice that the above-referenced post-employment exemptions, granted on October 29, 1991; November 10, 2003; and December 4, 2003, respectively, will expire and are revoked effective on January 2, 2014. As of the effective date, a person occupying any one of these positions will become subject to the

post-employment restrictions of 18 U.S.C. 207(c) and (f) if the rate of basic pay for the position is equal to or greater than 86.5 percent of the rate of basic pay payable for level II of the Executive Schedule.

As stated in 5 CFR 2641.301(j)(3)(ii), the Director of OGE is required to “maintain a listing of positions or categories of positions in Appendix A to [5 CFR part 2641] for which the 18 U.S.C. 207(c) restriction has been waived.” As such, Appendix A of this part is being amended to remove references to those SEC positions that are no longer exempt from the restrictions of 18 U.S.C. 207(c) and (f). These positions include: Solicitor, Office of General Counsel; Chief Litigation Counsel, Division of Enforcement; Deputy Chief Litigation Counsel, Division of Enforcement; SK–17 Positions; SK–16 and lower-graded SK positions supervised by employees in SK–17 positions; and SK–16 and lower-graded SK positions not supervised by employees in SK–17 positions.

I. Matters of Regulatory Procedure

Administrative Procedure Act

Under 5 U.S.C. 553(a)(2), rules relating to agency management or personnel are exempt from the notice and comment rulemaking requirements of the Administrative Procedure Act (APA). Further, under 5 U.S.C. 553(b)(3)(A), notice and comment rulemaking requirements do not apply to rules concerning matters of agency organization, procedure, or practice. Given that this rule concerns matters of agency management or personnel, and organization, procedure, or practice, the notice and comment requirements of the APA do not apply here. Even if this rulemaking were subject to APA proposed rulemaking procedures, OGE finds good cause pursuant to 5 U.S.C. 553(b)(3)(B), to waive the notice and comment requirements of the APA. The codification of OGE’s revocation of exempted positions is technical in nature, and it is important and in the public interest that the codification of OGE’s revocation of exempted positions be published in the **Federal Register** as promptly as possible. For these reasons, OGE is issuing this regulation as a final rule effective 90 days after publication.

Regulatory Flexibility Act

As Director of the Office of Government Ethics, I certify under the Regulatory Flexibility Act (5 U.S.C. chapter 6) that this final rule would not have a significant economic impact on a substantial number of small entities

because it primarily affects current and former Federal executive branch employees.

Paperwork Reduction Act

The Paperwork Reduction Act (44 U.S.C. chapter 35) does not apply because this regulation does not contain information collection requirements that require approval of the Office of Management and Budget.

Unfunded Mandates Reform Act

For purposes of the Unfunded Mandates Reform Act of 1995 (2 U.S.C. chapter 5, subchapter II), this final rule would not significantly or uniquely affect small governments and will not result in increased expenditures by State, local, and tribal governments, in the aggregate, or by the private sector, of \$100 million or more (as adjusted for inflation) in any one year.

Executive Order 12866

In promulgating this final rule, the Office of Government Ethics has adhered to the regulatory philosophy and the applicable principles of regulation set forth in section 1 of Executive Order 12866, Regulatory Planning and Review. This rule has not been reviewed by the Office of Management and Budget under that Executive order since it deals with agency organization, management, and personnel matters and is not “significant” under the order.

Executive Order 12988

As Director of the Office of Government Ethics, I have reviewed this final rule in light of section 3 of Executive Order 12988, Civil Justice Reform, and certify that it meets the applicable standards provided therein.

List of Subjects in 5 CFR Part 2641

Conflict of interests, Government employees.

Approved: September 19, 2013.

Walter M. Shaub, Jr.,

Director, Office of Government Ethics.

Accordingly, for the reasons set forth in the preamble, the Office of Government Ethics is amending part 2641 of subchapter B of chapter XVI of title 5 of the Code of Federal Regulations as follows:

PART 2641—POST-EMPLOYMENT CONFLICT OF INTEREST RESTRICTIONS

■ 1. The authority citation for part 2641 continues to read as follows:

Authority: 5 U.S.C. App. (Ethics in Government Act of 1978); 18 U.S.C. 207; E.O. 12674, 54 FR 15159, 3 CFR, 1989 Comp., p.

215, as modified by E.O. 12731, 55 FR 42547, 3 CFR, 1990 Comp., p. 306.

■ 2. Effective January 2, 2014, Appendix A to part 2641 is amended by removing the listing for the Securities and Exchange Commission (and all positions thereunder).

[FR Doc. 2013–23346 Filed 10–2–13; 8:45 am]

BILLING CODE 6345–03–P

DEPARTMENT OF AGRICULTURE

Agricultural Marketing Service

7 CFR Part 205

[Document Number AMS–NOP–11–0003; NOP–10–13FR]

RIN 0581–AD13

National Organic Program (NOP); Sunset Review (2013)

AGENCY: Agricultural Marketing Service, USDA.

ACTION: Final rule.

SUMMARY: This final rule addresses recommendations submitted to the Secretary of Agriculture (Secretary) by the National Organic Standards Board (NOSB) following their November 2011 and May 2012 meetings. These recommendations pertain to the 2013 Sunset Review of substances on the U.S. Department of Agriculture’s (USDA) National List of Allowed and Prohibited Substances (National List). Consistent with the recommendations from the NOSB, this final rule continues the allowed uses of multiple synthetic and nonsynthetic substances and the prohibition of one nonsynthetic substance on the National List (along with any restrictive annotations). This rule also removes one synthetic substance from the National List.

DATES: This rule is effective November 3, 2013.

FOR FURTHER INFORMATION CONTACT:

Melissa Bailey, Ph.D., Director, Standards Division, Telephone: (202) 720–3252; Fax: (202) 205–7808.

SUPPLEMENTARY INFORMATION:

I. Background

The Organic Foods Production Act of 1990 (OFPA) (7 U.S.C. 6501–6522) authorizes the establishment of the National List of Allowed and Prohibited Substances (National List). The National List, a subpart within the USDA organic regulations (7 CFR 205.600 through 205.607), identifies synthetic substances that may be used in organic production and nonsynthetic (natural) substances that are prohibited in organic crop and

livestock production. The National List also identifies nonagricultural nonsynthetic, nonagricultural synthetic and nonorganic agricultural substances that may be used in organic handling.

The exemptions and prohibitions granted on the National List are required to be reviewed every 5 years under OFPA by the National Organic Standards Board (NOSB). The Secretary of Agriculture has authority under OFPA to renew such exemptions and prohibitions. If substances are not reviewed by the NOSB within 5 years of their inclusion on the National List and renewed by the Secretary, their authorized use or prohibition expires.

On June 1, 2011, the Agricultural Marketing Service (AMS) published an Advanced Notice of Proposed Rulemaking (ANPR) (76 FR 31495) in the **Federal Register**, announcing the NOSB's review of exempted and prohibited substances due to sunset in 2013. AMS posted these comments for public review and provided these comments to the NOSB in advance of their review of these substances. At its November 2011 and May 2012 meetings, the NOSB reviewed the substances shown in Table 1 under the 2013 Sunset review. Based on its review, the NOSB provided the following

recommendations for consideration by the Secretary: (1) Renew multiple exemptions and one prohibition without change; (2) remove an exemption for one synthetic substance, tartaric acid; and (3) amend the exemptions for two synthetic substances, EPA List 3—Inerts of unknown toxicity and cellulose, and one nonsynthetic substance, carrageenan. The NOSB also issued second recommendations for EPA List—3 Inerts, cellulose, and carrageenan for the purpose of renewing their existing listings if carrying out the NOSB recommendations to restrict these substances was not feasible. Based on the NOSB recommendations, AMS published a proposed rule in the **Federal Register** (78 FR 25879) on May 3, 2013, to address the continued use or prohibition of these substances on the National List in organic production and handling. Comments received on the proposed rule and AMS' response is addressed in *COMMENTS RECEIVED ON PROPOSED RULE NOP-10-13PR*.

In response to the sunset provision in OFPA, this final rule addresses multiple recommendations submitted to the Secretary by the NOSB pertaining to substances due to sunset (i.e. expire) from the National List in 2013. In consideration of the impending Sunset

date of November 3, 2013 for these substances, the information available, the requirements of OFPA, and the need to look at the potential impacts on small businesses, this final rule renews, without change, multiple exemptions (uses) and a prohibition on the National List (along with any restrictive annotations) for 5 years. A list of these substances and AMS' actions are provided in Table 1. This final rule also removes the exemption for one substance on the National List.

Under the authority of OFPA, the National List can be amended by the Secretary based on proposed amendments developed by the NOSB. Since established, AMS has published multiple amendments to the National List beginning on October 31, 2003 (68 FR 61987). AMS published the most recent amendment to the National List on May 28, 2013 (78 FR 31815).

II. Overview of Final Actions

Table 1 provides an overview of final actions for designated sections of the National List. The actions pertaining to all listings will be effective on November 3, 2013. Pursuant to the sunset provisions in OFPA, the new sunset date for all listings is five years from the effective date of their renewal.

TABLE 1—OVERVIEW OF FINAL ACTIONS FOR SUNSET 2013

National list section	Substance listing	Final action
Synthetic substances allowed for use in organic crop production		
205.601(a)(3)	Copper sulfate—for use as an algicide in aquatic rice systems, is limited to one application per field during any 24-month period. Application rates are limited to those which do not increase baseline soil test values for copper over a timeframe agreed upon by the producer and accredited certifying agent.	Renew.
205.601(a)(5)	Ozone gas—for use as an irrigation system cleaner only	Renew.
205.601(a)(6)	Peracetic acid—for use in disinfecting equipment, seed, and asexually propagated planting material. ¹	Addressed through separate rule-making action; see May 28, 2013 final rule (78 FR 31815).
205.601(e)(4)	Copper sulfate—for use as tadpole shrimp control in aquatic rice production, is limited to one application per field during any 24-month period. Application rates are limited to levels which do not increase baseline soil test values for copper over a timeframe agreed upon by the producer and accredited certifying agent.	Renew.
205.601(i)(8)	Peracetic acid—for use to control fire blight bacteria. ¹	Addressed through separate rule-making action; see May 28, 2013 final rule (78 FR 31815).
205.601(m)(2) ...	EPA List 3—Inerts of unknown toxicity—for use only in passive pheromone dispensers.	Renew.
Nonsynthetic substances prohibited for use in organic crop production		
205.602(c)	Calcium chloride, brine process is natural and prohibited for use except as a foliar spray to treat a physiological disorder associated with calcium uptake.	Renew.
Nonsynthetic, nonagricultural (nonorganic) substances allowed as ingredients in or on processed products labeled as “organic” or “made with organic (specified ingredients or food group(s))”		
205.605(a)	Agar-agar	Renew.
205.605(a)	Animal enzymes—(Rennet—animals derived; Catalase—bovine liver; Animal lipase; Pancreatin; Pepsin; and Trypsin).	Renew.
205.605(a)	Calcium sulfate—mined	Renew.
205.605(a)	Carrageenan	Renew.

TABLE 1—OVERVIEW OF FINAL ACTIONS FOR SUNSET 2013—Continued

National list section	Substance listing	Final action
205.605(a)	Glucono delta-lactone—production by the oxidation of D-glucose with bromine water is prohibited.	Renew.
205.605(a)	Tartaric acid—made from grape wine	Renew.
Synthetic, nonagricultural (nonorganic) substances allowed as ingredients in or on processed products labeled as “organic” or “made with organic (specified ingredients or food group(s))”		
205.605(b)	Cellulose—for use in regenerative casings, as an anti-caking agent (non-chlorine bleached) and filtering aid.	Renew.
205.605(b)	Tartaric acid—made from malic acid	Remove.

¹ The current annotations for peracetic acid can be found at 7 CFR Part 205.601(a)(6) and (i)(8).

Renewals

Consistent with the NOSB recommendations and in consideration of the public comments received on the proposed rule (78 FR 25879), this final rule renews multiple listings pertaining to the National List.

This final rule continues the exemptions at section 205.601, along with any restrictive annotations, for the following synthetic substances allowed for use in organic crop production as shown in Table 1: copper sulfate (2 uses), ozone gas, and EPA List 3—Inerts.

This final rule continues the prohibition at section 205.602, along with its restrictive use annotation, for the nonsynthetic substance prohibited for use in organic crop production as shown in Table 1: calcium chloride.

This final rule continues the exemptions at section 205.605(a), along with any restrictive annotations, for the nonsynthetic, nonagricultural (nonorganic) substances allowed as ingredients in or on processed products labeled as “organic” or “made with organic (specified ingredients or food group(s))” as shown in Table 1: agar-agar, animal enzymes, carrageenan, tartaric acid—made from grape wine, calcium sulfate, and glucono delta-lactone.

This final rule continues the exemption at section 205.605(b), along with its restrictive annotation, for the nonorganically produced agricultural product allowed as an ingredient in or on processed products labeled as “organic” as shown in Table 1: cellulose.

Nonrenewals

Section 205.601 Synthetic Substances Allowed for Use in Organic Crop Production

The renewals for peracetic acid are not addressed in this final rule for Sunset 2013. Instead, AMS completed rulemaking on a 2009 NOSB

recommendation to ensure the listings for peracetic acid on the National List aligned with EPA labeling requirements. This final rule amended the section 205.601(a)(6) and 205.601(i)(8) exemptions for peracetic acid on May 28, 2013 (78 FR 31815). This amendment was completed prior to the November 3, 2013, sunset date for peracetic acid; therefore, the previous listings for peracetic acid do not need to be renewed under this rulemaking action.

Section 205.605 Nonagricultural (Nonorganic) Substances Allowed as Ingredients in or on Processed Products Labeled as “Organic” or “Made With Organic (Specified Ingredients or Food Group(s))”

This final rule amends section 205.605(b) of the National List by removing the exemption for the listing for tartaric acid—made from malic acid. This amendment is effective on November 3, 2013.

III. Related Documents

An Advance Notice of Proposed Rulemaking (ANPR) with request for comments was published in **Federal Register** on June 1, 2011 (76 FR 31495) to notify the public that the listings discussed in this final rule would expire on November 3, 2013 if not reviewed by the NOSB and renewed by the Secretary. Substances and recommendations addressed through this final rule were announced for NOSB deliberations in the following **Federal Register** notices: (1) October 7, 2011 (76 FR 62336); and (2) April 9, 2012 (77 FR 21067). The proposal to address the substances in this final rule was published as a proposed rule in the **Federal Register** on May 3, 2013 (78 FR 25879).

IV. Statutory and Regulatory Authority

OFPA, as amended (7 U.S.C. 6501–6522), authorizes the Secretary to make

amendments to the National List based on proposed amendments developed by the NOSB. Sections 6518(k)(2) and 6518(n) of OFPA authorize the NOSB to develop proposed amendments to the National List for submission to the Secretary and establish a petition process by which persons may petition the NOSB for the purpose of having substances evaluated for inclusion on or deletion from the National List. The National List petition process is implemented under section 205.607 of the USDA organic regulations. The current petition process was published on January 18, 2007 (72 FR 2167) and can be accessed through the NOP Web site at <http://www.ams.usda.gov/nop>.

A. Executive Order 12866 and Executive Order 13563

AMS has determined that according to the criteria defined in Executive Order 12866 and Executive Order 13563, this rule change is not a significant regulatory action. As such, the rule is not subject to Office of Management and Budget review.

B. Executive Order 12988

Executive Order 12988 instructs each executive agency to adhere to certain requirements in the development of new and revised regulations in order to avoid unduly burdening the court system. This final rule is not intended to have a retroactive effect.

States and local jurisdictions are preempted under OFPA from creating programs of accreditation for private persons or State officials who want to become certifying agents of organic farms or handling operations. A governing State official would have to apply to USDA to be accredited as a certifying agent, as described in section 2115(b) of OFPA (7 U.S.C. 6514(b)). States are also preempted under section 2104 through 2108 of OFPA (7 U.S.C. 6503 through 6507) from creating certification programs to certify organic

farms or handling operations unless the State programs have been submitted to, and approved by, the Secretary as meeting the requirements of OFPA.

Pursuant to section 2108(b)(2) of OFPA (7 U.S.C. 6507(b)(2)), a State organic certification program may contain additional requirements for the production and handling of organically produced agricultural products that are produced in the State and for the certification of organic farm and handling operations located within the State under certain circumstances. Such additional requirements must: (a) Further the purposes of OFPA, (b) not be inconsistent with OFPA, (c) not be discriminatory toward agricultural commodities organically produced in other States, and (d) not be effective until approved by the Secretary.

Pursuant to section 2120(f) of OFPA (7 U.S.C. 6519(f)), this rule would not alter the authority of the Secretary under the Federal Meat Inspection Act (21 U.S.C. 601–624), the Poultry Products Inspection Act (21 U.S.C. 451–471), or the Egg Products Inspection Act (21 U.S.C. 1031–1056), concerning meat, poultry, and egg products, nor any of the authorities of the Secretary of Health and Human Services under the Federal Food, Drug and Cosmetic Act (21 U.S.C. 301–399), nor the authority of the Administrator of EPA under the Federal Insecticide, Fungicide, and Rodenticide Act (7 U.S.C. 136–136(y)).

Section 2121 of OFPA (7 U.S.C. 6520) provides for the Secretary to establish an expedited administrative appeals procedure under which persons may appeal an action of the Secretary, the applicable governing State official, or a certifying agent under this title that adversely affects such person or is inconsistent with the organic certification program established under this title. OFPA also provides that the U.S. District Court for the district in which a person is located has jurisdiction to review the Secretary's decision.

C. Regulatory Flexibility Act

The Regulatory Flexibility Act (RFA) (5 U.S.C. 601–612) requires agencies to consider the economic impact of each rule on small entities and evaluate alternatives that would accomplish the objectives of the rule without unduly burdening small entities or erecting barriers that would restrict their ability to compete in the market. The purpose of the RFA is to fit regulatory actions to the scale of businesses subject to the action. Section 605 of the RFA allows an agency to certify a rule, in lieu of preparing an analysis, if the rulemaking is not expected to have a significant

economic impact on a substantial number of small entities.

Small agricultural service firms, which include producers, handlers, and accredited certifying agents, have been defined by the Small Business Administration (SBA) (13 CFR 121.201) as those having annual receipts of less than \$7,000,000 and small agricultural producers are defined as those having annual receipts of less than \$750,000.

According to USDA, National Agricultural Statistics Service (NASS), certified organic acreage exceeded 3.5 million acres in 2011.² According to NOP's Accreditation and International Activities Division, the number of certified U.S. organic crop and livestock operations totaled over 17,750 in 2012. There were also 10,850 certified organic handling operations worldwide in 2012. AMS believes that most of these entities would be considered small entities under the criteria established by the SBA. U.S. sales of organic food and non-food have grown from \$1 billion in 1990 to \$31.4 billion in 2011. Sales in 2011 represented 9.5 percent growth over 2010 sales.³

In addition, the USDA has 84 accredited certifying agents who provide certification services to producers and handlers. A complete list of names and addresses of accredited certifying agents may be found on the AMS NOP Web site, at <http://www.ams.usda.gov/nop>. AMS believes that most of these accredited certifying agents would be considered small entities under the criteria established by the SBA.

Pursuant to the requirements set forth in the RFA, AMS considered the economic impact of this action on small entities. The impact on entities affected by this final rule would not be significant. The effect of this final rule would be to allow the continued use of additional substances in agricultural production and handling. AMS concludes that the economic impact of continuing the allowance for Sunset 2013 substances would avoid market disruption and would be beneficial to small agricultural service firms. The effect of the removal of one synthetic substance, tartaric acid, would be minimal to small agricultural firms since a nonsynthetic form of tartaric acid from grape wine is commercially available and is the predominant form

of this substance used in organic processed products. The allowance for nonsynthetic tartaric acid will be renewed under this rule. Accordingly, AMS certifies that this rule will not have a significant economic impact on a substantial number of small entities.

D. Paperwork Reduction Act

No additional collection or recordkeeping requirements are imposed on the public by this final rule. Accordingly, OMB clearance is not required by section 350(h) of the Paperwork Reduction Act of 1995, 44 U.S.C. 3501, Chapter 35, or OMB's implementing regulations at 5 CFR part 1320.

E. Executive Order 13175

This final rule has been reviewed in accordance with the requirements of Executive Order 13175, Consultation and Coordination with Indian Tribal Governments. The review reveals that this regulation will not have substantial and direct effects on Tribal governments and will not have significant Tribal implications.

F. Comments Received on Proposed Rule NOP–10–13PR

AMS received over 3,100 comments on proposed rule AMS–NOP–11–0003; NOP–10–13PR. Comments were received from organic crop producers, crop distributors, organic handlers, consumers, accredited certifying agents, trade associations, non-profit organizations, growers associations, and advocacy groups. AMS also received two comments that were submitted after the close of the comment period and therefore were not considered herein.

Some comments presented concerns that are not within the scope of the sunset review action. Several comments stated their general opposition to the allowance of synthetics in organic production and some commenters restated this and specifically cited their opposition to all of the substances proposed for renewal in the proposed rule.

All comments on the proposed renewal for animal enzymes, calcium chloride, ozone gas and tartaric acid made from grape wine were supportive of the action as proposed. Therefore, AMS is finalizing the amendments as proposed through this final rule.

As stated in the proposed rule, the NOSB provided AMS with two recommendations for each of the following three substances—EPA List 3 Inerts, carrageenan, and cellulose. The NOSB provided the two recommendations based on the “Sunset Review Process” section of the NOSB's

² U.S. Department of Agriculture, National Agricultural Statistics Service. October 2012. 2011 Certified Organic Productions Survey. <http://usda01.library.cornell.edu/usda/current/OrganicProduction/OrganicProduction-10-04-2012.pdf>.

³ Organic Trade Association. 2012. Organic Industry Survey. www.ota.com.

Policy and Procedures Manual. The first NOSB Sunset recommendation for each of these substances recommended new restrictions on their allowance in organic production or handling as follows:

a. EPA List 3 Inerts: amend the current listing and also include an expiration date of October 21, 2017, after which these substances could not be used;

b. carrageenan: (1) Indicate specific allowed forms of carrageenan by Chemical Abstracts Service (CAS) number; and (2) prohibit its use in organic infant formula; and

c. cellulose: prohibit the microcrystalline form of this substance by specifying the forms that are allowed.

The second NOSB recommendation for each substance recommended to renew the existing listings as codified. Based on our review, AMS proposed to implement the NOSB's second recommendations to renew the existing listings instead of adding new restrictions on these three substances. For this reason, over 2,400 comments requested the withdrawal of the proposed rule. The commenter's reasons for this request are described below in conjunction with AMS' response.

Numerous comments asserted that the NOSB's second recommendations to renew EPA List 3 Inerts, carrageenan and cellulose were intended for the Secretary to act upon only if an unavoidable administrative delay makes completion of rulemaking regarding the first recommendations for these substances impossible before the November 3, 2013 sunset date. These comments state that AMS' action to implement the NOSB recommendations to renew on grounds other than an administrative delay is equivalent to a violation of OFPA. Most of these same commenters also stated that the NOSB first recommendations to amend the annotations for these three substances were based on NOSB's findings of unacceptable human health and environmental effects associated with their current allowance. Many commenters also cited that these renewals would constitute an addition of a synthetic substance to the National List by AMS, which would violate 7 U.S.C. 6517(d)(2).

AMS disagrees with these positions. Carrageenan is listed as a nonsynthetic substance, and therefore its renewal could not be in violation of OFPA (7 U.S.C. 6517(d)(2)) because it is not a synthetic substance. The NOSB provided AMS with two NOSB recommendations for each of these substances—one to renew the listing and one to add new restrictions to its

current use. Consistent with the provisions of OFPA, AMS has determined that the second recommendation in each case should be implemented. The proposed rule reflected AMS's independent review and explained in detail why accepting the NOSB's first recommendations to amend the annotations for EPA List 3 Inerts, carrageenan, and cellulose was not appropriate and, therefore, rulemaking action could not be implemented prior to the November 3, 2013 sunset date. Further, AMS has collected additional feedback through public comment submitted in response to the proposed rule that supports its proposal. For these reasons, AMS is implementing the NOSB's second recommendations to renew these substances through this final rule. A summary of AMS' justification for each of the three substances is provided below.

EPA List 3—Inerts of Unknown Toxicity

AMS received approximately 60 comments on the proposed action to renew the listing for EPA List 3 Inert ingredients. The majority of comments stated that AMS should not adopt the proposed rule; instead, the commenters supported the NOSB's first recommendation to add new restrictions on alternative EPA List 3 Inerts. A minority of commenters opposed the allowance of any synthetic materials in organic crop production, but did not provide information on alternative practices or alternative substances that may substitute for the use of EPA List 3 inert ingredients. Two commenters supported the action as proposed by AMS.

Comments that did not support the proposed action claimed that: (1) The proposed action violated OFPA; (2) AMS ignored a NOSB recommendation for EPA List 3 Inerts; and (3) the renewal of the listing without an expiration date would delay or prevent the NOSB review of inert ingredients.

Some commenters indicated that AMS should issue a new proposed rule consistent with the NOSB's first recommendation for EPA List 3 Inerts. This recommendation included the following changes the listing for EPA List 3 Inerts: (1) Modification to the introductory text at section 205.601(m); (2) amending the listing and annotation for EPA List 3 Inerts to read as follows: "Inert ingredients exempt from the requirement of a tolerance under 40 CFR 180.1122 that were formerly on EPA List 3 in passive polymeric dispenser products may be used until October 21, 2017;" and (3) amending section 205.2 to add a definition for "passive

polymeric dispenser products" that is intended to be removed in coordination with the proposed expiration date of October 21, 2017.

In the proposed rule, AMS proposed renewal of the current listing for EPA List 3 Inerts, without any changes or addition of an expiration date. The NOSB provided two recommendations regarding EPA List 3 Inerts, and the proposed rule, implemented as final through this action, aligns with the second recommendation, which meets the requirements under OFPA. As stated in the proposed rule, AMS recognizes the intent of the NOSB to address the complex challenges presented by the out-of-date listings for EPA List 3 and EPA List 4 Inerts in a timely manner. However, a rulemaking action to add an expiration date to the listing for EPA List 3 Inerts as part of the Sunset Review would not be appropriate if the timeline for the ongoing NOSB Inerts review takes longer than projected.

One commenter noted that the NOSB's expiration date should not be problematic because there is only a small number of EPA List 3 materials to review before October 2017 and that NOP and NOSB could prioritize this work. Other commenters indicated that the intent of the NOSB with its first recommendation was to ensure that inert ingredients are reviewed prior to October 2017.

Currently, there is also ongoing work within the NOSB to review additional (e.g., EPA List 4) inert ingredients that will be addressed by the NOSB in other recommendations on inert ingredients. The NOSB, as part of an Inerts Working Group, is in the process of establishing reviews for all inert ingredients in pesticides used in organic production. These include former EPA List 3 and EPA List 4 Inerts. The overall review of inerts represents a larger number of substances than that which was indicated by one of the commenters. Given these circumstances, it is appropriate to accept the NOSB's second recommendation so that the NOSB has sufficient time to address inert ingredients and make additional recommendations.

One commenter supported the proposed relisting of EPA List 3 Inerts as proposed by AMS and noted that the expiration date of October 21, 2017 was arbitrary given that the NOSB review of inert ingredients may not complete by that date. The commenter noted that the expiration in 2017 would have detrimental impacts on organic operators and input suppliers. AMS agrees with the commenter and is not adding the 2017 expiration date to the EPA List 3 Inerts listing for this reason.

One commenter suggested that AMS adopt the renewed listing as an interim rule, and secondarily ask the NOSB to reconsider the sunset extension based on the specific agency concerns. AMS has not adopted this suggestion. The NOSB should continue its review of EPA List 3 Inerts under its current process for reviewing Inerts, rather than redirect its efforts to provide additional support for its previous sunset recommendation to change the listing in advance of completion of this work.

In summary, after consideration of the recommendation and the comments received, AMS is implementing the second NOSB recommendation to renew the existing listing for EPA List 3 Inerts through this final rule as proposed.

Carrageenan

AMS received approximately 130 comments specific to the proposed action to renew the existing listing for carrageenan. The majority of comments stated that AMS should not adopt the proposed rule; instead, the commenters supported either the NOSB's first recommendation to prohibit the use of carrageenan in infant formula and add CAS numbers or a prohibition of the use of the substance in organic processed products altogether. AMS also received a comment from a non-profit organization which had gathered over 14,000 signatures in support of removing carrageenan from the National List. Approximately 40 commenters supported the action as proposed.

Comments that did not support the proposed action claimed that: (1) Carrageenan in food and infant formula is not safe for human consumption; and (2) the proposed action is not based on sound science. One commenter stated that he had submitted two petitions to the FDA requesting (1) that the food additive regulations be amended to prohibit the use of carrageenan in infant formula; and (2) that the FDA designation of "Generally recognized as safe" (GRAS) for carrageenan in infant formula be reconsidered.

Prior to the May 2012 NOSB meeting, the Handling Subcommittee conducted a review of past NOSB recommendations, technical reports, historical documents, and public comments and concluded that the available information indicates that the substance is essential for organic production, is compatible with organic production practices, and does not reveal unacceptable risks to the environment, human, or animal health as a result of its use or manufacture.⁴

Neither the Handling Subcommittee proposal submitted prior to the NOSB meeting nor the full NOSB issued a recommendation stating that carrageenan use in food should be prohibited.⁵ AMS concurs with this determination.

Both commenters and the FDA have identified many deficiencies in the literature regarding the gastrointestinal toxicity of carrageenan, concluding there is no information clearly demonstrating that there is evidence for a carcinogenic effect for food grade carrageenan use in foods or infant formula. Other commenters stated that subsequent research has continued to support the conclusion that food grade carrageenan is safe. AMS conducted an independent review which included consultation with the FDA to gain a detailed understanding of the relevant regulations allowing for the use of carrageenan in foods or infant formula. The FDA, as the food safety authority in the U.S., maintains that carrageenan is safe for use in foods and infant formulas as codified. If in the future the FDA does issue a finding supporting a prohibition of carrageenan in any or all foods, AMS will take appropriate action, if needed, to come into alignment with this finding. A request to amend the annotation for this substance or remove it from the National List would require a petition to the NOSB.

In summary, the NOSB provided two recommendations regarding carrageenan, and the proposed rule aligns with the second recommendation, which meets the requirements under OFPA. After consideration of the recommendation and the comments received, AMS has determined that it is appropriate to accept the NOSB's second recommendation and renew the listing for carrageenan through this final rule as proposed.

Cellulose

AMS received approximately 20 comments on the proposed action specific to cellulose. Roughly half of these comments opposed the proposed action. These statements concurred with the NOSB's first recommendation that contrary to the powdered form of cellulose, the microcrystalline form of cellulose is a heavily processed substance and the impacts of its use would be incompatible with organic production. One commenter requested that USDA evaluate the data concerning

availability of nonsynthetic and organic forms of cellulose for these uses, including organic rice concentrate, and for USDA to exercise its authority to develop a more restrictive standard in this case. Another commenter asked that AMS consider restricting the use of microcrystalline cellulose in future rulemaking. The remaining public comments supported the proposed action but did not state whether they used or supported the use of microcrystalline cellulose. To date, AMS has not received information to indicate that the organic industry is using the microcrystalline form of cellulose; however, AMS has not completed its research of this topic and needs more information from the industry to confirm that the microcrystalline form of cellulose is not currently in use in organic processed products and will consider a restriction on its use for future rulemaking.

The NOSB provided two recommendations regarding cellulose, which meets the requirements under OFPA. Consistent with the NOSB's second recommendation, AMS is renewing listing for cellulose through this final rule as proposed.

Other comments suggesting changes to the proposed rule for other substances under sunset review are described below in conjunction with AMS' response, including any amendments that will be addressed through this final rule. Some commenters requested changes to substance annotations which were either different from the NOSB recommendation or would result in the expanded use of an exempted material. Such requests would require a petition to the NOSB, which can be initiated in accordance with the Notice of Guidelines on Procedures for Submitting National List Petitions (72 FR 2167).

Copper Sulfate

The Crops Subcommittee put forth a proposal prior to the Fall 2011 NOSB meeting to further restrict the use of copper sulfate. The proposal stated that conversations with rice growers led them to believe that cultural practices (drill-seeding) would eliminate the need for copper sulfate use except in particular weather conditions. AMS received one comment stating that the use of copper sulfate in organic rice production is inconsistent with organic agricultural practices. This comment stated that the Crops Subcommittee proposal for placing further restrictions on the use of this substance was well-supported with evidence illustrating that copper products are toxic to aquatic

⁴ Handling Subcommittee Proposal on Carrageenan. February, 21, 2012. Available at the

NOP Web site: <http://www.ams.usda.gov/AMSV1.0/getfile?dDocName=STELPRDC5097825&acct=nosb>.

⁵ NOSB Recommendation on Carrageenan. May 25, 2012. Available at the NOP Web site: <http://www.ams.usda.gov/AMSV1.0/getfile?dDocName=STELPRDC5098921>.

organisms. The NOSB deliberated on the available information as well as written and in-person public comment on copper sulfate at the November 29–December 2, 2011 NOSB meeting in Savannah, GA. At this meeting, the Crops Subcommittee revised its proposal on the grounds that prescribing specific cultural practices within the annotation would be duplicative of the organic system plan requirements of the USDA organic regulations. As a result, the Crops Subcommittee put forward a motion to renew the current listing that received a unanimous vote of support. The Crops Subcommittee also requested that alternatives for copper sulfate in rice production be added to the next Materials Subcommittee Research Priorities proposal.⁶ The Crops Subcommittee's proposal was recommended by the full NOSB.

AMS also received one comment stating that the current annotation for copper sulfate should be amended to change its listing from limited use of once per a 24-month period for rice shrimp control to allowing its use to be dependent upon the weather conditions that induce the growth of algae (also called scum) and rice shrimp. The commenter suggested the annotation should be amended to match the listing for fixed coppers at section 205.601(i), which allows the substance to be “used in a manner that minimizes accumulation of copper in the soil and shall not be used as herbicides.” Commenter requests for changes to listings that would result in the expanded use or removal of an exempted material and would need to be petitioned and reviewed by the NOSB.

Consistent with the NOSB's recommendation, AMS is renewing listing for copper sulfate through this final rule as proposed.

Animal Enzymes

Eleven commenters submitted statements of support for the continued allowance of animal enzymes in organic handling and processing. Consistent with the NOSB's recommendation, AMS is renewing listing for animal enzymes through this final rule as proposed.

Agar-Agar

The Handling Subcommittee's put forth a proposal prior to the Fall 2011 NOSB meeting to relist agar-agar as a nonsynthetic on section 205.605(a) and

add an additional listing as a synthetic on section 205.605(b). The Subcommittee based this proposal on information obtained from the most recent technical report. This report indicated that there are certain processing methods for agar-agar that would result in a chemical change that would render it synthetic. The Subcommittee then determined that it would withdraw the proposal to reclassify agar-agar and asked that the NOP revisit the classification of this substance following the publication of final guidance on the classification of materials.⁷ The NOSB then recommended to renew agar-agar as listed on section 205.605(a).

AMS received one comment which supported the Handling Subcommittee's proposal. AMS also received one comment in support for the continued allowance of agar-agar based on its physical properties that enable it to act as a replacement for gelatin in vegetarian formulations of processed products.

Consistent with the NOSB's recommendation, AMS is renewing listing for agar-agar through this final rule as proposed.

Calcium Sulfate

AMS received one comment requesting that the listing for calcium sulfate be restricted to use only as a coagulant for bean curd on the grounds that there was not sufficient evidence for its essentiality for the production of other processed products. The Handling Subcommittee conducted a review of past NOSB recommendations, technical reports, historical documents, and public comments and concluded that the available information indicates that the substance is essential for organic production, is compatible with organic production practices, and does not reveal unacceptable risks to the environment, human, or animal health as a result of its use or manufacture. AMS concurs with this determination.

AMS also received one comment in support of the continued allowance of calcium sulfate as an aid in developing the texture of bean curd for the production of firm tofu. Another commenter stated that calcium sulfate allows them to produce a desired texture and flavor of tofu that is not achievable with alternative ingredients.

Consistent with the NOSB's recommendation, AMS is renewing listing for calcium sulfate through this final rule as proposed.

Glucono Delta-Lactone

AMS received one comment requesting that the listing for glucono delta-lactone be restricted to use only as a coagulant in bean curd on the grounds that there was not sufficient evidence for its essentiality for the production of other processed products. The Handling Subcommittee's review of previous technical reports, NOSB recommendations, historical documents, and public comments and concluded that the available information indicates that the substance is essential for organic production, is compatible with organic production practices, and does not reveal unacceptable risks to the environment, human, or animal health as a result of its use or manufacture.⁸ The NOSB's recommendation stated that there is no new information contradicting the original recommendation which was the basis for the previous NOSB decisions to list and again re-list this material, and no public comments were submitted that provided any information to the contrary.

Consistent with the NOSB's recommendation, AMS is renewing listing for glucono delta-lactone through this final rule as proposed.

Tartaric Acid (Made From Malic Acid)

There were two comments submitted from a trade association, one of which supported the proposed action, and the other did not support the proposed action. Another two comments on the proposed removal of tartaric acid made from malic acid were not supportive of the proposed action. There were no comments submitted that provided information justifying their position.

Consistent with the NOSB's recommendation, AMS is removing the listing for tartaric acid made from malic acid through this final rule as proposed.

G. Effective Date

This final rule reflects recommendations submitted to the Secretary by the NOSB for the purpose of fulfilling the requirements of 7 U.S.C. 6517(e) of the OFPA. OFPA requires the NOSB to review each substance on the National List within 5 years of its adoption or review (7 U.S.C. 6517(e)). The substances reauthorized for use on the National List were most recently

⁶ The topic of “Copper sulfate in rice production” was included in the Materials Subcommittee's August 17, 2012 Proposal for Research Priorities for 2012. Available at the NOP Web site: <http://www.ams.usda.gov/AMSV1.0/getfile?dDocName=STELPRDC5101295>.

⁷ U.S. Department of Agriculture. “National Organic Program: Notice of Draft Guidance on Classification of Materials and Materials for Organic Crop Production.” 78 *Federal Register* 63 (April 2, 2013), pp. 19637–19638. Available at the NOP Web site: <http://www.ams.usda.gov/AMSV1.0/getfile?dDocName=STELPRDC5103326>.

⁸ Handling Subcommittee Proposal on Glucono Delta-Lactone. March 20, 2012. Available at the NOP Web site: <http://www.ams.usda.gov/AMSV1.0/getfile?dDocName=STELPRDC5097826&acct=nosb>.

authorized for use in organic agriculture on November 3, 2008. Because these substances are critical to organic production and handling operations, producers and handlers should be able to continue to use these substances for a full 5-year period beyond their sunset date of November 3, 2013. Accordingly, pursuant to 5 U.S.C. 553, it is found and determined that good cause exists for not postponing the effective date of this rule until 30 days after publication in the **Federal Register**. This rule shall be effective on November 3, 2013.

List of Subjects in 7 CFR Part 205

Administrative practice and procedure, Agriculture, Animals, Archives and records, Imports, Labeling, Organically produced products, Plants, Reporting and recordkeeping requirements, Seals and insignia, Soil conservation.

For the reasons set forth in the preamble, 7 CFR part 205 is amended as follows:

PART 205—NATIONAL ORGANIC PROGRAM

- 1. The authority citation for 7 CFR part 205 continues to read as follows:

Authority: 7 U.S.C. 6501–6522.

- 2. Section 205.605 is amended by removing the entry “Tartaric acid—made from malic acid” from paragraph (b).

Dated: September 30, 2013.

Rex A. Barnes,

Associate Administrator, Agricultural Marketing Service.

[FR Doc. 2013–24208 Filed 10–2–13; 8:45 am]

BILLING CODE 3410–02–P

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA–2012–0680; Directorate Identifier 2011–NM–247–AD; Amendment 39–17602; AD 2013–19–20]

RIN 2120–AA64

Airworthiness Directives; The Boeing Company Airplanes

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Final rule.

SUMMARY: We are adopting a new airworthiness directive (AD) for certain The Boeing Company Model DC–10–10 and MD–10–10F airplanes. This AD was prompted by a report that the safe life

limit on certain main landing gear (MLG) upper torque link bolts is reduced significantly due to those bolts being fabricated from bar stock with a machined head instead of from a forged blank with an upset head. This AD requires replacing certain MLG upper torque link bolts with new or serviceable parts. We are issuing this AD to prevent damage to the MLG and consequent damage to airplane structure, which could adversely affect the airplane's continued safe flight and landing.

DATES: This AD is effective November 7, 2013.

The Director of the Federal Register approved the incorporation by reference of a certain publication listed in the AD as of November 7, 2013.

ADDRESSES: For service information identified in this AD, contact Boeing Commercial Airplanes, Attention: Data & Services Management, 3855 Lakewood Boulevard, MC D800–0019, Long Beach, CA 90846–0001; telephone 206–544–5000, extension 2; fax 206–766–5683; Internet <https://www.myboeingfleet.com>. You may review copies of the referenced service information at the FAA, Transport Airplane Directorate, 1601 Lind Avenue SW., Renton, WA. For information on the availability of this material at the FAA, call 425–227–1221.

Examining the AD Docket

You may examine the AD docket on the Internet at <http://www.regulations.gov>; or in person at the Docket Management Facility between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this AD, the regulatory evaluation, any comments received, and other information. The address for the Docket Office (phone: 800–647–5527) is Document Management Facility, U.S. Department of Transportation, Docket Operations, M–30, West Building Ground Floor, Room W12–140, 1200 New Jersey Avenue SE., Washington, DC 20590.

FOR FURTHER INFORMATION CONTACT:

Nenita Odesa, Aerospace Engineer, Airframe Branch, ANM–120L, FAA, Los Angeles Aircraft Certification Office, 3960 Paramount Boulevard, Lakewood, CA 90712–4137; phone: (562) 627–5234; fax: (562) 627–5210; email: nenita.odesa@faa.gov.

SUPPLEMENTARY INFORMATION:

Discussion

We issued a notice of proposed rulemaking (NPRM) to amend 14 CFR part 39 by adding an AD that would apply to the specified products. The

NPRM published in the **Federal Register** on July 11, 2012 (77 FR 40828). The NPRM proposed to require replacing certain MLG upper torque link bolts with a new or serviceable part.

Comments

We gave the public the opportunity to participate in developing this AD. The following presents the comments received on the proposal (77 FR 40828, July 11, 2012) and the FAA's response to each comment.

Request To Revise the Unsafe Condition

Boeing requested that we revise the unsafe condition in the NPRM (77 FR 40828, July 11, 2012). Boeing stated that it disagrees with the **SUMMARY** section of the NPRM where it states that the safe life limit (SLL) of the bolt is reduced significantly due to “incorrect” fabrication. Boeing stated that it approved the fabrication of the bolts from bar stock with a machined head; however, this did not reduce the SLL at that point in time. Boeing stated that the fabrication therefore is not incorrect, and that the SLL reduction was due to fabrication from bar stock with a machined head.

We partially agree with Boeing's request. We agree that the cause of the unsafe condition is not incorrect fabrication.

We disagree with the commenter's statement that the fabrication method of the bolt is correct because with a reduced SLL the discrepant bolts do not meet the type design. The correct fabrication process of the bolt, from forged blank with an upset forged head, would not have reduced the SLL. We have changed the cause of the unsafe condition throughout this final rule to state that the SLL of the bolt is reduced significantly because those bolts were “fabricated from bar stock with a machined head.”

Request To Allow Maintenance Records Review

FedEx requested that in paragraph (g) of the NPRM (77 FR 40828, July 11, 2012) operators be allowed to show compliance by a records review.

We agree with the commenter that a review of an airplane's maintenance record is acceptable if the part number of the bolt can be conclusively determined from that review. We have changed paragraph (g) of this final rule accordingly.

Request To Revise Applicability of the NPRM (77 FR 40828, July 11, 2012)

FedEx stated that paragraphs (g) and (h) of the NPRM (77 FR 40828, July 11, 2012) state to inspect the 18 airplanes

listed in the Effectivity section of Boeing Alert Service Bulletin DC10–32A260, dated September 30, 2011. FedEx stated that this wording requires an inspection of the airplane, and since the bolts are easily replaced, the airplane effectivity listed in the service information is not accurate. FedEx stated that it has identified two additional airplanes that have the recalled bolts installed, and that the NPRM would require the operator to inspect an airplane that does not have a recalled bolt installed. FedEx stated that the NPRM should be worded to require the tracking and removal of the recalled bolts listed in that service information without any reference to the airplane effectivity. In addition, FedEx stated that the NPRM should change the SLL of the bolt and then allow the bolts to be tracked and removed in the same manner as any life-limited part. FedEx stated that paragraph (f) of the NPRM should state clearly that an airplane does not require an inspection if a recalled bolt is not installed.

We infer that FedEx is requesting that we revise the applicability of this final rule because the AD applicability refers to the effectivity in Boeing Alert Service Bulletin DC10–32A260, dated September 30, 2011. We disagree with the commenter regarding revising the applicability of this AD. We confirmed with Boeing that the two additional airplanes mentioned previously are not included in the service information effectivity, as the affected bolts were removed in March 2012 and are no longer serviceable. We also disagree that this final rule should be revised to require a reduced SLL of the bolt, and the tracking and removal of the recalled bolts listed in the service information. According to 14 CFR 39.1, Airworthiness Directives apply to aircraft, aircraft engines, propellers, or appliances, and we are required to provide airplane effectivity in an AD. We have not changed this AD in this regard.

Request To Revise the Parts Installation Paragraph

FedEx requested that we revise paragraph (h) of the NPRM (77 FR 40828, July 11, 2012), which stated that no one may install a recalled bolt on an airplane after the effective date of the AD. FedEx stated that the intent of this requirement is to prevent a replacement bolt from being installed. FedEx stated that the requirement can be interpreted

as preventing removal and re-installation of a recalled bolt during maintenance, which could result in grounding an airplane at a remote station until a new bolt is available. FedEx stated that the operator should have the flexibility to remove a recalled bolt and re-install it on the same airplane or another airplane to meet operational requirements. FedEx stated that paragraph (h) of the NPRM should be changed to state that no one may install a replacement bolt. FedEx stated that the intent of paragraph (h) of the NPRM could also be accomplished by requiring all recalled bolts to be removed from spares and the spare gear assemblies.

We agree with the commenter. We agree that an operator should have the flexibility to re-install recalled bolts on the same airplane if the bolts have not reached their revised SLL of 6,590 flight cycles. We also agree that an operator should have the flexibility to install the reduced life bolt on an airplane not listed on the service bulletin effectivity list, provided the reduced life bolt is replaced prior to accumulation of 6,590 flight cycles. Therefore, we have removed paragraph (h) of the NPRM (77 FR 40828, July 11, 2012) from this AD because this would allow the reinstallation of a reduced life bolt on other Model DC–10–10 and MD–10–10 airplanes. Subsequent paragraphs have been redesignated accordingly. We have also clarified paragraph (g) of this AD to specify that any replacement bolts identified in paragraph 3.B.1 of the Accomplishment Instructions of Boeing Alert Service Bulletin DC10–32A260, dated September 30, 2011, must be replaced prior to the revised SLL.

Request To Clarify Compliance Time

FedEx Express and Boeing requested clarification of the compliance time. FedEx stated that paragraph (g) of the NPRM (77 FR 40828, July 11, 2012) states that the recalled bolts must be removed at 6,590 cycles since installation. FedEx stated the wording does not correlate with the service information and the service information changes the SLL for these recalled bolts from “47,300 to 6,590 cycles.” FedEx stated that this will force the recalled bolts to be removed at 6,590 cycles since new. FedEx added that the wording of the NPRM allows a bolt to be flown at 6,590 cycles since installation. FedEx stated that the NPRM assumes every

bolt has been installed only once in one airplane. FedEx stated that a review of its records show that several of these bolts have been installed on more than one airplane.

Boeing stated that the compliance time should be “before 6,590 flight cycles are accrued on the part, except as specified in paragraph (h)” regardless of bolt installation. Boeing stated that this reasoning takes into account multiple installations. In addition, Boeing stated that the SLL is 6,590 flight cycles, regardless of part installation.

We partially agree with the commenters’ request to clarify the compliance time. The FAA intended the term “bolt installation” as installation of the bolt since new. We disagree with FedEx’s statement that this AD and the service information use different terms in the compliance time because the term “within 6,590 flight cycles from bolt installation” is similar to the compliance time in section 1.E., “Compliance,” of the service information, which states, “before 6,590 flight cycles from bolt installation.” In addition, we have removed paragraph (h) of the NPRM (77 FR 40828, July 11, 2012) from this AD to address a previous comment; therefore, the additional language is unnecessary. Subsequent paragraphs have been redesignated accordingly.

Conclusion

We reviewed the relevant data, considered the comments received, and determined that air safety and the public interest require adopting this AD with the changes described previously—and minor editorial changes. We have determined that these minor changes:

- Are consistent with the intent that was proposed in the NPRM July 11, 2012 (77 FR 40828, July 11, 2012) for correcting the unsafe condition; and
- Do not add any additional burden upon the public than was already proposed in the NPRM July 11, 2012 (77 FR 40828, July 11, 2012).

We also determined that these changes will not increase the economic burden on any operator or increase the scope of this AD.

Costs of Compliance

We estimate that this AD affects 17 airplanes of U.S. registry.

We estimate the following costs to comply with this AD:

ESTIMATED COSTS

Action	Labor cost	Parts cost	Cost per product	Cost on U.S. operators
Bolt Replacement	2 work-hours × \$85 per hour = \$170	\$9,340	\$9,510	\$161,670

Authority for This Rulemaking

Title 49 of the United States Code specifies the FAA's authority to issue rules on aviation safety. Subtitle I, section 106, describes the authority of the FAA Administrator. Subtitle VII: Aviation Programs, describes in more detail the scope of the Agency's authority.

We are issuing this rulemaking under the authority described in Subtitle VII, Part A, Subpart III, Section 44701: "General requirements." Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

Regulatory Findings

This AD will not have federalism implications under Executive Order 13132. This AD will not have a substantial direct effect on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed above, I certify that this AD:

- (1) Is not a "significant regulatory action" under Executive Order 12866,
- (2) Is not a "significant rule" under DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979),
- (3) Will not affect intrastate aviation in Alaska, and
- (4) Will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

Adoption of the Amendment

Accordingly, under the authority delegated to me by the Administrator, the FAA amends 14 CFR part 39 as follows:

PART 39—AIRWORTHINESS DIRECTIVES

- 1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

§ 39.13 [Amended]

- 2. The FAA amends § 39.13 by adding the following new airworthiness directive (AD):

2013–19–20 The Boeing Company:
Amendment 39–17602; Docket No. FAA–2012–0680; Directorate Identifier 2011–NM–247–AD.

(a) Effective Date

This AD is effective November 7, 2013.

(b) Affected ADs

None.

(c) Applicability

This AD applies to The Boeing Company Model DC–10–10 and MD–10–10F airplanes, certificated in any category, as identified in Boeing Alert Service Bulletin DC10–32A260, dated September 30, 2011.

(d) Subject

Joint Aircraft System Component (JASC)/Air Transport Association (ATA) of America Code 32, Landing Gear.

(e) Unsafe Condition

This AD was prompted by a report that the safe life limit on certain main landing gear (MLG) upper torque link bolts is reduced significantly due to those bolts being fabricated from bar stock with a machined head. We are issuing this AD to prevent damage to the MLG and consequent damage to airplane structure, which could adversely affect the airplane's continued safe flight and landing.

(f) Compliance

Comply with this AD within the compliance times specified, unless already done.

(g) Modification

For airplanes having any bolts identified in paragraph 3.B.1. of the Accomplishment Instructions of Boeing Alert Service Bulletin DC10–32A260, dated September 30, 2011: Before the accumulation of 6,590 total flight cycles on the bolt, or within 180 days after the effective date of this AD, whichever occurs later, replace the MLG upper torque link bolt with a new or serviceable bolt, in accordance with the Accomplishment Instructions of Boeing Alert Service Bulletin DC10–32A260, dated September 30, 2011. A review of airplane maintenance records is acceptable if the part number of the bolt can

be conclusively determined from that review. Thereafter, before the accumulation of 6,590 total flight cycles on any bolt identified in paragraph 3.B.1. of the Accomplishment Instructions of Boeing Alert Service Bulletin DC10–32A260, dated September 30, 2011, replace it with a new or serviceable bolt.

(h) Alternative Methods of Compliance (AMOCs)

(1) The Manager, Los Angeles Airplane Certification Office (ACO), ANM–120L, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. In accordance with 14 CFR 39.19, send your request to your principal inspector or local Flight Standards District Office, as appropriate. If sending information directly to the manager of the ACO, send it to the attention of the person identified in paragraph (i) of this AD.

(2) Before using any approved AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the local flight standards district office/certificate holding district office.

(3) An AMOC that provides an acceptable level of safety may be used for any repair required by this AD if it is approved by The Boeing Commercial Airplanes Organization Designation Authorization (ODA) that has been authorized by the Manager, Los Angeles ACO, to make those findings. For a repair method to be approved, the repair must meet the certification basis of the airplane, and 14 CFR 25.571, Amendment 45, and the approval must specifically refer to this AD.

(i) Related Information

For more information about this AD, contact Nenita Odesa, Aerospace Engineer, Airframe Branch, ANM–120L, FAA, Los Angeles Aircraft Certification Office, 3960 Paramount Boulevard, Lakewood, CA 90712–4137; phone: (562) 627–5234; fax: (562) 627–5210; email: nenita.odesa@faa.gov.

(j) Material Incorporated by Reference

(1) The Director of the Federal Register approved the incorporation by reference (IBR) of the service information listed in this paragraph under 5 U.S.C. 552(a) and 1 CFR part 51.

(2) You must use this service information as applicable to do the actions required by this AD, unless the AD specifies otherwise.

(i) Boeing Alert Service Bulletin DC10–32A260, dated September 30, 2011.

(ii) Reserved.

(3) For The Boeing Company service information identified in this AD, contact Boeing Commercial Airplanes, Attention: Data & Services Management, 3855 Lakewood Boulevard, MC D800–0019, Long Beach, CA 90846–0001; telephone 206–544–5000, extension 2; fax 206–766–5683; email dse.boecom@boeing.com; Internet <https://www.myboeingfleet.com>.

(4) You may review copies of the referenced service information at the FAA, Transport Airplane Directorate, 1601 Lind Avenue SW., Renton, WA. For information on the availability of this material at the FAA, call 425-227-1221.

(5) You may view this service information that is incorporated by reference at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call 202-741-6030, or go to: <http://www.archives.gov/federal-register/cfr/ibr-locations.html>.

Issued in Renton, Washington, on September 17, 2013.

Ross Landes,

Acting Manager, Transport Airplane Directorate, Aircraft Certification Service.

[FR Doc. 2013-24105 Filed 10-2-13; 8:45 am]

BILLING CODE 4910-13-P

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2012-1320; Directorate Identifier 2012-NM-095-AD; Amendment 39-17618; AD 2013-20-12]

RIN 2120-AA64

Airworthiness Directives; The Boeing Company Airplanes

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Final rule.

SUMMARY: We are adopting a new airworthiness directive (AD) for certain The Boeing Company Model 767 airplanes. This AD was prompted by reports of cracks and heat damage on pivot joint components found during main landing gear (MLG) overhaul. This AD requires, for certain airplanes, repetitive inspections of the MLG pivots, truck beam bushings, and inner cylinder bushings. For all airplanes, this AD requires a maintenance program revision, one-time inspections of the MLG truck beam, and related investigative and corrective actions (including configuration changes) if necessary; accomplishment of these actions terminates the repetitive inspections. We are issuing this AD to detect and correct heat damage and cracks in the pivot pin, truck beam lugs, and inner cylinder lugs, which could result in fracture of the pivot joint components and consequent MLG collapse.

DATES: This AD is effective November 7, 2013.

The Director of the Federal Register approved the incorporation by reference

of a certain publication listed in the AD as of November 7, 2013.

ADDRESSES: For service information identified in this AD, contact Boeing Commercial Airplanes, Attention: Data & Services Management, P.O. Box 3707, MC 2H-65, Seattle, WA 98124-2207; telephone 206-544-5000, extension 1; fax 206-766-5680; Internet <https://www.myboeingfleet.com>. You may review copies of the referenced service information at the FAA, Transport Airplane Directorate, 1601 Lind Avenue SW., Renton, Washington. For information on the availability of this material at the FAA, call 425-227-1221.

Examining the AD Docket

You may examine the AD docket on the Internet at <http://www.regulations.gov>; or in person at the Docket Management Facility between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this AD, the regulatory evaluation, any comments received, and other information. The address for the Docket Office (phone: 800-647-5527) is Document Management Facility, U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE., Washington, DC 20590.

FOR FURTHER INFORMATION CONTACT: Berhane Alazar, Aerospace Engineer, Airframe Branch, ANM-120S, FAA, Seattle Aircraft Certification Office (ACO), 1601 Lind Avenue SW., Renton, Washington 98057-3356; phone: 425-917-6577; fax: 425-917-6590; email: berhane.alazar@faa.gov.

SUPPLEMENTARY INFORMATION:

Discussion

We issued a notice of proposed rulemaking (NPRM) to amend 14 CFR part 39 to include an AD that would apply to the specified products. The NPRM published in the **Federal Register** on January 30, 2013 (78 FR 6251). For certain airplanes, the NPRM proposed to require repetitive inspections of the MLG pivots, truck beam bushings, and inner cylinder bushings. For all airplanes, the NPRM proposed to require a maintenance program revision, one-time inspections of the MLG truck beam, and related investigative and corrective actions (including configuration changes) if necessary; accomplishment of these actions would terminate the repetitive inspections.

Comments

We gave the public the opportunity to participate in developing this AD. The

following presents the comments received on the proposal (78 FR 6251, January 30, 2013) and the FAA's response to each comment.

Support for NPRM (78 FR 6251, January 30, 2013)

American Airlines (American) noted no issue with this proposed AD (78 FR 6251, January 30, 2013), and reported that the proposed compliance time will allow the work to be done during normal gear overhaul.

Request To Clarify Applicability

Aviation Partners Boeing (APB) stated that the installation of winglets per supplemental type certificate (STC) ST01920SE ([http://rgl.faa.gov/Regulatory_and_Guidance_Library/rgstc.nsf/0/082838ee177dbf62862576a4005cdfc0/\\$FILE/ST01920SE.pdf](http://rgl.faa.gov/Regulatory_and_Guidance_Library/rgstc.nsf/0/082838ee177dbf62862576a4005cdfc0/$FILE/ST01920SE.pdf)) does not affect the accomplishment of the manufacturer's service instructions. Delta Airlines (Delta) noted that several previous ADs have included similar information about the APB winglet modification, and requested that we clarify the applicability of the NPRM (78 FR 6251, January 30, 2013) by including this provision.

We agree. We have re-designated paragraph (c) as (c)(1) and added paragraph (c)(2) to this final rule, which states that STC ST01920SE ([http://rgl.faa.gov/Regulatory_and_Guidance_Library/rgstc.nsf/0/082838ee177dbf62862576a4005cdfc0/\\$FILE/ST01920SE.pdf](http://rgl.faa.gov/Regulatory_and_Guidance_Library/rgstc.nsf/0/082838ee177dbf62862576a4005cdfc0/$FILE/ST01920SE.pdf)) does not affect the ability to accomplish the actions required by this AD. Therefore, for airplanes on which STC ST01920SE is installed, a "change in product" alternative method of compliance (AMOC) approval request is not necessary to comply with the requirements of Section 39.17 of the Federal Aviation Regulations (14 CFR 39.17). For all other AMOC requests, the operator must request approval of an AMOC in accordance with the procedures specified in paragraph (n) of this AD.

Request To Extend Compliance Time

UPS requested that we revise paragraph (g) of the NPRM (78 FR 6251, January 30, 2013) to specify the repetitive interval for the lubrication schedule (as referenced in Boeing Service Bulletin 767-32A0227, Revision 1, dated September 13, 2012). UPS stated that changing the current interval (14 days or 50 flight cycles) to 650 flight hours would provide adequate lubrication and a simplified method of tracking compliance with the lubrication interval. UPS stated that the

lubrication could be scheduled along with the lubrication of other components located in that area, which is required by AD 2006–07–14, Amendment 39–14541 (71 FR 17691, April 7, 2006), for certain Model 767–200, –300, and –300F series airplanes. UPS added that the NPRM’s proposed compliance time of 14 days/50 flight cycles to lubricate the MLG truck pivot pin conflicts with the existing UPS maintenance program, 14 days/30 flight cycles, and does not add any increased benefit to safety.

We disagree with the request, in light of the number of cracks that have been found in inner cylinder pivot bores due to friction-generated heat damage. More frequent lubrication reduces friction in the joint. Also, the Boeing 767–200/–300/–300F maintenance planning document was previously changed to specify 14 days/50 flight cycles for these actions. Under the provisions of paragraph (n) of this final rule, however, we may consider individual requests for adjustments to the compliance time if data are submitted to substantiate that such an adjustment would provide an acceptable level of safety. We have not changed the final rule regarding this issue.

Request To Revise Inspection Requirements

Paragraph (h) of the NPRM (78 FR 6251, January 30, 2013) specified “detailed and etch inspections” for Model 767–400ER airplanes. Boeing requested that we limit this requirement to a “detailed inspection.” Boeing reported that the referenced service information for this proposed requirement erroneously specifies “detailed and etch inspections” in table 2 of paragraph 1.E., “Compliance,” of Boeing Service Bulletin 767–32A0227, Revision 1, dated September 13, 2012. Boeing explained that etch inspections do not apply to Model 767–400ER airplanes (Group 1) because those truck and inner cylinder pivot lugs are chrome plated. Boeing stated that affected operators will be notified of this error, which will be corrected when this service bulletin is revised. Boeing noted that the error appears only in paragraph 1.E., “Compliance”—and not the Work Instructions (Parts 6 and 7)—of this service bulletin.

We agree with the request for the reasons provided by the commenter. We have revised paragraph (h) in this final rule accordingly.

Request To Revise Inspection Condition: Wear

Paragraph (h) of the NPRM (78 FR 6251, January 30, 2013) specified

inspections to detect, among other things, “wear” of the MLG pivot pins. Boeing asserted that, since wear is a normal occurrence, “wear” should be changed to “wear beyond limits” to correspond to this condition as described in Boeing Service Bulletin 767–32A0227, Revision 1, dated September 13, 2012.

We agree that clarification is necessary. Specific wear limits are defined in condition 4, table 5, of paragraph 1.E., “Compliance,” of Boeing Service Bulletin 767–32A0227, Revision 1, dated September 13, 2012. No change to this final rule is necessary.

Request To Revise Inspection Condition: Grease in Inner Diameters

Paragraph (h) of the NPRM (78 FR 6251, January 30, 2013) also specified inspections to detect “grease not present in the bushing inner diameter.” Boeing contended this step is unnecessary, since operators must clean the pivot joint before the inspection, so there would be no grease present on the bushing inner diameters. (Boeing Service Bulletin 767–32A0227, Revision 1, dated September 13, 2012, specifies applying grease through the lube fittings as part of the inspection process to check for clogged lube passages.) Boeing therefore requested that we revise this condition to “grease not appearing in the bushing inner diameters when applied through the lube fittings” to more closely match the service bulletin description.

We agree with the request, for the reasons provided by the commenter. We have changed paragraph (h) in this final rule accordingly.

Request To Revise Descriptive Heading

The descriptive heading for paragraph (i) of the NPRM (78 FR 6251, January 30, 2013) was “MLG Truck Beam Inspections.” Boeing requested that we change this heading to “MLG Truck Beam and Inner Cylinder Configuration Change.” Boeing contended that this change would emphasize the main purpose of Boeing Service Bulletin 767–32A0227, Revision 1, dated September 13, 2012—to replace the aluminum-nickel-bronze bushings with copper-nickel-tin bushings.

We agree with the commenter’s request and rationale. Boeing Service Bulletin 767–32A0227, Revision 1, dated September 13, 2012, specifies this configuration change. We have revised the heading accordingly in this final rule.

Request To Clarify Inspection Locations

Paragraph (i) of the NPRM (78 FR 6251, January 30, 2013) specified

inspections of the “truck beam.” Boeing requested that we revise this proposed requirement to add inspection of the “inner cylinders.” Boeing stated that the main purpose of Boeing Service Bulletin 767–32A0227, Revision 1, dated September 13, 2012, is to replace the truck beam and inner cylinder pivot-joint bushings, and asserted that the NPRM omitted the inner cylinder bushings and emphasized the inspection process rather than the configuration change.

We agree with the request and have changed paragraph (i) accordingly in this final rule.

Request To Include Heat Damage as an Inspection Condition

Paragraph (i) of the NPRM (78 FR 6251, January 30, 2013) specified inspections to detect, among other things, “distress, corrosion, and cracking.” Boeing requested that we add “heat damage” to these conditions to more closely match the language of Boeing Service Bulletin 767–32A0227, Revision 1, dated September 13, 2012. Boeing stated that heat damage, explicitly identified as a condition in this service bulletin, is the primary type of damage to be expected.

We agree to clarify the possible findings of the inspection. Boeing Service Bulletin 767–32A0227, Revision 1, dated September 13, 2012, specifies various conditions based on the airplane group, and heat damage is identified as one of those conditions. We have changed paragraph (i) in this final rule to clarify that the inspection is intended to detect “applicable discrepancies” specified in Boeing Service Bulletin 767–32A0227, Revision 1, dated September 13, 2012.

Request To Allow Terminating Action per Service Information

Paragraph (k)(2) of the NPRM (78 FR 6251, January 30, 2013) specified that overhaul of the MLG and installation of certain truck beam and inner cylinder bushings terminate the inspection requirements, if those actions are done using an FAA-approved alternative method of compliance (AMOC). Boeing stated that the MLG overhaul includes investigative and corrective actions that are equivalent to those found in Boeing Service Bulletin 767–32A0227, Revision 1, dated September 13, 2012, so an overhaul should be an acceptable substitute for those actions. Boeing stated that most or all operators are expected to use the overhaul option, which is available in this service bulletin, so FAA approval of this service bulletin would make the process for requesting AMOC approval (as specified

in paragraph (k)(2) of the NPRM unnecessary.

We disagree with the request because the overhaul procedures necessary to address the unsafe condition identified in this AD would encompass significantly more work than the commenter described. Operators must contact the FAA to obtain approval for an acceptable method to ensure that the overhaul meets the requirement of this AD. We have not changed the final rule regarding this issue.

Request To Include Part References

Delta requested that we clarify the proposed actions specified in paragraphs (h) and (i) of the NPRM (78 FR 6251, January 30, 2013) by also identifying the applicable Parts of the Accomplishment Instructions of Boeing Service Bulletin 767–32A0227, Revision 1, dated September 13, 2012.

We agree with the request. We have added references to “Part 2” in paragraph (h) of this final rule and “Part 3” in paragraph (i) of this final rule.

Request To Account for Related AD

UPS requested that we revise paragraph (b) of the NPRM (78 FR 6251, January 30, 2013) to refer to AD 2006–07–14, Amendment 39–14541 (71 FR 17691, April 7, 2006). UPS stated that the new copper-nickel-tin bushing material (identified in the NPRM and Boeing Service Bulletin 767–32A0227, Revision 1, dated September 13, 2012), replaces the aluminum-nickel-bronze

bushing material specified in AD 2006–07–14. UPS asserted that compliance with both the NPRM and AD 2006–07–14 cannot be concurrently satisfied because the NPRM, which would require use of copper-nickel-tin material, conflicts with AD 2006–07–14, which requires use of aluminum-nickel-bronze bushing material. UPS stated that Boeing Service Bulletin 767–32A0227, Revision 1, dated September 13, 2012, explains that use of the new copper-nickel-tin bushing material is an AMOC to AD 2006–07–14, and requested that we revise the NPRM to include this AMOC.

We find that clarification is necessary. Paragraph 1.F., “Approval,” of Boeing Service Bulletin 767–32A0227, Revision 1, dated September 13, 2012, already addresses the issue raised by the commenter. Specifically, paragraph (j) of AD 2006–07–14, Amendment 39–14541 (71 FR 17691, April 7, 2006), specifies installing aluminum-nickel-bronze bushings as part of the terminating action. This final rule requires replacement of those aluminum-nickel-bronze bushings with bushings made of copper-nickel-tin material. Using a copper-nickel-tin bushing is considered to be an AMOC for installing an aluminum-nickel-bronze bushing, when installed as part of the terminating action for paragraph (j) of AD 2006–07–14. As requested by the commenter, we changed paragraph (b) of this final rule to clarify that this AD affects AD 2006–07–14.

Requests To Correct Typographical Error

Boeing and Delta noted a typographical error in paragraph (h) of the NPRM (78 FR 6251, January 30, 2013), which incorrectly specified inspecting “pivots” instead of “pivot pins.”

We acknowledge the error and have corrected paragraph (h) in this final rule accordingly.

Conclusion

We reviewed the relevant data, considered the comments received, and determined that air safety and the public interest require adopting this AD with the changes described previously—and minor editorial changes. We have determined that these minor changes:

- Are consistent with the intent that was proposed in the NPRM (78 FR 6251, January 30, 2013) for correcting the unsafe condition; and
- Do not add any additional burden upon the public than was already proposed in the NPRM (78 FR 6251, January 30, 2013).

We also determined that these changes will not increase the economic burden on any operator or increase the scope of this AD.

Costs of Compliance

We estimate that this AD affects 420 airplanes of U.S. registry. We estimate the following costs to comply with this AD:

ESTIMATED COSTS					
Action	Labor cost	Parts cost	Cost per product	Number of affected U.S. airplanes	Cost on U.S. operators
Maintenance program revision.	1 work-hour × \$85 per hour = \$85.	\$0	\$85	420	\$35,700.
Repetitive inspections	59 work-hours × \$85 per hour = \$5,015 per inspection cycle.	0	\$5,015 per inspection cycle.	38	\$190,570 per inspection cycle.
One-time inspections	147 work-hours × \$85 per hour = \$12,495.	0	\$12,495	420	\$5,247,900.

We have received no definitive data that would enable us to provide cost estimates for the on-condition actions (including related investigative actions, configuration changes, and corrective actions) specified in this AD.

Authority for This Rulemaking

Title 49 of the United States Code specifies the FAA’s authority to issue rules on aviation safety. Subtitle I, section 106, describes the authority of the FAA Administrator. Subtitle VII: Aviation Programs, describes in more

detail the scope of the Agency’s authority.

We are issuing this rulemaking under the authority described in Subtitle VII, Part A, Subpart III, Section 44701: “General requirements.” Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition

that is likely to exist or develop on products identified in this rulemaking action.

Regulatory Findings

This AD will not have federalism implications under Executive Order 13132. This AD will not have a substantial direct effect on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed above, I certify that this AD:

- (1) Is not a “significant regulatory action” under Executive Order 12866,
- (2) Is not a “significant rule” under DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979),
- (3) Will not affect intrastate aviation in Alaska, and
- (4) Will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

Adoption of the Amendment

Accordingly, under the authority delegated to me by the Administrator, the FAA amends 14 CFR part 39 as follows:

PART 39—AIRWORTHINESS DIRECTIVES

- 1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

§ 39.13 [Amended]

- 2. The FAA amends § 39.13 by adding the following new airworthiness directive (AD):

2013–20–12 The Boeing Company:

Amendment 39–17618 ; Docket No. FAA–2012–1320; Directorate Identifier 2012–NM–095–AD.

(a) Effective Date

This AD is effective November 7, 2013.

(b) Affected ADs

AD 2006–07–14, Amendment 39–14541 (71 FR 17691, April 7, 2006), is affected by this AD.

(c) Applicability

(1) This AD applies to The Boeing Company Model 767–200, –300, –300F, and –400ER series airplanes, certificated in any category, as identified in Boeing Service Bulletin 767–32A0227, Revision 1, dated September 13, 2012.

(2) Installation of Supplemental Type Certificate (STC) ST01920SE ([http://rgl.faa.gov/Regulatory_and_Guidance_Library/rgstc.nsf/0/082838ee177dbf62862576a4005cdfc0/\\$FILE/ST01920SE.pdf](http://rgl.faa.gov/Regulatory_and_Guidance_Library/rgstc.nsf/0/082838ee177dbf62862576a4005cdfc0/$FILE/ST01920SE.pdf)) does not affect the ability to accomplish the actions required by this AD. Therefore, for airplanes on which STC ST01920SE is installed, a “change in product” alternative method of compliance (AMOC) approval request is not necessary to comply with the requirements of 14 CFR 39.17.

(d) Subject

Joint Aircraft System Component (JASC)/ Air Transport Association (ATA) of America Code 32, Landing Gear.

(e) Unsafe Condition

This AD was prompted by reports of cracks and heat damage found on pivot joint components found during main landing gear (MLG) overhaul. We are issuing this AD to detect and correct heat damage and cracks in the pivot pin, truck beam lugs, and inner cylinder lugs, which could result in fracture of the pivot joint components and consequent MLG collapse.

(f) Compliance

Comply with this AD within the compliance times specified, unless already done.

(g) Maintenance Program Revision

At the applicable times specified in paragraph 1.E., “Compliance,” of Boeing Service Bulletin 767–32A0227, Revision 1, dated September 13, 2012, except as provided by paragraph (j) of this AD, revise the maintenance program to incorporate the specified maintenance review board (MRB) item, in accordance with Part 1 of the Accomplishment Instructions of Boeing Service Bulletin 767–32A0227, Revision 1, dated September 13, 2012.

(h) Repetitive Pivot Pin and Bushing Inspections

For airplanes identified as Group 1 in Boeing Service Bulletin 767–32A0227, Revision 1, dated September 13, 2012: At the applicable times specified in paragraph 1.E., “Compliance,” of Boeing Service Bulletin 767–32A0227, Revision 1, dated September 13, 2012, except as provided by paragraph (j) of this AD, do a detailed inspection to detect discrepancies (including bronze transfer, heat discoloration, darkened streaks, thermal spray coating distress, wear, cracking, smearing of material into the lubrication grooves, or grease not appearing in the bushing inner diameters when applied through the lube fittings) of the MLG pivot pins, truck beam bushings, and inner cylinder bushings, and do all applicable corrective actions, in accordance with Part 2 of the Accomplishment Instructions of Boeing Service Bulletin 767–32A0227, Revision 1, dated September 13, 2012. Do all applicable corrective actions before further flight. Repeat the inspection thereafter at the applicable times specified in paragraph 1.E., “Compliance,” of Boeing Service Bulletin 767–32A0227, Revision 1, dated September 13, 2012.

(i) Inspections of MLG Truck Beam and Inner Cylinder Configuration Change

For all airplanes: At the applicable time specified in paragraph 1.E., “Compliance,” of Boeing Service Bulletin 767–32A0227, Revision 1, dated September 13, 2012, except as provided by paragraph (j) of this AD, inspect the MLG truck beam and inner cylinders, using a detailed inspection, etch inspection, and fluorescent penetrant inspection (FPI), as applicable, to detect applicable discrepancies, and do all

applicable related investigative and corrective actions (including configuration changes), in accordance with Part 3 of the Accomplishment Instructions of Boeing Service Bulletin 767–32A0227, Revision 1, dated September 13, 2012. Do all applicable related investigative and corrective actions before further flight. Boeing Service Bulletin 767–32A0227, Revision 1, dated September 13, 2012, provides options for accomplishing certain corrective actions.

(j) Service Information Exception

Where Boeing Service Bulletin 767–32A0227, Revision 1, dated September 13, 2012, specifies a compliance time “after the original issue date of this service bulletin,” this AD requires compliance within the specified compliance time after the effective date of this AD.

(k) Terminating Action

(1) Accomplishment of the actions required by paragraphs (g) and (i) of this AD terminates the requirements of paragraph (h) of this AD.

(2) Overhaul of the MLG and installation of truck beam and inner cylinder bushings having applicable part numbers identified in Appendix “B” of Boeing Service Bulletin 767–32A0227, Revision 1, dated September 13, 2012, terminate the requirements of paragraphs (h) and (i) of this AD, if the actions are done using a method approved in accordance with the procedures specified in paragraph (n) of this AD.

(l) No Alternative Actions or Intervals

After accomplishing the revision required by paragraph (g) of this AD, no alternative actions (e.g., inspections) or intervals may be used unless the actions or intervals are approved as an AMOC in accordance with the procedures specified in paragraph (n) of this AD.

(m) Credit for Previous Actions

This paragraph provides credit for the actions specified in paragraphs (g), (h), (i), and (k) of this AD, if those actions were performed before the effective date of this AD using Boeing Alert Service Bulletin 767–32A0227, dated April 25, 2012, which is not incorporated by reference in this AD.

(n) Alternative Methods of Compliance (AMOCs)

(1) The Manager, Seattle Aircraft Certification Office (ACO), FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. In accordance with 14 CFR 39.19, send your request to your principal inspector or local Flight Standards District Office, as appropriate. If sending information directly to the manager of the ACO, send it to the attention of the person identified in paragraph (o)(1) of this AD. Information may be emailed to 9-ANM-Seattle-ACO-AMOC-Requests@faa.gov.

(2) Before using any approved AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the local flight standards district office/certificate holding district office.

(3) An AMOC that provides an acceptable level of safety may be used for any repair

required by this AD if it is approved by the Boeing Commercial Airplanes Organization Designation Authorization (ODA) that has been authorized by the Manager, Seattle ACO, to make those findings. For a repair method to be approved, the repair must meet the certification basis of the airplane, and the approval must specifically refer to this AD.

(o) Related Information

(1) For more information about this AD, contact Berhane Alazar, Aerospace Engineer, Airframe Branch, ANM-120S, FAA, Seattle Aircraft Certification Office (ACO), 1601 Lind Avenue SW., Renton, Washington 98057-3356; phone: 425-917-6577; fax: 425-917-6590; email: berhane.alazar@faa.gov.

(2) Service information identified in this AD that is not incorporated by reference in this AD may be obtained at the addresses specified in paragraphs (p)(3) and (p)(4) of this AD.

(p) Material Incorporated by Reference

(1) The Director of the Federal Register approved the incorporation by reference (IBR) of the service information listed in this paragraph under 5 U.S.C. 552(a) and 1 CFR part 51.

(2) You must use this service information as applicable to do the actions required by this AD, unless the AD specifies otherwise.

(i) Boeing Service Bulletin 767-32A0227, Revision 1, dated September 13, 2012.

(ii) Reserved.

(3) For service information identified in this AD, contact Boeing Commercial Airplanes, Attention: Data & Services Management, P.O. Box 3707, MC 2H-65, Seattle, Washington 98124-2207; telephone 206-544-5000, extension 1; fax 206-766-5680; Internet <https://www.myboeingfleet.com>.

(4) You may view this service information at Transport Airplane Directorate, 1601 Lind Avenue SW., Renton, Washington. For information on the availability of this material at the FAA, call 425-227-1221.

(5) You may view this service information that is incorporated by reference at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call 202-741-6030, or go to <http://www.archives.gov/federal-register/cfr/ibr-locations.html>.

Issued in Renton, Washington, on September 16, 2013.

Ross Landes,

Acting Manager, Transport Airplane Directorate, Aircraft Certification Service.

[FR Doc. 2013-23898 Filed 10-2-13; 8:45 am]

BILLING CODE 4910-13-P

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2013-0052; Directorate Identifier 2013-NE-02-AD; Amendment 39-17600; AD 2013-19-18]

RIN 2120-AA64

Airworthiness Directives; Rolls-Royce plc Turbofan Engines

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Final rule.

SUMMARY: We are adopting a new airworthiness directive (AD) for all Rolls-Royce plc (RR) RB211-535E4-37, RB211-535E4-B-37, RB211-535E4-C-37, and RB211-535E4-B-75 turbofan engines. This AD requires removal of affected parts using a drawdown plan. This AD was prompted by RR updating the low-cycle-fatigue life analysis for the low pressure turbine (LPT) stage 2 discs. We are issuing this AD to prevent LPT stage 2 disc failure, which could result in uncontained engine damage and damage to the airplane.

DATES: This AD becomes effective November 7, 2013. The Director of the Federal Register approved the incorporation by reference of certain publications listed in this AD as of November 7, 2013.

ADDRESSES: The Docket Operations office is located at Docket Management Facility, U.S. Department of Transportation, 1200 New Jersey Avenue SE., West Building Ground Floor, Room W12-140, Washington, DC 20590-0001.

Examining the AD Docket

You may examine the AD docket on the Internet at <http://www.regulations.gov>; or in person at the Docket Operations office between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this AD, the mandatory continuing airworthiness information (MCAI), the regulatory evaluation, any comments received, and other information. The street address for the Docket Operations office (phone: 800-647-5527) is provided in the **ADDRESSES** section. Comments will be available in the AD docket shortly after receipt.

FOR FURTHER INFORMATION CONTACT:

Robert Green, Aerospace Engineer, Engine Certification Office, FAA, Engine & Propeller Directorate, 12 New England Executive Park, Burlington, MA 01803; phone: 781-238-7754; fax: 781-238-7199; email: Robert.Green@faa.gov.

SUPPLEMENTARY INFORMATION:

Discussion

We issued a notice of proposed rulemaking (NPRM) to amend 14 CFR part 39 by adding an AD that would apply to the specified products. The NPRM was published in the **Federal Register** on April 5, 2013 (78 FR 20507). The NPRM proposed to correct an unsafe condition for the specified products. The MCAI states:

A recent re-evaluation of Critical Part lives carried out by Rolls-Royce revealed changes to the thermal profile and stresses in certain features of the low pressure turbine (LPT) Stage 2 disc. These changes have resulted in a reduction of the cyclic life of the LPT stage 2 discs.

Operation of an engine equipped with a Critical Part that has exceeded its cyclic life may result in Critical Part failure, consequent release of high energy debris, damage to the aeroplane and/or injury to occupants.

Comments

We gave the public the opportunity to participate in developing this AD. We considered the comments received.

Agreement With the AD

The Boeing Company expressed support for the NPRM (78 FR 20507, dated April 5, 2013).

Request To Be Less Specific About Service Bulletin Revision Level and Date

Texas Aero Engine Services LLC and United Airlines (UAL) requested that we not include the revision level and date of RR Alert Non-Modification Service Bulletin (NMSB) No. RB.211-72-AH029, dated December 13, 2012, or that we add the words “or later revision” because service bulletins can be revised often.

We disagree. RR Alert NMSB No. RB.211-72-AH029, dated December 13, 2012, contains unique methods that require incorporation by reference, requiring that we specify revision level and date. We do not know how the NMSB may be revised in the future, and therefore cannot add the words “or later revision.” We did not change this AD.

Request To Change the Definition of Engine Shop Visit (ESV)

RR and UAL requested that we change our definition of ESV in paragraph (g) of this AD by replacing the words “separation of flanges” with “deblading of the affected rotor disc.” They noted that our ESV definition is not consistent with the instructions in RR Alert NMSB No. RB.211-72-AH029, dated December 13, 2012, which only applies when the LPT Module will be stripped and the affected rotor is debladed. Our ESV

definition will result in removal of parts earlier than would occur using the RR NMSB. RR noted that this is unnecessary based on their risk assessment of a possible failure. In a subsequent comment, RR asked that the ESV definition be based on the deblading of the high pressure turbine disc since this better defines an engine refurbishment shop visit.

We disagree. We defined ESV as the separation of a pair of major mating engine module flanges in order to satisfy our safety concerns while minimizing the impact to the public. We have determined that corrective actions can be practicably implemented at next ESV and that these actions will provide an acceptable level of safety. We did not change this AD.

Request To Exempt an External Gearbox Removal From the ESV Definition

RR requested that we clarify that the separation of a pair of major mating engine module flanges in paragraph (g) of this AD does not include the separation of an engine external gearbox from the engine, which would not constitute a refurbishment shop visit.

We agree. We changed paragraph (g) of this AD to state: "For the purpose of this AD, an ESV is whenever engine maintenance performed prior to reinstallation requires the separation of a pair of major mating engine module flanges. Separation of flanges solely for the purpose of shipment without subsequent internal maintenance is not an ESV. Separation of the external gearbox engine mating flanges or removal of the external gearbox is also not classified as a shop visit."

Request To Delay Implementation of Reduced Rotating Parts Life Limits

American Airlines (AAL), FedEx Express, and RR asked that we revise or remove paragraph (e)(2) of this AD to eliminate the requirement to assign the reduced maximum approved lives within 30 days of the effective date of this AD and allow the current lives as published in the Time Limits Manual (TLM) to remain in effect until November 30, 2016. AAL stated that the AD requirement will cause problems for operator life limit tracking systems, causing confusion and possibly the grounding of aircraft. Operator life limit tracking systems prevent the operation of parts beyond their maximum approved lives.

We disagree. Operating beyond the redefined, reduced cyclic life limits represents an unsafe condition. LPT stage 2 discs that exceed the reduced life limits should be removed from

service as soon as practicable to correct an unsafe condition. We did not change this AD.

Request To Clarify Wording Regarding Compliance Date and Life Limits

AAL and RR requested that we clarify wording in paragraph (e)(4) of this AD regarding removal of affected parts by the compliance date, and that the parts cannot exceed current life limits. AAL stated that this paragraph could potentially allow parts to operate beyond both the current and reduced life limits.

We partially agree. We agree that paragraph (e)(4) of this AD could be misinterpreted because we did not specify that paragraph (e)(3) of this AD applies to those engines which have an engine shop visit prior to reaching the reduced life.

We do not agree that the compliance wording could potentially allow parts to operate beyond their current life limits because the TLM limits for the RR RB211 engine cannot be exceeded.

We changed paragraph (e)(3) of this AD by inserting "before reaching the part life assigned in paragraph (e)(2)". The paragraph now reads: "(3) After the effective date of this AD, for engines that have an engine shop visit (ESV) before reaching the part life assigned in paragraph (e)(2) of this AD, remove the LPT stage 2 disc from service before the part exceeds the part life assigned in paragraph (e)(2)."

Request To Change Compliance To Be Consistent With the RR Alert NMSB

AAL, RR, and UAL requested that we change the compliance to be consistent with RR Alert NMSB No. RB.211-72-AH029, dated December 13, 2012. This AD requires that the reduced life limits be assigned within 30 days after the effective date of the AD. The RR Alert NMSB establishes that these lives are provisional lives, and that the current lives as published in the TLM remain in effect until November 30, 2016. AAL and RR noted that the risk assessment conducted by RR supports the continued use of the current life limits for parts not exposed during a shop visit and demonstrated an acceptable level of safety. AAL noted that the AD as proposed (78 FR 20507, April 5, 2013) will result in significant shop visit costs in comparison to the shop visit costs associated with the RR Alert NMSB.

We disagree. The redefined, reduced cyclic life limits are needed to correct an unsafe condition. We have determined that corrective actions can be practicably implemented at next ESV and that these actions will provide an

acceptable level of safety. We did not change this AD.

Request To Change Compliance Time

UAL requested that we change the compliance time in paragraphs (e)(1) and (e)(2) of this AD from "within 30 days" to "within 90 days" because for UAL's fleet of 137 engines, 30 days is too short of a compliance period.

We disagree. The recommended timeframe for completion in RR Alert NMSB No. RB.211-72-AH029, dated December 13, 2012, was 6 weeks. The new lives of the LPT stage 2 discs could have been recalculated starting from when the NMSB was issued. In addition, the effective date of this AD is 35 days after the date of publication in the **Federal Register**, which provides additional time beyond the 30 days mandated in this AD. We did not change this AD.

Request To Change the Costs of Compliance

AAL requested that we change the costs of compliance to include the labor costs associated with replacing the parts at an ESV (i.e., engine disassembly costs). AAL states that the AD requires replacement of parts in modules that are not related to an engine removal cause, which will result in additional labor costs to access and replace those parts.

We disagree. We consider the actual costs of this AD, which are associated with the prorated reduction in the lives of the life-limited parts. We do not consider the engine disassembly costs that will vary depending on the category of the ESV. We did not change this AD.

Comment That the European Aviation Safety Agency (EASA) AD Referred to in the NPRM Has Been Superseded

RR commented that EASA AD 2012-0266, dated December 18, 2012, referred to in this AD, has been superseded.

We disagree. EASA AD 2012-0266 is not superseded. We did not change this AD.

Conclusion

We reviewed the available data, including the comments received, and determined that air safety and the public interest require adopting this AD with the changes described previously. We determined that these changes will not increase the economic burden on any operator or increase the scope of this AD.

Costs of Compliance

We estimate that this AD would affect about 220 engines installed on airplanes of U.S. registry. The average labor rate is \$85 per hour. We do not estimate any

labor cost associated with this AD because the affected parts are replaced during scheduled shop visits. Prorated cost of the parts adjusted for lost life is about \$8,290 per engine. Based on these figures, we estimate the cost of the AD on U.S. operators to be \$1,823,800.

Authority for This Rulemaking

Title 49 of the United States Code specifies the FAA's authority to issue rules on aviation safety. Subtitle I, section 106, describes the authority of the FAA Administrator. "Subtitle VII: Aviation Programs," describes in more detail the scope of the Agency's authority.

We are issuing this rulemaking under the authority described in "Subtitle VII, Part A, Subpart III, Section 44701: General requirements." Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

Regulatory Findings

We determined that this AD will not have federalism implications under Executive Order 13132. This AD will not have a substantial direct effect on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed above, I certify this AD:

(1) Is not a "significant regulatory action" under Executive Order 12866,

(2) Is not a "significant rule" under the DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979),

(3) Will not affect intrastate aviation in Alaska to the extent that it justifies making a regulatory distinction, and

(4) Will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

We prepared a regulatory evaluation of the estimated costs to comply with this AD and placed it in the AD docket.

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

Adoption of the Amendment

Accordingly, under the authority delegated to me by the Administrator, the FAA amends 14 CFR part 39 as follows:

PART 39—AIRWORTHINESS DIRECTIVES

■ 1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

§ 39.13 [Amended]

■ 2. The FAA amends § 39.13 by adding the following new airworthiness directive (AD):

2013-19-18 Rolls-Royce plc: Amendment 39-17600; Docket No. FAA-2013-0052; Directorate Identifier 2013-NE-02-AD.

(a) Effective Date

This AD becomes effective November 7, 2013.

(b) Affected ADs

None.

(c) Applicability

This AD applies to all Rolls-Royce plc (RR) RB211-535E4-37, RB211-535E4-B-37, RB211-535E4-C-37, and RB211-535E4-B-75 turbofan engines.

(d) Unsafe Condition

This AD was prompted by RR updating the low-cycle-fatigue life analysis for the low pressure turbine (LPT) stage 2 discs. We are issuing this AD to prevent LPT stage 2 disc failure, which could result in uncontained engine damage and damage to the airplane.

(e) Actions and Compliance

(1) Within 30 days after the effective date of this AD, re-calculate the cyclic life since new of each LPT stage 2 disc. Use the part lives and prorated life formulas in Appendices 1, 2, and 3 of RR Alert Non-Modification Service Bulletin (NMSB) No. RB.211-72-AH029, dated December 13, 2012, to make that calculation.

(2) Assign the Maximum Approved Lives defined in Appendix 1 of Alert NMSB No. RB.211-72-AH029, dated December 13, 2012, to the LPT stage 2 disc based on the flight profile that will be flown.

(3) After the effective date of this AD, for engines that have an engine shop visit (ESV), before reaching the part life assigned in paragraph (e)(2) of this AD, remove the LPT stage 2 disc from service before the part exceeds the part life assigned in paragraph (e)(2).

(4) For those engines that do not have an ESV after the effective date of this AD before the part exceeds the part life assigned in paragraph (e)(2) of this AD, remove the part from service at the next ESV.

(f) Installation Prohibition

Except for parts that have been reworked using RR Service Bulletin No. RB.211-72-D365, Revision 5, dated December 13, 2012, after the effective date of this AD, do not

reinstall any part removed per this AD into any engine.

(g) Definition

For the purpose of this AD, an ESV is whenever engine maintenance performed prior to reinstallation requires the separation of a pair of major mating engine module flanges. Separation of flanges solely for the purpose of shipment without subsequent internal maintenance is not an ESV. Separation of the external gearbox engine mating flanges or removal of the external gearbox is also not classified as a shop visit.

(h) Alternative Methods of Compliance (AMOCs)

The Manager, Engine Certification Office, FAA, may approve AMOCs to this AD. Use the procedures found in 14 CFR 39.19 to make your request.

(i) Related Information

(1) For more information about this AD, contact Robert Green, Aerospace Engineer, Engine Certification Office, FAA, Engine & Propeller Directorate, 12 New England Executive Park, Burlington, MA 01803; phone: 781-238-7754; fax: 781-238-7199; email: Robert.Green@faa.gov.

(2) Refer to European Aviation Safety Agency Airworthiness Directive 2012-0266, dated December 18, 2012 for more information. You may examine the AD on the Internet at <http://www.regulations.gov/#!documentDetail;D=FAA-2013-0052-0004>.

(j) Material Incorporated by Reference

(1) The Director of the Federal Register approved the incorporation by reference (IBR) of the service information listed in this paragraph under 5 U.S.C. 552(a) and 1 CFR part 51.

(2) You must use this service information as applicable to do the actions required by this AD, unless the AD specifies otherwise.

(i) RR Alert Non-Modification Service Bulletin (NMSB) No. RB.211-72-AH029, dated December 13, 2012.

(ii) Reserved.

(3) For Rolls-Royce plc service information identified in this AD, contact Rolls-Royce plc, Corporate Communications, P.O. Box 31, Derby, England, DE248BJ; phone: 011-44-1332-242424; fax: 011-44-1332-249936; email: http://www.rolls-royce.com/contact/civil_team.jsp; or download from <https://www.aeromanager.com>.

(4) You may view this service information at FAA, Engine & Propeller Directorate, 12 New England Executive Park, Burlington, MA. For information on the availability of this material at the FAA, call 781-238-7125.

(5) You may view this service information at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call 202-741-6030, or go to: <http://www.archives.gov/federal-register/cfr/ibr-locations.html>.

Issued in Burlington, Massachusetts, on September 16, 2013.

Carlos A. Pestana,

Acting Directorate Assistant Manager, Engine & Propeller Directorate, Aircraft Certification Service.

[FR Doc. 2013-23448 Filed 10-2-13; 8:45 am]

BILLING CODE 4910-13-P

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2013-0029; Directorate Identifier 2013-NE-01-AD; Amendment 39-17599; AD 2013-19-17]

RIN 2120-AA64

Airworthiness Directives; Rolls-Royce plc Turbofan Engines

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Final rule.

SUMMARY: We are adopting a new airworthiness directive (AD) for all Rolls-Royce plc (RR) RB211-535E4-B-37 series turbofan engines. This AD requires removal of affected parts using a drawdown plan. This AD was prompted by recalculating the lives of certain rotating life limited parts (LLPs) operated to certain flight profiles. We are issuing this AD to prevent the failure of rotating LLPs, which could result in uncontained failure of the engine and damage to the airplane.

DATES: This AD becomes effective November 7, 2013. The Director of the Federal Register approved the incorporation by reference of certain publications listed in this AD as of November 7, 2013.

ADDRESSES: The Docket Operations office is located at Docket Management Facility, U.S. Department of Transportation, 1200 New Jersey Avenue SE., West Building Ground Floor, Room W12-140, Washington, DC 20590-0001.

Examining the AD Docket

You may examine the AD docket on the Internet at <http://www.regulations.gov>; or in person at the Docket Operations office between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this AD, the mandatory continuing airworthiness information (MCAI), regulatory evaluation, any comments received, and other information. The street address for the Docket Operations office (phone: 800-647-5527) is provided in the **ADDRESSES**

section. Comments will be available in the AD docket shortly after receipt.

FOR FURTHER INFORMATION CONTACT:

Robert Green, Aerospace Engineer, Engine Certification Office, FAA, Engine & Propeller Directorate, 12 New England Executive Park, Burlington, MA 01803; phone: 781-238-7754; fax: 781-238-7199; email: robert.green@faa.gov.

SUPPLEMENTARY INFORMATION:

Discussion

We issued a notice of proposed rulemaking (NPRM) to amend 14 CFR part 39 by adding an AD that would apply to the specified products. The NPRM was published in the **Federal Register** on April 5, 2013 (78 FR 20509). The NPRM proposed to correct an unsafe condition for the specified products. The MCAI states:

Flight Profiles (FP) define the limits of engine operation within which the engine will qualify for use of an associated set of Critical Parts life limits. The Rolls-Royce RB211-535E4-B-37 engine previously had only one such FP and associated set of life limits published in the applicable RR Time Limits Manual.

However, a recent review of operational flight data has revealed that some engines may have been operated beyond the currently valid datum FP.

Failure to account for the correct rate of fatigue damage associated with engine operation may lead to Critical Parts failure, possibly resulting in release of high energy debris, damage to the aeroplane and/or injury to occupants.

Comments

We gave the public the opportunity to participate in developing this AD. We considered the comments received.

Agreement With the AD

The Boeing Company expressed support for the NPRM (78 FR 20509, dated April 5, 2013).

Request To Be Less Specific About Service Bulletin Revision Level and Date

Texas Aero Engine Service LLC, RR, and United Airlines (UAL) requested that we not include the revision level and date of RR Alert Non-Modification Service Bulletin (NMSB) No. RB.211-72-AG875, or that we add the words "or later revision" because service bulletins can be revised often.

We disagree. RR Alert NMSB No. RB.211-72-AG875, dated December 13, 2012, contains unique methods that require incorporation by reference, requiring that we specify revision level and date. We do not know how the NMSB may be revised in the future, and therefore cannot add the words "or later revision." We did not change this AD.

Request To Change the Definition of Engine Shop Visit (ESV)

RR and UAL requested that we change our definition of ESV in paragraph (g) of this AD by replacing the words "separation of flanges" with "deblading of the affected rotor disc." They noted that our definition of ESV is not consistent with the instructions in RR Alert NMSB No. RB.211-72-AG875, dated December 13, 2012, which only applies when the rotor is debladed. Our ESV definition will result in the removal of parts earlier than would occur using the RR NMSB. RR noted that this is not necessary based on their risk assessment of a possible failure. In a subsequent comment, RR asked that the ESV definition be based on the deblading of the high pressure turbine disc since this better defines an engine refurbishment shop visit.

We disagree. We defined ESV as the separation of a pair of major mating engine module flanges in order to satisfy our safety concerns while minimizing the impact to the public. The redefined, reduced cyclic life limits are needed to correct an unsafe condition. We have determined that corrective actions can be practicably implemented at next ESV and that these actions will provide an acceptable level of safety. We did not change this AD.

Request To Exempt an External Gearbox Removal From the ESV Definition

RR requested that we clarify that the separation of a pair of major mating engine module flanges in paragraph (g) of this AD does not include the separation of an engine external gearbox from the engine, which would not constitute a refurbishment shop visit.

We agree. We changed paragraph (g) of this AD to state: "For the purpose of this AD, ESV is whenever engine maintenance performed prior to reinstallation requires the separation of a pair of major mating engine module flanges. Separation of flanges solely for the purpose of shipment without subsequent internal maintenance is not an ESV. Separation of the external gearbox engine mating flanges or removal of the external gearbox is also not classified as a shop visit."

Request To Delay Implementation of Reduced Rotating Parts Life Limits

American Air Lines (AAL) and RR asked that we revise or remove paragraph (e)(2) of this AD to eliminate the requirement to assign the reduced maximum approved lives within 30 days of the effective date of this AD and allow the current lives as published in

the Time Limits Manual (TLM) to remain in effect until November 30, 2016. AAL stated that the AD requirement will cause problems for operator life limit tracking systems, causing confusion and possibly the grounding of aircraft. Operator life limit tracking systems prevent the operation of parts beyond their maximum approved lives.

We disagree. Operating beyond the redefined, reduced cyclic life limits represents an unsafe condition. LLPs that exceed the reduced life limits should be removed from service as soon as practicable to correct an unsafe condition. We did not change this AD.

Request To Clarify Wording Regarding Compliance Date and Life Limits

AAL and RR requested that we clarify wording in paragraph (e)(5) of this AD regarding removal of affected parts by the compliance date, and that the parts cannot exceed current life limits. One commenter stated that this paragraph could potentially allow parts to operate beyond both the current and reduced life limits.

We partially agree. We agree that paragraph (e)(5) of this AD could be misinterpreted because we did not specify that paragraph (e)(4) of this AD applies to those engines which have an engine shop visit prior to reaching the reduced life.

We do not agree that the compliance wording could potentially allow parts to operate beyond their current life limits because the life limits, as published in the TLM for RR RB211 engines, cannot be exceeded.

We changed paragraph (e)(4) of this AD by inserting “before reaching the part life assigned in paragraph (e)(2)”. The paragraph now reads: “(4) After the effective date of this AD, for engines that incorporate an LP turbine disc stage 2, IP compressor rotor shaft (stage 1 to 6), HP compressor rear rotor shaft assembly, or HP turbine disc whose part life is defined by paragraph (e)(1) of this AD, that have an engine shop visit (ESV) before reaching the part life assigned in paragraph (e)(2) of this AD, remove each part from service before the part exceeds the part life assigned in paragraph (e)(2).”

Request To Change Compliance To Be Consistent With the RR NMSB

AAL, RR, and UAL requested that we change the compliance to be consistent with RR Alert NMSB No. RB.211–72–AG875, dated December 13, 2012. AAL noted that the risk assessment conducted by RR supports the continued use of the current life limits for parts not exposed during a shop

visit, and demonstrated an acceptable level of safety. AAL further stated that the AD as proposed (78 FR 20509, April 5, 2013) will result in significant shop visit costs in comparison to the shop visit costs associated with the RR Alert NMSB.

We disagree. The redefined, reduced cyclic life limits are needed to correct an unsafe condition. We have determined that corrective actions can be practicably implemented at next ESV and that these actions will provide an acceptable level of safety. We did not change this AD.

Request To Change Compliance Time

UAL requested that we change the compliance time in paragraphs (e)(1) and (e)(2) of this AD from “within 30 days” to “within 90 days” because for UAL’s fleet of 137 engines, 30 days is too short of a compliance period.

We disagree. The recommended timeframe for completion in RR Alert NMSB No. RB.211–72–AG875, dated December 13, 2012, was 6 weeks. The new lives of the rotating LLPs could have been recalculated starting from when the NMSB was issued. In addition, the effective date of this AD is 35 days after the date of publication in the **Federal Register**, which provides additional time beyond the 30 days mandated in this AD. We did not change this AD.

Request To Change the Costs of Compliance

AAL requested that we change the costs of compliance to include the labor costs associated with replacing the parts (i.e., engine disassembly costs). AAL states that the AD requires replacement of parts in modules that are not related to an engine removal cause, resulting in additional labor costs to access and replace those parts.

We disagree. We consider the actual costs of this AD, which are associated with the prorated reduction in the lives of the LLPs. We do not consider the engine disassembly costs, which will vary depending on the category of the ESV. We did not change this AD.

Conclusion

We reviewed the available data, including the comments received, and determined that air safety and the public interest require adopting this AD with the changes described previously. We determined that these changes will not increase the economic burden on any operator or increase the scope of this AD.

Costs of Compliance

We estimate that this AD will affect about 377 engines of U.S. registry. Of these 377 engines, we estimate 95 engines operate to Flight Profile D or E. The average labor rate is \$85 per hour. We do not estimate any labor cost is associated with this AD because the affected parts are replaced at the next shop visit. Prorated cost of parts adjusted to Flight Profile D operation, will cost about \$77,672 per engine. Prorated cost of parts, adjusted to Flight Profile E operation, will cost about \$204,981 per engine. Based on these figures, we estimate the cost of this AD on U.S. operators to be \$11,834,655.

Authority for This Rulemaking

Title 49 of the United States Code specifies the FAA’s authority to issue rules on aviation safety. Subtitle I, section 106, describes the authority of the FAA Administrator. “Subtitle VII: Aviation Programs,” describes in more detail the scope of the Agency’s authority.

We are issuing this rulemaking under the authority described in “Subtitle VII, Part A, Subpart III, Section 44701: General requirements.” Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

Regulatory Findings

We determined that this AD will not have federalism implications under Executive Order 13132. This AD will not have a substantial direct effect on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed above, I certify this AD:

- (1) Is not a “significant regulatory action” under Executive Order 12866,
- (2) Is not a “significant rule” under the DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979),
- (3) Will not affect intrastate aviation in Alaska to the extent that it justifies making a regulatory distinction, and
- (4) Will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

We prepared a regulatory evaluation of the estimated costs to comply with this AD and placed it in the AD docket.

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

Adoption of the Amendment

Accordingly, under the authority delegated to me by the Administrator, the FAA amends 14 CFR part 39 as follows:

PART 39—AIRWORTHINESS DIRECTIVES

■ 1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

§ 39.13 [Amended]

■ 2. The FAA amends § 39.13 by adding the following new airworthiness directive (AD):

200X-19-17 Rolls-Royce plc Amendment 39-17599; Docket No. FAA-2013-0029; Directorate Identifier 2013-NE-01-AD.

(a) Effective Date

This AD becomes effective November 7, 2013.

(b) Affected ADs

None.

(c) Applicability

This AD applies to all Rolls-Royce plc (RR) RB211-535E4-B-37 series turbofan engines.

(d) Unsafe Condition

This AD was prompted by recalculating the lives of certain rotating life limited parts (LLPs) operated to certain flight profiles. We are issuing this AD to prevent the failure of rotating LLPs, which could result in uncontained failure of the engine and damage to the airplane.

(e) Actions and Compliance

Comply with this AD within the compliance times specified, unless already done.

(1) Within 30 days after the effective date of this AD, for engines that have operated to Flight Profile D or E, recalculate the life of the low-pressure (LP) turbine disc stage 2, intermediate-pressure (IP) compressor rotor shaft (stage 1 to 6), high-pressure (HP) compressor rear rotor shaft assembly, and HP turbine disc installed on that engine. Use the part lives, prorated life formulas, and flight profiles in Appendices 2, 4, and 5 of RR Alert Non-Modification Service Bulletin (NMSB) No. RB.211-72-AG875, dated December 13, 2012, to make that calculation.

(2) Within 30 days after the effective date of this AD, for engines that will operate to Flight Profile D or E, assign the maximum approved lives defined in Appendix 2 of RR Alert NMSB No. RB.211-72-AG875, dated December 13, 2012, to the LP turbine disc stage 2, IP compressor rotor shaft (stage 1 to

6), HP compressor rear rotor shaft assembly, and HP turbine disc based on the flight profile that will be flown.

(3) For engines that have only operated to, and will continue to operate to, Flight Profile C, as defined in Appendix 5 of RR Alert NMSB No. RB.211-72-AG875, dated December 13, 2012, no further action is required by this AD.

(4) After the effective date of this AD, for engines that incorporate an LP turbine disc stage 2, IP compressor rotor shaft (stage 1 to 6), HP compressor rear rotor shaft assembly, or HP turbine disc whose part life is defined by paragraph (e)(1) of this AD, that have an engine shop visit (ESV) before reaching the part life assigned in paragraph (e)(2) of this AD, remove each part from service before the part exceeds the part life assigned in paragraph (e)(2).

(5) For those engines that incorporate an LP turbine disc stage 2, IP compressor rotor shaft (stage 1 to 6), HP compressor rear rotor shaft assembly, or HP turbine disc whose part life is defined by paragraph (e)(1) of this AD, that do not have an ESV after the effective date of this AD before the part exceeds the part life assigned in paragraph (e)(2) of this AD, remove the part from service at the next ESV.

(f) Installation Prohibition

Any LP turbine disc stage 2, IP compressor rotor shaft (stage 1 to 6), HP compressor rear rotor shaft assembly, or HP turbine disc whose part life is defined by paragraph (e)(1) of this AD that is re-installed in any engine after the effective date of this AD must be removed from service before the part exceeds the part life assigned in paragraph (e)(2) of this AD.

(g) Definition

For the purpose of this AD, ESV is whenever engine maintenance performed prior to reinstallation requires the separation of a pair of major mating engine module flanges. Separation of flanges solely for the purpose of shipment without subsequent internal maintenance is not an ESV. Separation of the external gearbox engine mating flanges or removal of the external gearbox is also not classified as a shop visit.

(h) Alternative Methods of Compliance (AMOCs)

The Manager, Engine Certification Office, may approve AMOCs for this AD. Use the procedures found in 14 CFR 39.19 to make your request.

(i) Related Information

(1) For more information about this AD, contact Robert Green, Aerospace Engineer, Engine Certification Office, FAA, Engine & Propeller Directorate, 12 New England Executive Park, Burlington, MA 01803; phone: 781-238-7754; fax: 781-238-7199; email: robert.green@faa.gov.

(2) Refer to European Aviation Safety Agency AD 2012-0265, dated December 18, 2012, for related information. You may examine the AD on the Internet at <http://www.regulations.gov/#/documentDetail;D=FAA-2013-0029-0007>.

(j) Material Incorporated by Reference

(1) The Director of the Federal Register approved the incorporation by reference (IBR) of the service information listed in this paragraph under 5 U.S.C. 552(a) and 1 CFR part 51.

(2) You must use this service information as applicable to do the actions required by this AD, unless the AD specifies otherwise.

(i) Rolls-Royce plc Alert Non-Modification Service Bulletin No. RB.211-72-AG875, dated December 13, 2012.

(ii) Reserved.

(3) For Rolls-Royce plc service information identified in this AD, contact Rolls-Royce plc, Corporate Communications, P.O. Box 31, Derby, England, DE248BJ; phone: 011-44-1332-242424; fax: 011-44-1332-249936; email: http://www.rolls-royce.com/contact/civil_team.jsp; or download from <https://www.aeromanager.com>.

(4) You may view this service information at FAA, Engine & Propeller Directorate, 12 New England Executive Park, Burlington, MA. For information on the availability of this material at the FAA, call 781-238-7125.

(5) You may view this service information at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call 202-741-6030, or go to: <http://www.archives.gov/federal-register/cfr/ibr-locations.html>.

Issued in Burlington, Massachusetts, on September 16, 2013.

Carlos A. Pestana,

Acting Directorate Assistant Manager, Engine & Propeller Directorate, Aircraft Certification Service.

[FR Doc. 2013-23452 Filed 10-2-13; 8:45 am]

BILLING CODE 4910-13-P

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2012-0998; Directorate Identifier 2011-NM-249-AD; Amendment 39-17605; AD 2013-19-23]

RIN 2120-AA64

Airworthiness Directives; The Boeing Company Airplanes

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Final rule.

SUMMARY: We are adopting a new airworthiness directive (AD) for certain The Boeing Company Model 737-600, -700, -700C, -800, -900, and -900ER series airplanes. This AD was prompted by a new revision to the airworthiness limitations of the maintenance planning data (MPD) document. This AD requires revising the maintenance program to update inspection requirements to detect fatigue cracking of principal

structural elements (PSEs). We are issuing this AD to detect and correct fatigue cracking of various principal structural elements (PSEs), which could adversely affect the structural integrity of these airplanes.

DATES: This AD is effective November 7, 2013

The Director of the Federal Register approved the incorporation by reference of a certain publication listed in the AD as of November 7, 2013.

ADDRESSES: For service information identified in this AD, contact Boeing Commercial Airplanes, Attention: Data & Services Management, P.O. Box 3707, MC 2H-65, Seattle, Washington 98124-2207; telephone 206-544-5000, extension 1; fax 206-766-5680; Internet <https://www.myboeingfleet.com>. You may review copies of the referenced service information at the FAA, Transport Airplane Directorate, 1601 Lind Avenue SW., Renton, Washington. For information on the availability of this material at the FAA, call 425-227-1221.

Examining the AD Docket

You may examine the AD docket on the Internet at <http://www.regulations.gov>; or in person at the Docket Management Facility between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this AD, the regulatory evaluation, any comments received, and other information. The address for the Docket Office (phone: 800-647-5527) is Document Management Facility, U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE., Washington, DC 20590.

FOR FURTHER INFORMATION CONTACT: Nancy Marsh, Aerospace Engineer, Airframe Branch, ANM-120S, Seattle Aircraft Certification Office, FAA, 1601 Lind Avenue SW., Renton, WA 98057-3356; phone: 425-917-6440; fax: 425-917-6590; email: nancy.marsh@faa.gov.

SUPPLEMENTARY INFORMATION:

Discussion

We issued a notice of proposed rulemaking (NPRM) to amend 14 CFR part 39 to include an AD that would apply to the specified products. The NPRM published in the **Federal Register** on September 24, 2012 (77 FR 58791). The NPRM proposed to require revising the maintenance program to update inspection requirements to detect fatigue cracking of PSEs.

Comments

We gave the public the opportunity to participate in developing this AD. The following presents the comments received on the proposal (77 FR 58791, September 24, 2012) and the FAA's response to each comment.

Requests To Use the Most Recent MPD Document

Boeing and American Airlines (AAL) requested that the most recent MPD document be incorporated into the NPRM (77 FR 58791, September 24, 2012).

Boeing stated that the NPRM (77 FR 58791, September 24, 2012) should reference Subsection B, AWLs—Structural Inspections, of Section 9, “Airworthiness Limitations (AWLs) and Certification Maintenance Requirements (CMRs),” of Boeing 737-600, -700, -700C, -800, -900, and -900ER MPD Document, D626A001-CMR, Revision December 2011. Boeing stated that this is the most recent MPD document and that this revision incorporates more stringent restrictions that should be included before the final rule is issued.

AAL stated that the Relevant Service Information section and paragraph (g) of the NPRM (77 FR 58791, September 24, 2012) refer to Subsection B, AWLs—Structural Inspections, of Section 9, “Airworthiness Limitations (AWLs) and Certification Maintenance Requirements (CMRs),” of Boeing 737-600, -700, -700C, -800, -900, and -900ER MPD Document, D626A001-CMR, Revision July 2011. AAL stated that the most recent revision of that document is Revision August 2012, and that it should be incorporated into the NPRM.

We agree with the commenters' requests. The Relevant Service Information section of the NPRM (77 FR 58791, September 24, 2012) is not restated in the final rule. However, we have added both Revision December 2011 and Revision August 2012 of Subsection B, AWLs—Structural Inspections, of Section 9, “Airworthiness Limitations (AWLs) and Certification Maintenance Requirements (CMRs),” of Boeing 737-600, -700, -700C, -800, -900, and -900ER MPD Document, D626A001-CMR to paragraph (g) of this AD as acceptable options for doing the actions required by this AD. We also re-organized paragraph (g) of this AD to improve readability. Because Revision August 2012 of Subsection B, AWLs—Structural Inspections, of Section 9, “Airworthiness Limitations (AWLs) and Certification Maintenance Requirements (CMRs),” of Boeing 737-600, -700, -700C, -800, -900, and -900ER MPD

Document, D626A001-CMR is a more stringent document, we might consider future rulemaking to require the actions specified in that document.

Request To Use Later Revisions of the Service Information

All Nippon Airways (ANA) requested the use of a later-approved MPD document. ANA noted that the NPRM (77 FR 58791, September 24, 2012) refers to Subsection B, AWLs—Structural Inspections, of Section 9, “Airworthiness Limitations (AWLs) and Certification Maintenance Requirements (CMRs),” of Boeing 737-600, -700, -700C, -800, -900, and -900ER MPD Document, D626A001-CMR, Revision July 2011, and that the current document is Revision December 2011. ANA stated that once the NPRM becomes a final rule, an alternative method of compliance (AMOC) will be necessary to do the actions in the latest document. ANA also stated that airworthiness limitations and CMR documents are revised periodically; if an AMOC is necessary for each revision of the document, it will burden the operators. ANA stated that if paragraph (g) of the NPRM addresses “D626A001-CMR revision July 2011, or later,” then an AMOC will not be necessary for each later revision of the document. ANA stated that, since the document is reviewed by the FAA prior to public release, the FAA is able to confirm if the document meets the adequate level of safety.

We disagree with ANA's request. We cannot use the phrase, “or later FAA-approved revisions,” in an AD when referring to the service document because doing so violates Office of the Federal Register (OFR) regulations for approval of materials “incorporated by reference” in rules. See 1 CFR 51.1(f).

In general terms, we are required by OFR regulations to either publish the service document contents as part of the actual AD language; or submit the service document to the OFR for approval as “referenced” material, in which case we may only refer to such material in the text of an AD. The AD may refer to the service document only if the OFR approved it for “incorporation by reference.” See 1 CFR part 51.

To allow operators to use later revisions of the referenced document (issued after publication of the AD), either we must revise the AD to reference specific later revisions, or operators must request approval to use later revisions as an AMOC with this AD under the provisions of paragraph (j)(1) of this AD. As stated previously, we have added Revision December 2011

and Revision August 2012 of Subsection B, AWLs—Structural Inspections, of Section 9, “Airworthiness Limitations (AWLs) and Certification Maintenance Requirements (CMRs),” of Boeing 737–600, –700, –700C, –800, –900, and –900ER MPD Document, D626A001–CMR to paragraph (g) of this AD as acceptable options for doing the required actions.

Requests for an AMOC Exception

WestJet and AAL requested an AMOC exception.

WestJet stated that in paragraph (c)(2) of the NPRM (77 FR 58791, September 24, 2012) the wording “may not be able to” implies that if an inspection to a modified, altered, or repaired area can be accomplished, then an AMOC is not required. WestJet also stated that an AMOC should not be required for Boeing repairs that have damage tolerant assessments and for supplemental type certificates (STCs) that have FAA-approved airworthiness limitation structural inspections.

AAL stated that paragraph (c)(2) of the NPRM (77 FR 58791, September 24, 2012) provides minimal information on how operators should address new and existing repairs in a PSE area, as defined in Subsection B, AWLs—Structural Inspections, of Section 9, “Airworthiness Limitations (AWLs) and Certification Maintenance Requirements (CMRs),” of Boeing 737–600, –700, –700C, –800, –900, and –900ER MPD Document, D626A001–CMR, Revision July 2011. AAL also stated that all repairs in a PSE area that hide a portion of the inspection area will need an alternate inspection method approved by the Seattle Aircraft Certification Office to ensure continued damage tolerance of the affected structure. AAL stated that the current process will create an unnecessary burden on operators. AAL said that repairs approved under section 25.571(b) or 26.43(d) of the Federal Aviation Regulations (14 CFR 25.571(b) and 14 CFR 26.43(d), respectively) would provide the required level of safety for the continued damage tolerance of the affected structure for the NPRM.

We disagree with the commenters’ requests. The revised set of inspections in Subsection B, AWLs—Structural Inspections, of Section 9,

“Airworthiness Limitations (AWLs) and Certification Maintenance Requirements (CMRs),” of Boeing 737–600, –700, –700C, –800, –900, and –900ER MPD Document, D626A001–CMR, Revision July 2011, resulted from an updated analysis of The Boeing Company Model 737–600, –700, –700C, –800, –900, and –900ER series airplanes. The analysis includes consideration of updated loads and flight lengths that increase the stresses on the structure. Previously approved repairs, modifications, and alterations may not include consideration of the updated analysis, and therefore, a review is required before an AMOC can be issued for them. Affected operators, however, may request approval of an AMOC under the provisions of paragraph (j)(1) of this AD by submitting data substantiating that the change would provide an acceptable level of safety. We have not changed this final rule in this regard.

Request To Reference Different Advisory Circular (AC)

AAL requested that the NPRM (77 FR 58791, September 24, 2012) reference a different AC. AAL stated that paragraph (c)(2) of the NPRM provides FAA guidance for determining the changes necessary for the required inspections to satisfy the continued damage tolerance of the affected structure. AAL stated that the NPRM references FAA AC 25.1529–1A, dated November 20, 2007 (http://www.faa.gov/documentLibrary/media/Advisory_Circular/AC%2025.1529-1A.pdf), for guidance regarding alternative inspection procedures; however, AC 25.1529–1A, dated November 20, 2007, applies only to airplanes that have a passenger seating capacity of less than 30 and a maximum payload capacity of less than 7,500 pounds. AAL stated that FAA AC 120–93, dated November 20, 2007 ([http://rgl.faa.gov/Regulatory_and_Guidance_Library/rgAdvisoryCircular.nsf/0/f73fd2a31b353a71862573b000521928/\\$FILE/AC%20120-93.pdf](http://rgl.faa.gov/Regulatory_and_Guidance_Library/rgAdvisoryCircular.nsf/0/f73fd2a31b353a71862573b000521928/$FILE/AC%20120-93.pdf)), refers to the damage tolerance inspection for repairs and alteration.

We agree with the commenter’s request. We have revised paragraph (c)(2) of this AD by specifying FAA AC 120–93, dated November 20, 2007 ([http://rgl.faa.gov/Regulatory_and_Guidance_Library/rgAdvisoryCircular.nsf/0/f73fd2a31b353a71862573b000521928/\\$FILE/AC%20120-93.pdf](http://rgl.faa.gov/Regulatory_and_Guidance_Library/rgAdvisoryCircular.nsf/0/f73fd2a31b353a71862573b000521928/$FILE/AC%20120-93.pdf)), in lieu of

http://www.faa.gov/documentLibrary/media/Advisory_Circular/AC%2025.1529-1A.pdf).

STC Comment

Aviation Partners Boeing stated that the installation of winglets per STC ST00830SE ([http://rgl.faa.gov/Regulatory_and_Guidance_Library/rgstc.nsf/0/408e012e008616a7862578880060456c/\\$FILE/ST00830SE.pdf](http://rgl.faa.gov/Regulatory_and_Guidance_Library/rgstc.nsf/0/408e012e008616a7862578880060456c/$FILE/ST00830SE.pdf)) affects the accomplishment of the manufacturer’s service instructions.

We have added paragraph (c)(3) of this AD to state that installation of STC ST00830SE ([http://rgl.faa.gov/Regulatory_and_Guidance_Library/rgstc.nsf/0/408e012e008616a7862578880060456c/\\$FILE/ST00830SE.pdf](http://rgl.faa.gov/Regulatory_and_Guidance_Library/rgstc.nsf/0/408e012e008616a7862578880060456c/$FILE/ST00830SE.pdf)) affects the ability to accomplish the actions required by this AD. Therefore, for airplanes on which STC ST00830SE is installed, a “change in product” AMOC approval request might be necessary to comply with the requirements of 14 CFR 39.17.

Conclusion

We reviewed the relevant data, considered the comments received, and determined that air safety and the public interest require adopting this AD with the changes described previously—and minor editorial changes. We have determined that these minor changes:

- Are consistent with the intent that was proposed in the NPRM (77 FR 58791, September 24, 2012) for correcting the unsafe condition; and
- Do not add any additional burden upon the public than was already proposed in the NPRM (77 FR 58791, September 24, 2012).

We also determined that these changes will not increase the economic burden on any operator or increase the scope of this AD.

Costs of Compliance

We estimate that this AD affects 1,200 airplanes of U.S. registry.

We estimate the following costs to comply with this AD:

ESTIMATED COSTS

Action	Labor cost	Parts cost	Cost per product	Cost on U.S. operators
Document Revision	1 work-hour × \$85 per hour = \$85	\$0	\$85	\$102,000

Paperwork Reduction Act

A federal agency may not conduct or sponsor, and a person is not required to respond to, nor shall a person be subject to a penalty for failure to comply with a collection of information subject to the requirements of the Paperwork Reduction Act unless that collection of information displays a current valid OMB Control Number. The OMB Control Number for this information collection is 2120-0056. Public reporting for this collection of information is estimated to be approximately 5 minutes per response, including the time for reviewing instructions, completing and reviewing the collection of information. All responses to this collection of information are mandatory. Comments concerning the accuracy of this burden and suggestions for reducing the burden should be directed to the FAA at: 800 Independence Ave. SW., Washington, DC 20591, Attn: Information Collection Clearance Officer, AES-200.

Authority for This Rulemaking

Title 49 of the United States Code specifies the FAA's authority to issue rules on aviation safety. Subtitle I, section 106, describes the authority of the FAA Administrator. Subtitle VII: Aviation Programs, describes in more detail the scope of the Agency's authority.

We are issuing this rulemaking under the authority described in Subtitle VII, Part A, Subpart III, Section 44701: "General requirements." Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

Regulatory Findings

This AD will not have federalism implications under Executive Order 13132. This AD will not have a substantial direct effect on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed above, I certify that this AD:

- (1) Is not a "significant regulatory action" under Executive Order 12866,
- (2) Is not a "significant rule" under DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979),

(3) Will not affect intrastate aviation in Alaska, and

(4) Will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

Adoption of the Amendment

Accordingly, under the authority delegated to me by the Administrator, the FAA amends 14 CFR part 39 as follows:

PART 39—AIRWORTHINESS DIRECTIVES

- 1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

§ 39.13 [Amended]

- 2. The FAA amends § 39.13 by adding the following new airworthiness directive (AD):

2013-19-23 The Boeing Company:

Amendment 39-17605 ; Docket No. FAA-2012-0998; Directorate Identifier 2011-NM-249-AD.

(a) Effective Date

This AD is effective November 7, 2013.

(b) Affected ADs

None.

(c) Applicability

(1) This AD applies to the Boeing Company Model 737-600, -700, -700C, -800, -900, and -900ER series airplanes, certificated in any category, with an original airworthiness certificate or original export certificate of airworthiness issued before April 3, 2012.

(2) This AD requires revisions to certain operator maintenance documents to include new inspections. Compliance with these inspections is required by 14 CFR 91.403(c). For airplanes that have been previously modified, altered, or repaired in the areas addressed by these inspections, the operator may not be able to accomplish the inspections described in the revisions. In this situation, to comply with 14 CFR 91.403(c), the operator must request approval for an alternative method of compliance (AMOC) according to paragraph (j) of this AD. The request should include a description of changes to the required inspections that will ensure the continued damage tolerance of the affected structure. The FAA has provided guidance for this determination in FAA Advisory Circular (AC) 120-93, dated November 20, 2007 ([http://rgl.faa.gov/Regulatory_and_Guidance_Library/rgAdvisoryCircular.nsf/0/f73fd2a31b353a71862573b000521928/\\$FILE/AC%20120-93.pdf](http://rgl.faa.gov/Regulatory_and_Guidance_Library/rgAdvisoryCircular.nsf/0/f73fd2a31b353a71862573b000521928/$FILE/AC%20120-93.pdf)).

(3) Installation of Supplemental Type Certificate (STC) ST00830SE (<http://>

[rgl.faa.gov/Regulatory_and_Guidance_Library/rgstc.nsf/0/408e012e008616a7862578880060456c/\\$FILE/ST00830SE.pdf](http://rgl.faa.gov/Regulatory_and_Guidance_Library/rgstc.nsf/0/408e012e008616a7862578880060456c/$FILE/ST00830SE.pdf)) affects the ability to accomplish the actions required by this AD. Therefore, for airplanes on which STC ST00830SE is installed, a "change in product" AMOC approval request might be necessary to comply with the requirements of 14 CFR 39.17.

(d) Subject

Joint Aircraft System Component (JASC)/Air Transport Association (ATA) of America Code 52, Doors; 53, Fuselage; 54, Nacelles/Pylons; 55, Stabilizers; and 57, Wings.

(e) Unsafe Condition

This AD was prompted by a new revision to the airworthiness limitations of the maintenance planning data (MPD) document. We are issuing this AD to detect and correct fatigue cracking of various principal structural elements (PSEs), which could adversely affect the structural integrity of these airplanes.

(f) Compliance

Comply with this AD within the compliance times specified, unless already done.

(g) Maintenance Program Revision

(1) Within 12 months after the effective date of this AD, revise the maintenance program by incorporating the information in paragraph (g)(1)(i), (g)(1)(ii), or (g)(1)(iii) of this AD, except as provided by paragraph (h) of this AD.

(i) Subsection B, AWLs—Structural Inspections, of Section 9, "Airworthiness Limitations (AWLs) and Certification Maintenance Requirements (CMRs)," of Boeing 737-600, -700, -700C, -800, -900, and -900ER MPD Document, D626A001-CMR, Revision July 2011.

(ii) Subsection B, AWLs—Structural Inspections, of Section 9, "Airworthiness Limitations (AWLs) and Certification Maintenance Requirements (CMRs)," of Boeing 737-600, -700, -700C, -800, -900, and -900ER MPD Document, D626A001-CMR, Revision December 2011.

(iii) Subsection B, AWLs—Structural Inspections, of Section 9, "Airworthiness Limitations (AWLs) and Certification Maintenance Requirements (CMRs)," of Boeing 737-600, -700, -700C, -800, -900, and -900ER MPD Document, D626A001-CMR, Revision August 2012.

(2) The initial compliance time for the inspections is within the applicable times specified in the documents identified in paragraphs (g)(1)(i), (g)(1)(ii), and (g)(1)(iii) of this AD, or within 18 months after the effective date of this AD, whichever occurs later; or within the applicable time specified in those documents from the time of installation of new parts.

(3) Reports specified in the documents identified in paragraphs (g)(1)(i), (g)(1)(ii), and (g)(1)(iii) of this AD may be submitted within 10 days after the airplane is returned to service, instead of 10 days after each individual finding as specified in Section 9 of the documents identified in paragraphs (g)(1)(i), (g)(1)(ii), and (g)(1)(iii) of this AD.

(h) No Alternative Inspections and Inspection Intervals

After accomplishing the actions required by paragraph (g) of this AD, no alternative actions (i.e., alternative inspections) or inspection intervals may be used or incorporated unless the alternative action or interval is approved as an AMOC in accordance with the procedures specified in paragraph (j) of this AD.

(i) Paperwork Reduction Act Burden Statement

A federal agency may not conduct or sponsor, and a person is not required to respond to, nor shall a person be subject to a penalty for failure to comply with a collection of information subject to the requirements of the Paperwork Reduction Act unless that collection of information displays a current valid OMB Control Number. The OMB Control Number for this information collection is 2120-0056. Public reporting for this collection of information is estimated to be approximately 5 minutes per response, including the time for reviewing instructions, completing and reviewing the collection of information. All responses to this collection of information are mandatory. Comments concerning the accuracy of this burden and suggestions for reducing the burden should be directed to the FAA at: 800 Independence Ave. SW., Washington, DC 20591, Attn: Information Collection Clearance Officer, AES-200.

(j) Alternative Methods of Compliance (AMOCs)

(1) The Manager, Seattle Aircraft Certification Office (ACO), ANM-120S, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. In accordance with 14 CFR 39.19, send your request to your principal inspector or local Flight Standards District Office, as appropriate. If sending information directly to the manager of the ACO, send it to the attention of the person identified in paragraph (k) of this AD. Information may be emailed to: 9-ANM-Seattle-ACO-AMOC-Requests@faa.gov.

(2) Before using any approved AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the local flight standards district office/certificate holding district office.

(3) An AMOC that provides an acceptable level of safety may be used for any repair required in the area affected by this AD if it is approved by the Boeing Commercial Airplanes Organization Designation Authorization (ODA) that has been authorized by the Manager, Seattle ACO, to make those findings. For a repair method to be approved, the repair must meet the certification basis of the airplane, and the approval must specifically refer to this AD.

(k) Related Information

For more information about this AD, contact Nancy Marsh, Aerospace Engineer, Airframe Branch, ANM-120S, Seattle Aircraft Certification Office, FAA, 1601 Lind Avenue SW., Renton, WA 98057-3356; phone: 425-917-6440; fax: 425-917-6590; email: nancy.marsh@faa.gov.

(l) Material Incorporated by Reference

(1) The Director of the Federal Register approved the incorporation by reference (IBR) of the service information listed in this paragraph under 5 U.S.C. 552(a) and 1 CFR part 51.

(2) You must use this service information as applicable to do the actions required by this AD, unless the AD specifies otherwise.

(i) Section 9, "Airworthiness Limitations (AWLs) and Certification Maintenance Requirements (CMRs)," of Boeing 737-600, -700, -700C, -800, -900, and -900ER Maintenance Planning Data (MPD) Document, D626A001-CMR, Revision July 2011.

(ii) Section 9, "Airworthiness Limitations (AWLs) and Certification Maintenance Requirements (CMRs)," of Boeing 737-600, -700, -700C, -800, -900, and -900ER MPD Document, D626A001-CMR, Revision December 2011.

(iii) Section 9, "Airworthiness Limitations (AWLs) and Certification Maintenance Requirements (CMRs)," of Boeing 737-600, -700, -700C, -800, -900, and -900ER MPD Document, D626A001-CMR, Revision August 2012.

(3) For Boeing service information identified in this AD, contact Boeing Commercial Airplanes, Attention: Data & Services Management, P.O. Box 3707, MC 2H-65, Seattle, Washington 98124-2207; telephone 206-544-5000, extension 1; fax 206-766-5680; Internet <https://www.myboeingfleet.com>.

(4) You may review copies of the referenced service information at the FAA, Transport Airplane Directorate, 1601 Lind Avenue SW., Renton, Washington. For information on the availability of this material at the FAA, call 425-227-1221.

(5) You may view this service information that is incorporated by reference at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call 202-741-6030, or go to: <http://www.archives.gov/federal-register/cfr/ibr-locations.html>.

Issued in Renton, Washington, on September 16, 2013.

Ross Landes,

Acting Manager, Transport Airplane Directorate, Aircraft Certification Service.

[FR Doc. 2013-23462 Filed 10-2-13; 8:45 am]

BILLING CODE 4910-13-P

DEPARTMENT OF TRANSPORTATION**Federal Aviation Administration****14 CFR Part 39**

[Docket No. FAA-2013-0833; Directorate Identifier 2012-NM-140-AD; Amendment 39-17615; AD 2013-20-09]

RIN 2120-AA64

Airworthiness Directives; Bombardier, Inc. Airplanes

AGENCY: Federal Aviation Administration (FAA), Department of Transportation (DOT).

ACTION: Final rule; request for comments.

SUMMARY: We are adopting a new airworthiness directive (AD) for certain Bombardier, Inc. Model CL-215-6B11 (CL-415 Variant) airplanes. This AD requires replacing the panel assembly of the main distribution center (MDC) rack. This AD was prompted by findings of chafed power wires due to flexing of the MDC rack panel. We are issuing this AD to prevent damage to power wires, which could cause simultaneous loss of systems such as electrical power, pilot indications, and caution/advisory lighting systems, which are essential for safe flight.

DATES: This AD becomes effective October 18, 2013.

The Director of the Federal Register approved the incorporation by reference of a certain publication listed in the AD as of October 18, 2013.

We must receive comments on this AD by November 18, 2013.

ADDRESSES: You may send comments by any of the following methods:

- **Federal eRulemaking Portal:** Go to <http://www.regulations.gov>. Follow the instructions for submitting comments.

- **Fax:** (202) 493-2251.

- **Mail:** U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE., Washington, DC 20590.

- **Hand Delivery:** U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE., Washington, DC, between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

For service information identified in this AD, contact Bombardier, Inc., 400 Côte-Vertu Road West, Dorval, Québec H4S 1Y9, Canada; telephone 514-855-5000; fax 514-855-7401; email thd.crj@aero.bombardier.com; Internet <http://www.bombardier.com>. You may review copies of the referenced service

information at the FAA, Transport Airplane Directorate, 1601 Lind Avenue SW., Renton, WA. For information on the availability of this material at the FAA, call 425-227-1221.

Examining the AD Docket

You may examine the AD docket on the Internet at <http://www.regulations.gov>; or in person at the Docket Operations office between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this AD, the MCAI, the regulatory evaluation, any comments received, and other information. The street address for the Docket Operations office (telephone (800) 647-5527) is in the **ADDRESSES** section. Comments will be available in the AD docket shortly after receipt.

FOR FURTHER INFORMATION CONTACT:

Assata Dessaline, Aerospace Engineer, Avionics and Services Branch, ANE-172, FAA, New York Aircraft Certification Office, 1600 Stewart Avenue, Suite 410, Westbury, New York 11590; telephone (516) 228-7301; fax (516) 794-5531.

SUPPLEMENTARY INFORMATION:

Discussion

Transport Canada Civil Aviation (TCCA), which is the aviation authority for Canada, has issued Canadian Airworthiness Directive CF-2012-16, dated May 9, 2012 (referred to after this as the Mandatory Continuing Airworthiness Information, or “the MCAI”), to correct an unsafe condition for the specified products. The MCAI states:

During aeroplane operation, the Main Distribution Centre (MDC) rack panel is subject to flexing, due to the weight of the two DC Generator Control Units and the Trim Comparator Unit installed on the rack panel. Some wires routed below the MDC rack panel were found chafed. Prolonged chafing of the wires may result in damage to the power wires causing simultaneous loss of systems such as electrical power, pilot indications, and caution/advisory lighting systems, potentially leading to a hazardous situation.

This [Canadian] AD is issued to replace the existing MDC rack panel assembly with a new design that incorporates additional stiffening support structure to prevent flexing of the rack panel.

Damaged power wires could cause simultaneous loss of systems such as electrical power, pilot indications, and caution/advisory lighting systems, which are essential for safe flight. You may examine the MCAI on the Internet at <http://www.regulations.gov> by searching for and locating it in Docket No. FAA-2013-0833.

Relevant Service Information

Bombardier has issued Alert Service Bulletin 215-A4436, Revision 1, dated February 2, 2012. The actions described in this service information are intended to correct the unsafe condition identified in the MCAI.

Clarification of Service Information Note

Bombardier Alert Service Bulletin 215-A4436, Revision 1, dated February 2, 2012, includes a note in the Accomplishment Instructions section instructing operators to contact Bombardier “if any deviation exists” in accomplishing the service bulletin. We have included a sentence in this AD to clarify that any deviation from the instructions provided in the service bulletin must be approved as an alternative method of compliance under paragraph (i)(1) of this AD.

FAA’s Determination and Requirements of This AD

This product has been approved by the aviation authority of another country, and is approved for operation in the United States. Pursuant to our bilateral agreement with the State of Design Authority, we have been notified of the unsafe condition described in the MCAI and service information referenced above. We are issuing this AD because we evaluated all pertinent information and determined the unsafe condition exists and is likely to exist or develop on other products of the same type design.

There are no products of this type currently registered in the United States. However, this rule is necessary to ensure that the described unsafe condition is addressed if any of these products are placed on the U.S. Register in the future.

FAA’s Determination of the Effective Date

Since there are currently no domestic operators of this product, notice and opportunity for public comment before issuing this AD are unnecessary.

Comments Invited

This AD is a final rule that involves requirements affecting flight safety, and we did not precede it by notice and opportunity for public comment. We invite you to send any written relevant data, views, or arguments about this AD. Send your comments to an address listed under the **ADDRESSES** section. Include “Docket No. FAA-2013-0833; Directorate Identifier 2012-NM-140-AD” at the beginning of your comments. We specifically invite comments on the overall regulatory, economic,

environmental, and energy aspects of this AD. We will consider all comments received by the closing date and may amend this AD because of those comments.

We will post all comments we receive, without change, to <http://www.regulations.gov>, including any personal information you provide. We will also post a report summarizing each substantive verbal contact we receive about this AD.

Costs of Compliance

We estimate that this AD will affect 0 products of U.S. registry. We also estimate that it will take about 8 work-hours per product to comply with the basic requirements of this AD. The average labor rate is \$85 per work-hour. Required parts will cost about \$0 per product. Where the service information lists required parts costs that are covered under warranty, we have assumed that there will be no charge for these parts. As we do not control warranty coverage for affected parties, some parties may incur costs higher than estimated here. Based on these figures, we estimate the cost of this AD to the U.S. operators to be \$680 per product.

Authority for This Rulemaking

Title 49 of the United States Code specifies the FAA’s authority to issue rules on aviation safety. Subtitle I, section 106, describes the authority of the FAA Administrator. “Subtitle VII: Aviation Programs,” describes in more detail the scope of the Agency’s authority.

We are issuing this rulemaking under the authority described in “Subtitle VII, Part A, Subpart III, Section 44701: General requirements.” Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

Regulatory Findings

We determined that this AD will not have federalism implications under Executive Order 13132. This AD will not have a substantial direct effect on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed above, I certify that this AD:

1. Is not a “significant regulatory action” under Executive Order 12866;
2. Is not a “significant rule” under the DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979);
3. Will not affect intrastate aviation in Alaska; and
4. Will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

We prepared a regulatory evaluation of the estimated costs to comply with this AD and placed it in the AD docket.

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

Adoption of the Amendment

Accordingly, under the authority delegated to me by the Administrator, the FAA amends 14 CFR part 39 as follows:

PART 39—AIRWORTHINESS DIRECTIVES

- 1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

§ 39.13 [Amended]

- 2. The FAA amends § 39.13 by adding the following new AD:

2013–20–09 Bombardier, Inc.: Amendment 39–17615. Docket No. FAA–2013–0833; Directorate Identifier 2012–NM–140–AD.

(a) Effective Date

This airworthiness directive (AD) becomes effective October 18, 2013.

(b) Affected ADs

None.

(c) Applicability

This AD applies to Bombardier, Inc. Model CL–215–6B11 (CL–415 Variant) airplanes, certificated in any category, serial numbers 2001 through 2076 inclusive.

(d) Subject

Air Transport Association (ATA) of America Code 53, Fuselage.

(e) Reason

This AD was prompted by findings of chafed power wires due to flexing of the main distribution center (MDC) rack panel. We are issuing this AD to prevent damage to power wires, which could cause simultaneous loss of systems such as electrical power, pilot indications, and caution/advisory lighting systems, which are essential for safe flight.

(f) Compliance

You are responsible for having the actions required by this AD performed within the compliance times specified, unless the actions have already been done.

(g) Replacement

Within 13 months after the effective date of this AD: Replace the existing MDC rack panel assembly with a new rack panel assembly, in accordance with the Accomplishment Instructions of Bombardier Alert Service Bulletin 215–A4436, Revision 1, dated February 2, 2012. A note in the Accomplishment Instructions section of Bombardier Alert Service Bulletin 215–A4436, Revision 1, dated February 2, 2012, instructs operators to contact Bombardier “if any deviation exists” in accomplishing the service bulletin; however, any deviation from the instructions provided in the service bulletin must be approved as an alternative method of compliance (AMOC) under paragraph (i)(1) of this AD.

(h) Credit for Previous Actions

This paragraph provides credit for actions required by paragraph (g) of this AD, if those actions were performed before the effective date of this AD using Bombardier Alert Service Bulletin 215–A4436, dated September 19, 2011.

(i) Other FAA AD Provisions

The following provisions also apply to this AD:

(1) *Alternative Methods of Compliance (AMOCs):* The Manager, New York Aircraft Certification Office (ACO), ANE–170, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. In accordance with 14 CFR 39.19, send your request to your principal inspector or local Flight Standards District Office, as appropriate. If sending information directly to the ACO, send it to ATTN: Program Manager, Continuing Operational Safety, FAA, New York ACO, 1600 Stewart Avenue, Suite 410, Westbury, NY 11590; telephone 516–228–7300; fax 516–794–5531. Before using any approved AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the local flight standards district office/certificate holding district office. The AMOC approval letter must specifically reference this AD.

(2) *Airworthy Product:* For any requirement in this AD to obtain corrective actions from a manufacturer or other source, use these actions if they are FAA-approved. Corrective actions are considered FAA-approved if they are approved by the State of Design Authority (or their delegated agent). You are required to assure the product is airworthy before it is returned to service.

(j) Related Information

(1) Refer to Mandatory Continuing Airworthiness Information (MCAI) Canadian Airworthiness Directive CF–2012–16, dated May 9, 2012, for related information. You may examine the MCAI on the Internet at <http://www.regulations.gov> by searching for and locating it in Docket No. FAA–2013–0833.

(2) Service information identified in this AD that is not incorporated by reference in this AD may be obtained at addresses specified in paragraphs (k)(3) and (k)(4) of this AD.

(k) Material Incorporated by Reference

(1) The Director of the Federal Register approved the incorporation by reference (IBR) of the service information listed in this paragraph under 5 U.S.C. 552(a) and 1 CFR part 51.

(2) You must use this service information as applicable to do the actions required by this AD, unless the AD specifies otherwise.

(i) Bombardier Alert Service Bulletin 215–A4436, Revision 1, dated February 2, 2012.

(ii) Reserved.

(3) For service information identified in this AD, contact Bombardier, Inc., 400 Côte-Vertu Road West, Dorval, Québec H4S 1Y9, Canada; telephone 514–855–5000; fax 514–855–7401; email thd.crj@aero.bombardier.com; Internet <http://www.bombardier.com>.

(4) You may review copies of the service information at the FAA, Transport Airplane Directorate, 1601 Lind Avenue SW., Renton, WA. For information on the availability of this material at the FAA, call 425–227–1221.

(5) You may view this service information that is incorporated by reference at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call 202–741–6030, or go to: <http://www.archives.gov/federal-register/cfr/ibr-locations.html>.

Issued in Renton, Washington, on September 18, 2013.

Ross Landes,

Acting Manager, Transport Airplane Directorate, Aircraft Certification Service.

[FR Doc. 2013–23890 Filed 10–2–13; 8:45 am]

BILLING CODE 4910–13–P

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 71

[Docket No. FAA–2013–0775; Airspace Docket No. 13–ASW–19]

Establishment of Class E Airspace; Comanche, TX

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Final rule.

SUMMARY: This action establishes Class E airspace at Comanche, TX. Controlled airspace is necessary to accommodate Area Navigation (RNAV) Standard Instrument Approach Procedures (SIAP) at Comanche County-City Airport. The FAA found that SIAPs were established for the airport in 2006, but the Class E airspace area to contain it was never established, thereby prohibiting certain aircraft from using the procedures. This

seriously impacts the safety and management of instrument flight rules (IFR) operations at the airport. As a result, a Notice to Airmen (NOTAM) has been issued suspending the use of the procedures until the Class E airspace area is established.

DATES: *Effective date:* 0901 UTC, November 14, 2013. The Director of the Federal Register approves this incorporation by reference action under 1 CFR Part 51, subject to the annual revision of FAA Order 7400.9 and publication of conforming amendments.

FOR FURTHER INFORMATION CONTACT: Scott Enander, Central Service Center, Operations Support Group, Federal Aviation Administration, Southwest Region, 2601 Meacham Blvd., Fort Worth, TX 76137; telephone 817-321-7716.

SUPPLEMENTARY INFORMATION:

History

In 2006, the RNAV (GPS) RWY 17 standard instrument approach procedure was established for Comanche County-City Airport, Comanche, TX. The FAA discovered that the Class E transitional airspace area required by 14 CFR 71.71(c) was not established to contain the procedure. As a result, a NOTAM has been issued to designate the SIAP as "Not Authorized" due to the lack of Class E airspace, prohibiting aircraft from using the SIAP until the required airspace can be established.

Because of this, aircraft are unable to land in instrument meteorological conditions, which adversely impacts the utility and the safe and efficient use of the airport. Business aircraft based at Comanche County-City Airport incur added costs when diverting to alternate airports during poor weather conditions, and recreational and tourist flights have to be cancelled, creating negative effects on the local economy. This also restricts lifesaving aeromedical evacuation aircraft, which are forced to add critical flight time to their missions to land at alternate airports during periods of low ceilings and visibility as the nearest alternate airport with instrument approach capability is 20 miles away.

It is in the public interest to restore IFR operations at Comanche County-City Airport as soon as possible to enhance the safe and efficient use of airspace at the airport and ensure that any critical medical evacuation operations are not delayed. Therefore, I find that notice and public procedure under 5 U.S.C. 553(b) is impracticable and contrary to the public interest.

The Rule

This action amends Title 14 Code of Federal Regulations (14 CFR) part 71 by establishing Class E airspace extending upward from 700 feet above the surface within an 8.7-mile radius of Comanche County-City Airport, Comanche, TX to contain aircraft executing standard instrument approach procedures at the airport. Controlled airspace enhances the safety and management of IFR operations at the airport.

The FAA has determined that this regulation only involves an established body of technical regulations for which frequent and routine amendments are necessary to keep them operationally current. Therefore, this regulation: (1) Is not a "significant regulatory action" under Executive Order 12866; (2) is not a "significant rule" under DOT Regulatory Policies and Procedures (44 FR 11034; February 26, 1979); and (3) does not warrant preparation of a regulatory evaluation as the anticipated impact is so minimal. Since this is a routine matter that only affects air traffic procedures and air navigation, it is certified that this rule, when promulgated, does not have a significant economic impact on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

The FAA's authority to issue rules regarding aviation safety is found in Title 49 of the U.S. Code. Subtitle 1, Section 106, describes the authority of the FAA Administrator. Subtitle VII, Aviation Programs, describes in more detail the scope of the agency's authority. This rulemaking is promulgated under the authority described in Subtitle VII, Part A, Subpart I, Section 40103. Under that section, the FAA is charged with prescribing regulations to assign the use of airspace necessary to ensure the safety of aircraft and the efficient use of airspace. This regulation is within the scope of that authority as it establishes controlled airspace at Comanche County-City Airport, Comanche, TX.

Environmental Review

The FAA has determined that this action qualifies for categorical exclusion under the National Environmental Policy Act in accordance with FAA Order 1050.1E, "Environmental Impacts: Policies and Procedures," paragraph 311a. This airspace action is not expected to cause any potentially significant environmental impacts, and no extraordinary circumstances exist that warrant preparation of an environmental assessment.

List of Subjects in 14 CFR Part 71

Airspace, Incorporation by reference, Navigation (air).

Adoption of the Amendment

In consideration of the foregoing, the Federal Aviation Administration amends 14 CFR part 71 as follows:

PART 71—DESIGNATION OF CLASS A, B, C, D, AND E AIRSPACE AREAS; AIR TRAFFIC SERVICE ROUTES; AND REPORTING POINTS

■ 1. The authority citation for 14 CFR part 71 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40103, 40113, 40120; E.O. 10854, 24 FR 9565, 3 CFR, 1959–1963 Comp., p. 389.

§ 71.1 [Amended]

■ 2. The incorporation by reference in 14 CFR 71.1 of the Federal Aviation Administration Order 7400.9X, Airspace Designations and Reporting Points, dated August 7, 2013, and effective September 15, 2013, is amended as follows:

Paragraph 6005 Class E Airspace Areas Extending Upward From 700 Feet or More Above the Surface

* * * * *

ASW TX E5 Comanche, TX [New]

Comanche County-City Airport, TX
(Lat. 31°55'13" N., long. 98°35'57" W.)

That airspace extending upward from 700 feet above the surface within an 8.7-mile radius of Comanche County-City Airport.

Issued in Fort Worth, Texas, on September 25, 2013.

Christopher L. Southerland,
Manager, Operations Support Group, ATO
Central Service Center.

[FR Doc. 2013–24149 Filed 10–2–13; 8:45 am]

BILLING CODE 4910–13–P

DEPARTMENT OF HOMELAND SECURITY

Coast Guard

33 CFR Part 117

[USCG–2012–1085]

RIN 1625–AA09

Drawbridge Operation Regulation; Christina River, Wilmington, DE

AGENCY: Coast Guard, DHS.

ACTION: Final rule.

SUMMARY: The Coast Guard is changing the operating schedule that governs the Walnut Street Bridge at mile 2.8, and the Market Street Bridge at mile 3.0, both located on the Christina River in

Wilmington, DE. Originally it was also proposed that the Third Street Drawbridge at mile 2.3 be included in this rule change but that request was withdrawn. Since the two other drawbridges are located near one another and the few vessels that do transit this waterway usually go through all three bridges, the Walnut Street and Market Street bridges will now open on the same eight hour advance notice. This rule will change the current regulations by allowing the Third Street and Walnut Street drawbridges to be opened in sequence with the same eight hour advance notice presently given to the Market Street drawbridge. This schedule clarifies the sequencing of these drawbridge openings, and provides for the reasonable needs of navigation.

DATES: This rule is effective November 4, 2013.

ADDRESSES: Documents mentioned in this preamble are part of docket number USCG–2012–1085. To view documents mentioned in this preamble as being available in the docket, go to <http://www.regulations.gov>, type the docket number in the “SEARCH” box and click “SEARCH”. Click on Open Docket Folder on the line associated with this rulemaking. You may also visit the Docket Management Facility in Room W12–140 on the ground floor of the Department of Transportation West Building, 1200 New Jersey Avenue SE., Washington, DC, 20590 between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

FOR FURTHER INFORMATION CONTACT: If you have questions on this rule, call or email Terrance A. Knowles, Environmental Protection Specialist, Fifth Coast Guard District, at (757) 398–6587, terrance.a.knowles@uscg.mil. If you have questions on viewing, call Barbara Hairston, Program Manager, Docket Operations, telephone 202–366–9826.

SUPPLEMENTARY INFORMATION:

Table of Acronyms

CFR Code of Federal Regulations
DELDOT Delaware Department of Transportation
DHS Department of Homeland Security
FR Federal Register
NPRM Notice of Proposed Rulemaking

A. Regulatory History and Information

On January 24, 2013, we published a notice of proposed rulemaking (NPRM) entitled Drawbridge Operation Regulation; Christina River, Wilmington, DE in the **Federal Register** (78 FR 5156). We received one comment

on the proposed rule. No public meeting was requested, and none was held.

B. Basis and Purpose

The Delaware Department of Transportation (DELDOT) who owns and operates these bascule-type drawbridges have requested a permanent change to the existing bridge regulations, allowing the Walnut Street bridge to also open on signal with eight hours advance notice as does the Market Street Bridge. This schedule allows for both of the drawbridges to be opened in sequence on the same opening request if required. Vessel traffic on this part of the Christina River consists of a few commercial and pleasure craft.

Three vessels make-up 97% of the number of openings at these bridges: The Kalmar Nyckel sail ship, the River Taxi, and the River Boat Queen. The Market Street bridge has the most restrictive clearance of the three (8 ft. vertical clearance), and was opened a total 578 times in 2011. In 2011 the Walnut Street Bridge was opened 244 times. The River Taxi does not require an opening to pass under the Walnut Street Bridge. The Third Street Bridge was opened 250 times, but it will continue to open on signal.

C. Discussion of Comments, Changes and the Final Rule

The City of Wilmington Fire Department requested that the Third Street Bridge continue to have a bridge tender to open it on signal twenty-four hours per day, as it is currently regulated. The Fire Chief wanted a bridge tender to be available to open all the bridges during an emergency. DELDOT agreed with this proposal and now only Market Street and Walnut Street Bridges will require 8 hours advance notice.

The Coast Guard will not finalize the proposed change to the operating schedule that governs the Third Street Drawbridge. Since the two other drawbridges are located near one another and the few vessels that do transit this waterway usually go through all three bridges, the Walnut Street and Market Street bridges will now open on the same eight hour advance notice.

This rule changes the current regulations by allowing the Third Street and Walnut Street drawbridges to be opened in sequence with the same eight hour advance notice presently given to the Market Street drawbridge.

We are also modifying the existing regulations by removing the last sentence in 33 CFR 117.237(c), “The draws of these bridges shall open at all times as soon as possible for passage of a public vessel of the United States”.

This sentence is being removed because it is redundant and already exists in 33 CFR 117.31(b)(1).

D. Regulatory Analyses

We developed this rule after considering numerous statutes and executive orders related to rulemaking. Below we summarize our analyses based on a number of these statutes or executive orders.

1. Regulatory Planning and Review

This rule is not a “significant regulatory action” under section 3(f) of Executive Order 12866, Regulatory Planning and Review, as supplemented by Executive Order 13563, Improving Regulation and Regulatory Review, and does not require an assessment of potential costs and benefits under section 6(a)(3) of Order 12866 or under section 1 of Executive Order 13563. The Office of Management and Budget has not reviewed it under those Orders.

The rule is expected to have minimal impact on mariners due to the low number of vessels requiring openings on the river. In addition, the fact that an 8-hour advance notice is presently required for the Market Street Bridge opening, it is understood that time for passage through all bridges, under the this rule, will be consistent with the current regulation.

2. Impact on Small Entities

Under the Regulatory Flexibility Act (5 U.S.C. 601–612), as amended, requires federal agencies to consider the potential impact of regulations on small entities during rulemaking. The term “small entities” comprises small businesses, not-for-profit organizations that are independently owned and operated and are not dominant in their fields, and governmental jurisdictions with populations of less than 50,000. The Coast Guard received no comments from the Small Business Administration on this rule. The Coast Guard certifies under 5 U.S.C. 605(b) that this rule will not have a significant economic impact on a substantial number of small entities.

This rule will not have a significant economic impact on a substantial number of small entities because only a few vessels transit through both these bridges and it is rare that in such cases any vessel stops between the bridges being regulated. Most commercial traffic will leave and return during the day. This rule would possibly affect small entities such as owners/operators of vessels needing to transit through the bridges but requiring more than eight feet of vertical clearance (the most vertically restrictive Market Street

Bridge). These vessels can minimize delays and plan their transits in accordance with the opening schedule.

3. Assistance for Small Entities

Under section 213(a) of the Small Business Regulatory Enforcement Fairness Act of 1996 (Pub. L. 104–121), we want to assist small entities in understanding this rule. If the rule would affect your small business, organization, or governmental jurisdiction and you have questions concerning its provisions or options for compliance, please contact the person listed in the **FOR FURTHER INFORMATION CONTACT**, above.

Small businesses may send comments on the actions of Federal employees who enforce, or otherwise determine compliance with, Federal regulations to the Small Business and Agriculture Regulatory Enforcement Ombudsman and the Regional Small Business Regulatory Fairness Boards. The ombudsman evaluates these actions annually and rates each agency's responsiveness to small business. If you wish to comment on actions by employees of the Coast Guard, call 1–888–REG–FAIR (1–888–734–3247). The Coast Guard will not retaliate against small entities that question or complain about this rule or any policy or action of the Coast Guard.

4. Collection of Information

This rule calls for no new collection of information under the Paperwork Reduction Act of 1995 (44 U.S.C. 3501–3520).

5. Federalism

A rule has implications for federalism under Executive Order 13132, Federalism, if it has a substantial direct effect on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government. We have analyzed this rule under that Order and have determined that it does not have implications for federalism.

6. Protest Activities

The Coast Guard respects the First Amendment rights of protesters. Protesters are asked to contact the person listed in the **FOR FURTHER INFORMATION CONTACT** section to coordinate protest activities so that your message can be received without jeopardizing the safety or security of people, places or vessels.

7. Unfunded Mandates Reform Act

The Unfunded Mandates Reform Act of 1995 (2 U.S.C. 1531–1538) requires

Federal agencies to assess the effects of their discretionary regulatory actions. In particular, the Act addresses actions that may result in the expenditure by a State, local, or tribal government, in the aggregate, or by the private sector of \$100,000,000 (adjusted for inflation) or more in any one year. Though this rule will not result in such expenditure, we do discuss the effects of this rule elsewhere in this preamble.

8. Taking of Private Property

This rule would not cause a taking of private property or otherwise have taking implications under Executive Order 12630, Governmental Actions and Interference with Constitutionally Protected Property Rights.

9. Civil Justice Reform

This rule meets applicable standards in sections 3(a) and 3(b)(2) of Executive Order 12988, Civil Justice Reform, to minimize litigation, eliminate ambiguity, and reduce burden.

10. Protection of Children

We have analyzed this rule under Executive Order 13045, Protection of Children from Environmental Health Risks and Safety Risks. This rule is not an economically significant rule and would not create an environmental risk to health or risk to safety that might disproportionately affect children.

11. Indian Tribal Governments

This rule does not have tribal implications under Executive Order 13175, Consultation and Coordination with Indian Tribal Governments, because it does not have a substantial direct effect on one or more Indian tribes, on the relationship between the Federal Government and Indian tribes, or on the distribution of power and responsibilities between the Federal Government and Indian tribes.

12. Energy Effects

This action is not a “significant energy action” under Executive Order 13211, Actions Concerning Regulations That Significantly Affect Energy Supply, Distribution, or Use.

13. Technical Standards

This rule does not use technical standards. Therefore, we did not consider the use of voluntary consensus standards.

14. Environment

We have analyzed this rule under Department of Homeland Security Management Directive 023–01, and Commandant Instruction M16475.ID which guides the Coast Guard in

complying with the National Environmental Policy Act of 1969 (NEPA) (42 U.S.C. 4321–4370f), and have concluded that this action is one of a category of actions which do not individually or cumulatively have a significant effect on the human environment. This rule simply promulgates the operating regulations or procedures for drawbridges. The Christina River, Walnut Street and Market Street bridges will only open with eight hours of advance notice. This rule is categorically excluded under figure 2–1, paragraph (32)(e), of the Instruction.

Under figure 2–1, paragraph (32)(e), of the Instruction, an environmental analysis checklist and a categorical exclusion determination are not required for this rule.

List of Subjects in 33 CFR Part 117

Bridges.

For the reasons discussed in the preamble, the Coast Guard amends 33 CFR part 117 as follows:

PART 117—DRAWBRIDGE OPERATION REGULATIONS

■ 1. The authority citation for part 117 continues to read as follows:

Authority: 33 U.S.C. 499; 33 CFR 1.05–1; Department of Homeland Security Delegation No. 0170.1.

■ 2. In § 117.237, revise paragraph (c) to read as follows:

§ 117.237 Christina River.

* * * * *

(c) In Wilmington DE, the draw of the Third Street Bridge at mile 2.3, shall open on signal, the draws of the Walnut Street Bridge at mile 2.8, and the Market Street Bridge at mile 3.0, shall open on signal if at least eight hours notice is given. From 7 a.m. to 8 a.m. and 4:30 p.m. to 5:30 p.m., Monday through Saturday except holidays, the draws of these three bridges need not be opened for the passage of vessels. Any vessel which has passed through one or more of these bridges immediately prior to a closed period and which requires passage through the other bridge or bridges in order to continue to its destination shall be passed through the draw or draws of the bridge or bridges without delay.

* * * * *

Dated: September 18, 2013.

S.H. Ratti,

Rear Admiral, U.S. Coast Guard, Commander, Fifth Coast Guard District.

[FR Doc. 2013–24154 Filed 10–2–13; 8:45 am]

BILLING CODE 9110–04–P

DEPARTMENT OF HOMELAND SECURITY**Coast Guard****33 CFR Part 165**

[USCG–2013–0849]

RIN 1625–AA11

Regulated Navigation Area; Reporting Requirements for Barges Loaded With Certain Dangerous Cargoes, Inland Rivers, Ninth Coast Guard District; Stay (Suspension)**AGENCY:** Coast Guard, DHS.**ACTION:** Temporary final rule.

SUMMARY: The Commander, Ninth Coast Guard District is staying (suspending) reporting requirements under the Regulated Navigation Area (RNA) established for barges loaded with certain dangerous cargoes (CDC barges) in the inland rivers of the Ninth Coast Guard District. This stay (suspension) extension is necessary because the Coast Guard continues to analyze future reporting needs and evaluate possible changes in CDC reporting requirements. This stay (suspension) of the CDC reporting requirements in no way relieves towing vessel operators and fleeting area managers responsible for CDC barges in the RNA from their dangerous cargo or vessel arrival and movement reporting obligations currently in effect under other regulations or placed into effect under appropriate Coast Guard authority.

DATES: This rule is effective on October 3, 2013 until December 31, 2015.

ADDRESSES: Documents indicated in this preamble as being available in the docket are part of docket USCG–2013–0849. To view documents mentioned in this preamble as being available in the docket, go to <http://www.regulations.gov>, type the docket number in the “SEARCH” box and click “SEARCH”. Click on Open Docket Folder on the line associated with this rulemaking. You may also visit the Docket Management Facility in Room W12–140 on the ground floor of the Department of Transportation West Building, 1200 New Jersey Avenue SE., Washington, DC 20590, between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

FOR FURTHER INFORMATION CONTACT: If you have questions about this temporary rule, call or email LCDR David Webb, U.S. Coast Guard; telephone 216–902–6050, email: David.M.Webb@uscg.mil. If you have questions on viewing the docket, call Barbara Hairston, Program

Manager, Docket Operations, telephone 202–366–9826.

SUPPLEMENTARY INFORMATION:**Table of Acronyms**

CDC Certain Dangerous Cargo
DHS Department of Homeland Security
FR Federal Register
NPRM Notice of Proposed Rulemaking

A. Regulatory History and Information

The Coast Guard is issuing this temporary final rule without prior notice and opportunity to comment pursuant to authority under section 4(a) of the Administrative Procedure Act (APA) (5 U.S.C. 553(b)). This provision authorizes an agency to issue a rule without prior notice and opportunity to comment when the agency for good cause finds that those procedures are “impracticable, unnecessary, or contrary to the public interest.” Under 5 U.S.C. 553(b)(3)(B), the Coast Guard finds that good cause exists for not publishing a notice of proposed rulemaking (NPRM) with respect to this rule because it would be impracticable, unnecessary, and contrary to the public interest.

The contract for the CDC barge reporting system at the Inland River Vessel Movement Center (IRVMC) expired in January 2011. Due to the expiration of this contract, the Coast Guard is not able to receive and process reports. Therefore in late December 2010, the Coast Guard decided to suspend the IRVMC reporting requirements for a 2-year period. This suspension was published in the **Federal Register** at 76 FR 2829 (January 18, 2011), and was due to expire on January 15, 2013. The Coast Guard extended this suspension from January 23, 2013 until September 30, 2013, and published this extended suspension in the **Federal Register** at 78 FR 4788 (January 23, 2013).

At this time, there is no plan to renew the contract for the CDC barge reporting system, and the Coast Guard is still considering whether to enter into a new contract and lift the suspension, modify the reporting requirements in the RNA, or repeal the RNA completely. Additionally, the Coast Guard has proposed a rule that would require vessels in this area to install and carry Automatic Identification System (AIS). See Vessel Requirements for Notices of Arrival and Departure, and Automatic Identification System notice of proposed rulemaking (73 FR 76295, December 16, 2008). These requirements, if imposed, may provide a suitable alternative to the stayed reporting requirements of 33 CFR 165.921. Therefore, an additional extension of the stay is necessary while

the Coast Guard continues to evaluate these options.

We believe prior notice and comment is unnecessary because we expect the affected public will have no objection to resuming the stay (suspension) of regulatory requirements that will expire on October 1, 2013. The Coast Guard received no public comment or objection regarding the suspension that was in effect from 2011 until January 15, 2013. Prior notice and comment is also contrary to the public interest because there is no public purpose served by continuing to require reports when there is no mechanism for receiving or processing those reports.

Under 5 U.S.C. 553(d)(1), a substantive rule that relieves a restriction may be made effective less than 30 days after publication. This temporary final rule, suspending the reporting requirements and thereby relieving the regulatory restriction on towing vessel operators and fleeting area managers provided by 33 CFR 165.921, is effective the same date of its publication in the **Federal Register**.

B. Basis and Purpose

The legal basis for this rulemaking is the Coast Guard’s authority to establish regulated navigation areas, under 33 U.S.C. 1226, 1231; 46 U.S.C. Chapter 701, 3306, 3703; 50 U.S.C. 191, 195; 33 CFR 1.05–1, 6.04–1, 6.04–6, 160.5; Pub. L. 107–295, 116 Stat. 2064; and Department of Homeland Security Delegation No. 0170.1. An RNA is a water area within a defined boundary for which regulations for vessels navigating within the area have been established, to control vessel traffic in a place determined to have hazardous conditions. See 33 CFR 165.10; Commandant Instruction Manual M16704.3A, 1–6.

The purpose of this temporary final rule is to continue the suspension of reporting requirements that was in place between January 2011 and January 15, 2013 and extended from January 23, 2013 through September 30, 2013. This temporary rule relieves the towing vessel operators and fleeting area managers responsible for CDC barges from the 33 CFR 165.921 reporting requirements for the period from the date of publication of this rule in the **Federal Register**, October 3, 2013, to December 31, 2015. We intend for there to be no gap in the stay of these reporting requirements, but if this rule is published after September 30, 2013, we will not enforce the reporting requirements during any gap in the stay.

C. Discussion of the Final Rule

During the suspension of reporting requirements, towing vessel operators and fleeting area managers responsible for CDC barges will be relieved of their obligation to report their CDCs under 33 CFR 165.921(d), (e), (f), (g), and (h). This suspension in no way relieves towing vessel operators and fleeting area managers responsible for CDC barges from their dangerous cargo or vessel arrival and movement reporting obligations currently in effect under other regulations or placed into effect under appropriate Coast Guard authority.

D. Regulatory Analyses

We developed this temporary final rule after considering numerous statutes and executive orders related to rulemaking. Below we summarize our analyses based on 14 of these statutes or executive orders.

1. Regulatory Planning and Review

This rule is not a significant regulatory action under section 3(f) of Executive Order 12866, Regulatory Planning and Review, as supplemented by Executive Order 13563, Improving Regulation and Regulatory Review, and does not require an assessment of potential costs and benefits under section 6(a)(3) of Executive Order 12866 or under section 1 of Executive Order 13563. The Office of Management and Budget has not reviewed it under that Order. This rule is temporary and limited in nature by extending the previously published suspension of CDC barge reporting requirements, creating no undue delay to vessel traffic in the regulated area.

2. Small Entities

The Regulatory Flexibility Act of 1980 (RFA), 5 U.S.C. 601–612, as amended, requires federal agencies to consider the potential impact of regulations on small entities during rulemaking. The term “small entities” comprises small businesses, not-for-profit organizations that are independently owned and operated and are not dominant in their fields, and governmental jurisdictions with populations of less than 50,000.

The Coast Guard certifies under 5 U.S.C. 605(b) that this rule will not have a significant economic impact on a substantial number of small entities. This rule will affect the following entities, some which may be small entities: Owners or operators of CDC barges intending to transit the Inland Rivers in the Ninth Coast Guard District from October 3, 2013 to December 31, 2015. This rule will not have a significant economic impact on those

entities or a substantial number of any small entities because this rule suspends reporting requirements during this period.

3. Assistance for Small Entities

Under section 213(a) of the Small Business Regulatory Enforcement Fairness Act of 1996 (Pub. L. 104–121), we want to assist small entities in understanding this rule. If the rule would affect your small business, organization, or governmental jurisdiction and you have questions concerning its provisions or options for compliance, please contact the person listed in the **FOR FURTHER INFORMATION CONTACT**, above.

Small businesses may send comments on the actions of Federal employees who enforce, or otherwise determine compliance with, Federal regulations to the Small Business and Agriculture Regulatory Enforcement Ombudsman and the Regional Small Business Regulatory Fairness Boards. The Ombudsman evaluates these actions annually and rates each agency’s responsiveness to small business. If you wish to comment on actions by employees of the Coast Guard, call 1–888–REG–FAIR (1–888–734–3247). The Coast Guard will not retaliate against small entities that question or complain about this rule or any policy or action of the Coast Guard.

4. Collection of Information

This rule calls for no new collection of information under the Paperwork Reduction Act of 1995 (44 U.S.C. 3501–3520).

5. Federalism

A rule has implications for federalism under Executive Order 13132, Federalism, if it has a substantial direct effect on State or local governments and would either preempt State law or impose a substantial direct cost of compliance on them. We have analyzed this rule under that Order and have determined that it does not have implications for federalism.

6. Protest Activities

The Coast Guard respects the First Amendment rights of protesters. Protesters are asked to contact the person listed in the **FOR FURTHER INFORMATION CONTACT** section to coordinate protest activities so that your message can be received without jeopardizing the safety or security of people, places, or vessels.

7. Unfunded Mandates Reform Act

The Unfunded Mandates Reform Act of 1995 (2 U.S.C. 1531–1538) requires

Federal agencies to assess the effects of their discretionary regulatory actions. In particular, the Act addresses actions that may result in the expenditure by a State, local, or tribal government, in the aggregate, or by the private sector of \$100,000,000 or more in any one year. Though this rule will not result in such an expenditure, we do discuss the effects of this rule elsewhere in this preamble.

8. Taking of Private Property

This rule will not cause a taking of private property or otherwise have taking implications under Executive Order 12630, Governmental Actions and Interference with Constitutionally Protected Property Rights.

9. Civil Justice Reform

This rule meets applicable standards in sections 3(a) and 3(b)(2) of Executive Order 12988, Civil Justice Reform, to minimize litigation, eliminate ambiguity, and reduce burden.

10. Protection of Children

We have analyzed this rule under Executive Order 13045, Protection of Children from Environmental Health Risks and Safety Risks. This rule is not an economically significant rule and does not create an environmental risk to health or risk to safety that may disproportionately affect children.

11. Indian Tribal Governments

This rule does not have tribal implications under Executive Order 13175, Consultation and Coordination with Indian Tribal Governments, because it does not have a substantial direct effect on one or more Indian tribes, on the relationship between the Federal Government and Indian tribes, or on the distribution of power and responsibilities between the Federal Government and Indian tribes.

12. Energy Effects

This action is not a “significant energy action” under Executive Order 13211, Actions Concerning Regulations That Significantly Affect Energy Supply, Distribution, or Use.

13. Technical Standards

This rule does not use technical standards. Therefore, we did not consider the use of voluntary consensus standards.

14. Environment

We have analyzed this rule under Department of Homeland Security Management Directive 023–01 and Commandant Instruction M16475.1D, which guide the Coast Guard in

complying with the National Environmental Policy Act of 1969 (NEPA) (42 U.S.C. 4321–4370f), and have determined that this action is one of a category of actions which do not individually or cumulatively have a significant effect on the human environment. This rule involves the extension of a previously published suspension of reporting requirements established for CDC barges transiting the inland rivers of the Ninth Coast Guard District. This rule is categorically excluded, under figure 2–1, paragraph (34)(g), of the Instruction. Under figure 2–1, paragraph (34)(g), of the Instruction, an environmental analysis checklist and a categorical exclusion determination are not required for this rule.

List of Subjects in 33 CFR Part 165

Harbors, Marine safety, Navigation (water), Reporting and recordkeeping requirements, Security measures, Waterways.

For the reasons discussed in the preamble, the Coast Guard amends 33 CFR part 165 as follows:

PART 165—REGULATED NAVIGATION AREAS AND LIMITED ACCESS AREAS

- 1. The authority citation for part 165 continues to read as follows:

Authority: 33 U.S.C. 1226, 1231; 46 U.S.C. Chapter 701; 50 U.S.C. 191, 195; 33 CFR 1.05–1(g), 6.04–1, 6.04–6, and 160.5; Pub. L. 107–295, 116 Stat. 2064; Department of Homeland Security Delegation No. 0170.1.

- 2. Amend 33 CFR 165.921 by staying paragraphs (d), (e), (f), (g), and (h) from October 3, 2013 until December 31, 2015.

Dated: September 25, 2013.

Fred M. Midgett,

Rear Admiral, U.S. Coast Guard, Commander, Ninth Coast Guard District.

[FR Doc. 2013–24153 Filed 10–2–13; 8:45 am]

BILLING CODE 9110–04–P

DEPARTMENT OF HOMELAND SECURITY

Coast Guard

33 CFR Part 165

[Docket No. USCG–2012–0309]

RIN 1625–AA00

Safety Zone; Chicago Harbor, Navy Pier East, Chicago, IL; Correction

AGENCY: Coast Guard, DHS.

ACTION: Notice of enforcement of regulation; correction.

SUMMARY: The Coast Guard is correcting the docket number in a notice of enforcement that appeared in the **Federal Register** on September 26, 2013 (78 FR 59240). The correct docket number is USCG–2012–0309.

DATES: This correction is effective October 3, 2013.

FOR FURTHER INFORMATION CONTACT: MST1 Joseph McCollum, Prevention Department, Coast Guard Sector Lake Michigan, Milwaukee, WI, 414–747–7148.

SUPPLEMENTARY INFORMATION: The heading of the notice of enforcement of regulation published in the **Federal Register** of September 26, 2013, in FR Doc. 2013–23383, on page 59240, contained an incorrect docket Number, “USCG–2013–0309.” The correct RIN Number is “USCG–2013–0309.” We are publishing this notice to correct that error.

Correction of Publication

Accordingly, the notice of enforcement of regulation entitled Safety Zone; Chicago Harbor, Navy Pier East, Chicago, IL published in the **Federal Register** of September 26, 2013, in FR Doc. 2013–23383, is corrected as follows: On page 59240, in the heading, “Docket No. USCG–2013–0309” is corrected to read “Docket No. USCG–2012–0309”.

Dated: September 27, 2013.

Michael Cavallaro,

Commander, U.S. Coast Guard, Acting Chief, Office of Regulations and Administrative Law.

[FR Doc. 2013–24152 Filed 10–2–13; 8:45 am]

BILLING CODE 9110–04–P

DEPARTMENT OF COMMERCE

United States Patent and Trademark Office

37 CFR Chapter I

[Docket No.: PTO–C–2013–0044]

Patent and Trademark Office Acquisition Guidelines (PTAG)

AGENCY: United States Patent and Trademark Office, Commerce.

ACTION: Notice.

SUMMARY: The United States Patent and Trademark Office (USPTO) has updated the Patent and Trademark Office Acquisition Guidelines (PTAG), which are the agency’s internal operating procedures for procurement.

DATES: October 3, 2013.

ADDRESSES: *Written comments:* Please submit any comments by email to

loren.howcroft@uspto.gov. Although electronic comments are preferred, written comments may be submitted by postal mail addressed to: Loren Howcroft, Division Chief—Policy, Analysis and Liaison Division, United States Patent and Trademark Office, Madison East Building, Room MDE 7D03, 600 Dulany Street, Alexandria, VA 22314. Comments may also be submitted through the Federal eRulemaking Portal at <http://www.regulations.gov>. Comments submitted to the Federal eRulemaking Portal should include docket number PTO–C–2013–0044 in the subject line of the email. All comments made through the Federal eRulemaking Portal Web site will be made available for public inspection. Therefore, any information that should not be made public, such as an address or phone number, should not be included in the comments. While the USPTO welcomes and values all comments from the public in response to this notice, these comments do not bind the USPTO to any further actions related to the comments, and the USPTO may not respond to any or every comment that is submitted. The USPTO will, however, give consideration to all comments received. To view the PTAG, please visit the USPTO’s Web site at <http://www.uspto.gov> and type “PTAG” in the search box.

FOR FURTHER INFORMATION CONTACT:

Loren Howcroft, Division Chief—Policy, Analysis and Liaison Division, Office of the Chief Financial Officer, Office of Procurement, by telephone at (571) 270–1625, or by mail addressed to: Loren Howcroft, Division Chief—Policy, Analysis and Liaison Division, United States Patent and Trademark Office, Madison East Building, Room MDE 7D03, 600 Dulany Street, Alexandria, VA 22314.

SUPPLEMENTARY INFORMATION: As outlined herein, the PTAG has been reorganized into parts that follow the acquisition process and that can be more easily cited. Clarifying language was added to more fully explain the USPTO’s agency-specific procurement flexibilities. This updated PTAG supersedes the one issued on March 10, 2003 [68 FR 25, 2/6/03, effective 3/10/03]. This PTAG will be effective as of October 3, 2013.

Nature of Guidelines

The alternate procedures set forth in this notice are intended to incorporate brevity of content, streamlined procedures, innovation in process, flexibility, and discretion to the acquisition process while ensuring objectivity and maximum reasonable

competition. USPTO employees may use procedures other than those set forth in the Federal Acquisition Regulation (FAR) and this notice so long as those procedures comply with all applicable statutes, Executive Orders and regulations, will further the legitimate interests of the USPTO and are calculated to result in fair decisions. Neither the FAR nor the alternate guidance provided in this notice is binding on USPTO vendors or any other member of the public, except to the extent provisions therefrom are incorporated in legally enforceable contracts. Instructions set forth in solicitations or other procurement documents are also binding in that they may establish conditions on an offeror's continued participation in the procurement process.

Guidelines

Part 1—Introduction

In accordance with the Patent and Trademark Office Efficiency Act (PTOEA), 35 U.S.C. 2(b)(4)(A), the USPTO possesses its own procurement authority. 35 U.S.C. 2(b)(4)(A) also provides the USPTO with certain exemptions from the Federal Property and Administrative Services Act (FPAS) and the Competition in Contracting Act (CICA). As a result of these exemptions, the USPTO is not subject to the FAR in its entirety. The purpose of the Patent and Trademark Office Acquisition Guidelines (PTAG) is to provide internal operating procedures for how the USPTO will conduct its acquisitions as a result of these exemptions.

Part 2—Acquisition Planning

2.0 Scope of Part

Acquisition planning is the joint responsibility of the entire acquisition team, which includes the Contracting Officer (CO) and the technical/program representatives. Acquisition planning serves two important purposes: it establishes how an agency will meet programmatic requirements within the agency's budgetary goals and it serves as a guideline for the acquisition.

2.1 Procedures

COs will work with the technical/program representatives to clearly describe the agency's approach to individual acquisitions. The content, length and complexity of the individual acquisition plan shall be left to the discretion of the acquisition team. When an acquisition plan is appropriate, it shall include:

1. Description of what the USPTO is procuring

2. Cost estimate (including option years as appropriate)
3. Which organization the acquisition will support
4. How the requirement will be used by the agency
5. Development of the acquisition strategy (including risk assessments)
6. Anticipated milestone schedule

2.2 Acquisition Forecasting

As a result of exemptions described in Part 1 above, the USPTO is not required to report its acquisition forecast in governmentwide advance acquisition planning systems. However, to encourage vendor involvement in upcoming acquisitions and to allow for effective workload management, the USPTO maintains and publishes its acquisition forecast on its Office of Procurement's Web site.

Part 3—Electronic Commerce

The USPTO will use governmentwide acquisition systems to the maximum extent practicable to procure its products and services. The USPTO may use vendor-managed acquisition systems, such as reverse auctioning tools, when it is in the best interest of the agency to do so. The USPTO will use the Governmentwide Point of Entry (GPE), as defined in FAR 2.101, to post synopses, requests for information, solicitations, contract awards, and other pertinent contractual information, as appropriate. The Office of Procurement Web site will be used to provide information about the USPTO's procurement guidelines, to publish the acquisition forecast, to post the small business goals, and to communicate upcoming events and items of interest to the vendor community.

Part 4—Market Research

4.0 Scope of Part

Market research is the means by which the USPTO will identify and determine the availability of products or services that will satisfy its requirements. When appropriate, market research may also be used to determine the acquisition strategy and contract type. Market research is the responsibility of the entire acquisition team.

4.1 Procedures

COs should work closely with the technical/program representatives to conduct market research. The CO must document the results of the market research in the contract file. The CO has the discretion to determine the extent of the market research as appropriate for the particular procurement.

4.2 Market Research Resources

The acquisition team may refer to one or more of the following sources for market research data:

1. Publicly available sources of data
2. Governmentwide sources of data
3. Requests for Information
4. Vendor Days
5. Pre-proposal Conferences
6. Any other source deemed to be reasonably reliable

Part 5—Competition

5.0 Scope of Part

As a result of its exemptions described in Part 1 above, the USPTO is not required to meet the test of "full and open competition" as defined in FAR Part 6. In addition, the CO may use agency-specific acquisition procedures as described herein when the particular circumstances warrant it and it is in the best interest of the agency to do so. The USPTO will endeavor to conduct its procurements on a competitive basis under the FAR when it is reasonable to do so.

5.1 Procedures

1. COs must document the contract file to explain their decisions regarding the use of competition and to what extent it will be used.
2. COs must fulfill the notification requirements set forth in FAR Part 5 "Publicizing Contract Actions."

Part 6—USPTO-Specific Acquisition Procedures

6.0 Scope of Part

The USPTO has established the following non-exhaustive list of agency-specific acquisition procedures, which may be used in addition to those procedures already available under the FAR. The CO has the discretion to determine whether to use any of the procedures as appropriate for the particular procurement.

6.1 Procedures

6.1.1 Alternative Competition Method

- a. After conducting market research, the CO and Contracting Officer's Representative (COR) will use their technical expertise and understanding of the marketplace to determine which vendor(s) is/are the most likely to successfully meet the agency's needs and are thereby eligible to participate in an alternative competition.
- b. The CO should consider the USPTO's small business goals when determining which vendor(s) can participate in an alternative competition.

- c. When synthesizing an alternative competition, the CO shall insert the following statement: "The subject requirement is being procured using the Alternative Competition Method in accordance with the Patent and Trademark Office Acquisition Guidelines (PTAG) and the Patent and Trademark Office Efficiency Act 35 U.S.C. 2(b)(4)(A)."
 - d. Instead of posting the solicitation on the GPE, the CO will send it directly to the selected vendor(s).
- 6.1.2 Micro-purchases**
- a. The USPTO's micro-purchase threshold is double the value listed in FAR 2.101 "Micro-purchase."
 - b. The total value of USPTO's micro-purchase threshold shall not exceed the synopsis threshold established in FAR 5.101 (a) (1) "Methods for disseminating information."
 - c. The USPTO shall generally refer to and follow the policies and procedures set forth in FAR Part 13.2 "Actions At or Below the Micro-Purchase Threshold" for guidance for all of its micro-purchase awards.
- 6.1.3 Simplified Acquisition Procedures for Commercial Items**
- a. The USPTO's threshold to use simplified acquisition procedures for commercial items is double the value listed in FAR 13.5 (a) "Test Program for Certain Commercial Items."
 - b. The USPTO's authority to use these procedures will not expire, even in the event that the test program in the FAR does expire. In the event that the FAR-based program does expire, the USPTO's COs are authorized to use the latest policies and procedures set forth in the FAR prior to cancellation of the test program.
 - c. The USPTO shall generally refer to and follow the policies and procedures set forth in FAR Part 13.5 for guidance for all awards issued in accordance with PTAG 6.1.3.
- 6.1.4 Socio-economic Small Business Utilization Program**
- a. Up to the threshold established in FAR 15.403-4 "Requiring certified cost or pricing data," the USPTO may award contracts to companies in the following socio-economic program categories on a sole source basis: small disadvantaged business, veteran-owned small business, service-disabled veteran-owned small business, woman-owned small business, and HubZone small business.
- b. When using the procedures under this section 6.1.4, and upon receiving a new requirement, the CO must consider the USPTO's current small business goal achievements when determining which socio-economic program to use.
 - c. Once the socio-economic program has been selected based upon the results of the market research and/or the CO and COR's knowledge of the market place, the CO can identify a qualified business. A qualified business is one that has demonstrated the ability to successfully perform work similar in scope, complexity, and dollar value to the current requirement.
 - d. The CO must post the Statement of Work (SOW) or Performance Work Statement (PWS) and a statement similar to the following on the GPE for no less than 15 calendar days: "The USPTO intends to award the [brief description of the requirement] to [insert vendor name here], a [insert socio-economic program here] small business, in accordance with the Patent and Trademark Office Efficiency Act, 35 U.S.C. 2(b)(4)(A). Any other vendor that is part of the [insert socio-economic program here] may contact the Contracting Officer to express interest in competing for the requirement within the synopsis period. When contacting the Contracting Officer, vendors must submit a capability statement that does not exceed [insert number of pages here] pages in length that shows their ability to perform the requirement."
 - e. If a vendor within the selected socio-economic program is deemed to be qualified by the CO and/or COR using the criteria established in subparagraph d above, the CO will include them in a restricted sources competition.
 - f. If the vendor has been deemed to be unqualified, the CO must notify them in writing providing a brief explanation for why they were considered to be unqualified. To the maximum extent practicable, notification will happen within 5 business days after the end of the synopsis period.
- 6.1.5 Streamlined Negotiated Acquisition Procedures**
- a. The USPTO may elect to use a Streamlined Negotiated Acquisition Procedure, under which COs may generally refer to and follow the policies and procedures set forth in FAR Part 15 "Contracting by Negotiation." Outlined below are some notable exceptions to the current FAR Part 15 procedures that the CO may elect to use under this section 6.1.5.
 - b. COs may use the combined synopsis/solicitation feature provided in the GPE when posting a requirement using FAR Part 15 policies and procedures.
 1. COs must allow the combined synopsis/solicitation to be posted for no less than 30 calendar days.
 2. When utilizing this procedure, COs must include the following statement in the synopsis portion of their combined synopsis/solicitation: "This requirement is being posted as a combined synopsis/solicitation in accordance with the Patent and Trademark Office Acquisition Guidelines (PTAG) Part 6—USPTO-Specific Acquisition Procedures."
 3. The synopsis/solicitation must address the same requirements set forth in FAR Part 5.1 "Dissemination of Information" and FAR 15.203 "Requests for Proposals."
 - c. COs do not need to request, as part of their solicitations, that vendors provide information that is available in a governmentwide system. For example, the contracting officer does not need to request that the vendor submit Section K "Representations, certifications, and other statements of offerors or respondents" as part of their proposal since that information is currently available in the System of Award Management (SAM).
 1. When utilizing this procedure, COs must include the following certification requirement in their solicitations: "I [insert vendor name here] certify that the information provided in the governmentwide system is current, true and accurate as of [insert date of proposal submission]. I further certify that my company is a [insert business size standard] for North American Industry Classification System (NAICS) code [insert NAICS for the requirement]."
 2. The vendors must put this certification in the introduction portion of their proposals.
- Part 7—Contract Types**
- 7.0 Scope of Part**
- Where appropriate, the USPTO may use any contract type provided for in the FAR without regard to any limitations specified therein, and in

addition may use hybrid or other contract types not provided for in the FAR.

7.1 Indefinite-Delivery Contracts

a. The USPTO is not required to make multiple awards for indefinite-quantity contracts under any circumstances, or where multiple awards are made, to use any specific procedures for placing task or delivery orders.

b. COs are encouraged, however, to consider the use of multiple awards when doing so would be in the best interest of the USPTO.

c. A solicitation contemplating multiple awards must address the procedures the USPTO will use for selecting between contractors when awarding task or delivery orders.

d. Where a specific procurement includes procedures for seeking task or delivery order proposals from multiple contractors, applying these procedures to individual requirements below the micropurchase threshold stated in PTAG Part 6.1.2 (a) will typically not be in the best interest of the USPTO.

7.2 Options

a. As a result of its exemptions described in Part 1 above, USPTO may renegotiate options contained in an existing contract without seeking further competition when it is in the best interest of the agency to do so (for example for the purpose of seeking a price reduction, adjusting quantities, and/or adjusting performance periods).

1. The USPTO will notify the vendor that it intends to renegotiate the option at the time that USPTO provides the notice required by FAR Part 17.207 (a) "Exercise of Options."

2. The CO will issue a bilateral modification when exercising a renegotiated option.

3. Any changes to option pricing would be made normally for the purpose of implementing a price reduction. The CO may only renegotiate an increase to the overall price of a pre-priced option when the price increase directly corresponds with either a higher quantity or longer period of performance than the option under negotiation.

b. As a result of its exemptions described in Part 1 above, USPTO may make award on the basis of unpriced options contained in an existing contract without seeking further competition. COs may consider using unpriced options as a performance incentive.

c. In addition to 7.2.a. and 7.2.b, COs retain their authority to unilaterally exercise options in accordance with the terms of the options.

Part 8—Bid Protests

The USPTO continues to be subject to the bid protest jurisdiction of the Government Accountability Office and of the Court of Federal Claims. The USPTO is also subject to Executive Order 12979 concerning protests to the agency. To see the procedures for considering such protests, please refer to www.uspto.gov and type "Agency Level Protests" in the search box.

Part 9—Printing

The USPTO is exempt from the requirement to use the Government Printing Office to meet its printing needs per 35 U.S.C. § 2(b)(4)(B). Accordingly, the USPTO intends to acquire printing by the most economic and efficient means available, which may in particular acquisitions include the Government Printing Office.

Part 10—Deviations

The USPTO has the option to implement the deviations granted by the Department of Commerce (DOC) when it is in the best interest of the agency to do so. To see a list of deviations granted by DOC, please refer to www.commerce.gov and type "Procurement Memoranda" in the search box.

Dated: September 30, 2013.

Teresa Stanek Rea,

Deputy Under Secretary of Commerce for Intellectual Property and Deputy Director of the United States Patent and Trademark Office.

[FR Doc. 2013-24316 Filed 10-2-13; 8:45 am]

BILLING CODE 3510-16-P

ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 52

[EPA-R10-OAR-2013-0088: FRL-9901-34-Region 10]

Approval and Promulgation of Implementation Plans; Washington: Thurston County Second 10-Year PM₁₀ Limited Maintenance Plan

AGENCY: Environmental Protection Agency (EPA).

ACTION: Final rule.

SUMMARY: The EPA is approving a limited maintenance plan submitted by the State of Washington on July 1, 2013, for the Thurston County maintenance area (Thurston County) for particulate matter with an aerodynamic diameter less than or equal to a nominal 10 micrometers (PM₁₀). The EPA is also approving both local and state

regulatory updates related to this maintenance plan.

DATES: This final rule is effective on November 4, 2013.

ADDRESSES: The EPA has established a docket for this action under Docket Identification No. EPA-R10-OAR-2013-0088. All documents in the docket are listed on the <http://www.regulations.gov> Web site. Although listed in the index, some information may not be publicly available, i.e., Confidential Business Information or other information the disclosure of which is restricted by statute. Certain other material, such as copyrighted material, is not placed on the Internet and will be publicly available only in hard copy form. Publicly available docket materials are available either electronically through <http://www.regulations.gov> or in hard copy at EPA Region 10, Office of Air, Waste, and Toxics, AWT-107, 1200 Sixth Avenue, Seattle, Washington 98101. The EPA requests that you contact the person listed in the **FOR FURTHER INFORMATION CONTACT** section to schedule your inspection. The Regional Office's official hours of business are Monday through Friday, 8:30 a.m. to 4:30 p.m., excluding Federal holidays. **FOR FURTHER INFORMATION CONTACT:** Jeff Hunt at (206) 553-0256, hunt.jeff@epa.gov, or the above EPA, Region 10 address.

SUPPLEMENTARY INFORMATION:

Throughout this document, wherever "we," "us," or "our" are used, it is intended to refer to the EPA.

Table of Contents

- I. Background
- II. Final Action
- III. Statutory and Executive Order Reviews

I. Background

An explanation of the Clean Air Act requirements and implementing regulations that are met by this State Implementation Plan (SIP), a detailed explanation of the revision, and the EPA's reasons for approving it were provided in the notice of proposed rulemaking published on August 5, 2013, and will not be restated here. See 78 FR 42480. The public comment period for this proposed rule ended on September 4, 2013. The EPA did not receive any comments on the proposal.

II. Final Action

The EPA is approving the second 10-year limited maintenance plan for Thurston County submitted by Washington State on July 1, 2013. Washington's submittal also included a request to approve state regulatory

updates to the original control measures included in Chapter 173–433 Washington Administrative Code (WAC) as well as corresponding local Olympic Region Clean Air Agency regulations. The EPA is approving these regulatory changes, as well as other minor corrections described in the EPA's proposed rule, because these changes strengthen the SIP.

III. Statutory and Executive Order Reviews

Under the CAA, the Administrator is required to approve a SIP submission that complies with the provisions of the Act and applicable Federal regulations. 42 U.S.C. 7410(k); 40 CFR 52.02(a). Thus, in reviewing SIP submissions, the EPA's role is to approve state choices, provided that they meet the criteria of the CAA. Accordingly, this action merely approves state law as meeting Federal requirements and does not impose additional requirements beyond those imposed by state law. For that reason, this action:

- Is not a "significant regulatory action" subject to review by the Office of Management and Budget under Executive Order 12866 (58 FR 51735, October 4, 1993);
- does not impose an information collection burden under the provisions of the Paperwork Reduction Act (44 U.S.C. 3501, *et seq.*);
- is certified as not having a significant economic impact on a substantial number of small entities under the Regulatory Flexibility Act (5 U.S.C. 601, *et seq.*);
- does not contain any unfunded mandate or significantly or uniquely affect small governments, as described in the Unfunded Mandates Reform Act of 1995 (Pub. L. 104–4);
- does not have Federalism implications as specified in Executive Order 13132 (64 FR 43255, August 10, 1999);
- is not an economically significant regulatory action based on health or safety risks subject to Executive Order 13045 (62 FR 19885, April 23, 1997);
- is not a significant regulatory action subject to Executive Order 13211 (66 FR 28355, May 22, 2001);
- is not subject to requirements of Section 12(d) of the National Technology Transfer and Advancement Act of 1995 (15 U.S.C. 272 note) because application of those requirements would be inconsistent with the CAA; and

- does not provide the EPA with the discretionary authority to address, as appropriate, disproportionate human health or environmental effects, using practicable and legally permissible methods, under Executive Order 12898 (59 FR 7629, February 16, 1994). In addition, this rule does not have tribal implications as specified by Executive Order 13175 (65 FR 67249, November 9, 2000), because it will not impose substantial direct costs on tribal governments or preempt tribal law. The SIP is not approved to apply in Indian country located in the State, except for non-trust land within the exterior boundaries of the Puyallup Indian Reservation, also known as the 1873 Survey Area. Under the Puyallup Tribe of Indians Settlement Act of 1989, 25 U.S.C. 1773, Congress explicitly provided state and local agencies in Washington authority over activities on non-trust lands within the 1873 Survey Area and the EPA is therefore approving this SIP on such lands.

The Congressional Review Act, 5 U.S.C. 801 *et seq.*, as added by the Small Business Regulatory Enforcement Fairness Act of 1996, generally provides that before a rule may take effect, the agency promulgating the rule must submit a rule report, which includes a copy of the rule, to each House of the Congress and to the Comptroller General of the United States. EPA will submit a report containing this action and other required information to the U.S. Senate, the U.S. House of Representatives, and the Comptroller General of the United States prior to publication of the rule in the **Federal Register**. A major rule cannot take effect until 60 days after it is published in the **Federal Register**. This action is not a "major rule" as defined by 5 U.S.C. 804(2).

Under section 307(b)(1) of the Clean Air Act, petitions for judicial review of this action must be filed in the United States Court of Appeals for the appropriate circuit by December 2, 2013. Filing a petition for reconsideration by the Administrator of this final rule does not affect the finality of this action for the purposes of judicial review nor does it extend the time within which a petition for judicial review may be filed, and shall not postpone the effectiveness of such rule or action. This action may not be challenged later in proceedings to enforce its requirements. (See section 307(b)(2)).

List of Subjects in 40 CFR Part 52

Environmental protection, Air pollution control, Incorporation by reference, Intergovernmental relations, Particulate matter, Reporting and recordkeeping requirements.

Dated: September 12, 2013.

Dennis J. McLerran,

Regional Administrator, Region 10.

40 CFR part 52 is amended as follows:

PART 52—APPROVAL AND PROMULGATION OF IMPLEMENTATION PLANS

■ 1. The authority citation for part 52 continues to read as follows:

Authority: 42 U.S.C. 7401 *et seq.*

Subpart WW—Washington

- 2. Section 52.2470 is amended:
 - a. In paragraph (c) Table 1—Washington Department of Ecology Regulations by:
 - i. Revising entries 173–433–030 through 173–433–120;
 - ii. Adding in numerical order entry 173–433–140;
 - iii. Revising entry 173–433–150; and
 - iv. Removing entries 173–433–170 and 173–433–200;
 - b. In paragraph (c) by adding a table at the end titled "TABLE 8—Olympic Region Clean Air Agency Regulations" with the entries 6.2.3, 6.2.6, 6.2.7, and 8.1.1 through 8.1.8;
 - c. In paragraph (e) by
 - i. Removing the existing table heading "State of Washington Nonregulatory Provisions and Quasi-Regulatory Measures" and replacing it with "Table 2—Attainment, Maintenance, and Other Plans" respectively;
 - ii. Adding a table after the introductory text titled "Table 1—Approved but not incorporated by reference statutes and regulations"; and
 - ii. Adding an entry in the newly designated Table 2—Attainment, Maintenance, and Other Plans with entry "Particulate Matter (PM₁₀) 2nd 10-year Limited Maintenance Plan" at the end of the section with the heading "Attainment and Maintenance Planning—Particulate Matter."

The revised and added text reads as follows:

§ 52.2470 Identification of plan.

* * * * *

(c) * * *

TABLE 1—WASHINGTON DEPARTMENT OF ECOLOGY REGULATIONS

State citation	Title/subject	State effective date	EPA approval date	Explanations
*	*	*	*	*
Washington Administrative Code, Chapter 173-433—Solid Fuel Burning Device Standards				
173-433-030	Definitions	4/20/91	10/3/13 [Insert page number where the document begins].	*
173-433-100	Emission Performance Standards.	3/6/93	10/3/13 [Insert page number where the document begins].	
173-433-110	Opacity Standards	3/6/93	10/3/13 [Insert page number where the document begins].	
173-433-120	Prohibited Fuel Types	4/20/91	10/3/13 [Insert page number where the document begins].	
173-433-140	Impaired Air Quality Criteria	4/20/91	10/3/13 [Insert page number where the document begins].	*
173-433-150	Curtailement	4/20/91	10/3/13 [Insert page number where the document begins].	
*	*	*	*	*

TABLE 8—OLYMPIC REGION CLEAN AIR AGENCY REGULATIONS

State citation	Title/subject	State effective date	EPA approval date	Explanations
Rule 6.2 Outdoor Burning				
6.2.3	No Residential or Land Clearing Burning.	2/4/12	10/3/13 [Insert page number where the document begins].	Only as it applies to the cities of Olympia, Lacey, and Tumwater.
6.2.6	Curtailement	3/18/11	10/3/13 [Insert page number where the document begins].	
6.2.7	Recreational Burning	3/18/11	10/3/13 [Insert page number where the document begins].	
Rule 8.1 Wood Heating				
8.1.1	Definitions	5/22/10	10/3/13 [Insert page number where the document begins].	
8.1.2 (b) and (c)	General Emission Standards	5/22/10	10/3/13 [Insert page number where the document begins].	
8.1.3	Prohibited Fuel Types	5/22/10	10/3/13 [Insert page number where the document begins].	
8.1.4	Curtailement	5/22/10	10/3/13 [Insert page number where the document begins].	
8.1.5	Exceptions	5/22/10	10/3/13 [Insert page number where the document begins].	
8.1.7	Sale and Installation of Uncertified Woodstoves.	5/22/10	10/3/13 [Insert page number where the document begins].	
8.1.8	Disposal of uncertified woodstoves.	5/22/10	10/3/13 [Insert page number where the document begins].	

* * * * *

(e) * * *

TABLE 1—APPROVED BUT NOT INCORPORATED BY REFERENCE STATUTES AND REGULATIONS

State citation	Title/subject	State effective date	EPA approval date	Explanations
Washington Department of Ecology Regulations				
173–433–200	Regulatory Actions and Penalties.	10/18/90	1/15/93, 58 FR 4578.	
Olympic Region Clean Air Agency Regulations				
8.1.6	Penalties	5/22/10	10/3/13 [Insert page number where the document begins].	

TABLE 2—ATTAINMENT, MAINTENANCE, AND OTHER PLANS

Name of SIP provision	Applicable geographic or non-attainment area	State submittal date	EPA approval date	Comments
*	*	*	*	*
Attainment and Maintenance Planning—Particulate Matter				
Particulate Matter (PM ₁₀) 2nd 10-year Limited Maintenance Plan.	Thurston County	7/1/13	10/3/13 [Insert page number where the document begins].	
*	*	*	*	*

[FR Doc. 2013–23511 Filed 10–2–13; 8:45 am]

BILLING CODE 6560–50–P

DEPARTMENT OF HEALTH AND HUMAN SERVICES**Centers for Medicare & Medicaid Services****42 CFR Part 412****[CMS–1599–IFC]****RIN 0938–AR53****Medicare Program; FY 2014 Inpatient Prospective Payment Systems: Changes to Certain Cost Reporting Procedures Related to Disproportionate Share Hospital Uncompensated Care Payments****AGENCY:** Centers for Medicare & Medicaid Services (CMS), HHS.**ACTION:** Interim final rule with comment period.

SUMMARY: In the fiscal year (FY) 2014 inpatient prospective payment systems (IPPS)/long-term care hospital (LTCH) PPS final rule, we established the methodology for determining the amount of uncompensated care payments made to hospitals eligible for the disproportionate share hospital (DSH) payment adjustment in FY 2014

and a process for making interim and final payments. This interim final rule with comment period revises certain operational considerations for hospitals with Medicare cost reporting periods that span more than one Federal fiscal year and also makes changes to the data that will be used in the uncompensated care payment calculation in order to ensure that data from Indian Health Service (IHS) hospitals are included in Factor 1 and Factor 3 of that calculation.

DATES: *Effective date:* These regulations are effective on October 1, 2013.

Comment date: To be assured consideration, comments must be received at one of the addresses provided below, no later than 5 p.m. on November 29, 2013.

ADDRESSES: In commenting, please refer to file code CMS–1599–IFC. Because of staff and resource limitations, we cannot accept comments by facsimile (FAX) transmission.

You may submit comments in one of four ways (please choose only one of the ways listed).

1. *Electronically.* You may submit electronic comments on this regulation to <http://www.regulations.gov>. Follow the “Submit a comment” instructions.

2. *By regular mail.* You may mail written comments to the following address ONLY:

Centers for Medicare & Medicaid Services, Department of Health and Human Services, Attention: CMS–1599–IFC, P.O. Box 8013, Baltimore, MD 21244–8013.

Please allow sufficient time for mailed comments to be received before the close of the comment period.

3. *By express or overnight mail.* You may send written comments to the following address ONLY:

Centers for Medicare & Medicaid Services, Department of Health and Human Services, Attention: CMS–1599–IFC, Mail Stop C4–26–05, 7500 Security Boulevard, Baltimore, MD 21244–1850.

4. *By hand or courier.* Alternatively, you may deliver (by hand or courier) your written comments ONLY to the following addresses prior to the close of the comment period:

a. For delivery in Washington, DC—Centers for Medicare & Medicaid Services, Department of Health and Human Services, Room 445–G, Hubert H. Humphrey Building, 200 Independence Avenue SW., Washington, DC 20201.

(Because access to the interior of the Hubert H. Humphrey Building is not readily available to persons without Federal government identification, commenters are encouraged to leave

their comments in the CMS drop slots located in the main lobby of the building. A stamp-in clock is available for persons wishing to retain a proof of filing by stamping in and retaining an extra copy of the comments being filed.)

b. For delivery in Baltimore, MD—
Centers for Medicare & Medicaid Services, Department of Health and Human Services, 7500 Security Boulevard, Baltimore, MD 21244–1850.

If you intend to deliver your comments to the Baltimore address, call telephone number (410) 786–9994 in advance to schedule your arrival with one of our staff members.

Comments erroneously mailed to the addresses indicated as appropriate for hand or courier delivery may be delayed and received after the comment period.

For information on viewing public comments, see the beginning of the **SUPPLEMENTARY INFORMATION** section.

FOR FURTHER INFORMATION CONTACT: Tzvi Hefter or Ing Jye Cheng, (410) 786–4548.

SUPPLEMENTARY INFORMATION:

Inspection of Public Comments: All comments received before the close of the comment period are available for viewing by the public, including any personally identifiable or confidential business information that is included in a comment. We post all comments received before the close of the comment period on the following Web site as soon as possible after they have been received: <http://regulations.gov>. Follow the search instructions on that Web site to view public comments.

Comments received timely will be also available for public inspection as they are received, generally beginning approximately 3 weeks after publication of a document, at the headquarters of the Centers for Medicare & Medicaid Services, 7500 Security Boulevard, Baltimore, Maryland 21244, Monday through Friday of each week from 8:30 a.m. to 4 p.m. To schedule an appointment to view public comments, phone 1–800–743–3951.

I. Background

Section 3133 of the Patient Protection and Affordable Care Act (PPACA), as amended by section 10316 of PPACA and section 1104 of the Health Care and Education Reconciliation Act (Pub. L. 111–152), added a new section 1886(r) to the Social Security Act (the Act) that modifies the methodology for computing the Medicare disproportionate share hospital (DSH) payment adjustment beginning in fiscal year (FY) 2014. For the purposes of this interim final rule with comment period, we refer to these provisions collectively

as section 3133 of the Affordable Act. Currently, hospitals qualify for a DSH payment adjustment under a statutory formula that considers their Medicare utilization due to beneficiaries who also receive Supplemental Security Income (SSI) benefits and their Medicaid utilization. Under section 1886(r) of the Act, starting in FY 2014, hospitals that are eligible for Medicare DSH payments will receive 25 percent of the amount they previously would have received under the current statutory formula for Medicare DSH payments. The remaining amount, equal to an estimate of 75 percent of what otherwise would have been paid as Medicare DSH payments, reduced for changes in the percentage of individuals under age 65 who are uninsured will become available to make additional payments to each hospital that qualifies for Medicare DSH payments and that has uncompensated care. Each Medicare DSH hospital will receive an additional amount based on its estimated share of the total amount of uncompensated care reported for all Medicare DSH hospitals for a given time period. In this interim final rule with comment period, we are revising certain policies and processes described in the FY 2014 IPPS/LTCH PPS final rule. Specifically, we are revising certain operational considerations for hospitals with Medicare cost reporting periods that span more than one Federal fiscal year and also making changes to the data that will be used in the uncompensated care payment calculation in order to ensure that data from Indian Health Service (IHS) hospitals are included in Factor 1 and Factor 3 of that calculation.

In the final rule titled “Medicare Program; Hospital Inpatient Prospective Payment Systems for Acute Care Hospitals and the Long-Term Care Hospital Prospective Payment System and Fiscal Year 2014 Rates; Quality Reporting Requirements for Specific Providers; Hospital Conditions of Participation; Payment Policies Related to Patient Status” (which appeared in the August 19, 2013 **Federal Register** (78 FR 50496)), we made payment and policy changes under the Medicare inpatient prospective payment systems (IPPS) for operating costs of acute care hospitals. Section 1886(r) of the Act, as added by section 3133 of the Affordable Care Act, provides for a reduction to disproportionate share payments under section 1886(d)(5)(F) of the Act and for a new uncompensated care payment to eligible hospitals. Specifically, section 1886(r) of the Act now requires that, for “fiscal year 2014 and each subsequent fiscal year,” “subsection (d) hospitals”

that would otherwise receive a “disproportionate share payment . . . made under subsection (d)(5)(F)” will receive two separate payments: (1) 25 percent of the amount they previously would have received under subsection (d)(5)(F) for DSH (“the empirically justified amount”); and (2) an additional payment for the DSH hospital’s proportion of uncompensated care, determined as the product of three factors. These three factors are: (1) 75 percent of the payments that would otherwise be made under subsection (d)(5)(F); (2) 1 minus the percent change in the percent of individuals under the age of 65 who are uninsured (minus 0.1 percentage points for FY 2014, and minus 0.2 percentage points for FY 2015 through FY 2017); and (3) a hospital’s uncompensated care amount relative to the uncompensated care amount of all DSH hospitals expressed as a percentage.

II. Provisions of the Interim Final Rule

A. Operational Considerations for Hospitals With Medicare Cost Reporting Periods That Span More Than One Federal Fiscal Year

In the FY 2014 IPPS/LTCH PPS final rule (78 FR 50645), we finalized “a process to distribute interim uncompensated care payments under the IPPS on a per-discharge basis through our claims processing system, with a reconciliation of the hospitals’ [uncompensated care] payments at cost report settlement to ensure that hospitals receive no more than the estimated amount included in this final rule”. We described that process as follows (78 FR 50646):

[A]t cost report settlement, the fiscal intermediary/MAC will issue a notice of program reimbursement that includes a determination concerning whether each hospital is eligible for empirically justified Medicare DSH payments and, therefore, eligible for uncompensated care payments in FY 2014 and each subsequent year. In the case where a hospital received interim payments for its empirically justified Medicare DSH payments and uncompensated care payments for FY 2014 or a subsequent year on the basis of estimates prior to the payment year, but is determined to be ineligible for the empirically justified Medicare DSH payment at cost report settlement, the hospital would no longer be eligible for either payment and CMS would recoup those monies. For a hospital that did not receive interim payments for its empirically justified Medicare DSH payments and uncompensated care payments for FY 2014 or a subsequent year, but at cost report settlement is determined to be eligible for DSH payments, the uncompensated care payment for such a hospital is calculated based on the Factor 3 value determined prospectively for that fiscal year. . . . The

reconciliations at cost report settlement would be based on the values for Factor 1, Factor 2, and Factor 3 that we have finalized prospectively for a Federal fiscal year.

In the final rule (78 FR 50646), we provided an example in which a DSH eligible hospital has a cost reporting period of January 1, 2014 through December 31, 2014. We stated that this hospital would receive interim payments for its uncompensated care payments beginning on October 1, 2013. For cost reporting purposes, we stated that the uncompensated care payments for federal FY 2014 would be assigned to cost reporting periods beginning on or after October 1, 2013, and would be reconciled on those cost reports. Thus, in the example of the hospital with a cost reporting period beginning on January 1, 2014, if the hospital remained eligible for empirically justified DSH payments at cost report settlement, then it would receive its full FY 2014 uncompensated care payment on its cost report for the cost reporting period beginning on January 1, 2014. Although we acknowledged that it is possible to align interim and final payments for the uncompensated care payment with an individual hospital's cost reporting periods, we believed it would be administratively efficient and practical to pay the uncompensated care payment on the basis of the Federal fiscal year because that is how it is determined, and to reconcile that amount in the cost reporting period that begins in the respective Federal fiscal year. We stated in the final rule (78 FR 50647) that we believed this methodology would not delay the full payment of FY 2014 payments to hospitals with cost reporting periods that begin after October 1, 2013.

However, as we prepared to implement the FY 2014 IPPS/LTCH PPS final rule, several difficulties regarding this approach that we had not previously considered came to our attention. We initially proposed to make interim uncompensated care payments on a bi-weekly basis, finalizing a different process to make interim uncompensated care payments on a per-discharge basis in response to comments. In addition to proposing and finalizing a process for making interim uncompensated care payments, we also proposed and finalized a reconciliation process that would reconcile the uncompensated care payment for a given fiscal year, such as FY 2014, on the cost report for the cost reporting period beginning in that fiscal year (that is, for FY 2014, the cost report for the cost reporting period beginning in FY 2014). We proposed and finalized this approach because we believed it would

be administratively efficient and practical. As indicated previously and in the FY 2014 IPPS/LTCH PPS final rule, we believed that this policy would neither delay nor substantially affect the disbursement of final uncompensated care payments; but, since the final rule was issued, we have come to doubt these conclusions.

We have come to believe that the policy we adopted in the FY 2014 IPPS/LTCH PPS final rule is inconsistent with longstanding cost reporting requirements. As a general rule, payments for discharges are reported in the cost reporting period in which they occur, and all payments made for discharges during a cost reporting period are reconciled on the cost report for that period. (See PRM-I, Section 2805 and 42 CFR 412.1(a)). We did not specifically address or propose to change the cost reporting rules in either the FY 2014 IPPS/LTCH PPS proposed or final rules. However, for hospitals with cost reporting periods that are not concurrent with the Federal fiscal year, the policy adopted in the FY 2014 IPPS/LTCH PPS final rule departs from these cost reporting requirements by reconciling interim uncompensated care payments made for discharges occurring during the hospital's 2013 cost reporting period on the hospital's 2014 cost report. Under ordinary cost reporting requirements, those payments (having been made during the hospital's 2013 cost reporting period) would have to be treated as an overpayment on the hospital's 2013 cost report and therefore recouped. However, as finalized in the FY 2014 IPPS/LTCH PPS final rule, if the hospital was found to be eligible for DSH payments for its cost reporting period that begins during FY 2014, we would then pay the hospital its full FY 2014 uncompensated care payment during the settlement of the hospital's 2014 cost report (that is, we would repay the previously recouped uncompensated care payments when we reconciled the hospital's 2014 cost report). These administrative issues would effectively delay uncompensated care payments, frustrate our policy of making uncompensated care payments promptly, and would likely lead to serious cash flow difficulties for some hospitals. In sum, we do not believe the policy we finalized in the FY 2014 IPPS/LTCH PPS final rule of reconciling uncompensated care payments for hospitals with cost reporting periods that begin after October 1, 2013 would work as intended for the large majority of IPPS hospitals that have cost reporting periods that are not concurrent with the Federal fiscal year.

To effectuate a revised process, we intend to align final payments for the uncompensated care payment with each individual hospital's cost reporting periods and to reconcile interim uncompensated care payment amounts on the hospital's cost report for the proportion of the cost reporting period that overlaps a Federal fiscal year and in which the interim payments were made or should have been made. Thus, the final uncompensated care payment amounts that would be included on a cost report spanning two Federal fiscal years would be the pro rata share of the uncompensated care payment associated with each Federal fiscal year. This pro rata share would be determined based on the proportion of the applicable Federal fiscal year that is included in that cost reporting period. Earlier in this interim final rule with comment period, we reiterated an example from the FY 2014 IPPS/LTCH PPS final rule, where a hospital is estimated to be eligible for the empirically justified DSH payment and also an uncompensated care payment in FY 2014 and has a cost reporting period of January 1, 2014 through December 31, 2014. Under the revised process we are adopting in this interim final rule with comment period, in this example, this hospital would still begin to receive interim payments for its uncompensated care on October 1, 2013. However, instead of having the entire FY 2014 payment reconciled on its cost report for the cost reporting period beginning on January 1, 2014 (which ends on December 31, 2014 and would therefore require the hospital to pay back monies received for the portion of its cost reporting period beginning on January 1, 2013 that occurs in Federal fiscal year 2014), we will reconcile the interim FY 2014 uncompensated care payments received for discharges from October 1, 2013 through December 31, 2013 on the hospital's cost report for the cost reporting period beginning on January 1, 2013 against a pro rata share of its FY 2014 uncompensated care payment. If this hospital is eligible for DSH on its cost report for the cost reporting period ending on December 31, 2013, it will receive a pro rata share of its FY 2014 uncompensated care payment. This pro rata share would be approximately three-twelfths (that is, the period of time from October 1, 2013 through December 31, 2013, divided by the period of time from January 1, 2013 through December 31, 2013) of the hospital's FY 2014 uncompensated care payment. If the hospital's subsequent cost reporting period is January 1, 2014 through December 31, 2014, we also will

reconcile the interim FY 2014 uncompensated care payments received for discharges from January 1, 2014 through September 30, 2014 on the hospital's cost report for the cost reporting period beginning on January 1, 2014 against a pro rata share of its FY 2014 uncompensated care payment. We would also reconcile the interim FY 2015 uncompensated care payments received for discharges from October 1, 2014 through December 31, 2014 (that is, discharges occurring in FY 2015 during that hospital's cost reporting period) on the hospital's cost report for the cost reporting period beginning on January 1, 2014 against a pro rata share of its FY 2015 uncompensated care payment. Accordingly, for the hospital in this example, if it remained eligible for Medicare DSH on its cost report for the cost reporting period beginning on January 1, 2014, it would receive the sum of two pro rata shares of uncompensated care payments, one pro rata share approximately equal to nine-twelfths (that is, the period of time from January 1, 2014 through September 30, 2014 divided by the period of time from January 1, 2014 through December 31, 2014) of the hospital's FY 2014 uncompensated care payment and one pro rata share equal to approximately three-twelfths or (that is, the period of time from October 1, 2014 through December 31, 2014 divided by the period of time from January 1, 2014 through December 31, 2014) of the hospital's FY 2015 uncompensated care payment.

Under this interim final rule with comment period, and in accordance with the policies we finalized in the FY 2014 IPPS/LTCH PPS final rule regarding eligibility for the uncompensated care payment, hospitals with cost reporting periods that span more than one Federal fiscal year will be eligible for the respective pro rata shares of their uncompensated care payment if they were eligible for DSH in that cost reporting period. If they were ineligible for DSH in that cost reporting period, they would be ineligible to receive the respective pro rata share of the uncompensated care payment for the respective Federal fiscal year (or years). We believe this new approach remains fundamentally consistent with the policy we finalized in the FY 2014 IPPS/LTCH PPS final rule (78 FR 50622) where we stated that "our final determination on the hospital's eligibility for uncompensated care payments would be based on the hospital's actual DSH status on the cost report for that payment year." However, it avoids the cost reporting difficulties

that would have arisen from the reconciliation process originally adopted in the final rule.

B. Treatment of Indian Health Service Hospitals

In the FY 2014 IPPS/LTCH PPS final rule, we discussed the hospitals that are eligible to receive the uncompensated care payments under section 1886(r)(2) of Act. Specifically, we stated (78 FR 50622) that the "new payment methodology under subsection (r) applies to 'subsection (d) hospitals' that would otherwise receive a 'disproportionate share payment . . . made under subsection (d)(5)(F).'" Therefore, eligibility for empirically justified Medicare DSH payments is unchanged under this new provision. Consistent with the law, hospitals must receive empirically justified Medicare DSH payments in FY 2014 or a subsequent year to receive an additional Medicare uncompensated care payment for that year.

In the FY 2014 IPPS/LTCH PPS final rule, we finalized our methodology for calculating the new uncompensated care payments. As we discussed in the final rule, section 1886(r)(2) of the Act provides that for each eligible hospital in FY 2014 and subsequent years, the new uncompensated care payment is the product of three factors. Factor 1 of that methodology is the "difference between our estimates of: (1) The amount that would have been paid in Medicare DSH payments for FY 2014 and subsequent years, in the absence of the new payment provision; and (2) the amount of empirically justified Medicare DSH payments that are made for FY 2014 and subsequent years, which takes into account the requirement to pay 25 percent of what would have otherwise been paid under section 1886(d)(5)(F) of the Act. In other words, this factor represents our estimate of 75 percent (100 percent minus 25 percent) of our estimate of Medicare DSH payments that would otherwise be made, in the absence of section 1886(r) of the Act, for FY 2014 and subsequent years." (See 78 FR 50627).

In the FY 2014 IPPS/LTCH PPS final rule (78 FR 50630), we finalized our proposal to use the most recently available estimates, as calculated by the our Office of the Actuary, to determine both the aggregate amount of empirically justified DSH payments under section 1886(r)(1) of the Act and the aggregate amount of payments that would otherwise have been made under section 1886(d)(5)(F) of the Act. In order to calculate these estimates, our Office of the Actuary used the March 2013

update of the Medicare Hospital Cost Report Information System (HCRIS) and the proposed rule's IPPS Impact file. The estimate excluded Maryland hospitals, SCHs paid under their hospital-specific rate, and hospitals in the Rural Community Hospital Demonstration Program, as these hospitals do not receive a Medicare DSH payment. The CMS Office of the Actuary's final estimate for Medicare DSH payments for FY 2014 without regard to the application of section 1886(r)(1) of the Act, is approximately \$12.772 billion. The estimate for empirically justified Medicare DSH payments for FY 2014, with the application of section 1886(r)(1) of the Act, is approximately \$3.193 billion. Factor 1 is the difference of these two estimates by our Office of the Actuary; therefore, in the FY 2014 IPPS/LTCH PPS final rule, we calculated Factor 1 to be approximately \$9.579 billion.

IHS hospitals are subsection (d) hospitals that can receive empirically justified Medicare DSH payments under section 1886(r)(1) of the Act if they meet the eligibility requirements under subsection (d)(5)(F). Therefore, eligible IHS hospitals will also receive the new uncompensated care payment under subsection (r)(2). However, following the issuance of the FY 2014 IPPS/LTCH PPS final rule, it has come to our attention that although IHS hospitals can receive Medicare DSH payments, they submit Medicare hospital cost reports to CMS that are not uploaded in the HCRIS database. Therefore, their Medicare DSH payments were not included in the estimates by our Office of the Actuary that were used to calculate Factor 1. Because IHS hospitals are eligible to receive Medicare DSH payments and the new uncompensated care payments, we believe it is inappropriate to exclude the Medicare DSH payments to IHS hospitals from the estimates used to calculate Factor 1. In addition, we did not intend to finalize a policy that specifically excludes DSH payments to IHS hospitals from our estimate of Medicare DSH payments for purposes of calculating Factor 1 in the calculation of the uncompensated care payment.

Therefore, in this interim final rule with comment period, we are revising the policy originally adopted in the FY 2014 IPPS/LTCH PPS final rule in order to change the data that will be considered in calculating Factor 1 for FY 2014 and subsequent years. Specifically, in addition to the March 2013 update of HCRIS, we will also consider, supplemental cost report data provided by IHS hospitals to CMS as of March 2013. We will also recalculate

Factor 1, to reflect the Office of the Actuary's estimate of Medicare DSH payments to IHS hospitals, based on this supplemental data. With the inclusion of the Medicare DSH payments to IHS hospitals, our Office of the Actuary's revised estimate of Medicare DSH payments for FY 2014 without regard to the application of 1886(r)(1) of the Act is approximately \$12.791 billion (we note that this revised estimate also includes the correction for Factor 1 made in the correcting document for the FY 2014 IPPS/LTCH PPS final rule that appears elsewhere in this issue of the **Federal Register**). The CMS Office of the Actuary's revised estimate of empirically justified Medicare DSH payments for FY 2014, with the application of section 1886(r)(1) of the Act, is approximately \$3.198 billion (we note that this revised estimate also includes the correction for Factor 1 made in the correcting document for the FY 2014 IPPS/LTCH PPS final rule that appears elsewhere in this issue of the **Federal Register**). Factor 1 is the difference of these two estimates of our Office of the Actuary; therefore, in this interim final rule with comment period, we recalculated Factor 1 to be approximately \$9.593 billion (we note that this revised estimate also includes the correction for Factor 1 made in the correcting document for the FY 2014 IPPS/LTCH PPS final rule that appears elsewhere in this issue of the **Federal Register**). We note that based on the recalculation of Factor 1, the amount available for uncompensated care payments for FY 2014 will be approximately \$9.046 billion (our Factor 2 finalized in the FY 2014 IPPS/LTCH PPS final rule of 0.943 times our revised Factor 1 estimate of \$9.593 billion).

In the FY 2014 IPPS/LTCH PPS final rule (78 FR 50634 through 50643), we discuss the methodology used to calculate Factor 3 in the calculation of the uncompensated care payment. Under the final policy adopted in that final rule, for FY 2014 we would determine a DSH hospital's Factor 3 as the sum of its Medicaid days and SSI days (numerator) relative to the total number of Medicaid days and SSI days for all DSH hospitals (denominator). Under this policy, we would determine a hospital's SSI days based on the most recent SSI fraction. As we stated in the final rule, the most recent SSI fraction for FY 2014 is the FY 2011 SSI fraction. The FY 2011 SSI fractions for each subsection (d) hospital were published on the CMS Web site on June 27, 2013. In addition, under the final policy adopted in the final rule, we would determine a hospital's Medicaid days

based on the Medicaid days reported on the 2011, or if not available, the 2010 Medicare Hospital Cost Report, using the March 2013 update of HCRIS.

Because the cost reports submitted by IHS hospitals are not uploaded into HCRIS, we did not include their Medicaid days in our calculation of Factor 3. Specifically, Medicaid days for IHS hospitals were excluded from the numerator of Factor 3 for those IHS hospitals and from the denominator of Factor 3 for all hospitals. As a result, we believe that the Factor 3 that was calculated for each IHS hospital under the policies adopted in the 2014 IPPS/LTCH PPS final rule, based only on FY 2011 SSI days, significantly understated the actual amount of uncompensated care furnished by these hospitals. The uncompensated care payment amounts calculated for these hospitals were also significantly lower than they would have been had these days been included. We are concerned that under the policy originally adopted in the FY 2014 IPPS/LTCH PPS final rule, IHS hospitals, that serve a significant low income population, will be subject to the 75 percent reduction to their Medicare DSH payments under subsection (r)(1) but will receive reduced uncompensated care payments under subsection (r)(2) due to their cost reports not being included in the HCRIS database. Given that we intended to base our estimate of the uncompensated care provided by IHS hospitals, in part, on the care they provide to Medicaid patients, we believe it is appropriate to make a change to the data that will be considered in determining Factor 3 of the new uncompensated care payment to allow the Medicaid days for IHS hospitals to be included. This change will also help to ensure that eligible IHS hospitals receive an uncompensated care payment that does not significantly understate the amount of uncompensated care they provide. Accordingly, in this interim final rule with comment period, we are revising the policy adopted in the final rule to permit us to consider supplemental cost report data submitted to CMS as of March 2013 only by IHS hospitals in addition to data reflected in the March 2013 update of HCRIS, in calculating Factor 3 of the uncompensated care payment. The Medicaid days for IHS hospitals that are reflected in the supplemental data will be included in the numerator of the Factor 3 calculation for IHS hospitals and will be included in the denominator of Factor 3 for all hospitals eligible to receive the uncompensated care payment.

III. Waiver of Proposed Rulemaking and Delay in Effective Date

We ordinarily publish a notice of proposed rulemaking in the **Federal Register** and invite public comment on the proposed rule in accordance with 5 U.S.C. 553(b) of the Administrative Procedure Act (APA). The notice of proposed rulemaking includes a reference to the legal authority under which the rule is proposed, and the provisions of the proposed rule or a description of the subjects and issues involved. This procedure can be waived, however, if an agency finds good cause that a notice-and-comment procedure is impracticable, unnecessary, or contrary to the public interest and incorporates a statement of the finding and its reasons in the rule issued.

We believe there is good cause to waive notice and comment rulemaking to make the revisions to our policy for reconciling uncompensated care payments for hospitals with Medicare cost reporting periods that are not concurrent with the Federal fiscal year. We believe it would be inequitable and contrary to the public interest to require the large majority of IPPS hospitals that have a cost reporting period that does not align with the Federal fiscal year to pay back to CMS the monies they receive as interim uncompensated care payments for Federal FY 2014 during their cost reporting period beginning in Federal FY 2013. Additionally, these hospitals would experience a delay in the receipt of their final Federal FY 2014 uncompensated care payments until their next cost reporting period. This change will not affect the manner in which uncompensated care payments are calculated. Rather, it affects only the manner in which those payments are reconciled for cost reporting purposes. As a result, the policy being adopted in this interim final rule with comment period will benefit those hospitals that have cost reporting periods that do not align with the Federal fiscal year by avoiding administrative issues. These administrative issues would effectively delay uncompensated care payments, frustrate our policy of making uncompensated care payments promptly, and would likely lead to serious cash flow difficulties for some hospitals. There will be no impact on hospitals that have cost reporting periods that align with the Federal fiscal year. Therefore, we believe it would be contrary to the public interest not to change the methodology for reconciling uncompensated care payments for hospitals that have cost reporting periods that are not concurrent with the

Federal fiscal year. Further, it would be impracticable to go through notice-and-comment rulemaking to achieve what we believe would be the more equitable and efficient result. The methodology for reconciling uncompensated care payments adopted in the FY 2014 IPPS/LTCH PPS final rule goes into effect on October 1, 2013. There is insufficient time to undertake notice-and-comment rulemaking before that date. As a result, absent this interim final rule with comment period, it would be impossible to avoid the administrative issues discussed previously.

We also believe there is good cause to waive notice-and-comment rulemaking to make changes to the data that will be used in the uncompensated care payment calculation in order to ensure that data from IHS hospitals are included in Factor 1 and Factor 3 of that calculation. As discussed previously, IHS hospitals are subsection (d) hospitals that can receive Medicare DSH payments and uncompensated care payments. However, IHS hospitals submit Medicare Hospital Cost reports to CMS that are not uploaded into the HCRIS database. As a result, the data for these hospitals were excluded from the estimates for Factor 1, which were based upon data from the March 2013 update of HCRIS. In addition, the Medicaid days for IHS hospitals were excluded from the calculation of Factor 3. Specifically, these Medicaid days were excluded from the numerator for the IHS hospitals and excluded from the denominator for all hospitals. As a result, the Factor 3 that was calculated for each IHS hospital under the policy adopted in the FY 2014 IPPS/LTCH PPS final rule is understated and will result in reduced uncompensated care payments to these hospitals.

We believe it is contrary to the public interest not to correct this inadvertent oversight by supplementing the data used to calculate Factor 1 and Factor 3 to reflect cost report data submitted to CMS by IHS hospitals. As discussed previously, IHS hospitals are subsection (d) hospitals that may receive DSH payments if all other eligibility criteria are satisfied. Pursuant to section 1886(r)(1) of the Act, starting on October 1, 2013, DSH payments to all hospitals that are eligible for DSH, including IHS hospitals, will be reduced by 75 percent. As a result, we believe it is important that Factor 1 of the uncompensated care calculation incorporates the amount by which DSH payments to IHS hospitals will be reduced as a result of the implementation of section 1886(r)(1) of the Act. Furthermore, we believe it is in the public interest to ensure that our estimate of the amount of

uncompensated care for IHS hospitals for purposes of determining Factor 3 of the uncompensated care payment calculation takes into account care provided to Medicaid patients. IHS hospitals serve a significant low income population, including individuals that are eligible for Medicaid. It was not our intention to exclude the care furnished by IHS hospitals to Medicaid eligible individuals, and thus to understate the amount of Factor 3 for these hospitals. Rather, this was an inadvertent error that arose from the data that we originally elected to use for the purposes of determining the uncompensated care payments. Nevertheless, this omission results in a significant reduction in the uncompensated care payments received by IHS hospitals. We believe it would be contrary to the public interest not to address that inadvertent omission by supplementing the data originally used in the FY 2014 IPPS/LTCH PPS final rule to include data that reflects the Medicaid days for IHS hospitals for a time period that is contemporaneous with the time period of the data used to estimate uncompensated care for other subsection (d) hospitals. Further, for the same reasons stated previously, it would be impracticable to go through notice-and-comment rulemaking to achieve what we believe would be the more equitable result. The FY 2014 IPPS/LTCH PPS final rule goes into effect on October 1, 2013. There is insufficient time to undertake notice-and-comment rulemaking before that date. As a result, absent this interim final rule with comment period, it would not be possible to recompute Factor 1 and Factor 3 of the uncompensated care payment methodology before the start of the fiscal year, and uncompensated care payments to IHS hospitals would significantly understate their relative share of the total uncompensated care burden.

For all of these reasons, we find good cause to waive the notice-and-comment rulemaking procedure for this interim final rule with comment period.

In addition, section 553(d) of the APA (5 U.S.C. 553(d)) ordinarily requires a 30-day delay in the effective date of final rules after the date of their publication in the **Federal Register**. This 30-day delay in effective date can be waived, however, if an agency finds for good cause that the delay is impracticable, unnecessary, or contrary to the public interest, and the agency incorporates a statement of the finding and its reasons in the rule issued.

As described previously, the process that we adopted in the FY 2014 IPPS/LTCH PPS final rule for reconciling

uncompensated care payments would result in the large majority of IPPS hospitals that do not have cost reporting periods concurrent with the Federal fiscal year being required to pay back to CMS the monies they receive as interim uncompensated care payments during Federal fiscal year 2014 for the portion of their cost reporting period beginning in Federal FY 2013 and experiencing a delay in the receipt of their final FY 2014 uncompensated care payments until their next cost reporting period. If we were to provide for a 30-day delay in the effective date of this provision, hospitals with 2014 cost reporting periods that begin after October 1, 2013, but before this interim final rule with comment period becomes effective would be adversely affected as we described previously. Therefore, we believe it is contrary to the public interest to delay the effective date of revising this process.

Similarly, as described previously, the data used to calculate Factor 1 and Factor 3 did not include data from the Medicare Hospital Cost Reports for IHS hospitals. This omission resulted in our estimate of Factor 1 of the uncompensated care payment being understated. In addition, Factor 3, which is used to determine each hospital's share of uncompensated care payment amounts, was understated for IHS hospitals because it excluded all Medicaid days for those hospitals, which are a significant portion of the uncompensated care they provide. If we were to provide for a 30-day delay in the effective date of this interim final rule with comment period, we believe the exclusion of this data from our calculation of uncompensated care payments would pose a financial hardship for IHS hospitals that serve a significant low income patient population. Therefore, we believe it is contrary to the public interest to delay the effective date of this revision to our methodology to allow the use of supplemental data submitted by IHS hospitals.

For all of these reasons, we find good cause to waive the 30-day delay in the effective date for this interim final rule with comment period.

IV. Collection of Information Requirements

This document does not impose information collection and recordkeeping requirements. Consequently, it need not be reviewed by the Office of Management and Budget under the authority of the Paperwork Reduction Act of 1995.

V. Response to Comments

Because of the large number of public comments we normally receive on **Federal Register** documents, we are not able to acknowledge or respond to them individually. We will consider all comments we receive by the date and time specified in the **DATES** section of this preamble, and, when we proceed with a subsequent document, we will respond to the comments in the preamble to that document.

VI. Regulatory Impact Statement

We have examined the impact of this rule as required by Executive Order 12866 on Regulatory Planning and Review (September 30, 1993), Executive Order 13563 on Improving Regulation and Regulatory Review (January 18, 2011), the Regulatory Flexibility Act (RFA) (September 19, 1980, Pub. L. 96–354), section 1102(b) of the Social Security Act, section 202 of the Unfunded Mandates Reform Act of 1995 (March 22, 1995, Pub. L. 104–4), Executive Order 13132 on Federalism (August 4, 1999) and the Congressional Review Act (5 U.S.C. 804(2)).

Executive Orders 12866 and 13563 direct agencies to assess all costs and benefits of available regulatory alternatives and, if regulation is necessary, to select regulatory approaches that maximize net benefits (including potential economic, environmental, public health and safety effects, distributive impacts, and equity). Executive Order 13563 emphasizes the importance of quantifying both costs and benefits, of reducing costs, of harmonizing rules, and of promoting flexibility. A regulatory impact analysis (RIA) must be prepared for major rules with economically significant effects (\$100 million or more in any 1 year). The monetary impact of this final rule is approximately a \$15 million increase in payments to hospitals relative to the estimates included in the FY 2014 IPPS/LTCH PPS final rule. Therefore, this interim final rule with comment period does not reach the economic threshold and thus is not considered a major rule.

The RFA requires agencies to analyze options for regulatory relief of small entities if a rule has a significant impact on a substantial number of small entities. For purposes of the RFA, small entities include small businesses, nonprofit organizations, and small governmental jurisdictions. Most hospitals and most other providers and suppliers are small entities, either by nonprofit status or by having revenues of less than \$7.0 million to \$35.5 million in any 1 year. Individuals and

States are not included in the definition of a small entity. For purposes of the RFA, all hospitals and other providers and suppliers are considered to be small entities. Individuals and States are not included in the definition of a small entity. We believe that this interim final rule with comment period will have an impact on small entities.

In addition, section 1102(b) of the Act requires us to prepare a regulatory impact analysis if a rule may have a significant impact on the operations of a substantial number of small rural hospitals. This analysis must conform to the provisions of section 604 of the RFA. With the exception of hospitals located in certain New England counties, for purposes of section 1102(b) of the Act, we define a small rural hospital as a hospital that is located outside a metropolitan statistical area and has fewer than 100 beds. Section 601(g) of the Social Security Amendments of 1983 (Pub. L. 98–21) designated hospitals in certain New England counties as belonging to the adjacent urban area. Thus, for purposes of the IPPS and the LTCH PPS, we continue to classify these hospitals as urban hospitals. (We refer readers to Table I in section I.G. of the Appendix for the FY 2014 IPPS/LTCH PPS final rule for the quantitative effects of the final policy changes under the IPPS for operating costs.)

Section 202 of the Unfunded Mandates Reform Act of 1995 also requires that agencies assess anticipated costs and benefits before issuing any rule whose mandates require spending in any 1 year of \$100 million in 1995 dollars, updated annually for inflation. In 2013, that threshold is approximately \$141 million. This interim final rule with comment period will have no consequential effect on State, local, or tribal governments, nor will it affect private sector costs.

Executive Order 13132 establishes certain requirements that an agency must meet when it promulgates a final rule that imposes substantial direct requirement costs on State and local governments, preempts State law, or otherwise has Federalism implications. Since this regulation does not impose any costs on State or local governments, the requirements of Executive Order 13132 are not applicable.

In accordance with the provisions of Executive Order 12866, this rule was not reviewed by the Office of Management and Budget.

(Catalog of Federal Domestic Assistance Program No. 93.773, Medicare—Hospital Insurance; and Program No. 93.774, Medicare—Supplementary Medical Insurance Program)

Dated: September 27, 2013.

Marilyn Tavenner,

Administrator, Centers for Medicare & Medicaid Services.

Approved: September 27, 2013.

Kathleen Sebelius,

Secretary, Department of Health and Human Services.

[FR Doc. 2013–24209 Filed 9–30–13; 4:15 pm]

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DEPARTMENT OF HEALTH AND HUMAN SERVICES

Centers for Medicare & Medicaid Services

42 CFR Parts 412, 482, 485, and 489

[CMS–1599 & 1455–CN2]

RINs 0938–AR53 and 0938–AR73

Medicare Program; Hospital Inpatient Prospective Payment Systems for Acute Care Hospitals and the Long-Term Care Hospital Prospective Payment System and Fiscal Year 2014 Rates; Quality Reporting Requirements for Specific Providers; Hospital Conditions of Participation; Payment Policies Related to Patient Status; Corrections

AGENCY: Centers for Medicare & Medicaid Services (CMS), HHS.

ACTION: Final rule; correction.

SUMMARY: This document corrects technical and typographical errors in the final rules that appeared in the August 19, 2013 **Federal Register** titled “Medicare Program; Hospital Inpatient Prospective Payment Systems for Acute Care Hospitals and the Long-Term Care Hospital Prospective Payment System and Fiscal Year 2014 Rates; Quality Reporting Requirements for Specific Providers; Hospital Conditions of Participation; Payment Policies Related to Patient Status.”

DATES: This correcting document is effective October 1, 2013.

FOR FURTHER INFORMATION CONTACT: Tzvi Hefter, (410) 786–4487.

SUPPLEMENTARY INFORMATION:

I. Background

In FR Doc. 2013–18956, which appeared in the August 19, 2013 **Federal Register** (78 FR 50496), there were a number of technical errors that are identified and corrected in the Correction of Errors section. The provisions in this correction document are effective as if they had been included in the document that appeared in the August 19, 2013 **Federal Register**.

Accordingly, the corrections are effective October 1, 2013.

II. Summary of Errors

A. Errors in the Preamble

On page 50546, in our discussion of the four new procedure codes, we inadvertently made a typographical error in the effective date.

On page 50591, we made a typographical error in the number of hospitals approved for reclassification in FY 2013.

On pages 50630, 50631, 50634, 50641, and 50642, in our discussion of disproportionate share hospitals (DSHs), we made inadvertent errors in the: (1) Actuarial estimate of the aggregate amount of Medicare DSH payments for FY 2014 without regard to section 1886(r)(1) of the Social Security Act (the Act); (2) actuarial estimate of the aggregate amount of empirically justified Medicare DSH payments for FY 2014 with the application of section 1886(r)(1) of the Act; (3) calculation of Factor 1; (4) determination of the amount available for uncompensated care payments for 2014; and (5) number of hospitals that we projected to be eligible to receive a Medicare DSH payment in FY 2014.

On page 50678, in our discussion of Hospital Value-Based Purchasing (HVBP) Program FY 2014 payment details, we made an inadvertent error in the slope of the linear exchange function that was used to calculate the updated proxy value-based incentive payment adjustment factors in Table 16A.

On page 50772, in our discussion of the LTCH PPS 25-percent threshold payment adjustment, we inadvertently misstated the time period for the application of the policy.

On page 50859, in our discussion of LTCH CARE Data, we inadvertently misstated commenter's statement.

On page 50867, in our discussion of the LTCH Quality Reporting (LTCHQR) Program, we made a technical error in describing a type of claim-based measure.

On pages 50854, 50855, 50856, 50862, 50864, 50866, and 50876 in our discussion of the LTCHQR Program, we made grammatical errors.

On pages 50855, 50858, 50859, 50860, 50861, 50871, 50876, 50879, 50880, 50881, and 50882 in our discussion regarding the LTCHQR Program measures, we made typographical and technical errors in referencing an NQF-endorsed measure name.

B. Summary of Errors in and Corrections to Files and Tables Posted on the CMS Web Site

1. Errors and Corrections to the Medicare DSH Files

Supplemental Medicare DSH File.—FY 2014 Uncompensated Care Payment Factors. For the FY 2014 IPPS/LTCH PPS Final Rule, we published a list of hospitals that we identified to be subsection (d) hospitals and subsection (d) Puerto Rico hospitals eligible to receive empirically justified Medicare DSH payment adjustments and uncompensated care payments for FY 2014. As stated in the FY 2014 IPPS/LTCH PPS final rule (78 FR 50642), we allowed the public an additional period after the issuance of the final rule to contact us with comments on whether any of the hospitals should be removed from the list or if any hospitals should be added to the list, based on their subsection (d) status. Based on the comments received during this additional period, we are making several corrections to the Supplemental Medicare DSH File. First, in calculating Factor 3 of the uncompensated care payment methodology, we inadvertently excluded the FY 2011 SSI days and the Medicaid days from the most recently available 2011 or 2010 cost report for certain providers that were projected to receive Medicare DSH in FY 2014.

These providers had submitted their 2010 and/or 2011 Medicare hospital cost reports to their Medicare contractor prior to the March 2013 update of HCRIS but the Medicare contractor had been unable to upload either the 2010 or 2011 Medicare hospital cost reports in a timely manner to be included in the March 2013 update of HCRIS. As a result, the Medicaid days for these providers were inadvertently excluded from the calculation of Factor 3. In addition, due to a programming error, these providers had SSI days reported for their FY 2011 SSI ratios that were inadvertently excluded in the calculation of their Factor 3. The Medicaid days and SSI days for these providers were excluded from the numerator of Factor 3 for the affected providers and from the denominator of Factor 3 for all providers. Second, as a result of the exclusion of these Medicare hospital cost reports from the March 2013 update of HCRIS, the Medicare DSH payments for these providers were not included in the Office of the Actuary's Medicare DSH estimates for the calculation of Factor 1. Third, seven providers listed as eligible to receive Medicare DSH payments are no longer subsection(d) hospitals and have been removed from the list of hospitals

eligible to receive empirically justified Medicare DSH payment adjustments and uncompensated care payments for FY 2014. We are changing the number of hospitals that are eligible to receive empirically justified Medicare DSH payment adjustments and uncompensated care payments for FY 2014. In order to correct these errors, we have revised Factor 3 for all hospitals to incorporate the changes to the data. Specifically, to account for the removal of hospitals that are not subsection (d) hospitals and the addition of data for the two hospitals whose data was inadvertently excluded from the calculation of Factor 3, we have recalculated the denominator of Factor 3 for all hospitals. In addition, we have also recalculated the numerator of Factor 3 for the hospitals that had data inadvertently excluded. We have also revised Factor 1 to include in our estimates the Medicare DSH payments for the providers whose Medicare hospital cost report data was not included in the March 2013 update of HCRIS.

2. Errors in and Corrections to the IPPS Tables

We are correcting the errors in the following IPPS tables that are listed on page 51002 of FY 2014 IPPS/LTCH PPS final rule and are available on the Internet on the CMS Web site at <http://www.cms.gov/Medicare/Medicare-Fee-for-Service-Payment/AcuteInpatientPPS/FY-2014-IPPS-Proposed-Rule-Home-Page.html>:

In Table 2.—Acute Care Hospitals Case-Mix Indexes for Discharges Occurring in Federal Fiscal Year 2012; Hospital Wage Indexes for Federal Fiscal Year 2014; Hospital Average Hourly Wages for Federal Fiscal Years 2012 (2008 Wage Data), 2013 (2009 Wage Data), and 2014 (2010 Wage Data); and 3-Year Average of Hospital Average Hourly Wages. We determined that we used incorrect wages and hours for provider 040029 located in core-based statistical area (CBSA) 30780. Therefore, we are correcting the FY 2014 wage indexes for the following providers in, or reclassified into, CBSA 30780: 040007, 040014, 040016, 040029, 040036, 040041, 040071, 040074, 040084, 040114, 040119, 040134, 040137, and 040147. In addition, for provider 040029, we are correcting the average hourly wage FY 2014, and the average hourly wage (3 Years). We also are making a correction to the FY 2014 wage index of provider 330386 because we inadvertently did not treat provider 330386 as being redesignated under section 1886(d)(8)(B) of the Act to CBSA 39100. By treating provider 330386 as

being redesignated under section 1886(d)(8)(B) of the Act to CBSA 39100, the reclassified wage index of CBSA 39100 is changing as well. Since provider 330224 is reclassifying into CBSA 39100, provider 330224's FY 2014 wage index is being corrected accordingly.

In Table 3A.—FY 2014 and 3-Year Average Hourly Wage for Acute Care Hospitals in Urban Areas by CBSA. We determined that we used incorrect wages and hours for provider 040029 located in CBSA 30780. Therefore, we are correcting the FY 2014 average hourly wage and the 3-year average hourly wage for CBSA 30780, Little Rock-North Little Rock-Conway, AR.

In Table 4A.—Wage Index and Capital Geographic Adjustment Factor (GAF) for Urban Areas by CBSA and by State—FY 2014. We determined that we used incorrect wages and hours for provider 040029 located in CBSA 30780. Therefore, for CBSA 30780, Little Rock-North Little Rock-Conway, AR, we are correcting the data in the columns titled “Wage Index” and “GAF.”

In Table 4C.—Wage Index and Capital Geographic Adjustment Factor (GAF) For Hospitals That Are Reclassified by CBSA and by State—FY 2014. We determined that we used incorrect wages and hours for provider 040029 located in CBSA 30780. Therefore, for CBSA 30780, Little Rock-North Little Rock-Conway, AR, we are correcting the data in the columns titled “Wage Index” and “GAF.” We are also correcting the data in the columns titled “Wage Index” and “GAF” for CBSA 39100, Poughkeepsie-Newburgh-Middletown, NY, because we inadvertently did not treat provider 330386 as being redesignated under section 1886(d)(8)(B) of the Act to CBSA 39100, and therefore, we inadvertently excluded the data of provider 330386 from the calculation of the wage index and GAF for CBSA 39100.

In Table 4J.—Out-Migration Adjustment for Acute Care Hospitals—FY 2014. First, the column titled “Reclassified for FY 2013” is being corrected to read “Reclassified for FY 2014”. Second, we determined that we used incorrect wages and hours for provider 040029 located in CBSA 30780. As a result, we are adjusting the wage index for CBSA 30780, which, in turn, changes the out-migration adjustment of certain providers located in counties that are receiving an out-migration adjustment based on commuting into a county located within CBSA 30780. Specifically, we are correcting the value in the column titled “Out-Migration Adjustment” of providers 040014, 040071, and 040076.

Third, we inadvertently did not treat provider 330386 as being redesignated under section 1886(d)(8)(B) of the Act to CBSA 39100. Because we had not treated provider 330386 as being redesignated under section 1886(d)(8)(B) of the Act, we had listed provider 330386 in Table 4J as receiving the out-migration adjustment. However, since a hospital that is redesignated under section 1886(d)(8)(B) of the Act cannot simultaneously receive the out-migration adjustment, we are correcting Table 4J for provider 330386 by placing an asterisk in the column titled “Reclassified for FY 2014” (previously incorrectly titled “Reclassified for FY 2013”), indicating that this provider is not receiving the out-migration adjustment.

In Table 9A.—Hospital Reclassifications and Redesignations—FY 2014. We inadvertently did not treat provider 330386 as being redesignated from rural to urban under section 1886(d)(8)(B) of the Act. We are correcting Table 9A to include provider 330386 as being redesignated from the geographic CBSA of 33 to the reclassified CBSA of 39100, and indicating LUGAR in the column titled “LUGAR”.

In Table 15.—FY 2014 Readmissions Adjustment Factors, we are correcting a technical error in the calculation of the readmissions adjustment factors. For some hospitals, we inadvertently included high cost outlier payments in determining the base operating DRG payment amounts in the calculation of aggregate payments for excess readmissions and aggregate payments for all discharges that were used to calculate the readmissions adjustment factors published for the FY 2014 IPPS/LTCH final rule. As specified in the definitions in § 412.152, the base operating DRG payment amount does not include any additional payments for high cost outliers under subpart F of 42 CFR part 412. The technical correction to the determination of the base operating DRG payment amounts changes the readmissions payment adjustment factor for some hospitals in Table 15 by a small amount.

In Table 16A.—Updated Proxy Hospital Inpatient Value-Based Purchasing (VBP) Program Adjustment Factors for FY 2014. Due to a technical error in including high cost outlier payments for some hospitals in the proxy Hospital VBP Program adjustment factors calculations, we are correcting the proxy Hospital VBP Program adjustment factors for all hospitals listed in the table.

3. Errors in and Corrections to a LTCH PPS Table

We are also correcting the errors in the following LTCH PPS table that is listed on page 51002 of the FY 2014 IPPS/LTCH PPS final rule and that available on the Internet on the CMS Web site at <http://www.cms.gov/Medicare/Medicare-Fee-for-Service-Payment/LongTermCareHospitalPPS/index.html>.

Table 12A.—LTCH PPS Wage Index for Urban Areas for Discharges Occurring from October 1, 2013 through September 30, 2014. Due to a technical error found in the data of a provider in CBSA 30780, we are correcting the LTCH PPS wage index value for that CBSA.

III. Waiver of Proposed Rulemaking

We ordinarily publish a notice of proposed rulemaking in the **Federal Register** to provide a period for public comment before the provisions of a rule take effect in accordance with section 553(b) of the Administrative Procedure Act (APA) (5 U.S.C. 553(b)). However, we can waive this notice and comment procedure if the Secretary finds, for good cause, that the notice and comment process is impracticable, unnecessary, or contrary to the public interest, and incorporates a statement of the finding and the reasons therefore in the notice.

Section 553(d) of the APA ordinarily requires a 30-day delay in effective date of final rules after the date of their publication in the **Federal Register**. This 30-day delay in effective date can be waived, however, if an agency finds for good cause that the delay is impracticable, unnecessary, or contrary to the public interest, and the agency incorporates a statement of the findings and its reasons in the rule issued.

In our view, this correcting document does not constitute a rule that would be subject to the APA notice and comment or delayed effective date requirements. This correcting document corrects technical and typographical errors in the preamble and tables posted on the CMS Web site but does not make substantive changes to the policies or payment methodologies that were adopted in the final rule. As a result, this correcting document is intended to ensure that the preamble and tables posted on the CMS Web site accurately reflect the policies adopted in that final rule.

In addition, even if this were a rule to which the notice and comment and delayed effective date requirements applied, we find that there is good cause to waive such requirements.

Undertaking further notice and comment procedures to incorporate the corrections in this document into the final rule or delaying the effective date would be contrary to the public interest because it is in the public's interest for providers to receive appropriate payments in as timely a manner as possible. Furthermore, such procedures would be unnecessary, as we are not altering the policies that were already subject to comment and finalized in our final rule. Therefore, we believe we have good cause to waive the notice and comment and effective date requirements.

Correction of Errors

In FR Doc. 2013–18956 of August 19, 2013 (78 FR 50496), make the following corrections:

A. Corrections of Errors in the Preamble

1. On page 50546, first column, second full paragraph, lines 17 and 18, the date, “October 1, 2014” is corrected to read “October 1, 2013.”

2. On page 50591, third column, last full paragraph, line 15, the figure “196” is corrected to read “169”.

3. On page 50630, third column, last paragraph,

a. Line 12, the figure “\$12.772” is corrected to read “\$12.775”.

b. Line 26, the figure “\$3.193” is corrected to read “\$3.194”.

4. On page 50631, first column, first paragraph, line 3, the figure “\$9.579” is corrected to read “\$9.581”.

5. On page 50634, first column, second full paragraph,

a. Line 9, the figure “\$9.033” is corrected to read “\$9.035”.

b. Line 10, the figure “9.579” is corrected to read “9.581”.

6. On page 50641, third column, second full paragraph,

a. Line 12, the figure “2,695” is corrected to read “2687”.

b. Line 17, the figure “2,437” is corrected to read “2430”.

7. On page 50642, first column, first paragraph,

a. Line 2,

(1) The figure “2,437” is corrected to read “2,430”.

(2) The figure “72” is corrected to read “71”.

b. Line 7, the figure “2,437” is corrected to read “2430”.

8. On page 50678, top two-thirds of the page, second column, partial paragraph, line 30, the figure “1.8363321306” is corrected to read “1.8363054116.”

9. On page 50772, bottom third of the page, second column, third paragraph, lines 9 through 11, the phrase “applied to discharges occurring on or after

October 1, 2013.” is corrected to read “applied for cost reporting periods beginning on or after October 1, 2013.”

10. On page 50854, first column,

a. First full paragraph, last two lines, the phrase “testing and development” is corrected to read “measure testing and development”.

b. Second full paragraph,

(1) Line 8, the phrase “that are fully” is corrected to read “that are either fully”.

(2) Last line through the second column first partial paragraph line 1, the phrase “why a particular measure is high priority” is corrected to read “why particular measures are high priority”.

11. On page 50855,

a. First column, second full paragraph, lines 31 through 33, the phrase “when LTCHs are required to submit data on the new measures we included in the proposed rule.” is corrected to read “LTCHs are required to submit data on the new measures.”

b. Second column, first partial paragraph, line 9, the phrase “we refer readers to that final rule” is corrected to read “we refer readers to the FY 2013 IPPS/LTCH PPS final rule”.

c. Third column,

(1) First partial paragraph, lines 7 and 8, the phrase “More specifically, this commenter” is corrected to read “More specifically, these commenters”.

(2) Last paragraph, line 6, the phrase “compliance for October 1, 2012” is corrected to read “compliance for the October 1, 2012”.

12. On page 50856,

a. Upper third of the page, first column, second partial paragraph, line 4, the phrase “that it will use” is corrected to read “that we will use”.

b. Lower two-thirds of the page, third column, last paragraph, lines 13 and 14, the phrase “an healthcare-associated infection (HAI)” is corrected to read “a healthcare-associated infection (HAI)”.

13. On page 50858, lower two-thirds of the page, second column, last paragraph, line 3, the phrase “NQF #0680, Percentage” is corrected to read “NQF #0680, Percent”.

14. On pages 50859,

a. Upper third of the page, in the table, PROPOSED TIMELINE FOR SUBMISSION OF LTCHQR PROGRAM QUALITY DATA FOR THE FY 2016 AND FY 2017 PAYMENT DETERMINATIONS: NQF #0680 PERCENTAGE OF RESIDENTS OR PATIENTS WHO WERE ASSESSED AND APPROPRIATELY GIVEN THE SEASONAL INFLUENZA VACCINE [Short Stay], in the table heading, line 2, the phrase “PERCENTAGE OF RESIDENTS” is corrected to read “PERCENT OF RESIDENTS”.

b. Lower two-thirds of the page, second column,

(1) Third full paragraph, line 18, the phrase “calculation of the measure” is corrected to read “calculation and public reporting of the measure”.

(2) Last paragraph, line 2, the phrase “CMS align the data” is corrected to read “CMS update the data”.

15. On page 50860,

a. First column, first partial paragraph, line 18, the phrase “LTCHs to show if” is corrected to read “LTCHs to report whether”.

b. Second column, second paragraph, line 19, the parenthetical phrase “(short-stay)” is corrected to read “(Short-Stay)”.

c. Third column,

(1) Third full paragraph,

(a) Lines 13 and 14, the parenthetical phrase “(short-stay)” is corrected to read “(Short-Stay)”.

(b) Line 17, the parenthetical phrase “(short-stay)” is corrected to read “(Short-Stay)”.

(c) Line 26, the phrase “measure and endorsement by” is corrected to read “measure and endorsed by”.

(2) Last paragraph, lines 5 and 6, the parenthetical phrase “(short-stay)” is corrected to read “(Short-Stay)”.

16. On page 50861, upper half of the page,

a. Third column, partial paragraph, line 5, the parenthetical phrase “(short-stay)” is corrected to read “(Short-Stay)”.

b. In the table, FINAL TIMELINE FOR SUBMISSION OF LTCHQR PROGRAM QUALITY DATA FOR THE FY 2016 AND FY 2017 PAYMENT DETERMINATIONS: NQF #0680 PERCENTAGE OF RESIDENTS OR PATIENTS WHO WERE ASSESSED AND APPROPRIATELY GIVEN THE SEASONAL INFLUENZA VACCINE [Short Stay], in the table heading, line 2, the phrase “PERCENTAGE OF RESIDENTS” is corrected to read “PERCENT OF RESIDENTS”.

17. On page 50862,

a. First column, third full paragraph, lines 5 and 6, the phrase, “setting and NQF endorsement for LTCH setting” is corrected to read “setting and to obtain NQF endorsement for the LTCH setting”.

b. Second column,

(1) First full paragraph, lines 23 and 24, the phrase “SNF/nursing home patient population” is corrected to read “SNF/nursing home short-stay resident population”.

(2) Second full paragraph, line 4, the phrase “ulcers and is committed” is corrected to read “ulcers, and we are committed”.

18. On page 50864, second column,

a. First full paragraph, line 5, the phrase “commenters urge” is corrected to read “commenters urged”.

b. Third full paragraph, line 1, the phrase “noted it is” is corrected to read “noted that is it”.

19. On page 50866, second column, first partial paragraph, line 19, the phrase “and measuring infection rates is” is corrected to read “and measuring infection rates are”.

20. On page 50867,

a. First column, second full paragraph, line 11, the phrase “LTCHQR measure scores” is corrected to read “LTCHQR Program measures scores”.

b. Third column, first partial paragraph, line 9, the phrase “claims-based MRSA” is corrected to read “claims-based CDI”.

21. On page 50869, third column, first full paragraph, lines 22 and 23, the phrase “discharge, or the date of patient death” is corrected to read “discharge or until the date of the patient’s death”.

22. On page 50870, first full paragraph, lines 5 and 6, the phrase “discharge date, or date of death” is corrected to read “discharge or until the date of the patient’s death”.

23. On page 50871,

a. Second column, last paragraph, line 6, the phrase “but note that but note that” is corrected to read “but note that”.

b. Third column, third full paragraph, line 11, the phrase “are typically not” is corrected to read “is typically not”.

24. On page 50872,

a. First column, last paragraph, lines 10 and 11, the phrase “LTCH harmonizes” is corrected to read “LTCH readmission measure harmonizes”.

b. Second column, third full paragraph,

(1) Line 1, the phrase “Some comments” is corrected to read “Some commenters”.

(2) Line 5, the phrase “They suggest” is corrected to read “They suggested”.

25. On page 50873,

a. Second column,

(1) First full paragraph, line 25, the phrase “readmissions are considered” is corrected to read “readmissions were considered”.

(2) Last paragraph, lines 1 and 2, the phrase “The two years of data for each report period” is corrected to read “The 2 years of data for each reporting period”.

b. Third column, first full paragraph, line 1, the phrase “Some commenters are” is corrected to read “Some commenters were”.

26. On page 50875, second column, first full paragraph,

a. Line 1, the phrase “We note that,” is corrected to read “We noted that,”.

b. Line 14, the phrase “LTCH setting” is corrected to read “the LTCH setting”.

27. On page 50876, second column,

a. First partial paragraph, line 1, the phrase “but it concluded” is corrected to read “it concluded”.

b. Last paragraph, line 14 through the third column first partial paragraph, the sentences “In this instance, for example, an application of the Percent of Residents Experiencing One or More Falls with Major Injury (Long Stay) measure (NQF #0674) is NQF-endorsed for the LTCH setting, an indication that it is appropriate for LTCH patients. In addition, this measure is appropriate in light of the fact that fall-related injury is an important patient safety concern for LTCH patients. For the reasons listed above, this measure is appropriate for LTCH patients.” are corrected to read “In light of the TEP feedback and the fact that fall-related injury is an important patient safety concern for patients in health care settings, including LTCHs, this measure is appropriate for the LTCHQR Program.”

28. On page 50879,

a. First column, fourth full paragraph (section heading), line 5, the parenthetical phrase “(Short Stay)” is corrected to read “(Short-Stay)”.

b. Second column,

(1) First partial paragraph, line 1, the parenthetical phrase “(Short Stay)” is corrected to read “(Short-Stay)”.

(2) First full paragraph,

(a) Line 8, the page reference “277322” is corrected to read “27732”.

(b) Lines 16 and 17, the phrase “Data collection and submission of this measure will continue” is corrected to read “We proposed in the FY 2014 IPPS/LTCH PPS proposed rule (78 FR 27722 and 27723) that data collection and submission for this measure would continue”.

29. On page 50880, upper half of the page, the table, TIMELINE FOR SUBMISSION OF LTCHQR PROGRAM QUALITY DATA FOR THE FY 2016 PAYMENT DETERMINATION: NQF #0680 PERCENTAGE OF RESIDENTS OR PATIENTS WHO WERE ASSESSED AND APPROPRIATELY GIVEN THE SEASONAL INFLUENZA VACCINE (SHORT STAY), in the table heading,

a. Line 2, the phrase “PERCENTAGE OF RESIDENTS” is corrected to read “PERCENT OF RESIDENTS”.

b. Line 3, the parenthetical phrase “(SHORT STAY)” is corrected to read “(SHORT-STAY)”.

30. On page 50881, lower two-thirds of the page, the table, TIMELINE FOR SUBMISSION OF LTCHQR PROGRAM QUALITY DATA FOR THE FY 2017 PAYMENT DETERMINATION: NQF #0680 PERCENTAGE OF RESIDENTS

OR PATIENTS WHO WERE ASSESSED AND APPROPRIATELY GIVEN THE SEASONAL INFLUENZA VACCINE (SHORT STAY), in the table heading,

a. Line 2, the phrase “PERCENTAGE OF RESIDENTS” is corrected to read “PERCENT OF RESIDENTS”.

b. Line 3, the parenthetical phrase “(SHORT STAY)” is corrected to read “(SHORT-STAY)”.

31. On page 50882, lower two-thirds of the page,

a. In the table, TIMELINE FOR SUBMISSION OF LTCHQR PROGRAM QUALITY DATA FOR THE FY 2018 PAYMENT DETERMINATION FOR ALL MEASURES EXCEPT #0431 INFLUENZA VACCINATION COVERAGE AMONG HEALTH CARE PERSONNEL AND #0680 PERCENTAGE OF RESIDENTS OR PATIENTS WHO WERE ASSESSED AND APPROPRIATELY GIVEN THE SEASONAL INFLUENZA VACCINE (SHORT STAY), in the table heading,

(1) Line 2, the phrase “EXCEPT #0431” is corrected to read “EXCEPT NQF #0431”.

(2) Lines 1 and 2, the phrase “# 0680 PERCENTAGE OF RESIDENTS” is corrected to read “NQF # 0680 PERCENT OF RESIDENTS”.

(3) Line 3, the parenthetical phrase “(SHORT STAY)” is corrected to read “(SHORT-STAY)”.

b. In the table TIMELINE FOR SUBMISSION OF LTCHQR PROGRAM QUALITY DATA FOR THE FY 2018 PAYMENT DETERMINATION: #0680 PERCENTAGE OF RESIDENTS OR PATIENTS WHO WERE ASSESSED AND APPROPRIATELY GIVEN THE SEASONAL INFLUENZA VACCINE (SHORT STAY), in the table heading,

(1) Lines 2 and 3, the phrase “# 0680 PERCENTAGE OF RESIDENTS” is corrected to read “NQF # 0680 PERCENT OF RESIDENTS”.

(2) Line 4, the parenthetical phrase “(SHORT STAY)” is corrected to read “(SHORT-STAY)”.

32. On page 50887, second column, first full paragraph, line 2, the phrase “two-percentage point reduction” is corrected to read “2.0 percentage point reduction”.

(Catalog of Federal Domestic Assistance Program No. 93.778, Medical Assistance Program)

(Catalog of Federal Domestic Assistance Program No. 93.773, Medicare—Hospital Insurance; and Program No. 93.774, Medicare—Supplementary Medical Insurance Program)

Dated: September 30, 2013.

Oliver Potts,

*Deputy Executive Secretary to the
Department, Department of Health and
Human Services.*

[FR Doc. 2013-24211 Filed 9-30-13; 4:15 pm]

BILLING CODE 4120-01-P

DEPARTMENT OF HEALTH AND HUMAN SERVICES

Centers for Medicare & Medicaid Services

42 CFR Parts 413 and 424

[CMS-1446-CN]

RIN 0938-AR65

Medicare Program; Prospective Payment System and Consolidated Billing for Skilled Nursing Facilities for FY 2014; Correction

AGENCY: Centers for Medicare &
Medicaid Services (CMS), HHS.

ACTION: Final rule; correction.

SUMMARY: This document corrects technical errors that appeared in the final rule published in the August 6, 2013, *Federal Register* entitled “Medicare Program; Prospective Payment System and Consolidated Billing for Skilled Nursing Facilities for FY 2014.”

DATES: These corrections are effective October 1, 2013.

FOR FURTHER INFORMATION CONTACT: John Kane, (410) 786-0557.

SUPPLEMENTARY INFORMATION:

I. Background

In FR Doc. 2013-18776 of August 6, 2013 (78 FR 47936), there were a number of technical errors that are identified and corrected in the Correction of Errors section below. The provisions in this correction document are effective as if they had been included in FR Doc. 2013-18776 published August 6, 2013, hereinafter referred to as the FY 2014 SNF PPS final rule. Accordingly, the corrections are effective October 1, 2013.

II. Summary of Errors

A. Summary of Errors in the Preamble

On page 47958, in our discussion of consolidated billing, a citation to the Medicare Claims Processing Manual (CMS Publication 100-04) was inadvertently abbreviated incorrectly.

On page 47963, in our discussion of ensuring accuracy in grouping to rehabilitation RUG-IV categories, a citation to the Medicare Benefit Policy

Manual (CMS Publication 100-02) was inadvertently abbreviated incorrectly.

B. Summary of Errors in the Addenda

On pages 47969 through 47975, in Table A: FY 2014 Wage Index for Urban Areas Based on CBSA Labor Market Areas, we inadvertently included several incorrect urban area titles for certain core-based statistical areas (CBSAs). As the result of receiving a corrected hospital cost report file, we also determined that we had inadvertently used incorrect wage data in calculating the wage index value for CBSA 30780 (Little Rock-North Little Rock-Conway AR), producing an incorrect wage index value for this CBSA.

III. Waiver of Proposed Rulemaking and Delayed Effective Date

We ordinarily publish a notice of proposed rulemaking in the *Federal Register* to provide a period for public comment before the provisions of a rule take effect in accordance with section 553(b) of the Administrative Procedure Act (APA) (5 U.S.C. 553(b)). However, we can waive this notice and comment procedure if the Secretary finds, for good cause, that the notice and comment process is impracticable, unnecessary, or contrary to the public interest, and incorporates a statement of the finding and the reasons therefore in the notice.

Section 553(d) of the APA ordinarily requires a 30-day delay in effective date of final rules after the date of their publication in the *Federal Register*. This 30-day delay in effective date can be waived, however, if an agency finds for good cause that the delay is impracticable, unnecessary, or contrary to the public interest, and the agency incorporates a statement of the findings and its reasons in the rule issued.

We find for good cause that it is unnecessary to undertake notice and comment rulemaking because this document merely provides technical corrections to the FY 2014 SNF PPS final rule in the preamble and addenda. We are not making substantive changes to our payment methodologies or policies, but rather, are simply implementing correctly the payment methodologies and policies that we previously proposed, received comment on, and subsequently finalized. This correction document is intended solely to ensure that the FY 2014 SNF PPS final rule accurately reflects these payment methodologies and policies. Therefore, we believe that undertaking further notice and comment rulemaking activity in connection with it would be

unnecessary and contrary to the public interest.

Further, we believe a delayed effective date is unnecessary because this correction document merely corrects inadvertent technical errors. The corrections noted above do not make any substantive changes to the SNF PPS payment methodologies or policies. Moreover, we regard imposing a delay in the effective date as being contrary to the public interest. We believe that it is in the public interest for providers to receive appropriate SNF PPS payments in as timely a manner as possible and to ensure that the FY 2014 SNF PPS final rule accurately reflects our payment methodologies, payment rates, and policies. Therefore, we find good cause to waive notice and comment procedures, as well as the 30-day delay in effective date.

Correction of Errors

In FR Doc. 2013-18776 of August 6, 2013 (78 FR 47936), make the following corrections:

A. Corrections to the Preamble

1. On page 47958, third column, first paragraph, lines 30 and 31, the parenthetical citation “(see Pub. L. 100-04, ch. 6, § 20.4)” is corrected to read “(see Pub. 100-04, ch. 6, § 20.4)”.

2. On page 47963, first column, third full paragraph, lines 10 and 11, the parenthetical citation “(see Pub. L. 100-02, ch. 8, § 30.6)” is corrected to read “(see Pub. 100-02, ch. 8, sec. 30.6)”.

B. Corrections to the Addendum

1. On pages 47969 through 47975 in Table A—FY 2014 Wage Index for Urban Areas Based on CBSA Labor Market Areas,

a. The urban areas for the listed entries (CBSAs) are corrected to read as follows:

CBSA code	Urban area (constituent counties)	Wage index
12420	Austin-Round Rock-San Marcos, TX.	0.9576
12540	Bakersfield-Delano, CA.	1.1579
13644	Bethesda-Rockville-Frederick, MD.	1.0319
16740	Charlotte-Gastonia-Rock Hill, NC-SC.	0.9447
22744	Fort Lauderdale-Pompano Beach-Deerfield, FL.	1.0378

b. The wage index for the listed entry (CBSA 30780) is corrected to read as follows:

CBSA code	Urban area (constituent counties)	Wage index
30780	Little Rock-North Little Rock-Conway, AR.	0.8632

c. The urban areas for the listed entries (CBSAs) are corrected to read as follows:

CBSA code	Urban area (constituent counties)	Wage index
36740	Orlando-Kissimmee-Sanford, FL.	0.9063
38900	Portland-Vancouver-Hillsboro, OR-WA.	1.1766
41700	San Antonio-New Braunfels, TX.	0.8911

(Catalog of Federal Domestic Assistance Program No. 93.773, Medicare—Hospital Insurance; and Program No. 93.774, Medicare—Supplementary Medical Insurance Program)

Dated: September 27, 2013.

Jennifer M. Cannistra,

Executive Secretary to the Department, Department of Health and Human Services.

[FR Doc. 2013-24080 Filed 9-30-13; 4:15 pm]

BILLING CODE 4120-01-P

FEDERAL COMMUNICATIONS COMMISSION

47 CFR Part 87

[WT Docket Nos. 10-61 and 09-42, RM-11503, RM-11596; FCC 13-30]

Aviation Services

AGENCY: Federal Communications Commission.

ACTION: Final rule.

SUMMARY: In this document, the Federal Communications Commission (Commission) amends its rules to authorize the use of frequency 1090 MHz by aeronautical utility mobile stations for airport surface detection equipment, commonly referred to as vehicle “squitters,” to help reduce collisions between aircraft and airport ground vehicles. In addition, we establish service rules for audio visual warning systems to help aircraft in flight avoid antenna structures and other obstacles. We also adopt rules to permit ground testing of aviation data link systems, and decline to authorize remote monitoring of certain automated ground stations.

DATES: Effective November 4, 2013. The incorporation by reference of certain publications listed in the rule is approved by the Director of the Federal Register as of November 4, 2013.

FOR FURTHER INFORMATION CONTACT: Tim Maguire, Mobility Division, Wireless Telecommunications Bureau at (202) 418-2155.

SUPPLEMENTARY INFORMATION: This is a summary of the Commission’s *Report and Order (R&O)*, in WT Docket No. 10-61; FCC 13-30, adopted February 28, 2013, and released March 1, 2013. The full text of this document is available for inspection and copying during normal business hours in the FCC Reference Center, 445 12th Street SW., Room CY-A257, Washington, DC 20554, or by downloading the text from the Commission’s Web site at http://transition.fcc.gov/Daily_Releases/Daily_Business/2013/db0301/FCC-13-30A1.pdf. The complete text also may be purchased from the Commission’s duplicating contractor, Best Copy and Printing, Inc., Portals II, 445 12th Street SW., Suite CY-B402, Washington, DC 20554. Alternative formats are available for people with disabilities (Braille, large print, electronic files, audio format), by sending an email to FCC504@fcc.gov or calling the Consumer and Government Affairs Bureau at (202) 418-0530 (voice), (202) 418-0432 (TTY).

Background

1. Air traffic controllers utilize airport surface detection equipment (ASDE-X) to manage the movement of aircraft on airport surfaces, but the current system does not allow the positive identification of ground vehicles such as snowplows and maintenance vehicles that routinely operate on the runway movement area. *See* 47 CFR 87.345. Unless the vehicle is visible from the control tower, air traffic controllers can determine only its location, but not the vehicle type or the operator. *See NPRM, 25 FCC Rcd at 3356 para. 3.* In response to growing concerns about airplanes colliding with or having to take evasive maneuvers to avoid vehicles on the airport surface, the Federal Aviation Administration (FAA) seeks to expand the use of ASDE-X to manage the movement of service vehicles as well as aircraft in the runway movement area.

2. The National Telecommunications and Information Administration (NTIA), supported by the FAA, filed a petition for rulemaking requesting that the Commission amend part 87 of the Commission’s rules to allow use of frequency 1090 MHz for tracking of ground vehicle movements on the airport surface. *See Petition for Rulemaking of the National Telecommunications and Information Administration (July 29, 2008).* In the *Notice of Proposed Rulemaking and*

Order (NPRM), the Commission noted that the frequency 1090 MHz is currently used for ASDE-X to manage the movement of aircraft on airport surfaces and for other things, such as the Traffic Alert and Collision Avoidance System (TCAS),¹ but tentatively concluded that permitting use of the frequency by vehicle squitters would further the public interest. *See NPRM, 25 FCC Rcd at 3356 paras. 6-7.*

3. Accordingly, the Commission sought comment on proposed technical and service rules for vehicle squitters on frequency 1090 MHz. *See NPRM, 25 FCC Rcd at 3357 paras. 9-14.* The NPRM sought comment on whether the Commission should limit operation of vehicle squitters to the runway movement area to prevent use of the system for purposes other than vehicle and aircraft safety (such as tracking baggage carts). *See NPRM, 25 FCC Rcd at 3357 paras. 12.* The NPRM also tentatively agreed with NTIA’s proposal that the Commission coordinate applications with the FAA through the Interdepartment Radio Advisory Committee (IRAC), and it sought comment on whether the Commission should require applicants to pre-coordinate with the relevant FAA Regional Office before filing an application with the Commission. *See NPRM, 25 FCC Rcd at 3357 para. 13.*

I. Procedural Matters

A. Paperwork Reduction Act Analysis

4. This document contains new or modified information collection requirements subject to the Paperwork Reduction Act of 1995 (PRA), Public Law 104-13. Specifically, it requires prospective DLT station licensees to coordinate their applications with ASRI, the aeronautical enroute station

¹ TCAS is an airborne warning system designed to avert mid-air collisions. *See Review of part 87 of the Commission’s Rules Concerning the Aviation Radio Service, Report and Order and Further Notice of Proposed Rule Making, WT Docket No. 01-289, 18 FCC Rcd 21432, 21467 n.265 (2003) (Part 87 Report and Order).* In the *Part 87 Report and Order*, the Commission adopted a proposal to permit ground testing of TCAS on frequency 1090 MHz, and amended § 87.475(c)(2) of the rules, 47 CFR 87.475(c)(2), accordingly. *See Part 87 Report and Order, 18 FCC Rcd at 21467 para. 74.* When it amended § 87.475(c)(2) later in that proceeding, however, the Commission inadvertently removed the language authorizing ground testing of TCAS on 1090 MHz. *See Review of part 87 of the Commission’s Rules Concerning the Aviation Radio Service, Second Report and Order and Second Further Notice of Proposed Rule Making, WT Docket No. 01-289, 21 FCC Rcd 11582, 11587-88 para. 6 (2006) (Part 87 Second Report and Order).* In the NPRM in this proceeding, the Commission proposed to correct that error by amending § 87.475(c)(2) to restore the deleted language. *See NPRM, 25 FCC Rcd at 3357 n.13.* We now adopt the proposed correction.

licensee. It will be submitted to the Office of Management and Budget (OMB) for review under section 3507(d) of the PRA. OMB, the general public, and other Federal agencies are invited to comment on the new or modified information collection requirements contained in this proceeding. In the present document, we have assessed the effects of requiring coordination of DLT applications with ASRI and find that this will avoid interference to safety-related aeronautical enroute communications without having a significant impact on small business concerns with fewer than 25 employees. Coordination with ASRI should not be more burdensome than coordination with the FAA, which is required for analogous RLT applications.

B. Report to Congress

5. The Commission will send a copy of the *R&O* to Congress and the Government Accountability Office pursuant to the Congressional Review Act, see 5 U.S.C. 801(a)(1)(A).

C. Final Regulatory Flexibility Analysis

6. As required by the Regulatory Flexibility Act of 1980, as amended (RFA), an Initial Regulatory Flexibility Analysis (IRFA) was incorporated in the *NPRM* in WT Docket Nos. 10–61 and 09–42; RM–11503 and RM–11596, at 75 FR 22352, April 28, 2010. The Commission sought written public comment on the proposals in the *NPRM*, including comment on the IRFA. This present Final Regulatory Flexibility Analysis (FRFA) conforms to the RFA.

Need for, and Objectives of, the Report and Order

7. The rules adopted in the *R&O* are intended to ensure that the Commission's part 87 rules governing the Aviation Radio Service remain up to date and continue to further the Commission's goals of accommodating new technologies, facilitating the efficient and effective use of the aeronautical spectrum, avoiding unnecessary regulation, and, above all, enhancing the safety of flight. Specifically, we amend part 87 of the Commission's rules to allow use of the frequency 1090 MHz by aeronautical utility mobile stations for airport surface detection equipment, commonly referred to as vehicle "squitters," to help reduce collisions between aircraft and airport ground vehicles. In addition, we establish service rules for audio visual warning systems to help aircraft in flight avoid antenna structures and other obstacles. We also adopt rules to permit ground testing of aviation data link test systems.

Summary of Significant Issues Raised by Public Comments in Response to the IRFA

8. No comments were submitted specifically in response to the IRFAs. Nonetheless, we have considered the potential economic impact on small entities of the rules discussed in the IRFAs, and we have considered alternatives that would reduce the potential economic impact on small entities of the rules enacted herein.

Description and Estimate of the Number of Small Entities to Which Rules Will Apply

9. The RFA directs agencies to provide a description of, and, where feasible, an estimate of the number of small entities that may be affected by the rules adopted herein. The RFA defines the term "small entity" as having the same meaning as the terms "small business," "small organization," and "small governmental jurisdiction." In addition, the term "small business" has the same meaning as the term "small business concern" under the Small Business Act. A small business concern is one which: (1) Is independently owned and operated; (2) is not dominant in its field of operation; and (3) satisfies any additional criteria established by the Small Business Administration (SBA).

10. Small businesses in the aviation and marine radio services use a marine very high frequency (VHF), medium frequency (MF), or high frequency (HF) radio, any type of emergency position indicating radio beacon (EPIRB) and/or radar, an aircraft radio, and/or any type of emergency locator transmitter (ELT). The Commission has not developed a definition of small entities specifically applicable to these small businesses. For purposes of this analysis, the Commission uses the SBA small business size standard for the category Wireless Telecommunications Carriers (except satellite)," which is 1,500 or fewer employees. Census data for 2007 shows that there were 1,383 firms in that category that operated for the entire year. Of those 1,383, 1,368 had fewer than 1,000 employees, and 15 firms had 1,000 or more employees. Thus under this category and the associated small business size standard, the majority of firms can be considered small.

11. Some of the rules adopted herein may also affect small businesses that manufacture aviation radio equipment. The Census Bureau does not have a category specific to aviation radio equipment manufacturers. The appropriate category is that for wireless communications equipment

manufacturers. The Census Bureau defines this category as follows: "This industry comprises establishments primarily engaged in manufacturing radio and television broadcast and wireless communications equipment. Examples of products made by these establishments are: Transmitting and receiving antennas, cable television equipment, GPS equipment, pagers, cellular phones, mobile communications equipment, and radio and television studio and broadcasting equipment." The SBA has developed a small business size standard for Radio and Television Broadcasting and Wireless Communications Equipment Manufacturing, which is: All such firms having 750 or fewer employees. According to Census bureau data for 2007, there were a total of 939 firms in this category that operated that year. Of this total, 912 had fewer than 500 employees and 27 had 500 or more employees. Thus, under this size standard, the majority of firms can be considered small.

Description of Projected Reporting, Recordkeeping, and Other Compliance Requirements for Small Entities

12. The rule changes adopted in the *R&O* require manufacturers to meet certain criteria and potential licensees to operate the equipment as prescribed in the Rules, including prior coordination with the FAA and ASRI. We believe the other final rules will have no significant effect on the compliance burdens of regulatees. The *R&O* requires data link test (DLT) system applicants to coordinate with the aeronautical enroute licensee for the frequencies on which the DLT applicant proposes to operate. This requirement affects small and large companies equally. The compliance requirement is no greater than the requirement to coordinate with the Federal Aviation Administration applications to operate analogous radionavigation land test system equipment, which the *NPRM* proposed to extend to DLT applicants.

Steps Taken To Minimize the Significant Economic Impact on Small Entities, and Significant Alternatives Considered

13. The RFA requires an agency to describe the steps it has taken to minimize the significant economic impact on small entities consistent with the stated objectives of applicable statutes, including a statement of the factual, policy, and legal reasons for selecting the alternative adopted in the final rule and why each one of the other significant alternatives to the rule considered by the agency which affect

the impact on small entities was rejected.

14. We believe that the *R&O* does not impose any significant additional reporting, recordkeeping, or other compliance requirements on small entities. The rules adopted in the *R&O* authorize new ground station technologies that will promote the overriding issue of aviation safety. No commenter identified any less burdensome alternatives that would be consistent with the item's objectives and the Commission's goals and responsibilities.

15. The Commission will send a copy of the *R&O* in WT Docket Nos. 10–61 and 09–42, including the Final Regulatory Flexibility Analysis, in a report to be sent to Congress pursuant to the Congressional Review Act. In addition, the Commission will send a copy of the *R&O*, including the Final Regulatory Flexibility Analysis, to the Chief Counsel for Advocacy of the SBA. A copy of the *R&O* and the Final Regulatory Flexibility Analysis (or summaries thereof) will also be published in the **Federal Register**.

List of Subjects for 47 CFR Part 87

Air transportation, Communications equipment, Incorporation by reference, Radio.

Federal Communications Commission.

Marlene H. Dortch,
Secretary.

For the reasons discussed in the preamble, the Federal Communications Commission amends 47 CFR part 87 as follows:

PART 87—AVIATION SERVICES

■ 1. The authority citation for part 87 continues to read as follows:

Authority: 48 Stat. 1066, 1082, as amended; 47 U.S.C. 154, 303, 307(e) unless otherwise noted. Interpret or apply 48 Stat. 1064–1068, 1081–1105, as amended; 47 U.S.C. 151–156, 301–609.

■ 2. Section 87.5 is amended by adding the definitions “Aircraft data link system”, “Aircraft data link land test station” in alphabetical order, and revising the definition of “Surveillance radar station” to read as follows:

§ 87.5 Definitions.

* * * * *

Aircraft data link system. A system used to provide data communications between the aircraft and ground personnel necessary for the safe, efficient and economic operation of the aircraft.

Aircraft data link land test station. A station which is used to test and calibrate aircraft data link system communications equipment.

* * * * *

Surveillance radar station. A radionavigation land station in the aeronautical radionavigation service employing radar to detect the presence of aircraft within its range.

* * * * *

■ 3. Section 87.131 is amended by revising the entry in the table for “Aeronautical utility mobile” and adding an entry for “Aircraft data link land test” immediately afterward to read as follows:

§ 87.131 Power and emissions.

* * * * *

Class of station	Frequency band/frequency	Authorized emission(s) ⁹	Maximum power ¹
* * *	* * *	* * *	* * *
Aeronautical utility mobile	VHF	A3E	10 watts.
	1090 MHz	M1D	20 watts.
Aircraft data link land test	131.450 MHz, 131.550 MHz, 131.725 MHz, 131.825 MHz, 136.850 MHz.	A2D	100 microwatts.
	136.900 MHz, 136.925 MHz, 136.950 MHz, 136.975 MHz.	G1D	100 microwatts.
* * *	* * *	* * *	* * *

¹ The power is measured at the transmitter output terminals and the type of power is determined according to the emission designator as follows:

- (i) Mean power (pY) for amplitude modulated emissions and transmitting both sidebands using unmodulated full carrier.
(ii) Peak envelope power (pX) for all emission designators other than those referred to in paragraph (i) of this note.

⁹ Excludes automatic link establishment.

■ 4. Amend § 87.133 by amending the table in paragraph (a) to add an entry to

category (7) between “Aircraft earth station” and Radionavigation stations” to read as follows:

§ 87.133 Frequency stability.

(a) * * *

Frequency band (lower limit exclusive, upper limit inclusive), and categories of stations	Tolerance ¹	Tolerance ²
* * *	* * *	* * *
Aeronautical utility mobile stations on 1090 MHz	1000	1000
* * *	* * *	* * *

¹ This tolerance is the maximum permitted until January 1, 1990, for transmitters installed before January 2, 1985, and used at the same installation. Tolerance is indicated in parts in 10⁶ unless shown as Hertz (Hz).

² This tolerance is the maximum permitted after January 1, 1985 for new and replacement transmitters and to all transmitters after January 1, 1990. Tolerance is indicated in parts in 10⁶ unless shown as Hertz (Hz).

■ 5. Section 87.137 is amended by amending the table in paragraph (a) to

add an entry between M1A and N0N to read as follows:

§ 87.137 Types of emission.

(a) * * *

Class of emission	Emission designator	Below 50 MHz	Above 50 MHz	Authorized band- width (kilohertz) frequency deviation
* * * * *	* * * * *	* * * * *	* * * * *	* * * * *
M1D	14M0M1D	14.0		
* * * * *	* * * * *	* * * * *	* * * * *	* * * * *

■ 6. Amend § 87.171 by adding the entries AVW and DLT to the “Symbol and class of station” list in alphabetical order, and by moving the entry for FAU between the FAT and FAW entries to read as follows:

§ 87.171 Class of station symbols.

* * * * *

AVW—Audio visual warning systems

* * * * *

DLT—Aircraft data link land test

* * * * *

■ 7. In § 87.173 amend the table in paragraph (b) as follows:

■ a. Revise the entries for 122.700 MHz, 122.725 MHz, 122.750 MHz, 122.800 MHz, 122.850 MHz, 122.900 MHz, 122.950 MHz, 122.975 MHz, 123.000 MHz, 123.025 MHz, 123.050 MHz, 123.075 MHz, 123.300 MHz, 123.500 MHz, 128.825–132.000 MHz, 136.500

MHz–136.875 MHz, 136.900 MHz, 136.925 MHz, 136.950 MHz, 136.975 MHz and 1030.000 MHz as set forth below.

■ b. Add new entries for 131.450 MHz, 131.550 MHz, 131.725 MHz, 131.825 MHz, 136.850 MHz and 1090.000 MHz in numerical order as set forth below.

§ 87.173 Frequencies.

* * * * *

(b) * * *

Frequency or frequency band	Subpart	Class of station	Remarks
* * * * *	* * * * *	* * * * *	* * * * *
122.700 MHz	G, L, Q	MA, FAU, MOU, AVW	Unicom at airports with no control tower; Aeronautical utility stations.
122.725 MHz	G, L, Q	MA, FAU, MOU, AVW	Unicom at airports with no control tower; Aeronautical utility stations.
122.750 MHz	F, Q	MA2, AVW	Private fixed wing aircraft air-to-air communications.
* * * * *	* * * * *	* * * * *	* * * * *
122.800 MHz	G, L, Q	MA, FAU, MOU, AVW	Unicom at airports with no control tower; Aeronautical utility stations.
* * * * *	* * * * *	* * * * *	* * * * *
122.850 MHz	H, K, Q	MA, FAM, FAS, AVW.	
* * * * *	* * * * *	* * * * *	* * * * *
122.900 MHz	F, H, L, M, Q	MA, FAR, FAM, MOU, AVW.	
* * * * *	* * * * *	* * * * *	* * * * *
122.950 MHz	G, L, Q	MA, FAU, MOU, AVW	Unicom at airports with control tower; Aeronautical utility stations.
122.975 MHz	G, L, Q	MA, FAU, MOU, AVW	Unicom at airports with no control tower; Aeronautical utility stations.
123.000 MHz	G, L, Q	MA, FAU, MOU, AVW	Unicom at airports with no control tower; Aeronautical utility stations.
123.025 MHz	F, Q	MA2, AVW	Helicopter air-to-air communications; Air traffic control operations.
123.050 MHz	G, L, Q	MA, FAU, MOU, AVW	Unicom at airports with no control tower; Aeronautical utility stations.
123.075 MHz	G, L, Q	MA, FAU, MOU, AVW	Unicom at airports with no control tower; Aeronautical utility stations.
* * * * *	* * * * *	* * * * *	* * * * *
123.300 MHz	K, Q	MA, FAS, AVW.	
* * * * *	* * * * *	* * * * *	* * * * *
123.500 MHz	K, Q	MA, FAS, AVW.	
* * * * *	* * * * *	* * * * *	* * * * *
128.825–132.000 MHz.	I	MA, FAE	Domestic VHF.
131.450 MHz	I	DLT.	
131.550 MHz	I	DLT.	
131.725 MHz	I	DLT.	
131.825 MHz	I	DLT.	
* * * * *	* * * * *	* * * * *	* * * * *
136.500–136.875 MHz.	I	MA, FAE	Domestic VHF; 25 kHz channel spacing.
136.850 MHz	I	DLT.	
136.900 MHz	I	MA, FAE, DLT	International and Domestic VHF.
136.925 MHz	I	MA, FAE, DLT	International and Domestic VHF.
136.950 MHz	I	MA, FAE, DLT	International and Domestic VHF.
136.975 MHz	I	MA, FAE, DLT	International and Domestic VHF.

Frequency or frequency band	Subpart	Class of station	Remarks
* * * * *	* * * * *	* * * * *	* * * * *
1030.000 MHz	Q	RLT.	
1090.000 MHz	L	MOU, RLT	Vehicle Squitter.
* * * * *	* * * * *	* * * * *	* * * * *

■ 8. In part 87, revise the heading to subpart I to read as follows:

Subpart I—Aeronautical Enroute Stations, Aeronautical Fixed Stations, and Aircraft Data Link Land Test Stations

■ 9. Add an undesignated center heading “AIRCRAFT DATA LINK LAND TEST STATIONS” after § 87.279, in subpart I and add §§ 87.285 and 87.287 to subpart I to read as follows:

Aircraft Data Link Land Test Stations

§ 87.285 Scope of service.

The frequencies indicated in § 87.287 of this chapter may be used to test aircraft data link systems on a secondary basis to other licensed stations. Equipment must be designed so that it will engage in data link exchange only with the aircraft whose identification has been programmed into the device, and must comply with the applicable specifications for VDL Mode 2 operation set forth in the ICAO “Manual on VHF Digital Link (VDL) Mode 2” First Edition-2001, and RTCA DO-281A,” Minimum Operational Performance Standards for Aircraft VDL Mode 2 Physical, Link and Network Layer”, November 8, 2005. These documents are incorporated by reference in accordance with 5 U.S.C. 552(a), and 1 CFR part 51 and approved by the Director of the Federal Register. The RTCA document is available and may be obtained from RTCA, Inc., 1828 L Street NW., Suite 805, Washington, DC 20036 and by

email to info@rtca.org or go to <http://RTCA.org>. The ICAO document is available and may be obtained from the ICAO, Customer Services Unit, 999 University Street, Montréal, Quebec H3C 5H7, Canada, by email to icaohq@icao.int or go to: <http://www.icao.int>. You may inspect a copy at the Federal Communications Commission, 445 12th Street SW., Washington, DC 20554, or at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call 202-741-6030, or go to: http://www.archives.gov/federal_register/code_of_federal_regulations/ibr_locations.html.

§ 87.287 Frequencies.

(a) The frequencies assignable to aircraft data link land test stations are 131.450 MHz, 131.550 MHz, 131.725 MHz, 131.825 MHz, 136.850 MHz, 136.900 MHz, 136.925 MHz, 136.950 MHz, and 136.975 MHz. Interstitial frequencies separated by 8.33 kilohertz from these frequencies may also be assigned.

(b) Before submitting an application for an aircraft data link land test station, an applicant must obtain written permission from the licensee of the aeronautical enroute stations serving the areas in which the aircraft data link land test station will operate on a co-channel basis. The Commission may request an applicant to provide documentation as to this fact.

■ 10. Amend § 87.349 by adding paragraph (f) to read as follows:

§ 87.349 Frequencies.

* * * * *

(f) The Commission will assign frequency 1090 MHz for use by aeronautical utility mobile stations for ground vehicle identification and collision avoidance after coordination with the FAA, subject to the following conditions:

(1) The applicant must notify the appropriate Regional Office of the FAA prior to submission to the Commission of an application for a new station or for modification of an existing station. Each application must include the FAA Regional Office notified and date of notification.

(2) Eligibility is restricted to airport operators holding an FAA Airport Operating Certificate, and other entities approved by the FAA on a case-by-case basis to use frequency 1090 MHz for use by aeronautical utility mobile stations for ground vehicle identification and collision avoidance;

(3) No more than two hundred 1090 MHz aeronautical utility mobile stations will be authorized at one airport;

(4) Licenses are limited to only those locations that are within the vicinity of an FAA ASDE-X multilateration system or ADS-B equipment, and/or where the primary purpose for seeking transmit authorization is to provide surface data to aircraft and air traffic control authorities.

(5) Message transmission rates are limited as indicated in the table below:

ADS-B Message	Rate when moving	Rate when stationary
Surface Position Message (Types 5, 6, 7, 8)	Every 0.4 to 0.6 seconds	Every 4.8 to 5.2 seconds.
Aircraft Operational Status (Type 31)	Every 4.8 to 5.2 seconds	Every 4.8 to 5.2 seconds.
Aircraft Identification and Type (Type 2)	Every 4.8 to 5.2 seconds	Every 9.8 to 10.2 seconds.

■ 11. Amend § 87.475 as follows:

■ a. Redesignating paragraph (b)(9), (b)(7) and (8) as paragraphs (b)(7), (b)(8) and (9) respectively;

■ b. Adding new paragraphs (b)(10) through (b)(14); and

■ c. Revising paragraphs (c)(1) and (c)(2) introductory text .

§ 87.475 Frequencies.

* * * * *

(b) * * *

(10) 2700–2900 MHz: Non-Government land-based radars may be licensed. U.S. Government coordination is required. Applicants must demonstrate a need for the service which the Government is not prepared to render.

(11) 5000–5250 MHz: This band is to be used for the operation of the international standard system (microwave landing system).

(12) 9000–9200 MHz: This band is available to land-based radars. Stations operating in this band may receive interference from stations operating in the radiolocation service.

(13) 15,400–15,700 MHz: This band is available for use of land stations associated with airborne electronic aids to air navigation.

(14) 24,250–25,250, 32,300–33,400 MHz: In these bands, land-based

radionavigation aids are permitted where they operate with airborne radionavigation devices.

(c) *Frequencies available for radionavigation land test stations.* (1) The frequencies set forth in §§ 87.187(c), (e) through (j), (r), (t), and (ff); and 87.475(b)(6) through (b)(11) may be assigned to radionavigation land test stations for the testing of aircraft transmitting equipment that normally operate on these frequencies and for the testing of land-based receiving equipment that operate with airborne radionavigation equipment.

(2) The frequencies available for assignment to radionavigation land test stations for the testing of airborne receiving equipment are 108.000 and 108.050 MHz for VHF omni-range; 108.100 and 108.150 MHz for localizer; 334.550 and 334.700 MHz for glide slope; 978 and 979 MHz (X channel)/ 1104 MHz (Y channel) for DME; 978 MHz for Universal Access Transceiver; 1030 MHz for air traffic control radar beacon transponders; 1090 MHz for Traffic Alert and Collision Avoidance Systems (TCAS); and 5031.0 MHz for microwave landing systems.

Additionally, the frequencies in paragraph (b) of this section may be assigned to radionavigation land test stations after coordination with the FAA. The following conditions apply:

* * * * *

■ 12. Section 87.483 is added to subpart Q to read as follows:

§ 87.483 Audio visual warning systems.

An audio visual warning system (AVWS) is a radar-based obstacle avoidance system. AVWS activates obstruction lighting and transmits VHF audible warnings to alert pilots of potential collisions with land-based obstructions. The AVWS operations are limited to locations where natural and man-made obstructions exist. The continuously operating radar calculates the location, direction and groundspeed of nearby aircraft that enter one of two warning zones reasonably established by the licensee. As aircraft enter the first warning zone, the AVWS activates obstruction lighting. If the aircraft continues toward the obstacle and enters the second warning zone, the VHF radio transmits an audible warning describing the obstacle.

(a) Radiodetermination (radar) frequencies. Frequencies authorized under § 87.475(b)(8) of this chapter are available for use by an AVWS. The frequency coordination requirements in § 87.475(a) of this chapter apply.

(b) VHF audible warning frequencies. Frequencies authorized under § 87.187(j), § 87.217(a), § 87.241(b), and

§ 87.323(b) (excluding 121.950 MHz) of this chapter are available for use by an AVWS. Multiple frequencies may be authorized for an individual station, depending on need and the use of frequencies assigned in the vicinity of a proposed AVWS facility. Use of these frequencies is subject to the following limitations:

(1) The output power shall not exceed – 3 dBm watts for each frequency authorized.

(2) The antenna used in transmitting the audible warnings must be omnidirectional with a maximum gain equal to or lower than a half-wave centerfed dipole above 30 degrees elevation, and a maximum gain of +5 dBi from horizontal up to 30 degrees elevation.

(3) The audible warning shall not exceed two seconds in duration. No more than six audible warnings may be transmitted in a single transmit cycle, which shall not exceed 12 seconds in duration. An interval of at least twenty seconds must occur between transmit cycles.

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DEPARTMENT OF THE INTERIOR

Fish and Wildlife Service

50 CFR Part 17

[Docket No. FWS–R9–ES–2012–0034; 450 003 0115]

RIN 1018–AY68

Endangered and Threatened Wildlife and Plants; Listing the Blue-throated Macaw

AGENCY: Fish and Wildlife Service, Interior.

ACTION: Final rule.

SUMMARY: We, the U.S. Fish and Wildlife Service (Service), are listing the blue-throated macaw (*Ara glaucogularis*) as endangered under the Endangered Species Act of 1973, as amended (Act). This species is endemic to a small area in Bolivia, and there are estimated to be fewer than 500 individuals remaining in the wild. Its status remains tenuous despite conservation efforts. Threats to the species include: lack of reproductive success (loss of nestlings) due to nest failure, which primarily is caused by competition for nest sites and predation by larger avian species; and the lack of suitable, available habitat in addition to its small population size.

DATES: This final rule is effective November 4, 2013.

ADDRESSES: This final rule is available on the Internet at <http://www.regulations.gov> under Docket No. FWS–R9–ES–2012–0034. Comments and materials we received, as well as supporting documentation used in the preparation of this rule, are available for public inspection, by appointment, during normal business hours at: U.S. Fish and Wildlife Service, 4401 N. Fairfax Drive, Suite 400, Arlington, VA 22203.

FOR FURTHER INFORMATION CONTACT: Janine Van Norman, Chief, Branch of Foreign Species, Endangered Species Program, U.S. Fish and Wildlife Service, 4401 North Fairfax Drive, Room 420, Arlington, VA 22203; telephone 703–358–2171. If you use a telecommunications device for the deaf (TDD), call the Federal Information Relay Service (FIRS) at 800–877–8339.

SUPPLEMENTARY INFORMATION:

Background

The Endangered Species Act of 1973, as amended (Act) (16 U.S.C. 1531 *et seq.*), is a law that was passed to prevent extinction of species by providing measures to help alleviate the loss of species and their habitats. Before a plant or animal species can receive the protection provided by the Act, it must first be added to one of the Federal Lists of Endangered and Threatened Wildlife and Plants. Section 4 of the Act and its implementing regulations at part 424 of title 50 of the Code of Federal Regulations (CFR) set forth the procedures for adding species to these lists.

Previous Federal Actions

We received the petition to list this species on May 6, 1991, from Alison Stattersfield, of the International Council for Bird Preservation (ICBP). That petition requested that we list 53 foreign birds under the Act, including the blue-throated macaw, which is the subject of this final rule. We took several actions on this petition. On December 16, 1991, we published a positive 90-day finding and announced the initiation of a status review of the species included in the 1991 petition (56 FR 65207). On March 28, 1994, we published a document that served as our 12-month finding on the 1991 petition (59 FR 14496). In that document, we announced our finding that listing 38 species from the 1991 petition, including the blue-throated macaw, was warranted but precluded because of other, higher priority listing actions. The blue-throated macaw was assigned

a listing priority number (LPN) of 2. Species are assigned LPNs based on the magnitude and immediacy of threats, as well as their taxonomic status. A lower LPN corresponds to a higher priority to determine a listing status. An LPN of 2 reflects threats that are both imminent and high in magnitude, as well as the taxonomic classification of the blue-throated macaw as a full species. In the May 3, 2011, Annual Notice of Review, we announced that listing was warranted but precluded for 20 foreign species, including the blue-throated macaw.

On January 10, 2013, we issued a proposed rule (78 FR 2239) to add the blue-throated macaw as endangered to the Federal List of Endangered and Threatened Wildlife.

Summary of Comments

We base this rule on a review of the best scientific and commercial information available, including all information we received during the public comment period. In the January 10, 2013, proposed rule (78 FR 2239), we requested that all interested parties submit information that might contribute to development of a final rule. The public comment period was open for 60 days, ending March 11, 2013. We also contacted appropriate scientific experts and organizations, and invited them to comment on the proposed listing in accordance with our peer review policy, described in the section below. We received 23 comments from members of the public including peer reviewer; these comments are available at <http://www.regulations.gov> under Docket No. FWS-R9-ES-2012-0034).

Peer Review

In accordance with our policy, "Notice of Interagency Cooperative Policy for Peer Review in Endangered Species Act Activities," that was published on July 1, 1994 (59 FR 34270), we sought the expert opinion of three appropriate independent specialists regarding this rule. The purpose of such review is to ensure listing decisions are based on scientifically sound data, assumptions, and analysis. We sent copies of the proposed rule to the peer reviewers immediately following publication in the **Federal Register**. We invited these peer reviewers to comment, during the public comment period, on the specific assumptions and the data that were the basis for our conclusions regarding the proposal to list this species as endangered under the Act. We received comments from three peer reviewers.

We reviewed all comments we received for substantive issues and new information regarding the proposed listing of this species; we address those comments below. Comments that provided support or opposition without substantive information were noted, but will not be addressed in this final rule. Some of the commenters did not appear to understand the criteria for listing under the Act. Therefore, we are providing clarification below. The following summarizes the comments we received and our responses.

(1) *Comment:* Many commenters, while not opposed to the listing of the species, asked for a special rule under section 4(d) of the Act (also called a "4(d) rule") that would allow interstate trade of the species to occur.

Response: Section 4(d) of the Act allows the Service to develop a special rule to apply the prohibitions of section 9 or to provide measures that are necessary and advisable to provide for the conservation of threatened species. A special rule cannot be promulgated for a species that is listed as endangered under the Act. Because we determined that listing the blue-throated macaw as endangered under the Act is appropriate, we are not able to develop a 4(d) rule for this species. That said, not all interstate trade is prohibited under the ESA. Sale; offer for sale; and delivery, receipt, carrying, transport, or shipment in interstate or foreign commerce in the course of a commercial activity are prohibited. Interstate trade that is not sale, offer for sale, or in the course of a commercial activity is not regulated.

(2) *Comment:* Several commenters, including individual bird breeders and the American Federation of Aviculture, objected to our finding, but did not provide new information relevant to the determination (for the specific content of these comments, see <http://www.regulations.gov> under Docket No. FWS-R9-ES-2012-0034).

Response: We thank all the commenters for their interest in the conservation of this species and thank those commenters who provided information for our consideration in making this listing determination. Under section 4(b) of the Act, the Service is required to make listing determinations solely on the basis of the best scientific and commercial data available after conducting a review of the status of the species. When we published our proposed rule, we opened a public comment period during which we requested any additional information on the blue-throated macaw. In making this listing determination, we reviewed the best

available scientific and commercial information, we contacted species experts, and we diligently searched for the most current information on this species. Therefore, we have obtained and considered the "best scientific and commercial data available" in our listing determination. After careful consideration, we conclude that this species meets the definition of an endangered species under the Act.

Effects of This Rule

Commercial Use

The Act does not prohibit *intrastate* (within a State or U.S. territory) sale, offer for sale, or certain other intrastate activities of an endangered species. But, among other things, it does prohibit *interstate* (between States and U.S. territories) sale, offer for sale, and certain other activities such as transport in the course of a commercial activity of endangered species. If a person in the course of a commercial activity can demonstrate that such sale or other commercial use enhances the propagation or survival of the species, or that it is for scientific research, he or she may apply for a permit for these activities.

Because interstate commercial use of endangered species is generally prohibited, if you wish to sell or otherwise commercially use your macaw(s), you would have to either sell the bird(s) to someone who resides within your home State, commercially use the bird within your State, or apply for a permit for interstate sale or commercial use of your bird(s). In addition, to be in compliance with the Act, any advertisements for the sale of your birds should include a statement that no sale involving parties from another state can be consummated until a permit has been obtained from the Service.

Captive Breeding

The Service does not regulate captive breeding of listed species. This means that you are not prohibited from continuing to breed these birds. However, the Act does prohibit interstate and foreign sales, certain other interstate and foreign commercial activities, imports, and exports *without* a Service permit. Therefore, if you intend to sell any progeny, you will either need to sell them within the State the birds were bred to someone residing in the same State or, if intending to sell the birds outside the State where they were bred, you will need to obtain a Service permit. In addition, to be in compliance with the Act and its implementing regulations at 50 CFR Part

17, any advertisements for the sale of your birds should include a statement that no sale involving parties from another state can occur until a permit has been obtained from the Service. For more information on obtaining such a permit, see <http://www.fws.gov/permits>.

Personal Pets

The Act does not restrict ownership of your personal pet or moving your personal pet across State lines for noncommercial purposes. There are no restrictions on traveling with or transporting legally obtained endangered species within the United States for your own personal use. No permit is required for you to travel or transport your pet macaw(s) within the United States, provided you are not selling or otherwise engaging in a commercial activity with the bird.

Summary of Changes From Proposed Rule

This final rule incorporates changes to our proposed listing based on the comments we received and newly available scientific and commercial information. Peer reviewers generally commented that the proposed rule was thorough and comprehensive. There were different views on what the historical threats to the species were and differences in thoughts on the magnitude of the various factors currently affecting the species. For example, some peer reviewers and commenters indicated that illegal removal from the wild for the pet trade was the most significant factor affecting the species and that habitat loss and competition for nest sites had less of an effect on the species than predation. Others questioned the degree of the effect that botflies have on the species. There are very few individuals studying and working closely with this species, and we made our determinations based on the best available scientific and commercial information. None of the information collected during the comment period changed our final listing determination. A list of literature used in finalizing this determination and comments we received are available at <http://www.regulations.gov> under Docket No. FWS-R9-ES-2012-0034.

The most significant change is that, based on recent surveys, the population of this species appears to be greater than was previously believed. Recent surveys conducted by the Armonia Association and the Loro Parque Fundación indicate that the wild population of the blue-throated macaw is likely between 350 to 400 individuals (Waugh 2013, pers. comm.; Lebbin 2013, pers. comm.; Hennessey 2013, pers. comm.);

including between 190 to 225 mature individuals (Waugh 2013, pers. comm.). Additionally, a population viability analysis on the blue-throated macaw was conducted and published in late 2012 (Strem and Bouzat 2012, pp. 12–24). It was not available at the time we were developing the proposed listing determination; however, this information is incorporated into this final listing determination.

We also note that providing separate legal status to captive specimens of protected species is not permissible under the ESA.

Species Information

Taxonomy

The taxonomic status of this species was disputed until fairly recently. The blue-throated macaw was previously considered an aberrant form of the blue-and-yellow macaw (*A. ararauna*), but these two species are known to occur sympatrically (in the same location) without interbreeding (Kyle 2007a; del Hoyo *et al.* 1997). Common names in Spanish for the blue-throated macaw include guacamayo barba azul and guacamayo caninde. Both BirdLife International (BLI) and the Integrated Taxonomic Information System (ITIS) recognize the blue-throated macaw as *Ara glaucogularis*. ITIS (<http://www.itis.gov>) is a database maintained by a partnership of U.S., Canadian, and Mexican federal government agencies, other organizations, and taxonomic specialists to provide taxonomic information. Therefore, we accept the species as *Ara glaucogularis*.

Population

As of 1998, the species was known to occur in eight locations, and the total species' population was believed to be 100 to 150 individuals (Loro Parque Fundación (LPF) 2002, p. 13). In October 2004, a new, small population was found at Santa Rosa, 100 kilometers (km) (62 miles (mi)) west of what was believed to be the western-most edge of the species' range (LPF 2012; Herrera *et al.* 2007, p. 18). Biologists surveying for this species in 2004 found more birds than in previous surveys by searching outside known population locations in specific habitat types believed to support the blue throated macaw (palm groves and forested islands) (Herrera *et al.* 2007, p. 18). In 2007, a population of approximately 25 individuals was found one hour south of Trinidad (Kyle 2007a, p. 6). Also in 2007, a flock of approximately 70 birds was observed near the Rio Mamoré (Asociación Armonía), in the vicinity of where the Barba Azul Nature Reserve is now

located. Population surveys conducted between 2004 and 2008 by Asociación Armonía and LPF indicate that there are now likely between 350 to 400 individuals (Waugh 2013, pers. comm.).

We note that there are likely more than 1,000 individual blue-throated macaws held in captivity worldwide according to the 2011 North American Regional Studbook (Anderson 2011, p. 4).

Species Description

Blue-throated macaws have a blue throat; a bare, white face containing identifiable blue-streaks; dark grey irises; and a large black bill (Anderson 2011, p. 4; Kyle 2007b, p. 16). Its forehead is also blue, and there is a lack of contrast between its remiges (large flight feathers on the wing) and upperwing covert (outer) feathers. This species is approximately the same size (85 centimeters (cm) or 33 inches) as the blue-and-yellow macaw. However, the blue-throated macaw is not as competitive as the blue-and-yellow macaw in obtaining nesting cavities (Kyle 2007a). Male blue-throated macaws are larger than females at about 800 grams (1.76 pounds), and females weigh approximately 600 grams (1.32 pounds) (Kyle 2007b, p. 16).

Blue-throated macaws, like other parrot species, are monogamous and tend to mate for life (Strem and Bouzat 2012, pp. 12–13). There is also a significant investment in the care for their young; blue-throated macaws are not fully independent of their parents for a full year (Berkunsky 2010, p. 5). Therefore, some breeding pairs may not produce nestlings every breeding season. The blue-throated macaw forms its nests in large tree cavities; its preferred nesting tree is the motacú palm (*Attalea phalerata*), which is native to Bolivia, Brazil, and Peru. The northern population of blue-throated macaws breeds between August to November, and the southern population breeds between November to March (Berkunsky 2012, pers. comm.; Kyle 2007a). The southern population, an hour south of Trinidad, tends to breed around the same time as the more commonly found blue-and-yellow macaw. This overlap of breeding seasons adds to competition for nest sites.

Blue-throated macaws are sexually mature between 6 and 8 years of age (Strem 2008; Kyle 2007a, p. 6). Females lay one to three eggs per clutch (generally one clutch per year is produced), and the eggs incubate for 26 days. One to three hatchlings are raised, depending on food availability (BLI 2010; Kyle 2007a). Nestlings fledged at

between 13 and 14 weeks. Blue-throated macaws are seen traveling mostly in pairs but also have been seen in a large flock of between 70 and 100 individuals (Herrera 2012, pers. comm.; Macleod *et al.* 2009, p. 15; Waugh 2007a, p. 53).

Diet

This species seeks areas where palm fruits and suitable nesting cavities are readily available (Herrera *et al.* 2007, pp. 18–24). It feeds on fruits of approximately 12 species of trees (Kyle 2007a, pp. 1–10). There are 84 species of palms in Bolivia (Moraes *et al.* 2001, p. 234) and approximately 11 palm species within the blue-throated macaw's range. Blue-throated macaws prefer the fleshy part of the fruit, or mesocarp, of motacú and also *Mauritia flexuosa* (royal palms or carandai-guazú), as well as *Acrocomia aculeata* (common names include: coyoli palm, gru-gru palm, macaw palm, acrocome, Coyolipalme, amankayo, corajo, corozo, baboso, tucuma, and totai) (Herrera 2007, p. 20; Yamashita and M. de Barros 1997, p. 144; Jordan and Munn 1993; <http://www.ars-grin.gov>; <http://www.pacsoa.org.au>). The macaws first puncture the apex of the mesocarp and remove the outer layer (Yamashita and M. de Barros 1997, p. 144). The motacú continually produces fruit throughout the year. Between 80 and 90 percent of motacú palms produce fruits all year, but the peak is between July and December (LPF 2003, p. 21; Moraes *et al.* 1996, p. 424). Motacú is believed to be pollinated by beetles in the *Mystrops* genus (Moraes *et al.* 1996, p. 425). The same palm tree may produce at any one time between three and five racemes (flowering stalks, each with fruits in a different stage of development ripeness) (Yamashita and M. de Barros 1997, p. 144).

The species has also been observed at clay licks (Kyle 2007a, p. 2), which are clay banks where the birds consume soil or minerals; however, the reason for the clay consumption remains unclear.

Range and Habitat Description

The blue-throated macaw is endemic to the tropical savanna ecoregion of north-central Bolivia in the Department of Beni (Strem and Bouzat 2012, p. 13; LPF 2010; Kingsbury 2010, p. 8). This ecoregion is approximately 160,000 square kilometers (km²) (61,776 square miles (mi²)). (See Appendix A in Docket No. FWS-R9-ES-2012-0034 at <http://www.regulations.gov> for a map of the region (hereinafter referred to as “Appendix A”). Within this region, the blue-throated macaw is found both in groups and in widely dispersed isolated pairs within an area estimated to be

between 2,508 and 12,900 km² (968 and 4,981 mi²) (Waugh 2013, pers. comm.; Strem and Bouzat 2012, p. 12; LPF 2012; BLI 2012; Hesse 2000, p. 104). The species is found at elevations between 200 and 300 meters (m) (656 and 984 feet (ft)) (Yamashita and M. de Barros 1997, p. 144; Brace *et al.* 1995). The blue-throated macaw's habitat was occupied by humans for thousands of years before European colonization (Erickson 2000, p. 2). Its habitat consists of lowlands in an area known as Llanos (plains) de Mojos, also known as Llanos de Moxos (LPF 2010; Mayle *et al.* 2007, p. 301; Yamashita and M. de Barros 1997, p. 141). See Appendix A for a photo representing the flooded habitat. The Llanos de Mojos is a wide savannah plain with poor drainage and, in the wet season, is extremely susceptible to flooding. The floods cover large areas of the plains, and the area may remain flooded for 5 to 7 months in some areas. These plains include parts of the river basins of the Iténez, Mamoré, Beni, and Madre de Dios Rivers (see Appendix A for a map; Yamashita and M. de Barros 1997, p. 144).

The blue-throated macaw's habitat has progressively diminished over thousands of years and its habitat is now primarily restricted to small “islands” of suitable habitat within privately owned cattle pastures (see Appendix A for a photo illustrating these islands; Milpacher 2012, pers. comm.; Kingsbury 2010, p. 72; Berkunsky 2008, p. 4; Kyle 2007a, p. 4; Kyle 2006, p. 7; LPF 2003, p. 6). The species has been observed in flocks of up to 100 birds in the Barba Azul Nature Reserve (Waugh 2013, pers. comm). The blue-throated macaw is believed to occur on ranches adjacent to the Barba Azul Nature Reserve, Ranches Las Gamas, Los Patos, Pelotal, and Juan Latino, but the status of the species is unclear in these areas (Kingsbury 2010, p. 89). In other parts of the species' range, the species is believed to occur on the ranches Elsner with Espíritu, San Rafael, and the Estancia El Dorado; however, to the best of our knowledge, these are privately managed, and the species is not being monitored on the ranches.

Palm Islands

Palm-dominated forest islands form the blue-throated macaw's primary habitat. These “islands” are on elevated terrain and are sometimes referred to as “alturas” (high ground). The islands were primarily formed as mounds resulting from prehistoric human existence in this region (Erickson 2008, pp. 168–169). The lowlands are frequently inundated by water due to

the flooding of nearby rivers (see Appendix A). Historically, human cultures manipulated the water flow to create plains that were higher and subsequently drier (Erickson 2008, pp. 168–169). The mounds are common throughout the savannas and wetlands of Bolivia; there may be as many as 10,000 of these mounds or islands in Bolivia (Erickson 2008, p. 169). They have been found to vary in size from a few hectares to many square kilometers (Erickson 2008, pp. 168–169; Yamashita and M. de Barros 1997, p. 144). Most are raised less than one meter and are often surrounded by ponds or moat-like ditches (Erickson 2008, pp. 168–169). Typically, these islands are surrounded by seasonally flooded grasslands; are between 0.2 and 1.0 hectare (ha) (0.49 to 2.47 acre (ac)) in size; and are approximately 130 to 235 m (426 to 771 ft) above sea level (Kingsbury *et al.* 2010, p. 71; Yamashita and M. de Barros 1997, p. 144).

Besides motacú, palm species found on these islands are typically *Syagrus botryophora* (sumuqué) and *Astrocaryum vulgare* (chontilla), interspersed with semi-deciduous emergent trees such as *Enterolobium spp.* (no common name (NCN)), *Sterculia striata* (NCN) and *Tabebuia spp.* (roble), and the Curupau tree (*Anadenanthera colubrina*) (also known as yopo, vilca, huilco, wilco, cebil, or angico) (Kyle 2005, p. 7). Some trees such as *Ceiba pentandra* (mapajo or kapok tree) and *Hura crepitans* (common names include catahua, Ochoo, arbol del diablo, acacu, monkey's dinner-bell, habillo, ceiba de leche, sandbox tree, possum wood, dynamite tree, ceiba blanca, assacu, and posentri) can reach more than 40 m (131 ft) in height.

The motacú palms may have survived on the mound islands for various reasons: their value to human cultures, their resistance to burning, and their ecological suitability to the microclimate. Motacú is not only vital to the life history of blue-throated macaws; it also has local, commercial, and ecosystem importance (Kyle 2005, p. 3; Moraes *et al.* 1996, pp. 424–425). This species of palm is used in the local community as thatch for housing, which can last up to 7 years. Its fruit is consumed by humans and various other species; parts of the palm tree are used to make baskets and brooms; and palm oil is sold commercially (Zambrana *et al.* 2007, p. 2785; Moraes *et al.* 1996, pp. 425–426).

Significance of Palm Islands to Blue-Throated Macaws

Habitat favored by blue-throated macaws contains tall, mature trees in areas with continuous motacú palm fruit production (Yamashita and M. de Barros 1997, p. 145). Densities of motacú, the blue-throated macaw's preferred nesting and feeding source, vary greatly. In the 1997 Yamashita and M. de Barros study, macaws were only observed in areas where motacú represented more than 60 percent of the trees.

Natural cavities in dead or decaying trees (usually motacú palms) are the primary source of nesting sites for this species. Blue-throated macaws prefer dead trees that have cavities with a minimum internal diameter of 30 cm (11.8 inches) for nesting, and, therefore, the tree must have a diameter at breast height of 60 cm (23.6 inches) or greater (see Appendix A for a picture representing a tree cavity; Yamashita and M. de Barros 1997, p. 145).

Factors Affecting the Species

Section 4 of the Act, and its implementing regulations at 50 CFR part 424, set forth the procedures for adding species to the Federal Lists of Endangered and Threatened Wildlife and Plants. Under section 4(a)(1) of the Act, we may list a species based on any of the following five factors: (A) The present or threatened destruction, modification, or curtailment of its habitat or range; (B) overutilization for commercial, recreational, scientific, or educational purposes; (C) disease or predation; (D) the inadequacy of existing regulatory mechanisms; and (E) other natural or manmade factors affecting its continued existence. Listing actions may be warranted based on any of the above factors, singly or in combination. We considered all of these factors in determining that the blue-throated macaw qualifies as an endangered species. Each of these factors is considered and evaluated in this document.

In analyzing threats to a species, the Service focuses its analysis on threats acting upon wild specimens within the native range of the species because the goal of the Act is survival and recovery of the species in its native ecosystems. We do not separately analyze "threats" to captive-held specimens because the statutory five factors are not well-suited to consideration of specimens in captivity and captive-held specimens are not eligible for separate consideration for listing. But we do consider the extent to which specimens

held in captivity create, contribute to, reduce, or remove threats to the species.

Loss of Palm Islands Due to Habitat Conversion

Within the past few hundred years, the blue-throated macaw lost much of its remaining habitat due to conversion of palm forests to pasture for cattle grazing. Cattle are not native to Bolivia; they were introduced to Bolivia in the 1600s. After the Second World War, cattle ranching and the associated burning of pastures began significantly impacting the landscape (Robison *et al.* 2000, p. 61). The macaw's preferred habitat is now limited to a few small, isolated islands of suitable habitat that are surrounded by these cattle ranches (Gilardi 2012, pers. comm.). During the flooding season, which can occur for up to 6 months of a year, cattle take refuge on the motacú palm islands because the islands are drier due to their higher elevation (LPF 2003, p. 33). In general, there is no direct conflict between the cattle themselves and blue-throated macaws, but cattle can degrade their habitat by trampling. Adding to habitat loss, in the preferred habitat of the blue-throated macaw where these motacú palms remain (within privately owned cattle ranches), local ranchers typically burn the pastures annually (Berkunsky 2008, p. 4; del Hoyo 1997). This type of burning results in almost no recruitment of native palm trees, which are vital to the ecological needs of the blue-throated macaw (Yamashita and M. de Barros 1997, p. 144). The reduction in habitat (reduced availability of motacú palms) and lack of recruitment of motacú palms is a concern for in the future for blue-throated macaws because it takes several years for motacú palms to be able to produce fruit and to develop into a size suitable for nesting cavities.

As mitigation, local conservation efforts are not only planting trees that provide food for blue-throated macaws, they are also conducting educational efforts directed towards land owners within the range of the blue-throated macaw. Additionally, the Barba Azul Nature Reserve is currently expanding (to 11,000 ha) (27,181 ac) to include adjacent ranches where the blue-throated macaw is believed to breed. The land newly incorporated into the protected area has more palm islands with better forest (Waugh 2013, pers. comm.). However, projects designed to provide additional habitat for this species are in the early stages of development and it is too early to evaluate the effectiveness of these efforts.

The lack of nesting cavities (suitable habitat) is often a limiting factor for bird

species that depend on these cavities for nesting (Sandoval and Barrantes 2009, p. 75; Kyle 2006, p. 8). To raise their young, blue-throated macaws require specific nesting cavities that provide protection from predation and flooding. Additionally, many different species compete for these increasingly rare nest sites. The loss of suitable trees is one factor that has resulted in increased competition from other species for these nesting cavities. The impact of habitat loss is compounded by extreme weather events and contributes to other factors that affect blue-throated macaws, such as an increase in vulnerability to predation and competition for nests.

Nest Failure

Nest failure (the failure of nestlings to survive to fledgling stage) continues for various reasons, despite intensive conservation efforts (Berkunsky 2010, p. 4; Kyle 2006, p. 8). Some of the causes of nest failure include: predation, infestation by botflies (parasites in the *Philornis* genus), exposure to severe weather events such as flooding, and competition for food and shelter with other species such as bees (Berkunsky 2010, pp. 4–5). Many nestlings die in early developmental stages, often due to starvation (due to lack of food or parental neglect, exposure to cold temperatures, or flooding (Kyle 2007a, pp. 1–10). If parents do not have access to enough nutritional food sources, some nestlings are neglected so that their other nestlings will survive. Nestlings can also fall out of collapsed trees before they have fledged. During five field seasons of closely observing nest sites, 43 percent of the active nests (30 active nests) were predated (Berkunsky 2008, p. 5; Kyle 2007a, pp. 7–8). See additional discussion below under the *Exposure to Extreme Weather Events* section.

Predation

Predation is a key factor limiting this species' population growth in some areas of its range (Kyle 2007a, pp. 3, 6–7; Kyle 2006, p. 8). During one season of observation, all nestlings within three nests of seven active blue-throated macaw nests were lost to predation (Kyle 2007a, pp. 6–8). Because the species has such a small population size with likely fewer than 500 individuals remaining in the wild, losses such as this have a significant effect on the status of the species as a whole. Predators of the blue-throated macaw include:

- Toco toucan (*Ramphastos toco*),
- Crane hawk (*Geranospiza caerulescens*),

- Great-horned owl (*Bubo virginianus*), and
- Southern crested caracara (*Caracara plancus*, a bird of prey).

The blue-throated macaw's habitat of sparse, palm-forested islands scattered among natural grasslands, increases the species' vulnerability to nest predation (Kyle 2007a, pp. 6–7). Tree nest cavities chosen by blue-throated macaws tend to be visible to other avian species flying overhead. In addition to nesting on palm islands, blue-throated macaws are also known to nest in isolated palms in open fields, which are even more exposed than nests on palm islands (Herrera *et al.* 2007, p. 20). All of the species that predate on adult blue-throated macaws, eggs, or nestlings have large distributions and are commonly found at the habitat islands used by blue-throated macaws (Kyle 2007a, pp. 6–7). Great horned owls have been seen at many sites where blue-throated macaws are nesting (Kyle 2007a, p. 6). These owls, native to South America, have a vast range, are the most widely distributed owl in South America, and occupy a variety of habitats including open forest, farmland, and grassland.

Because blue-throated macaw nests may be concentrated in these small "islands" of trees within cattle pastures, they are more easily located by predators than species that nest in a continuous forest setting. To discourage and mitigate the effects of predation, some conservation activities being conducted include the monitoring and discouragement of predators from attacking blue-throated macaw nests. These efforts are intensive. In one case, where it appeared the nest tree was collapsing, the tree was monitored all night by conservation staff (Kyle 2007a, p. 9). Often trees containing active nests are monitored in this way if persistent predation has been observed. The mitigation efforts are helpful if nestlings can survive until they are at least 300 grams (0.66 pounds), they have a greater chance of survival (Kyle 2007a, p. 7). However, these mitigation projects are in the early stages of development and it is too early to evaluate the effectiveness of these efforts.

Botfly parasites can also cause mortality of nestlings and have been observed in blue-throated macaw nestlings. During some parts of their life cycle, botflies live subcutaneously, and feed on macaw tissue (Olah *et al.* in press; Wunderle Jr. and Arendt 2011, p. 39). Botflies significantly reduce the energy available for nestling growth and development (Uhazy and Arendt 1986 in Wunderle Jr. and Arendt 2011, p. 39) and can contribute to reduced fitness and in some cases death of nestlings. In

one study of avian nestlings, botfly parasitism caused 56 percent of mortalities, while egg and chick losses from nest predators and competitors accounted for less than 10 percent of reproductive failures (Arendt 2000 in Wunderle Jr. and Arendt 2011, p. 39).

Exposure to Extreme Weather Events

Because this species has a small population, the blue-throated macaw is also vulnerable to natural catastrophic events such as flooding, drought, and other stochastic disturbances (Strem and Bouzat 2012, p. 12; Kyle 2006, pp. 5–6). Bolivia is described as a "climatically volatile region" and is one of the countries in the world most affected by natural disasters in recent years (Oxfam International 2009, p. 5). This species' habitat experiences extreme changes over the course of a year.

For many months of the year, the blue-throated macaw's habitat is flooded; at other times during the year, its habitat suffers from severe drought. During periods of drought, nestlings are sometimes neglected and starve.

High rainfall occurs during the summer months; the wet season is between September and May. Annual precipitation is between 110 and 250 cm (43 and 98 in) (Haase and Beck 1989 in Kingsbury 2010, p. 9). Very heavy rainfall in this region can continue for long periods of time (Kyle 2006, pp. 5–6; Hanagarth and Sarmiento 1990 in Beck and Moraes, undated). Every 6 to 12 years, 80 to 90 percent of the region is inundated (Beck and Moraes, undated). Although these areas are seasonally flooded, they are also prone to periods of drought (Kyle 2007a, p. 3; Mayle *et al.* 2007, p. 294; Yamashita and M. de Barros 1997, p. 144).

Severe storms, such as one that occurred in 2005, are described as "nest killers." These severe storms cause the dead palm trees in which the nests have been constructed to collapse or flood (Kyle 2007b, p. 15), which causes nest failure for the season and subsequently no recruitment.

Dead palm trees often collapse in these storms. During the 2006–2007 season, this phenomenon was observed when the nest of one blue-throated macaw pair in a dead motacú palm tree collapsed due to strong winds (Kyle 2007a, p. 4). Although the reason is unclear, these dead palm trees are currently the preferred sites for nest construction by the blue-throated macaw, and the species has strong nest site fidelity (Berkunsky 2012, pers. comm.). The extent to which this behavior is learned and modified is also unclear. However, researchers are working with the blue-throated macaw

to introduce nest sites that are safer and less prone to predation and nest failure due to extreme weather events such as flooding (Berkunsky 2010, pp. 4–5).

Flooding, a significant cause of nest failure in the recent past, has not been documented since 2008 at monitored and human-manipulated nests. This is due to one of the conservation measures in place: drilling drain holes in the nests and at the bottom of the dead palm trees to prevent nest flooding. However, flooding can still occur if nests are not monitored and manipulated.

Competition for Nest Sites

In addition to nest failure, there is a shortage of nests in some areas. As described above, there is little remaining of the preferred habitat of motacú palms. The species appears to "learn" nesting sites, and will re-use nesting locations that they had used in the past (Berkunsky 2010; Kyle 2007a, p. 4). Blue-throated macaws choose to nest in the top of dead motacú palms which provide easy access to their preferred food source. These nesting sites also expose the birds to predation, competition from other species for nests, drought, excessive rainfall, and nest flooding. Many species, in addition to the blue-throated macaw, use the motacú palm for feeding and nesting. In the Llanos de Mojos, there are 21 species of parrots that may compete for nest sites (Kingsbury *et al.* 2010, p. 83; Yamashita and M. de Barros 1997, p. 144). Some species known to compete for nest sites with the blue-throated macaw include the blue and yellow macaw, woodpeckers, and bees (Kyle 2007a, p. 6; LPF 2003, p. 33).

In order to provide more choices for nesting habitat, conservation organizations are installing nest boxes. In 2009, in the Barba Azul Nature Reserve, 46 artificial nests were monitored, in part by video cameras; however, the majority of them (24 nests) were occupied by blue and yellow macaws (LPF 2010, p. 15). Likely due to the larger size of the blue and yellow macaw or perhaps their more aggressive nature, blue and yellow macaws usually win most confrontations for nests (Kyle 2007a, p. 6). During the 2010 field study at the Barba Azul Nature Reserve, researchers also observed that there were a greater number of blue and yellow macaws using the Barba Azul Nature Reserve than blue-throated macaws (Kingsbury 2010, p. 83). At an area where both species were drinking water, researchers noted that the blue-throated macaws exhibited agitated behavior when blue-and-yellow macaws were nearby (Kingsbury 2010, p. 83). Although the Barba Azul Nature Reserve

was established specifically for the blue-throated macaws, other species use the reserve and compete for nesting sites.

As stated earlier, to mitigate this problem, at least two conservation organizations are installing nest boxes to create more available sites for nesting, but despite the past 10 years of conservation efforts and experimentation with nest boxes, nest failure still occurs. In addition to predation, other reasons for nest failure are numerous, which has instigated the experimentation and installation of these nest boxes. Bees and other species continue to compete with blue-throated macaws for these nest boxes. After many years of experimentation, the nest boxes are slowly becoming more effective at providing suitable nesting sites. Blue-throated macaws seem to habituate to certain nesting sites and locations, likely based on food availability and learned behavior.

Although blue-throated macaws have begun to use some of the nest boxes, it has been a slow and tedious process to encourage blue-throated macaws to use these boxes, and the population continues to suffer losses, particularly due to nest failure, which the installation of suitable nest boxes is attempting to alleviate. When nests fail (no nestlings survive that season), a significant amount of effort has been expended by that breeding pair. Because this species has such a small population (likely there are fewer than 500 individuals remaining in the wild), each nestling survival has great significance to the overall species' status. The effect of the death of each new nestling on the population of blue-throated macaws is devastating to the viability of the population. If the nestlings survive the first season to the point that they fledge, their chances of survival are much greater than when they are new nestlings and are entirely dependent on their parents for survival.

Bees can also make both natural nesting cavities and manmade nest boxes inhospitable for blue-throated macaws (Berkunsky 2008, p. 5). At the beginning of one breeding season, 67 percent of nest boxes monitored were occupied by bees (Berkunsky 2008, p. 5). After being removed, bees had returned within 2 weeks. Most naturally occurring nest sites, because there are so few of them and they are in demand by numerous species, require intense monitoring and manipulation in order to maintain an attractive, suitable environment for blue-throated macaws.

Disease

Macaws are susceptible to many bacterial, parasitic, and viral diseases

(Kistler *et al.* 2009, p. 2,176; Portaels *et al.* 1996, p. 319; Bennett *et al.* 1991). Macaws are prone to many viral infections such as retrovirus, pox virus, and paramyxovirus, which can cause weakened immune systems and subsequent death (Gaskin 1989, pp. 249, 251, 252). Recently, an examination of tissue revealed the likely presence of the pox virus in dead blue-throated macaw nestlings, indicating that close contact between blue-throated macaws and domestic poultry may be facilitating pathogen transmission to this species (Wildlife Conservation Society (WCS) *in litt.* 2011). In one location within the limited range of the species, blue-throated macaws share water sources with chickens, ducks, and other birds (WCS *in litt.* 2011; Kingsbury 2010, p. 83). Blue-throated macaws in this area are being closely monitored to decrease the possibility of transmission of the pox virus; however, it remains a concern.

Proventricular dilatation disease (PDD) is one of the most serious diseases known to affect parrots (Kistler *et al.* 2008, p. 2). PDD, also known as avian born virus (ABV) or macaw wasting disease, is a fatal disease that poses a serious threat to all captive-held and wild parrots worldwide, particularly those with very small populations (Kistler *et al.* 2008, p. 1; Abramson *et al.* 1995, p. 288). This contagious disease causes damage to the nerves of the upper digestive tract, so that food digestion and absorption are negatively affected. The disease has a 100-percent mortality rate in affected birds, although the exact manner of transmission between birds is unclear (Kistler *et al.* 2008, p. 1). PDD has been documented in several continents in more than 50 different parrot species and in free-ranging species in at least five other orders of birds (Kistler *et al.* 2008, p. 2). This disease is concerning because blue-throated macaws share water sources with other species of birds, and this disease could be transmitted between individuals that are within close range.

This species is closely monitored in the wild; conservationists working with this species are taking precautions so that diseases are not introduced into the wild population. Despite close monitoring and precautions, disease is likely to affect this extremely small population; therefore, we are concerned that diseases will become problematic to this species in the wild. At this time, we do not find that disease is contributing to the risk of extinction of blue-throated macaws, but it may affect this species in the future.

Small Population Size

An additional factor that affects the continued existence of this species is its small, declining population of likely fewer than 500 individuals in the wild. Recently, two observations have been made: (1) Malformations in chicks, and (2) reduced fertility in many reproductive pairs (WCS *in litt.* 2011). Small, rapidly declining populations of species, combined with other threats such as reduced reproductive success, lead to an increased risk of extinction (Strem and Bouzat 2012, p. 22; Harris and Pimm 2008, p. 169).

Species tend to have a higher risk of extinction if they occupy a small geographic range and occur at low density (Purvis *et al.* 2000, p. 1949). A small, declining population size renders a species vulnerable to any of several risks including inbreeding depression, loss of genetic variation, and accumulation of new mutations. A species' small population size, combined with its restricted range may increase the species' vulnerability to adverse natural events and manmade activities that destroy individuals and their habitat (Holsinger 2000, pp. 64–65; Young and Clarke 2000, pp. 361–366; Primack 1998, pp. 279–308). Extinction risk is heightened in small, declining populations by an increased vulnerability to the loss of genetic variation due to inbreeding depression and genetic drift (changes in relative frequency of gene sequences). This, in turn, compromises a species' ability to adapt genetically to changing environments (Frankham 1996, p. 1507) and reduces fitness, thus increasing extinction risk (Reed and Frankham 2003, pp. 233–234). Inbreeding can have individual or population-level consequences either by increasing the phenotypic expression (the outward appearance or observable structure, function, or behavior of a living organism) of recessive, deleterious alleles (harmful gene sequences) or by reducing the overall fitness of individuals in the population (Charlesworth and Charlesworth 1987, p. 231; Shaffer 1981, p. 131).

Strem and Bouzat indicated in their population viability analysis (PVA) that continuing threats, such as declines in abundance, small population size, and low population growth rates, make this species highly vulnerable to any change (2012, p. 12). Their study indicated that even small increases in habitat loss (2 percent) and population harvesting (3 percent) had severe effects on the population (2012, p. 12). We note that Strem and Bouzat conducted the PVA simulations using only published data

on the blue-throated macaw population size (2012, p. 13). However, even considering the recent discovery of a new population, the researchers indicated that “multiple anthropogenic factors threaten the species’ survival over the long term” (Strem and Bouzat 2012, p. 22). They noted that the results showed that the blue-throated macaw has a relatively low probability of extinction over the next 50 years. However, they also noted that after the 50- to 100-year period considered for the simulations, population decreased considerably to approximately half of the initial abundance (Strem and Bouzat 2012, p. 22).

This species faces many challenges: it has many predators, limited suitable habitat, and competition from other species for nest sites, in addition to its small population size. Any loss of potentially reproducing individuals could have a devastating effect on the ability of its population to increase. Small populations have a higher risk of extinction due to random environmental events (Shaffer 1987, pp. 69–75; Gilpin and Soule 1986, pp. 24–28; Shaffer 1981, p. 131). Because of its small population and restricted range, the blue-throated macaw is vulnerable to random environmental events; in particular, it is threatened by extreme precipitation events and nest flooding.

Removal From the Wild

Removal of macaws from the wild over the past few hundred years contributed to this species’ small population size (LPF 2012; Herrera and Hennessey 2009, p. 233; Kyle 2007a). Macaws, both live and dead, have been a significant part of Bolivian culture for thousands of years. Evidence of this exists in pre-Colombian Andean feather art (American Museum of Natural History 2012). Feathers have been used historically in headdresses, and parrots have been used in ceremonial sacrifices (American Museum of Natural History 2012; Berdan 2004, p. 4; Creel and McKusick 1994, pp. 510–511). Feathers of blue-throated macaws would still be used for headdresses today if it were not for intervention and education programs implemented by nongovernmental conservation organizations (NGCOs) (BLI 2012; LPF 2010; LPF 2003, p. 29). In addition to being used in ceremonies and costumes, there is evidence that parrots have been household pets since at least A.D. 1000 (Creel and McKusick 1994, pp. 513–515) as evidenced in burial remains; live macaws likely had commercial value even during that time period. Parrots were traded over long distances; archeological remains indicate that parrots were found well

outside their native range (Creel and McKusick 1994, pp. 515–516).

Historically, the most significant impact to the decline of this species’ population was likely due to collection of birds from the wild during the late 1800s and early 1900s (Yamashita and M. de Barros 1997, p. 144). During this time period, bird-skin traders of European descent sold thousands of bird skins, particularly in the United States, for at least three generations (Yamashita and M. de Barros 1997, p. 144; Trimble 1936, pp. 41–43).

The Inadequacy of Existing Regulatory Mechanisms

Under the Act, we are required to evaluate whether the existing regulatory mechanisms are adequate. There are limited regulatory mechanisms in place to protect this species (de la Torre *et al.* 2011, p. 334; Herrera and Hennessey 2007, p. 295; LPF 2003, pp. 6–7). This species is considered critically endangered by the International Union for Conservation of Nature (IUCN) (BLI 2012; LPF 2012). However, IUCN rankings do not confer any actual protection or management. This species is listed in Appendix I of the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) (CITES 2012). CITES regulates international trade in animal and plant species listed under the Convention. For additional information on CITES, visit <http://www.cites.org>. An Appendix-I listing includes species threatened with extinction whose trade is permitted only under exceptional circumstances, which generally precludes commercial trade. These protections under CITES were put in place for the blue-throated macaw because the species had suffered substantial population declines throughout its range due to habitat destruction and overexploitation.

The government of Bolivia has enacted various laws and regulatory mechanisms to protect and manage wildlife and their habitats in Bolivia. For example, the Bolivian Government prohibits and imposes sanctions against the possession and the trafficking of any protected species, such as the blue-throated macaw (LPF Recovery Plan 2003, p. 7). Additionally, the CITES listing and the ban by the Bolivian Government in 1984 to export this species effectively limit legal international trade (LPF 2012; Herrera and Hennessey 2009, pp. 233–234; LPF Recovery Plan 2003, p. 7). However, even after the export of this species was prohibited in the 1980s, and despite the laws in place and the intense conservation efforts ongoing for this

species, localized illegal trade is still occurring.

International trade in this species is now negligible (<http://www.unep-wcmc.org>, accessed June 4, 2012). International trade of the blue-throated macaw was initially restricted by the listing of the species in Appendix II of CITES in 1981, and in 1983, the species was transferred from Appendix II to Appendix I. The World Conservation Monitoring Centre (WCMC) at the United Nations Environment Programme (UNEP) manages a CITES Trade Database on behalf of the CITES Parties. Each Party to CITES is responsible for compiling and submitting annual reports to the CITES Secretariat regarding their country’s international trade in species protected under CITES. Data obtained from UNEP-WCMC (<http://www.unep-wcmc.org/citestrade>) show that during the 2-year period (1981–1982) that the blue-throated macaw was listed in Appendix II, a total of 29 specimens (all live birds) were legally exported from Bolivia. The trade database indicates that a total of 84 specimens (all live birds) have been exported from Bolivia since the species was listed in Appendix I in 1983, with no specimens traded between 1993 and 2010). The CITES database does not indicate any trends in the trade data to cause concern.

In addition to Bolivia’s restrictions and the trade restrictions implemented through CITES, the Wild Bird Conservation Act (WBCA) that was enacted in 1992 in the United States may have assisted in dampening the demand for this species. The purpose of the WBCA is to promote the conservation of exotic birds and to ensure that importation of exotic birds into the United States does not negatively affect wild populations. The WBCA generally restricts the importation of most CITES-listed live or dead exotic birds except for certain limited purposes such as zoological display or cooperative breeding programs. Import of dead specimens is allowed for scientific specimens and museum specimens. The Service may approve cooperative breeding programs and subsequently issue import permits under such programs. Wild-caught birds may be imported into the United States if certain standards are met and they are subject to a management plans that provides for sustainable use. Parrot imports to the United States were already declining before the enactment of the WBCA, but the WBCA contributed to curtailing the import of wild parrots.

Although international trade is not a concern, poaching for local sale continues to occur (LPF 2012; Herrera and Hennessey 2009, p. 233; Kyle 2007a). Although Bolivia banned the export of live parrots in 1984 (Brace et al. 1995, pp. 27–28), localized illegal trade within South America continued to occur, although it became less frequent (Herrera and Hennessey 2009, p. 233). For example, in 1993, investigators reported that an Argentinian bird dealer was offering Bolivian dealers a “high price” for blue-throated macaws (Jordan and Munn 1993, p. 695).

More recently, a study of markets in Santa Cruz, Bolivia estimated that over 22,000 individuals of 31 parrot species were illegally traded during 2004–2005, despite Bolivian laws (Herrera and Hennessey 2007, p. 298). Bolivian Law 1333 (Ministerio de Desarrollo Sostenible y Planificación 1999), Article 111 states that all persons involved in trade, capture, and transportation without authorization of wild animals will suffer a 2-year prison sentence together with a fine equivalent to 100 percent of the value of the animal. This law is supported by an addendum that states that all threatened species are of national importance and must be protected (Herrera and Hennessey 2007, p. 295). Asociación Armonía (a nonprofit organization in Bolivia) monitored the trade of wild birds that passed through a pet market in Santa Cruz, Bolivia between July 2004 to December 2007 (Herrera and Hennessey 2009, p. 233; Herrera and Hennessey 2007, p. 295). During the 2004–2005 study period, none of the parrots found were blue-throated macaws. In 2006, two blue-throated macaws were found for sale (Herrera and Hennessey 2009, p. 233). However, the blue-throated macaw was absent in the market during the monitoring period prior to 2006, and no blue-throated macaws were found for sale in this market in 2007 (Herrera and Hennessey 2009, p. 233; Herrera and Hennessey 2007, p. 295). This absence of the species in the market may be due either to the effectiveness of the ongoing conservation programs and laws in Bolivia, or it may be indicative of the scarcity of blue-throated macaws in the wild. Ninety-four percent of the birds documented were believed to be wild-caught. This illegal activity occurs despite the national laws that ban unauthorized trade (Herrera and Hennessey 2007, p. 298).

The high value of this species could lead to continued illegal trade. An internet search indicated that captive-bred specimens of this species sell for between \$1,500 and \$3,000 in the

United States (<http://www.hoobly.com>, accessed September 13, 2010). One search advertised that this is a “very rare species and there are only 300 left in the wild.” However, alternatively, because these birds are not difficult to breed in captivity, the supply of captive-bred birds has increased, which some experts believe may be alleviating illegal collection of wild birds (Waugh 2007a).

Removal of blue-throated macaws from the wild can have a particularly devastating effect given their low reproductive rate and slow recovery from various environmental pressures (Lee 2010, p. 3; Wright *et al.* 2001, p. 711). Some blue-throated macaws have even been used for fish bait (Kyle 2007a, p. 7). The remains of a blue-throated macaw were found near a lake stuffed into a tree cavity with a bag of salt (Kyle 2007a, p. 7). Because this species has so few individuals remaining, any removal from the wild is extremely detrimental to the survival of the species when considered with all of the other factors acting upon the species.

Other Factors

An additional factor that affects the nesting success of blue-throated macaws is the availability of food sources—not only the abundance of food, but the timing of its availability. Phenology (how the timing of plant life cycle events interacts with animal biological processes) is influenced by variations in climate. The timing of motacú palm fruit production is critical for various life stages of the blue-throated macaw, particularly during the period following hatching. The motacú palms, on which blue-throated macaws depend for nesting as well as feeding, are affected by drought, burning, and excessive rainfall. In years when there is significant drought or excessive rainfall, the fruiting abundance and timing of fruit production can significantly affect the success of nestlings, or it can prohibit blue-throated macaws from even attempting to nest (Kyle 2007). In some seasons when food is not as plentiful, breeding pairs may choose not to brood, and the weakest of the nestlings are neglected by its parents and die of starvation (Kyle 2007a, pp. 4–5). During these times, in some cases, the diet is supplemented by these conservation organizations; however, it is a very intensive process.

In summary, there are many factors that are causing stress to this species’ population in the wild. It is affected by several factors such as habitat loss and degradation (factor A), poaching to a limited extent (factor B), predation (factor C), and nest flooding and lack of nest sites in part due to competition

from other species but also due to habitat loss and degradation (factor E). Despite numerous laws and regulatory mechanisms to administer and manage wildlife and their habitats, existing laws are inadequate (factor D) to protect the species and its habitat from these other factors. Combined with its reduced population size, the species lacks sufficient redundancy and resiliency to recover from present and future threats without intervention and intense conservation actions. This was corroborated by the recent PVA conducted in 2012, regarding the viability of the population of the blue-throated macaw (Strem and Bouzat 2012, p. 22). Overall, the researchers indicate that population growth rates are likely not at replacement levels because the species has undergone a rapid population reduction over the past 50 years, in part due to habitat loss and poaching (Strem and Bouzat 2012, p. 20). The PVA found that growth rate estimates do not reach the rate of replacement necessary to maintain the viability of population over the long term (Strem and Bouzat 2012, p. 20), making the species particularly vulnerable to any change or threat. These factors acting on the species are expected to continue into the future.

In-situ Conservation

This species is considered by many organizations to be the most endangered macaw remaining in the wild (BLI 2012; World Parrot Trust (WPT) 2012; LPF 2010; LPF 2003, p. 4). Several NGOs are working intensely on various conservation projects to protect this species and its habitat. Various NGOs have been involved in the conservation of this species since 1995, with authorization from the Bolivian Government (Waugh 2013, pers. comm.; Gilardi 2012, pers. comm.; LPF 2002, p. 10). NGOs involved include Asociación Armonía (Bolivia’s BirdLife International partner), the Loro Parque Fundación (LPF), and WPT. A species recovery plan that provides the basis for the blue-throated macaw conservation program was approved by Bolivia’s Ministry for Sustainable Development in 2004, and has been in place since then (LPF 2003, pp. 6–7).

Within its breeding range, a multitude of efforts are in progress to conserve the species (Waugh 2013, pers. comm.; Gilardi 2012, pers. comm.; Berkunsky 2010, p. 5, Kyle 2007, pp. 1–11). Conservation measures include constant monitoring, protection, and manipulation of nests; supplementing nestlings’ diet when food sources are scarce; agreements with private landowners to protect this species’

habitat; patrolling existing macaw habitat by foot and motorbike; and monitoring the Beni lowlands for additional populations (LPF 2012; Kyle 2007a; Snyder *et al.* 2000). NGOs have implemented cooperation agreements with the Federation of Cattle Farmers of the Beni (FEGABENI) and the local authorities in Trinidad, Bolivia (LPF *et al.* 2003, p. 6).

Land acquisition to expand protected habitat for this species has been funded by the World Land Trust and the Loro Parque Fundación (Waugh 2013, pers. comm.). In 2008, Asociación Armonía and LPF purchased a 3,555-ha (8,785-ac) reserve for the purpose of establishing a protected area for the blue-throated macaw (World Land Trust 2010, <http://www.worldlandtrust-us.org>, accessed July 16, 2010; BLI 2008). In 2010, the Barba Azul Nature Reserve ("Reserve") was expanded by 1,123 ha (2,775 ac), creating a total protected area for the blue-throated macaws of 4,664 ha (11,525 ac) (Asociación Armonía 2012). Currently, this Reserve is the only protected area designated for the blue-throated macaw. The legal protections that apply fall under Bolivian Law 1333 (Ministerio de Desarrollo Sostenible y Planificación 1999), Article 111. This Reserve protects savanna habitat, and habitat restoration is occurring in the Reserve, although it is unclear the extent the Reserve is used by blue-throated macaws. The actual protections in place include monitoring of habitat, local education and awareness programs about the species, and establishment of suitable nesting sites. Approximately 70 blue-throated macaws have been observed in or around this Reserve (Herrera 2012, pers. comm.); however, these macaws may be some of the same macaws that are observed in other parts of the species' range during the breeding season (Berkunsky 2012, pers. comm.).

Despite the existence of the Reserve, there are no nests in the Reserve that are known to be occupied by blue-throated macaws (Herrera 2012, pers. comm.). Although the species is present in the Barba Azul Nature Reserve, it has not yet been shown to be breeding there (Waugh 2013, pers. comm.). There is evidence that they use the Reserve for feeding (Herrera 2012, pers. comm.; Kingsbury 2010, pp. 69–82). New information provided indicates that the blue-throated macaws that inhabit this Reserve and adjacent ranches are different than the birds in the southern portion of its range (see Appendix A for a map of the species' range; Strem and Bouzat 2012, p. 23; Milpacher 2012, pers. comm.; Herrera 2012, pers. comm.). Other than the Barba Azul Nature Reserve, there are no protected

areas in the Llanos de Mojos except the Beni Biosphere Reserve, which has been in existence since 1986. However, to our knowledge, the blue-throated macaw does not use the Beni Biosphere Reserve (Hesse and Duffield 2000, p. 258).

In addition to conservation efforts, the NGOs working in Bolivia are conducting field research to better understand the current state of this species. However, the conservation work is difficult due to various factors that affect the species. Because some of this species' habitat is flooded for 6 months of the year, monitoring its habitat is difficult during certain seasons (Berkunsky 2010, p. 5). There have also been discussions of reintroducing captive-raised birds into the wild; however, this practice could inadvertently introduce disease into the wild population if precautions are not taken to minimize the transmission of disease to other blue-throated macaws (Sainsbury *et al.* 2012, p. 442).

Another conservation measure in place is research on the motacú palm (Milpacher 2012, pers. comm.) because the number of motacú palms is decreasing. This palm species plays a significant role in the life cycle of the blue-throated macaw. One study found that the old and senescent motacú palms are significantly more abundant than the younger palms (LPF 2003, p. 21). Based on their findings, researchers concluded that the islands containing motacú are not regenerating motacú palms sufficiently. It is likely that the lack of regeneration is due to overgrazing by cattle and excessive use of fire over centuries (Kyle 2006, p. 5). The World Parrot Trust has recently attempted several small-scale palm germination experiments to assess reestablishing palm habitat (Milpacher 2012, pers. comm.). The motacú palm has commercial value in addition to its ecological role. Palm trees are used for a multitude of purposes, such as thatch for housing, fruit, and palm oil (de la Torre *et al.* 2011, pp. 327–369; Zambrana *et al.* 2007, pp. 2771–2778). Motacú palm-dominated islands may have persisted in part due to their various ecological and commercial values, but they certainly persist in part because the islands are raised areas within the lowlands that are prone to flooding. With respect to the short term, local researchers believe that there will be adequate motacú fruits in the region for a few more decades (LPF 2003, p. 21); however, research on the motacú is vital to the conservation of the blue-throated macaw.

Educational awareness programs are in place in addition to research and monitoring. As an example, the

Asociación Armonía is involved in an awareness campaign to encourage that the protection and conservation of these birds occurs at a local level (e.g., protection of macaws from trappers and the sustainable management of key habitats, such as palm groves and forest islands, on private property) (Llampa 2007; BLI 2008a; Snyder *et al.* 2000). Two educational awareness centers have been established in the towns of Santa Ana del Yacuma and Santa Rosa del Yacuma (LPF 2010, p. 16). In response to the limited but continued poaching that occurs in the wild, LPF initiated a travelling exhibition, "Extinction is Forever," which visited 17 urban localities in Bolivia in 2010 (LPF 2010, p. 15). The exhibition includes 21 photographs that explain the ancestral and present-day relationship between people and birds, and highlights the effects of illegal trade of wild birds in Bolivia currently. An estimated 1,000 visitors attended each showing in the main cities (LPF 2010, p. 15).

Reproductive success is vital to the blue-throated macaw's recovery, and this species faces many challenges to successfully reproducing. This species' nests often have an open crown (i.e., no roof) and are prone to flooding (Berkunsky 2010, p. 4; Kyle 2007a, p. 3). During many seasons, nests, eggs, and nestlings are destroyed due to flooding. Both WBT and Asociación Armonía have been conducting conservation activities, such as installation of artificial nest boxes that provide safe habitat, manipulating nests so that they do not flood, and discouraging predators and nest competitors. The installation of a multitude and variety of nest boxes is a way to boost breeding success. Because many other species compete for these nest boxes, and blue-throated macaws tend to re-use previously used nesting sites, the process of introducing nest boxes and encouraging blue-throated macaws to use them, while discouraging other species from using them, is a very time-intensive process. Despite all of these conservation efforts, fewer than 500 individuals of this species are believed to remain in the wild. In summary, the conservation efforts underway are abundant, but will need to continue in order to have lasting impacts on the species.

It is our policy that we do not consider captive-held specimens in our analysis of the five factors under Section 4(a) of the Act; we do not believe that it was within the Congressional intent when the Act was written, unless there is some obvious reason for doing so. For additional background on our interpretation of the provisions of the

Act, see 78 FR 35204, June 12, 2013. We do not believe that captive-held members of blue-throated macaws either create or contribute to threats to the species or remove or reduce threats to the species. There are likely more than 1,000 individual blue-throated macaws held in captivity worldwide according to the 2011 North American Regional Studbook, however, many of these birds are of uncertain origin (Anderson 2011, p. 4). We also note that it is not possible to separate captive-held specimens as a different legal status under the Act.

Finding (Listing Determination)

In assessing whether the blue-throated macaw meets the definition of an endangered or threatened species, we considered the five factors in section 4(a)(1) of the Act. A species is “endangered” for purposes of the Act if it is in danger of extinction throughout all or a significant portion of its range and is “threatened” if it is likely to become endangered within the foreseeable future throughout all or a significant portion of its range. In considering what factors might constitute threats to a species, we must look beyond the mere exposure of the species to the factor to evaluate whether the species may respond to the factor in a way that causes actual impacts to the species. If there is exposure to a factor and the species responds negatively, the factor may be a threat and we attempt to determine how significant a threat it is. The threat is significant if it drives, or contributes to, the risk of extinction of the species such that the species may warrant listing as endangered or threatened as those terms are defined in the Act. We conducted a review of the status of this species and assessed whether the blue-throated macaw is endangered or threatened throughout all or a significant portion of its range.

We have assessed the best scientific and commercial information available regarding the past, present, and future threats affecting this species. Historically, the blue-throated macaw existed in much higher numbers in more continuous, connected habitat; its suitable habitat is now extremely small. Its small population size, combined with its restricted range, increases the species’ vulnerability to adverse natural events that destroy individuals and their habitat. It is subject to inbreeding depression, loss of genetic variation, and accumulation of new mutations. In addition to its small population size, many factors currently affect blue-throated macaws. These include: Inadequate nest sites (both in abundance and effectiveness); nest (clutch) failure (when one or all of the

nestlings fail to survive to fledgling stage due to a variety of reasons such as starvation, inadequate nutrition, sibling competition); nest flooding; bottlies; competition for nests with more competitive species, such as bees, and other avian species, such as large woodpeckers and other macaw species; and predation by numerous species, particularly other bird species (such as toucans, owls, vultures, other raptors, and even other macaw species). Regulatory mechanisms are ineffective at reducing the factors affecting the blue-throated macaw (Factor D).

We have determined that captive-held specimens cannot be given separate consideration under the ESA based on their captive state (see 78 FR 35204, June 12, 2013), but captive-held specimens can, in some cases, create, contribute to, reduce, or remove threats to the species. We have no information in this case indicating that captive-held blue-throated macaws either create or contribute to threats to this species or remove or reduce threats to the species. Due to the effectiveness of CITES and, in the United States, the WBCA, international trade for pets is not a concern. Removal of some birds from the wild for the pet trade may still be occurring, but there is no information indicating to what extent animals currently held in captivity are motivating poachers to capture and remove additional birds from the wild. Regarding whether captive-held birds reduce any threats to the species, there are likely more than 1,000 individual blue-throated macaws held in captivity worldwide according to the 2011 North American Regional Studbook. However, many of these birds are of uncertain origin (Anderson 2011, p. 4) and may harbor diseases that do not exist in the wild population and therefore may not be suitable for reintroduction efforts.

Our review of the information pertaining to the five threat factors supports a conclusion that these factors place the blue-throated macaw in danger of extinction throughout all of its range, such that a listing of endangered is warranted. The species is currently in danger of extinction because the species exists at such low levels that it is vulnerable to a multitude of threats. Given the species’ low reproductive capacity, it is very difficult to increase to the levels of abundance that allow the species to withstand such events. All of these factors are now and will continue to result in threats to the continued existence of the species. We also examined the blue-throated macaw to analyze if any other listable entity under the definition of “species,” such as subspecies or distinct population

segments, may qualify for a different status. However, because of the magnitude and uniformity of the threats throughout its range, we find that there are no other listable entities that may warrant a different determination of status. Since threats extend throughout its entire range, it is unnecessary to determine if the blue-throated macaw is in danger of extinction throughout a significant portion of its range.

Based on our evaluation of the best available scientific and commercial information and given its current population size, and severely limited distribution throughout its historical range, we have determined the species is in danger of extinction throughout all of its range and thus meets the definition of an endangered species. Because the species is in danger of extinction now, as opposed to in the foreseeable future, the blue-throated macaw meets the definition of an endangered species rather than a threatened species. Therefore, we are listing the blue-throated macaw as endangered under the Act.

Available Conservation Measures

Conservation measures provided to species listed as endangered under the Act include recognition, requirements for Federal protection, and prohibitions against certain practices. Recognition through listing results in public awareness, and encourages and results in conservation actions by Federal and State governments, private agencies and interest groups, and individuals.

The Act and its implementing regulations set forth a series of general prohibitions and exceptions that apply to all endangered wildlife. These prohibitions, at 50 CFR 17.21, in part, make it illegal for any person subject to the jurisdiction of the United States to “take” (includes harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or to attempt any of these) within the United States or upon the high seas; import or export; deliver, receive, carry, transport, or ship in interstate or foreign commerce in the course of commercial activity; or sell or offer for sale in interstate or foreign commerce any endangered wildlife species. It also is illegal to possess, sell, deliver, carry, transport, or ship any such wildlife that has been taken in violation of the Act. Certain exceptions apply to agents of the Service, other Federal land management agencies, the National Marine Fisheries Service, and State conservation agencies.

Permits may be issued to carry out otherwise prohibited activities involving endangered wildlife species under certain circumstances.

Regulations governing permits for endangered species are codified at 50 CFR 17.22. With regard to endangered wildlife, a permit may be issued for the following purposes: For scientific purposes, to enhance the propagation or survival of the species, and for incidental take in connection with otherwise lawful activities.

Clarity of Rule

We are required by Executive Orders 12866 and 12988 and by the Presidential Memorandum of June 1, 1998, to write all rules in plain language. This means that each rule we publish must:

- (a) Be logically organized;
- (b) Use the active voice to address readers directly;
- (c) Use clear language rather than jargon;
- (d) Be divided into short sections and sentences; and
- (e) Use lists and tables wherever possible.

If you feel that we have not met these requirements, send us comments by one of the methods listed in the **ADDRESSES** section. To better help us revise the rule, your comments should be as specific as possible. For example, you should tell us the names of the sections

or paragraphs that are unclearly written, which sections or sentences are too long, the sections where you feel lists or tables would be useful, etc.

National Environmental Policy Act (NEPA)

We have determined that environmental assessments and environmental impact statements, as defined under the authority of the National Environmental Policy Act of 1969 (42 U.S.C. 4321 *et seq.*), need not be prepared in connection with regulations adopted under section 4(a) of the Act. We published a notice outlining our reasons for this determination in the **Federal Register** on October 25, 1983 (48 FR 49244).

References Cited

A list of all references cited in this rule is available on the Internet at <http://www.regulations.gov> under Docket No. FWS-R9-ES-2012-0034 or upon request from the Branch of Foreign Species, Endangered Species Program, U.S. Fish and Wildlife Service.

Author

The primary author of this rule is Amy Brisendine, Branch of Foreign

Species, Endangered Species Program, U.S. Fish and Wildlife Service.

List of Subjects in 50 CFR Part 17

Endangered and threatened species, Exports, Imports, Reporting and recordkeeping requirements, Transportation.

Regulation Promulgation

Accordingly, we amend part 17, subchapter B of chapter I, title 50 of the Code of Federal Regulations, as set forth below:

PART 17—[AMENDED]

- 1. The authority citation for part 17 continues to read as follows:

Authority: 16 U.S.C. 1361–1407; 1531–1544; and 4201–4245, unless otherwise noted.

- 2. Amend § 17.11(h) by adding a new entry for “Macaw, blue-throated” in alphabetical order under BIRDS to the List of Endangered and Threatened Wildlife to read as follows:

§ 17.11 Endangered and threatened wildlife.

* * * * *

(h) * * *

Species		Historic range	Vertebrate population where endangered or threatened	Status	When listed	Critical habitat	Special rules
Common name	Scientific name						
* BIRDS	*	*	*	*	*		*
* Macaw, blue-throated.	* <i>Ara glaucogularis</i>	* Bolivia	* Entire	* E	* 814	* NA	* NA
*	*	*	*	*	*		*

* * * * *

Dated: September 20, 2013.

Rowan W. Gould,

Acting Director, U.S. Fish and Wildlife Service.

[FR Doc. 2013-24215 Filed 10-2-13; 8:45 am]

BILLING CODE 4310-55-P

Proposed Rules

Federal Register

Vol. 78, No. 192

Thursday, October 3, 2013

This section of the FEDERAL REGISTER contains notices to the public of the proposed issuance of rules and regulations. The purpose of these notices is to give interested persons an opportunity to participate in the rule making prior to the adoption of the final rules.

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2013-0862; Directorate Identifier 2012-NM-098-AD]

RIN 2120-AA64

Airworthiness Directives; Dassault Aviation Airplanes

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Notice of proposed rulemaking (NPRM).

SUMMARY: We propose to adopt a new airworthiness directive (AD) for certain Dassault Aviation Model FALCON 2000 and FALCON 2000EX airplanes. This proposed AD was prompted by a determination that new center of gravity (CG) limits applicable during takeoff with a Slat/Flap SF2 setting are necessary. This proposed AD would require revising the airplane flight manual (AFM) to include procedures to advise the flightcrew of the new CG limits. We are proposing this AD to prevent an erratic takeoff path and consequent reduced controllability of the airplane.

DATES: We must receive comments on this proposed AD by November 18, 2013.

ADDRESSES: You may send comments by any of the following methods:

- **Federal eRulemaking Portal:** Go to <http://www.regulations.gov>. Follow the instructions for submitting comments.
- **Fax:** (202) 493-2251.
- **Mail:** U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE., Washington, DC 20590.
- **Hand Delivery:** U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE., Washington, DC, between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

For Dassault service information identified in this proposed AD, contact Dassault Falcon Jet, P.O. Box 2000, South Hackensack, NJ 07606; telephone 201-440-6700; Internet <http://www.dassaultfalcon.com>. For Aviation Partners Inc. service information identified in this proposed AD, contact Aviation Partners Inc., 7299 Perimeter Road South, Seattle, WA 98108; telephone 800-946-4638; Internet <http://www.aviationpartners.com>. You may review copies of the referenced service information at the FAA, Transport Airplane Directorate, 1601 Lind Avenue SW., Renton, WA. For information on the availability of this material at the FAA, call 425-227-1221.

Examining the AD Docket

You may examine the AD docket on the Internet at <http://www.regulations.gov>; or in person at the Docket Operations office between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this proposed AD, the regulatory evaluation, any comments received, and other information. The street address for the Docket Operations office (telephone (800) 647-5527) is in the **ADDRESSES** section. Comments will be available in the AD docket shortly after receipt.

FOR FURTHER INFORMATION CONTACT: Tom Rodriguez, Aerospace Engineer, International Branch, ANM-116, Transport Airplane Directorate, FAA, 1601 Lind Avenue SW., Renton, WA 98057-3356; telephone (425) 227-1137; fax (425) 227-1149.

SUPPLEMENTARY INFORMATION:

Comments Invited

We invite you to send any written relevant data, views, or arguments about this proposed AD. Send your comments to an address listed under the **ADDRESSES** section. Include "Docket No. FAA-2013-0862; Directorate Identifier 2012-NM-098-AD" at the beginning of your comments. We specifically invite comments on the overall regulatory, economic, environmental, and energy aspects of this proposed AD. We will consider all comments received by the closing date and may amend this proposed AD based on those comments.

We will post all comments we receive, without change, to <http://www.regulations.gov>, including any personal information you provide. We

will also post a report summarizing each substantive verbal contact we receive about this proposed AD.

Discussion

The European Aviation Safety Agency (EASA), which is the Technical Agent for the Member States of the European Community, has issued EASA Airworthiness Directive 2012-0081, dated May 14, 2012 (referred to after this as the Mandatory Continuing Airworthiness Information, or "the MCAI"), to correct an unsafe condition for the specified products. The MCAI states:

During a test flight on a Falcon 2000EX equipped with winglets (commercial designation Falcon 2000LX), performed for the certification of a maximum takeoff weight increase, the aeroplane took off and experienced unsatisfactory control characteristics under specific combined conditions of loading, slat-flap setting and horizontal tailplane trim setting. The weight and the Center of Gravity (CG) of the aeroplane during that test flight were within the already certified limits.

This condition, if not corrected, could result in an erratic take-off path and reduced control of the aeroplane, which could ultimately jeopardize the aeroplane safe flight.

To address this condition, Dassault Aviation developed Change Proposal (CP) 036 to the Airplane Flight Manual (AFM), which introduced new CG limits which are applicable during take-off with Slat/Flap SF2 setting.

Since issuance of EASA PAD 11-077, Dassault Aviation issued a normal AFM revision currently at revision 15, which incorporates Dassault Aviation CP 036.

For the reasons described above, this [EASA] AD requires amendment of the applicable AFM to ensure that the flight crew applies the appropriate operational procedure.

You may obtain further information by examining the MCAI in the AD docket.

Relevant Service Information

Dassault Aviation has issued Revision 15 to the Falcon 2000EX EASy, 2000DX, and 2000LX Airplane Flight Manual (AFM) DGT88898, dated October 30, 2011 (for Model 2000EX airplanes).

Aviation Partners Inc. has issued AFM Supplement APF2-0601, Code 002, Revision 3, dated June 1, 2012 (for Model FALCON 2000 airplanes), and AFM Supplement APF2-0601, Code 001, Revision 4, dated June 1, 2012 (for Model FALCON 2000EX airplanes).

The actions described in this service information are intended to correct the unsafe condition identified in the MCAI.

FAA's Determination and Requirements of This Proposed AD

This product has been approved by the aviation authority of another country, and is approved for operation in the United States. Pursuant to our bilateral agreement with the State of Design Authority, we have been notified of the unsafe condition described in the MCAI and service information referenced above. We are proposing this AD because we evaluated all pertinent information and determined an unsafe condition exists and is likely to exist or develop on other products of the same type design.

Differences Between This Proposed AD and the MCAI or Service Information

The applicability in the MCAI specifies Dassault Aviation Model Falcon 2000EX airplanes on which Dassault Aviation modification M2848 or Dassault Aviation Technical Instructions TI-F2000EX-M2846-ME or TI-F2000EX-M3118/M2846-ME has been embodied for the installation of winglets; including serial number 602. However, the applicability in this proposed AD would also include Model FALCON 2000 and Model FALCON 2000EX airplanes modified by Aviation Partners Incorporated Supplemental Type Certificate (STC) Number ST01987SE (installation of winglets). We have determined that this group of airplanes is subject to the same unsafe condition as the airplanes identified in the MCAI. In addition, the applicability in this AD would exclude Model FALCON F2000EX airplanes on which Dassault Modification M3254 or Dassault Service Bulletin F2000EX-300, Revision 1, dated May 17, 2013, has been embodied. We have determined that this group of airplanes is not subject to the same unsafe condition as the airplanes identified in the MCAI.

Although the MCAI does not include revising the AFM by incorporating the CG limits in Aviation Partners AFM Supplement APF2-0601, Code 002, Revision 3, dated June 1, 2012 (for Model FALCON 2000 airplanes), and AFM Supplement APF2-0601, Code 001, Revision 4, dated June 1, 2012 (for Model FALCON 2000EX airplanes); that requirement is included in this proposed AD.

These differences have been coordinated with EASA.

Costs of Compliance

Based on the service information, we estimate that this proposed AD would affect about 69 products of U.S. registry. We also estimate that it would take about 1 work-hour per product to comply with the basic requirements of this proposed AD. The average labor rate is \$85 per work-hour. Based on these figures, we estimate the cost of the proposed AD on U.S. operators to be \$5,865, or \$85 per product.

Authority for This Rulemaking

Title 49 of the United States Code specifies the FAA's authority to issue rules on aviation safety. Subtitle I, section 106, describes the authority of the FAA Administrator. "Subtitle VII: Aviation Programs," describes in more detail the scope of the Agency's authority.

We are issuing this rulemaking under the authority described in "Subtitle VII, Part A, Subpart III, Section 44701: General requirements." Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

Regulatory Findings

We determined that this proposed AD would not have federalism implications under Executive Order 13132. This proposed AD would not have a substantial direct effect on the States, on the relationship between the national Government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed above, I certify this proposed regulation:

1. Is not a "significant regulatory action" under Executive Order 12866;
2. Is not a "significant rule" under the DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979);
3. Will not affect intrastate aviation in Alaska; and
4. Will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

We prepared a regulatory evaluation of the estimated costs to comply with this proposed AD and placed it in the AD docket.

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

The Proposed Amendment

Accordingly, under the authority delegated to me by the Administrator, the FAA proposes to amend 14 CFR part 39 as follows:

PART 39—AIRWORTHINESS DIRECTIVES

- 1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

§ 39.13 [Amended]

- 2. The FAA amends § 39.13 by adding the following new AD:

Dassault Aviation: Docket No. FAA-2013-0862; Directorate Identifier 2012-NM-098-AD.

(a) Comments Due Date

We must receive comments by November 18, 2013.

(b) Affected ADs

None.

(c) Applicability

This AD applies to Dassault Aviation airplanes; certificated in any category; as identified in paragraphs (c)(1) and (c)(2) of this AD; except Model FALCON F2000EX airplanes on which Dassault Modification M3254 or Dassault Service Bulletin F2000EX-300, Revision 1, dated May 17, 2013, has been embodied.

(1) Model FALCON 2000EX airplanes on which Dassault Aviation modification M2848 or Dassault Aviation Technical Instructions TI-F2000EX-M2846-ME or TI-F2000EX-M3118/M2846-ME has been embodied for the installation of winglets; including serial number 602.

(2) Model FALCON 2000 and FALCON 2000EX airplanes modified by Aviation Partners Incorporated Supplemental Type Certificate (STC) ST01987SE (installation of winglets).

(d) Subject

Air Transport Association (ATA) of America Code 27, Flight Controls.

(e) Reason

This AD was prompted by a determination that new center of gravity (CG) limits applicable during takeoff with a Slat/Flap SF2 setting are necessary. We are issuing this AD to prevent an erratic takeoff path and consequent reduced controllability of the airplane.

(f) Compliance

You are responsible for having the actions required by this AD performed within the compliance times specified, unless the actions have already been done.

(g) Airplane Flight Manual (AFM) Revision

Within 14 days after the effective date of this AD: Revise the AFM by incorporating the CG limits in sub-sections 1–050–05C, Issue 2, and 1–050–05D, Issue 1, of the Weights and Loading Limitations section of the Dassault Aviation Falcon 2000EX EASy, 2000DX, and 2000LX AFM DGT88898, Revision 15, dated October 30, 2012 (for airplanes identified in paragraph (c)(1) of this AD); or by incorporating the CG limits in Aviation Partners Inc. AFM Supplement APF2–0601, Code 002, Revision 3, dated June 1, 2012 (for Model FALCON 2000 airplanes identified in paragraph (c)(2) of this AD), or AFM Supplement APF2–0601, Code 001, Revision 4, dated June 1, 2012 (for Model FALCON 2000EX airplanes identified in paragraph (c)(2) of this AD).

(h) Other FAA AD Provisions

The following provisions also apply to this AD:

(1) *Alternative Methods of Compliance (AMOCs)*: The Manager, International Branch, ANM–116, Transport Airplane Directorate, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. In accordance with 14 CFR 39.19, send your request to your principal inspector or local Flight Standards District Office, as appropriate. If sending information directly to the International Branch, send it to ATTN: Tom Rodriguez, Aerospace Engineer, International Branch, ANM–116, Transport Airplane Directorate, FAA, 1601 Lind Avenue SW., Renton, WA 98057–3356; telephone (425) 227–1137; fax (425) 227–1149. Information may be emailed to: 9-ANM-116-AMOC-REQUESTS@faa.gov. Before using any approved AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the local flight standards district office/certificate holding district office. The AMOC approval letter must specifically reference this AD.

(2) *Airworthy Product*: For any requirement in this AD to obtain corrective actions from a manufacturer or other source, use these actions if they are FAA-approved. Corrective actions are considered FAA-approved if they are approved by the State of Design Authority (or their delegated agent). You are required to assure the product is airworthy before it is returned to service.

(i) Related Information

Refer to Mandatory Continuing Airworthiness Information (MCAI) EASA Airworthiness Directive 2012–0081, dated May 14, 2012, for related information.

Issued in Renton, Washington, on September 25, 2013.

Jeffrey E. Duven,

Acting Manager, Transport Airplane Directorate, Aircraft Certification Service.

[FR Doc. 2013–24216 Filed 10–2–13; 8:45 am]

BILLING CODE 4910–13–P

SECURITIES AND EXCHANGE COMMISSION**17 CFR Parts 230 and 239**

[Release No. 33–9458; Release No. 34–70538; Release No. IC–30737; File No. S7–06–13]

RIN 3235–AL46

Amendments to Regulation D, Form D and Rule 156; Re-Opening of Comment Period

AGENCY: Securities and Exchange Commission.

ACTION: Proposed rule; reopening of comment period.

SUMMARY: On July 10, 2013, the Securities and Exchange Commission issued for comment a number of proposed amendments to Regulation D, Form D and Rule 156 under the Securities Act in Release No. 33–9416 (July 10, 2013). In light of the public interest in the proposed amendments, the Commission is re-opening the comment period to permit interested persons additional time to analyze and comment on the proposed amendments.

DATES: The comment period for the proposed rule published at 78 FR 44806 on July 24, 2013, is reopened until November 4, 2013.

ADDRESSES: Comments may be submitted by any of the following methods:

Electronic Comments

- Use the Commission's Internet comment form (<http://www.sec.gov/rules/proposed.shtml>);
- Send an email to rule-comments@sec.gov. Please include File Number S7–06–13 on the subject line; or
- Use the Federal eRulemaking Portal (<http://www.regulations.gov>). Follow the instructions for submitting comments.

Paper Comments

- Send paper comments in triplicate to Elizabeth M. Murphy, Secretary, Securities and Exchange Commission, 100 F Street NE., Washington, DC 20549–1090.

All submissions should refer to File Number S7–06–13. This file number should be included on the subject line if email is used. To help us process and review your comments more efficiently, please use only one method. The Commission will post all comments on the Commission's Internet Web site (<http://www.sec.gov/rules/proposed.shtml>). Comments are also available for Web site viewing and printing in the Commission's Public

Reference Room, 100 F Street NE., Washington, DC 20549 on official business days between the hours of 10:00 a.m. and 3:00 p.m. All comments received will be posted without change; we do not edit personal identifying information from submissions. You should submit only information that you wish to make available publicly.

FOR FURTHER INFORMATION CONTACT: Charles Kwon, Special Counsel, Office of Chief Counsel, or Karen C. Wiedemann, Attorney Fellow, Office of Small Business Policy, Division of Corporation Finance, at (202) 551–3500; or, with respect to private funds, Melissa Gainor or Alpa Patel, Senior Counsels, Investment Adviser Regulation Office, Division of Investment Management, at (202) 551–6787, Securities and Exchange Commission, 100 F Street NE., Washington, DC 20549.

SUPPLEMENTARY INFORMATION:**I. Background**

In July 2013, the Commission issued for comment a number of proposed amendments to Regulation D, Form D and Rule 156 under the Securities Act.¹ These proposed amendments are intended to enhance the Commission's ability to evaluate the development of market practices in Rule 506 offerings and to address concerns that may arise in connection with permitting issuers to engage in general solicitation and general advertising under new paragraph (c) of Rule 506. Specifically, the proposed amendments to Regulation D would require the filing of a Form D in Rule 506(c) offerings before the issuer engages in general solicitation; require the filing of a closing amendment to Form D after the termination of any Rule 506 offering; require written general solicitation materials used in Rule 506(c) offerings to include certain legends and other disclosures; require the submission, on a temporary basis, of written general solicitation materials used in Rule 506(c) offerings to the Commission; and disqualify an issuer from relying on Rule 506 for one year for future offerings if the issuer, or any predecessor or affiliate of the issuer, did not comply, within the last five years, with Form D filing requirements in a Rule 506 offering. The proposed amendments to Form D would require an issuer to include additional information about offerings conducted in reliance on Regulation D. Finally, the proposed amendments to Rule 156 would extend the antifraud guidance

¹ See *Amendments to Regulation D, Form D and Rule 156*, Release No. 33–9416 (July 10, 2013) [78 FR 44806 (July 24, 2013)].

contained in the rule to the sales literature of private funds.

II. Re-Opening of Comment Period

The proposed amendments have generated a large amount of public interest. The Commission believes that providing the public additional time to consider thoroughly the matters addressed by the release and comments submitted to date and to submit comprehensive responses would benefit the Commission in its consideration of final rules. The Commission, therefore, is re-opening the comment period for "Amendments to Regulation D, Form D and Rule 156" (Release No. 33-9416 (July 10, 2013)) [78 FR 44806 (July 24, 2013)] until November 4, 2013.

By the Commission.

Dated: September 27, 2013.

Elizabeth M. Murphy,
Secretary.

[FR Doc. 2013-24048 Filed 10-2-13; 8:45 am]

BILLING CODE 8011-01-P

DEPARTMENT OF HOMELAND SECURITY

Coast Guard

33 CFR Part 165

[Docket No. USCG-2012-0080]

RIN 1625-AA00

Regulated Navigation Area; Southern Oahu Tsunami Vessel Evacuation, Honolulu, HI

AGENCY: Coast Guard, DHS.

ACTION: Supplementary notice of proposed rulemaking.

SUMMARY: The Coast Guard is proposing to establish a permanent regulated navigation area (RNA) and to enforce this proposed regulation only when a tsunami warning is issued for the Hawaiian Islands by the Pacific Tsunami Warning Center. Tsunami warnings require the evacuation of a large number of vessels from their respective harbors. Following the evacuation, these vessels must remain offshore until the emergency situation has passed and the harbors have been deemed safe for reentry. Past tsunami warnings have created potentially dangerous offshore traffic congestion between commercial and recreational vessel traffic. Because of this, designated vessel traffic staging areas are necessary for a safe and orderly evacuation of Southern Oahu ports.

DATES: Comments and related material must be received by the Coast Guard on or before November 4, 2013.

ADDRESSES: Documents mentioned in this preamble are part of docket USCG-2012-0080. To view documents mentioned in this preamble as being available in the docket, go to <http://www.regulations.gov>, type the docket number in the "SEARCH" box and click "SEARCH." Click on Open Docket Folder on the line associated with this rulemaking. The following link will take you directly to the docket: <http://www.regulations.gov/#/docketDetail;D=USCG-2012-0080>. You may also visit the Docket Management Facility in Room W12-140 on the ground floor of the Department of Transportation West Building, 1200 New Jersey Avenue SE., Washington, DC 20590, between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

FOR FURTHER INFORMATION CONTACT: If you have questions on this proposed rule, call or email Lieutenant Commander Scott Whaley of the United States Coast Guard Sector Honolulu at 808-522-8264 ext. 3352 or Scott.O.Whaley@uscg.mil, respectively. If you have questions on viewing or submitting material to the docket, call Barbara Hairston, Program Manager, Docket Operations, telephone (202) 366-9826.

SUPPLEMENTARY INFORMATION:

Table of Acronyms

DHS Department of Homeland Security
FR Federal Register
NPRM Notice of Proposed Rulemaking
SNPRM Supplemental Notice of Proposed Rulemaking
RNA Regulated Navigation Area

A. Public Participation and Request for Comments

We encourage you to respond to this notice by submitting comments and related materials. All comments received will be posted without change to <http://www.regulations.gov> and will include any personal information you have provided.

1. Submitting Comments

If you submit a comment, please include the docket number for this rulemaking, indicate the specific section of this document to which each comment applies, and provide a reason for each suggestion or recommendation. You may submit your comments and material online at <http://www.regulations.gov>, or by fax, mail, or hand delivery, but please use only one of these means. If you submit a comment online, it will be considered received by the Coast Guard when you successfully transmit the comment. If you fax, hand deliver, or mail your

comment, it will be considered as having been received by the Coast Guard when it is received at the Docket Management Facility. We recommend that you include your name and a mailing address, an email address, or a telephone number in the body of your document so that we can contact you if we have questions regarding your submission. To submit your comment online, go to <http://www.regulations.gov>, type the docket number USCG-2012-0080 in the "SEARCH" box, and then click "SEARCH." Click on "Submit a Comment" on the line associated with this supplementary notice of proposed rulemaking (SNPRM).

If you submit your comments by mail or hand delivery, submit them in an unbound format, no larger than 8½ by 11 inches, suitable for copying and electronic filing. If you submit comments by mail and would like to know that they reached the Facility, please enclose a stamped, self-addressed postcard or envelope. We will consider all comments and material received during the comment period and may change the proposed rule based on your comments.

2. Viewing Comments and Documents

To view comments, as well as documents mentioned in this preamble as being available in the docket, go to <http://www.regulations.gov>, inserting USCG-2012-0080 in the "SEARCH" box, and then click "SEARCH." You may also visit the Docket Management Facility in Room W12-140 on the ground floor of the Department of Transportation West Building, 1200 New Jersey Avenue SE., Washington, DC 20590, between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. We have an agreement with the Department of Transportation to use the Docket Management Facility.

3. Privacy Act

Anyone can search the electronic form of comments received into any of our dockets by the name of the individual submitting the comment (or signing the comment, if submitted on behalf of an association, business, labor union, etc.). You may review a Privacy Act notice regarding our public dockets in the January 17, 2008, issue of the **Federal Register** (73 FR 3316).

4. Public Meeting

We do not plan to hold a public meeting. But you may submit a request for one using one of the four methods specified under **ADDRESSES**. Please explain in detail why you believe a public meeting would be beneficial. If

we determine that one would aid in solving this problem, we will hold one at a time and place announced by a later notice in the **Federal Register**.

B. Regulatory History and Information

The Coast Guard collaborated with the Hawaii Ocean Safety Team, the Industry Advisory Board and other industry partners in the initial development of a proposed Southern Oahu Tsunami Vessel Evacuation regulated navigation area. All recommendations received careful consideration during the drafting of this rule. On May 14, 2013, the Coast Guard published a notice of proposed rulemaking (NPRM) in the **Federal Register** (78 FR 28170) under the same docket number (USCG–2012–0080) as this SNPRM. The Coast Guard received a total of five comments; those comments are posted, without change, at <http://www.regulations.gov>. To view these comments go to <http://www.regulations.gov>, insert USCG–2012–0080 in the “SEARCH” box, and then click “SEARCH.”

In accordance with 33 CFR 1.05–40, we are issuing this supplementary notice of proposed rulemaking (SNPRM) because, after consideration of the comments received, the Coast Guard proposes to substantially change the rule from that originally published in the NPRM. This SNPRM advises the public of the revised proposal and provides an opportunity for comment on the changes.

C. Basis and Purpose

The statutory basis for this rulemaking is 33 U.S.C. 1231, which gives the Coast Guard, under a delegation from the Secretary of Homeland Security, regulatory authority to enforce the Ports and Waterways Safety Act. A regulated navigation area is a water area within a defined boundary for which regulations for vessels navigating within the area have been established to mitigate hazardous conditions deemed to exist in that area. The *purpose* of this rulemaking is to provide greater safety for vessels and maritime commerce in the event of a tsunami threat.

D. Discussion of Comments, Changes and the New Proposed Rule

The Coast Guard received a total of five written submissions on the NPRM published on May 14, 2013 in the **Federal Register**.

One commenter voiced his support of the rule proposed in the NPRM, calling it an “important safety regulation”.

One commenter was unable to locate the graphic displaying the staging areas.

An electronic copy of the graphic was emailed to him. The graphic was also disseminated via press release, advertised on the local TV news and posted on the Coast Guard Sector Honolulu HOMEPORT Web page. Further, the graphic associated with the NPRM was filed in the docket on June 5, 2013.

One commenter suggested changes to the proposed rule that would reduce the potential for small recreational vessels operating in the same staging area as large container vessels and cruise ships. In this SNPRM, the Coast Guard proposes to segregate the staging areas for recreational and commercial vessels. The potential for hazardous situations or even collisions, due to, among other things, limited maneuverability, would increase if recreational and commercial vessels were staged in the same area. Therefore, in this SNPRM the Coast Guard has modified the proposed staging areas to further reduce the potential for vessel intermingling, congestion and incidents. The current proposed rule adds a second recreational vessel staging area, eliminating the need for recreational vessels departing Keehi Lagoon to transit through the commercial vessel staging area.

One commenter suggested reconsideration of the potential path of commercial vessels and recreational vessels transiting from their berths to their respective staging areas. The staging areas have been modified so that commercial and recreational vessels can transit to their respective staging area without crossing each other's path.

One commenter pointed out a discrepancy with the stated geographical positions. The latitudes and longitudes have been changed to more accurately reflect the intended boundary for the regulated navigation zone.

E. Discussion of the Proposed Rule

Earthquakes off Chile and Japan in February 2010 and March 2011, respectively, resulted in tsunami threats to the Main Hawaiian Islands. These incidents emphasized the need to establish heightened safety measures, to ensure an orderly and organized evacuation plan, in order to protect the infrastructure of the southern coast of Oahu, Hawaii, including Honolulu Harbor. Honolulu Harbor has only one entrance for large commercial vessels and is the principle harbor of Hawaii's hub and spoke maritime commerce system. If, in response to a tsunami warning, a marine incident were to occur off the southern shore of Oahu, especially near the entrance of Honolulu

Harbor, the results could be devastating to Hawaii's economy and the maritime commerce system and the constituencies that rely heavily upon the system's viability.

In response to this risk, the Coast Guard proposes the establishment of a regulated navigation area (RNA) designated as the Southern Oahu Tsunami Evacuation zone.

In the event of a tsunami warning, the Coast Guard Captain of the Port for Honolulu (COTP) would notify the public that an enforcement period is in effect for the duration of the emergency for this RNA. At the conclusion of the threat, the COTP would notify the public when the RNA enforcement period is suspended or terminated.

During the enforcement period, the COTP intends to deploy Coast Guard vessels and personnel, if feasible, to ensure participating commercial and recreational vessels move to and stay within separate staging areas, and seaward of the 50-fathom curve that covers near-shore waters less than 300 feet deep. Coast Guard plans, which could vary depending on specific conditions during an actual emergency, call for those staging areas to be separated by an exclusionary area. This exclusionary area would measure 4 nautical miles long by one (1) nautical mile wide, centering lengthwise and along a line running seaward at 208 degrees southwest of the Honolulu Harbor Range light. Vessels participating in the staging area would have to stay outside of the exclusionary area.

There are two staging areas to the east of the exclusionary area: a commercial vessel staging area and a recreational vessel staging area. This eastern recreational staging area is intended for use by recreational vessels departing from and returning to the Ala Wai Small Boat harbor and Kewalo Basin. There will also be one recreational vessel staging area to the west of the exclusionary area. This staging area is intended for recreational vessels departing from and returning to the Keehi Lagoon area.

Although recreational vessels would be able to use either the east or west staging area, the mariners decision for which staging area to use should be based on which staging area is the easiest to transit to so as to avoid crossing the path of other vessels. The commercial staging area is intended for use by all commercial vessels departing from and returning to Kewalo Basin and Honolulu Harbor.

A graphic of the regulated navigation area is posted in the docket (<http://www.regulations.gov/>

#!docketDetail;D=USCG-2012-0080) and also on the United States Coast Guard Sector Honolulu Homeport Web page (<https://homeport.uscg.mil/mycg/portal/ep/portDirectory.do?tabId=1&cotpId=27>) under the Waterways Management tab. The graphic shows how we expect to separate commercial and recreational vessels when the RNA is being enforced, but under actual enforcement conditions local commanders may vary the plan as conditions warrant.

F. Regulatory Analyses

We developed this proposed rule after considering numerous statutes and executive orders related to rulemaking. Below we summarize our analyses based on a number of these statutes or executive orders.

1. Regulatory Planning and Review

This proposed rule is not a significant regulatory action under section 3(f) of Executive Order 12866, Regulatory Planning and Review, because it would have an effect on the regulated public only in the rare circumstances of a tsunami threat, while at other times vessels will be able to transit the area freely. Further, staging within this RNA is completely voluntary and vessels are free to evacuate outside of the RNA if they prefer. Therefore, it does not require an assessment of potential costs and benefits under section 6(a)(3) of that Order. The Office of Management and Budget has not reviewed it under that Order.

2. Impact on Small Entities

The Regulatory Flexibility Act of 1980 (RFA), 5 U.S.C. 601–612, as amended, requires federal agencies to consider the potential impact of regulations on small entities during rulemaking. The term “small entities” comprises small businesses, not-for-profit organizations that are independently owned and operated and are not dominant in their fields, and governmental jurisdictions with populations of less than 50,000.

The Coast Guard certifies under 5 U.S.C. 605(b) that this proposed rule will not have a significant economic impact on a substantial number of small entities. This proposed rule would affect the following entities, some of which might be small entities: the owners or operators of vessels intending to transit and remain in the exclusionary zone during a tsunami threat, or owners or operators of vessels otherwise intending to operate in a fashion not compatible with this proposed rule. This rule would not have a significant impact on a substantial number of small entities because the RNA would only be

activated, and thus subject to enforcement, when a tsunami warning has been issued by the Pacific Tsunami Warning Center.

If you think that your business, organization, or governmental jurisdiction qualifies as a small entity and that this rule would have a significant economic impact on it, please submit a comment (see **ADDRESSES**) explaining why you think it qualifies and how and to what degree this rule would economically affect it.

3. Assistance for Small Entities

Under section 213(a) of the Small Business Regulatory Enforcement Fairness Act of 1996 (Pub. L. 104–121), we want to assist small entities in understanding this rule. If the rule would affect your small business, organization, or governmental jurisdiction and you have questions concerning its provisions or options for compliance, please contact the person listed in the **FOR FURTHER INFORMATION CONTACT**, above.

Small businesses may send comments on the actions of Federal employees who enforce, or otherwise determine compliance with, Federal regulations to the Small Business and Agriculture Regulatory Enforcement Ombudsman and the Regional Small Business Regulatory Fairness Boards. The Ombudsman evaluates these actions annually and rates each agency’s responsiveness to small business. If you wish to comment on actions by employees of the Coast Guard, call 1–888–REG–FAIR (1–888–734–3247). The Coast Guard will not retaliate against small entities that question or complain about this rule or any policy or action of the Coast Guard.

4. Collection of Information

This proposed rule will not call for a new collection of information under the Paperwork Reduction Act of 1995 (44 U.S.C. 3501–3520.).

5. Federalism

A proposed rule has implications for federalism under Executive Order 13132, Federalism, if it has a substantial direct effect on State or local governments and would either preempt State law or impose a substantial direct cost of compliance on them. We have analyzed this proposed rule under that Order and have determined that it does not have implications for federalism.

6. Protest Activities

The Coast Guard respects the First Amendment rights of protesters. Protesters are asked to contact the person listed in the **FOR FURTHER**

INFORMATION CONTACT section to coordinate protest activities so that your message can be received without jeopardizing the safety or security of people, places, or vessels.

7. Unfunded Mandates Reform Act

The Unfunded Mandates Reform Act of 1995 (2 U.S.C. 1531–1538) requires Federal agencies to assess the effects of their discretionary regulatory actions. In particular, the Act addresses actions that may result in the expenditure by a State, local, or tribal government, in the aggregate, or by the private sector of \$100,000,000 or more in any one year. Though this proposed rule would not result in such expenditure, we do discuss the effects of this proposed rule elsewhere in this preamble.

8. Taking of Private Property

This proposed rule would not affect a taking of private property or otherwise have taking implications under Executive Order 12630, Governmental Actions and Interference with Constitutionally Protected Property Rights.

9. Civil Justice Reform

This rule meets applicable standards in sections 3(a) and 3(b)(2) of Executive Order 12988, Civil Justice Reform, to minimize litigation, eliminate ambiguity, and reduce burden.

10. Protection of Children From Environmental Health Risks

We have analyzed this proposed rule under Executive Order 13045, Protection of Children from Environmental Health Risks and Safety Risks. This proposed rule is not an economically significant rule and would not create an environmental risk to health or risk to safety that might disproportionately affect children.

11. Indian Tribal Governments

This proposed rule does not have tribal implications under Executive Order 13175, Consultation and Coordination with Indian Tribal Governments, because it would not have a substantial direct effect on one or more Indian tribes, on the relationship between the Federal Government and Indian tribes, or on the distribution of power and responsibilities between the Federal Government and Indian tribes.

12. Energy Effects

This action is not a “significant energy action” under Executive Order 13211, Actions Concerning Regulations That Significantly Affect Energy Supply, Distribution, or Use.

13. Technical Standards

The National Technology Transfer and Advancement Act (NTTAA) (15 U.S.C. 272 note) directs agencies to use voluntary consensus standards in their regulatory activities unless the agency provides Congress, through the Office of Management and Budget, with an explanation of why using these standards would be inconsistent with applicable law or otherwise impractical. Voluntary consensus standards are technical standards (e.g., specifications of materials, performance, design, or operation; test methods; sampling procedures; and related management systems practices) that are developed or adopted by voluntary consensus standards bodies.

This proposed rule does not use technical standards. Therefore, we did not consider the use of voluntary consensus standards.

14. Environment

We have analyzed this proposed rule under Department of Homeland Security Management Directive 023-01 and Commandant Instruction M16475.ID, which guide the Coast Guard in complying with the National Environmental Policy Act of 1969 (NEPA)(42 U.S.C. 4321-4370f), and have made a preliminary determination that this action is one of a category of actions which do not individually or cumulatively have a significant effect on the human environment. This proposed rule, implementing an RNA for vessel staging areas in the event of a tsunami threat to the Main Hawaiian Islands, is categorically excluded from further review under paragraph (34)(g) of Figure 2-1 of the Commandant Instruction. A preliminary environmental analysis checklist and a categorical exclusion determination are available in the docket where indicated under **ADDRESSES**, or you may obtain a copy by calling or emailing Lieutenant Commander Scott Whaley of the United States Coast Guard Sector Honolulu at 808-522-8264 ext. 3352 or Scott.O.Whaley@uscg.mil, respectively. We seek any comments or information that may lead to the discovery of a significant environmental impact from this proposed rule.

List of Subjects in 33 CFR Part 165

Harbors, Marine safety, Navigation (water), Reporting and recordkeeping requirements, Security measures, Waterways.

For the reasons discussed in the preamble, the Coast Guard proposes to amend 33 CFR part 165 as follows:

PART 165—REGULATED NAVIGATION AREAS AND LIMITED ACCESS AREAS

■ 1. The authority citation for part 165 continues to read as follows:

Authority: 33 U.S.C. 1231; 46 U.S.C. Chapter 701, 3306, 3703; 50 U.S.C. 191, 195; 33 CFR 1.05-1, 6.04-1, 6.04-6, and 160.5; Pub. L. 107-295, 116 Stat. 2064; Department of Homeland Security Delegation No. 0170.1.

■ 2. Add § 165.14-1413 to read as follows:

§ 165.14-1413 Regulated navigation area; Southern Oahu Tsunami Evacuation; Honolulu, Hawaii.

(a) *Location.* The following area is a regulated navigation area (RNA): All waters of the Pacific Ocean south of the southern shoreline of Oahu, HI, extending from the surface of the water to the ocean floor, enclosed by a line connecting the following points: 21°17'14" N, 157°55'34" W; 21°13'30" N, 157°55'34" W; 21°13'30" N, 157°48'20" W; 21°14'14" N, 157°48'20" W, thence westward along the 50 fathom curve to the beginning point. These coordinates are based upon the National Oceanic and Atmospheric Administration Coast Survey, Pacific Ocean, Oahu, Hawaii, chart 19357.

(b) *Regulations.* You may contact the Coast Guard on VHF Channel 16 (156.800 MHz) or at telephone number 808-842-2600, to obtain clarification on RNA transits and locations. Operations permitting, the Coast Guard patrol boats plan to enforce the RNA and provide on-scene direction. During the enforcement period persons and vessels wishing to remain inside the RNA must abide by the following stipulations:

(1) No person or vessel may enter into an exclusionary area 4 nautical miles long by one (1) nautical mile wide, centered lengthwise and along a line running seaward at 208 degrees southwest of Honolulu Harbor Front Range Light, except to transit to or from the staging areas or other areas outside the zone. Loitering or lingering in the exclusionary zone is prohibited.

(2) The Western Recreational Vessel Staging area is bound by a line connecting the following points: 21°17'14" N, 157°55'34" W; 21°14'36" N, 157°55'34" W; 21°16'31" N, 157°53'54" W and then along the 50-fathom curve to the beginning point. This staging area is intended for recreational vessels departing from and returning to the Keehi Lagoon area.

(3) The Commercial Vessel Staging Area is bound by a line connecting the following points: 21°16'09" N, 157°52'59" W; 21°13'30" N, 157°55'34" W; 21°13'30" N, 157°51'39" W; 21°15'22" N, 157°51'10" W and then

along the 50-fathom curve to the beginning point. This staging area is intended for use by all commercial vessels intended to remain in the RNA during a tsunami treat.

(4) The Eastern Recreational Vessel Staging Area is bound by the following points: 21°15'22" N, 157°51'10" W; 21°13'30" N, 157°51'39" W; 21°13'30" N, 157°48'20" W; 21°14'14" N, 157°48'20" W and then along the 50-fathom curve to the beginning point. The Commercial Vessel Staging Area bounds this staging area's western edge. The dividing line between the Commercial Vessel Staging Area and the Eastern Recreational Vessel Staging Area can be determined visually. The private dayboards located in the Ala Wai Small Boat Harbor and the La Ronde Rotating Restaurant roof top restaurant form a natural range that mariners can use in daylight hours to gauge the eastern boundary of the Commercial Vessel Staging Area and the western boundary of the Eastern Recreational Vessel Staging Area. This eastern recreational staging area is intended for use by recreational vessels departing from and returning to the Ala Wai Small Boat harbor and Kewalo Basin.

(5) Located between the Western Recreational Vessel Staging Area and the Commercial Vessel Staging Area is an Exclusion Area. This area is bound by the following points: 21°16'31" N, 157°53'54" W; 21°14'36" N, 157°55'35" W; 21°13'30" N, 157°55'34" W; 21°13'54" N, 157°55'08" W; 21°16'09" N, 157°52'59" W.

(6) All vessels staging in the RNA must be seaward of the 50 fathom (300 foot) curve.

(c) *Enforcement period.* Paragraph (b) of this section will be enforced only when a tsunami warning has been issued for the Hawaiian Islands by the Pacific Tsunami Warning Center. The COTP will notify the public of any enforcement, suspension of enforcement, or termination of enforcement through appropriate means to ensure the widest publicity, including the use of broadcast notice to mariners, notices of implementation and press releases.

(d) *Penalties.* Vessels or persons violating this rule are subject to the penalties set forth in 33 U.S.C. 1232.

Dated: September 3, 2013.

C.B. Thomas,

Rear Admiral, U.S. Coast Guard, Commander, Fourteenth Coast Guard District.

[FR Doc. 2013-24150 Filed 10-2-13; 8:45 am]

BILLING CODE 9110-04-P

DEPARTMENT OF HOMELAND SECURITY**Federal Emergency Management Agency****44 CFR Part 206****[Docket ID FEMA–2013–0042]****RIN 1660–AA73****Public Assistance Cost Estimating Format for Large Projects****AGENCY:** Federal Emergency Management Agency, DHS.**ACTION:** Notice of proposed rulemaking.

SUMMARY: In this rule the Federal Emergency Management Agency (FEMA) proposes the implementation of the Cost Estimating Format (CEF) as the standard estimating procedure for large permanent work projects authorized under the Public Assistance program. Under the Public Assistance Program, FEMA awards grants to State and local governments, Indian tribes, and certain private nonprofit organizations to assist them in responding to and recovering from Presidentially-declared emergencies and other disasters. The CEF provides a uniform method of estimating costs for large projects. In this rule, FEMA also proposes to establish reimbursement thresholds to govern situations in which the actual cost of a work project is higher or lower than the CEF estimate.

DATES: Submit comments on or before December 2, 2013.

ADDRESSES: You may submit comments, identified by Docket ID FEMA–2013–0042, by one of the following methods:

Federal eRulemaking Portal: <http://www.regulations.gov>. Follow the instructions for submitting comments.

Mail/Hand Delivery/Courier: Regulatory Affairs Division, Office of Chief Counsel, Federal Emergency Management Agency, 8NE, 500 C Street SW., Washington, DC 20472–3100.

FOR FURTHER INFORMATION CONTACT: William Roche, Director, Public Assistance Division, Federal Emergency Management Agency, 500 C Street SW., Washington, DC 20472–3100, (phone) 202–212–2340; (facsimile) 202–646–3363; or (email) william.roche@fema.dhs.gov.

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Table of Acronyms

A&E	Architectural and Engineering
AASHTO	American Association of State and Highway Transportation Officials
AGCA	Associated General Contractors of America, Inc.
AIA	American Institute of Architects
APWA	American Public Works Association
ASPE	American Society of Professional Estimators
BCI	Building Cost Index
CCI	Construction Cost Index
CEF	Cost Estimating Format
CFR	Code of Federal Regulations
CSI	Construction Specifications Institute
DMA 2000	Disaster Mitigation Act of 2000 (Pub. L. 106–390)
E.O.	Executive Order
EA	Environmental Assessment
EIS	Environmental Impact Statement
EMI	Emergency Management Institute
FEMA	Federal Emergency Management Agency
FONSI	Finding of No Significant Impact
FR	Federal Register
FY	Fiscal Year
GAP	Grant Acceleration Program
HMP	Hazard Mitigation Planning
HVAC	Heating, Ventilation, and Air-Conditioning
NACE	National Association of County Engineers
NEMIS	National Emergency Management Information System
NEPA	National Environmental Policy Act (42 U.S.C. 4321 <i>et seq.</i>)
NETC	National Emergency Training Center
NSPE	National Society of Professional Engineers
NTTA	National Technology Transfer and Advancement Act of 1995 (Pub. L. 104–113)
OMB	Office of Management and Budget
PAC	Public Assistance Coordinator
PNP	Private Non-Profit
PRA	Paperwork Reduction Act (44 U.S.C. 3501 <i>et seq.</i>)
RFA	Regulatory Flexibility Act (5. U.S.C. 601–612)
TAC	Technical Assistance Contractor
UMRA	Unfunded Mandates Reform Act (2 U.S.C. 1531–1538)

I. Public Participation

We encourage you to participate in this rulemaking by submitting

comments and related materials. We will consider all comments and material received during the comment period.

If you submit a comment, identify the agency name and the docket ID for this rulemaking, indicate the specific section of this document to which each comment applies, and give the reason for each comment. You may submit your comments and material by electronic means, mail, or delivery to the address under the **ADDRESSES** section. Please submit your comments and material by only one means.

Regardless of the method used for submitting comments or material, all submissions will be posted, without change, to the Federal e-Rulemaking Portal at <http://www.regulations.gov>, and will include any personal information you provide. Therefore, submitting this information makes it public. You may wish to read the Privacy Act notice that is available via a link on the homepage of www.regulations.gov.

Viewing comments and documents: For access to the docket to read background documents or comments received, go to the Federal e-Rulemaking Portal at <http://www.regulations.gov>. Background documents and submitted comments may also be inspected at FEMA, Office of Chief Counsel, 8NE, 500 C Street SW., Washington, DC 20472–3100.

Public Meeting: We do not plan to hold a public meeting, but you may submit a request for one at the address under the **ADDRESSES** section explaining why one would be beneficial. If FEMA determines that a public meeting would aid this rulemaking, it will hold one at a time and place announced by a notice in the **Federal Register**.

II. Background

A. Public Assistance Program

Under the Public Assistance program, authorized by the Robert T. Stafford Disaster Relief and Emergency Assistance Act ¹ (Stafford Act) and implemented through regulations in title 44 of the Code of Federal Regulations (CFR), the Federal Emergency Management Agency (FEMA) awards grants to State and local governments, Indian tribes, and certain private nonprofit organizations to assist them in responding to and recovering from Presidentially-declared emergencies and major disasters. Specifically, the program provides assistance for debris removal, emergency protective measures, and

permanent restoration of infrastructure. FEMA refers to debris removal and emergency protective measures as “emergency work.” ² FEMA also categorizes these types of work as Category A (debris removal) and Category B (emergency protective measures). Permanent restoration of infrastructure, which FEMA refers to as “permanent work,” ³ includes several categories, including Roads and Bridges (Category C), Water Control Facilities (Category D), Buildings and Equipment (Category E), Utilities (Category F), and Parks, Recreational Facilities, and Other Items (Category G). The Cost Estimating Format (CEF) proposed by this rulemaking applies to permanent work only (Categories C–G).

FEMA may only provide assistance under the Public Assistance program after the President issues an emergency or major disaster declaration. *See* 44 CFR 206.1. Under the Public Assistance program, the “grantee” of a FEMA grant of financial assistance is generally the government of the State for which an emergency or major disaster has been declared, but may also be an Indian Tribal government. *See* 44 CFR 206.201(e). Additionally, a State agency, local government, eligible private nonprofit organization, or Indian tribe may submit an application to the grantee for assistance as a “subgrantee” under the State’s grant. *See* 44 CFR 206.201(a); 206.222. Public assistance is provided at a cost share, set by the President in the declaration. Usually, the Federal share is 75 percent of the total eligible cost, and the subgrantee share is 25 percent of the total eligible cost. *See* 42 U.S.C. 5172; 44 CFR. 206.47.

To apply for a Public Assistance grant, the applicant submits a Request for Public Assistance (FEMA Form 009–0–49 ⁴) to FEMA through the grantee. Upon FEMA’s approval of the grant application, the grantee notifies the applicant, and the applicant becomes a subgrantee. *See* 44 CFR 206.202.

The basis for the amount of a Public Assistance grant is provided in a Project Worksheet (FEMA Form 009–0–91 ⁵). The Project Worksheet documents the details of the project, which is a logical grouping of eligible work required as a

result of a declared major disaster or emergency. A project may include eligible work at several sites, and may include more than one Project Worksheet. A Project Worksheet is the primary form used to document the location, damage description and dimensions, scope of work, and cost estimate for each project. The scope of work may change as the work on the project progresses. If FEMA approves a revised scope of work, a new version of the Project Worksheet is generated. Some projects may have several versions of a Project Worksheet. An applicant may appeal FEMA determinations made in each version of the Project Worksheet pursuant to 44 CFR 206.206.

FEMA divides applications for Public Assistance into two groups—large projects and small projects—based on the dollar amount of the project. *See* 44 CFR 206.203(c). The threshold for large and small projects is adjusted annually to reflect changes in the Consumer Price Index for All Urban Consumers published by the United States Department of Labor. The threshold for large projects in Fiscal Year 2013 is \$67,500 (77 FR 61423, Oct. 9, 2012). This proposed rule only affects large projects.

Project Worksheets for large projects are developed by a FEMA Project Specialist, working with the applicant/subgrantee, and are submitted to a FEMA Public Assistance Coordinator (PAC) Crew Leader for review and processing. Large projects are funded on documented actual costs; however, work typically is not complete at the time of project approval. Therefore, FEMA obligates large project grants based on estimated costs. The obligation process is the process by which funds are made available to the grantee. The funds reside in a Federal account until drawn down by the grantee and paid to the subgrantee as the project progresses and actual costs are incurred. If FEMA approves a revised scope of work, a revised Project Worksheet is issued with a revised estimate, and funds are obligated or deobligated based on the revised estimate.

B. Traditional Method for Estimating Eligible Cost

This section describes the traditional method FEMA has used to estimate a project’s eligible costs. For a more detailed explanation of this method, please refer to FEMA’s Public Assistance Guide, available online at <http://www.fema.gov/public-assistance-policy-and-guidance/public-assistance-guide>. If work on a project is complete at the time of the applicant’s request for

² *See* 44 CFR 206.201(b).

³ *See* 44 CFR 206.201(j).

⁴ The Office of Management and Budget has approved the Request for Public Assistance form (FEMA Form 009–0–49) under information collection number 1660–0017 through July 31, 2016.

⁵ The Office of Management and Budget has approved the Project Worksheet form (FEMA Form 009–0–91) under information collection number 1660–0017 through July 31, 2016.

¹ Disaster Relief Act of 1974, Public Law 93–288, 88 Stat. 143 (May 22, 1974), as amended, 42 U.S.C. 5121 et seq.

Public Assistance funding, the grant amount is based on the actual cost. However, if work on a project is not complete at the time of the applicant's request for Public Assistance funding, FEMA must use a cost estimate to determine the base cost of the project. The base cost is the amount obligated for the project prior to project completion. The base cost is also known as construction costs, and includes the cost of labor, materials, and equipment. The base cost (construction costs) plus nonconstruction costs equal the total eligible cost. Traditionally, FEMA does not reimburse nonconstruction costs until the project is complete.

Typically, FEMA uses the unit cost method to determine the estimated base cost. Unit costs are line items representing the itemized breakdown of construction costs for completing the project. For example, a typical project will have line items for labor costs, such as an equipment operator, a foreman, a dispatcher, and a laborer, each representing a unit cost. There will also be line items for material costs, such as concrete, paint, or stone. Finally, there will be line items for equipment, such as a flatbed truck, a tractor, or a bulldozer. FEMA may use several cost data sources to determine unit costs. These sources include State or local data from previously completed projects, commercial estimating sources, and FEMA cost codes.

Once the base cost is estimated, and the Project Worksheet is approved, FEMA obligates the amount of the base cost to the grantee for disbursement to the subgrantee. This may occur before the subgrantee has begun work on the project, or after the subgrantee has already started work on the project. (If the entire scope of work has already been completed, the amount would be for actual eligible costs and an estimate of eligible costs would not be necessary.)

As work progresses on a project, the subgrantee may request additional funding for cost overruns, either if the scope of work changes, or if the scope of work costs more than originally estimated. There are several reasons why a subgrantee may need additional funding, but usually it is because additional damage is discovered that was not visible at the time the estimate was determined, or there have been variations in unit prices, or there have been delays in timely starts or completion of the scope of work. The subgrantee must evaluate each cost overrun and, when justified, submit a request for additional funding through the grantee to the FEMA Regional Administrator for a final determination.

The process for FEMA's approval of additional funding is the same as for the initial approval of funds—FEMA will perform a site inspection and formulate a scope of work. This will generate an additional version of the original Project Worksheet that was initially formulated and approved for the project. All requests for additional funding must contain sufficient documentation to support the eligibility of all claimed work and costs. *See* 44 CFR 206.204(e). If the Regional Administrator determines that eligible costs exceed the initial approval, the Regional Administrator will obligate additional funds as necessary. *See* 44 CFR 206.205(b)(2).

Once the project is complete, the project enters the reconciliation phase. It is during this phase that FEMA calculates the amount of eligible nonconstruction costs and adds them to the base cost. Eligible nonconstruction costs include project design and management costs, contractor overhead and profit, fees, cost escalation due to inflation, and other factors affecting the overall cost of the project, such as safety and security, including guard services, first aid, barricades, and traffic control personnel. FEMA obligates the amount of eligible nonconstruction costs at the end of the reconciliation phase of the project. The final eligible cost of the project is based upon the reasonable, actual construction and nonconstruction costs incurred by the subgrantee in completing the eligible scope of work.

This process can be problematic in several ways. The main problem is that the total eligible cost of the project is not known until the project reconciliation phase, after work has been completed. There is no clear budget during the beginning stages of the project. The subgrantee can request additional funding as the project progresses, but the subgrantee's expectation of funding at the beginning could be much higher than approved costs at the end. Often, a subgrantee appeals the estimated amounts before even embarking on construction, which greatly slows the process of reconstruction.

Another significant problem with this method is that the subgrantee incurs nonconstruction costs during the life of the project but is not able to recover those expenditures until the work is complete. The subgrantee cannot be certain that all of its nonconstruction costs will be reimbursed until FEMA makes an eligibility determination after project completion, and nonconstruction costs could be large. Even if the estimated base cost at the beginning of the project is accurate, it

could end up being only half of the total project cost once the nonconstruction costs are added to it after project completion (during the project reconciliation phase). In such cases, only half of the total project cost would be funded at the beginning, resulting in hardship for the subgrantee because the subgrantee must cover the other half of the costs from its own pocket until project closeout.

Another problem is that the process is time-consuming because funding for base costs often occurs in stages due to cost overruns. If the subgrantee encounters a cost overrun, which is common in large projects, work on the project is often halted until the approval process for additional funding is complete. This approval in stages also leads to more opportunities for disagreement over cost estimates and methods of repair. Also, there is no cost-saving incentive for the subgrantee because the subgrantee does not have a clear idea of its budget at the beginning, and knows that it can continue to request additional funding throughout the life of the project.

Finally, the process necessitates FEMA's presence throughout the life of the project to oversee and administer cost overruns, resulting in large administrative costs for the agency.

C. Development of the Cost Estimating Format (CEF) Version 1.0: the Grant Acceleration Program (GAP)

After the Northridge California earthquake in 1994, FEMA began to develop a new cost estimating method, referred to as the Grant Acceleration Program, in an attempt to correct the problems just outlined with the traditional method of estimating costs. The Northridge earthquake occurred in a large metropolitan area, so much of the damage was to large, complex buildings. The damage was often not apparent during the initial inspection (which is common with earthquake damage), and there were many cases of serious underlying structural damage that required sophisticated engineering analysis. To provide adequate funding for subgrantees to cover the repair to this damage earlier in the grant process, FEMA established a voluntary program using the GAP method that allowed participants to receive a fair and reasonable fixed budget amount upfront, thereby accelerating the normal funding procedure (hence the name Grant Acceleration Program).

Unlike the traditional method, which provided funding for the estimated base cost at the beginning of the project but did not reimburse nonconstruction costs until after the project was completed,

the GAP method provided subgrantees with funding for the total estimated cost of the project (construction and nonconstruction costs) at the beginning. The estimated total cost under GAP included the estimated base cost plus the estimated nonconstruction costs. Under the traditional method, FEMA did not need to estimate nonconstruction costs, because these costs are reimbursed after they are incurred, and therefore the actual amount is known. Under the GAP method, FEMA obligated funding for these costs before they were incurred, so FEMA had to estimate them.

To determine the amount of the nonconstruction costs under GAP, FEMA used a pre-established percentage markup. The amount of the markup is determined using RS Means Reed Construction Data. RS Means supplies construction cost information to the construction industry, and publishes a collection of annual construction cost data books which are widely used by the construction industry. This established percentage markup provided a systematic and uniform method of estimating nonconstruction costs consistent with industry practice.

Under the GAP system, once FEMA determined the estimated total cost of the project, that amount was offered to the subgrantee as a fixed sum. If the subgrantee accepted the offer, the subgrantee could not request additional funding as the project progressed. The idea was that further funding would not be necessary, since the amount that was offered to the subgrantee was for the total cost of the project, not just the base cost as with the traditional method. The GAP method was designed to be much more accurate and consistent than the traditional method and allowed the subgrantee to draw down funds for nonconstruction costs as they were incurred. Under GAP, if there were any cost overruns, the subgrantee could not request reimbursement for the amount of the overrun, and there was no right to appeal. If there was a cost underrun, the subgrantee could use the unspent balance for approved mitigation activities pursuant to section 406 of the Stafford Act. *See* 42 U.S.C. 5172.

The creation of GAP was the first step in addressing the problems with the traditional method of estimating and reimbursing project costs. There were some drawbacks to GAP, however. The main drawback was that the subgrantee could not request additional funding. This is problematic if there are large cost overruns. GAP was modified to address this and other problems, and eventually evolved into a new version of

the cost estimating format in 1998, which is referred to as CEF 2.0.

D. Cost Estimating Format (CEF) Version 2.0

1. General

CEF 2.0 provides a uniform method of estimating costs for large projects. It accounts for costs incurred across the entire spectrum of eligible work (from design to project completion). Under the CEF, FEMA obligates the entire amount of the Federal share of the estimate upfront to the grantee, and payments are made by the grantee to the subgrantee in increments as items of work are completed or near completion (i.e., less than a week from completion). The subgrantee can request additional amounts for cost overruns pursuant to 44 CFR 206.204.

CEF 2.0 is made up of various parts, categorized as parts A through H, that are compiled by a FEMA estimator (who is either the Public Assistance Project Specialist or is supervised by the Public Assistance Project Specialist) in a CEF Spreadsheet. Note that an applicant may provide its own estimate of the project cost; if so, the Public Assistance Project Specialist uses the CEF to validate that estimate. The main part of the CEF is Part A, which is the base cost (construction costs) required to complete the approved scope of work. A FEMA cost estimator uses a Part A worksheet to determine the estimated base cost. After estimating the Part A base cost, the FEMA estimator applies a series of factors (referred to as Parts B through H) to the Part A base cost estimate. With the exception of Part F, these factors are percentage factors. For example, if a Part B percentage factor is 2 percent, the estimator adds 2 percent of the Part A estimated base cost to the total estimate. Sometimes the CEF provides a recommended range of percents for each factor, such as 3 to 6 percent, and it is up to the discretion of the FEMA estimator which percentage to apply, depending on the specifics of the project. The FEMA estimator must detail why he or she chose a specific percentage in a special section of the CEF worksheet designed for this purpose. This flexibility in the CEF methodology allows it to more accurately estimate the many different types of large projects under the Public Assistance program.

The Part B through H factors represent the nonconstruction costs (also referred to as construction-related costs), and are used only if the costs represented by the Parts B through H factors are not otherwise itemized in Part A. The costs represented by the factors are allowable

project costs under 44 CFR part 13, Uniform Administrative Requirements for Grants and Cooperative Agreements to State and Local Governments. The cost estimator adds the estimated nonconstruction costs to the Part A base construction cost using a CEF Worksheet to estimate the total cost of completing the project. This “forward-pricing” methodology provides an estimate of the total eligible funding at the beginning of the project. The estimate, which FEMA uses to approve funds for the project, allows the subgrantee to more accurately manage the budget with a greater degree of confidence.

Typically, a subgrantee uses a general contractor and a number of subcontractors to complete a large construction project in a competitively bid environment. The structure of the CEF mirrors the subgrantee/general contractor/subcontractor relationship for eligible work. Part A costs are representative of the construction efforts required to complete the eligible work; it represents the costs of the trade or subcontractor(s). Parts B, C, D, and E represent the general contractor or equivalent costs; they represent the costs of completing the construction work over and above the base construction costs itemized in Part A. Parts F, G, and H represent the subgrantee’s non-construction project costs, including preparation of design or contract documents, plan review and permit fees, and managing project design and construction. The CEF Parts are described in detail below.

2. Part A—Estimated Base Cost

Preparing a precise base cost estimate in Part A is critical to the accuracy of the total project estimate developed with CEF 2.0. All construction work activities must be itemized and quantified in Part A. Construction work activities include labor, equipment, and materials, including small tools, incidentals, and hauling costs necessary to complete the work. (Part A also includes the subcontractor’s overhead and profit, but not the general contractor’s overhead and profit, which is included in the Part D factor.) Once the construction work activities are itemized, the estimator enters a unit cost for each item. There are various types of cost data that the estimator may use for the unit costs. The preferred cost data is a bid-tab (short for bid tabulation), which is a bidder’s amount for each pay item in a contract. The next preferred cost data is local cost data (also referred to as average weighted unit price data). The estimator can usually obtain local cost data from local completed project

costs or a comparable bid-tab. If there hasn't been a bid on the contract, local cost data is the preferred cost data because it is the most accurate reflection of what a project will cost; it is data from actual projects that took place in the general vicinity of the project being estimated. Other types of cost data, described below, are less accurate because they reflect national averages.

If the FEMA estimator cannot obtain appropriate local cost data, the next preferred cost data is the most current nationally-recognized construction data warehouse publications, such as RS Means, BNi Costbooks, Marshall & Swift, or Sweets Unit Cost Guide. For ease of reference, cost data publications are readily available to the FEMA estimator in the disaster field office.

If the estimator is unable to use local cost data or a cost data publication from a nationally-recognized construction data warehouse, then FEMA cost codes or other commercial cost data estimating sources are a last source of reference for unit prices in preparing Part A base costs. These are the least preferred sources of cost data, however, because they are the least accurate. Local cost data best represent actual costs because the local economic factor is already incorporated. The construction data warehouses are the next preferred because they are updated quarterly. FEMA cost codes are generally averages or estimates for a large geographical area and are not updated as frequently as local cost data; therefore, they are the least preferred.

In addition to the itemization of each item of work, Part A costs are split into permanent and non-permanent work, and completed and uncompleted work. In order to accurately apply CEF cost factors, a project is divided into different types of work, depending on how the restoration activities match the requirements of the Public Assistance program. The separation of completed and uncompleted work keeps the CEF estimate organized and easy to understand. After the FEMA estimator completes Part A, which includes the amount for the completed permanent and non-permanent work and the estimate for the uncompleted permanent and non-permanent work, the estimate for Part A is entered into the CEF spreadsheet. The FEMA cost estimator then applies the Parts B through H factors to this estimate, as described below.

3. Part B Factor—General Requirements and General Conditions

Part B accounts for non-permanent job site work that is not readily itemized in Part A. Part B is split into B.1, General

Requirements, and B.2, General Conditions. General requirements are those costs typically described in the general requirements of construction specifications. They include safety and security items, temporary services and utilities, quality control, and submittals, each described more fully below.

Safety and security items include guard service, first aid, barricades, uniformed traffic persons, flagging, railings, toe-boards, rented fencing, safety equipment (such as harnesses and scaffolding), fire protection (such as fire extinguishers and temporary hydrants), and temporary signage that may be required by a regulatory authority to control pedestrian or vehicle detours within and around the construction zone. For safety and security items, CEF 2.0 recommends a 4 percent factor for most construction sites, but the FEMA estimator may choose up to a 6 percent factor for complex projects such as airports, marinas, ports, projects in urban areas, and projects in large segmented sites with phased construction.

Temporary services and utilities include construction trailer or office space, and related office equipment. The space may be for the construction job superintendent or for inspectors. It also includes temporary utilities such as construction water, electricity, telephones, construction craft sanitary facilities, and any weather protection that may be necessary for the temporary services and utilities. CEF 2.0 recommends a 1 percent factor for temporary services and utilities.

Quality control is independent testing and inspection by an organization, other than the subgrantee or contractor, with expertise specific to the project scope of work. Examples include concrete strength testing, water quality testing, and non-destructive examination of welds (joints). CEF 2.0 recommends using a default of 0.5 percent for most projects and increasing the value up to 1 percent as the overall project complexities increase.

Submittals include the contractor's costs for preparation of shop drawings, materials certifications and instructions, providing samples and product data, and construction progress schedules. CEF 2.0 recommends a 5 percent factor for submittals.

General conditions, the B.2 factor, represent the general contractor's on-site project management costs. This factor covers field supervision and quality control costs. The quality control costs in B.2 are different than the quality control costs in B.1. The B.1 quality control costs are costs incurred by an inspection service or subcontractor in

meeting discipline-specific requirements to verify conformance to specification (e.g., field testing of concrete and soil backfill, laboratory testing of reinforcing steel, field testing of electrical components after installation). The quality control costs in B.2 are general contractor costs to design, manage, and report results of the total project quality control program. CEF 2.0 recommends a 4.25 percent factor for B.2.

4. Part C Factor—Construction Cost Contingencies/Uncertainties (Design and Construction)

Part C addresses construction cost contingencies and uncertainties. It accounts for the budgetary risk associated with project unknowns and complexities in determining the scope of work. It is included in the CEF estimate to create an appropriate level of probability for completing the project within that estimate. Part C is made up of C.1, Design Phase Scope Contingencies, C.2, Facility or Project Constructability, C.3, Access, Staging, and Storage Contingencies, and C.4, Economies of Scale.

The C.1 factor, Design Phase Scope Contingencies, represents standard cost estimating contingencies based on the design and engineering process as a function of time. This contingency is based on the concept that there are typically more unknowns and items at the schematic design stage than at the final design stage. The unknowns gradually decrease as the scope of work is defined, details for completing the work are developed, and the project advances towards a set of construction drawings and specifications that can be used by a construction contractor. The project is evaluated to determine the design phase at the time the estimate is prepared.

There are two levels of design development that the estimator considers for the C.1. factor: (1) The preliminary engineering analysis stage, and (2) the working drawing stage. At the preliminary engineering analysis stage, concepts have been developed but without a significant level of detailing. It is difficult to accurately quantify work at this stage, and contractors assume a relatively high level of risk in bidding on a project at this stage. CEF 2.0 recommends a factor of 15 to 20 percent (depending on the complexity of the project). At the working drawing stage, the design is more advanced, concepts have been determined, detailing is more complete, and work tasks and quantities have been readily defined. Contractors would assume a low to medium level of risk in bidding on a project at this stage.

CEF 2.0 recommends a factor of 2 to 10 percent at the working drawing stage (depending on the level of completeness of the working drawings).

The C.2 factor, Facility or Project Constructability, addresses project complexity. The complexity of construction activities varies among the different types of projects. For new projects, the constructability factor is not applied; it is assumed that the design process takes the complexity of the project into account. The constructability factor is applied for repair and retrofit projects. These projects must be accomplished within the physical and operations constraints of existing facilities, tend to consist of tasks that are more intensely detailed and sequenced, and require closer supervision throughout the process.

The constructability factor represents site conditions or construction process complexities such as steep site embankments, unstable soil conditions, difficult subsurface construction conditions requiring such activities as de-watering and rock excavation, extreme weather conditions affecting productivity (such as winter shutdowns), urban sites, special building code requirements, availability of adequate energy, skilled craft labor, and building materials, the subgrantee's special requirements and restrictions, and environmental considerations. The subgrantee's requirements and restrictions should be reasonable; they should apply to the specific services related to the eligible scope of construction. For example, there may be a requirement for interstate highway construction to occur during night hours because of peak traffic flow impacts.

If possible, project complexity issues should be addressed in Part A of the CEF. However, if certain project conditions cannot be identified or quantified, CEF 2.0 recommends suitable factors depending on the type of work. CEF 2.0 recommends a percentage range of 1 to 2 percent for roads (rural-urban), 1 to 5 percent for bridges and culverts (simple-complex), 1 to 5 percent for water control facilities, 1 to 2 percent for simple open buildings, 1 to 5 percent for schools, libraries, and offices, 1 to 7 percent for hospitals, museums, and historic buildings, 1 to 5 percent for public utilities, and 1 to 5 percent for park and recreation facilities. The FEMA estimator should assign a C.2 factor of 0 to 1 percent for simple construction projects, and should assign a factor at the upper end of the applicable range for projects with a combination of features that increase complexity. For example, two bridges may require the

same materials and equipment, but if unstable soil conditions exist at one of the bridges, the work at that bridge will require more detailed sequencing and greater supervision.

The C.3 factor, Access, Storage, and Staging Contingencies, addresses project site conditions that impose additional costs on the work activities listed in Part A. As with the C.2 factor, these items should be addressed in Part A. But if these contingencies are not accounted for in Part A because the need for them is unclear, then the C.3 factor should be applied. The C.3 factor includes site access, storage, and staging.

Site access addresses access to the project site. There may be difficult or long access routes for trucks delivering materials, a temporary access roadway or driveway constructed to provide access for equipment, site loading conditions requiring heavy equipment (such as barges, cranes, or forklifts), off-site parking for workers, and obstructions created by utilities or exposed systems.

Storage addresses the storage of construction materials and equipment on site to support proper staging and construction activities. There may be offsite storage of materials due to space constraints, temporary easements, and lot, sidewalk, or roadway space rental costs.

Staging addresses the timing and execution of the work, which could be complicated by occupation of facilities, lack of space, and access inside the facility. This factor should be used for sites that have work access limitations because services must continue to run in spite of construction (such as hospitals). CEF 2.0 recommends a factor of 1 to 4 percent for each of the C.3 factors, according to the impact each of the C.3 factors has on project cost.

The C.4 factor, Economies of Scale, addresses the increases or decreases in cost resulting from task or project size. For example, the mobilization cost for a worker is proportionally higher for one day's work than for 30 days' work. Economies of scale are particularly applicable to new construction projects, but are also applicable to other types of work where there is a reduction in cost due to project size. CEF 2.0 recommends a factor of 0 percent for projects under \$500,000, -0.5 percent for projects under \$2 million, -1 percent for projects under \$10 million, and -2 percent for projects over \$10 million.

5. Part D Factor—General Contractor's Overhead and Profit

Part D includes three parts: D.1, General Contractor's Overhead; D.2, General Contractor's Insurance,

Payment, and Performance Bonds; and D.3, General Contractor's Profit. The general contractor's overhead includes main office expenses, including labor and salary costs for personnel, including the principals, estimators, project managers, and general office staff, plus all other operational expenses associated with working out of the main office. CEF 2.0 recommends a factor of 7.7 percent for overhead. For the D.2 factors, CEF 2.0 recommends a factor of 1.5 percent for the general contractor's payment and performance bonds, 0.3 percent for builder's risk insurance, and 1.5 percent for public liability insurance. The total value of the D.2 factor is fixed at 3.3 percent. For the D.3 factor (the general contractor's profit), CEF 2.0 recommends a range of 3 to 10 percent, depending on the size of the project and the type of work. For example, for projects over \$10 million, the recommended factor is 3 percent for repair, retrofit, or new construction. For projects under \$500,000, the recommend factor is 10 percent for repair, retrofit, or new construction.

Part D should not be applied to projects completed using the subgrantee's labor, equipment, and materials (i.e., "force account" work), nor does Part D reflect the subcontractor's overhead and profit; the subcontractor's overhead and profit should be included in the line items in Part A.

6. Part E Factor—Cost Escalation Allowance

Part E accounts for cost escalation over the duration of the project and is based upon an inflation adjustment from the time the estimate is prepared until the mid-point of construction for the eligible scope of work. This factor is only used for escalating the cost of uncompleted work. The estimator applies the Part E factor by establishing a design and construction timeline to the mid-point of construction. The timeline will vary according to whether the eligible work is already started or is delayed. The escalated cost of construction is equal to the sum of Parts A through D times the number of months to the midpoint of uncompleted construction times the escalation factor.

The escalation factor is based on a 2-year average of either the Building Cost Index (BCI) or the Construction Cost Index (CCI). These indices are published in the *Engineering News-Record*, a monthly trade publication. *Engineering News-Record* collects and publishes monthly price data on 75 different building materials from 20 major cities in the United States, plus Montreal and Toronto. It uses this data to create the

BCI and CCI each month (see <http://enr.construction.com/economics/default.asp>). When applying CEF 2.0, the estimator uses either the BCI or the CCI to calculate the escalation factor, depending on the nature of the project.

7. Part F Factor—Plan Review and Construction Permit Costs

Part F addresses fees charged by State and local agencies for plan reviews and construction permits. It includes all fees that are paid to obtain approvals required before construction can commence. Part F is split into two factors: F.1, Plan Review Fees; and F.2, Construction Permit Fees. The actual fees are included in the CEF estimate, unlike other CEF factors where the estimator applies a percentage factor. Part F is not applicable in situations where State and local agencies waive fees during disaster recovery situations.

8. Part G Factor—Applicant's Reserve for Construction

Part G is the applicant/subgrantee's reserve for potential change orders related to eligible work and any other incident costs that may be incurred after the construction contract is awarded. It does not reflect discretionary change orders for upgrades or for any ineligible work. The applicant/subgrantee's reserve is based on project size. CEF 2.0 recommends a factor of 7 percent for projects less than \$200,000, 6 percent for projects ranging from \$200,001 to \$800,000, 5 percent for projects ranging from \$800,001 to \$1,400,000, 4 percent for projects ranging from \$1,400,001 to \$2 million, and 3 percent for projects greater than \$2 million.

9. Part H Factor—Applicant's Project Management and Design Costs

Part H represents the applicant/subgrantee's costs for overall project development and management throughout the design and construction phases. This factor includes the applicant/subgrantee's costs for managing the design process, basic design and inspection services normally performed by an architecture and engineering firm, and managing the construction phase (either third party or in-house). Incidental development costs are also absorbed into these categories. Part H costs are distinct from those management and administrative costs incurred by the applicant/subgrantee to manage the Public Assistance grant and reimbursed by FEMA pursuant to section 325 of the Stafford Act and 44 CFR part 207.

Part H.1 includes the Applicant's Project Management—Design Phase. The applicant/subgrantee's costs to

manage the project during the design phase include managing the Architectural and Engineering (A&E) contracts for final design, managing the permitting and special review process, and interfacing with other agencies. (A&E contracts are contracts for the provision of design services.) A value of 1 percent has been established for this factor. The H.1 factor is not applicable in those situations where design is not required.

Part H.2 includes A&E design contract costs. This factor covers the cost of basic design and inspection services, normally performed by an A&E firm, as well as a number of additional services not necessarily required with every construction project. The basic services consist of preliminary engineering analysis, preliminary design, final design, and construction inspection. Engineering curves are used to estimate the cost of basic engineering services as a percentage of the estimated construction cost. One of two curves, Curve A and Curve B, may be used to determine the appropriate percentage. Curve A applies to projects with above-average complexity and non-standard design. Curve B applies to projects of average complexity. The curves show a correlation between engineering costs and total construction costs. The curves are included in the Public Assistance Guide, FEMA 322, June 2007, Chapter 2, pages 58 and 60, at <http://www.fema.gov/government/grant/pa/policy.shtm> and in the docket for this rulemaking. To use the curves, the FEMA estimator starts with the estimate of construction costs. The FEMA estimator finds the construction cost on the horizontal axis and then finds the associated percentage of engineering and design services from the vertical axis. This percentage can be multiplied by the estimated construction cost to determine an appropriate engineering and design cost estimate. This estimate becomes the H.2 factor. The H.2 factor is not applicable in those situations where design, construction inspection, or other basic services are not required.

Part H.3 includes the Project Management—Construction Phase. Project management costs during the construction phase include quality assurance and management of additional testing during construction, advertising and awarding of the construction contract, decisions on construction problems and requests for information, management of change orders for on-site construction conditions and design errors, and omissions and unforeseen problems, such as differing site conditions and hidden damage. The H.3 factor is

applied depending on the amount of total construction costs. For construction costs under \$500,000, FEMA applies a 6 percent factor. For construction costs of \$500,000 to \$1,000,000, FEMA applies a 5 percent factor. For construction costs of \$1,000,000 to \$5,000,000, FEMA applies a 4 percent factor. For construction costs of more than \$5,000,000, FEMA applies a 3 percent factor.

10. Summary and Application of the Parts B Through H Factors

The expenses reflected in the Parts B through H factors can reasonably be expected to occur because they are costs directly related to the project and are almost always encountered during the course of construction. When FEMA developed these factors for CEF 2.0, it determined the Parts B through H percentage factors using guidance available from the Construction Specifications Institute (CSI) and Reed Construction Data, as well as data from closed-out grants for large projects nationwide. CSI is an organization that maintains and advances the standardization of construction language as it pertains to building specifications. CSI provides structured guidelines for specification in writing in a Project Resource Manual. CSI authored MasterFormat, which is an indexing system for organizing construction data, particularly construction specifications. The MasterFormat consists of 50 divisions, reflecting the growing complexity of the construction industry, such as masonry, electrical, finishes, and mechanical.

It is critically important that the FEMA cost estimator determine all elements that make up the construction costs itemized in Part A, so that costs are not duplicated in the construction-related costs in Parts B through H. Duplication of costs would result in an inflated project cost. If all work is completed and actual costs are known and itemized in Part A, the cost estimator need not apply Parts B through G. Conversely, if all work is not completed, the cost estimator may apply one or more of the factors in Parts B through H to the uncompleted items of work, where appropriate.

When applying the Parts B through H factors, the FEMA cost estimator must choose which cost data to use. Table 1 below depicts the hierarchy of preferred pricing with completed work favored first, and RS Means Cost Data favored least. As explained above, the hierarchy of preferred pricing is based on the accuracy of the data, with the most accurate being favored first, and the least accurate being favored last. In

Table 1, the “Completed Work” column applies to any work that has been completed on a project. If work has been completed, the only factor that is applied is Factor H. Factor H is applied to completed work because it represents the applicant/subgrantee’s costs for overall project development and management throughout the design and construction phases. It is applied as a percentage of the completed work. If

work is not completed, the FEMA estimator uses bid-tab data, local-cost data, or RS Means Cost Data to estimate the cost of the uncompleted work. If the FEMA estimator uses bid-tab data, only Factors F, G, and H apply. Factors B through E do not apply because bid-tab data includes the items that make up those factors. For example, Factor C, which reflects construction cost contingencies, would not be applicable

if bid-tab data is used because the cost is already known and, therefore, there is no contingency. Part G, however, would be applicable if bid-tab data is used because change orders and differing site conditions may still be a possibility. If local cost data is used, only Factors E through H apply, and if RS Means Cost Data is used, all factors apply.

TABLE 1—HIERARCHY OF COSTS

CEF Part	Types of costs used in part A and typical application of factors			
	<i>Completed Work</i>	<i>Bid tab</i>	<i>Local Cost Data</i>	<i>RS Means Cost Data</i>
A	*	*	*	Y
B	*	*	*	Y
C	*	*	*	Y
D	*	*	*	Y
E	*	*	Y	Y
F	*	Y	Y	Y
G	*	Y	Y	Y
H	Y	Y	Y	Y

Y = Part or Factor Normally Applied.

* = Part or Factor Normally Not Applied.

In all cases, the cost estimator is responsible for determining the unit costs in Part A, before it applies one or more of the Parts B through H factors so that there is no cost duplication of work activities previously considered in Part A.

CEF 2.0 is explained more thoroughly in FEMA’s *Cost Estimating Format for Large Projects Instructional Guide, Version 2* (November 1998), available in the docket for this rulemaking at www.regulations.gov.

III. The Disaster Mitigation Act of 2000

Section 205(d) of the Disaster Mitigation Act of 2000 (DMA 2000), Public Law 106–390, 114 Stat. 552 (October 30, 2000), 42 U.S.C. 5172, which amends section 406(e) of the Stafford Act, directs the President, acting through the Administrator of FEMA,⁶ to establish an expert panel, to include “representatives from the construction industry and State and local government [to] develop recommendations concerning procedures for estimating the cost of repairing, restoring, reconstructing, or replacing a facility consistent with industry practices.” DMA 2000 further requires the President to promulgate regulations that establish cost estimation procedures, taking into account the recommendations of the

expert panel, for use in determining the eligible cost of repairing, restoring, reconstructing, or replacing a public or private nonprofit facility under section 406 of the Stafford Act. The statute limits use of these procedures to large projects.

DMA 2000 also requires modification of the eligible cost when the actual cost of the project is greater than a predetermined ceiling percentage or when the actual cost is less than the estimated cost by a predetermined floor percentage. The statute requires the expert panel to develop recommendations concerning floor and ceiling percentages, and requires the President to promulgate regulations establishing ceiling and floor percentages, taking into account the recommendations of the panel. The statute requires application of the floor and ceiling percentages. If the actual project cost is greater than the ceiling percentage of the estimated cost, the President may reimburse a portion of the actual cost that exceeds the estimated cost. If the actual project cost is less than the estimate but more than or equal to the floor percentage of the estimated cost, the applicant may use the excess for mitigation activities. If the actual project cost is less than the floor percentage of the estimated cost, the applicant must return the difference.

This rulemaking implements section 205(d) of DMA 2000 by proposing the CEF as the cost estimating methodology for determining the eligible cost for large projects under the Public Assistance program, and by proposing

floor and ceiling thresholds of +/- 10 percent, as recommended by the expert panel. Sections IV and V of this preamble discuss the implementation of DMA 2000 in detail.

IV. The Expert Panel on Cost Estimating

A. Establishment of the Panel

Pursuant to section 205(d) of DMA 2000, FEMA established the Expert Panel (Panel) on Cost Estimating for the Public Assistance Program on April 1, 2000. FEMA invited professional organizations to nominate candidates for membership on the Panel. There were nine panel members including experts in design, construction, and cost estimating of roads, water control facilities, buildings, utility systems, and recreational facilities, who represented various geographical regions of the country. FEMA (the Designated Federal Official) and the National Emergency Management Association co-chaired the Panel. The other Panel members represented the American Association of State and Highway Transportation Officials (AASHTO), the Associated General Contractors of America, Inc. (AGCA), the American Institute of Architects (AIA), the American Public Works Association (APWA), the American Society of Professional Estimators (ASPE), the National Association of County Engineers (NACE), and the National Society of Professional Engineers (NSPE).

The Panel’s charter established the Panel to evaluate the Public Assistance program’s methodology for estimating the cost of repairing, restoring,

⁶ The President has delegated the authorities of the Stafford Act to the Secretary of the Department of Homeland Security. Executive Order 13286 (February 28, 2003). The Secretary has in turn delegated those authorities to the Administrator of FEMA. DHS Delegation 9001.1 (December 10, 2010).

reconstructing, or replacing a public facility or private nonprofit facility based on the design of the facility as the facility existed immediately before the disaster and in conformity with codes, specifications, and standards (including floodplain management and hazard mitigation criteria required by the President or under the Coastal Barrier Resources Act (16 U.S.C. 3501 *et seq.*)) applicable at the time at which the disaster occurred. The Charter required the Panel to review the CEF materials and determine if the CEF methodology is appropriate for the Public Assistance program. It also required the Panel to determine what level of technical expertise is required to uniformly apply the recommended estimating methodology to maximize its accuracy and national applicability.

B. Meetings of the Panel

The Panel met twice in 2001 and each meeting was open to the general public. The meeting minutes are available for viewing in the public docket for this rulemaking. On May 25, 2001, FEMA published a notice in the **Federal Register** at 66 FR 28910 announcing the first meeting of the Panel. The first meeting of the Panel was conducted from June 26–27, 2001. At the meeting, FEMA provided the Panel with an overview of the Stafford Act and section 205(d) of DMA 2000, a briefing on the Public Assistance program and the GAP, and a briefing on the CEF. After FEMA's CEF presentation, Panel members expressed their general consensus that the CEF is a sound tool and discussion focused on how to make the CEF better. The Panel indicated that the applicant/subgrantee needs to be involved in developing the cost estimate and all parties involved must have a clear understanding of the scope of work, and that the scope of work must remain consistent throughout the life of the project. The Panel noted that the Public Assistance Project Officer is responsible for developing the Project Worksheet in a multi-disciplinary environment, but the lead FEMA estimator is responsible for developing the actual construction cost estimate and should participate in the on-site review of the project conducted by the Public Assistance Project Officer. The Panel noted that subgrantees have been pleased with the quality of the CEF estimates, and that using an integrated, seamless process where everyone works together as a team has worked well. Using subgrantee-provided cost data wherever possible is especially helpful in obtaining an accurate estimate. The

Panel members agreed that the factors used in the CEF are acceptable, and acknowledged that some project savings and overruns would still be realized in the real world as a result of open market conditions.

The Panel indicated that the CEF should mirror, as closely as possible, standard industry methods, such as those used by ASPE, and that ASPE Committee members would be asked to help with this effort. It discussed how the CEF is an incremental-complexity instrument (i.e., there is less risk as more information becomes known and as the process moves forward).

Next, the Panel directed that two comparative analyses be performed between the CEF version 2.0 and ASPE's *Standard Estimating Practice* (5th edition, 1998). The first comparative analysis would be performed by each of FEMA's Technical Assistance Contractors (TACs), and the second comparative analysis would be performed by ASPE's Standards, Certification, and Education Boards. The results of the comparative analyses would be used by the Panel at its second meeting to augment and/or revise the CEF. The Panel directed that the independent comparative analyses determine whether or not the CEF is parallel to ASPE's level 3 (design, development/budget appropriation) estimating approach, and if the CEF was not parallel to an ASPE level 3 estimate, to say so and identify the ASPE level that parallels the CEF.

ASPE cost estimates are categorized by levels. At the time of the Panel's recommendation, the Levels used were taken from *Standard Estimating Practice*, 5th ed., which includes Level 1 to Level 6. (The current edition has revised levels, going from Level 1 to Level 5, which will be discussed later in this preamble.) Level 1 is the lowest level of project definition (the early planning stages of the project) and Level 6 is the highest level of project definition (when the project design is finalized). A Level 1 cost estimate will be less accurate than a Level 6 cost estimate, because of the lack of information available to the estimator at Level 1.

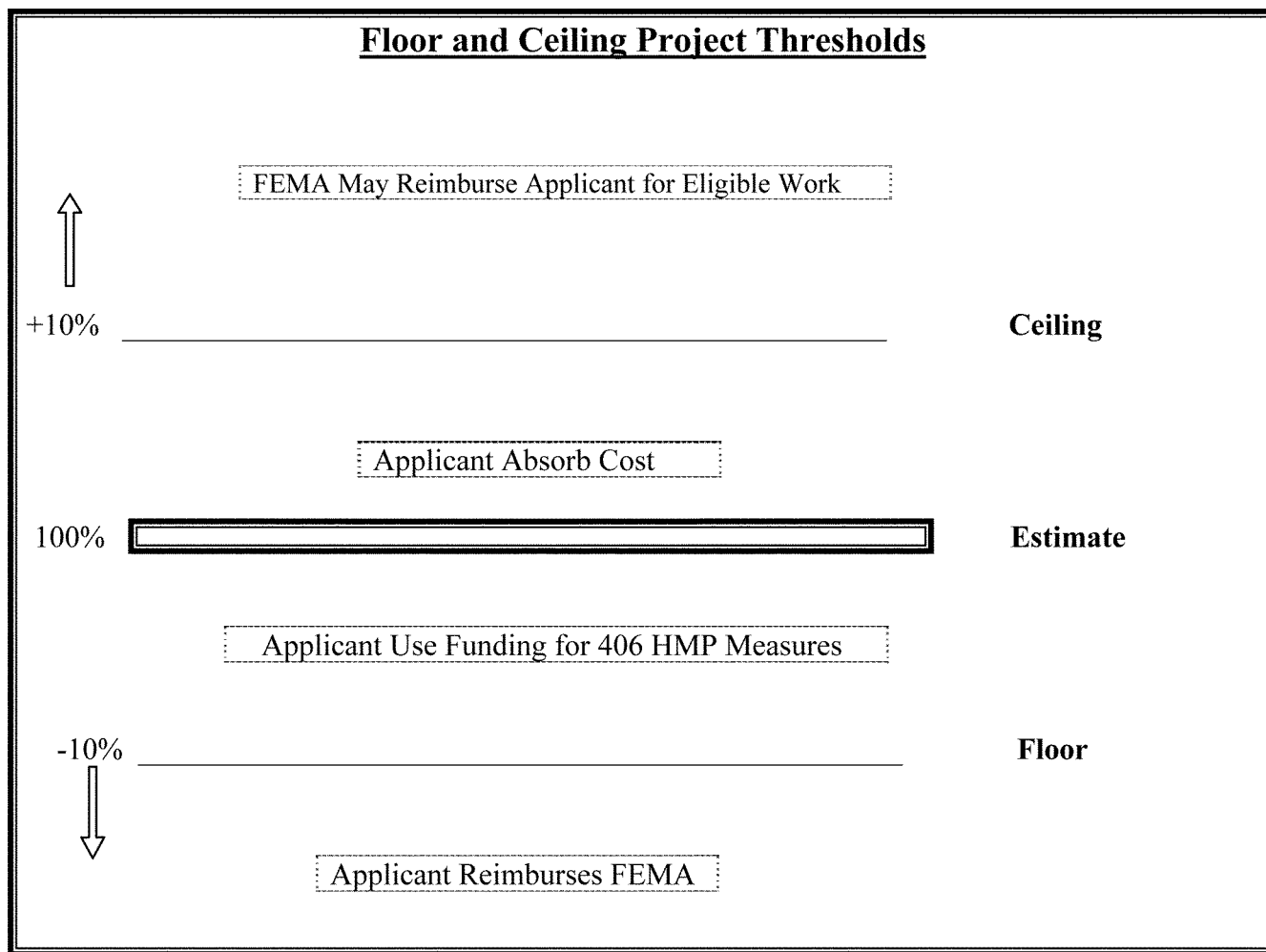
According to the *Standard Estimating Practice*, 5th ed., a Level 1 estimate is the Order of Magnitude level; at this level, the estimate contingency may range from 20 to 50 percent. Estimators prepare this level of estimate from an outline of the proposed project. Level 2 is the Schematic/Conceptual Design level; the estimate contingency may range from 20 to 30 percent. Level 3 is the Design Development level; the

estimate contingency at this level may range from 15 to 25 percent. Estimators prepare this level of estimate from no less than 25 percent complete preliminary design drawings and draft specifications. Estimates produced at ASPE Level 3 are used to verify budget conformance as the scope and design is finalized and final materials are selected. Information required for this level includes drawings showing plans, elevations, typical details, engineering design criteria, equipment layouts and detailed outline specifications. ASPE Level 4 is the Project Control Level. Estimators prepare this level of estimate from no less than 75 percent complete design drawings and specifications. ASPE Level 5 is the Construction Document level; the estimate contingency at this phase may range from 5 to 10 percent. Estimators prepare this level of estimate from no less than 90 percent complete design drawings and specifications. This level is used to verify pricing as details are completed and design is modified and completed. This estimate can be used to evaluate the subcontract pricing during the bid phase. Information required for this level includes detailed drawings showing plans, elevations, sections, details, schedules, specifications, and bidding criteria. ASPE Level 6 is the bid-phase estimate. The purpose of this level is to show probable costs in the preparation and submittal of bids. At this phase, design drawings and specifications are complete. Estimate contingencies should be at zero percent at ASPE Level 6.

The Panel directed that the comparative analyses between the CEF and the ASPE methods consist of validating whether or not a CEF estimate (at an ASPE Level 3) would provide a level of confidence commensurate with an ASPE Level 5 (construction documents/contract drawings/definitive) estimate, such that the CEF estimate (at an ASPE level 3) would be within the ± 10 percent floor and ceiling thresholds.

Regarding the floor and ceiling thresholds, FEMA reported that its general experience with CEF to date showed that for project costs of \$2 to \$4 million, the project range had been (plus or minus) 10 percent; for project costs less than \$2 million, there had been cost overruns of more than 20 percent, and for project costs greater than \$4 million, there had been cost underruns of more than 20 percent. The Panel agreed that the following depiction expressed the intent of section 205(d) of DMA 2000:

Floor and Ceiling Project Thresholds



The meeting minutes state that the Panel reached consensus and recognized that plus and minus 10 percent are reasonable floor and ceiling thresholds for project cost, “as derived from construction industry standards.” The meeting minutes indicate that it was understood that some projects in the \$50,000 to \$100,000 range could fall outside the threshold, but there was general agreement that the 10 percent threshold is appropriate and that using the same number across the board would make the program easier to administer.

On August 28, 2001, FEMA published a notice in the **Federal Register** at 66 FR 45313 announcing the second meeting of the Panel. The second meeting of the Panel was conducted from September 26–27, 2001. The Panel compared and contrasted the CEF with estimating methods used by ASPE. A representative from the ASPE gave a presentation comparing the CEF to ASPE’s Level 3 estimate. The ASPE representative noted that the preliminary finding was that the CEF conforms to recommended estimating

practices. However, the ASPE Board of Directors, Technical Board, and Standing Committees had not yet formalized the Society’s findings. (The findings were eventually formalized in January 2002.) Further, the ASPE representative noted two areas of caution when using the CEF: the need for appropriate expertise of the personnel performing the estimates, and the quality of the construction document data that directly affects the level of detail included in the estimate. Most estimators, he said, would prefer to use historical and/or local cost data rather than factored national cost data from commercial estimating manuals, and would prefer to use the estimating expertise from the vicinity of the disaster, when possible. This allows factors to be developed on the project site. Regarding the ASPE Level 3 estimate, the ASPE representative stated that that level is not designed to require sufficient construction documentation to attain the ideal $\pm 10\%$ range of eventual firm bids.

Next, FEMA presented the results of its comparative analysis of the CEF to

ASPE’s Level 3 estimating approach. ASPE’s Level 3 estimate is a “Design Development/Budget Appropriation” level prepared from not less than 25 percent complete preliminary design drawings and draft specifications. The purpose of this estimate is to establish probable costs within the range of available information. To perform the primary comparison of CEF to an ASPE Level 3, the documentation and design development criteria for both estimating methods were detailed. In its presentation, FEMA noted that the requirements for both estimating methodologies are very similar. Site plans, dimensions, arrangements, and schematics are required for both. ASPE also requires detailed preliminary plumbing, mechanical and electrical drawings. This level of detail is not specifically defined as a requirement for CEF. FEMA noted that while the requirements for both methodologies are generally quite similar, they are not directly comparable. The CEF focuses on costs to return disaster-damaged eligible facilities to their pre-disaster condition. In this regard, the CEF

parallels the performance objective of ASPE Level 3. Under post-disaster conditions, a CEF estimate will compare favorably with other cost estimating methodologies (e.g., Building Construction Handbook, United States Department of Energy Cost Estimating Guide, and the Association for the Advancement of Cost Engineering's Cost Estimate Classification System) and produce an estimate of approximately the same magnitude and confidence level.

FEMA concluded that the results of its comparison of the CEF to ASPE Estimating procedures (Levels 1 through 6) show that the CEF process parallels the ASPE Level 3 process in level of contingency (design phase scope contingency) and the type and level of design documentation required. ASPE's method does not specifically incorporate factors in the estimate, as is done in CEF, but it does allow a percentage to be used for general conditions in Levels 1 and 2, and standard estimating industry practice often involves adding a percentage of base costs to a number of items to put together a total estimate (e.g., construction cost contingencies, reserve for change orders, overhead, and profit).

FEMA indicated that to ensure a high level of confidence in the CEF estimate, a clear definition of the scope of work is required, along with active participation by the subgrantee, and that to meet the ASPE Level 5 criteria using the Panel's plus or minus 10 percent thresholds, the Panel could consider refining the qualification criteria to include all large permanent work projects on the basis of all work being done for an individual subgrantee, rather than on a project-by-project basis. The FEMA presenter concluded that the CEF falls well within the range of other industry-accepted cost estimating systems.

Each panelist voted on the behalf of their respective organizations and unanimously endorsed the CEF 2.0 and selected the CEF as the recommended cost estimating methodology for the Public Assistance program.

The minutes of both meetings are posted on FEMA's Web site at <http://www.fema.gov/government/grant/pa/meeting.shtm> and in the docket for this rulemaking at www.regulations.gov.

C. Panel Recommendation Report

The Panel issued a Recommendation Report in October 2002. The Report is available on FEMA's Web site at <http://www.fema.gov/government/grant/pa/exppanel.shtm> and in the docket for this rulemaking at www.regulations.gov. The

Panel made nine recommendations in its report. They are:

1. Official Endorsement of the CEF

The Panel officially endorsed the CEF 2.0 as the cost estimating methodology and instrument of the Public Assistance program, predicated on the following observations: The CEF mandates the use of CSI Masterformat and estimates are prepared with the CSI number system; the format of the CEF is designed to serve the unique requirements of the Public Assistance program; the organized approach of the CEF promotes consistency in documentation; the CEF has the capability to import and incorporate cost data from other estimating programs; and the design of the CEF is flexible and, therefore, superior to other inflexible estimating systems.

2. Recommendation of Plus or Minus 10 Percent as the Reasonable Floor and Ceiling Thresholds for Project Cost

The Recommendation report indicates that the 10 percent thresholds "best represent accepted engineering and construction industry standards for estimating project costs."

3. Close Attention Must Be Made to the Degree of Documentation Detail Required for Developing CEF Estimates

The Panel recommended that the highest level of detail that can be made available from design and/or construction information should be used to build the CEF estimate. When available, the use of lump sum competitive bids is discouraged in favor of itemized unit price bids. If used, lump sum bids require 100 percent full-detailed and complete drawings and the work activities should be itemized. In either case, estimate accuracy depends upon the completeness of the bid documents. The Panel noted that the realistic starting point for developing a cost estimate for a disaster-damaged facility is at an ASPE Level 3, which is prepared from not less than 25 percent complete preliminary design drawings and draft specifications. The purpose of this estimate is to establish probable costs within the range of available information. The Panel specified that in order to attain the plus or minus 10 percent threshold accuracy proposed for a CEF estimate, the Public Assistance process should progress to a level of detail corresponding to an ASPE Level 5, which is prepared from not less than 90 percent complete design drawings and specifications. This level shows the probable project cost.

4. Important Points That Must Be Considered When Using the CEF

The Panel noted that early identification of personnel with discipline-specific, technical expertise is required to accurately develop a complete scope of work before CEF estimates are generated, and those estimates should include experienced cost estimators. The individual assigned to develop the estimate must have discipline-specific, technical expertise in the formulation of large projects. Federal, State and local partners must collaborate in good faith when identifying and documenting the eligible scope of work to repair or replace a disaster-damaged facility to improve the likelihood of realizing accurate cost estimates within the floor and ceiling thresholds. The Panel noted that it is best to take time preparing a CEF estimate at the outset to improve the chance that it will not have to be revisited in the future (i.e., if it is done incorrectly, such as not applying one of the factors). Working with the subgrantee early on in the disaster response and recovery process is essential to discussion and agreement on the scope of eligible work and could be helpful in reducing the need for change orders. Hidden damage and differing site conditions would be an exception. The Panel recommended that whenever possible, base costs captured in Part A of the CEF should be derived from local cost-estimating resources and cost data. The Panel also recommended that work activities not itemized in the CEF estimate should be eliminated from the Project Worksheet (e.g., the deduction for depreciation, insurance recovery, and salvage value, etc.) before the CEF estimated cost and the eligible cost of the actual work are compared. The estimator should calculate the plus or minus 10 percent threshold between the CEF estimated cost and the eligible cost of the actual work.

5. CEF Training Offered at Disaster Field Offices Should Be Made a Resident Course Offering of FEMA's Emergency Management Institute

The Panel recommended that FEMA establish a resident CEF training program at the Emergency Management Institute (EMI) of FEMA's National Emergency Training Center (NETC). The training would be for Public Assistance Project Officers, Technical Specialists, FEMA's Public Assistance Coordinators, Public Assistance Officers, and management officials responsible for disaster operations.

6. The Lower-Bound Percentile for Factor C.1 (Preliminary Engineering Analysis Stage) Should Be Revised to More Accurately Reflect the Risk in Bidding Simple Projects

As noted in this preamble, the Part C factor accounts for the budgetary risk associated with project unknowns and complexities in determining the scope of work. It is included in the CEF estimate to create an appropriate level of probability for completing the project within that estimate. The C.1 factor, Design Phase Scope Contingencies, represents standard cost estimating contingencies based on the design and engineering process as a function of time. This contingency is based on the concept that there are typically more unknowns and items at the schematic design stage than at the final design stage. The unknowns gradually decrease as the scope of work is defined, details for completing the work are developed, and the project advances towards a set of construction drawings and specifications that can be used by a construction contractor. The project is evaluated to determine the design phase at the time the estimate is prepared.

At the preliminary engineering analysis stage, concepts have been developed but without a significant level of detailing. It is difficult to accurately quantify work at this stage, and contractors assume a relatively high level of risk in bidding a project at this stage. CEF 2.0 recommends a factor of 15 to 20 percent (depending on the complexity of the project). The Panel's recommendation is that the current lower-bound percentile of 15 percent does not accurately depict the actual risk of bidding a simple project; the lower-bound percentile of 7 percent is more realistic.

7. Cost Data Should Be Obtained for Use in Analyzing Results for Each Large Project Estimated by the CEF

The Panel noted that the Public Assistance Officer forwards a CEF Large Project Report to FEMA Headquarters, and this report includes the CEF estimate of the large project and the actual cost of the completed large project. To facilitate FEMA's efforts in collecting this information, the Panel encouraged FEMA to incorporate CEF data collection into its existing database (the National Emergency Management Information System (NEMIS)), to allow FEMA the ability to standardize information reporting requirements, facilitate project cost data development, and to electronically access data for analysis.

The Panel emphasized that data collection for estimated and actual costs should be designed for comparison of like work activities between the final CEF estimated costs and the eligible costs of actual work. It is critical that work activities not itemized in the CEF estimate be eliminated from the Project Worksheet (such as the deduction for insurance recovery), before comparing the CEF estimated cost and the eligible cost of the actual work. Only when like items of work exist is the plus or minus 10 percent threshold between the CEF estimated cost and the eligible cost of the actual work properly calculated.

8. The Engineering and Design Services Curves (A and B) Should Be Updated as Soon as Practicable When Received From the American Society of Civil Engineers (ASCE) Committee on Professional Practice

As addressed in this preamble's discussion of the Part H factor, engineering curves are used to estimate the cost of basic engineering services as a percentage of the estimated construction cost. One of two curves, Curve A and Curve B, may be used to determine the appropriate percentage. Curve A applies to projects with above-average complexity and non-standard design. Curve B applies to projects of average complexity. In its recommendation, the Panel indicated that the 1975 curves being used by FEMA are lower than current engineering and construction costs, and that a better estimate of A&E costs is necessary.

9. Incorporate Lessons Learned Into the CEF

The Panel recommended that FEMA make periodic revisions and incorporate lessons learned from previous disasters into the CEF Instructional Guide and/or worksheet to better ensure that user guidance remains current.

V. Proposed Rule

A. General

FEMA accepts the Panel's recommendation to adopt the CEF as the cost estimating procedure for large permanent work projects. FEMA has made several changes to CEF 2.0 as a result of the Panel's recommendations as well as other general improvements made as a result of using CEF in the field. The new version reflecting these changes is called CEF 2.1. FEMA also accepts the Panel's recommendation of a 10 percent floor threshold for underruns and a 10 percent ceiling threshold for overruns.

Pursuant to DMA 2000, FEMA will apply the CEF to large projects (projects above \$67,500 for fiscal year (FY) 2013) involving permanent work (Categories C through G) only. These restrictions are implemented pursuant to section 2(d) of DMA 2000, which specifically limits applicability of the cost estimation procedures to large projects, and to projects authorized by section 406 of the Stafford Act, which are projects involving repairing, restoring, reconstructing, or replacing a disaster-damaged public facility or private nonprofit facility. FEMA categorizes such projects as permanent work.

FEMA proposes to apply the CEF only to projects that are less than 90 percent complete. By the time a project is 90 percent complete, most of the actual costs of the project are known, rendering little need for the CEF, which is designed to determine unknown costs. FEMA determines whether a project is 90 percent complete by dividing the total amount of the approved invoices for completed eligible work by the total construction contract award amount for eligible work, and then multiplying by 100. For example, if the total contract award is \$100,000, and the total amount of approved invoices is \$87,000, FEMA would divide \$87,000 by \$100,000 to get 0.87, and then FEMA would multiply 0.87 by 100 to get 87 percent complete.

Once FEMA completes the CEF estimate, FEMA will attach the CEF Spreadsheet to the Project Worksheet, along with all supporting documentation. After FEMA approves the Project Worksheet, FEMA will obligate the Federal share of the total project cost estimate to the grantee. The grantee is responsible for drawing down funds from Smartlink⁷ and for using those funds to make incremental payments to the subgrantee in accordance with local rules and procedures as work is completed and documentation is submitted. Once FEMA has established a total eligible project cost of an approved scope of work, FEMA will not alter that amount, and any cost overruns or underruns will be addressed at project closeout. FEMA will not allow for revised scopes of work because the CEF estimate takes into account the possibility of any such revisions in the Part C Factor: Construction Cost Contingencies/Uncertainties (Design and

⁷ Smartlink is an electronic money transferring system. When FEMA obligates funds for an approved Project Worksheet, FEMA transfers the approved funds to the Smartlink system. The grantee uses an identification number and password to access the Smartlink system to draw down the funds to pay the subgrantee.

Construction). The Part C factor accounts for the budgetary risk associated with project unknowns and complexities in determining the scope of work. It is included in the CEF estimate to create an appropriate level of probability for completing the project within that estimate.

B. CEF Version 2.1

FEMA proposes in this rulemaking to use CEF version 2.1 as the cost estimating procedure for determining the total project cost estimate of a large permanent work project. FEMA has incorporated the Panel's recommendations and lessons learned from version 2.0 into version 2.1.

One of the major changes in version 2.1 is the revision of Factor C.1 (Preliminary Engineering Analysis). In accordance with the Panel's recommendation, the lower-bound percentile of bidding simple projects has been changed from 15 percent to 7 percent. For Factor C.2 (Facility or Project Constructability), the input of

percentages is restricted to a maximum of 7 percent. The recommended range was not higher than 7 percent in CEF 2.0, but the estimator had the option of using a higher percentage. CEF 2.1 no longer allows the estimator to use a percentage higher than 7 percent. This will help ensure that the CEF estimates are consistent and that the estimator chooses factors within the recommended ranges. If the FEMA estimator has sufficient information to support costs outside the recommended range, then that cost should be itemized in Part A rather than use a CEF Factor. For similar reasons, Factors B.1, C.2 and C.3 have been restricted to their recommended ranges.

Regarding Factor C.4 (Economies of scale), Factor D.3 (General contractor's profit), and Factor G (Applicant's reserve for change orders), the step functions for these factors have been changed to a curve function. When using a step function, a certain percentage is applied to a project based on the dollar amount of the project. This

approach is reasonable, except for projects at the boundary of the range, which resulted in sharp dollar changes at arbitrary boundaries. By changing to a curve function, the FEMA estimator can adjust the factors based on the size of the project in a way that avoids these sharp dollar changes. For example, for a project of \$2,950,000 (the sum of CEF Parts A, B, C, D.1 and D.2) CEF version 2.0 assigned a general contractor profit of 7 percent for repair/retrofit work or 6.5 percent for new construction (for projects from \$1.5 million to \$3.0 million). For a similar project of \$3,150,000 the general contractor profit decreases to 5.5 percent for repair/retrofit work and 5 percent for new work. As shown in Table 2, the increase in project size results in a substantial decrease in the dollar amount of the profit.

In CEF version 2.1 the change in profit is continuous as the project size changes. The percentage continues to decrease but a drop in dollars at the boundaries is avoided.

TABLE 2

CEF Version	Project size	Repair/retrofit		New construction	
		% Profit	\$ Profit	% Profit	\$ Profit
CEF V.2	\$2,950,000	7	\$206,500	6.5	\$191,750
	3,150,000	5.5	173,250	5	157,500
CEF V2.1	2,950,000	5.7	167,863	5	146,708
	3,150,000	5.5	174,409	4.8	157,509

FEMA has not included the specific recommended percentages for the factors in the regulatory text. The percentages are listed in the *CEF for Large Projects Instructional Guide V2.1* and in the CEF Spreadsheet. FEMA did not include them in the regulatory text because application of a specific percentage is in the discretion of the FEMA estimator. This allows the FEMA estimator the flexibility to adjust the percentages as necessary for each specific project. This flexibility will allow the FEMA estimator to reach the most accurate estimate possible, thus avoiding the possibility of large overruns or underruns. It also allows FEMA to adjust the recommended percentages for each factor if necessary due to lessons learned or any change of circumstances such as: (1) Inflation, (2) publication by the ASCE of new cost data requiring an update to the engineering design curves, (3) updated recommendations of the CEF Expert Panel, or (4) any other changes that affect the engineering and construction industry.

Another major change to CEF 2.0 affects the Part H.2 Factor (A&E Design Cost Curves). FEMA has updated the A&E curves to be consistent with the Public Assistance Guide (FEMA 322/ June 2007) and the 2005 ASCE data, as recommended by the CEF Panel.

The Panel recommended that an appropriate amount of time be taken in preparing the eligible scope of work and in estimating the Part A costs. FEMA agrees, as this will result in a more accurate CEF estimate. FEMA has stressed the importance of preparing an accurate scope of work in the CEF Instructional Guide for version 2.1, as well as the importance of a detailed and thorough estimate in Part A.

The Panel also recommended that FEMA identify personnel with discipline-specific, technical expertise to more accurately develop a complete scope of work before CEF estimates are generated and to include experienced cost estimators. FEMA recognizes that the success of the CEF system is predicated upon the development of an accurate scope of work in Part A and selection of the appropriate factors in

Parts B through H, and that the professional experience of the estimator is an important consideration. Members of the CEF team should be engineers, cost estimators, or technicians with experience in design, construction, and cost estimating. FEMA generally recognizes that an individual with cost estimating experience who qualifies as an Engineer IV, according to the ASCE, or a U.S. Army Corps of Engineers GS-11, is qualified to use the CEF. The Panel also recommended that FEMA establish a resident CEF training program at the EMI FEMA's NETC. FEMA has implemented a training and credentialing program for CEF users.

The CEF Instructional Guide for CEF 2.1 is available in the docket for this rulemaking at www.regulations.gov.

C. Floor and Ceiling Thresholds

1. Establishment of Set 10 Percent Floor and Ceiling Thresholds

Due to the time that has elapsed between the Panel's Recommendation Report in 2002 and the publication of this proposed rulemaking, FEMA contacted individual panel members to

re-validate the 10 percent threshold recommendation.⁸ FEMA received responses from three panel members; all three re-validated the 10 percent recommendation. FEMA also reached out to individual industry experts, who also supported the 10 percent recommendation. In addition, the 10 percent threshold is supported by industry research. See Ray R. Venkataraman and Jeffrey K. Pinto, *Cost and Value Management in Projects*, 43–57 (2008); J. Thomas Tanner, “Construction Cost Estimating,” in *Land Development Handbook*, 831–847 (2002); Nigel J. Smith, *Project Cost Estimating*, 51–59 (1995); Anghel Patrascu, *Construction Cost Engineering Handbook*, 75–95 (1988). The responses from the individual Panel members and the individual industry experts, as well as the supporting research, are available for viewing in the docket for this rulemaking.

FEMA finds that the 10 percent threshold is an acceptable threshold for a CEF version 2.1 cost estimate, which is an ASPE Level 4 cost estimate. The current Level 4 is equivalent to the Level 5 at the time of the Panel’s recommendation. ASPE has revised its levels since the Panel’s recommendation. In the most recent edition of the *Standard Estimating Practice*, there are now five levels rather than six. Essentially, Levels 1 through 3 are still the same. Level 4 (project control) was removed, and the old Level 5 (construction document) became the new Level 4, and the old Level 6 (bid) became the new Level 5. The Panel recommendation that the CEF be a Level 5 estimate, which is when the level of design is 90 percent complete, would now be a Level 4 estimate.

For an accurate estimate, estimators need a detailed scope of work, detailed project specifications, drawings, diagrams, floor plans, elevations, and other similar information about the project. The more information the estimator has to define the project, the more accurate the estimate will be. FEMA’s CEF 2.1 Instruction Guide stresses to the FEMA estimator the importance of gathering these materials before completing an estimate.

The Panel also stressed the importance of certain items that would ensure that the estimator is able to produce a Level 5 (now Level 4) estimate. The Panel recommended that the FEMA estimator should be an experienced estimator, with discipline-

specific, technical expertise, and that the estimator take time preparing a CEF estimate at the outset to improve the chance that it will not have to be revisited in the future. The Panel also recommended that the FEMA estimator should work with the subgrantee early on in the disaster response and recovery process to determine an accurate, detailed, and clearly defined scope of eligible work, and to make use of the greatest degree of design and/or construction documentation detail. These recommendations are incorporated into CEF 2.1 and ensure that the CEF estimate is a Level 4 estimate (as per current ASPE levels). If this rule is finalized, the Instructional Guide will be revised to include a section on the application of the floor and ceiling thresholds.

The Panel emphasized that work activities not itemized in the CEF estimate should be eliminated from the Project Worksheet (such as the deduction for insurance recovery) before the CEF estimated cost and actual costs are compared. The Panel stressed that the plus or minus 10 percent thresholds cannot be applied except when there are like items of work in the CEF estimate and the determination of actual costs. When FEMA calculates the actual cost, it will only include those items that were included in the CEF estimate. This issue will be addressed in the Instructional Guide so that there is a valid comparison between the CEF estimate and the actual cost at the project reconciliation phase.

2. Ceiling Threshold

The statutory language establishing a ceiling threshold under section 406(e) of the Stafford Act, as amended by DMA 2000, states that if the actual project cost is greater than the ceiling percentage of the estimated cost, the President may reimburse a portion of the actual cost that exceeds the estimated cost.

There are at least two interpretations of the provision in the statute stating that FEMA may reimburse a “portion of the actual cost.” It could be interpreted to mean that if the actual costs exceed the ceiling threshold: (1) FEMA may reimburse the Federal share of any amount that exceeds the CEF estimate, or (2) FEMA may reimburse the Federal share of any amount that exceeds the ceiling threshold. The first interpretation views the provision as a *de minimus* statute, meaning that if FEMA’s estimate is fairly accurate (the amount of the overrun is less than the ceiling percentage) then there is no need for the administrative chore of adjusting that estimate, but if FEMA’s estimate is in error by more than the ceiling

percentage, then adjustment is necessary. With the first interpretation, FEMA would share all of the cost if the estimate is so inaccurate that it is in error by more than the ceiling percentage. The second interpretation is that FEMA may reimburse any amount of the Federal share over the ceiling threshold. This is the interpretation of the CEF Panel, and it ensures that the subgrantee has an interest in keeping costs down during a project. If FEMA were to determine that “a portion of the actual cost” means any eligible costs over the CEF estimate, then as soon as the subgrantee surpassed the CEF estimate, it would have an incentive to spend more to go over the ceiling threshold in order to avoid paying for the portion that was over the CEF estimate but was less than the ceiling threshold.

Thus, if the actual costs exceed the CEF estimate, but are under the ceiling threshold, FEMA would not reimburse the subgrantee for the excess amount. If there is a 10 percent ceiling threshold, the CEF estimate is \$100,000, and the actual costs are \$125,000 (which is \$15,000 over the ceiling threshold of \$110,000), then FEMA may reimburse the Federal share of any portion of the \$15,000 excess amount.

3. Floor Threshold

The statutory language establishing a floor percentage (referred to by FEMA as the floor threshold) under section 406(e) of the Stafford Act, as amended by DMA 2000, states that if the actual project cost is less than the estimate but more than or equal to the floor percentage of the estimated cost, the applicant may use the excess for mitigation activities. If the actual project cost is less than the floor percentage of the estimated cost, the applicant must return the difference.

Under paragraph (B)(i), if actual costs are less than the CEF estimate but are equal to or above the floor threshold, the subgrantee may keep the amount that is equal to or above the floor threshold. Thus, if the floor threshold is 10 percent, and the CEF estimate is \$100,000, then the floor threshold equals \$90,000. If the actual costs are between \$90,000 and \$99,999.99, the subgrantee may keep the excess amount. For example, if the actual cost is \$90,000, the subgrantee may keep the excess \$10,000 and use it “to carry out cost-effective activities that reduce the risk of future damage, hardship, or suffering from a major disaster.” FEMA interprets “cost-effective activities that reduce the risk of future damage, hardship, or suffering from a major disaster” to mean activities that mitigate risk to undamaged elements of disaster-

⁸ FEMA did not request that the Panel validate any other portion of its recommendation, as the other portions of the recommendation are not meaningfully effected by the time that has elapsed.

damaged facilities, activities that mitigate risk to undamaged elements of undamaged facilities, and activities that mitigate risk of future hardship and suffering. Although the CEF Panel recommended that the mitigation activities be limited to section 406 mitigation (i.e., mitigation authorized under section 406 of the Stafford Act) and 44 CFR 206.226(e), FEMA notes that this is not a compelling incentive to keep costs down because a subgrantee would already have the ability to use section 406 hazard mitigation funds regardless of whether the subgrantee has a CEF underrun. The Stafford Act's CEF provision did not specify that cost-effective activities must be limited to section 406 mitigation activities, because it includes reducing the risk of "future damage, hardship and suffering from a major disaster." Therefore, FEMA is interpreting such cost-effective activities broadly to include activities that mitigate undamaged elements of any disaster-damaged eligible facility (not just the facility that is the subject of the grant award), activities that mitigate undamaged elements of eligible undamaged facilities, and activities that would mitigate future hardship and suffering. FEMA interprets hardship and suffering to include conditions of life that are difficult to endure and that could result from a future major disaster. Conditions of life that are difficult to endure include lack of food, water, safe shelter, and medical care.

Types of activities that would mitigate undamaged elements of disaster-damaged facilities include installing shutters over undamaged windows similar to shutters installed over damaged windows, strengthening undamaged columns after seismic events, upgrading a roof in an area subject to hurricane-force winds, elevating critical facility components, such as electrical panels and heating, ventilation, and air-conditioning (HVAC) units, and adding berms and floodwalls for floodproofing. Types of activities that would mitigate undamaged facilities include flood proofing first floors, adding berms or floodwalls around public facilities in floodplains (e.g., sewage treatment plants), demolishing facilities, upgrading a roof in an area subject to hurricane-force winds, reinforcing designated emergency shelters, enlarging spillways on dams subject to overtopping by floodwaters, and raising bridges to prevent overtopping by allowing higher flows. Activities that would mitigate future hardship and suffering include purchasing equipment such as emergency generators and

emergency vehicles (e.g., fire trucks and related personal protective equipment, and ambulances), recovery planning (e.g., infrastructure assessments and risk analyses), installing storm warning systems such as weather/tornado warning sirens, providing training related to emergency response and recovery training courses that would be beneficial to communities, training for search and rescue teams, offsetting costs to establish debris recycling programs, constructing or rehabilitating designated shelters or safe rooms such as safe rooms in high incident tornado areas and inside critical facilities (e.g., schools, hospitals, government buildings, etc.), evacuation plans and signage in hurricane prone areas, earthquake detection and warning devices, and new or replacement equipment for search and rescue teams.

Under this proposed rule, the subgrantee must submit a separate Project Worksheet for FEMA approval before it may use a CEF underrun for a cost-effective activity. The subgrantee must submit the Project Worksheet within 90 days of identifying the project underrun, and the Project Worksheet must identify all projects under the same major disaster declaration with underruns that would be used to fund the cost-effective activity(ies). As with any other grant, if FEMA approves the proposed use of the subgrantee's underrun, the project would be subject to the applicable grant administration regulations at 44 CFR part 13.

Paragraph (B)(ii) of section 406(e) of the Stafford Act, as amended by DMA 2000, applies to situations where the actual cost is less than the floor threshold. There are two possible interpretations of paragraph (B)(ii), which states that if the actual costs are less than the floor threshold, the subgrantee must "reimburse [FEMA] in the amount of the difference." The "amount of the difference" may mean either: (1) The difference between the actual cost and the CEF estimate (i.e., the subgrantee would have to return the entire amount of the underrun), or (2) the difference between the actual cost and the floor threshold (i.e., the subgrantee would return the amount that is less than the floor threshold and keep the amount that is above the floor threshold). For example, under the first interpretation, if the CEF estimate is \$100,000 and the actual cost is \$70,000, the subgrantee would have to return the entire difference between the actual cost and the estimated cost, which is \$30,000. Under the second interpretation, using the same fact pattern, the subgrantee would have to return the difference between the actual

cost (\$70,000) and the floor threshold (\$90,000), which is \$20,000. The subgrantee could keep the \$10,000 above the floor threshold to use for cost-effective activities. Paragraph (B)(ii) does not contain the provision that excess funds may be used for cost-effective activities, however. That provision is only in paragraph (B)(i). Paragraph (B)(i) only applies when the actual cost is greater than or equal to the floor threshold. However, the CEF Panel endorsed the second interpretation, and FEMA's position is that the second interpretation is in keeping with the spirit and objective of the statute that excess funds be used for cost-effective activities to reduce the risk of future damage, hardship, or suffering from a major disaster. This is a logical interpretation of the statute, and within FEMA's discretion. It does not make sense to let the subgrantee apply the entire amount of the underrun to such cost-effective activities if the underrun is small, but to make the subgrantee return the entire amount of the underrun if the underrun is large. This would not be an incentive to keep costs low, and it would not encourage cost-effective activities to mitigate future loss. Therefore, FEMA proposes to adopt the second interpretation and with a restriction, for the sake of consistency with paragraph (B)(i), that excess funds greater than or equal to the floor threshold must be used for certain cost-effective activities.

4. Improved Projects

When performing permanent restoration work on a disaster-damaged facility, a subgrantee may decide to use the opportunity to make improvements to the facility while still restoring its pre-disaster function and at least its pre-disaster capacity. For example, the subgrantee may decide to replace a firehouse that originally had two bays with one that has three. Projects that incorporate such improvements are called improved projects. An improved project could be either a small or large project and must meet Public Assistance program requirements.

Funding for such projects is limited to the Federal share of the costs that would be associated with repairing or replacing the disaster-damaged facility to its pre-disaster design, or to the actual costs of completing the improved project, whichever is less. The CEF is only used to estimate the repair or replacement cost of the original facility to its pre-disaster design. Any additional costs not required by the original eligible scope of work are not eligible. In this proposed rule, the floor and ceiling thresholds are applied to the CEF estimate of the

eligible scope of work. Reimbursement for cost overruns above the ceiling threshold is available only for projects where the approved eligible costs are clearly tracked and documented separately from improvement costs. If the costs cannot be separately documented, then funding for the improved project will not exceed the Federal share of the CEF estimate. FEMA may provide assistance with hazard mitigation under Section 406 of the Stafford Act, if the improved project is not a completely new facility.

5. Alternate Projects

Alternate projects, authorized under section 406(c) of the Stafford Act and 44 CFR 206.203, may be approved by FEMA in any case in which a subgrantee determines that the public welfare would not be best served by repairing, restoring, reconstructing, or replacing the disaster-damaged facility. If a subgrantee chooses to do an alternate project, FEMA would award a portion of the funding that would have been awarded for the original project for use in the repair, restoration, or expansion of another facility, to construct a new facility, or to fund hazard mitigation measures in the disaster-affected area.

Funding for alternate projects is limited to 90 percent (for public facilities) or 75 percent (for eligible private nonprofit facilities) of the Federal share of the Federal estimate of the cost to repair, restore, reconstruct, or replace the disaster-damaged facility and of management expenses. Alternate project funding would be based on the CEF estimate to repair, restore, reconstruct, or replace the original disaster-damaged eligible facility. Any additional costs not required by the original eligible scope of work would not be eligible. FEMA would not apply the 10 percent threshold to alternate projects as the Stafford Act only provides for use of these thresholds for the repair, restoration, reconstruction, or replacement of a facility damaged or destroyed by a major disaster. Therefore, the threshold is not applicable to alternate projects.

FEMA would award the subgrantee 90 percent of the Federal share of the estimate of the original project (or 75 percent of the Federal share of the estimate if it was an eligible private nonprofit facility) to do the alternate project. FEMA would not do a new or revised estimate or scope of work for the alternate project itself because, at its option, a subgrantee can apply the funding, the amount of which is based on the estimate of the original project, to another project. The alternate project

may cost much more than the original project, but FEMA only awards the 90 percent or 75 percent of the Federal share of the estimate of the original project. FEMA, however, would only reimburse for actual costs.

For example, a subgrantee decides that instead of rebuilding the disaster-damaged facility (the original project) estimated at \$100,000, it wants to build a school (the alternate project) several miles away from the original project site, which is going to cost \$4 million. FEMA would award the subgrantee 90 percent of the Federal share (or 75 percent of the Federal share if it's a private nonprofit facility) of the original project estimate of \$100,000. So, if the Federal share is 75 percent, then the Federal share of \$100,000 is \$75,000. Ninety percent of \$75,000 is \$67,500. FEMA would award \$67,500 for the alternate project.

The Stafford Act does not provide for Federal funding to cover the \$4 million project cost, which is in excess of the \$100,000 project estimate to repair the original disaster-damaged facility. That is why FEMA does not prepare a scope of work or a revised estimate for the alternate project itself. Once FEMA obligates the money for the alternate project, it does not do any further monitoring of the project, except to make sure that the subgrantee uses the funds to build the alternate project, along with the other general grant requirements that FEMA must ensure that subgrantees meet (such as environmental and historic preservation). The subgrantee cannot request cost overruns under 44 CFR 206.205, because FEMA is not funding the entire project, but rather a percentage based on the Federal estimate of the cost to repair, restore, reconstruct or replace the original disaster-damaged eligible facility. If there is an underrun, FEMA will deobligate funds at project reconciliation and close-out.

The amendment made by DMA 2000 that provides for modification of eligible costs outside of the floor and ceiling only applies to "the actual cost of repairing, restoring, reconstructing, or replacing" a disaster-damaged facility. Therefore, it is not applicable to alternate projects undertaken pursuant to section 406(c). Under that section the subgrantee must determine that it will not repair, reconstruct, or replace its disaster-damaged facility, and is then limited to receiving a certain percentage of the Federal estimate of the repair, reconstruction, or replacement of that original facility. FEMA does not have authority to modify that estimate based on the floor and ceiling thresholds.

D. Appeals

As proposed, a subgrantee may appeal any FEMA determination made under the CEF. (See proposed new 44 CFR 206.211.) This includes a determination of the CEF estimate (which can be the original estimate and any revised estimates based on revised scopes of work, which are reflected in new versions of the Project Worksheet), the determination of the amount of actual costs, and the determination of the amount of any overrun or underrun. The appeal procedures for the Public Assistance program (44 CFR 206.206) would apply to any CEF appeals.

E. Consideration of Phased Funding

As proposed, the rule would follow FEMA's current procedure, whereby the Agency works with an applicant to develop a Project Worksheet that includes a scope of work and cost estimate for the full project. FEMA bases the amount of the Project Worksheet on the Estimated Base Cost in Part A, with adjustments using the non-construction cost factors B through H. As noted above, preparing a precise base cost estimate in Part A is critical to the accuracy of the total project estimate, as all other percentages such as initial planning and design, contingencies, and overhead and profit, are based upon the cost estimate in Part A. Generally, when FEMA approves that Project Worksheet, it obligates the full amount of the cost estimate for the entire project, from initial planning and design all the way through construction. For certain large or complex projects, this can result in the commitment of large amounts of money that may not be used for months or even years until the project is ready to enter into the construction phase. To provide for better overall financial and grant management, and to improve the quality of the estimate in Part A, FEMA may fund certain large and complex projects in two phases: (1) planning and design; and (2) construction and closeout. Under this process, FEMA would work with the applicant as it currently does to develop an initial estimate of the entire project and an estimate of the funding necessary for the planning and design phase of the project (CEF factors H.1 and H.2). FEMA would then approve one Project Worksheet to obligate the funding for the planning and design phase. FEMA and the applicant would use the results of the planning and design phase to develop a more accurate estimate for the construction phase, after which FEMA would approve a second Project Worksheet to obligate funding for the construction phase. Essentially, this

change would maintain Part A as currently written, but fund factors H.1 and H.2, limited to the costs required for planning and design, as a separate subgrant to the applicant. Once the planning and design phase was complete, FEMA would then run the full CEF and provide a grant including Parts A–H for the construction and closeout. FEMA is not proposing regulatory text at this time; however, FEMA is seeking public comment regarding the efficacy and feasibility of such an approach.

F. Effective Date

If FEMA publishes a final rule implementing the CEF, the rule will be effective 60 days after the date of publication of the final rule in the **Federal Register**. It will apply to large permanent work projects authorized under emergency or major disaster declarations issued on or after the effective date.

VI. Regulatory Analyses

A. Executive Order 12866, Regulatory Planning and Review and Executive Order 13563, Improving Regulation and Regulatory Review

Executive Orders 13563 and 12866 direct agencies to assess the costs and benefits of available regulatory alternatives and, if regulation is necessary, to select regulatory approaches that maximize net benefits (including potential economic, environmental, public health and safety effects, distributive impacts, and equity). Executive Order 13563 emphasizes the importance of quantifying both costs and benefits, of reducing costs, of harmonizing rules, and of promoting flexibility. FEMA has prepared and reviewed this rule consistent with Executive Orders 13563 and 12866. The annual impact (in 2010 dollars) is estimated at \$11.65 million in net transfers from FEMA to subgrantees. Over a 10-year period from 2013 through 2022, the total net transfers would be \$116.5 million (undiscounted), or \$71.5 million (discounted at 7 percent), or \$93.6 million (discounted at 3 percent). This rule is not an economically significant regulatory action under section 3(f)(1) of Executive Order 12866.

FEMA provides grants to State and local governments, Indian tribes, and to certain private non-profit (PNP) organizations for debris removal, emergency protective measures, and the repair, restoration, reconstruction, or replacement of facilities damaged in Presidentially-declared major disasters. This proposed regulation would allow

FEMA and subgrantees to better estimate the actual cost to repair or replace eligible disaster-damaged facilities.

Public Assistance projects are processed as either small or large projects. If the project cost is less than the annually updated cost threshold amount (\$67,500 for FY2013) the project is processed as a small project. If the project cost equals or exceeds the threshold the project is processed as a large project. This proposed rule would only affect large projects. Because of the nature of most large projects, work typically is not complete at the time of project approval; therefore, FEMA obligates grants based on an estimated cost. Upon completion of a large project, a subgrantee submits documentation to account for all incurred costs. The grantee is responsible for ensuring that all incurred costs are associated with the approved scope of work and for certifying that work has been completed in accordance with FEMA standards and policies. The grantee then submits documentation of project costs to FEMA for review. FEMA may conduct a final inspection as part of this review. Once the review is complete, FEMA determines whether funds should be obligated or de-obligated for the project.

This rule proposes to adopt the cost-estimating procedures recommended by the expert panel. When a grantee/subgrantee applies for a grant to fund a Public Assistance project, FEMA estimates the cost of the project to determine how much the grant award should be. FEMA uses the CEF to do that estimate. Implementation of the CEF via this rule would not create any impacts on grantees/subgrantees because FEMA has already been using the CEF to do these estimates since 1994. In that year, after the Northridge California earthquake, FEMA began to develop CEF version 1.0, referred to as the Grant Acceleration Program (GAP). The Northridge earthquake occurred in a large metropolitan area, so much of the damage was to large, complex buildings. The damage was often not apparent during the initial inspection (which is common with earthquake damage), and there were many cases of serious underlying structural damage that required sophisticated engineering analysis. To provide adequate funding for subgrantees to cover the repair to this damage earlier in the grant process, FEMA established a voluntary program using the GAP method that allowed participants to receive a fair and reasonable fixed budget amount up-front, thereby accelerating the normal funding procedure (hence the name Grant Acceleration Program). The main

drawback to GAP was that the subgrantee could not request additional funding, which was problematic if there are large cost overruns. GAP was modified to address this and other problems, and eventually evolved into a new version of the cost estimating format in 1998, which is referred to as CEF 2.0.

CEF 2.0, used until 2009, provided a uniform method of estimating costs for large projects. It accounted for costs incurred across the entire spectrum of eligible work (from design to project completion). Under the CEF 2.0, FEMA obligated the entire amount of the Federal share of the estimate up-front to the grantee, and payments were made by the grantee to the subgrantee in increments as items of work were completed or near completion (i.e., less than a week from completion). The subgrantee could request additional amounts for cost overruns pursuant to 44 CFR 206.204. CEF 2.1, issued in 2009, is very similar to CEF 2.0, with a few minor differences.

CEF 2.1 (as was CEF 2.0) is made up of various parts, categorized as parts A through H, that are compiled by a FEMA estimator (who is either the Public Assistance Project Specialist or is supervised by the Public Assistance Project Specialist) in a CEF Spreadsheet. The main part of the CEF is Part A, which is the base cost (construction costs) required to complete the approved scope of work. A FEMA cost estimator uses a Part A worksheet to determine the estimated base cost. After estimating the Part A base cost, the FEMA estimator applies a series of factors (referred to as Parts B through H) to the Part A base cost estimate. With the exception of Part F, these factors are percentage factors. For example, if a Part B percentage factor is 2 percent, the estimator adds 2 percent of the Part A estimated base cost to the total estimate. Sometimes the CEF provides a recommended range of percents for each factor, such as 3 to 6 percent, and it is up to the discretion of the FEMA estimator which percentage to apply, depending on the specifics of the project. The FEMA estimator must detail why he or she chose a specific percentage in a special section of the CEF worksheet designed for this purpose. This flexibility in the CEF methodology allows it to more accurately estimate the many different types of large projects under the Public Assistance program.

The Part B through H factors represent the nonconstruction costs (also referred to as construction-related costs), and are used only if the costs represented by the Parts B through H factors are not

otherwise itemized in Part A. The costs represented by the factors are allowable project costs under 44 CFR part 13, Uniform Administrative Requirements for Grants and Cooperative Agreements to State and Local Governments. The cost estimator adds the estimated nonconstruction costs to the Part A base construction cost using a CEF Worksheet to estimate the total cost of completing the project. This “forward-pricing” methodology provides an estimate of the total eligible funding at the beginning of the project. The estimate, which FEMA uses to approve funds for the project, allows the subgrantee to more accurately manage the budget with a greater degree of confidence.

As noted above, CEF 2.1 was issued in 2009. It is very similar to CEF 2.0, but with a few substantive changes. One of the main changes in CEF version 2.1 was the revision of Factor C.1 (Preliminary Engineering Analysis). In accordance with the recommendation of the expert panel, the lower-bound percentile of bidding simple projects was changed from 15 percent to 7 percent. For Factor C.2 (Facility or Project Constructability), the input of percentages was restricted to a maximum of 7 percent. In CEF 2.0, the recommended range was not higher than 7 percent, but the estimator had the option of using a higher percentage. CEF 2.1 no longer allows the estimator to use a percentage higher than 7 percent. This will help ensure that the CEF estimates are consistent and that the estimator chooses factors within the recommended ranges. If the FEMA estimator has sufficient information to support costs outside the recommended range, then that cost should be itemized in Part A rather than use a CEF Factor. For similar reasons, Factors B.1, C.2 and C.3 have been restricted to their recommended ranges. Regarding Factor C.4 (Economies of scale), Factor D.3 (General contractor's profit), and Factor G (Applicant's reserve for change orders), the step functions for these factors were changed to a curve function. When using a step function, a certain percentage is applied to a project based on the dollar amount of the project. This approach is reasonable, except for projects at the boundary of the range, which resulted in sharp dollar changes at arbitrary boundaries. By changing to a curve function, the FEMA estimator can adjust the factors based on the size of the project in a way that avoids these sharp dollar changes.

As described above, FEMA has used the CEF for several years, and therefore, adoption of the CEF by this rule would

have no additional economic impact. The qualitative benefits and efficiencies this proposed rule provides include the fact that subgrantees would now have the incentive to finish a project at or below the estimated costs because they can use the underruns (up to 10 percent) for other eligible projects. In addition, subgrantees would have a clear vision of their project and can budget up front for their project. Currently, subgrantees do not do this because they can get reimbursed for any cost overruns throughout the project. Under the proposed rule, subgrantees would absorb any cost overruns (up to 10 percent), and would not get reimbursed for any remaining cost overruns until the end at grant closeout.

For large projects involving permanent work, this rule proposes – 10 percent and +10 percent, respectively, for the floor and ceiling thresholds required by section 406(e) of the Stafford Act. If the actual eligible cost of a project is up to 10 percent less than the estimated eligible cost, the subgrantee would be allowed to use the underrun on cost-effective activities that reduce the risk of future damage, hardship, or suffering from a major disaster. We interpret these activities to have a broader scope than eligible hazard mitigation under Sections 406 of the Stafford Act. This would provide subgrantees with an incentive to manage their projects so as to possibly achieve underruns. For instance, these cost-effective activities would not be limited to the project that generated cost underruns nor would the cost-effective activities be limited to damaged portions of disaster-damaged facilities. The subgrantee must submit a separate Project Worksheet for FEMA approval before it may use a CEF underrun for a cost-effective activity. The subgrantee must submit the Project Worksheet within 90 days of identifying the project underrun, and the Project Worksheet must identify all projects under the same major disaster declaration with underruns that would be used to fund the cost-effective activity(ies). As with any other grant, if FEMA approves the proposed use of the subgrantee's underrun, the project would be subject to the applicable grant administration regulations at 44 CFR part 13.

If the actual eligible cost is more than 10 percent below the estimated eligible cost, the subgrantee would be required to reimburse FEMA the amount of the underrun greater than the – 10 percent threshold. If the actual eligible cost exceeds the estimated eligible cost by up to 10 percent, the subgrantee would absorb the cost. If the actual eligible cost

exceeds the estimated eligible cost by more than 10 percent, the amount over the 10 percent may be eligible for reimbursement from FEMA to the subgrantee. FEMA would perform its normal eligibility determination to determine which costs would be reimbursed. The Panel found that the selected thresholds best represent engineering and construction industry principles for accurately estimating large project costs. These thresholds were seen as reasonable and were the consensus choice of the Panel.

FEMA selected a sample of 183 Public Assistance large projects from 2004 through 2008 for which the permanent work was 100 percent complete. The CEF was used to develop the cost estimates for these large projects and the estimates were then used as the basis for obligating funds. This sample was drawn to represent a range of disaster type (45 disasters) and damage categories (Category C–G). For the sample of 183 large projects, the total approved estimated eligible costs under CEF were \$52.77 million (in 2010 \$), and the actual final project costs were \$52.53 million (in 2010 \$), resulting in an overall total net difference for all 183 large projects of \$241,593 (or 0.46 percent of \$52.53 million). This seems like a relatively small difference between the estimated and actual costs. However, an individual large project could vary widely in terms having a cost underrun of greater than \$200,000 or a cost overrun of greater than \$600,000. When all of the underruns and overruns for the sample of 183 large projects are summed together, the total net difference is \$241,593.

The distribution of the percent difference between the approved eligible costs and the final project costs is close to a symmetric distribution. FEMA expects that the amount of overruns and underruns would be about the same. Table 3 shows the distribution of the percentage difference between the approved eligible costs and the final project costs for the sample of 183 large projects. The figures in Table 3, column 3, represent the “up to 10 percent” transfer amount, and show the impact of the proposed rule. For example, the four large projects that had actual costs greater than 130 percent of the estimated costs would absorb the cost overruns up to 10 percent (a total of \$390,612.62 for the four large projects) and could be reimbursed for the remainder of the cost overruns (e.g., the amount over 110 percent) as long as those costs are eligible under the Public Assistance program.

Table 3: Impact of the Proposed Rule for the Sample of 183 Large Projects

Cost Overrun (> 100%) or Underrun (< 100%) Category	Number of Large Projects	Amount of Transfer (Up to 10%) Under This Proposed Rule	Description
130% - 139.99%	4	\$390,612.62	Savings to FEMA
120% - 129.99%	8	\$562,004.78	Savings to FEMA
110% - 119.99%	21	\$314,485.95	Savings to FEMA
100% - 109.99%	45	\$541,470.26	Savings to FEMA
90% - 99.99%	38	(\$392,170.86)	Savings to Subgrantees
80% - 89.99%	42	(\$1,182,546.78)	Savings to Subgrantees
70% - 79.99%	19	(\$467,222.61)	Savings to Subgrantees
60% - 69.99%	4	(\$181,702.75)	Savings to Subgrantees
50% - 59.99%	2	(\$32,892.61)	Savings to Subgrantees
Total	183	(\$447,962.01)	Savings to Subgrantees

Source: FEMA

This rule proposes – 10 percent and +10 percent, respectively, for the floor and ceiling thresholds for large projects. The impact of this proposed change to the sample of 183 large projects was a small increase in Public Assistance funding by \$447,962, which is 0.85 percent of the total project costs of \$52.53 million. FEMA funds approximately 2,745 large projects for permanent work (Category C–G work) per year for \$1,365 million (in 2010 dollars). When the same 0.85 percent is applied to all 2,745 large projects with the total amount of \$1,365 million, the economic impact of this proposed rule is estimated at \$11.65 million per year (= \$1,365 million × 0.85 percent). This economic impact would be an increase in the Public Assistance funding amount in the form of a net transfer from FEMA to subgrantees for Public Assistance projects. However, as discussed above and shown in Table 3, this is a net effect of the proposed rule and not all subgrantees may benefit from an increase in the Public Assistance funding. Subgrantees would absorb overruns if the actual eligible cost exceeds the estimated eligible cost by up to 10 percent. In addition, subgrantees would be required to reimburse FEMA the amount of underruns greater than the – 10 percent threshold. Because the proposed rule would have an annual economic impact of less than \$100 million, this rulemaking is not an economically significant regulatory action.

This rulemaking is not a significant regulatory action because it does not create a serious inconsistency or otherwise interfere with an action taken or planned by another agency—the rule is unique to FEMA and its Public Assistance program. It does not materially alter the budgetary impact of

the Public Assistance grant program or the rights and obligations of recipients thereof. The rule proposes to adopt a method of estimating eligible cost that has already been well developed and utilized by FEMA for large projects. Therefore, it does not raise novel legal or policy issues arising out of legal mandates, the President's priorities, or the principles set forth in Executive Order 12866, nor does it affect the rights and obligations of the subgrantees. Although the floor and ceiling thresholds represent a new component of the large project funding process, implementation of the thresholds is required by statute.

To facilitate the periodic review of existing significant regulations, Executive Order 13563 requires agencies to consider how best to promote retrospective analysis of rules that may be outmoded, ineffective, insufficient, or excessively burdensome, and to modify, streamline, expand, or repeal them in accordance with what has been learned. This proposed rule would result in a net decrease in the burden on applicants by providing an additional \$11.65 million per year in Federal assistance as a net transfer from FEMA to applicants, and it would also provide applicants an incentive to keep actual costs low because applicants would be able to keep the portion of any cost underrun up to 10 percent of the original estimated costs. Another qualitative benefit is that the proposed rule would increase efficiencies because the subgrantees would have a clearer vision of the project funding streams, and it would be easier for them to plan.

B. The Paperwork Reduction Act

The Paperwork Reduction Act (PRA), 44 U.S.C. 3501 *et seq.*, requires government agencies to acquire

approval from the Office of Management and Budget (OMB) for collections of information from the public. This rule does not include any new collections of information. Under this rule, a FEMA estimator will prepare the CEF estimate using a spreadsheet template specifically designed for use with the CEF. Although the subgrantee is part of the Federal-State team that assists the FEMA estimator in developing the estimate, the subgrantee does not input data into the CEF spreadsheet, nor does the subgrantee calculate the CEF estimate. After the FEMA estimator completes the CEF spreadsheet, it is attached to the Project Worksheet as documentation of FEMA's calculations of the estimate of the total eligible cost of the approved scope of work.

During the Public Assistance process, FEMA and the subgrantee work together to complete the various aspects of the Project Worksheet, which includes a detailed location of the project, a detailed scope of work, and the estimate of the total cost of the scope of work. FEMA estimators may use various methodologies to calculate this estimate, as explained in this rulemaking. If this rule becomes effective, the CEF method will be the mandatory estimating method for large permanent work projects.

OMB has approved the Project Worksheet under the "Public Assistance Program" information collection, OMB Control No. 1660-0017. The Public Assistance Program information collection covers any information or data that a FEMA estimator may need from a subgrantee in order for the FEMA estimator to calculate a project estimate. There is no additional data or other information that a FEMA estimator needs from a subgrantee in order to complete an estimate using the CEF

methodology. The CEF is simply an alternate method that is used to calculate an estimate, using the same data and information that FEMA already collects from a subgrantee to aid the FEMA estimator. Therefore, FEMA's use of the CEF spreadsheet to calculate the CEF estimate does not affect the burden hours of the subgrantee's preparation of the Project Worksheet.

The CEF for Large Projects version 2.1 requires a Public Assistance Group Supervisor to prepare and submit a CEF Large Project Report for each large project that was estimated using the CEF. This report is not an information collection because it does not gather information from the public and is not prepared or submitted by the public. It is prepared by FEMA personnel, using information already possessed by FEMA. The report includes the disaster number and name of the Public Assistance Group Supervisor preparing the report, the declaration date and the date prepared, the subgrantee name, the Public Assistance identification number, the Project Worksheet number, the category of permanent work (C, D, E, F or G), the CEF estimated cost, the CEF actual post-construction cost, the dollar amount of obligation or de-obligation, the reason for cost reconciliation, and the primary function of the facility. FEMA does not need to request this information from the public; it is information that FEMA possesses in the course of administering the Public Assistance program. Therefore, the Project report is not an information collection under the PRA.

C. The Unfunded Mandates Reform Act

The Unfunded Mandates Reform Act of 1995 (UMRA) (2 U.S.C. 1531–1538) requires Federal agencies to assess the effects of their discretionary regulatory actions. In particular, the Unfunded Mandates Reform Act addresses actions that may result in the expenditure by a State, local, or Tribal government, in the aggregate, or by the private sector, of \$100,000,000 (adjusted for inflation) or more in any one year. UMRA exempts from its definition of “Federal intergovernmental mandate” regulations that establish conditions of Federal assistance or provide for emergency assistance or relief at the request of any State, local, or Tribal government. Therefore, this proposed rule is not an unfunded Federal mandate under that Act.

Even if UMRA did not include this exemption, this rulemaking does not include an unfunded mandate. It provides for an alternate method of estimating eligible project costs for Public Assistance grants. The alternate

method (the Cost Estimating Format) should provide a more accurate estimate of the cost of a large project than the traditional method of estimating project costs. State, local, and Tribal governments are required to pay a cost share of the Public Assistance grant. This cost share is not expected to increase with the use of the Cost Estimating Format.

D. OMB Circular No. A–119, *Federal Participation in the Development and Use of Voluntary Consensus Standards and in Conformity Assessment Activities*

OMB Circular A–119 establishes policies on Federal use and development of voluntary consensus standards and on conformity assessment activities. The National Technology Transfer and Advancement Act of 1995 (NTTA), Public Law 104–113, codified existing policies in A–119, established reporting requirements, and authorized the National Institute of Standards and Technology to coordinate conformity assessment activities of the agencies. The Circular directs agencies to use voluntary consensus standards in lieu of government-unique standards except where inconsistent with law or otherwise impractical. It also provides guidance for agencies participating in voluntary consensus standards bodies and describes procedures for satisfying the reporting requirements in the Act. The policies in the Circular are intended to reduce to a minimum the reliance by agencies on government-unique standards.

Voluntary consensus standards are technical standards (e.g., specifications of materials, performance, design, or operation; test methods; sampling procedures; and related management system practices) that are developed or adopted by voluntary consensus standards bodies. This rule uses technical standards other than voluntary consensus standards, which are as follows:

1. Construction Specifications Institute

The CEF uses the MasterFormat developed by CSI. CSI is a national association dedicated to creating standards and formats to improve construction documents and project delivery. MasterFormat is a structured hierarchy of 50 divisions, and sections within each division that standardizes information in construction project manuals. MasterFormat minimizes confusion and miscommunication, leading to fewer, costly project delays, errors, and omissions. The MasterFormat 2004 edition replaces MasterFormat 1995 and is available from the CSI Web pages located at

http://www.csinet.org/s_csi/docs/9400/9361.pdf.

2. Reed Construction Data

The CEF also uses commercial cost reference manuals, known in the construction and engineering industry as RS Means Cost Data, as developed and published annually by Reed Construction Data, a supplier of construction cost information. RS Means Cost Data provides accurate and up-to-date cost information that helps owners, developers, architects, engineers, contractors and others to carefully and precisely project and control the cost of both new building construction and renovation projects. Key information includes: city cost indexes, productivity rates, crew composition, and contractor's overhead and profit rates. Reed Construction Data performs these functions by collecting data from all facets of the industry, and organizing it in an accessible format. From the preliminary budget to the detailed unit price estimate, the data is useful for all phases of construction cost determination. Annual cost data publications are available from the RS Means Web pages located at <http://www.rsmeans.com/bookstore/booksearch.asp?c=5>.

MasterFormat and RS Means Cost Data were developed in the private sector but not in the full consensus process. They are widely used and accepted de-facto standards by the engineering and construction industry.

These standards are used because FEMA did not find voluntary consensus standards that are applicable to this rule on a national basis. If you are aware of voluntary consensus standards that might apply, please identify them in a comment to the address under the **ADDRESSES** caption and explain why they should be used.

E. Executive Order 13132, *Federalism*

Executive Order 13132, Federalism, 64 FR 43255, August 10, 1999, sets forth principles and criteria that agencies must adhere to in formulating and implementing policies that have federalism implications, that is, regulations that have “substantial direct effects on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government.” FEMA has determined that this rule does not have federalism implications as it does not limit the policymaking discretion of the States and does not preempt any State laws.

F. Executive Order 13175, Consultation and Coordination With Indian Tribal Governments

Executive Order 13175, Consultation and Coordination with Indian Tribal Governments, 65 FR 67249, November 9, 2000, applies to agency regulations that have Tribal implications, that is, regulations that have substantial direct effects on one or more Indian tribes, on the relationship between the Federal Government and Indian tribes, or on the distribution of power and responsibilities between the Federal Government and Indian tribes. Under this Executive Order, to the extent practicable and permitted by law, no agency may promulgate any regulation that has Tribal implications, that imposes substantial direct compliance costs on Indian Tribal governments, and that is not required by statute, unless funds necessary to pay the direct costs incurred by the Indian Tribal government in complying with the regulation are provided by the Federal Government, or the agency consults with Tribal officials.

This rulemaking does not have Tribal implications. The Public Assistance program is a voluntary program that provides funding to subgrantees, including Tribal governments, in need of emergency and disaster response assistance. There is no substantial direct compliance cost associated with this proposed rule. This proposed rule would not affect the distribution of power or responsibilities of Tribal governments.

G. Regulatory Flexibility Act

The Regulatory Flexibility Act (RFA) (5 U.S.C. 601–612), and section 213(a) of the Small Business Regulatory Enforcement Fairness Act of 1996 (Pub. L. 104–121) require that special consideration be given to the effects of proposed regulations on small entities. Under the RFA, FEMA has considered whether this proposed rule would have a significant economic impact on a substantial number of small entities. The term “small entities” includes small business, small non-profit organization, and small governmental jurisdictions. Small governmental jurisdictions mean the government of cities, counties, towns, townships, villages, school districts, or special districts that have populations of less than 50,000.

FEMA used 2000 U.S. Census Bureau data to identify actual Public Assistance subgrantees that under the RFA could be considered small entities. In the sample of 183 Public Assistance large projects for which the permanent

restorative work was 100 percent complete during 2004 and 2008, FEMA identified 109 Public Assistance subgrantees with populations of 50,000 or less that have received Public Assistance funding for 119 Public Assistance large projects. These 109 small entities amount to approximately 76 percent of the total 144 subgrantees in the sample.

FEMA measured the annual impact of the rule on each of the 109 small governmental jurisdictions based on the estimated increase or decrease in Federal assistance and annual revenues. Annual revenues for these 109 small governmental jurisdictions were estimated from the per capita revenue for local governments by State. For example, the per capita revenue for all local governments in Florida in 2007 (in 2010 dollars) was \$4,192.⁹ Therefore, annual revenue for a small governmental jurisdiction in Florida with a population size of 1,000 is estimated approximately at \$4.19 million (= \$4,192 × 1,000). FEMA compared the estimated increase or decrease in Federal assistance with the estimated annual revenue for each of these 109 small governmental jurisdictions. Out of these 109 small governmental jurisdictions, only 1 percent (or less than 1 percent) was expected to have a negative impact (a decrease in Federal assistance) higher than 1 percent of their annual revenues. Since this sample was drawn to represent a range of disaster type (45 disasters) and categories C through G for Public Assistance large projects for which the permanent restorative work is 100 percent complete, FEMA expects that this finding would also apply to all 2,745 Public Assistance large projects per year. Consequently, FEMA certifies that there is no significant economic impact on a substantial number of small entities.

H. National Environmental Policy Act

The National Environmental Policy Act of 1969 (NEPA), as amended, 42 U.S.C. 4321 *et seq.*, requires agencies to consider environmental impacts in their decision-making. Specifically, NEPA requires agencies to prepare an Environmental Impact Statement (EIS) for “major federal actions significantly affecting the quality of the human environment.” If an action may or may not have a significant impact, the agency must prepare an Environmental Assessment (EA). If, as a result of this study, the agency makes a Finding of No Significant Impact (FONSI), no further

⁹ <http://www.taxpolicycenter.org/taxfacts/displayafact.cfm?Docid=513>.

action is necessary. If the action will have a significant effect, the agency uses the EA to develop an EIS.

Pursuant to 44 CFR 10.8(c)(1) and (2), action taken or assistance provided under sections 402, 403, 407, or 502 of the Stafford Act and action taken or assistance provided under section 406 of the Stafford Act that has the effect of restoring facilities substantially as they existed before a major disaster or emergency are statutorily excluded from NEPA and the preparation of environmental impact statements and environmental assessments by section 316 of the Stafford Act, 42 U.S.C. 5159.

I. Executive Order 12630, Governmental Actions and Interference With Constitutionally Protected Property Rights

FEMA has reviewed this rule under Executive Order 12630, “Governmental Actions and Interference with Constitutionally Protected Property Rights” (53 FR 8859, Mar. 18, 1988) as supplemented by Executive Order 13406, “Protecting the Property Rights of the American People” (71 FR 36973, June 28, 2006). This rule will not affect the taking of private property or otherwise have taking implications under Executive Order 12630.

J. Executive Order 12988, Civil Justice Reform

FEMA has reviewed this rule under Executive Order 12988, “Civil Justice Reform” (61 FR 4729, Feb. 7, 1996). This rule meets applicable standards to minimize litigation, eliminate ambiguity, and reduce burden.

List of Subjects in 44 CFR Part 206

Administrative practice and procedure, Coastal zone, Community facilities, Disaster assistance, Fire prevention, Grant programs-housing and community development, Housing, Insurance, Intergovernmental relations, Loan programs-housing and community development, Natural resources, Penalties, Reporting and recordkeeping requirements.

For the reasons discussed in the preamble, the Federal Emergency Management Agency proposes to amend 44 CFR part 206, subpart G, as follows:

PART 206—FEDERAL DISASTER ASSISTANCE

■ 1. The authority citation for part 206 continues to read as follows:

Authority: Robert T. Stafford Disaster Relief and Emergency Assistance Act, 42 U.S.C. 5121 through 5207; Homeland Security Act of 2002, 6 U.S.C. 101 *et seq.*; Department of Homeland Security Delegation

9001.1; sec. 1105, Pub. L. 113–2, 127 Stat. 43 (42 U.S.C. 5189a note).

■ 2. Amend section 206.203 by revising paragraph (c) (1) to read as follows:

§ 206.203 Federal grant assistance.

* * * * *

(c) * * * (1) *Large projects.* When the approved estimate of eligible costs for an individual project is \$35,000 or greater, Federal funding equals the Federal share of the actual eligible costs documented by a grantee, or, if FEMA estimated the eligible costs of the project pursuant to § 206.211, Federal funding equals the Federal share of the estimated total eligible cost, subject to set floor and ceiling thresholds, in accordance with § 206.211. Such \$35,000 amount is adjusted annually to reflect changes in the Consumer Price Index for All Urban Consumers published by the Department of Labor. FEMA publishes the threshold for large projects each year in the **Federal Register**.

* * * * *

■ 3. Add section 206.211 to read as follows:

§ 206.211 Cost Estimating Format (CEF) for restoration of disaster-damaged facilities.

(a) *General.* FEMA will use the Cost Estimating Format (CEF) to calculate an estimate of the total eligible project cost of the approved scope of work for restoration of disaster-damaged facility projects under the Public Assistance program. Once FEMA has established a total eligible project cost of an approved scope of work, FEMA will not allow revisions to the approved scope of work. Any cost overruns or underruns will be addressed pursuant to paragraph (e) of this section.

(b) *Limitations.* (1) *Restoration of disaster-damaged facilities.* This section applies to restoration of damaged facilities projects only, which are projects authorized by section 406 of the Stafford Act. It does not apply to emergency work projects, which are projects authorized by sections 403, 407, 418, 419, and 502 of the Stafford Act.

(2) *Large projects.* This section applies to large projects only. FEMA publishes the threshold for large projects each fiscal year in the **Federal Register**. For purposes of this section, the applicable fiscal year is the year in which the emergency or major disaster is declared.

(3) *Projects must be less than 90 percent complete.* This section applies only to projects that are less than 90 percent complete at the time the CEF estimate is calculated. The percent complete is the sum of approved invoice amounts for eligible work divided by

the approved contract amount for eligible work multiplied by 100. For projects that are over 90 percent complete, funding will be based only on the actual costs of performing eligible work.

(c) *Funding.* (1) *General.* Upon project approval by FEMA, Federal funding will equal the Federal share of the CEF estimate of the total eligible cost of the approved scope of work. (2) *Improved projects.* For improved projects, Federal funding is determined as described in paragraph (c)(1) of this section and is limited as provided in § 206.203(d)(1). *Project reconciliation and closeout* apply as described in paragraph (e) of this section; however reimbursement will only be provided for actual cost overruns under subparagraph (e)(1), if eligible actual costs are tracked and documented separately from the improvement costs.

(3) *Alternate projects.* When the CEF is used for a large project and the subgrantee subsequently decides to do an alternate project, final Federal funding for the alternate project is a percentage of the Federal share of the CEF estimate of the total eligible cost of the approved scope of work of the original project. This percentage is determined according to § 206.203(d)(2). The CEF is not applied to the alternate project itself, and the floor and ceiling thresholds described in paragraph (e) of this section do not apply.

(d) *Parts of the CEF Estimate.* The CEF estimate includes itemized base construction costs (Part A) plus nonconstruction costs (CEF Parts B through H Factors), as applicable. A FEMA cost estimator itemizes the unit costs in Part A and then applies one or more of the Parts B through H factors (usually a specific percentage for each factor) to the Part A estimate. The Parts B through H factors must not duplicate any itemized cost in Part A.

(1) *Part A.* Part A is the estimated sum of itemized construction costs required to directly complete the approved scope of work. The sum of these costs is referred to as the base cost. The base cost includes labor, equipment, materials, small tools, incidentals, and hauling costs necessary to complete the approved scope of work, as well as subcontractor overhead and profit.

(2) *CEF Parts B through H Factors.* The CEF factors reflect nonconstruction costs that are not itemized in Part A.

(i) *Part B Factor: General Requirements and General Conditions.* The Part B factor includes general requirements, which includes safety and security, temporary services and utilities, safety and security measures, quality control, and administrative

submittals, and general conditions, which include a prime contractor's on-site project management costs.

(ii) *Part C Factor: Construction Cost Contingencies/Uncertainties (Design and Construction).* The Part C factor addresses uncertainties in completing the approved scope of work and unforeseeable costs. The Part C factor includes the following:

(A) *Factor C.1: Design Phase/Scope Definition Contingencies.* This factor represents standard cost estimating contingencies based on the status of the design and engineering process at the time of the estimate. A greater percentage is applied for this factor at the beginning stages of the design and engineering process; a lesser percentage is applied for this factor at the later stages of the design and engineering process.

(B) *Factor C.2: Facility or Project Constructability.* This factor addresses project complexity. A greater percentage is applied to more complex projects; a lesser percentage is applied to less complex projects. The C.2 factor applies to repair and retrofit projects only; it does not apply to new construction projects.

(C) *Factor C.3: Access, Storage, and Staging Contingencies.* This factor addresses project site conditions that impose additional costs on the work activities included in Part A. It addresses access to the project site, storage of construction materials and equipment, and the timing and execution of the work.

(D) *Factor C.4: Economies of Scale.* This factor accounts for the increases or decreases in cost associated with the repetitive elements of a project. The larger the size of the project, the less it will cost for each repetitive element.

(iii) *Part D Factor: General Contractor's Overhead and Profit.* The Part D factor includes:

(A) *Factor D.1: General Contractor's Home Office Overhead Costs.* This factor addresses the general contractor's main office expenses, including labor and salary costs for personnel plus all other operational expenses associated with working out of the main office.

(B) *Factor D.2: General Contractor's Insurance, Payment, and Performance Bonds.* This factor addresses the general contractor's payment and performance bonds, builder's risk insurance, and public liability insurance.

(C) *Factor D.3: General Contractor's Profit.* This factor addresses the general contractor's profit, which is a specific percentage depending on the project size and type of work (repair, retrofit, or new construction). For purposes of the application of Factor D.3, the project

size is the sum of Parts A, B, C, D.1, and D.2.

(iv) *Part E Factor: Cost Escalation Allowance.* This factor accounts for cost escalation over the duration of the project and is based upon an inflation adjustment from the time the estimate is prepared until the mid-point of construction for the approved scope of work. The escalated cost of construction is equal to the sum of Parts A through D, multiplied by the number of months to the midpoint of uncompleted construction, multiplied by the escalation factor. The escalation factor is based on a 2-year average of either the Building Cost Index (BCI) or the Construction Cost Index (CCI), depending on the nature of the project.

(v) *Part F Factor: Plan Review and Construction Permit Costs.* The Part F factor equals actual fees charged by State and local agencies for plan reviews and construction permits.

(vi) *Part G Factor: Applicant's Reserve for Construction.* The G factor addresses the applicant/subgrantee's reserve for eligible work change orders approved by FEMA. It does not include discretionary change orders for upgrades or ineligible work. The percentage applied is based on project size. Project size for purposes of applying this percentage is the sum of Parts A through F.

(vii) *Part H Factor: Applicant's Project Management and Design Costs.* The H factor addresses the applicant/subgrantee's cost to manage the design and construction of the project. These costs are not part of the statutory administrative cost allowance provided to the applicant/subgrantee to manage the overall recovery effort. The administrative allowance implemented in 44 CFR part 207 reimburses the applicant/subgrantee's cost of requesting, obtaining and administering Federal assistance, and does not account for project management costs. The H factor includes:

(A) *Factor H.1: Applicant's Project Management—Design Phase.* This factor includes the applicant/subgrantee's costs to manage the project during the design phase, including managing the architecture and engineering contracts for final design, managing the permitting and special review process, and interfacing with other agencies. The H.1 factor is not applicable in situations where a design is not required.

(B) *Factor H.2: Architecture & Engineering Design Contract Costs.* This factor addresses the applicant/subgrantee's cost for basic design and inspection services, including preliminary engineering analysis, preliminary design, final design, and construction inspection.

(C) *Factor H.3: Project Management—Construction Phase.* This factor addresses management costs during the construction phase, including quality assurance and management of additional testing during construction, advertising and awarding of the construction contract, decisions on construction problems and requests for information, management of change orders for on-site construction conditions and design errors, and omissions and unforeseen problems, such as differing site conditions and hidden damage. The H.3 factor is applied depending on the amount of total estimated construction costs.

(e) *Project reconciliation and closeout.* Upon completion of the approved scope of work FEMA will determine final grant funding for projects described in paragraphs (c)(1) and (c)(2) of this section, in accordance with § 206.205(b)(2), except for the application of floor and ceiling thresholds as indicated in this section. For purposes of determining the amount of an overrun or underrun under this section, the actual cost must include every item that was included in the CEF estimate, and must not include any item that was not included in the CEF estimate.

(1) *Cost overruns.* The cost overrun procedures in § 206.204(e) do not apply to this section. A subgrantee may not apply for reimbursement for cost overruns before the completion of the approved scope of work. After completion of the approved scope of work, the project enters the reconciliation phase. If FEMA determines at the reconciliation phase that the actual costs to complete the approved scope of work exceed the CEF estimate of the approved scope of work by more than 10 percent, the amount of the Federal share over that 10 percent may be eligible for FEMA reimbursement. If the actual costs to complete the approved scope of work for a project exceed the CEF estimate of the approved scope of work by 10 percent or less, the subgrantee will not receive reimbursement from FEMA for the amount that exceeds the CEF estimate.

(2) *Cost underruns.* (i) If the actual cost to complete the approved scope of work is at least 90 percent of the CEF estimate of the approved scope of work, the subgrantee may use the Federal share of the underrun for the following cost-effective activities:

(A) Activities that mitigate future risk to undamaged elements of any disaster-damaged eligible facility;

(B) Activities that mitigate future risk to any element of any eligible facility owned or operated by the subgrantee;

(C) Activities that reduce the risk of future hardship and suffering as a result of a major disaster. Hardship and suffering include conditions of life that are difficult to endure and that could result from a future major disaster.

If the subgrantee plans to use an underrun for any of these cost effective activities, the subgrantee must submit a Project Worksheet for the cost effective activity(ies) within 90 days of identifying the project underrun. The Project Worksheet must identify all projects under the same major disaster declaration with underruns that would be used to fund the cost-effective activity(ies).

(ii) If the actual cost to complete the approved scope of work is less than 90 percent of the CEF estimate of the approved scope of work, the subgrantee must return the Federal share of the underrun less than 90 percent of the CEF estimate. The subgrantee may use the Federal share of the remaining 10 percent underrun for cost-effective activities as indicated in paragraph (e)(2)(i) of this section.

(iii) If the subgrantee has not started its cost-effective activities described in paragraph (e)(2)(i) of this section within 12 months of final reconciliation, FEMA will de-obligate those funds or take other appropriate action to recover funds according to procedures set forth in 44 CFR part 13.

(f) *Appeal.* A subgrantee may appeal a determination made by FEMA under this section in accordance with § 206.206, Appeals.

(g) *Effective date.* This section is applicable to emergency or major disaster declarations issued on or after [insert date 60 days after date of publication of the Final Rule in the **Federal Register**].

Dated: September 19, 2013.

W. Craig Fugate,
Administrator, Federal Emergency
Management Agency.

[FR Doc. 2013–23258 Filed 10–2–13; 8:45 am]

BILLING CODE 9111–23–P

FEDERAL COMMUNICATIONS COMMISSION

47 CFR Part 64

[CG Docket Nos. 11–116 and 09–158; CC Docket No. 98–170; DA 13–1807]

Empowering Consumers To Prevent and Detect Billing for Unauthorized Charges (“Cramming”); Consumer Information and Disclosure; Truth-in-Billing Format

AGENCY: Federal Communications Commission.

ACTION: Proposed rule.

SUMMARY: In this document, the Commission, via the Consumer and Governmental Affairs Bureau (Bureau) seeks comment to refresh the record in response to the Commission’s April 2012 Further Notice of Proposed Rulemaking (*Further Notice*), in which the Commission sought comment on whether it should take additional steps to prevent cramming, including “opt-in” and possible solutions to Commercial Mobile Radio Service (CMRS) cramming. The additional comments will facilitate the development of a full record given the importance of the issues in this proceeding.

DATES: Interested parties may file comments on or before November 18, 2013, and reply comments on or before December 2, 2013.

ADDRESSES: You may submit comments, identified by CG Docket No. 11–116, by any of the following methods:

Electronic Filers: Comments may be filed electronically using the Internet by accessing the Commission’s Electronic Comment Filing System (ECFS), through the Commission’s Web site <http://fjallfoss.fcc.gov/ecfs2/>. Filers should follow the instructions provided on the Web site for submitting comments. For ECFS filers, in completing the transmittal screen, filers should include their full name, U.S. Postal service mailing address, and CG Docket No. 11–116.

- Paper filers: Parties who choose to file by paper must file an original and four copies of each filing. Filings can be sent by hand or messenger delivery, by commercial overnight courier, or by first-class or overnight U.S. Postal Service mail (although the Commission continues to experience delays in receiving U.S. Postal Service mail). All filings must be addressed to the Commission’s Secretary, Office of the Secretary, Federal Communications Commission.

- All hand-delivered or messenger-delivered paper filings for the

Commission’s Secretary must be delivered to FCC Headquarters at 445 12th St. SW., Room TW–A325, Washington, DC 20554. All hand deliveries must be held together with rubber bands or fasteners. Any envelopes must be disposed of before entering the building.

- Commercial Mail sent by overnight mail (other than U.S. Postal Service Express Mail and Priority Mail) must be sent to 9300 East Hampton Drive, Capitol Heights, MD 20743.

- U.S. Postal Service first-class, Express, and Priority mail should be addressed to 445 12th Street SW., Washington, DC 20554. In addition, parties must serve one copy of each pleading with the Commission’s duplicating contractor, Best Copy and Printing, Inc., 445 12th Street SW., Room CY–B402, Washington, DC 20554, or via email to fcc@bcpiweb.com.

For detailed instructions for submitting comments and additional information on the rulemaking process, see the **SUPPLEMENTARY INFORMATION** section of this document.

FOR FURTHER INFORMATION CONTACT:

Lynn Follansbee, Consumer and Governmental Affairs Bureau, Consumer Policy Division, at (202) 418–1514 or email: Lynn.Follansbee@fcc.gov.

SUPPLEMENTARY INFORMATION: This is a summary of the Commission’s Public Notice DA 13–1807, released August 27, 2013 in CG Docket Nos. 11–116 and 09–158, and CC Docket No. 98–170. The full text of document DA 13–1807 and copies of any subsequently filed documents in this matter may also be purchased from the Commission’s duplicating contractor, Best Copy and Printing, Inc., Portals II, 445 12th Street SW., Room CY–B402, Washington, DC 20554. Customers may contact the Commission’s duplicating contractor at its Web site, www.bcpiweb.com, or by calling (202) 488–5300. Document can also be downloaded in Word or Portable Document Format (PDF) at http://transition.fcc.gov/Daily_Releases/Daily_Business/2013/db0827/DA-13-1807A1.pdf.

Pursuant to 47 CFR 1.1200 *et seq.*, this matter shall be treated as a “permit-but-disclose” proceeding in accordance with the Commission’s *ex parte* rules. Persons making *ex parte* presentations must file a copy of any written presentation or a memorandum summarizing any oral presentation within two business days after the presentation (unless a different deadline applicable to the Sunshine period applies). Persons making oral *ex parte* presentations are reminded that memoranda summarizing the

presentation must: (1) List all persons attending or otherwise participating in the meeting at which the *ex parte* presentation was made; and (2) summarize all data presented and arguments made during the presentation. If the presentation consisted in whole or in part of the presentation of data or arguments already reflected in the presenter’s written comments, memoranda or other filings in the proceeding, the presenter may provide citations to such data or arguments in his or her prior comments, memoranda, or other filings (specifying the relevant page and/or paragraph numbers where such data or arguments can be found) in lieu of summarizing them in the memorandum. Documents shown or given to Commission staff during *ex parte* meetings are deemed to be written *ex parte* presentations and must be filed consistent with sec. 1.1206(b) of the Commission’s rules. In proceedings governed by sec. 1.49(f) or for which the Commission has made available a method of electronic filing, written *ex parte* presentations and memoranda summarizing oral *ex parte* presentations, and all attachments thereto, must be filed through the electronic comment filing system available for that proceeding, and must be filed in their native format (e.g., .doc, .xml, .ppt, searchable .pdf). Participants in this proceeding should familiarize themselves with the Commission’s *ex parte* rules.

People with Disabilities: To request materials in accessible formats for people with disabilities (Braille, large print, electronic files, audio format), send an email to fcc504@fcc.gov or call the Consumer and Governmental Affairs Bureau at (202) 418–0530 (voice), (202) 418–0432 (TTY).

Initial Paperwork Reduction Act of 1995 Analysis

Document DA 13–1807 does not contain proposed information collection requirements subject to the Paperwork Reduction Act of 1995, Public Law 104–13. In addition, therefore, it does not contain any proposed information collection burden for small business concerns with fewer than 25 employees, pursuant to the Small Business Paperwork Relief Act of 2002, Public Law 107–198, see 44 U.S.C. 3506(c)(4).

Synopsis

In document DA 13–1807, the Bureau seeks to update the record in response to the Commission’s *Further Notice*, adopted April 27, 2012, released April 27, 2012, and published at 77 FR 30972, May 24, 2012, in which the Commission sought comment on whether it should

take additional steps to prevent cramming, including “opt-in” and possible solutions to CMRS cramming. The record in this proceeding does not fully address the developments, studies, and information that has come to light since the *Further Notice* comments and reply comments were filed, including questions as to the extent to which consumers may continue to be unaware that third-party charges can appear on their wireline and CMRS bills and about their ability to successfully resolve disputes regarding unauthorized third-party charges. Document DA 13–1807 generally seeks comment on whether additional measures to combat wireline cramming are necessary and whether any new measures to combat CMRS cramming are appropriate, as well as what those measures might be and the costs and benefits of any proposal.

Document DA 13–1807 is issued pursuant to the authority contained in §§ 0.204, 0.361, 1.415 of the Commission’s rules, 47 CFR 0.204, 0.361, 1.415.

Federal Communications Commission.

Mark Stone,

Deputy Chief, Consumer and Governmental Affairs Bureau.

[FR Doc. 2013–24295 Filed 10–2–13; 8:45 am]

BILLING CODE 6712–01–P

FEDERAL COMMUNICATIONS COMMISSION

47 CFR Part 73

[MB Docket No. 13–207; RM–11700; DA 13–1794]

Radio Broadcasting Services; Heber Springs, Arkansas.

AGENCY: Federal Communications Commission.

ACTION: Proposed rule.

SUMMARY: This document requests comments on a Petition for Rule Making filed by Sydney Allison Sugg, proposing the allotment of Channel 270C3 at Heber Springs, Arkansas, as the community’s third local service. Channel 270C3 can be allotted to Heber Springs consistent with the minimum distance separation requirements of the Rules with a site restriction 12.8 kilometers (7.9 miles) northeast of the community. The reference coordinates are 35–34–12 NL and 91–55–41 WL.

DATES: Comments must be filed on or before October 15, 2013, and reply comments on or before October 30, 2013.

ADDRESSES: Secretary, Federal Communications Commission, 445 12th

Street SW., Washington, DC 20554. In addition to filing comments with the FCC, interested parties should serve the petitioner as follows: Frank R. Jazzo, Esq., Fletcher, Heald & Hildreth, PLC, 1300 North 17th Street 11th Floor, Arlington, Virginia 22209.

FOR FURTHER INFORMATION CONTACT: Rolanda F. Smith, Media Bureau, (202) 418–2700.

SUPPLEMENTARY INFORMATION: This is a synopsis of the Commission’s Notice of Proposed Rule Making, MB Docket No. 13–207, adopted August 22, 2013, and released August 23, 2013. The full text of this Commission decision is available for inspection and copying during normal business hours in the FCC’s Reference Information Center at Portals II, CY–A257, 445 12th Street SW., Washington, DC 20554. This document may also be purchased from the Commission’s duplicating contractors, Best Copy and Printing, Inc., 445 12th Street SW., Room CY–B402, Washington, DC 20554, telephone 1–800–378–3160 or via email www.BCPIWEB.com. This document does not contain proposed information collection requirements subject to the Paperwork Reduction Act of 1995, Public Law 104–13. In addition, therefore, it does not contain any proposed information collection burden “for small business concerns with fewer than 25 employees,” pursuant to the Small Business Paperwork Relief Act of 2002, Public Law 107–198, *see* 44 U.S.C. 3506(c)(4).

Provisions of the Regulatory Flexibility Act of 1980 do not apply to this proceeding.

Members of the public should note that from the time a Notice of Proposed Rule Making is issued until the matter is no longer subject to Commission consideration or court review, all *ex parte* contacts are prohibited in Commission proceedings, such as this one, which involve channel allotments. See 47 CFR 1.1204(b) for rules governing permissible *ex parte* contacts.

For information regarding proper filing procedures for comments, see 47 CFR 1.415 and 1.420.

List of Subjects in 47 CFR Part 73

Radio, Radio broadcasting.
Federal Communications Commission.
Nazifa Sawez,
Assistant Chief, Audio Division Media Bureau.

For the reasons discussed in the preamble, the Federal Communications Commission proposes to amend 47 CFR Part 73 as follows:

PART 73—RADIO BROADCAST SERVICES

■ 1. The authority citation for part 73 continues to read as follows:

Authority: 47 U.S.C. 154, 303, 334, 336 and 339.

§ 73.202 [Amended]

■ 2. Section 73.202(b), the Table of FM Allotments under Arkansas, is amended by adding Channel 270C3 at Heber Springs.

[FR Doc. 2013–24301 Filed 10–2–13; 8:45 am]

BILLING CODE 6712–01–P

DEPARTMENT OF TRANSPORTATION

Federal Transit Administration

49 CFR Chapter VI

[Docket No. FTA–2013–0030]

RIN 2132–AB20; 2132–AB07

The National Public Transportation Safety Plan, the Public Transportation Agency Safety Plan, and the Public Transportation Safety Certification Training Program; Transit Asset Management

AGENCY: Federal Transit Administration (FTA), DOT.

ACTION: Advance notice of proposed rulemaking.

SUMMARY: The Federal Transit Administration (FTA) is issuing this consolidated advance notice of proposed rulemaking (ANPRM) to request public comments on a wide range of topics pertaining to the new Public Transportation Safety Program (National Safety Program) and the requirements of the new transit asset management provisions (National TAM System) authorized by the Moving Ahead for Progress in the 21st Century Act. Together, the requirements of the National Safety Program and the National TAM System are intended to improve the safety of the Nation’s public transportation systems, ensure that those systems are in a state of good repair, and provide increased transparency into agencies’ budgetary decision-making process.

DATES: Comments must be received by January 2, 2014. Any comments filed after this deadline will be considered to the extent practicable.

ADDRESSES: Please submit your comments by only one of the following methods, identifying your submission by Docket Number (FTA–2013–0030) or RIN number (2132–AB20, 2132–AB07).

• *Federal eRulemaking Portal:* Submit electronic comments and other data to <http://www.regulations.gov>.

• *U.S. Mail:* Send comments to Docket Operations, U.S. Department of Transportation, 1200 New Jersey Avenue SE., West Building Room W12–140, Washington, DC 20590–0001.

• *Hand Delivery or Courier:* Take comments to Docket Operations in Room W12–140 of the West Building, Ground Floor, at 1200 New Jersey Avenue SE., Washington, DC, between 9:00 a.m. and 5:00 p.m., Monday through Friday, except Federal holidays.

• *Fax:* Fax comments to Docket Operations, U.S. Department of Transportation, at (202) 493–2251.

Instructions: You must include the agency name (Federal Transit Administration) and Docket Number (FTA–2013–0030) for this notice or RIN (2132–AB20, 2132–AB07), at the beginning of your comments. If sent by mail, submit two copies of your comments. Due to security procedures in effect since October 2001, mail received through the U.S. Postal Service may be subject to delays. Parties submitting comments should consider using an express mail firm to ensure their prompt filing of any submissions not filed electronically or by hand. If you wish to receive confirmation that FTA received your comments, you must include a self-addressed stamped postcard. All comments received will be posted without change to <http://www.regulations.gov>, including any personal information provided. You may review U.S. DOT's complete Privacy Act Statement published in the **Federal Register** on April 11, 2000, at 65 FR 19477–8 or <http://DocketsInfo.dot.gov>.

FOR FURTHER INFORMATION CONTACT:

Safety. For program matters, Richard Gerhart, Office of Safety, (202) 366–8970 or Richard.Gerhart@dot.gov. For legal matters, contact Candace Key, Office of Chief Counsel, (202) 366–4011 or Candace.Key@dot.gov.

Transit Asset Management. For program matters, John Giorgis, Office of Budget and Policy, (202) 366–5430 or John.Giorgis@dot.gov. For legal matters, Scott Biehl, Office of Chief Counsel, (202) 366–4011 or Scott.Biehl@dot.gov. Office hours are from 8:30 a.m. to 5:00 p.m., Monday through Friday, except Federal holidays.

SUPPLEMENTARY INFORMATION:

I. Introduction

- A. The National Public Transportation Safety Program
- B. The Safety Management System Approach
- C. Transit Asset Management

II. The Relationship Between Safety, the Safety Management System Approach, Transit Asset Management and State of Good Repair

III. Background

- A. The Need for a Comprehensive National Safety Program
- B. The Need for a National Transit Asset Management System

IV. The National Public Transportation Safety Plan

- A. Performance Criteria
- B. State of Good Repair
- C. Minimum Safety Performance Standards for Vehicles

V. The Public Transportation Agency Safety Plan

- A. Plan Requirements
- B. The State's Role

VI. The Public Transportation Safety Certification Training Program

VII. The National Transit Asset Management System

- A. Overview and Considerations for Small Operators
- B. Defining State of Good Repair
 - (1) Asset Age
 - (2) Asset Condition
 - (3) Asset Performance
 - (4) Comprehensive Assessment of Assets
- C. Transit Asset Management Plans
 - (1) Plan Requirements
 - (2) Investment Prioritization
- D. Performance Measures
 - (1) Defining Performance Measures
 - (2) Performance Targets
- E. Technical Assistance and Tools

VIII. Certification of Transit Agency Safety Plans and Transit Asset Management Plans

IX. Coordination of Targets and Plans With Metropolitan, Statewide and Non-Metropolitan Planning

X. Next Steps and Public Participation

I. Introduction

On July 6, 2012, the President signed into law the Moving Ahead for Progress in the 21st Century Act (MAP–21), Public Law 112–141. MAP–21 made a number of fundamental changes to the statutes that authorize the Federal transit programs at 49 U.S.C. Chapter 53. Under discussion in this ANPRM are several provisions within the Public Transportation Safety Program (National Safety Program) authorized at 49 U.S.C. 5329 and the transit asset management requirements (National TAM System) authorized at 49 U.S.C. 5326.

Many of the requirements of the National Safety Program and the National TAM System apply equally to all modes of public transportation.¹

¹ GAO, Rail Transit: Observations on FTA's State Safety Oversight Program, GAO–06–997T (Washington, DC: July 19, 2006), available at <http://www.gao.gov/assets/130/123829.pdf>, and Rail Transit: Additional Federal Leadership Would Enhance FTA's State Safety Oversight Program, GAO–06–821 (Washington, DC: July 26, 2006), available at <http://www.gao.gov/assets/260/250860.pdf>. GAO also testified to these issues before the Subcommittee on Highways, Transit, and

However, FTA intends to focus its initial oversight and enforcement efforts on rail transit systems' implementation of and compliance with these requirements. FTA believes that the increased potential for catastrophic accidents, loss of life, and property damage associated with rail transit warrants the most immediate attention.

To the extent that another Federal agency already regulates the safety of a particular mode of public transportation, FTA does not intend to promulgate duplicative, inconsistent, or conflicting regulations. For example, FTA does not intend to promulgate safety regulations that will apply to either commuter rail systems that are regulated by the Federal Railroad Administration or to ferry systems that are regulated by the United States Coast Guard. However, unlike the requirements for the National Safety Program, the requirements of the National Transit Asset Management System apply to all modes of public transportation, including commuter rail and ferry systems, regardless of whether those modes are required to comply with asset management regulations by other Federal agencies. However, FTA does not intend to promulgate duplicative, inconsistent, or conflicting National TAM System regulations.

Through this ANPRM, FTA is seeking comments from the entire transit industry on the topics addressed in this ANPRM. Specifically, FTA is seeking public comment on its initial interpretations, proposals it is considering, and questions regarding the following: (1) The requirements of the National Safety Program relating to the National Public Transportation Safety Plan, the Public Transportation Agency Safety Plan, and the Public Transportation Safety Certification Training Program; (2) the requirements of the National TAM System, including four proposed options under consideration for defining and measuring *state of good repair*; and (3) the relationship between safety, transit asset management and state of good.

FTA is also seeking comment on its intent to propose adoption of the Safety Management System (SMS) approach to guide the development and implementation of the National Safety

Pipelines, Committee on Transportation and Infrastructure, House of Representatives in July 2006 (<http://gao.gov/products/GAO-06-997T>) and in December 2009 before the Subcommittee on Highways and Transit, Committee on Transportation and Infrastructure, House of Representatives and the Subcommittee on Housing, Transportation, and Community Development, Committee on Banking, Housing, and Urban Affairs, U.S. Senate (<http://gao.gov/products/GAO-10-293T>; <http://gao.gov/products/GAO-10-314T>).

Program. SMS offers a proactive method for managing safety which enables agencies to identify and resolve safety concerns and challenges before they result in incidents. SMS combines established system safety engineering principles with advanced organizational management techniques, and supports continuous improvement in safety performance through a positive safety culture founded on four key priorities: safety policy, safety risk management, safety assurance, and safety promotion.

In addition, several requirements for both safety and transit asset management directly impact the Metropolitan, and the Statewide and Non-metropolitan planning processes. See 49 U.S.C. 5303 and 5304. Metropolitan planning organizations (MPO) and States must consider, and integrate recipients' TAM Plans and targets, as well as Transit Agency Safety Plans and targets, into the planning process. Because all of these provisions have broad impacts on FTA recipients and other stakeholders, this ANRPM also poses questions on the relationship of the safety and transit asset management requirements to the planning process.

The public comments in response to this ANPRM will help inform future notices of proposed rulemakings (NPRM) for the National Public Transportation Safety Plan, the Public Transportation Agency Safety Plan, the Public Transportation Safety Certification Training Program, and the National Transit Asset Management System.

A. The National Public Transportation Safety Program

Section 20021 of MAP-21 authorizes the new Public Transportation Safety Program codified at 49 U.S.C. 5329. The codification of section 5329 marks the culmination of efforts that began in December 2009 when the Administration transmitted a legislative proposal to Congress which requested the authority to establish and enforce minimum Federal safety standards for rail transit systems. In a historic move, not only did MAP-21 adopt many of the Administrations' proposals regarding the safety of rail transit, but it also provided FTA with the authority to regulate safety for all modes of public transportation.

The National Safety Program is comprised of the following four components—(1) the National Public Transportation Safety Plan (National Safety Plan), 49 U.S.C. 5329(b); (2) the Public Transportation Agency Plan (Transit Agency Safety Plan), 49 U.S.C. 5329(d); (3) the Public Transportation

Safety Certification Training Program (Safety Certification Training Program), 49 U.S.C. 5329(b)(1)(D) and 5329(c); and (4) the State Safety Oversight (SSO) Program. 49 U.S.C. 5329(e). Each of the four components will contribute to the establishment of a comprehensive framework that will ensure safe public transportation for all. FTA intends to publish separate NPRMs on each of these four components.

In most instances, the requirements of the National Safety Program will apply to each recipient of FTA funding, regardless of mode of transit provided. However, FTA's regulatory jurisdiction is limited by two provisions. First, FTA is prohibited from promulgating safety performance standards for rolling stock that is already regulated by another Federal agency. 49 U.S.C. 5329(2)(C)(i). Second, the requirements of the State Safety Oversight Program will not apply to rail transit systems that are subject to regulation by the Federal Railroad Administration. 49 U.S.C. 5329(e)(1) and (e)(2). Notwithstanding these two explicit statutory prohibitions, as previously mentioned, to the extent that any other Federal agency already regulates the safety of a particular mode of transportation, FTA does not intend to promulgate any duplicative, inconsistent, or conflicting regulations.

This ANPRM addresses and seeks public comment only on the first three components, which directly apply to FTA's regulated community. In the near future, FTA will issue a notice of proposed rulemaking on the SSO Program. That rule will propose requirements for States that must oversee rail transit systems within the regulated community.

The National Public Transportation Safety Plan

FTA will "create and implement" a National Safety Plan to "improve the safety of all public transportation systems that receive FTA funding." 49 U.S.C. 5329(b)(1). At minimum, the National Safety Plan will include: (1) Safety performance criteria for all modes of public transportation; (2) the definition of state of good repair developed through the implementation of the National TAM System; (3) a public transportation safety certification training program; and (4) minimum safety performance standards for transit vehicles used in revenue service that are not regulated by other U.S. DOT modes or any other Federal agency. The minimum safety performance standards, must, to the extent practicable, take into consideration recommendations and best practices of the National Transportation Safety Board (NTSB) and

the transit industry. 49 U.S.C. 5329(b)(2)(C).

The Public Transportation Agency Safety Plan

Within one year after FTA issues a final rule to carry out section 5329(d), each State or recipient of section 5307 Urbanized Area Formula Grants Program (section 5307) funds or section 5311 Rural Area Formula Program (section 5311) funds, must develop, implement, and certify a Public Transit Agency Safety Plan. 49 U.S.C. 5329(d)(1). Generally, large transit providers that are direct recipients of section 5307 funds must develop their own plans, have the plans approved by their board of directors, and certify those plans to FTA. However, small transit providers that are recipients under section 5307 or section 5311 may have their plans drafted or certified by their State. 49 U.S.C. 5329(d)(3). FTA seeks comment on how to define small transit providers and the States' role in the drafting and certification process in section V, below.

Pursuant to 49 U.S.C. 5329(d)(1), each Transit Agency Safety Plan must include, at minimum:

- A requirement that the board of directors, or equivalent entity, approve the plan and any updates;
- Methods for identifying and evaluating safety risks throughout all elements of the recipient's public transportation system;
- Strategies to minimize the exposure of the public, personnel, and property to hazards and unsafe conditions;
- A process and timeline for conducting an annual review and update of the plan;
- Performance targets based on the safety performance criteria and SGR standards set out in the National Safety Plan;
- Assignment of an adequately trained safety officer who reports directly to the general manager, president, or equivalent officer of the recipient; and
- A comprehensive staff training program for operations personnel and personnel directly responsible for safety.

Regulations to implement the requirements of the Transit Agency Safety Plan will take into account the size and operating environments of applicable recipients. Until FTA issues a final rule to carry out section 5329(d), existing safety and security plans required of rail transit agencies under 49 CFR part 659 will remain in effect. 49 U.S.C. 5329(d)(2). Once FTA issues a final rule, all recipients, including those that provide rail transit service, will

only be required to have one Transit Agency Safety Plan.

The Public Transportation Safety Certification Training Program

FTA is required to establish a Public Transportation Safety Certification Training Program for the certification and training of Federal and State employees, or other designated personnel, who conduct safety audits and examinations of public transportation systems, and employees of public transportation agencies directly responsible for safety oversight. 49 U.S.C. 5329(c)(1). Until a final rule is promulgated to establish and implement the Safety Certification Training Program, FTA is required to issue Interim Provisions for the certification and training of those persons that will be subject to the final rule. 49 U.S.C. 5329(c)(2).

FTA envisions that the Public Transportation Safety Certification Training Program (Safety Certification Training Program) authorized at 49 U.S.C. 5329(c), will establish minimum expertise requirements for Federal, State, transit agency and other designated personnel who are directly responsible for safety oversight. This program responds to findings identified in a 2006 report, "Rail Transit: Additional Federal Leadership Would Enhance FTA's State Safety Oversight Program," issued by the Government Accountability Office (GAO), which indicated a lack of expertise among safety oversight personnel.

This ANPRM seeks public comments on the Safety Certification Training Program. FTA will publish proposed Interim Provisions for the certification and training of employees responsible for safety oversight in a subsequent **Federal Register** notice. The public will have an opportunity to comment on the proposed Interim Provisions at that time. We ask that the public direct any comments on the Interim Provisions to that docket when it is available.

FTA will implement the requirements of the National Safety Program in consultation with the public, States, the transit industry, and the U.S. DOT's Transit Rail Advisory Committee for Safety (TRACS). FTA will use the comments received through this ANPRM to help develop the requirements of the National Safety Plan, Transit Agency Safety Plan, and Safety Certification Training Program. Depending upon the applicable statutory direction and relevant circumstances, FTA will implement the National Safety Program through a combination of regulations, statements

of policy, guidance materials, technical assistance and training.

B. The Safety Management System Approach

Transit is one of the safest ways to travel. According to the National Safety Council,² the lifetime odds of dying as an occupant of a rail car are approximately 1 in 178,000, and the lifetime odds of dying as an occupant of a bus are also about 1 in 178,000. By contrast, the lifetime odds of dying as an occupant of a passenger car are just 1 in 415, the lifetime odds of dying as a pedestrian are 1 in 749, and the lifetime odds of dying as a bicyclist are nearly 1 in 5,000.

However, serious incidents do occur, and the potential for catastrophic events remains. As discussed in section IIIA, below, in recent years, there have been several major transit accidents that resulted in fatalities, injuries, and significant property damage. Since 2004, the National Transportation Safety Board (NTSB) has reported on nine transit accidents that, collectively, resulted in 15 fatalities, 297 injuries, and over \$30 million in property damages.³ The NTSB has investigated a number of these accidents and has issued reports identifying the probable causes and contributing factors, including deficiencies in the training and supervision of employees; deficiencies in the maintenance of equipment and infrastructure; and deficiencies in safety management and oversight, such as weaknesses in transit agencies' safety rules and procedures, lack of a safety culture within the transit agency, and lack of adequate oversight by the state and Federal agencies. The deficiencies identified by the NTSB will continue to plague the transit industry as infrastructure ages, skilled employees retire, and transit agencies continue to endure financial stresses. FTA's goal is to address these deficiencies and improve safety.

In order to advance a comprehensive approach to safety decision-making, FTA is considering a Safety Management System (SMS) approach to developing and implementing the National Safety Program. Following a recommendation from FTA's Federal Advisory Committee—TRACS,⁴ on May 13, 2013, the FTA Administrator issued

a Dear Colleague Letter⁵ and FAQs⁶ to the transit industry setting forth FTA's intention to adopt the SMS approach to guide the advancement of FTA's safety rulemakings and other initiatives to improve the safety of public transportation. This ANPRM seeks comment on this proposed approach.

Safety management is based on the fact that safety is not an absolute condition—there will always be hazards and risks in public transportation. However, the traditional approach of primarily reacting to accidents by prescribing measures to prevent recurrence alone will not contribute to sustaining and improving public transportation safety. The need for a new approach to addressing public transportation safety has become especially urgent in light of high-profile rail transit accidents discussed in section IIIA, below.

Modern safety management practices that systematically and proactively identify the factors that contribute to unsafe events and prevent or minimize the likelihood of their occurrence have proven effective in addressing similar concerns in other transportation industries. Such practices call for setting safety goals and objectives, defining clear levels of accountability and responsibility for safety, establishing proactive approaches to managing risks and hazards in the day-to-day activities, risk-based resource allocation, monitoring and evaluating performance towards goals, and continuous learning and improvement.

SMS offers a means to prevent public transportation accidents by integrating safety into all aspects of a transit system's activities, from planning to design, to construction, to operations, to maintenance. SMS builds on the public transportation industry's three decades of experience with system safety by bringing management processes, integrated data analysis, and organizational culture more squarely into the industry's overall risk management framework. SMS is a management approach that provides processes that ensure each public transportation agency, no matter its size or service environment, has the necessary organizational structures, accountabilities, and policies and procedures in place to direct and control resources to optimally manage safety. When systematically applied, the SMS approach provides a set of

² National Safety Council (2013) *Injury Facts*®, 2013 Edition. Itasca, IL.

³ Section IIIA "The Need for a Comprehensive National Safety Program," discusses several of these accidents and provides links to the NTSB's reports.

⁴ Implementing Safety Management System Principles in Rail Transit Agencies, available at http://www.fta.dot.gov/documents/TRACS_Ltr_Rpt_SMS_fnl.pdf.

⁵ The Dear Colleague Letter is available at http://www.fta.dot.gov/newsroom/12910_15391.html.

⁶ The SMS FAQ's are available at http://www.fta.dot.gov/tso_15177.html.

decision-making tools that allow transit agencies to prioritize safety and sound transit asset management when making informed operating and capital investment decisions. These decision-making processes and investment prioritization decisions are discussed in more detail in Section II.

Following this ANPRM, FTA may issue an NPRM to implement SMS. In addition to FTA's general authority to issue rules to carry out section 5329, the statutorily-required components of the National Safety Program provide FTA with the legal authority and foundation necessary to implement the SMS approach within the transit industry. 49 U.S.C. 5329(f)(7).

There are four essential pillars of an SMS approach—(1) Safety policy, (2) safety risk-management, (3) safety assurance, and (4) safety promotion. The safety policy is the foundation of the organization's SMS. It clearly states the organization's safety objectives and sets forth the policies, procedures, and organizational structures necessary to accomplish the safety objectives. The safety policy clearly delineates management and employee responsibilities for safety throughout the organization. It also ensures that management is actively engaged in the oversight of the organization's safety performance by requiring regular review of the safety policy by a designated accountable executive (general manager, president, or other person with similar authority). Within the context of the Transit Agency Safety Plan, an organization's safety objectives will be articulated, at a minimum, through the setting of performance targets based on the safety performance criteria established in the National Safety Plan, and state of good repair standards based on the definition of that term established under the National TAM System. See 49 U.S.C. 5329(d)(1)(E).

Pursuant to 5329(d)(1)(B) and (C), the Transit Agency Safety Plan must also include "methods for identifying and evaluating safety risks throughout all elements of the public transportation system," and "strategies to minimize the exposure of the public, personnel, and property to hazards and unsafe conditions," respectively. Each of these requirements is consistent with the second pillar of SMS—safety risk management, which requires the development of processes and procedures to help the organization better understand its operational systems and identify hazards associated with those systems. Once hazards are identified, other procedures must be developed to analyze and assess the risk resulting from these hazards, as well as

to institute controls to mitigate or eliminate the risks.

Sections 5329(d)(1)(B) and (C) also encompass the requirements of the third pillar of SMS—safety assurance. Safety assurance requires an organization to monitor the effectiveness of safety risk controls established under safety risk management. Safety assurance is also designed to ensure that the organization meets or exceeds its safety objectives through the collection, analysis, and assessment of data about the organization's performance.

The fourth pillar of SMS—safety promotion—involves training, awareness, and communication that support safety. The training aspect is consistent with the Transit Agency Safety Plan requirement for a comprehensive staff training program for operations personnel and personnel directly responsible for safety. 49 U.S.C. 5329(d)(1)(G).

FTA is considering incorporating these four pillars into its safety related activities. Under the SMS approach, FTA's safety oversight reviews would focus on the overall safety performance of an entire organization and effective implementation of the methods for identifying and evaluating safety risks and to mitigate exposure to those risks, instead of relying solely on strict compliance with regulatory requirements or technical standards. Moreover, the principles of SMS will guide the establishment of national safety priorities set out in the National Safety Plan. Through data analysis FTA will identify national trends that suggest gaps in safety performance, common hazards and leading practices for risk control. FTA will then set national performance criteria and standards based on those safety hazards that pose the most significant risks.

Many of the system safety, risk management, and safety communications procedures and practices currently being used by both rail transit systems and bus transit systems are essential building blocks of a successful SMS. For example, some agencies already have vision and mission statements that include safety. In addition, some agencies already use quantitative measures to measure and evaluate safety performance. Types of data that some agencies currently collect to measure safety performance include accident investigation reports, customer complaints, and vehicle defect reports. Some agencies are already using data management systems such as Microsoft Excel or customized software to manage and analyze the data that is collected.

For those agencies that do not use an SMS, the adoption of the SMS approach

would be an organizational shift that can be integrated into the existing operational environment. FTA does not intend to prescribe exactly what processes a transit agency must have in place to implement SMS. FTA envisions that it would be up to each transit agency to develop processes to effectively implement SMS.

C. Transit Asset Management

Pursuant to the requirements at 49 U.S.C. 5326, FTA must establish a National TAM System that includes the following five elements: (1) FTA is to define the term, *state of good repair*, including objective standards for measuring asset conditions; (2) FTA must establish performance measures based on these state of good repair (SGR) standards, and each FTA grant recipient must annually set targets based on these measures; (3) each FTA recipient and subrecipient must develop an asset management plan that includes an asset inventory and investment prioritization; (4) asset inventories, condition assessments, and performance targets must be reported to FTA; and (5) FTA must provide technical assistance to recipients, including an analytical process or decision support tool that allows recipients to estimate capital investment needs over time and assists recipients with asset investment prioritization.

Each transit agency's investment priorities will become essential components of the long-range transportation plan and the transportation improvement program (TIP) in large metropolitan areas and essential components of the statewide transportation plan and the statewide transportation improvement program (STIP) in other areas. 49 U.S.C. 5303 and 5304. In all cases, the process of planning for the investment of Federal transportation dollars must consider the needs for transit state of good repair and safety alongside the comparable needs of the rest of the transportation network.

II. The Relationship Between Safety, the Safety Management System Approach, Transit Asset Management and State of Good Repair

Each transit agency has a process by which they budget, allocate funds, and plan for the future. In most cases, this decision-making process is led by a general manager or CEO who formulates the capital and operating budgets. In the SMS approach, this individual is called the accountable executive. This accountable executive is responsible for making decisions and balancing competing needs.

Ultimately, the decisions made by the accountable executive regarding the proposed capital and operating budgets are presented for approval to the transit agency's board of directors (board) or equivalent entity. Executives and boards must make strategic decisions regarding operational and service demands, capital investments, and the safety needs of the system. Accountable executives and boards often wrestle with these decisions because there is never enough money to do everything. Ensuring the appropriate consideration of safety and transit asset management as part of budgetary decisions related to capital and operating expenses has always been a balancing act. The implementation of the Transit Agency Safety Plan using the SMS approach would equip accountable executives and their boards with the information required to understand the hazards and associated risks within their own unique transit system. This knowledge encourages informed, deliberate, and transparent investments in controls and other measures to mitigate recognized risks. Instead of just having a capital plan and an operational plan, accountable executives and boards would now consider the needs identified in the Transit Agency Safety Plan and the TAM Plan, with other service needs, such as expansion, concurrently.

A key challenge in connecting transit asset management to safety planning is that even when assets are not in a state of good repair, they can be operated safely. Likewise, assets in a state of good repair can present a safety risk. That is not to say, however, that achieving a state of good repair is sufficient for safe transit operations. Similarly, safety is not the only reason for implementing TAM Plans. Still, FTA believes that there is a nexus between achieving a state of good repair and the safety of a transit system. The following discussion is intended to illustrate the linkage of transit asset management and state of good repair under the SMS approach.

FTA believes that, in the context of transit asset management, safety assessment begins with the statutorily required condition assessment. *See* 49 U.S.C. 5326(a)(2)(A). The condition assessment would identify those assets that fall below the SGR standards to be established by the National TAM System and the definition of state of good repair. If an asset is not in a state of good repair, it would be subsequently subject to a review under the SMS processes. The safety process would look at the condition of the asset and identify existing hazards and the associated level of risk. Many times

there will be no significant risk at all because the asset was either well maintained or simply does not pose a significant safety threat. The asset may still be a high-priority replacement for other reasons, but the safety process is not going to raise a red flag. Accordingly, any residual risk would be accepted and the agency would focus on those assets that do pose significant identified safety threats.

Sometimes, however, an asset will pose a risk that the accountable executive determines is unacceptable. This still may not mean that the asset should be immediately taken out of service, but it would require a control to be set in place to mitigate the risk to an acceptable level. This control would not always require the transit agency to either purchase an entirely brand new asset or spend any capital at all. Instead, it could mean that the transit agency, for example, would need to either purchase new shunting, or establish new procedures for track workers where there is concern about signaling, or institute a speed zone where track condition has become an issue, or implement a requirement to go to manual train control. The transit agency should ensure that proper safety assurance practices are in place and are utilized to monitor each control and determine whether or not it is sufficiently mitigating the risk.

Some controls will cost money to implement. They may involve training, overtime, and special equipment investments. Controls also can have operational consequences. A speed restriction in a big system may cause increased crowding or slower travel times that slow down service enough to impact the operating schedule. System impacts of this magnitude may already be considered in the agency budget process. The safety risk management and TAM processes highlight them.

Many transit agencies are faced with tough decisions about how to direct their investments. With a transparent process to manage safety, these tough decisions will be more deliberate and less likely to be inadequate or deferred. Ultimately, outputs from the TAM process and SMS will help shape the transit agency's strategic planning and budget process by contributing to informed decision-making.

FTA has placed a visual depiction of the aforementioned relationships and processes in the docket to this ANPRM.

III. Background

A. The Need for a Comprehensive National Safety Program

FTA's predecessor agency, the Urban Mass Transportation Administration (UMTA), originated under the Urban Mass Transportation Act of (UMT Act) of 1964—a Great Society initiative under the Kennedy and Johnson Administrations, designed to assist State and local governments in financing publicly and privately operated urban mass transportation systems “to be operated by public or private mass transportation companies as determined by local needs.” (Pub. L. 88–365; quoting Section 2(b)(3) of the UMT Act, 49 U.S.C. app. 1602(b)(3)). UMTA's mission, at that time, was strictly limited to providing Federal financial assistance to develop and maintain municipal transit systems.

From the inception of the program for Federal financial assistance to state and local agencies FTA and its predecessor agency, UMTA, were prohibited from regulating any aspect of the day-to-day operations of grant recipients. Prior to MAP–21, this prohibition was codified at 49 U.S.C. 5334(b)(1), which stated in pertinent part:

... [E]xcept for purposes of national defense or in the event of a national or regional emergency, the Secretary *may not regulate the operation*, routes, or schedules of a public transportation system for which a grant is made under this chapter, nor may the Secretary regulate the rates, fares, tolls, rentals, or other charges prescribed by any provider of public transportation. (Emphasis added)

The Congress deliberately chose not to give UMTA any ability to establish national standards for safety in urban mass transportation. *See, e.g., Amalgamated Transit Union v. Skinner*, 894 F.2d 1362, 1364 (D.C. Cir. 1990). Moreover, both UMTA's and FTA's authority to regulate safety during the past 45 years was limited to investigation of safety hazards (added in 1974), testing buses for durability (added in 1987), and requiring recipients to have a drug and alcohol program (added in 1991).

Specifically, in Section 107 of the National Mass Transportation Assistance Act of 1974, Congress instructed the agency to “investigate unsafe conditions in any facility, equipment, or manner of operation financed under this Act which the Secretary believes creates a serious hazard of death or injury.” The statute further directed UMTA to determine the nature and extent of the hazardous conditions; determine the means that might best correct or eliminate those

hazardous conditions; and compel the grant recipient to submit a plan for correcting or eliminating those conditions to UMTA's satisfaction. Also, the statute allowed the Secretary to "withhold further financial assistance" to the grant recipient until that plan was "approved or implemented." Nonetheless, the grant recipient was free to adopt, reject, or modify UMTA's recommendations.

Prior to MAP-21, FTA's investigative authority was codified at 49 U.S.C. 5329, and pursuant to Section 3028 of the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (Pub. L. 109-59 (2005); SAFETEA-LU), was broadened to allow FTA to "conduct investigations into safety hazards and security risks associated with a condition in equipment, a facility, or an operation financed under this chapter to establish the nature and extent of the condition and how to eliminate, mitigate, or correct it." Over the years, on several occasions, FTA has invoked this statute to audit individual transit agencies in instances where FTA believed there may have been unacceptable hazards or risks. Still, FTA has never interpreted Section 5329 as giving the agency authority to conduct a nationwide investigation into transit facilities or equipment or regulate those facilities or equipment through uniform standards for the entire transit industry.

Through Section 317 of the Surface Transportation and Uniform Relocation Assistance Act of 1987, the Congress directed UMTA to establish a program for testing new models of buses for maintainability, reliability, safety, performance, structural durability, fuel economy, and noise. The safety component of the bus testing program consists of a test for handling and stability. However, the purpose of the bus testing is simply to report the raw data for evaluation by transit agencies that seek to purchase new buses with Federal funding. Until the passage of MAP-21, FTA was not authorized to establish pass-fail criteria for safety or any of the other qualities for which the buses are tested.

Moreover, prior to MAP-21, pursuant to 49 U.S.C. 5330 and consistent with principles of federalism, it is the States—not FTA—that are responsible to require, review, approve, and monitor each rail transit agency's safety plan; investigate hazardous conditions and accidents at rail transit systems; and require action to correct or eliminate those conditions. FTA's role and responsibility is solely one of monitoring the many State agencies that exercise hands-on oversight of rail

transit operations, and providing technical assistance to those State agencies.

This very limited Federal authority for safety did not prove satisfactory in the view of the National Transportation Safety Board (NTSB or "Board"). In August 1991, following a number of accidents in the industry—including very serious accidents on rail transit systems in Philadelphia, Chicago, and New York City—the Board published a study titled, "*Oversight of Rail Rapid Transit Safety*" (NTSB/SS-91/02)⁷ in which it urged all States to develop or revise safety programs to ensure comprehensive and effective oversight over rail transit systems in their jurisdictions. The NTSB believed that States should have primary authority for oversight of rail transit safety, but it urged UMTA to evaluate the effectiveness of States' oversight of rail transit, develop guidelines, and require States and transit operators to use their UMTA grant funds to improve the safety of rail transit systems. Also, the NTSB encouraged UMTA to withhold Federal financial assistance, as necessary, pending corrective action by the States and transit agencies.

In response to the NTSB recommendations, the Congress created a State Safety Oversight (SSO) program for rail fixed guideway transit safety in Section 3029 of the Intermodal Surface Transportation Efficiency Act (ISTEA), enacted in December 1991. Public Law 102-240. ISTEA renamed UMTA as the Federal Transit Administration (FTA), and directed FTA to compel States with rail transit systems within their borders not otherwise subject to regulation by the Federal Railroad Administration (e.g., commuter rail systems, or light rail systems connecting to the "general railroad system" of the United States, as described in Appendix A to 49 CFR part 209) to establish and carry out safety program plans for each of those rail transit systems. The statute also required safety program plans to include, at minimum, core requirements for safety, lines of authority, levels of responsibility, and methods of documentation for those subjects. Further, Section 3029 of ISTEA granted FTA explicit authority to withhold funding from any State that did not comply with the statutory mandates, and directed FTA to promulgate rules for that purpose. This new authority for FTA made no provision for oversight of bus operations—possibly because the

1991 NTSB report was focused on rail transit.

The regulations implemented at 49 CFR part 659 to carry out the authority provided in 49 U.S.C. 5330 have been criticized for their lack of rigor and inconsistent application among States. Moreover, the State SSO programs developed to comply with the regulations in part 659 have been appropriately criticized for lack of authority, resources, and expertise. Most notably, in July 2006, the Government Accountability Office (GAO) identified some fundamental weaknesses in SSO agencies (SSOAs) in a report, "*Rail Transit: Additional Federal Leadership Would Enhance FTA's State Safety Oversight Program*."⁸ The GAO report found that the staffing levels and expertise varied greatly across SSOAs, and many of the SSOAs lacked enough qualified staff and adequate levels of training to meet their responsibilities. Lack of funding was also found to be a serious impediment. The GAO noted that the SSO regulations provided no enforcement power to the SSOAs, and very little enforcement power to FTA. Additionally, the GAO report faulted FTA for having failed to set goals and performance measures for State Safety Oversight, and having failed to audit SSOAs as often as originally planned. GAO urged FTA to set both short and long-term goals for State Safety Oversight, with measures of progress toward each of those goals; to audit each of the SSOAs at least once every three years; and to develop an appropriate training curriculum for SSOAs that would include courses on how to conduct oversight of rail transit systems.

Five major incidents following GAO's report highlighted increasing challenges for rail transit safety. On November 30, 2006, a Washington Metropolitan Area Transit Authority (WMATA) Blue Line train struck and killed two employees inspecting rail transit track in Alexandria, Virginia.⁹ On January 7, 2007, a WMATA Green Line train derailed near the Mt. Vernon station in Washington, DC, injuring 23 people and causing \$3.8 million in damage.¹⁰ On May 28, 2008, two Massachusetts Bay Transportation Authority (MBTA) light rail trains collided with one another on the Green Line in Newton,

⁸ Rail Transit: Additional Federal Leadership Would Enhance FTA's State Safety Oversight Program is available at <http://www.gao.gov/products/GAO-06-821>.

⁹ The NTSB's Railroad Accident Brief for the WMATA Blue Line accident is available at <http://www.ntsb.gov/doclib/reports/2008/RAB0802.pdf>.

¹⁰ The NTSB's accident report for the Mt Vernon Square accident is available at <http://www.ntsb.gov/doclib/reports/2007/RAR0703.pdf>.

⁷ Oversight of Rail Rapid Transit Safety (NTSB/SS-91/02) is available at http://www.ntsb.gov/doclib/recletters/1991/R91_33_36.pdf.

Massachusetts—a suburb of Boston—killing the operator of the second train, injuring another eight persons, and causing \$8 million in damage.¹¹ On May 8, 2009, the MBTA suffered another accident on its Green Line light rail system in which one train rear-ended another in the tunnel near the Government Center station in downtown Boston; 68 people were injured, with more than \$9 million in damage.¹² On June 22, 2009, two WMATA trains collided with one another near the Fort Totten station on the Red Line, killing the operator of the second train and eight passengers, injuring another 52 passengers, and causing \$12 million in damage.¹³ On July 18, 2009, two San Francisco Municipal Transportation Agency (Muni) light rail trains collided with one another at the West Portal station in downtown San Francisco, injuring the operators of both trains and 46 other persons and causing \$4.5 million in damage.¹⁴ And, in August and September, 2009, two WMATA maintenance employees lost their lives while working on the rail transit system; one was struck by a train on the Blue Line, the other by a maintenance vehicle on the Orange Line.

In its investigations, the NTSB found a variety of probable causes for these accidents including: equipment malfunctions; equipment in poor or marginal condition including equipment that can pose particular risks to safety, such as signal systems; lack of vehicle crashworthiness; and employee error—such as inattentiveness, or failure to follow a rail transit system's operating procedure. The NTSB found the lack of a strong safety culture to be a contributing factor in the WMATA accidents. Also, the NTSB found a lack of adequate oversight both by SSOAs and FTA.¹⁵

The NTSB has also found similar issues in the bus transit industry. After conducting several accident investigations involving transit buses (Normandy, Missouri; Cosmopolis, Washington; New York, New York; and

Nashville, Tennessee) and holding a public hearing on transit bus safety in March 1998, it found that substantial safety deficiencies and little Federal or State government safety oversight impacted the safety performance of the transit bus industry. As a result, the NTSB issued a Special Investigation Report in 1998¹⁶ which highlighted several deficiencies with Federal oversight of bus transit safety. The report noted that FTA was unable to “to identify situations that may lead to unsafe conditions on buses for the traveling public or to resolve any unsafe conditions because of a lack of effective safety oversight and enforcement.” In addition, NTSB questioned the utility of the safety data that was being collected on transit bus safety. Finally, the NTSB was concerned that, at the time, a comprehensive bus safety program was not available to transit agencies outside of APTA's membership program.

Based on its findings, the NTSB issued the following safety recommendations to the United States Department of Transportation:

- Develop and implement an oversight program to assess and ensure the safety of transit bus operations that receive Federal funding;
- Collect accurate, timely, and sufficient data so that thorough assessments can be made relating to transit bus safety;
- Evaluate the collected data, as part of the oversight program, to identify the underlying causes of transit bus accidents that could lead to the identification of safety deficiencies at transit agencies; and
- In cooperation with the American Public Transit Association, the Community Transportation Association of America, and the American Association of State Highway and Transportation Officials, develop a model comprehensive safety program(s) and provide it to all transit agencies.

In response to these recommendations, between 2000 and 2002, FTA sponsored outreach and research to develop a model program for Transit Bus Safety and Security. During this time, FTA worked with APTA, CTAA, and AASHTO to develop a memorandum of understanding (MOU) that was formally adopted by all parties in 2003.¹⁷

Most of the more recent transit bus accidents reported in the news have

occurred with motor coach vehicles. Most notably:

- On August 4, 2013 a North County Transit District bus struck three bicyclists in Camp Pendleton, CA, fatally injuring one and wounding two others. The bus had attempted to pass the cyclists by veering into the opposite lane of traffic and when the bus returned to its normal traffic lane it struck the cyclists.

- In May 2013 a Sound Transit bus in Kirkland, WA collided with another vehicle at an interstate exit ramp intersection causing 2 fatalities, 1 injury, and approximately \$40,000 in property damage.

- A Jacksonville Transportation Authority operator lost control of her vehicle in October 2011 while pulling away from a bus stop and struck and killed a patron who had just exited the vehicle. The operator stated that she applied the brakes, yet the bus kept moving and she could not turn the wheel. An investigation into the accident concluded that the operator, who had four previous accidents with JTA before the incident, did not straighten the bus's wheels before accelerating causing the bus to run over the curb, hit two signs, a fence, the victim, and an oak tree.

- In September 2010 a Southwest Ohio Regional Transit Authority bus operator pulled the bus to a curb and left her seat to check on an issue in the rear of the vehicle. The bus rolled approximately 150 feet down an incline and struck a pedestrian and a parked ambulance, resulting in 3 injuries and 1 fatality.

- In April 2010 the operator of a TriMet bus in Portland, OR made a left turn and struck five pedestrians in the crosswalk who had the lighted “walk” signal and the right-of-way. Two pedestrians died at the scene, one was seriously injured after he was pinned under the transit vehicle, and two more sustained injuries that required hospital treatment.

- On September 26, 2008 a WMATA Metrobus ran a red light and struck a taxi cab in Washington, DC, resulting in a fatality and five injuries. The accident investigation uncovered several prior arrests for the Metro operator including drug and gun charges. Another Washington Metro fatal accident occurred in October 2009 when a passenger disembarked from one Metrobus and when she crossed the street in front of the bus she was struck and killed by a second bus traveling in the second westbound lane of Mount Olivet Road in NE Washington. FTA could neither locate NTSB

¹¹ The NTSB's final report for the collision between two MBTA Green Line trains in Newton, Massachusetts is available at <http://www.nts.gov/doclib/reports/2009/RAR0902.pdf>.

¹² The NTSB's accident brief for the MBTA Green Line accident in Boston is available at <http://www.nts.gov/doclib/reports/2011/RAB1106.pdf>.

¹³ The NTSB's final report for the Fort Totten accident is available at <http://www.nts.gov/doclib/reports/2010/RAR1002.pdf>.

¹⁴ The NTSB's accident brief for the San Francisco MUNI accident is available at <http://www.nts.gov/doclib/reports/2011/RAB1104.pdf>.

¹⁵ The NTSB's final report for the Fort Totten accident is available at <http://www.nts.gov/doclib/reports/2010/RAR1002.pdf>.

¹⁶ The Special Investigation Report is available at <http://www.nts.gov/doclib/reports/1998/SIR9803.pdf>.

¹⁷ The Memorandum of Understanding is available at http://bussafety.fta.dot.gov/uploads/resource/3949_filename.

recommendations nor GAO reports to cite that document the accidents.

Currently, FTA has developed a well-received bus safety program, which includes a heavily trafficked resource Web site, onsite reviews and state DOT orientation seminars. However, the program remains completely voluntary and, therefore, FTA is unable to ensure that all bus transit agencies are positively affected. As highlighted in NTSB's 2013 *Most Wanted List*,¹⁸ there are significant more improvements that need to be made to ensure the safety of bus operations.

In December 2009, the Administration formally submitted a legislative proposal to the Congress calling for a more comprehensive approach to public transportation safety.¹⁹ In testimony before both the House Committee on Transportation and Infrastructure and the Senate Committee on Banking, Housing, and Urban Affairs, Secretary of Transportation Ray LaHood and Federal Transit Administrator Peter Rogoff presented the details of this legislative proposal, which was introduced in both houses in February 2010 as the Public Transportation Safety Program Act of 2010. H.R. 4643, S. 3015, 111th Cong. (2010). Citing the warning signs of increasing collisions, derailments, and casualties, the Secretary and the Administrator emphasized that rail transit always carries the potential for catastrophic accidents and damage—notwithstanding its record of being a very safe means of travel—and that the State Safety Oversight program, as it then existed, suffered from a number of fundamental weaknesses:

- Under the existing SSO framework, each rail transit system was free to determine its own safety practices and was not compelled to address action items found in audits or accident investigations. An SSOA would simply review those rail transit agency practices and report on the progress of corrective actions;

- Each SSOA had only so much regulatory, oversight, and enforcement authority as had been given by the State government. In many instances, the SSOA lacked authority to enforce any standards or compel compliance by the rail transit system it oversaw;

- Many States viewed the SSO program as an unfunded mandate. Thus, many States devoted insufficient resources to the program, which compromised the abilities of SSOAs to

recruit, train and develop staff with adequate technical, audit and oversight skills; and

- In many instances, an SSOA was dependent upon financial resources from the same entities it was obliged to oversee—the rail transit systems—thus creating a conflict of interest.

The Administration's bill would have required FTA to develop uniform, national standards for rail transit safety; given FTA authority to inspect rail transit systems for compliance with those standards; established a certification program for State Safety Oversight; authorized grants of 100 percent Federal funding for SSO programs, once certified; and required the SSO programs to be financially independent from the rail transit systems they oversaw. Further, the Administration's bill would have given States the option to decline participation in the SSO program, without penalty, in which instance, FTA would have been required to perform the oversight function. Also, the Administration's bill would have given FTA authority to issue civil or criminal penalties for noncompliance.²⁰

Also, in December 2009, the Secretary chartered an advisory committee for safety in rail transit systems, titled the *Transit Rail Advisory Committee for Safety* (TRACS). In accordance with the Federal Advisory Committee Act (Pub. L. 92-463, Oct. 6, 1972), TRACS was established to evaluate economic, technological, and institutional developments in the rail transit industry, and to make recommendations to the Secretary and FTA for Federal programs and policies in subjects of transit safety.

The TRACS is comprised of approximately 25 persons from transit agencies, academia, labor, and other transit professionals who provide a range of perspectives on how to enhance public transportation safety. Soon after its formation, TRACS provided FTA with input from knowledgeable stakeholders as the agency awaited the delegation of safety authority from Congress.

In July 2010, after both the House and Senate versions of the Administration's bill were referred to committees, the Senate Committee on Banking, Housing, and Urban Affairs reported the Public Transportation Safety Act of 2010 (S. 3638, 111th Cong. (2010)), which laid

the foundation for the general safety and State Safety Oversight provisions eventually enacted under MAP-21. The Senate Banking bill embodied most of the fundamental goals of the Administration's legislation but differed from the Administration's bill in that it did not allow a State to decline participation in the SSO program; the grants of Federal funds for an SSO program would require a 20 percent local match; and States could be allowed as much as three years after the effective date of a final rule to develop an SSO program adequate for certification—after which, in the event of an inadequate SSO program, FTA would be authorized to withhold all Federal grant funds for all public transportation operators in that State, not just the rail transit systems. *See generally*, the Senate Banking, Housing and Urban Affairs Committee Report accompanying the Senate bill. S. Rept. 111-232; 111th Cong. 2nd Sess. (2010). The 111th Congress adjourned before the Senate could act on the Senate Banking bill, and the House did not consider any similar bill.

In the 112th Congress, the text of the Public Transportation Safety Act of 2010 became section 20021 of the larger bill for reauthorization of surface transportation—the Moving Ahead for Progress in the 21st Century Act (MAP-21) (S. 1813, 112th Cong. (2012)—that passed the Senate on March 14, 2012. The Senate and House conferred with the Senate-passed MAP-21 and the House reauthorization bill (H.R. 4348), making some amendments to the safety provisions of section 20021. On July 6, 2012, the President signed into law the Moving Ahead for Progress in the 21st Century Act (Pub. L. 112-141; MAP-21), which authorized a new comprehensive Public Transportation Safety Program codified at 49 U.S.C. 5329 (section 5329). Moreover, the statutory provision that had previously prohibited FTA from regulating the operations of its recipients has been amended. Now there is an exception to the general prohibition on regulating operations for “purposes of establishing and enforcing a program to improve the safety of public transportation” under Section 5329. 49 U.S.C. 5336(b).

B. The Need for a National Transit Asset Management System

Transit provides more than 10 billion passenger trips each year, which represents more trips each month than all of the Nation's airlines combined will make in a year. When transit assets are not in a state of good repair (SGR), the consequences often include increased safety risks, decreased

¹⁸ The Most Wanted List is available at http://www.nts.gov/safety/mwl2_2012.html.

¹⁹ The letters to Congress and the proposed bill to establish a Public Transportation Safety Program are available at http://www.fta.dot.gov/about_FTA_11117.html.

²⁰ The proposed bill is available at http://www.fta.dot.gov/about_FTA_11117.html. See also, Examining the Federal Role in Overseeing the Safety of Public Transportation Systems: Hearing Before the Subcomm. on Hous., Transp. & Cmty. Dev. of the S. Comm. On Banking, Hous. & Urban Affairs, 111th Cong. 89-97 (2009).

reliability, higher maintenance costs, and an overall lower quality of service to customers. Through the requirements of section 5326 and the new needs-based State of Good Repair Formula Program authorized at 49 U.S.C. 5337, renewed emphasis will be placed on restoring and replacing the Nation's aging public transportation infrastructure.

FTA has focused attention on the growing problem of the Nation's transit SGR backlog, particularly at large transit systems, in a *series of reports*, including: the 2008 Report, "State of Good Repair: Beginning the Dialogue"; the "2009 Rail Modernization Study Report to Congress"; the "2010 National State of Good Repair Assessment"; and, the "2010 Department of Transportation Conditions & Performance Report."²¹ In the most recent of these reports, FTA estimated that the Nation's transit systems collectively have an SGR backlog that exceeds \$78 billion. This backlog continues to grow in spite of existing efforts to address the problem.

In the 2009 Rail Modernization Study Report to Congress, FTA identified four principles of sound transit asset management: (1) Taking a strategic, rather than a tactical, approach that moves beyond traditional *worst first* prioritization; (2) balancing the competing needs of operations, maintenance, reinvestment, and system expansion; (3) integrating the perspectives of the whole organization, including operations, safety, planning, engineering, budget, and information technology; and (4) making informed and prioritized choices based on sound data and clear organization objectives regarding the use of scarce resources. These principles will naturally also form a foundation for FTA and the transit industry to use in addressing the SGR backlog and implementing requirements for transit asset management planning.

MAP-21 fundamentally shifted the focus of Federal formula investments in transit to emphasize the need to maintain, rehabilitate, and replace existing transit assets. The ability of FTA recipients, along with States and Metropolitan Planning Organizations, both to set meaningful transit SGR performance targets and to achieve those targets, is critically dependent on the ability of all parties to work together to prioritize the funding of SGR projects from all funding sources. The new SGR Formula Grant Program for rail transit systems and for bus transit systems operating on dedicated lanes with

access for high-occupancy vehicles will also be an essential component of this process. However, these grants alone will not be enough to address the backlog. Due to overall limited availability of all sources of funding, transit agencies will need to be strategic in the use of all available funds from all sources—Federal, State, local, and system-generated—to make the best investments each year. The various components of this new National TAM System will work to emphasize state of good repair as a top priority at FTA and within the public transportation industry. Together, these elements will assist FTA and the transit industry in making the case for SGR investments and securing additional funding from all levels of government, but also for prioritizing SGR investments with existing funding sources.

In December 2012, FTA started the conversation on transit asset management with stakeholders through an Online Dialogue. This Online Dialogue attracted 739 registered users, almost 150 total comments, and nearly 1,500 votes on the ideas and comments submitted. Additionally, FTA has heard from industry stakeholders at numerous industry conferences and through a regular series of SGR Roundtables, which began in 2009.

This ANPRM continues that conversation and requests written comments on issues involving transit asset management and state of good repair. FTA wants to take a common-sense approach in carrying out the many requirements related to transit asset management and, to the extent possible, minimize the costs and burdens on all public transportation operators, particularly small operators with a limited number of assets. Below, this ANPRM raises a number of possibilities for the approach FTA might take in implementing the requirements of section 5326.

Not included in this ANPRM are detailed questions related to collecting asset inventory and condition assessment information in the National Transit Database (NTD). FTA previously began its efforts to implement this requirement based on earlier direction from Congress in 2010. FTA will be requesting comments from affected recipients and other stakeholders on proposed changes to its NTD Report Manual to include asset inventory and condition assessment information in a subsequent notice in the **Federal Register**.

IV. The National Public Transportation Safety Plan

Pursuant to 49 U.S.C. 5329(b)(1), FTA must "create and implement a national public transportation plan to improve the safety of all public transportation systems" that receive FTA financial assistance. The National Safety Plan must include: (1) Safety performance criteria; (2) the definition of state of good repair; (3) a safety certification training program; and (4) vehicle performance standards. The National Safety Plan will be applicable to each FTA recipient.

FTA envisions that the National Safety Plan will serve as a tool to establish and communicate national safety priorities based on analysis of available safety information. FTA will set national priorities based on those issues that are identified and which pose the highest level of safety risk. When such risks are observed, FTA will use the National Safety Plan to both set national criteria for specified safety performance and communicate mitigation strategies to the public transportation community. Accordingly, the performance criteria and standards, SGR measures, and training requirements will be adjusted in response to new information and the identification of emerging industry-wide or sector-wide gaps in safety. Each transit agency will address these requirements through their own required Transit Agency Safety Plan.

A. Performance Criteria

Pursuant to 49 U.S.C. 5329(b)(2)(A), FTA is required to set "safety performance criteria for all modes of public transportation." FTA envisions that the safety performance criteria will consist of desired outcomes, established controls to mitigate risks, and indicators for identifying and tracking safety-related issues. Each of these components relies heavily on the collection and analysis of safety information. The ability to use safety information to measure safety-related outcomes is a critical and necessary step forward in managing and mitigating risks. Through sound data collection, analysis, and mandatory reporting, the safety performance criteria established by rulemaking will help transit providers in the early detection and control of safety vulnerabilities, and will help FTA to better assess the effectiveness of its own program and initiatives. Eventually, FTA envisions that transit agencies will be able to use safety information to progress from a reactive safety risk management response, to a proactive or predictive

²¹ Each of these reports is available at <http://www.fta.dot.gov/sgf>.

response. That transition will allow transit agencies to direct resources towards effective safety risk management and safety assurance.

Although transit agencies will have primary responsibility for collecting and analyzing their own safety information, FTA is considering proposing data collection processes and analyses that will allow FTA to collect and roll up results to the national level. To this end, FTA intends to lead and support the transit industry and the States in developing or clarifying definitions of key terms, determining the industry's most pressing safety issues, developing standardized data collection and analysis methods, and establishing baselines to benchmark selected safety concerns. Transit systems would then set targets based on these measures. These targets will be part of the Transit Agency Safety Plan and incorporated into the metropolitan and statewide planning processes.

FTA understands that submitting certain sensitive safety data to FTA may cause some concern within the industry regarding the public availability of that information. However, FTA will need to collect some safety information regarding hazards and mitigation measures that are used across the industry. By reviewing this information, FTA will be able to add value to the industry by targeting research towards common hazards and by identifying and sharing leading best practices across the industry.

FTA seeks comments on the following questions:

1. What types of safety performance criteria do transit agencies already use?

2. What types of performance criteria should FTA consider?

3. Although FTA is not proposing specific performance criteria at this time, TRACS has suggested the following categories for which performance criteria should be set: (1) Casualties; (2) Operations; (3) Systems and Equipment; and (4) Organizational Culture and Human Performance. TRACS chose these categories because it believed that each was clearly associated with safety, and could be effectively integrated into decision making at the three levels of public transportation safety responsibility (Federal, State, and operating agency). Moreover, TRACS felt that initially, it may be necessary to limit safety performance measures to those for which adequate national-scale data exists, which tend to concern casualties and crashes. However, the plan should also define categories for leading indicators of safety risk, which the industry is encouraged to measure, and

which FTA will work towards measuring at the national level as part of its overall SMS approach to transit safety. To what extent do these performance criteria categories sufficiently address the relevant safety information pertaining to public transportation agencies? Are there other safety performance categories that should be included?

4. What experience can transit agencies share on establishing desired outcomes, controls, and indicators to identify and track casualties, as well as safety issues related to operations, systems and equipment, and organizational culture and performance?

5. Are there specific performance criteria that FTA should consider establishing and tracking within each of those four categories listed in question 2, above?

6. Because transit agencies typically have very low collision rates, should FTA consider establishing measures of near-collisions (or "close calls") to help identify circumstances that pose an increased risk of collisions? If so, how?

7. How should FTA streamline or improve existing reporting of safety information to the NTD?

B. State of Good Repair

Pursuant to 49 U.S.C. 5329(b)(2)(B), the National Safety Plan must include the definition of state of good repair. This definition must also be reflected in each Transit Agency Safety Plan through the setting of performance targets based on the definition and SGR standards set out in the National Safety Plan. 49 U.S.C. 5329(d)(1)(E). FTA envisions, the definition of state of good repair, and the condition of assets relative to that definition, will impact when a safety risk analysis is undertaken.

The definition of state of good repair will be established through the rulemaking to establish the National TAM System. The definition must include "objective standards for measuring the condition of capital assets of recipients, including equipment, rolling stock, infrastructure, and facilities." 49 U.S.C. 5326(b)(1). In section VII of this ANPRM, FTA describes four methods for defining and measuring state of good repair based on the following: (1) Asset age, (2) asset condition, (3) asset performance, and (4) a comprehensive assessment of assets.

In addition to the discussion on the National TAM System below, FTA seeks comment on the following questions specifically related to how to integrate the definition of SGR into the National Public Transportation Safety Plan:

8. How should the requirement for a definition of state of good repair and SGR performance measures be integrated into the new National Safety Plan?

9. How should safety considerations be addressed in the SGR performance measures and targets?

10. Should the safety SGR performance targets be the same as the SGR performance targets that will be required under the National TAM System?

C. Minimum Safety Performance Standards for Vehicles

Pursuant to 49 U.S.C. 5329(b)(2)(C), FTA is required to issue "minimum safety performance standards for public transportation vehicles used in revenue operations" other than rolling stock otherwise regulated by the DOT or another Federal agency. Those standards, "to the extent practicable," must "take into consideration: (1) relevant recommendations of the National Transportation Safety Board; and (2) recommendations of, and best practices standards developed by, the public transportation industry."

FTA is aware of existing voluntary consensus based standards for transit vehicles put forward by organizations such as the American Public Transportation Association (APTA).²² However, FTA understands that many of the standards are prescriptive standards or design standards rather than performance standards. Prescriptive standards and design standards define exactly how to do something—like a recipe. Prescriptive standards and design standards allow little or no flexibility. An example of a prescriptive standard would be: Grade crossing signals shall have 100 amp-hour battery back-up. Performance standards define an end result, but allow total flexibility on how that result is achieved. An example of a performance standard would be: Grade crossing signals shall have back-up power for a minimum of 12 hours of operation. MAP-21 explicitly calls for the development of minimum safety performance standards for vehicles. In fact, Congress stated in the report accompanying the Public Transportation Act of 2010, that they

²² APTA's rail transit standards may be found at <http://www.apta.com/resources/standards/Pages/Rail-Standards.aspx>. APTA's bus transit standards may be found at <http://www.apta.com/resources/standards/Documents/APTA-BTS-BC-RP-001-05.pdf>. An example of an APTA performance based standard is the Recommended Practice for Transit Bus In-Service Brake system Performance Testing available at <http://www.apta.com/resources/standards/Documents/APTA-BTS-BC-RP-001-05.pdf>.

did not intend for FTA to replicate the FRA regulatory model, with highly specific and prescriptive regulations related to public transportation safety.²³ Thus, many of the existing standards that apply to vehicles within FRA's jurisdiction would not meet the MAP-21 requirement that FTA create minimum safety performance standards for vehicles. However, FTA still seeks the public's comments on several questions regarding vehicle standards.

Presently, however, FTA's priority with respect to vehicles is issuing a proposed rule²⁴ to establish a bus testing pass/fail standard as required by 49 U.S.C. 5318(e)(2). After FTA publishes a final bus testing rule, buses may only be purchased with FTA funds if the vehicles were tested and received a passing score that will be established by rule. In addition, once FTA establishes minimum vehicle performance standards for buses, FTA-funded buses must also meet those standards.

FTA will work with the transit industry to identify appropriate performance-based vehicle standards for both rail and bus vehicles, and develop an appropriate implementation schedule based on objective data. In addition, FTA will take into consideration NTSB recommendations and leading industry practices.

FTA seeks comments on the following questions:

11. In addition to APTA's voluntary consensus standards, what other sources of safety performance standards for transit vehicles are available that FTA should consider?

12. What criteria should be used to identify, prioritize and develop performance-based vehicle standards?

13. To what degree should existing voluntary consensus standards be considered or used in developing and implementing a performance-based vehicle standards regime?

14. Specific to rail vehicle standards, what areas or categories of standards would yield the greatest safety improvement if required as a minimum safety performance standard for the public transportation industry? What areas or categories of standards would yield the most cost effective safety improvements?

15. Specific to bus vehicle standards, what areas or categories of standards would yield the greatest safety improvement if required as minimum safety performance standards for the

public transportation industry? What areas or categories of vehicle standards would yield the most cost effective safety improvements?

16. What NTSB recommendations or industry leading practices should FTA consider most urgently? To date, the NTSB has only issued recommendations to FTA for rail transit vehicles, including the following:

R-02-19: Require that new or rehabilitated vehicles funded by Federal Transit Administration grants be equipped with event recorders meeting Institute of Electrical and Electronics Engineers (IEEE) Standard 1482.1 for rail transit vehicle event recorders. IEEE 1482.1-1999 Standard for Rail Transit Vehicle Event Recorders or equivalent.

R-06-05: Develop transit railcar design standards to provide adequate means for safe and rapid emergency responder entry and passenger evacuation.

—RT-S-VIM-20-10 Standard for Emergency Lighting System Design for Rail Transit Vehicles or equivalent,

—RT-S-VIM-021-10 Standard for Emergency Signage for Rail Transit Vehicles or equivalent, and

—RT-S-VIM-022-10 Standard for Low-Location Emergency Path Marking for Rail Transit Vehicles or equivalent.

R-06-06: Develop minimum crashworthiness standards to prevent the telescoping of transit railcars in collisions and establish a timetable for removing equipment that cannot be modified to meet the new standards.

—ASME RT-2 2008 Safety Standard for Structural Requirements for Heavy Rail Vehicles or equivalent, and

—ASME RT-1 2009 Safety Standard for Structural Requirements for Light Rail Vehicles or equivalent.

V. The Public Transportation Agency Safety Plan

Section 5329(d)(1) of title 49, U.S.C., requires each recipient of section 53907 Urbanized Area Formula funds or section 5311 Rural Area Formula funds to certify that it has established a comprehensive Transit Agency Safety Plan. States may also draft and certify plans for rural areas or for small public transportation providers in urban areas. FTA envisions the Transit Agency Safety Plan as the mechanism through which recipients demonstrate their compliance with the National Safety Plan, by, among other things, setting targets based on the safety performance criteria and standards set out in the National Safety Plan.

The Transit Agency Safety Plan is also where FTA envisions each transit

agency to illustrate its practice of SMS. Ultimately, FTA envisions that the Transit Agency Safety Plan will reflect each transit agency's ongoing processes related to answering the following four fundamental SMS questions:

- What will likely be the cause of the transit agency's next accident? Is the transit agency doing risk monitoring to discover and address those potential causes?

- How does the transit agency know the likely cause of the next accident? Does the transit agency have internal auditing, required and voluntary reporting, data collection and analyses, and tracking to indicate that personnel are accurately informed about the biggest risks?

- What is the transit agency doing about to mitigate the risk? Does it have a viable strategy or action plan, along with appropriate budgetary and staff resources, in place to control or mitigate the risks?

- Is the strategy or action working? Does the agency have measures in place that will tell agency staff if the strategy or action plan is working to control or mitigate the identified risks?

FTA seeks comments on the SMS approach in general, and on the following questions:

17. Are there barriers or challenges to adopting SMS principles by recipients for any particular mode of transit? If so, which mode, and what are the barriers or challenges?

18. What type of information and technical assistance would the public transportation industry need from FTA in order to facilitate the adoption and implementation of SMS practices?

19. If SMS or elements of SMS are currently being practiced within your agency, how is it being carried out? What are the most effective means to implement SMS and how should it be scaled to accommodate both large and small public transportation systems? FTA also seeks examples and ideas from smaller agencies using SMS.

20. Are there alternative safety management approaches that FTA should consider?

A. Plan Requirements

Pursuant to 49 U.S.C. 5329(d), each Transit Agency Safety Plan must include, at minimum, the following:

- A requirement that the board of directors, or equivalent entity, approve the Transit Agency Safety Plan and any updates to the plan;

- Methods for identifying and evaluating safety risks throughout all elements of the recipient's public transportation system

²³ S. Rep. No. 111-132, at 4 (2010). Available at [http://thomas.loc.gov/cgi-bin/cpquery/?cp111:FLD010:@1\(sr232\)](http://thomas.loc.gov/cgi-bin/cpquery/?cp111:FLD010:@1(sr232)).

²⁴ RIN 2132-AB11.

- Strategies to minimize the exposure of the public, personnel, and property to hazards and unsafe conditions;

- A process and timeline for conducting an annual review and update of the plan;

- Performance targets based on the safety performance criteria and state of good repair standards set out in the National Safety Plan;

- Assignment of an adequately trained safety officer who reports directly to the general manager, president, or equivalent officer of the recipient; and

- A comprehensive staff training program for the operations personnel and personnel directly responsible for safety.

For the last three decades the public transportation industry has implemented plans and programs based on the system safety principles outlined in the *Military Standard 882*²⁵ series. This approach focuses on the application of engineering and management principles, criteria, and techniques to achieve an acceptable level of safety throughout all phases of a system lifecycle. Currently, under 49 CFR part 659, rail fixed guideway public transportation providers are required to develop and carry out System Safety Program Plans (SSPP) and System Security Plans (SSP). There is no comparable requirement for bus transit providers.

Some of the components of the SSPPs and SSPs are responsive to the new requirements in 49 U.S.C. 5329(d). For example, SSPPs and SSPs must address “methods for identifying and evaluating safety risks” by including sections devoted to hazard analysis and management, threat and vulnerability assessment, safety data acquisition and analysis, internal audits and reviews, accident and incident investigation and reporting, and emergency planning and preparedness. Despite the similarities in the components of these plans, implementation of the existing requirements for the SSPPs and SSPs has been inadequate and inefficient.²⁶ Major accidents often have underlying organizational antecedents with

multiple causes involving people operating across many levels or functions in an organization. It follows that predicting and preventing major accidents requires addressing the root causes based in organizational practices, management systems, and culture. As such, implementing the Transit Agency Safety Plan through the SMS approach will allow the transit industry to build on its experience with system safety by bringing management processes and organizational culture more squarely into the system safety engineering and hazard management framework.

Until FTA promulgates regulations for both the Transit Agency Safety Plans under 49 U.S.C. 5329(d) and a new regulation for the SSO Program under 49 U.S.C. 5329(e), the existing 49 CFR part 659 SSPPs and SSPs will remain in effect and serve as interim rail Transit Agency Safety Plans. Until a final rule is issued, there will be no comparable requirement for bus transit providers. However, FTA encourages both rail and bus transit providers to begin implementing the statutory requirements of the Transit Agency Safety Plan into their daily operations now, even as they await issuance of final rules since any final rules will be consistent with the statutory requirements.

FTA plans to conduct pilot programs and provide technical assistance to aid in this transitional process. Through pilot projects, FTA and the industry will test, update and continuously improve proposed public transportation safety concepts. Evaluations of pilot projects will help inform FTA’s development and provision of technical assistance.

With respect to the implementation of the Transit Agency Safety Plan, FTA seeks comment on the following questions:

21. Risk-based analysis can be applied in analyzing human factors such as employee fitness for duty (e.g. being physically and mentally qualified, not suffering from acute or cumulative fatigue, not being impaired by use of alcohol and controlled substances, etc). Agencies should also consider how to address situations where medical intervention may be appropriate (such as screening for sleep disorders and providing treatment for persons with sleep disorder diagnoses), as well as situations where progressive remedial interventions, up to and including termination, might be needed for certain safety-sensitive positions. Do agencies currently apply a risk based-approach in managing safety risks related to human factors? If so, how? What are the challenges associated with adopting a

risk-based approach to these management functions?

22. Many rail transit agencies also operate bus systems. FTA seeks comment from those rail transit agencies that already include bus or other public transportation mode operations in one agency plan. Has inclusion improved safety of the non-rail modes? What are the benefits and costs to including all transit mode operations into one Transit Agency Safety Plan?

23. What attributes, functions, and authorities should FTA require of an “equivalent entity” when there is no board of directors? If a transit agency is not governed by a board of directors, what additional authorities would an “equivalent entity” need to properly review and approve a Transit Agency Safety Plan?

24. How should performance milestones, targeted safety risks, and costs be considered in developing and evaluating risk mitigation strategies? FTA seeks examples of how public transportation agencies have engaged in such activities.

25. Public transportation agencies must establish a process and timeline for conducting an annual review and update of the transit agency safety plan. 49 U.S.C. 5329(d)(1)(D). These plans will be self-certified, allowing the public transportation provider’s board of directors (or equivalent entity) to determine whether the public transportation provider’s agency safety plan is adequate. FTA intends to maintain the authority to review transit agency safety plans during triennial reviews or in the event that FTA identifies circumstances posing a significant risk. FTA seeks comment regarding the appropriate role, if any, for States and FTA in the Transit Agency Safety Plan annual review process.

26. For those public transportation providers that are currently required to have safety plans pursuant to 49 CFR part 659, how is the effectiveness of the safety plan measured?

27. In accordance with 49 U.S.C. 5329(d), public transportation agencies will develop a comprehensive safety training program for operations personnel and personnel directly responsible for safety. What essential core competencies are needed to adequately train public transportation agency operations personnel and personnel responsible for safety of the agency? Should a transit agency’s personnel training requirements be scaled based on the size of the agency? In what ways can FTA minimize the costs of implementation (e.g. allowing for shared development of curricula)?

²⁵ Military Standard 882 is available at <http://www.system-safety.org/Documents/MIL-STD-882E.pdf>.

²⁶ GAO, Rail Transit: Observations on FTA’s State Safety Oversight Program, GAO-06-997T (Washington, DC: July 19, 2006), available at <http://www.gao.gov/assets/130/123829.pdf> and Rail Transit: Additional Federal Leadership Would Enhance FTA’s State Safety Oversight Program, GAO-06-821 (Washington, DC: July 26, 2006), available at <http://www.gao.gov/assets/260/250860.pdf>, and “Oversight of Rail Rapid Transit Safety” available at http://www.nts.gov/doclib/recletters/1991/R91_33_36.pdf.

28. What training do transit agency operations personnel and personnel directly responsible for safety currently receive? What is the curriculum? How long does it take to complete? When and where is it completed? Who provides the training? How is the effectiveness of these training programs evaluated?

29. Each public transportation provider must identify a chief safety officer who is responsible for operational safety and who reports directly to the general manager or equivalent officer. FTA seeks comment on what other responsibilities might be combined with this role, particularly in smaller operations where the same individual may function as the provider's general manager, operations manager and safety officer? FTA also seeks comment on how the combination of such roles causes any conflict between safety and any other interest in the transit system's operation?

30. What strategies could reduce the burden of producing and updating the Transit Agency Safety Plan, as well as transmitting key safety information to FTA and the States?

31. While the statute sets minimum plan requirements, FTA seeks comment on whether to establish less stringent regulatory requirements for small public transit providers, and what specific areas may be most conducive to different requirements based on the transit agency's size. For example, should regulations permit smaller transit providers to employ less expensive methods for identifying and evaluating safety risks than larger entities? Should FTA's regulations establish different safety performance criteria for smaller transit providers? Should the training requirements be different for smaller transit providers? If so, how?

32. FTA is required to notify the DOT Crisis Management Center (CMC) of significant newsworthy events affecting public transportation (such as transit collisions that include casualties, rail transit derailments, emergency evacuations, major crimes, significant revenue service disruptions and other related transit events). Currently, rail transit agencies are required to provide such notifications (within two hours of the incident) to their State Safety Oversight Agency, per 49 CFR 659.33. However, bus transit agencies provide incident notifications to FTA on a voluntary basis, typically as requested from FTA regional offices. FTA seeks to implement a requirement that all modes of transit agencies provide FTA with near real-time event notifications (within the two-hour timeframe). For rail transit agencies this could be

accomplished by copying FTA on their required notifications to their SSOAs. For bus and other non-rail modes of public transportation, this may require using a new template or form for notifying FTA. What methods might transit agencies best use to comply with such a requirement? Are there more effective or efficient methods or processes to report these incidents in real time? Should FTA consider alternative requirements for small transit providers?

B. The State's Role

Unlike 49 U.S.C. 5329(e), which establishes a clear role for States in overseeing the safety of rail fixed transit systems through the SSO program, the statute does not articulate a similar role for States with regard to the oversight of non-rail public transportation providers. States may, however, draft or certify transit agency safety plans for small section 5307 recipients and section 5311 recipients, including tribal transit recipients.

FTA seeks comment on the following questions:

33. How should FTA define *small 5307 provider*? Should the definition be based on the size of the agency (e.g., number of vehicles, annual passenger counts, annual revenue miles, annual budget, etc.)? Please provide the basis for your suggestion.

34. How might States draft a single state-wide Transit Agency Safety Plan that reflects implementation of SMS at the individual transit agency level? How would compliance with a single State plan work? Given the need for the plan to reflect individual agency processes, what technical assistance might FTA provided to States or agencies drafting and certifying plans? Can the number of transit providers seeking either option be predicted or quantified?

35. Do some States lack sufficient technical expertise or resources to draft or certify individual Transit Agency Safety Plans for small section 5307 and section 5311 public transit providers? If so, please explain?

36. How many plans would each State be expected to prepare?

37. If the State's role was limited to the certification of individual Transit Agency Safety Plans, what administrative burden would be imposed upon the State?

38. Would it reduce the overall administrative burden if each State prepared a standard Transit Agency Safety Plan template or model plan that could be used by each small urban and rural transit provider within its jurisdiction?

39. Is it practicable to create a multi-state or nation-wide model plan that could be shared between States?

40. If a State were to implement a standardized plan for small transit providers within its jurisdiction, would any safety factors be risked by adopting a one-size-fits-all approach, or must each plan be customized for each transit provider?

41. Should States that write and certify Transit Agency Safety Plans provide oversight of those agencies?

42. Should FTA require State DOT's to maintain a list of certified subrecipients that have established safety plans or that are covered by the statewide plan? If so, how should this list of certified subrecipients be maintained and updated?

43. How should FTA apply the safety plan provisions to recipients of the section 5307 Tribal Transit Formula Program and Tribal Transit Discretionary Program?

44. What resources will States need to carry out the drafting or certification functions?

45. Should States have a role in providing oversight of non-rail transit systems within their jurisdiction and, if so, what would be an estimate of the time required to perform such a role?

46. How are States that are currently performing this function carrying out their oversight responsibility for non-rail modes? Could this role be streamlined by combining the bus oversight duties into each State's existing rail oversight program?

47. If States did have a role in providing oversight of bus-only systems, how would States without rail fixed guideway systems (and therefore no established SSO Program) provide that oversight?

VI. The Public Transportation Safety Certification Training Program

Pursuant to 49 U.S.C. 5329(c)(1), FTA is required to establish a Public Transportation Safety Certification Training Program (Safety Certification Training Program) applicable to Federal and State employees, contractors who conduct oversight, and those employees at transit systems who are responsible for safety oversight.

Currently, FTA funds and supports a wide variety of safety training for the transit industry. FTA-sponsored training is developed in collaboration with transit industry professionals, industry experts, and professional training institutes. Courses are conducted nationally, primarily by the National Transit Institute, Transportation Safety Institute, Volpe National Transportation Systems Center, Johns Hopkins

University, and the Transportation Cooperative Research Program. Although the current training regime presents recommendations and current thinking about effective safety, security, and emergency preparedness strategies, it is strictly voluntary.

FTA is developing proposed Interim Provisions for safety certification and training pursuant to 49 U.S.C. 5329(c)(2). Soon, FTA will publish the proposed Interim Provisions in the **Federal Register** for public notice and comment and will provide the final Interim Provisions as quickly as possible thereafter. The specific goal of the Interim Provisions is to enhance the technical qualifications of Federal and State personnel, and their designated contractors responsible for public transportation safety oversight, as well as public transit agency personnel who are directly responsible for safety oversight in advance of a final rule for the Safety Certification Training Program. These Interim Provisions will remain in effect until FTA issues a final rule for the Safety Certification Training Program. Please direct your comments about the Interim Provisions to that docket, and any comments regarding the final Safety Certification Training Program to the docket for this ANPRM.

FTA intends for the Safety Certification Training Program to build upon the Interim Provisions. As a first-step toward a final regulation, FTA is organizing its training approach around a series of competencies and basic skills that Federal, State, and transit employees and contractors charged with overseeing transit safety need in order to perform their oversight duties. Developing the Safety Certification Training Program on a foundation that focuses on competencies and training outcomes, rather than static requirements, allows for greater flexibility and positions FTA to be more responsive when addressing emerging safety trends.

The competencies are based on SMS principles and the technical capabilities required for examining and overseeing implementation of safety program elements in the transit industry. The competencies and technical training are also designed to address gaps in safety oversight of public transportation systems identified in NTSB accident investigations, FTA's SSO audits and program, triennial reviews and annual reports submitted by SSO agencies, and NTD assessments and special studies. A list of proposed competency areas and accompanying learning objectives are in the docket for this ANPRM.

Applicability

As required by law, the Interim Provisions will apply to State employees, contractors who conduct oversight, and recipients of sections 5307 and 5311 funds for purposes of training transit agency personnel who are directly responsible for safety oversight. FTA intends for the requirements of the final Safety Certification Training Program to be more explicit than the Interim Provisions. For instance, under the proposed Interim Provisions, recipients will identify those personnel with direct safety oversight responsibilities, but the final rule for the Safety Certification Training Program may lead to regulations that identify specific positions that have direct responsibility for safety oversight. Thus, the individuals holding those positions may be covered by the final regulation.

Eligible Activities

Recipients of section 5307 or section 5311 funds may use up to 0.5 percent of apportioned formula funds to pay for up to 80 percent of the costs of an applicable transit agency employee's participation in the Safety Certification Training Program. 49 U.S.C. 5329(e)(6)(C)(iv).

The Training Certification Process

The safety oversight functions and responsibilities of each position will be different and will require discrete skill-sets. For instance, at the Federal level, FTA's oversight responsibilities include ensuring that SSOA personnel are properly trained and adequately resourced to perform their safety oversight responsibilities within their respective jurisdictions. At the State level, SSOA personnel are responsible for direct safety oversight of those rail transit systems under their jurisdiction. And, at the local level, public transportation agency personnel directly responsible for safety oversight have the responsibility for developing and implementing safety oversight within their respective agencies.

FTA seeks comment on the following questions:

48. What other safety-related competency areas or training outcomes should be identified?

49. Are all of the specific competencies already identified necessary?

50. Should personnel be required to obtain certification prior to starting a position, or should they be given a specific time frame to obtain safety certification after starting a position? What are the pros and cons of each option?

51. How often should personnel be required to receive refresher training?

52. Which transit agency positions are directly responsible for safety oversight of bus and/or rail? When answering this question, please refer to the table of competencies posted in the docket for this ANPRM.

53. Which transit agency operational positions are directly responsible for safety oversight? What are their job duties? What type of training do these employees currently receive?

54. Do members of transit agency board of director's or other equivalent entity currently receive any type of safety or risk management training? If so, what does the training cover?

55. How are personnel with transit safety oversight responsibility currently trained? How long does the training take? How is the effectiveness of the training evaluated? What type of training do oversight personnel need that is not already easily available within the transit industry?

VII. The National Transit Asset Management System

A. Overview and Considerations for Small Operators

The various elements of the National Transit Asset Management (TAM) System will apply very broadly to the many public transit agencies that receive funds from FTA. Most importantly, all recipients and subrecipients of FTA grants must develop a TAM Plan. 49 U.S.C. 5326(b)(2). Each recipient is further required to set SGR performance targets. 49 U.S.C. 5326(c)(2). Finally, recipients of the section 5307 or 5311 formula programs must also report asset condition data to the NTD. 49 U.S.C. 5335 and 5326(c)(3).

In FTA's Online Dialogue, conducted in early 2013, some commenters suggested that the best approach for implementing the requirement for a TAM Plan might be through a single statewide plan for subrecipients of certain statewide grants. While FTA recognizes the desire to minimize the administrative burden on small subrecipients, the statute requires that all FTA "recipients and subrecipients develop a transit asset management plan." Thus, while the statute specifically contemplates a single statewide safety plan for small operators, FTA interprets the language of the statute to specifically exclude a statewide TAM Plan.

Further, many commenters to the Online Dialogue suggested that small transit systems (and small rural transit systems in particular), should have

simpler and fewer requirements for smaller transit systems. FTA seeks to further develop these suggestions and seeks additional comments on how to be sensitive to the needs of small transit operators through this ANPRM. In particular, FTA notes that most small transit systems have already developed a detailed asset inventory for revenue vehicles in order to meet their NTD reporting requirements. This may allow FTA to set simpler TAM Plan requirements for small systems that would require assembling asset inventory information for assets other than revenue vehicles, and then also creating an investment prioritization.

The requirement that each recipient and subrecipient of FTA funds develop a TAM Plan represents a significant shift in the nature of FTA's financial assistance to the transit industry. All beneficiaries of FTA financial assistance will be required to take a strategic approach to thinking about the life-cycle needs of the assets underlying their service, and to deliberately consider how to strike an appropriate balance between the competing needs of operations, maintenance, reinvestment, and system expansion. Larger organizations will be required to systematically engage the differing perspectives of operations, safety, planning, engineering, budget, and information technology in order to include an organization-wide approach in the resulting plan. Smaller organizations may be permitted to take a simpler approach in developing an investment prioritization based on asset inventory information that is already largely on-hand.

Performance Targets

MAP-21 requires that all recipients set SGR performance targets, based on the definition of state of good repair established by FTA which must include objectives standards for measuring the condition of capital assets, including equipment, rolling stock, infrastructure and facilities. Subrecipients will not be required to set SGR performance targets directly; the recipient will set a performance target on their behalf. FTA intends to define state of good repair, and to set the SGR performance measure in a way that will allow for and provide a simple approach for small recipients and for grant recipients setting SGR targets on behalf of small subrecipients.

Transit Asset Management Plans

MAP-21 requires that all FTA recipients and subrecipients have a TAM Plan. The law specifies that plans, at a minimum, must have capital asset inventories and condition assessments

and investment prioritization. As noted above, FTA's recipients and subrecipients in our two primary formula programs, section 5307 and 5311, already maintain an asset inventory for revenue vehicles and report that information to the NTD. Expanding these inventories to include the one or two facilities for which small recipients and subrecipients have capital responsibility should not be particularly burdensome. Although FTA has not yet developed the specific requirements for the TAM Plan, FTA intends for the TAM Plan required of small operators to be relatively simple and based on the life-cycle of the revenue vehicles and facilities in the operator's asset inventory.

National Transit Database (NTD) Reporting

Currently NTD reporting requirements apply to section 5307 and section 5311. Recipients and beneficiaries²⁷ of the section 5307 program must report directly to the NTD. Recipients of section 5311 grants report directly to the NTD on behalf of their subrecipients. In all cases, recipients and subrecipients currently report a detailed asset inventory for revenue vehicles to the NTD. FTA will propose specific requirements for reporting an inventory of assets other than revenue vehicles to the NTD in a future notice in the **Federal Register**. The initial notice will likely only apply to reports from urbanized areas. A subsequent notice will likely cover additional reporting to the NTD Rural Module. Additionally, since revenue vehicles are the primary assets for small grant recipients in urbanized areas, the additional reporting burden on the basis of the one or two facilities for which the small recipient might have capital responsibility will be quite small. FTA will publish in the **Federal Register** a separate notice on this topic with more information and an opportunity to comment on the burden of these reporting requirements on small systems.

FTA recognizes that meeting the new requirements for transit asset management will not be easy and may require additional resources and expertise. In many cases funds from FTA's core formula grant programs may be used to cover costs related to implementing the TAM requirements. For example, expenses that may be eligible for FTA funding include the

software associated with an asset inventory system, tools for estimating capital investment needs over time, and for a decision support tools for investment prioritization. Similarly, costs related to assembling and maintaining an asset inventory and condition inspections are generally eligible preventive maintenance costs that can be funded by capital assistance. Finally, costs related to creating the TAM Plan itself are an eligible expense under the section 5307 program, the section 5311 program, and the section 5337 program. Recipients should consult with their FTA Regional Office with specific questions regarding grant eligibility.

FTA seeks comments on the following questions:

56. How should the requirements for the TAM Plan be tailored to different sized operators? Small operators will inherently have fewer assets and less-complex asset inventories, but what other steps can FTA take to minimize the burden on them?

57. How should FTA define *small operator* for purposes of the TAM Plan requirements? Please be as specific as possible. Should this definition use the same criteria for determining a small operator for purposes of a Transit Agency Safety Plan that is developed or certified by a State?

58. How should the requirements for a TAM Plan be handled for subrecipients of the section 5307 program—including both subrecipients of State Departments of Transportation (DOTs) and of individual large transit systems, for subrecipients of the section 5311 program, and for subrecipients of the Enhanced Mobility of Seniors and Individuals with Disabilities Program (section 5310)?

59. Should FTA require State DOT's and urbanized area designated recipients to maintain a list of certified subrecipients that have established? If so, how should this list of certified subrecipients be maintained and updated?

60. How should FTA apply the various TAM provisions to recipients of the section 5311 Tribal Transit Formula Program and Tribal Transit Discretionary Program?

61. How should the requirements for a TAM Plan apply to grant recipients who use an asset that is owned by a third party? Responses should consider that these assets may or may not have been purchased with Federal funds. Also, the grant recipient may indirectly contribute to the capital maintenance of the asset through a rental or lease payment, or in some cases the grant

²⁷ A beneficiary is a transit operator that benefits from a section 5307-funded project, but is not a direct recipient of the grant. For example, a rail system may benefit from a facility constructed using a section 5307 grant to a municipality.

recipient may not make a payment to the owner or operator of the asset.

62. Should FTA allow States to develop a Statewide TAM Plan?

B. Defining State of Good Repair

Under 49 U.S.C. 5326(b)(1), FTA is required to establish “a definition of the term *state of good repair* (SGR) that includes objective standards for measuring the condition of capital assets of recipients, including equipment, rolling stock, infrastructure, and facilities.” This definition will have a number of important consequences, including defining eligibility for projects under the State of Good Repair Grants Program (49 U.S.C. 5337(b)(2)) and defining what projects are excluded from eligibility under the Core Capacity Improvement Grants Program. 49 U.S.C. 5309(a)(2). This definition will also be used for grant applicants to the Pilot Program for Expedited Project Delivery to certify that their existing system “is in a state of good repair.” Section 20008(b) of MAP-21. Further, the National Public Transportation Safety Plan must include the definition of state of good repair. 49 U.S.C. 5329(b)(2)(B). As discussed in Section II, FTA envisions that the definition of state of good repair will play a role in a transit agency determining whether it needs to perform a safety risk assessment for those assets that fall below the SGR threshold.

Finally, the definition of state of good repair, which itself must include “objective standards for measuring the condition” of transit assets, will also form the basis for the SGR performance measures to be established by FTA. FTA grant recipients will set transit SGR performance targets, and report to FTA on their progress towards achieving that target. These targets will then be integrated into the Metropolitan and Statewide Planning Processes by Metropolitan Planning Organizations (MPOs) and State. See 49 U.S.C. 5326(c), 49 U.S.C. 5303 and 49 U.S.C. 5304. In particular, the SGR targets will be integrated into the performance-based planning processes and require consideration of transit SGR needs side-by-side with highway system goals in planning for the investment of Federal transportation funds.

In defining the term state of good repair, it is difficult to separate the definition from how it will ultimately be measured. For example, FTA used a definition of state of good repair in its 2010 Conditions and Performance

Report²⁸ using a numerical (1–5) condition rating scale and the Transit Economic Requirements Model (TERM).²⁹ In that report, an asset is considered to be in a state of good repair when the condition of that asset is estimated by the model to be above a condition rating value of 2.5, which is the mid-point of the marginal range on the rating scale. These ratings are primarily derived from measurements of asset age. The model consists of pre-defined “decay curve” relationships between asset age and asset condition for each of the several hundred defined asset classes. The model takes an asset inventory with asset ages as an input, and then provides estimated conditions for each of the assets as the output. Thus, the measurement of SGR in this case, being below a rating value of 2.5 on a 1–5 scale, is intrinsically tied to the age-based approach for defining state of good repair. FTA does not believe that this numerical measure satisfies the statutory requirement that the definition include “objective standards for measuring the condition of assets.”

Altogether, in many respects, the definition of state of good repair is the cornerstone on which all other aspects of the National TAM System will be built. This section describes four potential approaches that could be used to define and measure state of good repair, including objective standards for measuring the condition of assets. These approaches are, as follows:

- Asset age;
- Asset condition;
- Asset performance; or,
- A comprehensive (combined) approach.

None of these approaches represent a perfect means of defining and measuring state of good repair. In particular, these approaches all make various trade-offs between precision and reporting burden. In general, the simpler and less-burdensome the nature of the approach is, the less precise that approach will be for defining and measuring state of good repair. On the other hand, the more precise a particular approach is at defining and measuring state of good repair, then so is the overall burden and complexity of that approach.

²⁸ The 2010 Conditions and Performance Report to Congress is available at http://www.fta.dot.gov/documents/2010_CP_Report_FINAL.pdf.

²⁹ The TERM model consists of a database of transit assets and deterioration schedules that express asset conditions principally as a function of an asset's age. Vehicle condition is based on an estimate of vehicle maintenance history and major rehabilitation expenditures in addition to vehicle age; the conditions of wayside control systems and track are based on an estimate of use (revenue miles per mile of track) in addition to age.

The guidance provided by statute for selecting one of these approaches is relatively limited. The definition must “include objective standards for measuring the condition of capital assets;” and must at least be applicable to “equipment, rolling stock, infrastructure, and facilities.” The definition should also lend itself to an implementable performance measure for purposes of 49 U.S.C. 5326(c) and the performance-based planning process in 49 U.S.C. 5303 and 5304. FTA recognizes that multiple approaches are capable of satisfying these requirements, including the four approaches identified above.

In our online dialogue, several commenters suggested that the definition of state of good repair should be kept “simple and short” or “simple and high level.” While FTA appreciates the virtues of simplicity, FTA also notes that the statute does require the definition to include “objective standards for measuring the condition of capital assets.” Thus, the definition of state of good repair must be detailed enough to allow for the establishment of standards.

Another commenter proposed that, “if a vehicle can be operated safely, the state of good repair definition should not preclude that.” Although there often are safety implications if assets are not in a state of good repair, FTA does not intend to solely define state of good repair in terms of safety. Poor asset condition also has other important consequences beyond safety, such as reduced reliability, increased maintenance costs, diminished system performance, which delays transit riders from getting to their destinations, and decreased passenger comfort and aesthetics. FTA's goal in defining state of good repair is to draw attention to all of these negative impacts, as well as safety risks. When an asset is identified as not being in a state of good repair, this will trigger the need for a safety risk analysis in the Transit Agency Safety Plan, which may result in the implementation of appropriate controls.

FTA has developed a State of Good Repair White Paper³⁰ that provides greater detail on each of the proposed approaches to defining state of good repair which is included in the docket for this ANPRM. Commenters are strongly encouraged to review the White Paper alongside this ANPRM.

(1) Asset Age

This approach relies on the assumption that most assets provide reliable service for a predictable period

³⁰ Available at www.fta.dot.gov/sgr.

of time (adjusted by level of usage for some types of assets) after which they should be replaced. Although assets may continue to function safely and effectively at ages beyond this point, it is assumed that failure to replace assets at the end of this period of useful life leads to decreased performance, increased risk of in-service failure, and higher maintenance costs.

This approach establishes a *maximum useful life* for many assets, beyond which an asset is considered to be part of the state of good repair backlog. This is not to be confused with the *minimum useful life*, with which many FTA recipients may already be familiar and which represents the age before which an asset should not be replaced.

The primary benefits of this approach are its simplicity, consistency, and ease of implementation, while the primary drawbacks of this approach are its lack of precision in identifying the actual conditions of specific assets. For example, a well-maintained asset might be in suitable condition beyond its maximum useful life, whereas an asset with deferred maintenance might reach a deteriorated condition before reaching its maximum useful life. For a more detailed analysis of this approach please see the State of Good Repair *White Paper*.

(2) Asset Condition

This approach is based on periodic condition assessments of all assets using a set of standardized procedures and criteria. Assets with longer life expectations, such as buildings or tunnels, can be inspected less frequently than assets with shorter life expectancies, such as vehicles. Small or numerous assets (e.g. rail ties) may be sampled, as determined by standard procedures, with the average condition of the sample being applied to all assets in the category.

This approach would require FTA to develop significant guidance on how and when to assess the conditions of different classes of assets, including parameters for sampling, if necessary. The primary benefit of this approach is that it identifies the actual condition of each asset based upon its actual usage and maintenance history, while the primary draw-back is that it is significantly more labor-intensive for operators to complete and slightly less-consistent than the age-based approach. For a more detailed analysis of this approach please see the State of Good Repair *White Paper*.

(3) Asset Performance

This approach is based on a regular, comprehensive, assessment of a system's performance and relies upon the assumption that as assets age, they will become less durable and reliable, resulting in decreased operational performance. In many respects, the ability of an asset to safely and reliably perform its assigned function at a full-performance level is at the heart of state of good repair. This approach has not been tested in the United States but was the basis for public oversight of the public-private partnership that briefly ran the London Underground.

A performance-based approach would require far tighter integration of operations and capital maintenance than currently exists at most transit systems. It would also involve more FTA oversight of transit operational performance measures at a much-greater level of detail than currently occurs today. The primary benefit of this approach is that it is focused on the actual outcomes of being in a state of good repair, or not. The primary drawback of this approach is that it is relatively untested, and the requisite data infrastructure to support this approach may still need to be developed. For a more detailed analysis of this approach please see the State of Good Repair *White Paper*.

(4) Comprehensive Assessment of Assets

This approach combines the previous approaches to look at the age, condition, and performance of a system's assets, as well as to incorporate information on maintenance history for each asset. Condition ratings are calculated as a weighted combination of metrics for all the above considerations to produce a single rating for the asset. This approach would produce the most-comprehensive results, and would also involve FTA developing significant additional guidance in order to implement it.

The primary benefit of this approach is that it takes into consideration all the factors that contribute to state of good repair, whereas the primary draw-back of this approach is that it is clearly the most-complex and most-labor intensive approach for transit operators and FTA to implement. For a more detailed analysis of this approach please see the State of Good Repair *White Paper*.

FTA seeks public comment on the following questions:

63. What is the appropriate balance that FTA should strike in defining state of good repair between achieving precision in measuring state of good repair vs. minimizing the cost of measuring state of good repair?

64. What are the relative merits and drawbacks of each approach for defining state of good repair for FTA grant recipients and subrecipients of varying sizes, and/or with different modes? Should FTA consider implementing different approaches for different transit modes, or for grant recipients and subrecipients of different sizes? If so, what modal delineations or size distinctions should FTA adopt?

65. What are the relative merits and drawbacks of each approach for defining state of good repair for different classes of transit assets? Should FTA consider implementing different approaches for different asset classes? If so, what distinctions should FTA adopt between asset classes?

66. Should FTA implement different approaches for defining state of good repair based on a combination of the size of the recipient and the class of asset, particularly given the role of state of good repair in the SMS prescribed risk management process? If so, what delineations should FTA make?

67. What are the relative merits and drawbacks of each approach for purposes of implementing the required performance measures and performance targets?

68. If a condition-based approach (or the comprehensive approach) is adopted in whole, or in part, for certain asset classes or for certain recipients, what requirements and procedures should FTA establish for the requisite condition inspections?

69. If a performance-based approach (or the comprehensive approach) is adopted in whole, or in part, for certain asset classes or for certain recipients, what requirements and procedures should FTA adopt for collecting the necessary performance data to implement this approach?

70. How should the definition of state of good repair balance the benefits of improved safety, performance, comfort, and other factors?

71. If the comprehensive approach is selected for one or more classes of assets, how should FTA define the weights between various aspects of this approach?

72. To what extent should FTA include measures of the intensity of usage of an asset in its measure of state of good repair?

73. How do transit agencies currently evaluate the state of good repair of their systems? What criteria are used for this evaluation? What are the costs of the evaluation?

74. Are there any other approaches that FTA should consider?

C. Transit Asset Management Plans

(1) Plan Requirements

Under 49 U.S.C. 5326(b)(2) every recipient and subrecipient of FTA funds is required to develop a TAM Plan. The TAM Plan must include, at a minimum, capital asset inventories and condition assessments, decision support tools, and investment prioritization. These requirements apply to every recipient and subrecipient that either operates transit services or manages transit assets. Section 5326(a)(1) specifically states that this includes “equipment, rolling stock, infrastructure, and facilities for use in public transportation owned or leased by a recipient or subrecipient of Federal financial assistance under this chapter.”

The foundation of any effective TAM Plan is a good capital asset inventory. A transit agency must know what assets it has in order to plan how to manage those assets. Although FTA is preparing a separate **Federal Register** notice on collecting asset inventory information through the NTD, that is a separate subject from what should be included in the capital asset inventory of the TAM Plan. This is particularly true for larger transit systems and transit systems with rail modes, where the level of detail needed for a successful TAM Plan is likely to be more detailed than the data that will eventually be collected through the NTD.

Nevertheless, FTA recognizes that meeting the requirements for a TAM Plan may be challenging for many of our recipients. For example, out of 36 medium-sized rail and bus operators contacted by FTA for the *2010 National State of Good Repair Assessment*,³¹ FTA found that none of the sampled transit agencies possessed fully-developed capital asset planning inventories. Additionally, out of seven large rail systems contacted by FTA for the *2009 Rail Modernization Study Report to Congress*,³² only four had complete information on asset age or condition and remaining useful life; only two had replacement cost data for individual assets included in the inventory; and only one had comprehensive data on past asset rehabilitation activities.

FTA seeks public comment on the following questions:

75. Some current recipients or subrecipients may currently have Federally-funded assets with a Federal interest remaining in the asset, but these recipients may not be seeking FTA

funding in the future. Should these recipients be required to develop TAM Plans?

76. What other elements of a good TAM Plan should FTA consider as either requirements or as a suggested best-practice (e.g. a risk analysis, or a consideration of life-cycle costs)?

77. How should the requirements for a TAM Plan apply to transit systems that operate using a full-service contractor, where the contractor both provides the assets and operates the assets? What requirements for state of good repair and a TAM Plan should FTA require to be included in such full-service contracts, if any?

78. How should the TAM Plan apply to assets that are owned and operated by an entity other than the recipient, but upon which the recipient's operations relies?

79. How should the requirements for a TAM Plan apply to grant recipients who purchase an asset with Federal funds, and then lease that asset to a third party who operates the asset? Should the requirement for a TAM Plan apply to the party that is leasing the asset? Or should the requirement for a TAM Plan only apply to the grant recipient that is the lessor of the asset?

80. What level of detail should be required for the capital asset inventory in a TAM Plan? What type of categorization of assets should be required? Please be as specific as possible as to what requirements FTA should propose to ensure that capital asset inventories included in the TAM Plan support an effective transit asset management process.

81. What parameters should be required for the condition assessments included in the TAM Plan? Should these parameters be based on FTA's definition of state of good repair and the SGR performance measure?

82. Should FTA construct one or more TAM Plan templates for recipients to use? If so, should these templates be based upon asset type, recipient size, and/or some other factor? Should FTA develop professional certification or training courses related to TAM Plan development?

(2) Investment Prioritization

As noted above, each TAM Plan must include investment prioritization. 49 U.S.C. 5326(a)(2)(A). All projects identified in the TAM Plan should reflect priorities for funding from all available sources, including FTA program funds, State and local funds, and funds transferred from the Federal Highway Administration. Specifically, the new section 5337 State of Good Repair Formula Program requires that

all projects funded through this program must be identified in the TAM Plan.

Investment prioritization and project identification in the TAM Plans will connect funding decisions to projects that address SGR needs. In this fiscally-constrained environment, it is unlikely that sufficient increases in new funding from all sources will materialize to directly address all transit SGR needs. Investment prioritization in the TAM Plan will be the manifestation of each organization's strategic process to balance the competing needs for operations, maintenance, reinvestment, and system expansion in a resource-constrained environment, all while addressing or controlling safety hazards.

In FTA's Online Dialogue, a recurrent theme from commenters was the difficulty of balancing these competing needs. FTA recognizes that there are no easy answers to this dilemma. Thus, it is critical that the investment prioritization be done strategically, with an organization-wide approach, informed by up-to-date and reliable data. As such, investment prioritization must guide the setting of the SGR performance targets and safety performance targets for the organization.

These SGR priorities must “be coordinated to the maximum extent practicable” with the transit state of good repair performance targets being set by the States and Metropolitan Planning Organizations. 49 U.S.C. 5303(h)(2)(B)(i)(II). Identification of SGR projects in the investment prioritization of the TAM Plan is the first step towards including these projects in the transportation improvement program (TIP) and the statewide transportation improvement program (STIP). By extension, inclusion in the TIP and the STIP is essential for meeting the goals of the National TAM System to leverage both new and existing sources of funding towards reducing the SGR backlog throughout the industry.

FTA seeks public comment on the following questions:

83. How specific should the investment prioritization section be in the TAM Plan? Should it include specific projects, or just groups of assets to be addressed? How should this requirement align with the requirement that all projects funded by the SGR Formula Program (section 5337) be identified in the TAM Plan?

84. What time period should the investment prioritization in the TAM Plan cover?

85. What processes or procedures should FTA recommend or require for balancing competing priorities for operations, maintenance, and expansion projects with rehabilitation and

³¹ Available at [http://www.fta.dot.gov/documents/National_SGR_Study_072010\(2\).pdf](http://www.fta.dot.gov/documents/National_SGR_Study_072010(2).pdf).

³² Available at http://www.fta.dot.gov/documents/Rail_Mod_Final_Report_4-27-09.pdf.

replacement projects in development of TAM Plans? How should these trade-offs be reflected in final, certified TAM Plans?

86. What processes or procedures should FTA recommend or require to ensure that the investment prioritization reflects an organization-wide perspective towards establishing priorities?

87. What processes or procedures should FTA recommend or require to ensure that the investment prioritization identified in the TAM Plan match the actual investment decisions that are made?

88. At what level of detail should transit system safety be linked to or included as part of a transit system's TAM Plan? In particular, what procedures or requirements should FTA establish for incorporating safety into the asset inventory, condition assessment, and/or investment prioritization components of a TAM Plan?

89. Do transit agencies currently use any type of risk-based process to make investment decisions? If so, please describe that process.

90. How might a risk-based process change going forward to systematically ensure that each agency's greatest safety vulnerabilities are addressed first?

D. Performance Measures

Under 49 U.S.C. 5326(c)(1), FTA is required to establish SGR performance measures, based on the definition of state of good repair. Three months after a final rule is issued to establish SGR performance measures each FTA grant recipient is required to establish annual SGR performance targets in relation to those measures. Further, each year, FTA grant recipients are required to report to FTA on progress towards meeting those SGR targets, and to report the targets established for the subsequent fiscal year. Please note that only recipients, not subrecipients, will be required to set SGR performance targets. FTA also intends to select SGR performance measures that will minimize the administrative burden on small grant recipients.

The SGR performance measures are an essential component of the National TAM System. Each FTA grant recipient will be accountable for setting annual SGR performance targets relative to the measures. There are neither rewards for meeting a performance target, nor consequences for missing a performance target. Nevertheless, the process of setting targets and measuring progress is not just a paper exercise, but reflects the increased expectations by everyone involved with the transit system,

including the riding public, for bringing system assets into a state of good repair.

As a practical matter, several strong candidates for a SGR performance measures make reference to the SGR backlog for an individual transit system, particularly if the age-based, condition-based, or comprehensive approaches are used. The SGR backlog is a measurement of the total size or amount of assets owned or leased by a transit system that are not in a state of good repair. Under these approaches, FTA envisions adopting performance measures that provide a direct measure of each transit agency's SGR backlog. This sort of direct performance measure, based on the size of the SGR backlog, will allow individual transit systems to either show periodic progress towards achieving a state of good repair or to identify the resource investment necessary over a period of time for achieving a state of good repair. An SGR performance measure based on the SGR backlog would also be consistent with FTA's goal of working with the transit industry towards reducing the National SGR backlog, which FTA currently estimates to exceed \$78 billion, and which continues to grow. Alternatively, under the performance-based approach to defining state of good repair, FTA envisions adopting performance measures that provide an indirect measure of each transit agency's SGR backlog. These indirect measures could include in-service vehicle failures, maintenance break-downs, and track slow-zones.

The process of setting SGR performance targets will require each recipient to think quantitatively about the size of its own SGR backlog problem, and to analyze what resources it can leverage to address their SGR needs. The setting of SGR performance targets will also be an entirely local decision. Although FTA will strongly encourage recipients, States, and MPO's to set meaningful SGR targets, based on a creative and strategic leveraging of all available financial resources, FTA will not have a role in setting or approving SGR performance targets.

(1) Defining Performance Measures

FTA believes that the SGR performance measures should be transparent, readily understandable by the public, and sustainable over the long-term as possible. As such, FTA envisions that the SGR performance measures will be quantitative, and that the measures will not be constructed in reference to an arbitrary baseline. Rather, the measures will identify a quantitative value, and each transit agencies' SGR targets will represent

goals for that measurement after a specific time period. For example:

- The estimated replacement value of all assets in the SGR backlog for the transit system, e.g. the value of all assets in our SGR backlog will be less than \$100 million by the end of 2015.
- The percent of total assets, weighted by replacement value, in the SGR backlog for the transit system, e.g. fewer than 15% of our assets, weighted by replacement value, will be in our SGR backlog by the end of 2015.
- The average condition of all assets, weighted by replacement value, for the transit system as a whole, e.g. the average condition of all of our assets, weighted by replacement value, will be at least 3.14 (on a scale of 1 to 5, with 1 being poor and 5 being excellent) by the end of 2015.

FTA seeks comment on the following questions:

91. What are some other possible SGR performances measures that would have significant practical utility? Please be as specific as possible, using the format for the examples, above.

92. Should FTA consider a purely performance-based approach, i.e. rather than establishing direct SGR measures, instead establishing indirect SGR measures of in-service failures, maintenance break-downs, and track slow zones?

93. Should FTA propose different measures for smaller agencies? How should FTA develop different measures for different sized entities?

(2) Performance Targets

Pursuant to 49 U.S.C. 5326(c)(2), FTA grant recipients will be required to establish SGR performance targets in relation to the SGR performance measures within three months after FTA establishes the performance measures. Additionally, recipients of FTA funding will be required to submit an annual report describing the progress of the recipient toward meeting the recipient's SGR performance targets for the subsequent year. FTA seeks comment on how the SGR performance targets for each recipient should be reported to FTA, and how progress should be reported annually to FTA. FTA is considering requiring the SGR targets for each SGR performance measure be reported to the NTD since most FTA recipients already file an annual report to the NTD. These SGR targets could alternatively be reported to FTA through the Transit Electronic Awards Management (TEAM) System, although these SGR targets would need to be filed on a system-wide basis, and not on a grant-by-grant basis. It is also possible that stand-alone performance reports to

meet the statutory requirements could be considered, if that approach is determined to be less burdensome.

FTA seeks comments and suggestions on the following questions:

94. Should FTA collect the SGR performance targets through its National Transit Database? Or should SGR targets be collected through some other system?

95. Should SGR targets be set on a system-wide basis? Or should SGR targets be set on a per-mode basis, per asset class, or both? Or on some other basis?

96. Should the SGR performance measures and performance results be based on data reported through the NTD? Should the SGR performance measures and performance results be based on data reported separately?

97. What should be the time horizon for the SGR performance targets? Although the SGR targets must be set annually, as required by law, should separate short-range (one year) and long-range (greater than one year) targets be established?

98. How should the SGR performance measures and performance results be connected to the requirement for applicants to the Pilot Program for Expedited Project Delivery? Section 20008(b) of MAP-21. How should applicants certify to FTA that their existing transit system "is in a state of good repair" in order to be eligible for the Pilot Program?

E. Technical Assistance and Tools

As noted above, many of the TAM requirements outlined in MAP-21 apply to all FTA recipients who operate transit services. Because these are new requirements and affect a variety of transit providers, FTA is dedicated to providing guidance to recipients to assist in complying with these requirements. MAP-21 requires FTA to provide technical assistance on these provisions as well as develop an analytical process or decision support tool for estimating capital investment needs of transit systems over time and assisting with asset investment prioritization by transit systems. 49 U.S.C. 5326(b)(4).

Currently, there are a number of *documents and resources*³³ that have been developed that may assist recipients in meeting the requirements of the National TAM System. These include:

- Asset Management Methodology/ Condition Assessment Methodology Research, FTA-2011-002-TRI

- Asset Management Guide: Focusing on the Management of our Transit Investment
- TCRP Report 157: State of Good Repair: Prioritizing the Rehabilitation and Replacement of Existing Capital Assets and Evaluation the Implications for Transit
- TCRP Synthesis 92: Transit Asset Condition Reporting

FTA has also already developed its *TERM-Lite*³⁴ model as a possible tool for individual transit systems to estimate their own capital investment needs. There may be a need for other decision support tools to be developed to support TAM efforts. For example, there may be a need for a tool to help estimate the risks of reduced safety, increased maintenance costs, less reliability, and decreased performance that may result from deferring investments on particular assets.

FTA seeks comments and suggestions on the following questions:

99. What specific tools and resources should FTA develop to ease the implementation of these requirements? Please be specific as to what tools or resources would be most useful to you and your transit system, such as guidebooks, classroom training, webinars or online training, peer-to-peer exchanges, etc.

100. A number of private companies offer software tools for compiling and maintaining an asset inventory. Are there gaps in what is currently offered for these purposes that FTA should consider filling?

101. A number of private companies already offer software tools to assist transit systems with taking an organizational approach to investment prioritization. Are there specific gaps in what is currently available for these purposes that FTA should consider filling?

102. FTA has currently developed *TERM-Lite* to assist transit systems with estimating capital investment needs over time. Are there additional tools that FTA should develop to assist transit systems with estimating capital investment needs?

103. Are the various guidebooks and reports listed above useful to your transit system in preparing to conduct transit asset management planning? Are there other guidebooks or reports that FTA should develop to support planning for transit asset management?

104. Are there any other support tools or resources not mentioned here that would be helpful for recipients to have access to?

105. What decision support tools for investment prioritization and/or analytic processes for capital investment needs estimation does your transit agency already use?

106. What research should FTA be conducting or sponsoring to support improved TAM analysis?

VIII. Certification of Transit Agency Safety Plans and Transit Asset Management Plans

Both the Transit Agency Safety Plan and the TAM Plan have a self-certification requirement. See 49 U.S.C. 5329(d)(1) and 49 U.S.C. 5326(a)(2)(B). These certifications will serve two fundamental purposes. First, certification provides assurance to FTA that recipients have conscientiously sought to meet the requirements for the Transit Agency Safety Plan and the TAM Plan established by FTA, and that the resulting plans are supporting the goals for safety and transit asset management, respectively. Second, a recipient that engages in a rigorous review of their Transit Agency Safety Plan and TAM Plan before certifying it to FTA will have confidence that their plans meet the standards established by FTA.

FTA recognizes that applicants to FTA's grant programs are currently required to certify and assure compliance with many other FTA program elements. Although MAP-21 does not establish the process for how FTA will oversee certification of Transit Agency Safety Plans and TAM Plans, FTA will strongly consider using the existing certification process with oversight through the Triennial and State Management Reviews. However, FTA is also considering developing a new program for review of Transit Agency Safety Plans and TAM Plan certifications. Despite the method of oversight, recipients must ensure that FTA has access to each of these plans upon request and should be able to confirm that the certification requirements have been met.

FTA seeks public comment on the following questions:

107. Should certification be done through the annual Certification and Assurance process and a requirement to receive a grant? How should subrecipients certify? Is there another process to consider?

108. Should FTA establish a self-assessment or other set of procedures for recipients to follow before certifying their Transit Agency Safety Plan and TAM Plan?

109. After recipients have certified they have plans that comply with FTA requirements, should FTA review the

³³ All of these reports and decision support tools can be found on FTA's Web site at <http://www.fta.dot.gov/sgs>.

³⁴ *TERM-Lite* can be accessed at <http://www.fta.dot.gov/term-lite>.

plans prior to grant approval, as part of the Triennial/State Management Review, or at some other time?

110. FTA is considering reviewing certification of Transit Agency Safety Plans and TAM Plans on the basis of a weighted random sample of recipients as an alternative to reviewing all plans. Would this be a suitable alternative to reviewing all certifications?

111. What requirements and procedures should FTA establish for States and urbanized area designated recipients to review the TAM Plans of their subrecipients before certification?

112. What requirements and procedures should FTA establish for States that develop and certify Transit Agency Safety Plans for rural providers and small urban providers?

113. How frequently should TAM Plans be updated? How frequently should FTA review a recipient's updated TAM Plan? How should the certification be updated when the TAM Plan is updated?

114. For all grant recipients, should FTA require the certification of the TAM Plan to be signed by the Chief Executive Officer of transit operations, and/or the Chief Executive Officer of the legal entity receiving grants from FTA?

115. For grant recipients with a board of directors, should FTA require the TAM Plan be approved by the Board before certification?

IX. Coordination of Targets and Plans With Metropolitan, Statewide and Non-Metropolitan Planning

The Metropolitan Transportation Planning requirements at 49 U.S.C. 5303 and the Statewide and Nonmetropolitan Planning requirements at 49 U.S.C. 5304, oblige Metropolitan Planning Organizations (MPOs) and States, respectively, to coordinate their performance targets, to the maximum extent practicable, with performance targets set by FTA recipients for safety and state of good repair, and to integrate these targets into the planning process. See 49 U.S.C. 5326 and 49 U.S.C. 5329(d)(1)(E). At the MPO and State level, funding allocation for surface transportation investments must weigh the needs for transit safety and SGR side-by-side with the highway performance objectives and targets, as well as with goals for the expansion of the existing transit network. FTA plans to issue a joint NPRM with the Federal Highway Administration on this new performance management framework.

As a reminder of Federal planning requirements, MPOs are established in urbanized areas of 50,000 or more population, and must prepare a long range plan of at least 20 years in

duration (updated every 4–5 years). 49 U.S.C. 5303(i)(2)(A)(ii). This plan is financially constrained to revenue sources that are “reasonably expected to be made available” over that period. 49 U.S.C. 5303(i)(2)(E)(i)(II). Any projects anticipated to receive federal funds or that are subject to federal actions must be included in the long range plan. In addition, the MPOs are required to develop a metropolitan “transportation improvement program,” (TIP) which includes projects consistent with the long range plan that are expected to be implemented in the first four years of the plan. 49 U.S.C. 5303(j). The TIP, too, is financially constrained, in that any project included in it must demonstrate that it is fully funded.

As a result of MAP–21, MPOs and States are now required to establish performance targets that address forthcoming U.S. Department of Transportation-issued national performance measures that are based on the goals outlined in the legislation: safety, infrastructure condition, congestion reduction, system reliability, freight movement and economic vitality, environmental sustainability, reduced project delivery delays, transit safety, and transit state of good repair. MPOs also must coordinate their performance targets, to the maximum extent practicable, with performance targets set by FTA recipients under the new performance measure requirements for safety and state of good repair. TIPs must include a description of the anticipated progress toward achieving the performance targets resulting from implementation of the TIP. The investment prioritization developed for the TAM Plan at the individual system level must also be coordinated with development of the long-range transportation plan and the TIP.

Additionally, States are required by 49 U.S.C. 5304(h)(2)(C) to integrate transit safety and transit state of good repair performance targets into the planning process, and are required by section 5304(d)(2)(B)(ii), for areas not represented by a MPO, to select performance targets that are “coordinated, to the maximum extent practicable, with providers of public transportation” to ensure consistency with the state of good repair elements of section 5326(c) and the safety program found in sections 5329(b)(2) and 5329(d)(1)(E). Likewise, the investment prioritization developed for the TAM Plan at the individual system level must also be coordinated with development of the statewide transportation plan and the statewide transportation improvement program (STIP).

In FTA's TAM Online Dialogue, one commenter noted that areas with multiple transit systems under the same MPO face particular challenges in coordinating efforts in the planning process. This commenter suggested that it is important that “coordination to the maximum extent practicable” should also extend in both directions, with individual transit systems coordinating their own and SGR performance targets with the regional and SGR performance targets being established by the MPO. FTA raises this comment in order to get additional comments on the merits of this suggestion, and how such a requirement might be implemented.

FTA seeks comment on the following questions:

116. What procedures or requirements should FTA establish to ensure that Transit Agency Safety Plan and TAM Plan goals, measures, and targets from individual transit systems are integrated into the metropolitan transportation planning process?

117. Should MPO's be required to set a region-wide target for transit state of good repair, or should MPO's be required to incorporate the both safety and transit state of good repair targets from each transit system within their jurisdiction into the performance-based planning process, or should have MPO's have discretion to choose between these two approaches?

118. What procedures or requirements should FTA establish to ensure that Transit Agency Safety Plan and TAM Plan goals, measures, and targets from individual transit systems are integrated into the statewide and nonmetropolitan transportation planning process? Since States are already setting the transit SGR performance targets for rural area grants received by the State, are any additional steps needed for integration into the planning process?

119. Should FTA establish procedures or requirements to ensure that Transit Agency Safety Plan and TAM Plan goals, measures, and targets from individual transit systems are integrated into other metropolitan planning products, such as the Unified Planning Work Program (“UPWP”) and Congestion Management Process (“CMP”)?

120. FTA is interested in hearing recipient and stakeholder perspectives on how the investment priorities set forth in can be most-effectively reflected in the prioritization of projects, strategies, and resources—including Federal, state, and local funds—in MPO Plans and Transportation Improvement Programs, as well as the Long-Range Transportation Plans of States and Statewide Transportation Improvement

Programs. Specifically, how should transit state of good repair needs identified in be addressed alongside other investment goals in these financially-constrained plans?

121. How should safety targets be considered in the planning process by State's and MPOs? Should MPO's be required to set a region-wide safety target? Or, should MPO's be required to incorporate each of the safety targets from each transit system within their jurisdiction into the performance-based planning process? Or, should MPO's have discretion to choose between these two approaches? How would each approach make the planning process easier or more difficult for transit agencies?

X. Estimating the Benefits and Costs of Requirements

Executive Orders 12866 and 13563 direct agencies to propose or adopt a regulation only upon a reasoned determination that its benefits justify its costs, tailor a regulation to impose the least burden on society consistent with obtaining the regulatory objectives, and in choosing among alternative regulatory approaches, select those approaches that maximize net benefits.

Consistent with the requirements in these executive orders, FTA seeks comment on the following questions:

122. FTA seeks information from the public in order to assist it in assessing the cost of alternative regulatory approaches for implementing the National Safety Program and the National TAM System. For example, for commenters who suggest that FTA consider adopting certain safety performance criteria, minimum safety standards for vehicles, or objective standards for measuring the condition of capital assets, or training standards, what information do you have to assist FTA in assessing the incremental cost of adopting your suggestion? FTA is interested in information to assist it in assessing the full cost of the suggestion, such as the cost for transit agencies to collect and assess information and the cost to take action based on the information.

123. Likewise, FTA seeks information from the public to assist FTA in assessing the potential benefits of alternative regulatory approaches for implementing the National Safety Program and the National TAM System. For example, for commenters who suggest that FTA consider adopting certain safety performance criteria, minimum safety standards for vehicles, objective standards for measuring the condition of capital assets, or training standards, what information do you

have to assist FTA in assessing the incremental benefit from adopting your suggestion?

XI. Next Steps and Public Participation

This ANPRM seeks input from the public on these topics to ensure that the final rules are clear and effective. It is important that transit agencies, State agencies, SSO agencies, MPOs, other organizations, as well as interested members of the public that could potentially be affected by rules issued after this ANPRM, take this opportunity to share thoughts, concerns, ideas, and general comments on the topics presented herein.

After FTA reviews the comments collected through this ANPRM, FTA will draft several Notices of Proposed Rulemakings (NPRM) for the National Safety Program and the TAM Program. These NPRMs will set forth proposed regulations based on FTA's analysis of the statutory requirements and relevant issues, as well as comments received from the public. Once FTA publishes the proposed rules, stakeholders and the public will have another opportunity to provide comments that FTA will take into consideration prior to issuing final rules.

Peter Rogoff,
Administrator.

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DEPARTMENT OF THE INTERIOR

Fish and Wildlife Service

50 CFR Part 17

[Docket No. FWS-R4-ES-2013-0033;
4500030113]

RIN 1018-AZ15

Endangered and Threatened Wildlife and Plants; Proposed Endangered Status for *Brickellia mosieri* (Florida Brickell-bush) and *Linum carteri* var. *carteri* (Carter's Small-flowered Flax)

AGENCY: Fish and Wildlife Service, Interior.

ACTION: Proposed rule.

SUMMARY: We, the U.S. Fish and Wildlife Service (Service), propose to list *Brickellia mosieri* (Florida brickell-bush) and *Linum carteri* var. *carteri* (Carter's small-flowered flax), as endangered species under the Endangered Species Act. If we finalize this rule as proposed, it would extend the Act's protections to these plants.

DATES: We will accept comments received or postmarked on or before

December 2, 2013. Comments submitted electronically using the Federal eRulemaking Portal (see **ADDRESSES** section, below) must be received by 11:59 p.m. Eastern Time on the closing date. We must receive requests for public hearings, in writing, at the address shown in **FOR FURTHER INFORMATION CONTACT** by November 18, 2013.

ADDRESSES: You may submit comments by one of the following methods:

(1) *Electronically:* Go to the Federal eRulemaking Portal: <http://www.regulations.gov>. In the search box, enter FWS-R4-ES-2013-0033, which is the docket number for this rulemaking. You may submit a comment by clicking on "Comment Now!" If your comments will fit in the comment box provided, please use this feature of <http://www.regulations.gov>, as it is most compatible with our comment review procedures. If you attach your comments as a separate document, our preferred file format is Microsoft Word. If you attach multiple comments (such as form letters), our preferred format is a spreadsheet in Microsoft Excel.

(2) *By hard copy:* Submit by U.S. mail or hand-delivery to: Public Comments Processing, Attn: FWS-R4-ES-2013-0033; Division of Policy and Directives Management; U.S. Fish and Wildlife Service; 4401 N. Fairfax Drive, MS 2042-PDM; Arlington, VA 22203.

We request that you send comments only by the methods described above. We will post all information received on <http://www.regulations.gov>. This generally means that we will post any personal information you provide us (see the Information Requested section below for more information).

FOR FURTHER INFORMATION CONTACT:

Larry Williams, Field Supervisor, U.S. Fish and Wildlife Service, South Florida Ecological Services Office, 1339 20th Street, Vero Beach, FL 32960, by telephone 772-562-3909, or by facsimile 772-562-4288. Persons who use a telecommunications device for the deaf (TDD) may call the Federal Information Relay Service (FIRS) at 800-877-8339.

SUPPLEMENTARY INFORMATION:

Executive Summary

Why we need to publish a rule. Under the Act, if we intend to list a species as endangered or threatened throughout all or a significant portion of its range, we are required to promptly publish a proposal in the **Federal Register** and make a final determination on our proposal within one year. Listing a species as an endangered or threatened

species can only be completed by issuing a rule.

This document consists of a proposed rule to list *Brickellia mosieri* and *Linum carteri* var. *carteri* as endangered species. Elsewhere in today's **Federal Register**, we propose to designate critical habitat for *Brickellia mosieri* and *Linum carteri* var. *carteri* under the Act. Both plants are candidate taxa (i.e., species or varieties) for which we have on file sufficient information on biological vulnerability and threats to support preparation of a listing proposal, but for which development of a listing regulation has been precluded by other higher priority listing activities. This rule reassesses all available information regarding status of and threats to both plants.

The basis for our action. Under the Act, we may determine that a species is an endangered or threatened species based on any of five factors: (A) The present or threatened destruction, modification, or curtailment of its habitat or range; (B) overutilization for commercial, recreational, scientific, or educational purposes; (C) disease or predation; (D) the inadequacy of existing regulatory mechanisms; or (E) other natural or manmade factors affecting its continued existence. We have determined that the threats to both *Brickellia mosieri* and *Linum carteri* var. *carteri* consist primarily of habitat loss and modification through urban and agricultural development, and lack of adequate fire management (Factor A); proliferation of nonnative invasive plants, and sea level rise (Factor E); and these threats are not reduced by existing regulatory mechanisms (Factor D).

We will seek peer review. We are seeking comments from knowledgeable individuals with scientific expertise to review our analysis of the best available science and application of that science and to provide any additional scientific information to improve this proposed rule. Because we will consider all comments and information received during the comment period, our final determinations may differ from this proposal.

Information Requested

We intend that any final action resulting from this proposed rule will be based on the best scientific and commercial data available and be as accurate and as effective as possible. Therefore, we request comments or information from the public, other concerned governmental agencies, Native American tribes, the scientific community, industry, or any other interested parties concerning this

proposed rule. We particularly seek comments concerning:

- (1) Both plants' biology, range, and population trends, including:
 - (a) Habitat requirements for feeding, breeding, and sheltering;
 - (b) Genetics and taxonomy;
 - (c) Historical and current range including distribution patterns;
 - (d) Historical and current population levels, and current and projected trends; and
 - (e) Past and ongoing conservation measures for the plants, their habitat, or both.
- (2) The factors that are the basis for making a listing determination for a species under section 4(a) of the Act (16 U.S.C. 1531 *et seq.*), which are:
 - (a) The present or threatened destruction, modification, or curtailment of their habitat or range;
 - (b) Overutilization for commercial, recreational, scientific, or educational purposes;
 - (c) Disease or predation;
 - (d) The inadequacy of existing regulatory mechanisms; or
 - (e) Other natural or manmade factors affecting their continued existence.
- (3) Biological, commercial trade, or other relevant data concerning any threats (or lack thereof) to these plants and regulations that may be addressing those threats.
- (4) Additional information concerning the historical and current status, range, distribution, and population size of these plants, including the locations of any additional populations of these plants.
- (5) Current or planned activities in the areas occupied by these plants and possible impacts of these activities on these plants.
- (6) Additional information concerning the biological or ecological requirements of these plants, including pollination and pollinators.

Please note that submissions merely stating support for or opposition to the action under consideration without providing supporting information, although noted, will not be considered in making a determination, as section 4(b)(1)(A) of the Act directs that determinations as to whether any species is an endangered or threatened species must be made "solely on the basis of the best scientific and commercial data available."

You may submit your comments and materials concerning this proposed rule by one of the methods listed in **ADDRESSES**. We request that you send comments only by the methods described in **ADDRESSES**.

If you submit information via <http://www.regulations.gov>, your entire

submission—including any personal identifying information—will be posted on the Web site. If your submission is made via a hardcopy that includes personal identifying information, you may request at the top of your document that we withhold this information from public review. However, we cannot guarantee that we will be able to do so. We will post all hardcopy submissions on <http://www.regulations.gov>. Please include sufficient information with your comments to allow us to verify any scientific or commercial information you include.

Comments and materials we receive, as well as supporting documentation we used in preparing this proposed rule, will be available for public inspection on <http://www.regulations.gov>, or by appointment, during normal business hours, at the U.S. Fish and Wildlife Service, South Florida Ecological Services Office (see **FOR FURTHER INFORMATION CONTACT**).

Previous Federal Actions

Brickellia mosieri was first recognized as a candidate for possible future listing on September 27, 1985 (50 FR 39526), and we assigned the species a listing priority number (LPN) of 2. Candidate species are assigned LPNs based on immediacy and magnitude of threats, as well as taxonomic status. The lower the LPN, the higher priority that species is for us to determine appropriate action using our available resources (September 21, 1983; 48 FR 43100). Category 2 candidates were those taxa for which information contained in our files indicated that listing may be appropriate, but for which additional data were needed to support a listing proposal.

Linum carteri var. *carteri* was also first recognized as a candidate for possible future listing on September 27, 1985 (50 FR 39526), and assigned an LPN of 1. Category 1 candidates were those taxa for which the Service had substantial information on biological vulnerability and threats to support the appropriateness of proposing to list them as endangered or threatened species. On February 21, 1990, we downgraded this variety to a category 2 candidate (55 FR 6184).

Both *Brickellia mosieri* and *Linum carteri* var. *carteri* remained on the candidate list as published in what is now known as the Candidate Notice of Review (CNOR) until 1993 (55 FR 6184, February 21, 1990; 58 FR 51144, September 30, 1993). Both plants were removed from the candidate list from 1996 to 1998 because there was not sufficient information on their biological vulnerability and threats to

support issuance of a proposed rule. Both plants were again placed on the candidate list in the 1999 CNOR (October 25, 1999, 64 FR 57534), in which we determined that listing was warranted, but was precluded due to workloads and priorities. *B. mosieri* was assigned an LPN of 5, meaning that the magnitude of threats for the species remained high but were not imminent. *L. c. var. carteri* was assigned an LPN of 3, meaning that the magnitude of threats remained both high and immediate and reflected its taxonomic status at the varietal level.

Both plants remained on the candidate list as published in the CNORs from 2001 to 2004 (66 FR 54808, October 30, 2001; 67 FR 40657, June 13, 2002; 69 FR 24876, May 4, 2004). On May 11, 2005, we published findings for both plants in the 2005 CNOR (70 FR 24869) in response to a petition received on May 11, 2004. *Brickellia mosieri* remained on the candidate list, but we changed the LPN from a 5 to an 8, meaning that the magnitude of threats to the species were moderate, but immediate (70 FR 24869). A primary factor noted in this downgrading was the occurrence of 13 of the 17 known populations on conservation lands, which were being managed appropriately with prescribed fire and control of invasive nonnative species. *Linum carteri* var. *carteri* also remained on the candidate list, with an unchanged LPN of 3 (70 FR 24869). *B. mosieri* and *L. c. var. carteri* remained on the candidate list as published in the CNORs from 2006 to 2012, with LPNs of 8 and 3, respectively (71 FR 53756, September 12, 2006; 72 FR 69034, December 6, 2007; 73 FR 75176, December 10, 2008; 74 FR 57804, November 9, 2009; 75 FR 69222, November 10, 2010; 76 FR 66370, October 26, 2011; and 77 FR 69994, November 21, 2012).

On May 10, 2011, as part of an agreement with one of the agency's most frequent plaintiffs, the Service filed a workplan with the U.S. District Court for the District of Columbia. The workplan will enable the agency to, over a period of 6 years, systematically review and address the needs of more than 250 species listed within the 2010 CNOR, including *Brickellia mosieri* and *Linum carteri* var. *carteri*, to determine if these plants should be added to the Federal Lists of Endangered and Threatened Wildlife and Plants. This workplan will enable the Service to again prioritize its workload based on the needs of candidate species, while also providing state wildlife agencies, stakeholders, and other partners clarity and certainty about when listing

determinations will be made. On July 12, 2011, the Service reached an agreement with another frequent plaintiff group and further strengthened the workplan, which will allow the agency to focus its resources on the species most in need of protection under the Act. These agreements were approved by the court on September 9, 2011.

Status Assessment for *Brickellia mosieri* and *Linum carteri* var. *carteri*

Background

It is our intent to discuss below only those topics directly relevant to the listing of *Brickellia mosieri* and *Linum carteri* var. *carteri* as endangered in this proposed rule.

Brickellia mosieri

Description

Brickellia mosieri (Family: Asteraceae) is a perennial herb. Mature plants are 0.3–1.1 meters (m) (1.0–3.5 feet (ft)) tall, slender, erect, and branching (Chafin 2000, page numbers not applicable). Leaves are 1–3 centimeters (cm) (0.4–1.2 inches (in)) long, alternate, narrow, linear, thick, usually spreading or curved downward, entire or slightly toothed, and resin-dotted (Chafin 2000, page numbers not applicable). The flower heads are in loose, open clusters at the ends of branches (Chafin 2000, page numbers not applicable). Disk flowers are white in small, dense heads surrounded by hairy, slightly ribbed bracts; there are no ray flowers, although long-style branches (white, sometimes brown) may appear to be rays (Chafin 2000, page numbers not applicable).

Taxonomy

Brickellia mosieri was first described by Small in 1933 as *Kuhnia mosieri* (Bradley and Gann 1999, p. 11). In 1970, Long called the species *Kuhnia eupatorioides* var. *floridana*, reducing it to a variety of a more widespread species occurring in the eastern United States (Bradley and Gann 1999, p. 11). In 1971, Shinnars included all members of the genus *Kuhnia* in *Brickellia* and restored the plant to species status, calling it *Brickellia mosieri* (Bradley and Gann 1999, p. 11). In a 1989 study of the *Brickellia eupatorioides* complex, Turner identified it as a variety of the more widespread *Brickellia eupatorioides*, and gave it the new name *Brickellia eupatorioides* var. *floridana*. Wunderlin and Hansen (2003, pp. 300–301) recognized *Brickellia mosieri*, thinking the plant to be specifically distinct from *Brickellia eupatorioides*

(Bradley and Gann 1999, p. 11) and differentiating the species by leaf width and margin (i.e., *B. mosieri* having 1–3 millimeter (mm) (0.04–0.12 in) wide, entire or obscurely toothed leaves versus *B. eupatorioides* having 5–40 mm (0.2–1.6 in) wide, coarsely toothed leaves).

While some sources (Integrated Taxonomic Information System (ITIS) 2013a, page numbers not applicable) indicate that *Brickellia eupatorioides* var. *floridana* is the accepted taxonomy, local sources including the online Atlas of Florida Vascular Plants (Wunderlin and Hansen 2008, page numbers not applicable), the Florida Department of Agriculture and Consumer Services (FDACS; Coile and Garland 2003, p. 7), and the Institute for Regional Conservation (IRC) all use *Brickellia mosieri*. Although there is not complete agreement on whether this taxon is a variety or a species, there is consensus that it is a distinct taxon. Based upon the best available scientific information, *Brickellia mosieri* is a distinct taxon, endemic to Miami-Dade County in Florida. Synonyms include *Brickellia eupatorioides* var. *floridana*, *Kuhnia eupatorioides* var. *floridana*, and *Kuhnia mosieri* (Wunderlin and Hansen 2008, page numbers not applicable).

Climate

The climate of south Florida where *Brickellia mosieri* occurs is classified as tropical savanna and is characterized by distinct wet and dry seasons and a monthly mean temperature above 18 degrees Celsius (°C) (64.4 degrees Fahrenheit (°F)) in every month of the year (Gabler *et al.* 1994, p. 211). Freezes can occur in the winter months, but are infrequent at this latitude in south Florida. Rainfall in the pine rockland community where *B. mosieri* occurs exclusively, varies from an annual average of 153–165 cm (60–65 in) in the northern portion of the Miami Rock Ridge to an average of 140–153 cm (55–60 in) in the southern portion (Snyder *et al.* 1990, p. 238). Approximately 75 percent of yearly rainfall occurs during the wet season from June through September (Snyder *et al.* 1990, p. 238).

Habitat

Brickellia mosieri grows exclusively on the Miami Rock Ridge in Miami-Dade County outside the boundaries of Everglades National Park (ENP). This area extends from the ENP boundary, near the Park entrance road, northeast approximately 72 kilometers (km) (45 miles (mi)) to its end near North Miami. Habitat conditions more specific to this area are highlighted below. The pine rocklands are a unique ecosystem found

on limestone substrates in three areas in Florida—the Miami Rock Ridge, in the Florida Keys, and in the Big Cypress Swamp. The pine rocklands differ to some degree between and within these areas with regard to substrate (e.g., amount of exposed limestone, type of soil), elevation, hydrology, and species composition (both plant and animal).

Pine rockland occurs on relatively flat terrain, approximately 2–7 m (6.5–23.0 ft) above sea level with an average elevation of approximately 3 m (9.8 ft) (Service 1999, p. 3–167; Florida Natural Areas Inventory (FNAI) 2010, p. 62). On the Miami Rock Ridge, oolitic limestone is at or very near the surface, and solution holes occasionally form where the surface limestone is dissolved by organic acids. There is typically very little soil development, consisting primarily of accumulations of low-nutrient sand, marl, clayey loam, and organic debris found in solution holes, depressions, and crevices on the limestone surface (FNAI 2010, p. 62). However, extensive sandy pockets can be found at the northern end of the Miami Rock Ridge, beginning from approximately North Miami Beach and extending south to approximately SW. 216 Street (which runs east-west approximately one-half mile south of Quail Roost Pineland) (Service 1999, p. 3–162). *Brickellia mosieri* tends to occur on exposed limestone with minimal organic litter and in areas with only minor amounts of substrate disturbance (Bradley and Gann 1999, p. 11).

Pine rocklands are generally moderately to well drained, depending on the porosity of the limestone substrate and landscape position, including nearby associated natural communities. In pine rocklands on the Miami Rock Ridge outside of ENP, the water table seldom reaches the surface (Service 1999, p. 3–167). Bradley and Gann (1999) found one occurrence of *Brickellia mosieri* in a low-elevation pine rockland (2–3 m above sea level) very close to a marl prairie. The pine rockland that contains this occurrence may have flooded periodically during the summer wet season. Known populations of *B. mosieri* are found at elevations ranging from approximately 1.7–4.8 m (5.5–15.8 ft). While species occurrences are distributed throughout this range, there are two elevational groupings in the landscape—one with average elevations of approximately 1.7–2.1 m (5.5–7.0 ft) and the other, larger grouping between approximately 2.7 and 4.0 m (9.0 and 13.0 ft).

Pine rockland is characterized by an open canopy of South Florida slash pine (*Pinus elliotii* var. *densa*). Subcanopy development is rare in well-maintained

pine rocklands, with only occasional hardwoods such as *Lysiloma bahamensis* (wild tamarind) and *Quercus virginiana* (live oak) growing to tree size in Miami Rock Ridge pinelands (Snyder *et al.* 1990, p. 253). The shrub/understory layer is a diverse mix of species including both temperate and tropical shrubs and palms. Dominant plants in the shrub layer of pine rocklands vary based on elevation, soils, and location, including nearby associated natural communities. The pine rocklands where *Brickellia mosieri* occurs are characterized by an open shrub canopy of *Serenoa repens* (saw palmetto), *Myrica cerifera* (wax myrtle), *Metopium toxiferum* (poisonwood), and *Sideroxylon salicifolium* (willow bustic) as well as species with more restricted distribution within pine rocklands including *Sideroxylon reclinatum* (buckthorn), *Callicarpa americana* (beauty berry), *Dodonaea angustifolia* (varnish leaf), and *Ilex cassine* (dahoon holly) (Snyder *et al.* 1990, p. 254; Bradley and Gann 1999, p. 12). The shrub layer in pinelands occurring in the northern end of the Miami Rock Ridge more closely resembles pine flatwoods as a result of the amount of sandy soils in this area, with species such as *Lyonia fruticosa* (staggerbush), *Quercus minima* (dwarf live oak), *Quercus pumila* (running oak), and *Vaccinium myrsinites* (shiny blueberry) becoming more common (Snyder *et al.* 1990, p. 255). The height and density of the shrub layer vary based on fire frequency, with understory plants growing taller and more dense as time since fire increases.

Pine rocklands in all three areas of Florida also boast a richly diverse herbaceous layer, including a large number of rare and endemic species such as *Brickellia mosieri*. The diversity of the herbaceous layer decreases as the density of the shrub layer increases (i.e., as understory openness decreases), and pine rockland on the mainland has a more diverse herbaceous layer due to the presence of temperate species and some tropical species that do not occur in the Florida Keys (FNAI 2010, p. 63). The herbaceous layer can range from mostly continuous in areas with more soil development and little exposed limestone, to sparse where much of the limestone is at the surface. Most herbaceous species in pine rocklands are perennials (Snyder *et al.* 1990, p. 257). Common herbaceous associates of *B. mosieri* in the Miami Rock Ridge pine rocklands include *Schizachyrium sanguineum* (crimson bluestem), *Schizachyrium gracile* (wire bluestem), *Aster adnatus* (scaleleaf aster), and

Acalypha chamaedrifolia (bastard copperleaf) (Bradley and Gann 1999, p. 12). *B. mosieri* may also be found in close association with several other rare plants, including *Chamaesyce deltoidea* ssp. *deltoidea* (deltoid spurge), *Chamaesyce deltoidea* ssp. *adhaerens* (wedge sandmat), *Chamaesyce deltoidea* ssp. *pinetorum* (pineland sandmat), *Galactia smallii* (Small's milkpea), *Polygala smallii* (tiny polygala), and *Argythamnia blodgettii* (Blodgett's silverbush) (Bradley and Gann 1999, p. 12).

Pine rockland occurs in a mosaic with primarily two other natural community types—rockland hammock and marl prairie. Pine rockland grades into rockland hammock; pine rockland has an open pine canopy, and rockland hammock has a closed, hardwood canopy. Pine rockland is a fire-maintained ecosystem—a well-maintained pine rockland is a savanna-like forest, but, in the absence of fire, it will eventually succeed into rockland hammock. Historically, fires often started in the adjacent prairie wetlands and swept into the pinelands, which often have suitable fuel conditions to support surface fires that consume primarily leaf litter (pine needles and herbaceous fuel) and some understory vegetation (Snyder *et al.* 1990, p. 258). Pine rockland plants have adapted to frequent fires. Mature South Florida slash pine is a highly fire-resistant variety, and even its seedlings have thicker stems and are more fire-resistant than typical slash pine seedlings (Snyder *et al.* 1990, p. 259).

Aboveground portions of hardwood shrubs are typically killed by fire, but often resprout below ground; palms typically produce new growth post-fire from their unaffected apical buds. Pine rockland herbs, including *Brickellia mosieri*, respond favorably to fire with rapid regrowth and increased flowering. On one private conservation area, *B. mosieri* has only been observed in flower immediately after prescribed burning has occurred (Pine Ridge Sanctuary; Glancy 2013, pers. comm.).

Fire is important for the removal of litter accumulation from the limestone substrate and stimulation of herbaceous growth as well as for maintaining an open shrub layer. Evaluation of herbaceous layers post-fire suggests that pine rocklands may have evolved under a wide range of fire frequency, and some degree of variation in burn season, suggesting that pine rockland habitat historically existed as a mosaic in the landscape. The natural fire regime of pine rockland is believed to be approximately 3–7 years, or twice per decade, on average, with fires primarily

occurring in the summer (wet season) in association with lightning strikes. As time since fire increases, leaf litter deepens and the shrub layer becomes denser, eventually shading out understory species and preventing germination of new plants, which require exposed substrate and high light conditions. If fire is excluded for 20–30 years, hardwoods will come to dominate the community and hammock conditions will prevail, which further discourage fires from spreading except in drought conditions.

Pine rocklands are also susceptible to natural disturbances such as hurricanes and other severe storms, during which trees may be killed, thereby helping to maintain the open canopy that is essential to pine rockland plants such as *Brickellia mosieri*. This species was first observed in flower on Pine Ridge Sanctuary after Hurricane Andrew made landfall in south Florida in 1992 (Glancy 2013, pers. comm.). During such events, pine rocklands near the coast may be temporarily inundated by saltwater which can also kill or damage vegetation (Snyder *et al.* 1990, p. 251; URS Corporation Southern *et al.* 2007, p. 11). In addition, though rare, freeze events can kill tropical plants in the open understory, helping to reduce hardwood encroachment (Service 1999, p. 3–167; FNAI 2010, p. 63). These sporadic, but potentially major, disturbances along with burning, create the dynamic nature of the pine rockland habitat, in which some currently unsuitable areas may become open in the future, while areas currently open may develop more dense canopy over time, eventually rendering that portion of the pineland unsuitable for *B. mosieri* and other pine rockland endemic plants.

Pine rockland on the Miami Rock Ridge can also occur within lower, seasonally flooded marl prairies, which differ from pine rockland in having no pines, an understory dominated by grasses and sedges, and a minimal cover of shrubs (FNAI 2010, p. 63). Where pine rockland occurs close to the ocean, it may be bordered by mangrove swamp or salt marsh and can receive flooding by extremely high tides (FNAI 2010, p. 63). Pine rocklands on the northern Miami Rock Ridge grade into scrub and sandhill vegetation where the three communities intermix in areas with deep sands and rock outcrops (Snyder *et al.* 1990, p. 257).

Historical Range

Brickellia mosieri is endemic to the pine rocklands of the Miami Rock Ridge in Miami-Dade County. It was historically known from central and southern Miami-Dade County from

South Miami to Florida City, a range of approximately 36.2 km (22.5 mi), along the Miami Rock Ridge (Bradley and Gann 1999, p. 11). However, Bradley and Gann (1999, p. 11) state that herbarium specimens have not been studied from the New York Botanical Garden, so the full extent of its historical range is unknown. Available herbarium specimens and other records for this plant (Bradley and Gann 1999, p. 16; Wunderlin and Hansen 2008, page numbers not applicable) do not give precise or accurate location information.

Current Range, Population Estimates, and Status

Brickellia mosieri is currently distributed from central and southern Miami-Dade County from SW 120 St. (latitude ca. 25° 39.4') to Florida City (latitude ca. 25° 26.0'), suggesting its historical range has contracted at least 4.8 km (3 mi), or more than 13 percent (Bradley and Gann 1999, p. 11). At least 9 known populations on private lands have been extirpated including: Sunset Drive and 71 Court (site developed; last observation in 1968); Palms Woodlawn Cemetery (site developed; last observation in 1992); Turnpike Extension and 93rd Terrace (site destroyed; confirmed extirpated in 2007); plus at least 6 of 18 undated occurrences reported by Alan Herndon (Bradley and Gann 1999, p. 12; Bradley 2007, pers. comm.). In addition, several of Herndon's 18 sites experienced impacts to habitat through disturbance or invasion by nonnative plants or dense hardwoods, and *B. mosieri* may no longer occur at these sites (Bradley and Gann 1999, p. 12).

The number of extant occurrences of this species is somewhat uncertain due to the lack of complete and recent survey information, which is primarily a function of the number of populations that occur on private lands, making them difficult to survey. In addition, *Brickellia mosieri* can be extremely difficult to identify when not in flower, making it difficult to confidently determine when a population has been extirpated. The most complete survey that included the species was the 2004–2005 mapping by IRC of natural forest communities (NFCs; pinelands and hardwoods) in Miami-Dade County outside of ENP. IRC mapped both public and private NFCs where the county government obtained landowner permission or determined it was not necessary. This survey found *B. mosieri* on six privately owned parcels, including on the University of Miami Richmond campus (formerly the U.S. Naval Observatory). Surveys of

populations on public lands, specifically those owned or managed by the County, occur more commonly and provide a more detailed assessment of the species' status on selected preserves. *B. mosieri* was not found during a 2-year project intended to survey and map nonnative and rare plants along Florida Department of Transportation (FDOT) rights-of-way within Miami-Dade County (Gordon *et al.* 2007, pp. 1, 36).

Based on the best available data, we classified those occurrences of *Brickellia mosieri* that have not been confirmed extirpated as either extant (status confirmed within the last 10 years), possibly extant (reliable data are greater than 10 years but less than 15 years old; habitat is still extant), or unknown/historical (observation does not include sufficient detail, or data are more than 15 years old; habitat is still extant) (Table 1). Using this classification, populations of *B. mosieri* are believed to occur on at least 17 (extant or presumed extant) sites, and may possibly occur on up to another 5 (possibly extant) sites, although most of these latter sites have been searched in recent years without the species being found. *B. mosieri* may also occur at three historical sites, although additional confirmation is needed. Of the 17 extant occurrences, 9 occur on public conservation lands, 4 occur on private lands managed for conservation, and 4 occur on private lands with unknown management (Table 1). Four of the populations on public conservation lands, including two of the three large (≤ 100 plants) monitored populations, occur adjacent to one another in the Richmond Pineland Complex.

Bradley and Gann (1999, p. 12) estimated population size using a logarithmic scale. On that scale, the total population of the species in 1999 was estimated at 1,001–10,000 plants (with the exact number probably between 5,000 and 7,000 plants), and was thought to be declining (Bradley and Gann 1999, p. 12). Since that time, the estimate for the largest population (Larry and Penny Thompson Park, 1,001–10,000 plants in 1999) has decreased to 101–1,000 plants, with adjacent areas (University of Miami, Zoo Miami, Martinez Pineland) estimated to hold another 112–1,100 plants combined (Possley 2013b, pers. comm.). Additional plants are suspected to occur on adjacent privately owned parcels in the Richmond Pineland Complex (Possley 2013a, pers. comm.). The only other monitored population estimated to be composed of greater than 100 plants occurs on the Navy Wells Pineland Preserve, located approximately 20 km (12.5 mi) southwest at the southern end

of the species' current range. Another large population was observed on a private parcel situated between Navy Wells and the Richmond Pinelands; however this property has not been surveyed since 2004. Smaller populations occur on pine rockland fragments spread across the landscape,

most no more than approximately 3.2 km (2 mi) from their nearest neighboring population—the major exception to this is a 7.2-km (4.5-mi) gap between the populations on Quail Roost Pineland and Camp Owaissa Bauer. Based on the 17 populations considered to be extant, the current total population estimate is

between 515 and 4,935 plants, although the actual number of individuals is probably closer to between 2,150 and 3,700 (Table 1). Based on current estimates, the total population of *B. mosieri* has apparently declined by approximately 50 percent since 1999.

TABLE 1—EXTANT AND HISTORICAL POPULATIONS OF *Brickellia mosieri*—FOR THOSE POPULATIONS OCCURRING WITHIN A COUNTY-DESIGNATED NATURAL FOREST COMMUNITY (NFC) PARCEL, NFC NUMBER IS PROVIDED IF AVAILABLE. THE NFC NUMBER FORMAT IS A LETTER DESIGNATING PRIMARY HABITAT TYPE WITHIN THE NFC (“P” FOR PINE ROCKLAND, “H” FOR HAMMOCK), FOLLOWED BY A 1–3 DIGIT NUMBER ASSIGNED BY THE COUNTY

Population (NFC # if applicable (P-#))	Ownership (* denotes lands managed for conservation)	Population range (number of plants and year if available)
Extant: Regularly monitored populations—status confirmed within last 5 years.		
Navy Wells Pineland Preserve (P-415)	State of Florida (Florida Keys Aqueduct Authority) and Miami-Dade County*.	101–1,000 (272 in 2009). ¹
Pine Shore Pineland Preserve (P-48)	Miami-Dade County*	11–100 (77–118 in 2009). ¹
Quail Roost Pineland (P-144)	State of Florida—managed by Miami-Dade County*.	11–100 (23 in 2011). ¹
Richmond Pinelands Complex—Larry and Penny Thompson Park (P-391).	Miami-Dade County*	101–1,000 (815 in 2008). ¹
Richmond Pinelands Complex—Zoo Miami (P-391).	Miami-Dade County*	101–1,000 (742 in 2009). ¹
Rockdale Pineland (P-52)	State of Florida—managed by Miami-Dade County*.	1–10 (5 in 2010). ¹
Ron Ehman Park	Miami-Dade School Board—managed by Miami-Dade County*.	11–100 (31–45 in 2011). ¹
West Biscayne Pineland (P-295)	State of Florida—managed by Miami-Dade County*.	11–100 (15–150 in 2008). ¹
Presumed Extant: Populations not regularly monitored—status confirmed within last 10 years.		
P-132	Private*	1–10. ²
P-295	Private	101–1,000. ²
P-297	Private	11–100. ²
P-316	Private*	11–100. ²
P-365	Private	11–100. ²
Pine Ridge Sanctuary (P-310)	Private*	11–100. ³
Porter Russell Pineland Preserve (P-160)	Private—Tropical Audubon Society*	10–15. ⁴
Richmond Pinelands Complex —Martinez Pineland (P-391).	Miami-Dade County*	Unknown (previously grouped with Larry and Penny Thompson Park).
Richmond Pinelands Complex —University of Miami, Richmond Campus (P-391).	Private—University of Miami	11–100. ²
Possibly Extant: Habitat extant but status last confirmed 10–15 years ago.		
Camp Choe (P-397)	Private—Girls Scouts of Tropical Florida	11–100. ⁵
Camp Owaissa Bauer (H-681)	Miami-Dade County*	11–100. ⁵
Panther Pineland (P-338)	Private*	11–100. ⁵
Seminole Wayside Park (P-365)	Miami-Dade County*	11–100. ⁵
Tamiami Pinelands Complex Addition (P-6.00)	State of Florida—managed by Miami-Dade County*.	10–100. ⁵
Unknown/Historical: Habitat extant but records regarding occurrence are limited and/or >15 years old.		
Ingram Pineland (P-360)	State of Florida—managed by Miami-Dade County*.	Unknown. ⁶
Navy Wells #2 (P-329)	Miami-Dade School Board	Unknown. ⁷
Nixon Smiley Pineland Preserve (P-370)	Miami-Dade County*	Unknown. ⁸

¹ Possley 2013b, pers. comm.

² Bradley and Gann 2005, page numbers not applicable.

³ Glancy 2013, pers. comm.

⁴ Bradley 2008a, pers. comm.

⁵ Bradley and Gann 1999, p. 15.

⁶ IRC 2005, page numbers not applicable.

⁷ FNAI 2011, page numbers not applicable.

⁸ IRC 1999, p. 2; IRC 2013, page numbers not applicable.

Demographic, Reproductive Biology, and Population Genetics

Little research has been done into the demography, reproductive biology, or genetics of *Brickellia mosieri*. Field observations indicate that the species does not usually occur in great abundance—populations are typically sparse and contain a low density of plants even in well-maintained pine rockland habitat (Bradley and Gann 1999, p. 12). Reproduction is sexual (Bradley and Gann 1999, p. 12). While specific pollinators or dispersers are unknown, flower morphology suggests this species may be pollinated by butterflies, bees, or both (Koptur 2013, pers. comm.); wind is one likely dispersal vector (Gann 2013b, pers. comm.). Flowering takes place primarily in the fall (August–October), but individuals may be found in flower during most of the year (Bradley and Gann 1999, p. 12).

Linum carteri var. *carteri*

Description

Linum carteri var. *carteri* (Family: Linaceae) is an annual or short-lived perennial herb endemic to Miami-Dade County, where it grows in pine rocklands, particularly in disturbed pine rocklands (Bradley and Gann 1999, p. 70). Its stem is erect, 23–36 cm (9.0–14.2 in) tall, commonly branched near the base, and puberulent (covered with minute hairs). Its leaves are slender (18–26 mm (0.7–1.0 in) long and 0.8–1.2 mm (0.03–0.05 in) wide), entire, alternate, and closely overlap at the base of the plant. This variety has stipules (pair of appendages at the base of the petiole, which is the stalk by which a leaf is attached to a stem) with paired dark glands. Its inflorescence (cluster of flowers arranged on a branching stem) is an ascending or spreading cyme (usually flat-topped or convex flower cluster in which the main axis and each branch end in a flower that opens before the flowers below or to the side of it), with yellow petals that are broadly obovate (egg-shaped), 9–17 mm (0.35–0.67 in) long, and quickly deciduous. The fruit is straw-colored, ovoid, 4.1–4.6 mm (0.16–0.18 in) long, 3.4–3.7 mm (0.13–0.15 in) in diameter, and dehisces (opens spontaneously at defined places) into five two-seeded segments; seeds are narrowly ovoid-elliptic, 2.3–2.8 mm (0.09–0.11 in) long, 1.0–1.3 mm (0.04–0.05 in) wide. In habit and flower, the plant closely resembles *Piriqueta caroliniana* (Pitted stripe seed) in the Turneraceae (Bradley and Gann 1999, p. 70).

Taxonomy

According to Bradley and Gann (1999, p. 70), *Linum carteri* was named by Small in 1905; in 1907, he put it in a segregate genus, calling it *Cathartolium carteri*. His concept of the taxon included both pubescent and glabrous (smooth, without hairs) plants, with or without stipular (having stipules) glands. In 1963, Rogers renamed the plants as a variety of *Linum rigidum*, noting the close relationship of Florida plants to those in the Western United States. In 1968, he split the taxon into two varieties, calling pubescent plants *Linum carteri* var. *carteri*, and segregating the glabrous plants as *Linum carteri* var. *smallii*, basing the division on new genetic data from Mosquin and Hayley (1967, pp. 1278–1283) and his own morphological data (Bradley and Gann 1999, p. 70). *L. c.* var. *carteri* was treated as endemic to Miami-Dade County, while *L. c.* var. *smallii* was slightly more widespread in southern Florida (Bradley and Gann 1999, p. 70). Long and Lakela (1971), Robertson (1971), and Wunderlin (1998) have used this same taxonomy (Bradley and Gann 1999, p. 70). ITIS (2013, page numbers not applicable) uses the name *Linum carteri* var. *carteri* and indicates that this species' taxonomic standing is accepted. Based upon the best available scientific information, *Linum carteri* var. *carteri* is a distinct taxon, endemic to Miami-Dade County in Florida. Synonyms include *Cathartolium carteri* and *Linum rigidum* var. *carteri* (ITIS 2013b, page numbers not applicable).

Climate

The climate of south Florida where *Linum carteri* var. *carteri* occurs is described above for *Brickellia mosieri*.

Habitat

Like *Brickellia mosieri*, *Linum carteri* var. *carteri* grows exclusively on the Miami Rock Ridge in Miami-Dade County outside the boundaries of ENP. Its known populations are found at elevations ranging from approximately 1.6–4.8 m (5.2–15.9 ft), with occurrences distributed fairly regularly throughout this range. Herbarium label data indicated that *L. c.* var. *carteri* once occurred in pine rocklands with sand or marl deposits (Bradley and Gann 1999, p. 75). In addition, one specimen was taken from Brickell Hammock, but it is more likely that the plant was collected outside of the hammock or along the roadside (Bradley and Gann 1999, p. 75). Currently, this variety is associated with pine rocklands that have undergone some sort of substrate

disturbance (e.g., firebreaks, canal banks, edges of railway beds). All known occurrences are within either scarified pine rockland, disturbed areas adjacent to or within pine rocklands, or in completely disturbed areas having a limestone substrate (Bradley and Gann 1999, p. 71; Bradley 2013, pers. comm.). None of the known occurrences over the last 15 years have been from a completely undisturbed pine rockland. *L. c.* var. *carteri* responds positively to low competition and high light conditions, and responds negatively to shading or litter accumulation. Thus, it may have been excluded from much of its former habitat by inadequate fire management (Bradley and Gann 1999, p. 71). Alternatively, this variety may only proliferate on sites where exposed substrate occurs following disturbance; historically this may have occurred following hurricanes (e.g., under tip-up mounds), animal disturbance, or fire (Gann 2013a, pers. comm.). More information is needed to understand how this variety behaved in intact habitat before modern human disturbance (Gann 2013a, pers. comm.).

The pine rockland community is described above for *Brickellia mosieri*. The scarified pine rocklands and disturbed areas where *Linum carteri* var. *carteri* occurs often supports a subset of the pine rockland flora, as well as a component of weedy native and nonnative plants, including *Bidens alba* var. *radiata* (beggarticks), *Eremochloa ophiuroides* (centipede grass), *Desmodium* spp. (ticktrefoil), and *Stenotaphrum secundatum* (St. Augustine grass) (Bradley and Gann 1999, p. 71). *L. c.* var. *carteri* may grow in association with several other rare species including *Linum arenicola* (sand flax), *Dalea carthagenensis* var. *floridana* (Florida prairie-clover), and *Argythamnia blodgettii* (Blodgett's silverbush) (Bradley and Gann 1999, p. 71).

The natural disturbance regime for pine rocklands is discussed above for *Brickellia mosieri* and also applies to *Linum carteri* var. *carteri*. Fellows *et al.* (2004, p. 95) suggested that fire could be beneficial as it creates openings in the habitat, but that the potential for adults to survive from rootstock is unknown (although population recovery may be supported by the seed bank). Because areas where the variety now exists support native pine rockland herbaceous and grass plant species, periodic mowing of these areas may partially replace the role of fire in maintaining an open understory.

Historical Range

Linum carteri var. *carteri* was first collected in 1903 between the Coconut Grove and Cutler areas of Miami, and since that time, it has been found in pine rocklands from as far north as the Brickell Hammock area to as far south as the Naranja area (Gann *et al.* 2002, p. 463). Bradley and Gann (1999, p. 70) indicated that it has been found at many widespread locations, from Coconut Grove (latitude 25° 43.8') to southern Miami-Dade County, terminating near SW 280 Street (latitude 25° 30.4'), a range of about 39 km (24 mi). However, they believe that several of these occurrences represented misidentifications, and that the plants actually were either *Linum arenicola* (sand flax) or *Linum carteri* var. *smallii* (Bradley and Gann 1999, p. 72). For example, a previous report of the plant occurring at Homestead Air Reserve Base site is now considered to be erroneous (Bradley 2008b, pers. comm.). Austin *et al.* (1980, page number not applicable) noted that there were four historical sites for this variety in a study of southern Florida, although only one site remained in 1980; they attributed the 75 percent decline to urbanization.

Current Range, Population Estimates, and Status

Linum carteri var. *carteri* is currently found from R. Hardy Matheson Preserve (near Pinecrest) southwest to Naranja/Modello, with a distance of approximately 27.3 km (17 mi) between the farthest locations. The apparent reduction in its historical range (11.2 km (7.2 mi), or 30 percent) has occurred entirely in the northern portion, between Pinecrest and Coconut Grove, primarily due to urban development. Similarly, much of the habitat within the variety's current range has been destroyed (Gann *et al.* 2002, p. 463). At least five known populations have been extirpated including: Brickell Hammock (site developed; last observation in

1911); Red Road/114 Terrace (site developed; last observation in 1969); Deering Estate at Cutler (not sighted since 1980s; unknown reason); Ponce and Riviera Pineland (site developed in 2004); and Cocoplum Development (site developed in 2005) (Bradley 2007, pers. comm.; Bradley and van der Heiden 2013, pp. 14–16). Bradley and Gann (1999, p. 71) described nine known populations (only three of these occurring on conservation lands) with an estimated total population of 100–1,000 individuals; its status was thought to be possibly declining. Fellows *et al.* (2001, p. 2) estimated the total population to be 9,540–10,300 plants across six populations in 2001, with one population sustaining the vast majority (Chapman Field, U.S. Department of Agriculture (USDA) Subtropical Horticultural Research Station; 7,500 individuals). *L. c.* var. *carteri* was not found during a 2-year project intended to survey and map nonnative and rare plants along FDOT rights-of-way within Miami-Dade County (Gordon *et al.* 2007, pp. 1, 36).

In 2012, IRC (Bradley and van der Heiden 2013, entire) conducted a status survey for *Linum carteri* var. *carteri* to include extant occurrences, historical locations, and new survey stations. Because they had previously conducted a comprehensive survey of all pine rockland habitat in 2004–2005 (during which, *L. c.* var. *carteri* was not found on any new sites), this habitat was excluded from new surveys. Canals within urban Miami-Dade County that intersected with the pine rockland soils of the Miami Rock Ridge were surveyed, as were additional disturbed sites with remnant native vegetation in close proximity to existing sites. *L. c.* var. *carteri* was found at seven locations containing approximately 1,313 individuals; populations ranged in size from a single plant to 700 plants, with a median of 18 plants (Table 2; Bradley and van der Heiden 2013, p. 6). One occurrence (at Gifford Arboretum

Pineland), which had not been observed since the 1990s but whose habitat was still extant, was deemed “Historical” and may reappear there (Bradley and van der Heiden 2013, p. 14). Of the seven extant occurrences, five populations are on publicly owned lands, but only three of these are managed for the conservation of natural resources (Table 2). Four of the populations occur near the north end of the variety's range (near R. Hardy Matheson Preserve), and three occur near the south end (near Camp Owaissa Bauer), with an approximately 16-km (10-mi) gap between the closest populations of these groups. Within each grouping, populations are approximately 1.3–4.3 km (0.8–2.7 mi) apart.

Because this variety is known to be a short-lived perennial with widely fluctuating numbers of individuals (Maschinski *et al.* 2003, p. v; 2004, p. iv), as well as being difficult to find when not in flower, we include an estimate of population range using the logarithmic scale (Table 2) to account for these characteristics and to provide a comparison to the previous total population estimates. Using the logarithmic scale, the total population estimate is 337–3,310 plants. However, it should be noted that most 2012 observations were at the low end of the corresponding logarithmic range such that the resulting high end for the total population estimate may be a gross overestimate of the actual population. Based strictly on 2012 observations, the total population estimate may be closer to 1,300 individuals. Comparing these estimates to the 1999 and 2003 population estimates generally supports the boom-and-bust nature of *Linum carteri* var. *carteri*, although the significant decline since 2001 could also potentially indicate a declining trend in one or more populations (especially USDA Chapman Field and R. Hardy Matheson Preserve).

TABLE 2—EXTANT AND HISTORICAL POPULATIONS OF *Linum carteri* var. *carteri*—FOR THOSE POPULATIONS OCCURRING WITHIN A COUNTY-DESIGNATED NATURAL FOREST COMMUNITY (NFC) PARCEL, NFC NUMBER IS PROVIDED IF AVAILABLE. THE NFC NUMBER FORMAT IS A LETTER DESIGNATING PRIMARY HABITAT TYPE WITHIN THE NFC (“P” FOR PINE ROCKLAND, “H” FOR HAMMOCK), FOLLOWED BY A 1–3 DIGIT NUMBER ASSIGNED BY THE COUNTY

Population (NFC # if applicable (P-#))	Ownership (* denotes lands managed for conservation)	Population range (est. number of plants in 2012) ¹
Extant: Population status confirmed in 2012 surveys conducted by IRC.		
C-103 Canal	State of Florida—South Florida Water Management District	1–10 (1).
Camp Owaissa Bauer Addition (P-255.4)	State of Florida—managed by Miami-Dade County*	11–100 (13).
Chapman Field, USDA Subtropical Horticultural Research Station (portions are P-63).	Federal—U.S. Department of Agriculture	101–1,000 (700).
Montgomery Botanical Center	Private—Montgomery Botanical Center	11–100 (12).
Old Dixie Pineland	Private	11–100 (18).

TABLE 2—EXTANT AND HISTORICAL POPULATIONS OF *Linum carteri* var. *carteri*—FOR THOSE POPULATIONS OCCURRING WITHIN A COUNTY-DESIGNATED NATURAL FOREST COMMUNITY (NFC) PARCEL, NFC NUMBER IS PROVIDED IF AVAILABLE. THE NFC NUMBER FORMAT IS A LETTER DESIGNATING PRIMARY HABITAT TYPE WITHIN THE NFC (“P” FOR PINE ROCKLAND, “H” FOR HAMMOCK), FOLLOWED BY A 1–3 DIGIT NUMBER ASSIGNED BY THE COUNTY—Continued

Population (NFC # if applicable (P-#))	Ownership (* denotes lands managed for conservation)	Population range (est. number of plants in 2012) ¹
R. Hardy Matheson Preserve (H-634)	State of Florida—managed by Miami-Dade County *	101–1,000 (374).
Rockdale Pineland Addition (P-52)	Miami-Dade County *	101–1,000 (195).
Historical: Population not observed for >10 years, but habitat extant.		
Gifford Arboretum Pineland	Private	0.

¹ Source for number of plants is Bradley and van der Heiden (2013, pp. 12–16).

Demographics, Reproductive Biology and Population Genetics

The reproductive ecology and biology of *Linum carteri* var. *carteri* is not well understood, but reproduction is sexual (Bradley and Gann 1999, p. 71). *L. c.* var. *carteri* is capable of flowering throughout the year, but tends to have most abundant flowering and fruiting following rain (Maschinski and Walters 2008, p. 28). Tatje (1980, p. 2) indicated that the variety requires disturbance to bloom, although this theory was not supported by observations of Maschinski *et al.* (2003, pp. 37–39). While specific pollinators are unknown, flower morphology suggests this variety may be pollinated by butterflies, bees, or both (Koptur 2013, pers. comm.). Alternatively, Mosquin and Hayley (1967, p. 1278) suggested *L. c.* var. *carteri* may be self-pollinated. Dispersers are also unknown, although historically water may have played a role in dispersal when summer high-water conditions in adjacent wet prairies may have inundated portions of pine rocklands (Gann 2013b, pers. comm.). The maximum magnitude and frequency of seed production is unknown, although Maschinski and Walters (2007, p. 56) indicate plants can produce up to 62 fruits. Some fruits dehisce in a characteristic 5-parted star pattern, while others never dehisce (Fellows 2002, Appendix D2 p. 1).

Preliminary demographic monitoring of *Linum carteri* var. *carteri* showed that, for adult reproductive plants, average plant growth was fairly constant from July through October, flowering and fruit production were most abundant in July, and plant mortality increased during the fall months (Maschinski *et al.* 2002, p. iv). Maschinski and Walters (2008, p. 27) studied in situ germination and growth-to-maturity of plants growing in the wild at two sites (mown and undisturbed) from January 2006 until July 2007. Field germination varied

across sites and season of seed production, with seed produced in winter (January) having low to no germination and longer germination times than seeds produced in summer (July). Of the 51 seeds that germinated across all trials, they followed the growth of 32 seedlings—of these, only 6 set fruit (Maschinski and Walters 2008, p. 27). The mean time to set first bud was 197 ± 2.4 days, while mean time to first fruit set was 226 ± 2.3 days (Maschinski and Walters 2008, p. 27). The 226-day growth-to-maturity enables this variety to contribute seeds to a next generation in a relatively short period (Maschinski and Walters 2008, p. 28). Once mature, individuals may live one to several years producing multiple fruits (Maschinski and Walters 2008, p. 28). Growth-to-maturity may be influenced by season of germination, with summer-germinating seeds possibly reaching maturity more rapidly than seedlings that germinate in the fall or winter (Maschinski and Walters 2008, p. 28). Similarly, seeds produced during different seasons may differ in their germination rates, dormancy breaking requirements, and rates of growth (Maschinski and Walters 2008, p. 28).

To examine population viability in response to disturbance, long-term demographic studies were conducted from June 2003 through July 2007 at a disturbed (mown) site and an undisturbed site; in May 2006, a site having both disturbed and undisturbed sections was added (Maschinski 2006, p. 82; Maschinski and Walters 2007, p. 55). Results were mixed with regard to demographic responses between sites. Maschinski (2006, p. 83) reported that *Linum carteri* var. *carteri* has typical behavior for an early successional plant. Significantly higher densities of plants were found at the mown sites where competition with other plants is decreased, although changes in number of plants between sites and treatments were variable (Maschinski and Walters

2007, p. 56). Germination varied across sites and season of seed production as discussed above, although there was greater germination on the undisturbed site in both seasons. Fruiting was also variable across years and sites; while there was no clear effect of mowing, plants growing on mown sites were shorter, which may affect fruiting magnitude. While mowing does not usually kill adult plants, if mowing occurs prior to plants reaching reproductive status, it can also delay reproduction (Maschinski and Walters 2007 pp. 56–57). If such mowing occurs repeatedly, reproduction of those plants would be entirely eliminated. If, instead, mowing occurs at least three weeks after flowering, there would be a higher probability of adults setting fruit prior to mowing; mowing may then act as a positive disturbance by both scattering seeds and reducing competition (Maschinski and Walters 2007, p. 57). The exact impacts of mowing thus depend on the timing of the mowing event, rainfall prior to and following mowing, and the numbers of plants in the population that have reached a reproductive state.

Although population viability models projected declines in mown sites, and fairly stable population growth in undisturbed sites, high variation in the models suggest caution be used in interpreting results. One likely factor in the high year-to-year variation observed is variation in weather, which was most apparent in the model for undisturbed habitat. Preliminary models indicated that population viability was greatly affected by reproductive rates and whether there is a persistent seed bank (Maschinski 2006, p. 83; Maschinski and Walters 2007, p. 56). Models indicate that the transition from seedling to adult and adult reproduction greatly influence population trajectories (Maschinski and Walters 2007, p. 56). However, more frequent monitoring (with frequency partially dependent of

mowing regime) is needed to determine threshold reproductive values for population growth and whether disturbance regime has a persistent impact on population demographics (Maschinski 2013, pers. comm.).

Summary of Factors Affecting the Species

Section 4 of the Act (16 U.S.C. 1533), and its implementing regulations at 50 CFR part 424, set forth the procedures for adding species to the Federal Lists of Endangered and Threatened Wildlife and Plants. Under section 4(a)(1) of the Act, we may determine a species to be endangered or threatened due to one or more of the following five factors: (A) The present or threatened destruction, modification, or curtailment of its habitat or range; (B) overutilization for commercial, recreational, scientific, or educational purposes; (C) disease or predation; (D) the inadequacy of existing regulatory mechanisms; or (E) other natural or manmade factors affecting its continued existence. Listing actions may be warranted based on any of the above threat factors, singly or in combination. Each of these factors as applied to these two plants is discussed below.

A. The Present or Threatened Destruction, Modification, or Curtailment of Its Habitat or Range

Brickellia mosieri and *Linum carteri* var. *carteri* have experienced substantial destruction, modification, and curtailment of their habitat and range (see Status Assessment, above). Specific threats to these plants included in this factor include habitat loss, fragmentation, and modification caused by development (i.e., conversion to both urban and agricultural land uses) and inadequate fire management. Each of these threats and its specific effects on these plants are discussed in detail below.

Human Population Growth and Development

The pine rockland community of south Florida, to which both plants are endemic, is critically imperiled globally (FNAI 2012, p. 27). Since the 1800s, residential and commercial development and agriculture have drastically reduced the habitat for these plants throughout pine rocklands in south Florida. When the Florida East Coast (FEC) Railroad reached Miami in 1896, industrial logging began and pinelands were clearcut over the next 50 years (Snyder *et al.* 1990, p. 271). Groves of tropical trees were planted on well-drained (and previously cleared) pinelands; with the invention of the

“rock plow” in 1954, large-scale clearing of pinelands for row crops began (Snyder *et al.* 1990, p. 272). Due to these impacts combined with increased residential development from the early 1900s, pine rockland habitat in Miami-Dade County, including ENP, was reduced to about 11 percent of its natural extent, from approximately 74,000 hectares (ha) (183,000 acres (ac)) to only 8,140 ha (20,100 ac) in 1996 (Kernan and Bradley 1996, p. 2). Outside of ENP, only about 1 percent of the Miami Rock Ridge pinelands have escaped clearing, and much of what is left is in small remnant blocks isolated from other natural areas (Herndon 1998, p. 1). Habitat loss continues to occur in these plants’ ranges, and most remaining suitable habitat has been negatively altered by human activity.

While Miami-Dade County has developed a network of public conservation lands including some of these pine rocklands, much of the remaining habitat occurs on private lands as well as publically owned lands not managed for conservation. Species occurrences and suitable habitat remaining on these lands are threatened by habitat loss and degradation, and threats are expected to accelerate with increased development. The human population within Miami-Dade County, which comprises the historical and current ranges for these plants and, therefore, supports all of the remaining occurrences, is currently greater than 2.4 million people, and the population is expected to grow to more than 4 million by 2060, an annual increase of roughly 30,000 people (Zwick and Carr 2006, p. 20). Approximately 47 percent (8 sites) of extant *Brickellia mosieri* occurrences, and 28 percent (2 sites) of extant *Linum carteri* var. *carteri* occurrences, are located on private land within this County; however, it is likely that these plants will be lost from most of these sites, with increased development pressure.

Development, such as road construction, can also threaten these plants’ habitat on public lands. This is especially true for *Linum carteri* var. *carteri*, whose association with disturbed areas is more likely to result in occurrences in firebreaks and other edge areas subject to increased development pressure and effects. For example, one colony of 11–100 *L. c.* var. *carteri* individuals located within the FEC Railway right-of-way at Old Dixie Pineland was destroyed by the construction of the South Miami-Dade Busway in 2007 (Bradley and van der Heiden 2013, p. 15). In addition, one of the two colonies of *L. c.* var. *carteri* on Camp Owaissa Bauer Addition occurs

along the edge of pine rockland along Krome Avenue, and is threatened by the proposed widening of that road.

Another human-related factor that can modify public and private lands alike is the potential for high levels of nutrients from agricultural and urban areas to enter into pine rockland systems. Such chemical alteration of pine rockland soil, which has naturally low amounts of phosphorus and nitrogen, can result in changes to vegetation composition and structure, at the expense of pine rockland endemics such as *Brickellia mosieri* and *Linum carteri* var. *carteri*. This is currently not considered a problem in most intact pine rockland systems, but could likely be an issue where restoration is required (Gann 2013a, pers. comm.).

Habitat Fragmentation

Habitat fragmentation reduces the size of plant populations, and increases spatial isolation of remnants. Barrios *et al.* (2011, p. 1062) investigated the effects of fragmentation on a threatened pine rockland plant, *Angadenia berteroi* (pineland golden trumpet), and found that abundance and fragment size were positively related. Possley *et al.* (2008, p. 385) studied the effects of fragment size on species composition in south Florida pine rocklands, and found that plant species richness and fragment size were positively correlated (although some small fragments supported nearly as many species as the largest fragment). Composition of fragmented habitat typically differs from that of intact forests, as isolation and edge effects increase leading to increased abundance of disturbance-adapted species (weedy species, nonnative invasive species) and lower rates of pollination and propagule dispersal (Laurence and Bierregaard 1997, pp. 347–350.; Noss and Csuti 1997, pp. 284–299). The degree to which fragmentation threatens the dispersal abilities of *Brickellia mosieri* and *Linum carteri* var. *carteri* is unknown. Because *B. mosieri* is thought to be dispersed, to some degree, by wind, dispersal-related impacts are probably less than those experienced by *L. c.* var. *carteri*, which has heavier seeds. In the historical landscape, where pine rockland occurred within a mosaic of wetlands, water may have acted as a dispersal vector for all pine rockland seeds, and especially for plants such as *L. c.* var. *carteri*. In the current, fragmented landscape, this type of dispersal would no longer be possible. While additional dispersal vectors for *L. c.* var. *carteri* may include animals and (in certain locations) mowing equipment, it is likely that

fragmentation has effectively reduced this taxon's ability to disperse.

While pollination research has not been conducted for *Brickellia mosieri* or *Linum carteri* var. *carteri*, research regarding other species and ecosystems provides valuable information regarding potential effects of fragmentation to these plants. Effects of fragmentation on pollinators may include changes to the pollinator community as a result of limitation of pollinator-required resources (e.g., reduced availability of rendezvous plants, nesting and roosting sites, and nectar/pollen); these changes may include changes to pollinator community composition, species abundance and diversity, and pollinator behavior (Rathcke and Jules 1993, pp. 273–275; Kremen and Ricketts 2000, p. 1227; Harris and Johnson 2004, pp. 30–33). As a result, plants in fragmented habitats may experience lower visitation rates, which in turn may result in reduced seed production of the pollinated plant (which may lead to reduced seedling recruitment), reduced pollen dispersal, increased inbreeding, reduced genetic variability, and ultimately reduced population viability (Rathcke and Jules 1993, p. 275; Goverde *et al.* 2002, pp. 297–298; Harris and Johnson 2004, pp. 33–34).

In addition to effects on pollination, fragmentation of natural habitats often alters other ecosystems' functions and disturbance regimes. Fragmentation results in an increased proportion of "edge" habitat, which in turn has a variety of effects, including changes in microclimate and community structure at various distances from the edge (Margules and Pressey 2000, p. 248), altered spatial distribution of fire (greater fire frequency in areas nearer the edge) (Cochrane 2001, pp. 1518–1519), and increased pressure from nonnative invasive plants and animals that may out-compete or disturb native plant populations. The effects of fragmentation on fire go beyond edge effects and include reduced likelihood and extent of fires, and altered behavior and characteristics (e.g., intensity) of those fires that do occur. Habitat fragmentation encourages the suppression of naturally occurring fires, and has prevented fire from moving across the landscape in a natural way, resulting in an increased amount of habitat suffering from these negative impacts. High fragmentation of small habitat patches within an urban matrix discourages the use of prescribed fire as well due to logistical difficulties (see Fire Management, below). Forest fragments in urban settings are also subject to increased likelihood of certain types of human-related disturbance,

such as the dumping of trash (Chavez and Tynon 2000, p. 405). The many effects of habitat fragmentation may work in concert to threaten the local persistence of a species; when a species' range of occurrence is limited, threats to local persistence increase extinction risk.

Fire Management

One of the primary threats to both of these plants is habitat modification and degradation through inadequate fire management, which includes both the lack of prescribed fire and suppression of natural fires. Where the term "fire-suppressed" is used below, it describes degraded pine rockland conditions resulting from a lack of adequate fire (natural or prescribed) in the landscape. Historically, frequent (approximately twice per decade), lightning-induced fires were a vital component in maintaining native vegetation and ecosystem functioning within south Florida pine rocklands (see Status Assessment, above). A period of just 10 years without fire may result in a marked decrease in the number of herbaceous species due to the effects of shading and litter accumulation (FNAI 2010, p. 63). Exclusion of fire for approximately 25 years will likely result in gradual hammock development over that time period, leaving a system that is very fire resistant if additional pre-fire management (e.g., mechanical hardwood removal) is not undertaken.

Now, natural fires are unlikely to occur or are likely to be suppressed in the remaining, highly fragmented pine rockland habitat. The suppression of natural fires has reduced the size of the areas that burn, and habitat fragmentation has prevented fire from moving across the landscape in a natural way. Without fire, successional climax from pine rockland to rockland hammock is rapid, and displacement of native species by invasive nonnative plants often occurs. Understory plants such as *Brickellia mosieri* and *Linum carteri* var. *carteri* are shaded out by hardwoods and nonnatives alike. Shading may also be caused by a fire-suppressed (and, in some cases, planted) pine canopy that has evaded the natural thinning effects that fire has on seedlings and smaller trees. Gann (2013a, pers. comm.) indicates this is also a threat to pine rockland habitat on the Miami Rock Ridge. Whether the dense canopy is composed of pine, hardwoods, nonnatives, or a combination, seed germination and establishment are inhibited in fire-suppressed habitat due to accumulated leaf litter, which also changes soil moisture and nutrient availability (Hiers

et al. 2007, pp. 811–812). This alteration to microhabitat can also inhibit seedling establishment as well as negatively influence flower and fruit production (Wendelberger and Maschinski 2009, pp. 849–851), thereby reducing sexual reproduction in fire-adapted species such as *B. mosieri* and *L. c. var. carteri* (Geiger 2002, pp. 78–79, 81–83).

After an extended period of inadequate fire management in pine rocklands, it becomes necessary to control invading native hardwoods mechanically, since excess growth of native hardwoods would result in a hot fire, which can be destructive. Mechanical treatments cannot entirely replace fire because pine trees, understory shrubs, grasses, and herbs all contribute to an ever-increasing layer of leaf litter, covering herbs and preventing germination, as discussed above. Leaf litter will continue to accumulate even if hardwoods are removed mechanically. In addition, the ashes left by fires provide important post-fire nutrient cycling, which is not provided via mechanical removal.

Brickellia mosieri—All occurrences of *Brickellia mosieri* are affected by some degree of inadequate fire management, with the primary threat being shading by hardwoods (Bradley and Gann 1999, p. 15; Bradley and Gann 2005, page numbers not applicable). While management of some County conservation lands (e.g., those in Richmond Pinelands complex and Navy Wells Pineland Preserve) includes regular burning, other such lands can be severely fire-suppressed. For example, the *B. mosieri* population at Pine Shore Pineland Preserve may be the most endangered (due to lack of adequate fire management), and is expected to be extirpated within 10 years if fires are not reintroduced (Possley 2013a, pers. comm.). Even in areas under active management, some portions are typically fire-suppressed, thereby threatening populations of this species.

Linum carteri var. *carteri*—Of the seven extant occurrences of *Linum carteri* var. *carteri*, six are threatened to some degree by inadequate fire management. Three of these populations (Camp Owaissa Bauer Addition, Montgomery Botanical Center, and Rockdale Pineland) occur adjacent to fire-suppressed pine rocklands (Bradley and van der Heiden 2013, pp. 13–16). One population (R. Hardy Matheson Preserve) occurs in previously cleared pine rockland habitat in areas of open canopy gaps and exposed bare rock substrate (Bradley and van der Heiden 2013, p. 16). Pine rocklands at Chapman Field, USDA Subtropical Horticultural Research Station are severely fire-

suppressed, and the plant now occurs only adjacent to the pine rocklands or in nearby open fields (Bradley and van der Heiden 2013, p. 13). In addition, one historical population (at Gifford Arboretum Pineland) may have been extirpated due to the effects of inadequate fire management (Bradley and van der Heiden 2013, p. 14). Bradley and Gann (1999, pp. 71–72) suggested that the lack of fires in most forest fragments in Miami-Dade County during the last century may be one of the reasons why this taxon occurs primarily in disturbed areas.

Implementation of a prescribed fire program in Miami-Dade County has been hampered by a shortage of resources, and by logistical difficulties and public concern related to burning next to residential areas. Many homes have been built in a mosaic of pine rockland, so the use of prescribed fire in many places has become complicated because of potential danger to structures and smoke generated from the burns. Nonprofit organizations such as IRC have similar difficulties in conducting prescribed burns due to difficulties with permitting and obtaining the necessary permissions as well as hazard insurance limitations (Gann 2013a, pers. comm.). Few private landowners have the means and/or desire to implement prescribed fire on their property, and doing so in a fragmented urban environment is logistically difficult and may be costly. One of the few privately owned pine rocklands that is successfully managed with prescribed burning is Pine Ridge Sanctuary, located in a more agricultural (less urban) matrix in the southwestern portion of *Brickellia mosieri*'s current range, which was last burned in November 2010 (Glancy 2013, pers. comm.).

Conservation Efforts To Reduce the Present or Threatened Destruction, Modification, or Curtailment of Habitat or Range

In 1979, Miami-Dade County enacted the Environmentally Endangered Lands (EEL) Covenant Program, which reduces taxes for private landowners of natural forest communities (NFCs; pine rocklands and tropical hardwood hammocks) who agree not to develop their property and manage it for a period of 10 years, with the option to renew for additional 10-year periods (Service 1999, p. 3–177). Although these temporary conservation easements provide valuable protection for their duration, they are not considered under Factor D, below, because they are voluntary agreements and not regulatory in nature. Miami-Dade County currently has approximately 59 pine rockland

properties enrolled in this program, preserving 69.4 ha (172 ac) of pine rockland habitat (Johnson 2012, pers. comm.). The vast majority of these properties are small—only three are larger than 2 ha (5 ac)—and many are in need of habitat management such as prescribed fire and removal of nonnative invasive plants. Of the 59 pine rockland properties, three have known populations of *Brickellia mosieri*. Two of these, a 1.3-ha (3.3-ac) parcel and a 5.7-ha (14-ac) parcel, are in good overall condition. The other, a 5.75-ha (14.2-ac) parcel, has heavy cover by exotics, and illegal clearing of NFC vegetation was observed during a 2013 site inspection. Thus, while EEL covenant lands have the potential to provide valuable habitat for these plants and reduce threats in the near term, the actual effect of these conservation lands is largely determined by whether individual land owners follow prescribed EEL management plans and NFC regulations (see Local under Factor D).

Since 2005, the Service has funded IRC to facilitate restoration and management of privately owned pine rockland habitats in Miami-Dade County. These programs included prescribed burns, nonnative plant control, light debris removal, hardwood management, reintroduction of pines where needed, and development of management plans. One of these programs, called the Pine Rockland Initiative, includes 10-year cooperative agreements between participating landowners and the Service/IRC to ensure restored areas will be managed appropriately during that time. Although most of these objectives have been achieved, IRC has not been able to conduct the desired prescribed burns, due to logistical difficulties as discussed above (see Fire Management).

Fairchild Tropical Botanic Garden (FTBG), with the support of various Federal, State, local, and nonprofit organizations, has established the “Connect to Protect Network.” The objective of this program is to encourage widespread participation of citizens to create corridors of healthy pine rocklands by planting stepping stone gardens and rights-of-way with native pine rockland species, and restoring isolated pine rockland fragments. By doing this, FTBG hopes to increase the probability that pollination and seed dispersal vectors can find and transport seeds and pollen across developed areas that separate pine rockland fragments to improve gene flow between fragmented plant populations and increase the likelihood that these plants will persist over the long term. Although these

projects may serve as valuable components toward the conservation of pine rockland species and habitat, they are dependent on continual funding, as well as participation from private landowners, both of which may vary through time.

B. Overutilization for Commercial, Recreational, Scientific, or Educational Purposes

We have no evidence suggesting that overutilization for commercial, recreational, scientific, or educational purposes is a threat to *Brickellia mosieri*. Except for its rarity, the species does not possess any attributes that would make it desirable to collectors, such as showy foliage or flowers, and there are no known medicinal, culinary, or religious uses for this species. We also have no evidence that overutilization is a threat for *Linum carteri* var. *carteri*. However, FTBG states that the species is a member of the *Linum rigidum* complex and, therefore, may contain the α -carotenoids leutin and 5,6-monoepoxide (Robertson 1971, p. 658), both of which are hypothesized to reduce the risk of certain cancers (Fellows *et al.* 2004, p. 96). At this time, we have no evidence indicating that *L. c.* var. *carteri* is being used for this purpose. Therefore, we believe that collection for medicinal purposes is not a threat at this time. Based on our analysis of the best available scientific and commercial information, we find that collecting for commercial or scientific reasons or recreational activities is not a threat to *B. mosieri* or *L. c.* var. *carteri* in any portion of their ranges at this time and is not likely to become so in the future. Threats to these plants related to other aspects of recreation and similar human activities (i.e., not related to overutilization) are discussed in Factor E.

C. Disease or Predation

No diseases or incidences of predation have been reported for *Brickellia mosieri* and *Linum carteri* var. *carteri*.

D. The Inadequacy of Existing Regulatory Mechanisms

Under this factor, we examine whether existing regulatory mechanisms are inadequate to address the threats to the species discussed under the other factors. Section 4(b)(1)(A) of the Act requires the Service to take into account “those efforts, if any, being made by any State or foreign nation, or any political subdivision of a State or foreign nation, to protect such species. . . .” In relation to Factor D, we interpret this language to require the Service to consider

relevant Federal, State, and tribal laws, plans, regulations, and other such mechanisms that may minimize any of the threats we describe in threat analyses under the other four factors, or otherwise enhance conservation of the species. We give strongest weight to statutes and their implementing regulations and to management direction that stems from those laws and regulations. An example would be State governmental actions enforced under a State statute or constitution, or Federal action under statute.

Federal

These plants have no Federal regulatory protection in their known occupied and suitable habitat. Neither taxon occurs on National Wildlife Refuge or National Park land. *Brickellia mosieri* is known to occur on Federal lands within the Richmond Pinelands Complex, including lands owned by the U.S. Coast Guard and the National Oceanic and Atmospheric Association (NOAA; small portion of Martinez Pineland). The only known Federal occurrence of *Linum carteri* var. *carteri* is on Chapman Field USDA Subtropical Horticultural Research Station. There are no Federal protections for candidate species on these properties. These plants primarily occur on State- or County-owned and private land (Tables 1 and 2), and development of these areas will likely require no Federal permit or other authorization. Therefore, projects that affect them are usually not analyzed under the National Environmental Policy Act (NEPA) (42 U.S.C. 4321 *et seq.*).

State

Brickellia mosieri and *Linum carteri* var. *carteri* are listed on the Regulated Plant Index as endangered under Chapter 5B–40, Florida Administrative Code. The Regulated Plant Index also includes all federally listed endangered and threatened plant species. This listing provides little or no habitat protection beyond the State's Development of Regional Impact process, which discloses impacts from projects, but provides no regulatory protection for State-listed plants on private lands.

Florida Statutes 581.185 sections (3)(a) and (b) prohibit any person from willfully destroying or harvesting any species listed as endangered or threatened on the Index, or growing such a plant on the private land of another, or on any public land, without first obtaining the written permission of the landowner and a permit from the Florida Department of Plant Industry. The statute further provides that any

person willfully destroying or harvesting; transporting, carrying, or conveying on any public road or highway; or selling or offering for sale any plant listed in the Index as endangered must have a permit from the State at all times when engaged in any such activities.

In addition, subsections (8)(a) and (b) of the statute waive State regulation for certain classes of activities for all species on the Regulated Plant Index, including the clearing or removal of regulated plants for agricultural, forestry, mining, construction (residential, commercial, or infrastructure), and fire-control activities by a private landowner or his or her agent. However, section (10) of the statute provides for consultation similar to section 7 of the Federal Act for listed species by requiring the Department of Transportation to notify the FDACS and the Endangered Plant Advisory Council of planned highway construction at the time bids are first advertised, to facilitate evaluation of the project for listed plant populations, and to “provide for the appropriate disposal of such plants” (i.e., transplanting).

Local

In 1984, Section 24–49 of the Code of Miami-Dade County established regulation of County-designated NFCs, which include both pine rocklands and tropical hardwood hammocks. These regulations were placed on specific properties throughout the county by an act of the Board of County Commissioners in an effort to protect environmentally sensitive forest lands. The Miami-Dade County Department of Regulatory and Economic Resources (RER) has regulatory authority over NFCs and is charged with enforcing regulations that provide partial protection on the Miami Rock Ridge. Miami-Dade Code typically allows up to 20 percent of a pine rockland designated as NFC to be developed, and requires that the remaining 80 percent be placed under a perpetual covenant. In certain circumstances, where the landowner can demonstrate that limiting development to 20 percent does not allow for “reasonable use” of the property, additional development may be approved. NFC landowners are also required to obtain an NFC permit for any work, including removal of nonnatives within the boundaries of the NFC on their property. The NFC program is responsible for ensuring that NFC permits are issued in accordance with the limitations and requirements of the code and that appropriate NFC preserves are established and maintained in conjunction with the

issuance of an NFC permit. The NFC program currently regulates approximately 600 pine rockland or pine rockland/hammock properties, comprising approximately 1,200 ha (3,000 ac) of habitat (Joyner 2013, pers. comm.). NFC regulations are designed to prevent clearing or destruction of native vegetation within preserved areas; however, illegal development and destruction of pine rockland continues to occur, despite these regulations. When discovered, RER pursues unpermitted work through appropriate enforcement action and seeks restoration when possible.

Fee Title Properties

In 1990, Miami-Dade County voters approved a 2-year property tax to fund the acquisition, protection, and maintenance of environmentally endangered lands. The EEL Program identifies and secures these lands for preservation. Under this program to date, Miami-Dade County has acquired a total of approximately 255 ha (630 ac) of pine rockland. In addition, approximately 445 ha (1,100 ac) of pine rockland are owned by the Miami-Dade County Parks and Recreation Department and managed by the EEL Program, including some of the largest remaining areas of pine rockland habitat on the Miami Rock Ridge outside of ENP (e.g., Larry and Penny Thompson Park, Zoo Miami pinelands, and Navy Wells Pineland Preserve).

While State and local regulations, and fee title properties, do provide for protection of these plants specifically, and pine rockland habitat in general, they are either not effective or not implemented sufficiently to alleviate the threats to these plants or their habitat.

E. Other Natural or Manmade Factors Affecting Its Continued Existence

Brickellia mosieri and *Linum carteri* var. *carteri* are both threatened by other natural or manmade factors that affect each taxon to varying degrees. Specific threats to these plants included in this factor consist of the spread of nonnative invasive plants, potentially incompatible management practices (such as mowing and herbicide use), direct impacts to plants from recreation and other human activities, small population size and isolation, climate change, and the related risks from environmental stochasticity (extreme weather) on these small populations. Each of these threats and its specific effect on these plants are discussed in detail below.

Nonnative Plant Species

Nonnative plants have significantly affected pine rocklands, and threaten all occurrences of *Brickellia mosieri* and *Linum carteri* var. *carteri* to some degree (Bradley and Gann 1999, pp. 15, 72; Bradley and Gann 2005, page numbers not applicable; Bradley 2007, pers. comm.; Bradley and van der Heiden 2013, pp. 12–16). As a result of human activities, at least 277 taxa of nonnative plants have invaded pine rocklands throughout south Florida (Service 1999, p. 3–175). *Neyraudia neyraudiana* (Burma reed) and *Schinus terebinthifolius* (Brazilian pepper) threaten both plants (Bradley and Gann 1999, pp. 13, 72). *S. terebinthifolius*, a nonnative tree, is the most widespread and one of the most invasive species. It forms dense thickets of tangled, woody stems that completely shade out and displace native vegetation (Loflin 1991, p. 19; Langeland and Craddock Burks 1998, p. 54). *Acacia auriculiformis* (earleaf acacia), *Rhynchelytrum repens* (natal grass), *Lantana camara* (shrub verbena), and *Albizia lebbek* (tongue tree) are some of the other nonnative species in pine rocklands. More species of nonnative plants could become problems in the future, such as *Lygodium microphyllum* (Old World climbing fern), which is a serious threat throughout south Florida.

Nonnative invasive plants compete with native plants for space, light, water, and nutrients, and make habitat conditions unsuitable for both *Brickellia mosieri* and *Linum carteri* var. *carteri*, which respond positively to open conditions. They also affect the characteristics of a fire when it does occur. Historically, pine rocklands had an open, low understory where natural fires remained patchy with low temperature intensity, thus sparing many native plants such as *B. mosieri* and *L. c.* var. *carteri*. Dense infestations of *Neyraudia neyraudiana* and *Schinus terebinthifolius* cause higher fire temperatures and longer burning periods. With the presence of invasive nonnative species, it is uncertain how fire, even under a managed situation, will affect these plants. Bradley and Gann (1999, pp. 13, 71–72) indicated that the control of nonnative plants is one of the most important conservation actions for these plants and a critical part of habitat maintenance.

Management of nonnative invasive plants in pine rocklands in Miami-Dade County is further complicated because the vast majority of pine rocklands are small, fragmented areas bordered by urban development. Areas near managed pine rockland that contain

nonnative species can act as a seed source of nonnatives allowing them to continue to invade the surrounding pine rockland (Bradley and Gann 1999, p. 13).

Mowing

Linum carteri var. *carteri*'s occurrence in disturbed, open areas such as firebreaks and road rights-of-way makes it much more susceptible than *Brickellia mosieri* to disturbance factors such as mowing. According to Bradley and van der Heiden (2013, pp. 12–16), five of the seven extant populations of this variety are vulnerable to changes in mowing practices. Mowing can serve to maintain an open understory in the absence of fire (Bradley and Gann 1999, p. 71; Maschinski and Walters 2007, p. 56). For example, at the Montgomery Botanical Center, occasional mowing is thought to keep competing vegetation at bay while still allowing the plants to complete their life cycle (Maschinski 2011, pers. comm.). However, mowing can also threaten this variety depending on the timing, frequency, and intensity of its application (see Status Assessment, above). If not properly applied, mowing can eliminate reproduction entirely in very young plants or delay reproductive maturation (Maschinski and Walters 2007, p. 56; 2008, p. 28). In some instances, adult plants may be killed, but typically mowing simply disrupts the apical meristem (as with natural levels of herbivory) and triggers production of additional lateral branches; plants can produce compensatory branches following mowing and live to reproduce at a later time as long as the mowing regime is not too frequent (Maschinski and Walters 2008, p. 28). The impact of mowing can be modified by the timing and frequency of the mowing event, rainfall prior to and following the event, and the numbers of plants that have reached reproductive state prior to mowing (Maschinski and Walters 2008, p. 27). Maschinski and Walters (2008, p. 28) recommended adjusting the timing of mowing to occur at least three weeks after flowering is observed to allow a higher probability of adults setting fruit prior to the mowing event. With flexibility and proper instructions to land managers and ground crews, mowing practices could be implemented in such a way as to scatter seeds and reduce competition with little effect on population reproductive output for the year (Maschinski and Walters 2008, p. 28).

Herbicides

As with mowing, the use of herbicides is more likely to threaten populations of

Linum carteri var. *carteri*, due to the variety's occurrence in disturbed, open areas, which are also the typical habitat of weedy and nonnative plant species. Two of the seven extant *L. c.* var. *carteri* occurrences—the C-103 Canal and Chapman Field USDA Subtropical Horticultural Research Station—are in such areas. The use of herbicides for weed control here would be detrimental to these populations.

Recreation and Other Human Activities

Linum carteri var. *carteri*'s occurrence in disturbed, open areas such as firebreaks and road rights-of-way also makes it much more susceptible than *Brickellia mosieri* to recreational and other human activities. These activities may inadvertently impact some populations of *L. c.* var. *carteri*. In the past, mountain biking has been identified as a threat at R. Hardy Matheson Preserve (Bradley and Gann 1999, pp. 71, 74; Bradley 2007, pers. comm.), but this was remedied by placement of protective fencing (Possley 2012, pers. comm.). More recently, a colony of *L. c.* var. *carteri* at Camp Owaissa Bauer Addition has been impacted by “yard sales” and car parking along Krome Avenue (Bradley and van der Heiden 2013, p. 13). While these impacts are usually some distance from the plants, they sometimes encroach on the edge of the natural area and have the potential to trample the plants. This plant occurs in similar habitat on Rockdale Pineland, where it is found along the edges of the abandoned FEC Railroad tracks, adjacent to pine rockland habitat (Bradley and van der Heiden 2013, p. 16). Here, plants have also been trampled from parking vehicles and machinery along the edges of the railroad right-of-way (Bradley and van der Heiden 2013, p. 16). While these activities have affected individual plants in some populations, they are not likely to have caused significant population declines in the taxon.

Effects of Small Population Size and Isolation

Endemic species whose populations exhibit a high degree of isolation are extremely susceptible to extinction from both random and nonrandom catastrophic natural or human-caused events. Species that are restricted to geographically limited areas are inherently more vulnerable to extinction than widespread species because of the increased risk of genetic bottlenecks, random demographic fluctuations, climate change, and localized catastrophes such as hurricanes and disease outbreaks (Mangel and Tier

1994, p. 607; Pimm *et al.* 1988, p. 757). These problems are further magnified when populations are few and restricted to a very small geographic area, and when the number of individuals is very small. Populations with these characteristics face an increased likelihood of stochastic extinction due to changes in demography, the environment, genetics, or other factors (Gilpin and Soule 1986, pp. 24–34).

Small, isolated populations, such as those in fragmented habitat, often exhibit reduced levels of genetic variability, although the ultimate effect of these changes is dependent on a plant's specific life history, reproductive system, and interaction with pollinators and dispersal vectors (which may themselves be affected by fragmentation) (Young *et al.* 1996, p. 413). While research results clearly indicate that isolation/fragmentation has population genetic consequences for plants, consequences are varied and for some species there may be a "fragmentation threshold" below which genetic variation is not lost (Young *et al.* 1996, p. 416). No such study has been conducted for *Brickellia mosieri* or *Linum carteri* var. *carteri*, so whether these plants exhibit such a threshold is not known. Reduced genetic variability generally diminishes a species' capacity to adapt and respond to environmental changes, thereby decreasing the probability of long-term persistence (e.g., Barrett and Kohn 1991, p. 4; Newman and Pilson 1997, p. 361). Very small plant populations may experience reduced reproductive vigor due to ineffective pollination or inbreeding depression. Isolated individuals have difficulty achieving natural pollen exchange, which limits the production of viable seed. The problems associated with small population size and vulnerability to random demographic fluctuations or natural catastrophes are further magnified by synergistic (interaction of two or more components) effects with other threats, such as those discussed above.

Only small and fragmented occurrences of these two plants remain. The current ranges of *Brickellia mosieri* and *Linum carteri* var. *carteri* span such a small geographic area—a narrow band (no more than 4.0 km (2.5 mi) in width) along the ridge approximately 30.1 km (18.7 mi) and 26.9 km (16.7 mi) in length, respectively—that all populations could be affected by a single event (e.g., hurricane). Four of the seven remaining populations of *L. c.* var. *carteri* have fewer than 20 individual plants (see Table 2). *B. mosieri* populations occur in higher numbers (Table 1) but are still not considered

sizable. *L. c.* var. *carteri* shows great differences in plant numbers from year to year, probably because individuals typically live 1–2 years and grow from seed. This trait makes them more vulnerable than perennials to changes in environment. Viable plant populations for small, short-lived herbs may consist of tens of thousands of plants (Menges 1991, p. 48; Lande 1995, p. 789). Although robust population viability analyses (including minimum viable population calculations) have not been conducted for these plants, indications are that most existing populations for both plants are at best marginal. Lack of dispersal between occurrences may also be a threat (see Habitat Fragmentation under Factor A).

Climate Change

Climatic changes, including sea level rise (SLR), are major threats to south Florida, including *Brickellia mosieri* and *Linum carteri* var. *carteri*. Our analyses under the Act include consideration of ongoing and projected changes in climate. The terms "climate" and "climate change" are defined by the Intergovernmental Panel on Climate Change (IPCC). The term "climate" refers to the mean and variability of different types of weather conditions over time, with 30 years being a typical period for such measurements, although shorter or longer periods also may be used (IPCC 2007, p. 78). The term "climate change" thus refers to a change in the mean or variability of one or more measures of climate (e.g., temperature or precipitation) that persists for an extended period, typically decades or longer, whether the change is due to natural variability, human activity, or both (IPCC 2007, p. 78).

Scientific measurements spanning several decades demonstrate that changes in climate are occurring, and that the rate of change has been faster since the 1950s. Examples include warming of the global climate system, and substantial increases in precipitation in some regions of the world and decreases in other regions. (For these and other examples, see IPCC 2007, p. 30; and Solomon *et al.* 2007, pp. 35–54, 82–85.)

Scientists use a variety of climate models, which include consideration of natural processes and variability, as well as various scenarios of potential levels and timing of greenhouse gas (GHG) emissions, to evaluate the causes of changes already observed and to project future changes in temperature and other climate conditions (e.g., Meehl *et al.* 2007, entire; Ganguly *et al.* 2009, pp. 11555, 15558; Prinn *et al.* 2011, pp. 527, 529). Although

projections of the magnitude and rate of warming differ after about 2030, the overall trajectory of all the projections is one of increased global warming through the end of this century, even for the projections based on scenarios that assume that GHG emissions will stabilize or decline. Thus, there is strong scientific support for projections that warming will continue through the 21st century, and that the magnitude and rate of change will be influenced substantially by the extent of GHG emissions (IPCC 2007, pp. 44–45; Meehl *et al.* 2007, pp. 760–764 and 797–811; Ganguly *et al.* 2009, pp. 15555–15558; Prinn *et al.* 2011, pp. 527, 529).

Various changes in climate may have direct or indirect effects on species. These effects may be positive, neutral, or negative, and they may change over time, depending on the species and other relevant considerations, such as interactions of climate with other variables (e.g., habitat fragmentation) (IPCC 2007, pp. 8–14, 18–19).

Projected changes in climate and related impacts can vary substantially across and within different regions of the world (e.g., IPCC 2007, pp. 8–12). Therefore, we use "downscaled" projections when they are available and have been developed through appropriate scientific procedures (see Glick *et al.* 2011, pp. 58–61, for a discussion of downscaling). With regard to our analysis for *Brickellia mosieri* and *Linum carteri* var. *carteri*, downscaled projections suggest that SLR is the largest climate-driven challenge to low-lying coastal areas in the subtropical ecoregion of southern Florida (U.S. Climate Change Science Program (USCCSP) 2008, pp. 5–31, 5–32). Several populations of *B. mosieri* occur at elevations less than 2 m (6.6 ft) above sea level. In addition, approximately 50 percent of the known occurrences of *L. c.* var. *carteri* are located along a coastal ridge, making the species highly susceptible to increased storm surges and related impacts associated with SLR.

The long-term record at Key West shows that sea level rose on average 0.229 cm (0.090 in) annually between 1913 and 2013 (National Oceanographic and Atmospheric Administration (NOAA) 2013, p. 1). This equates to approximately 22.9 cm (9.02 in) over the last 100 years. IPCC (2008, p. 28) emphasized it is very likely that the average rate of SLR during the 21st century will exceed the historical rate. The IPCC Special Report on Emission Scenarios (2000, entire) presented a range of scenarios based on the computed amount of change in the climate system due to various potential

amounts of anthropogenic greenhouse gases and aerosols in 2100. Each scenario describes a future world with varying levels of atmospheric pollution leading to corresponding levels of global warming and corresponding levels of SLR. The IPCC Synthesis Report (2007, entire) provided an integrated view of climate change and presented updated projections of future climate change and related impacts under different scenarios.

Subsequent to the 2007 IPCC Report, the scientific community has continued to model SLR. Recent peer-reviewed publications indicate a movement toward increased acceleration of SLR. Observed SLR rates are already trending along the higher end of the 2007 IPCC estimates, and it is now widely held that SLR will exceed the levels projected by the IPCC (Rahmstorf *et al.* 2012, p. 1; Grinsted *et al.* 2010, p. 470). Taken together, these studies support the use of higher end estimates now prevalent in the scientific literature. Recent studies have estimated global mean SLR of 1–2 m (3.3–6.6 ft) by 2100 as follows: 0.75–1.90 m (2.5–6.2 ft; Vermeer and Rahmstorf 2009, p. 21530), 0.8–2.0 m (2.6–6.6 ft; Pfeffer *et al.* 2008, p. 1342), 0.9–1.3 m (3.0–4.3 ft; Grinsted *et al.* 2010, pp. 469–470), 0.6–1.6 m (2.0–5.2 ft; Jevrejeva *et al.* 2010, p. 4), and 0.5–1.40 m (1.6–4.6 ft; National Resource Council 2012, p. 2).

Other processes expected to be affected by projected warming include temperatures, rainfall (amount, seasonal timing, and distribution), and storms (frequency and intensity) (discussed more specifically under Environmental Stochasticity, below). The Massachusetts Institute of Technology (MIT) modeled several scenarios combining various levels of SLR, temperature change, and precipitation differences with human population growth, policy assumptions, and conservation funding changes (see Alternative Future Landscape Models, below). All of the scenarios, from small climate change shifts to major changes, indicate significant effects on coastal Miami-Dade County.

Prior to inundation, pine rocklands are likely to undergo habitat transitions related to climate change, including changes to hydrology and increasing vulnerability to storm surge. Hydrology has a strong influence on plant distribution in these and other coastal areas (IPCC 2008, p. 57). Such communities typically grade from salt to brackish to freshwater species. From the 1930s to 1950s, increased salinity of coastal waters contributed to the decline of cabbage palm forests in southwest Florida (Williams *et al.* 1999, pp. 2056–

2059), expansion of mangroves into adjacent marshes in the Everglades (Ross *et al.* 2000, pp. 101, 111), and loss of pine rockland in the Keys (Ross *et al.* 1994, pp. 144, 151–155). In one Florida Keys pine rockland with an average elevation of 0.89 m (2.9 ft), Ross *et al.* (1994, pp. 149–152) observed an approximately 65 percent reduction in an area occupied by South Florida slash pine over a 70-year period, with pine mortality and subsequent increased proportions of halophytic (salt-loving) plants occurring earlier at the lower elevations. During this same timespan, local sea level had risen by 15 cm (6.0 in), and Ross *et al.* (1994, p. 152) found evidence of groundwater and soil water salinization. Extrapolating this situation to pine rocklands on the mainland is not straightforward, but suggests that similar changes to species composition could arise if current projections of SLR occur and freshwater inputs are not sufficient to prevent salinization. Furthermore, Ross *et al.* (2009, pp. 471–478) suggested that interactions between SLR and pulse disturbances (*e.g.*, storm surges) can cause vegetation to change sooner than projected based on sea level alone. Alexander (1953, pp. 133–138) attributed the demise of pinelands on northern Key Largo to salinization of the groundwater in response to SLR. Patterns of human development will also likely be significant factors influencing whether natural communities can move and persist (IPCC 2008, p. 57; USCCSP 2008, p. 7–6).

The Science and Technology Committee of the Miami-Dade County Climate Change Task Force (Wanless *et al.* 2008, p. 1) recognizes that significant SLR is a very real threat to the near future for Miami-Dade County. In a January 2008 statement, the committee warned that sea level is expected to rise at least 0.9–1.5 m (3–5 ft) within this century (Wanless *et al.* 2008, p. 3). With a 0.9–1.2 m (3–4 ft) rise in sea level (above baseline) in Miami-Dade County: “Spring high tides would be at about 6 to 7 feet; freshwater resources would be gone; the Everglades would be inundated on the west side of Miami-Dade County; the barrier islands would be largely inundated; storm surges would be devastating; landfill sites would be exposed to erosion contaminating marine and coastal environments. Freshwater and coastal mangrove wetlands will not keep up with or offset SLR of 2 ft per century or greater. With a 5-ft rise (spring tides at nearly +8 ft), Miami-Dade County will be extremely diminished” (Wanless *et al.* 2008, pp. 3–4).

Drier conditions and increased variability in precipitation associated with climate change are expected to hamper successful regeneration of forests and cause shifts in vegetation types through time (Wear and Greis 2012, p. 39). Although it has not been well studied, existing pine rocklands have probably been affected by reductions in the mean water table. Climate changes are also forecasted to extend fire seasons and the frequency of large fire events throughout the Coastal Plain (Wear and Greis 2012, p. 43). While restoring fire to pine rocklands is essential to the long-term viability of *Brickellia mosieri* and *Linum carteri* var. *carteri* populations, increases in the scale, frequency, or severity of wildfires could have negative effects on these plants considering their general vulnerability due to small population size, restricted range, few colonies, and relative isolation.

Alternative Future Landscape Models

To accommodate the large uncertainty in SLR projections, researchers must estimate effects from a range of scenarios. Various model scenarios developed at MIT and GeoAdaptive Inc. have projected possible trajectories of future transformation of the south Florida landscape by 2060 based upon four main drivers: climate change, shifts in planning approaches and regulations, human population change, and variations in financial resources for conservation (Vargas-Moreno and Flaxman 2010, pp. 1–6). The scenarios do not account for temperature, precipitation, or species habitat shifts due to climate change, and no storm surge effects are considered. The current MIT scenarios range from an increase of 0.09–1.0 m (0.3–3.3 ft) by 2060.

Based on the most recent estimates of SLR and the data available to us at this time, we evaluated potential effects of SLR using the current “high” range MIT scenario as well as comparing elevations of remaining pine rockland fragments and extant and historical occurrences of *Brickellia mosieri* and *Linum carteri* var. *carteri* occurrences. The “high” range (or “worst case”) MIT scenario assumes high SLR (1 m (3.3 ft) by 2060), low financial resources, a ‘business as usual’ approach to planning, and a doubling of human population. Based on this scenario, pine rocklands along the coast in central Miami-Dade County, including one occurrence of *L. c.* var. *carteri* at R. Hardy Matheson Preserve, would become inundated. The “new” sea level would come up to the edge of pine rockland fragments at the southern end as well, translating to partial inundation or, at a minimum, vegetation

shifts in the pine rocklands in and around Navy Wells. While sea level would not overtake other pine rocklands in urban Miami-Dade County, changes in the salinity of the water table and soils would surely cause vegetation shifts in additional areas. In addition, many existing pine rockland fragments are projected to be developed for housing as the human population grows and adjusts to changing sea levels under this scenario. Actual impacts may be greater or less than anticipated based upon high variability of factors involved (e.g., SLR, human population growth) and assumptions made.

When simply looking at current elevations of pine rockland fragments and occurrences of these plants, it appears that an SLR of 1 m (3.3 ft) will inundate the coastal and southern pine rocklands and cause vegetation shifts largely as described above. SLR of 2 m (6.6 ft) appears to inundate much larger portions of urban Miami-Dade County, including all of Navy Wells and its surrounding area, and with it, several extant occurrences of *Brickellia mosieri*. The western part of urban Miami-Dade County would also be inundated (barring creation of sea walls or other barriers), creating a virtual island of the Miami Rock Ridge. After a 2-m rise in sea level, approximately 75 percent of the remaining pine rockland would still be above sea level but an unknown percentage of these fragments would be negatively impacted by salinization of the water table and soils, which would be exacerbated due to isolation from mainland fresh water flows. Above 2 m (6.6 ft) of SLR, very little pine rockland would remain, with the vast majority either being inundated or experiencing vegetation shifts.

Environmental Stochasticity

The climate of southern Florida is driven by a combination of local, regional, and global events, regimes, and oscillations. There are three main "seasons": (1) the wet season, which is hot, rainy, and humid from June through October; (2) the official hurricane season that extends one month beyond the wet season (June 1 through November 30), with peak season being August and September; and (3) the dry season, which is drier and cooler, from November through May. In the dry season, periodic surges of cool and dry continental air masses influence the weather with short-duration rain events followed by long periods of dry weather.

According to the Florida Climate Center, Florida is by far the most vulnerable State in the United States to hurricanes and tropical storms ([\[coaps.fsu.edu/climate_center/tropicalweather.shtml\]\(http://coaps.fsu.edu/climate_center/tropicalweather.shtml\)\). Based on data gathered from 1856 to 2008, Klotzbach and Gray \(2009, p. 28\) calculated the climatological probabilities for each State being impacted by a hurricane or major hurricane in all years over the 152-year timespan. Of the coastal States analyzed, Florida had the highest climatological probabilities, with a 51 percent probability of a hurricane \(Category 1 or 2\) and a 21 percent probability of a major hurricane \(Category 3 or higher\). From 1856 to 2008, Florida actually experienced 109 hurricanes and 36 major hurricanes. Given the low population sizes and restricted ranges of *Brickellia mosieri* and *Linum carteri* var. *carteri*, and the few isolated occurrences of *L. c. carteri* within locations prone to storm influences, these plants are at substantial risk from hurricanes, storm surges, and other extreme weather. Depending on the location and intensity of a hurricane or other severe weather event, it is possible that these plants could become extirpated or extinct.](http://</p>
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Hurricanes, storm surge, and extreme high tide events are natural events that can pose a threat to both plants. Hurricanes and tropical storms can modify habitat (e.g., through storm surge) and have the potential to destroy entire populations. Climate change may lead to increased frequency and duration of severe storms (Golladay *et al.* 2004, p. 504; McLaughlin *et al.* 2002, p. 6074; Cook *et al.* 2004, p. 1015). Both plants experienced these disturbances historically, but had the benefit of more abundant and contiguous habitat to buffer them from extirpations. With most of the historical habitat having been destroyed or modified, the few remaining populations of these plants could face local extirpations due to stochastic events.

Other processes to be affected by climate change, related to environmental stochasticity, include temperatures, rainfall (amount, seasonal timing, and distribution), and storms (frequency and intensity). Temperatures are projected to rise from 2–5 °C (3.6–9 °F) for North America by the end of this century (IPCC 2007, pp. 7–9, 13). Based upon modeling, Atlantic hurricane and tropical storm frequencies are expected to decrease (Knutson *et al.* 2008, pp. 1–21). By 2100, there should be a 10–30 percent decrease in hurricane frequency. Hurricane frequency is expected to drop due to more wind shear impeding initial hurricane development. However, hurricane winds are expected to increase by 5–10 percent. This is due to more hurricane energy available for

intense hurricanes. In addition to climate change, weather variables are extremely influenced by other natural cycles, such as El Niño Southern Oscillation with a frequency of every 4–7 years, solar cycle (every 11 years), and the Atlantic Multi-decadal Oscillation. All of these cycles influence changes in Floridian weather. The exact magnitude, direction, and distribution of all of these changes at the regional level are difficult to project.

Freezing Temperatures

Occasional freezing temperatures that occur in south Florida are a threat to *Brickellia mosieri* and *Linum carteri* var. *carteri*, causing damage or death to individual plants. Under normal circumstances, occasional freezing temperatures would not result in a significant impact to populations of these plants; however, the small size of some populations means the loss from freezing events of even a few individuals can reduce the viability of the population.

Conservation Efforts To Reduce Other Natural or Manmade Factors Affecting Continued Existence

An IRC program included reintroduction of both *Brickellia mosieri* and *Linum carteri* var. *carteri* in an effort to establish new occurrences of these plants and increase population sizes. To date, *B. mosieri* has been reintroduced to at least one site (George and Avery Pineland), although the status of these plants is currently unknown (Gann 2013b, pers. comm.).

Ex-situ conservation by FTBG consists of seed collection of pine rockland plants, including *Brickellia mosieri* and *Linum carteri* var. *carteri*, to learn about their germination, storage, and cultivation requirements to help safeguard these plants from extinction. FTBG has 22 seed accessions of *B. mosieri*, and a total of 1,589 seeds were provided to the National Center for Genetic Resources Preservation (NGRCP) for long-term storage (Maschinski *et al.* 2009, p. 26). Of *L. c. carteri*, FTBG has 59 accessions, and 2,643 seeds were provided to NGRCP for long-term storage (Maschinski *et al.* 2009, p. 27). Maschinski *et al.* (2009, p. 19 and 21) indicate that both plants are capable of orthodox seed storage. Frozen *B. mosieri* seeds germinated at 55 percent after 1 week of storage, compared to 54 percent of fresh seeds and 40 percent of desiccated seeds (Maschinski *et al.* 2009, p. 19). Frozen *L. c. carteri* seeds germinated at 75 percent after 4 months of storage, compared to 69 percent of fresh seeds and 71–88

percent of desiccated seeds (Maschinski *et al.* 2009, p. 21). These results indicate that seed storage may be a useful strategy for future reintroductions and supplementation of existing populations to increase the numbers and sizes of populations of these plants. As part of FTBG's Connect To Protect Network, reintroduction of endemic pine rockland plants such as *B. mosieri* and *L. c. var. carteri* is planned in corridors (networks of private stepping-stone gardens and public rights-of-way) they hope to create.

Cumulative Effects of Threats

The limited distributions and small population sizes of *Brickellia mosieri* and *Linum carteri* var. *carteri* make them extremely susceptible to further habitat loss, modification, and degradation and other anthropogenic threats. Mechanisms leading to the decline of these plants, as discussed above, range from local (e.g., lack of adequate fire management, mowing, herbicides), to regional (e.g., development, fragmentation, nonnative species), to global influences (e.g., climate change, SLR). The synergistic effects of threats (such as hurricane effects on a species with a limited distribution consisting of just a few small populations) make it difficult to predict population viability. While these stressors may act in isolation, it is more probable that many stressors are acting simultaneously (or in combination) on populations of *B. mosieri* and *L. c. var. carteri*.

Summary of Threats

We have determined that the threats to both *Brickellia mosieri* and *Linum carteri* var. *carteri* consist primarily of habitat loss and modification through urban and agricultural development, lack of adequate fire management, proliferation of nonnative invasive plants, and SLR. Threats described under Factor A—habitat loss, fragmentation, and degradation resulting from development and inadequate fire management, and Factor E—competition from nonnative invasive plants, are believed to be the primary drivers in the historical and recent declines of *B. mosieri* and *L. c. var. carteri*. *L. c. var. carteri* has also been threatened by anthropogenic disturbances which threaten populations in disturbed habitats, such as firebreaks and road rights-of-way, and both plants are suspected to be negatively affected by threats related to small, isolated populations (Factor E). All of these threats are expected to continue to impact populations of these plants in the future. Current local, State,

and Federal regulatory mechanisms (Factor D) are inadequate to protect these plants from taking and habitat loss. Despite the existing regulatory mechanisms, *B. mosieri* and *L. c. var. carteri* continue to decline.

Other factors that are likely to threaten *Brickellia mosieri* and *Linum carteri* var. *carteri* in the future are climate change (including SLR) and extreme weather events (hurricanes, frost events), especially as effects of these could be catastrophic on isolated, small populations of both plants (Factor E). The majority of the remaining populations of these plants are generally small and geographically isolated. The narrow distribution of their populations in hurricane-prone south Florida makes them more susceptible to extirpation from a single catastrophic event. Furthermore, this level of isolation makes natural recolonization of extirpated populations virtually impossible without human intervention.

The above-described threats have had substantial adverse effects on *Brickellia mosieri* and *Linum carteri* var. *carteri* populations and their habitats. Although attempts are ongoing to alleviate some of these threats at some locations, no populations appear to be without one or more major threats.

Proposed Determination

We have carefully assessed the best scientific and commercial information available regarding the past, present, and future threats to *Brickellia mosieri* and *Linum carteri* var. *carteri*. Section 3(6) of the Act defines an endangered species as “any species which is in danger of extinction throughout all or a significant portion of its range” and section 3(20) of the Act defines a threatened species as “any species which is likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range.”

As described in detail above, both plants are currently at risk throughout all of their respective ranges due to the immediacy, severity, and scope of threats from habitat destruction and modification (Factor A) and other natural or manmade factors affecting their continued existence (Factor E), and existing regulatory mechanisms are inadequate to reduce these threats (Factor D). Although actions are ongoing to alleviate some threats, no populations appear to be free of major threats. As a result, impacts from increasing threats, singly or in combination, are likely to result in the extinction of these plants.

Brickellia mosieri

Brickellia mosieri has been extirpated from approximately 13 percent of its historical range, and the primary threats of inadequate fire management (Factor A) and competition from nonnative invasive plants (Factor E) are currently active in the remaining populations. Populations of *B. mosieri* are relatively small and isolated from one another, and the species' ability to recolonize suitable habitat between populations is unknown at this time. Because of the current condition of the populations and life-history traits of the species, it is vulnerable to natural or human-caused changes in its currently occupied habitats. Existing regulatory mechanisms are inadequate to eliminate or even reduce these threats (Factor D). Numerous threats are occurring now and are likely to continue in the foreseeable future, at a high intensity, and across the species' entire range; therefore, we have determined the species is currently on the brink of extinction. Because these threats are placing the species in danger of extinction now and not only at some point in the foreseeable future, we find this species meets the definition of an endangered species rather than a threatened species. Therefore, we are proposing to list it as an endangered species. These threats are currently active, and will continue to affect the populations of *B. mosieri* into the foreseeable future, and these threats will individually and collectively contribute to the species' local extirpation and potential extinction.

Linum carteri var. *carteri*

L. c. var. carteri has been extirpated from approximately 30 percent of its historical range, and threats of inadequate fire management (Factor A) and competition from nonnative, invasive plants (Factor E), as well as other anthropogenic disturbances (Factor E), are currently active in the remaining populations. Populations of *L. c. var. carteri* are small, few in number, and isolated from one another; the taxon's ability to recolonize suitable habitat between populations is unknown at this time. Because of the current condition of the populations and life-history traits of the taxon, it is vulnerable to natural or human-caused changes in its currently occupied habitats. Existing regulatory mechanisms are inadequate to eliminate or even reduce these threats (Factor D). Numerous threats are occurring now and are likely to continue in the foreseeable future, at a high intensity, and across the taxon's entire range;

therefore, we have determined the taxon is currently on the brink of extinction. Because these threats are placing the taxon in danger of extinction now and not only at some point in the foreseeable future, we find this taxon meets the definition of an endangered species rather than a threatened species. Therefore, we are proposing to list it as an endangered species. The threats described above are currently active, and will continue to affect the populations of *L. c. var. carteri* into the foreseeable future, and these threats will individually and collectively contribute to the taxon's local extirpation and potential extinction.

Significant Portion of Its Range

We evaluated the current ranges of *Brickellia mosieri* and *Linum carteri* var. *carteri* to determine if there is any apparent geographic concentration of potential threats for either taxon. Both plants are highly restricted in their ranges, and the threats occur throughout their ranges. We considered the potential threats due to habitat loss and modification from development, lack of adequate fire management, competition from nonnative plants, and SLR, as well as the threats of incompatible land management and other human activities, hurricanes and other extreme weather, and small populations with restricted range. We found no concentration of threats because of the plants' limited and curtailed ranges, and uniformity of the threats throughout their entire ranges. Having determined that *B. mosieri* and *L. c. var. carteri* are endangered throughout their entire ranges, it is not necessary to evaluate whether there are any significant portions of their ranges.

Available Conservation Measures

Conservation measures provided to species listed as endangered or threatened under the Act include recognition, recovery actions, requirements for Federal protection, and prohibitions against certain practices. Recognition through listing results in public awareness and conservation by Federal, State, Tribal, and local agencies; private organizations; and individuals. The Act encourages cooperation with the States and requires that recovery actions be carried out for all listed species. The protection required by Federal agencies and the prohibitions against certain activities are discussed, in part, below.

The primary purpose of the Act is the conservation of endangered and threatened species and the ecosystems upon which they depend. The ultimate goal of such conservation efforts is the

recovery of these listed species, so that they no longer need the protective measures of the Act. Subsection 4(f) of the Act requires the Service to develop and implement recovery plans for the conservation of endangered and threatened species. The recovery planning process involves the identification of actions that are necessary to halt or reverse the species' decline by addressing the threats to its survival and recovery. The goal of this process is to restore listed species to a point where they are secure, self-sustaining, and functioning components of their ecosystems.

Recovery planning includes the development of a recovery outline shortly after a species is listed, preparation of a draft and final recovery plan, and revisions to the plan as significant new information becomes available. The recovery outline guides the immediate implementation of urgent recovery actions and describes the process to be used to develop a recovery plan. The recovery plan identifies site-specific management actions that will achieve recovery of the species, measurable criteria that determine when a species may be downlisted or delisted, and methods for monitoring recovery progress. Recovery plans also establish a framework for agencies to coordinate their recovery efforts and provide estimates of the cost of implementing recovery tasks. Recovery teams (comprising species experts, Federal and State agencies, nongovernmental organizations, and stakeholders) are often established to develop recovery plans. When completed, the recovery outline, draft recovery plan, and the final recovery plan will be available on our Web site (<http://www.fws.gov/endangered>), or from our South Florida Ecological Services Field Office (see **FOR FURTHER INFORMATION CONTACT**).

Implementation of recovery actions generally requires the participation of a broad range of partners, including other Federal agencies, States, Tribal, nongovernmental organizations, businesses, and private landowners. Examples of recovery actions include habitat restoration (e.g., restoration of native vegetation), research, captive propagation and reintroduction, and outreach and education. The recovery of many listed species cannot be accomplished solely on Federal lands because their range may occur primarily or solely on non-Federal lands. To achieve recovery of these plants requires cooperative conservation efforts on private, State, and Tribal lands.

If these plants are listed, funding for recovery actions will be available from a variety of sources, including Federal

budgets, State programs, and cost-share grants for non-Federal landowners, the academic community, and nongovernmental organizations. In addition, under section 6 of the Act, the State of Florida would be eligible for Federal funds to implement management actions that promote the protection and recovery of *Brickellia mosieri* and *Linum carteri* var. *carteri*. Information on our grant programs that are available to aid species recovery can be found at: <http://www.fws.gov/grants>.

Although *Brickellia mosieri* and *Linum carteri* var. *carteri* are only proposed for listing under the Act at this time, please let us know if you are interested in participating in recovery efforts for these plants. Additionally, we invite you to submit any new information on these plants whenever it becomes available and any information you may have for recovery planning purposes (see **FOR FURTHER INFORMATION CONTACT**).

Federal agencies are required to confer with us informally on any action that is likely to jeopardize the continued existence of a species that is proposed for listing. Section 7(a)(4) requires Federal agencies to confer with the Service on any action that is likely to jeopardize the continued existence of a species proposed for listing or result in destruction or adverse modification of proposed critical habitat. If a species is listed subsequently, section 7(a)(2) requires Federal agencies to ensure that activities they authorize, fund, or carry out are not likely to jeopardize the continued existence of the species or destroy or adversely modify its critical habitat. If a Federal action may adversely affect a listed species or its critical habitat, the responsible Federal agency must enter into formal consultation with the Service.

Federal agency actions within these plants' habitat that may require conference or consultation or both as described in the preceding paragraph include, but are not limited to, the funding of, carrying out, or issuance of permits for resource management activities, development of facilities, road and trail construction, recreational programs and any other landscape-altering activities on Federal lands administered by the Department of Defense, National Park Service, Fish and Wildlife Service, and U.S. Forest Service; or the issuance of Federal permits under section 404 of the Clean Water Act (33 U.S.C. 1251 *et seq.*) by the U.S. Army Corps of Engineers; construction and management of gas pipeline and power line rights-of-way by the Federal Energy Regulatory Commission; construction and

maintenance of roads or highways by the Federal Highway Administration; and disaster relief efforts conducted by the Federal Emergency Management Agency.

The Act and its implementing regulations set forth a series of general prohibitions and exceptions that apply to endangered plants. All prohibitions of section 9(a)(2) of the Act, implemented by 50 CFR 17.61, apply. These prohibitions, in part, make it illegal for any person subject to the jurisdiction of the United States to import or export, transport in interstate or foreign commerce in the course of a commercial activity, sell or offer for sale in interstate or foreign commerce, or remove and reduce the species to possession from areas under Federal jurisdiction. In addition, for plants listed as an endangered species, the Act prohibits the malicious damage or destruction on areas under Federal jurisdiction and the removal, cutting, digging up, or damaging or destroying of such plants in knowing violation of any State law or regulation, including State criminal trespass law. Certain exceptions to the prohibitions apply to agents of the Service and State conservation agencies.

Preservation of native flora of Florida (Florida Statutes 581.185) sections (3)(a) and (b) provide limited protection to species listed in the State of Florida Regulated Plant Index including *Brickellia mosieri* and *Linum carteri* var. *carteri*, as described under Factor D, *The Inadequacy of Existing Regulatory Mechanisms*. Federal listing increases protection for these plants by making violations of section 3 of the Florida Statute punishable as a Federal offense under section 9 of the Act. This provides increased protection from unauthorized collecting and vandalism for the plants on State and private lands, where they might not otherwise be protected by the Act, and increases the severity of the penalty for unauthorized collection, vandalism, or trade in these plants.

We may issue permits to carry out otherwise prohibited activities involving endangered and threatened plant species under certain circumstances. Regulations governing permits are codified at 50 CFR 17.62 for endangered plants, and at 50 CFR 17.72 for threatened plants. With regard to endangered plants, a permit must be issued for activities undertaken for scientific purposes or to enhance the propagation or survival of the species.

The Service acknowledges that it cannot fully address some of the natural threats facing *Brickellia mosieri* and *Linum carteri* var. *carteri* (e.g.,

hurricanes, tropical storms) or even some of the other significant, long-term threats (e.g., climatic changes, SLR). However, through listing, we provide protection to the known populations and any new population of these plants that may be discovered (see discussion below). With listing, we can also influence Federal actions that may potentially impact these plants (see discussion below); this is especially valuable if either species is found at additional locations. With this action, we are also better able to deter illicit collection and trade.

Our policy, as published in the **Federal Register** on July 1, 1994 (59 FR 34272), is to identify to the maximum extent practicable at the time a species is listed, those activities that would or would not constitute a violation of section 9 of the Act. The intent of this policy is to increase public awareness of the effect of a proposed listing on proposed and ongoing activities within the range of species proposed for listing. The following activities could potentially result in a violation of section 9 of the Act; this list is not comprehensive:

- (1) Import any such species into, or export any such species from, the United States;
- (2) Remove and reduce to possession any such species from areas under Federal jurisdiction; maliciously damage or destroy any such species on any such area; or remove, cut, dig up, or damage or destroy any such species on any other area in knowing violation of any law or regulation of any State or in the course of any violation of a State criminal trespass law;
- (3) Deliver, receive, carry, transport, or ship in interstate or foreign commerce, by any means whatsoever and in the course of a commercial activity, any such species;
- (4) Sell or offer for sale in interstate or foreign commerce any such species;
- (5) Introduce any nonnative wildlife or plant species to the State of Florida that compete with or prey upon *Brickellia mosieri* or *Linum carteri* var. *carteri*;
- (6) Release any unauthorized biological control agents that attack any life stage of *Brickellia mosieri* or *Linum carteri* var. *carteri*; or
- (7) Unauthorized manipulation or modification of the habitat of *Brickellia mosieri* or *Linum carteri* var. *carteri* on Federal lands.

Questions regarding whether specific activities would constitute a violation of section 9 of the Act should be directed to the Field Supervisor of the Service's South Florida Ecological Services Office (see **FOR FURTHER INFORMATION CONTACT**).

Requests for copies of regulations regarding listed species and inquiries about prohibitions and permits should be addressed to the U.S. Fish and Wildlife Service, Ecological Services Division, Endangered Species Permits, 1875 Century Boulevard, Atlanta, GA 30345 (Phone 404-679-7140; Fax 404-679-7081).

If *Brickellia mosieri* and *Linum carteri* var. *carteri* are listed under the Act, the State of Florida's Endangered Species Act (Florida Statutes 581.185) is automatically invoked, which would also prohibit take of these plants and encourage conservation by State government agencies. Further, the State may enter into agreements with Federal agencies to administer and manage any area required for the conservation, management, enhancement, or protection of endangered species (Florida Statutes 581.185). Funds for these activities could be made available under section 6 of the Act (Cooperation with the States). Thus, the Federal protection afforded to these plants by listing them as endangered species would be reinforced and supplemented by protection under State law.

Peer Review

In accordance with our joint policy on peer review published in the **Federal Register** on July 1, 1994 (59 FR 34270), we will seek the expert opinions of at least three appropriate and independent specialists regarding this proposed rule. The purpose of peer review is to ensure that our proposed listing and critical habitat designation are based on scientifically sound data, assumptions, and analyses. We will invite these peer reviewers to comment during this public comment period on our specific proposed rule.

We will consider all comments and information we receive during this comment period on this proposed rule during our preparation of a final determination. Accordingly, the final decision may differ from this proposal.

Public Hearings

Section 4(b)(5) of the Act provides for one or more public hearings on this proposal, if requested. Requests must be received within 45 days after the date of publication of this proposed rule in the **Federal Register**. Such requests must be sent to the address shown in **FOR FURTHER INFORMATION CONTACT**. We will schedule public hearings on this proposal, if any are requested, and announce the dates, times, and places of those hearings, as well as how to obtain reasonable accommodations, in the **Federal Register** and local newspapers at least 15 days before the hearing.

Required Determinations*Clarity of the Rule*

We are required by Executive Orders 12866 and 12988 and by the Presidential Memorandum of June 1, 1998, to write all rules in plain language. This means that each rule we publish must:

- (1) Be logically organized;
- (2) Use the active voice to address readers directly;
- (3) Use clear language rather than jargon;
- (4) Be divided into short sections and sentences; and
- (5) Use lists and tables wherever possible.

If you feel that we have not met these requirements, send us comments by one of the methods listed in **ADDRESSES**. To better help us revise the rule, your comments should be as specific as possible. For example, you should tell us the numbers of the sections or paragraphs that are unclearly written, which sections or sentences are too long, the sections where you feel lists or tables would be useful, etc.

Paperwork Reduction Act of 1995 (44 U.S.C. 3501 et seq.)

This rule does not contain any new collections of information that require approval by OMB under the Paperwork

Reduction Act of 1995 (44 U.S.C. 3501 et seq.). This rule will not impose recordkeeping or reporting requirements on State or local governments, individuals, businesses, or organizations. An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB control number.

National Environmental Policy Act (42 U.S.C. 4321 et seq.)

We have determined that environmental assessments and environmental impact statements, as defined under the authority of the National Environmental Policy Act, need not be prepared in connection with listing a species as endangered or threatened under the Act. We published a notice outlining our reasons for this determination in the **Federal Register** on October 25, 1983 (48 FR 49244).

References Cited

A complete list of references cited in this rulemaking is available on the Internet at <http://www.regulations.gov> and upon request from the South Florida Ecological Services Office (see **FOR FURTHER INFORMATION CONTACT**).

Authors

The primary authors of this package are the staff members of the South Florida Ecological Services Field Office.

List of Subjects in 50 CFR Part 17

Endangered and threatened species, Exports, Imports, Reporting and recordkeeping requirements, Transportation.

Proposed Regulation Promulgation

Accordingly, we propose to amend part 17, subchapter B of chapter I, title 50 of the Code of Federal Regulations, as set forth below:

PART 17—[AMENDED]

- 1. The authority citation for part 17 continues to read as follows:

Authority: 16 U.S.C. 1361–1407; 1531–1544; 4201–4245; unless otherwise noted.

- 2. Amend § 17.12(h) by adding entries for “*Brickellia mosieri*” and “*Linum carteri* var. *carteri*”, in alphabetical order under Flowering Plants, to the List of Endangered and Threatened Plants, to read as follows:

§ 17.11 Endangered and threatened wildlife.

* * * * *

(h) * * *

Species		Historical range	Family	Status	When listed	Critical habitat	Special rules
Scientific name	Common name						
FLOWERING PLANTS							
*	*	*	*	*	*		*
<i>Brickellia mosieri</i>	Brickell-bush, Florida.	U.S.A. (FL)	Asteraceae	E	.....	NA	NA
*	*	*	*	*	*		*
<i>Linum carteri</i> var. <i>carteri</i> .	Flax, Carter's small-flowered.	U.S.A. (FL)	Linaceae	E	.....	NA	NA
*	*	*	*	*	*		*

* * * * *

Dated: September 25, 2013.

Rowan W. Gould,

Acting Director, U.S. Fish and Wildlife Service.

[FR Doc. 2013–24173 Filed 10–2–13; 8:45 am]

BILLING CODE 4310–55–P

DEPARTMENT OF THE INTERIOR**Fish and Wildlife Service****50 CFR Part 17**

[Docket No. FWS–R4–ES–2013–0108; 4500030114]

RIN 1018–AZ64

Endangered and Threatened Wildlife and Plants; Designation of Critical Habitat for *Brickellia mosieri* (Florida Brickell-bush) and *Linum carteri* var. *carteri* (Carter's Small-flowered Flax)

AGENCY: Fish and Wildlife Service, Interior.

ACTION: Proposed rule.

SUMMARY: We, the U.S. Fish and Wildlife Service (Service), propose to designate critical habitat for *Brickellia mosieri* (Florida brickell-bush) and *Linum carteri* var. *carteri* (Carter's small-flowered flax) under the Endangered Species Act (Act). We are proposing to designate as critical habitat approximately 1,071 ha (2,646 ac) for *Brickellia mosieri* and approximately 1,054 ha (2,605 ac) for *Linum carteri* var. *carteri*. The critical habitat areas proposed for these plants overlap, for a combined total of approximately 1,096 ha (2,707 ac). The proposed critical habitat for both plants is located entirely

in Miami-Dade County, Florida. If we finalize this rule as proposed, it will extend the Act's protections to these plants' critical habitats.

DATES: We will accept comments received or postmarked on or before December 2, 2013. Comments submitted electronically using the Federal eRulemaking Portal (see **ADDRESSES** section, below) must be received by 11:59 p.m. Eastern Time on the closing date. We must receive requests for public hearings, in writing, at the address shown in **FOR FURTHER INFORMATION CONTACT** by November 18, 2013.

ADDRESSES: You may submit comments by one of the following methods:

(1) *Electronically:* Go to the Federal eRulemaking Portal: <http://www.regulations.gov>. In the Search box, enter FWS-R4-ES-2013-0108, which is the docket number for this rulemaking. Then, in the Search panel on the left side of the screen, under the Document Type heading, click on the Proposed Rules link to locate this document. You may submit a comment by clicking on "Comment Now!"

(2) *By hard copy:* Submit by U.S. mail or hand-delivery to: Public Comments Processing, Attn: FWS-R4-ES-2013-0108; Division of Policy and Directives Management; U.S. Fish and Wildlife Service; 4401 N. Fairfax Drive, MS 2042-PDM; Arlington, VA 22203.

We request that you send comments only by the methods described above. We will post all comments on <http://www.regulations.gov>. This generally means that we will post any personal information you provide us (see the Information Requested section below for more information).

The coordinates or plot points or both from which the maps are generated are included in the administrative record for this critical habitat designation and are available at <http://www.fws.gov/verobeach/>, at <http://www.regulations.gov> at Docket No. FWS-R4-ES-2013-0108, and at the South Florida Ecological Services Field Office (see **FOR FURTHER INFORMATION CONTACT**). Any additional tools or supporting information that we may develop for this critical habitat designation will also be available at the Fish and Wildlife Service Web site and Field Office set out above, and may also be included in the preamble and/or at <http://www.regulations.gov>.

FOR FURTHER INFORMATION CONTACT: Larry Williams, Field Supervisor, U.S. Fish and Wildlife Service, South Florida Ecological Services Field Office, 1339 20th Street, Vero Beach, FL 32960; by telephone 772-562-3909; or by

facsimile 772-562-4288. Persons who use a telecommunications device for the deaf (TDD) may call the Federal Information Relay Service (FIRS) at 800-877-8339.

SUPPLEMENTARY INFORMATION:

Executive Summary

Why we need to publish a rule. Under the Act, once we determine that a species is endangered or threatened, then we must also designate critical habitat for the species. Designations and revisions of critical habitat can only be completed by issuing a rule. Elsewhere in today's **Federal Register**, we propose to list *Brickellia mosieri* and *Linum carteri* var. *carteri* as endangered species under the Act.

*This rule consists of a proposed rule to designate critical habitat for *Brickellia mosieri* and *Linum carteri* var. *carteri*.*

The basis for our action. Under the Act, when a species is proposed for listing, we must designate critical habitat for the species to the maximum extent prudent and determinable. Both plants are being proposed for listing as endangered, and therefore we also propose to designate:

- Approximately 1,071 ha (2,646 ac) as critical habitat for *Brickellia mosieri* and approximately 1,054 ha (2,605 ac) for *Linum carteri* var. *carteri*. The critical habitat proposed for these plants overlap, for a combined total of approximately 1,096 ha (2,707 ac). The proposed critical habitat for both plants is located entirely in Miami-Dade County, Florida.

- The proposed critical habitat for both plants includes both occupied and unoccupied habitat. The Service determined that the unoccupied units are essential for the conservation of the plants, to provide for the necessary expansion of current *Brickellia mosieri* and *Linum carteri* var. *carteri* population(s), and for reestablishment of populations into areas where these plants previously occurred.

Section 4(b)(2) of the Act states that the Secretary shall designate and make revisions to critical habitat on the basis of the best available scientific data after taking into consideration the economic impact, national security impact, and any other relevant impact of specifying any particular area as critical habitat. The Secretary may exclude an area from critical habitat if he determines that the benefits of such exclusion outweigh the benefits of specifying such area as part of the critical habitat, unless he determines, based on the best scientific data available, that the failure to designate such area as critical habitat will result in the extinction of the species.

We are preparing an economic analysis of the proposed designations of critical habitat. We are preparing an analysis of the economic impacts of the proposed critical habitat designations and related factors. We will announce the availability of the draft economic analysis as soon as it is completed, at which time we will seek additional public review and comment.

We will seek peer review. We are seeking comments from knowledgeable individuals with scientific expertise to review our analysis of the best available science and application of that science and to provide any additional scientific information to improve this proposed rule. Because we will consider all comments and information we receive during the comment period, our final designations may differ from this proposal.

Information Requested

We intend that any final action resulting from this proposed rule will be based on the best scientific and commercial data available and be as accurate and as effective as possible. Therefore, we request comments or information from other concerned governmental agencies, Native American tribes, the scientific community, industry, or any other interested parties concerning this proposed rule. We particularly seek comments concerning:

(1) The reasons why we should or should not designate habitat as "critical habitat" under section 4 of the Act (16 U.S.C. 1531 *et seq.*), including whether there are threats to *Brickellia mosieri* or *Linum carteri* var. *carteri* from human activity, the degree of which can be expected to increase due to the designation, and whether that increase in threat outweighs the benefit of designation such that the designation of critical habitat is not prudent.

(2) Specific information on:

(a) The amount and distribution of *Brickellia mosieri* and *Linum carteri* var. *carteri* and their habitats;

(b) What may constitute "physical or biological features essential to the conservation of the species," within the geographical range currently occupied by these plants;

(c) Where these features are currently found;

(d) Whether any of these features may require special management considerations or protection;

(e) What areas, that were occupied at the time of listing (or are currently occupied) and that contain features essential to the conservation of these plants, should be included in the designation and why; and

(f) What areas not occupied at the time of listing are essential for the conservation of these plants and why.

(3) Land use designations and current or planned activities in the areas occupied by *Brickellia mosieri* or *Linum carteri* var. *carteri* or proposed to be designated as critical habitat, and possible impacts of these activities on these plants and proposed critical habitat.

(4) Information on the projected and reasonably likely impacts of climate change on *Brickellia mosieri* and *Linum carteri* var. *carteri* and proposed critical habitat.

(5) Any probable economic, national security, or other relevant impacts that may result from designating any area that may be included in the final designation. We are particularly interested in any impacts on small entities, and the benefits of including or excluding areas from the proposed designation that are subject to these impacts.

(6) Whether any specific areas we are proposing for critical habitat designation should be considered for exclusion under section 4(b)(2) of the Act, and whether the benefits of potentially excluding any specific area outweigh the benefits of including that area under section 4(b)(2) of the Act.

(7) Information specific to the management of pine rocklands under Miami-Dade County's Environmentally Endangered Lands Covenant Program that might allow us to evaluate potential exclusions.

(8) Whether our approach to designating critical habitat could be improved or modified in any way to provide for greater public participation and understanding, or to assist us in accommodating public concerns and comments.

You may submit your comments and materials concerning this proposed rule by one of the methods listed in **ADDRESSES**. We request that you send comments only by the methods described in the **ADDRESSES** section.

We will post your entire comment—including your personal identifying information—on <http://www.regulations.gov>. You may request at the top of your document that we withhold personal information such as your street address, phone number, or email address from public review; however, we cannot guarantee that we will be able to do so.

Comments and materials we receive, as well as supporting documentation we used in preparing this proposed rule, will be available for public inspection on <http://www.regulations.gov>, or by appointment, during normal business

hours, at the U.S. Fish and Wildlife Service, South Florida Ecological Services Field Office (see **FOR FURTHER INFORMATION CONTACT**).

Previous Federal Actions

All previous Federal actions are described in the proposal to list *Brickellia mosieri* and *Linum carteri* var. *carteri* as endangered species under the Act published elsewhere in today's **Federal Register**.

Critical Habitat

Background

It is our intent to discuss below only those topics directly relevant to the designation of critical habitat for *Brickellia mosieri* and *Linum carteri* var. *carteri* in this section of the proposed rule. For more information on the taxonomy, life history, habitat, and population descriptions of these plants, please refer to the proposed listing rule published elsewhere in today's **Federal Register**.

Critical habitat is defined in section 3 of the Act as:

(1) The specific areas within the geographical area occupied by the species, at the time it is listed in accordance with the Act, on which are found those physical or biological features:

(a) Essential to the conservation of the species and

(b) Which may require special management considerations or protection; and

(2) Specific areas outside the geographical area occupied by the species at the time it is listed, upon a determination that such areas are essential for the conservation of the species.

Conservation, as defined under section 3 of the Act, means to use and the use of all methods and procedures that are necessary to bring an endangered or threatened species to the point at which the measures provided pursuant to the Act are no longer necessary. Such methods and procedures include, but are not limited to, all activities associated with scientific resources management such as research, census, law enforcement, habitat acquisition and maintenance, propagation, live trapping, and transplantation, and, in the extraordinary case where population pressures within a given ecosystem cannot be otherwise relieved, may include regulated taking.

Critical habitat receives protection under section 7 of the Act through the requirement that Federal agencies ensure, in consultation with the Service,

that any action they authorize, fund, or carry out is not likely to result in the destruction or adverse modification of critical habitat. The designation of critical habitat does not affect land ownership or establish a refuge, wilderness, reserve, preserve, or other conservation area. Such designation does not allow the government or public to access private lands. Such designation does not require implementation of restoration, recovery, or enhancement measures by non-Federal landowners. Where a landowner requests Federal agency funding or authorization for an action that may affect a listed species or critical habitat, the consultation requirements of section 7(a)(2) of the Act would apply, but even in the event of a destruction or adverse modification finding, the obligation of the Federal action agency and the landowner is not to restore or recover the species, but to implement reasonable and prudent alternatives to avoid destruction or adverse modification of critical habitat.

Under the first prong of the Act's definition of critical habitat, areas within the geographical area occupied by the species at the time it was listed are included in a critical habitat designation if they contain physical or biological features (1) essential to the conservation of the species, and (2) which may require special management considerations or protection. For these areas, critical habitat designations identify, to the extent known using the best scientific data available, those physical or biological features that are essential to the conservation of the species (such as space, food, cover, and protected habitat). In identifying those physical and biological features within an area, we focus on the principal biological or physical constituent elements (primary constituent elements such as roost sites, nesting grounds, seasonal wetlands, water quality, tide, soil type) that are essential to the conservation of the species. Primary constituent elements are the specific elements of physical or biological features that provide for a species' life-history processes and are essential to the conservation of the species.

Under the second prong of the Act's definition of critical habitat, we can designate critical habitat in areas outside the geographical area occupied by the species at the time it is listed, upon a determination that such areas are essential for the conservation of the species. For example, an area currently occupied by the species but that was not occupied at the time of listing may be essential to the conservation of the species and may be included in the

critical habitat designation. We designate critical habitat in areas outside the geographical area occupied by a species only when a designation limited to its range would be inadequate to ensure the conservation of the species.

Section 4 of the Act requires that we designate critical habitat on the basis of the best scientific data available. Further, our Policy on Information Standards under the Endangered Species Act (published in the **Federal Register** on July 1, 1994 (59 FR 34271)), the Information Quality Act (section 515 of the Treasury and General Government Appropriations Act for Fiscal Year 2001 (Pub. L. 106–554; H.R. 5658)), and our associated Information Quality Guidelines, provide criteria, establish procedures, and provide guidance to ensure that our decisions are based on the best scientific data available. They require our biologists, to the extent consistent with the Act and with the use of the best scientific data available, to use primary and original sources of information as the basis for recommendations to designate critical habitat.

When we are determining which areas should be designated as critical habitat, our primary source of information is generally the information developed during the listing process for the species. Additional information sources may include the recovery plan for the species (if the species is already listed), articles in peer-reviewed journals, conservation plans developed by States and counties, scientific status surveys and studies, biological assessments, other unpublished materials, or experts' opinions or personal knowledge.

Habitat is dynamic, and species may move from one area to another over time. We recognize that critical habitat designated at a particular point in time may not include all of the habitat areas that we may later determine are necessary for the recovery of the species. For these reasons, a critical habitat designation does not signal that habitat outside the designated area is unimportant or may not be needed for recovery of the species. Areas that are important to the conservation of the species, both inside and outside the critical habitat designation, would continue to be subject to: (1) Conservation actions implemented under section 7(a)(1) of the Act, (2) regulatory protections afforded by the requirement in section 7(a)(2) of the Act for Federal agencies to ensure their actions are not likely to jeopardize the continued existence of any endangered or threatened species, and (3) section 9 of the Act's prohibitions on taking any

individual of the species, including taking caused by actions that affect habitat. Federally funded or permitted projects affecting listed species outside their designated critical habitat areas may still result in jeopardy findings in some cases. These protections and conservation tools would continue to contribute to recovery of these plants if we list *Brickellia mosieri* and *Linum carteri* var. *carteri*. Similarly, critical habitat designations made on the basis of the best available information at the time of designation will not control the direction and substance of future recovery plans, habitat conservation plans (HCPs), or other species conservation planning efforts if new information available at the time of these planning efforts calls for a different outcome.

Prudency Determination

Section 4(a)(3) of the Act, as amended, and its implementing regulations (50 CFR 424.12), require that, to the maximum extent prudent and determinable, the Secretary shall designate critical habitat at the time the species is determined to be an endangered or threatened species. Our regulations (50 CFR 424.12(a)(1)) state that the designation of critical habitat is not prudent when one or both of the following situations exist:

- (1) The species is threatened by taking or other human activity, and identification of critical habitat can be expected to increase the degree of threat to the species, or
- (2) Such designation of critical habitat would not be beneficial to the species.

There is no evidence that the designation of critical habitat for *Brickellia mosieri* or *Linum carteri* var. *carteri* would result in an increased threat from taking (collection) or other human activity for these plants. Therefore, in the absence of finding that the designation of critical habitat would increase threats to a species, if there are any benefits to a critical habitat designation, then it is prudent to designate critical habitat. Here, the potential benefits of designation include: (1) Triggering consultation under section 7 of the Act, in new areas for actions in which there may be a Federal nexus where it would not otherwise occur because, for example, it is or has become unoccupied or the occupancy is in question; (2) focusing conservation activities on the most essential features and areas; (3) providing educational benefits to State or county governments or private entities; and (4) preventing people from causing inadvertent harm to the species.

Therefore, because we have determined that the designation of critical habitat would not likely increase the degree of threat to these plants and may provide some measure of benefit, we find that designation of critical habitat is prudent for *B. mosieri* and *L. c. var. carteri*.

Critical Habitat Determinability

Having determined that designation of critical habitat is prudent, under section 4(a)(3) of the Act we must find whether critical habitat for *Brickellia mosieri* or *Linum carteri* var. *carteri* is determinable. Our regulations at 50 CFR 424.12(a)(2) state that critical habitat is not determinable when one or both of the following situations exist:

- (i) Information sufficient to perform required analyses of the impacts of the designation is lacking; or
- (ii) The biological needs of the species are not sufficiently well known to permit identification of an area as critical habitat.

We reviewed the available information pertaining to the biological needs of *Brickellia mosieri* and *Linum carteri* var. *carteri* and habitat characteristics where the plants are located. This and other information represent the best scientific data available and led us to conclude that the designation of critical habitat is determinable for *B. mosieri* and *L. c. var. carteri*.

Physical or Biological Features

In accordance with section 3(5)(A)(i) and 4(b)(1)(A) of the Act and regulations at 50 CFR 424.12, in determining which areas within the geographical area occupied by the species at the time of listing to designate as critical habitat, we consider the physical or biological features (PBFs) that are essential to the conservation of the species and which may require special management considerations or protection. These include, but are not limited to:

- (1) Space for individual and population growth and for normal behavior;
- (2) Food, water, air, light, minerals, or other nutritional or physiological requirements;
- (3) Cover or shelter;
- (4) Sites for breeding, reproduction, or rearing (or development) of offspring; and
- (5) Habitats that are protected from disturbance or are representative of the historical, geographical, and ecological distributions of a species.

We derived the specific PBFs for *Brickellia mosieri* and *Linum carteri* var. *carteri* from observations of both plants' habitat, ecology, and life history as

described below. (For more information, see the Background section of our proposed listing rule published elsewhere in today's **Federal Register**.) The PBFs for *B. mosieri* and *L. c.* var. *carteri* were defined on the basis of the habitat features of the areas currently occupied by the plants, which included substrate types, plant community structure, and associated plant species.

Space for Individual and Population Growth

Brickellia mosieri and *Linum carteri* var. *carteri* are endemic to, and occur exclusively within, pine rockland habitat on the Miami Rock Ridge outside of Everglades National Park (ENP) in Miami-Dade County in south Florida. This community and associated native plant species are described in the Status Assessment for *Brickellia mosieri* and *Linum carteri* var. *carteri* section in the proposed listing rule published elsewhere in today's **Federal Register**. Pine rocklands are a fire-maintained ecosystem characterized by an open canopy and understory and a limestone substrate (often exposed). Open canopy conditions are required to allow sufficient sunlight to reach the herbaceous layer and permit growth and flowering of *B. mosieri* and *L. c.* var. *carteri*. These plants also require a limestone substrate to provide suitable growing conditions (e.g., pH, nutrients, anchoring, and proper drainage). This combination of ecosystem characteristics (i.e., open canopy and limestone substrate) occurs only in pine rockland habitats (as opposed to rockland hammock, which occurs in conjunction with pine rockland and has a limestone substrate but a closed canopy). Therefore, based on this information, we identify pine rockland habitats to be a PBF for these plants.

Food, Water, Air, Light, Minerals, or Other Nutritional or Physiological Requirements

Soils—Substrates supporting *Brickellia mosieri* and *Linum carteri* var. *carteri* for anchoring or nutrient absorption are composed of oolitic limestone that is at or very near the surface. Solution holes occasionally form where the surface limestone is dissolved by organic acids. There is typically very little soil development, consisting primarily of accumulations of low-nutrient sand, marl, clayey loam, and organic debris found in solution holes, depressions, and crevices on the limestone surface (Florida Natural Areas Inventory (FNAI) 2010, p. 62). However, extensive sandy pockets can be found at the northern end of the Miami Rock Ridge, beginning from approximately

North Miami Beach and extending south to approximately SW. 216 Street (which runs east-west approximately one-half mile south of Quail Roost Pineland) (Service 1999, p. 3–162). In this area (the northern Biscayne region), pine rockland soils are primarily quartz sands classified as Opalocka sand-rock outcrop complex. This region has the least exposed rock. In the southern Biscayne, or Redlands, region to the south, pine rockland soils are rockier (i.e., exposed rock is the predominant surface) and are primarily classified as Cardsound silty clay loam-rock outcrop complex. Other soil types that are loosely associated with pine rocklands include Udorthents (in the northern half of the plants' current ranges) and Krome very gravelly loam (in the southern half). Therefore, based on the information above, we identify substrate derived from oolitic limestone to provide anchoring and nutritional requirements to be a PBF for these plants.

Cover or Shelter

Pine rockland is characterized by an open canopy of *Pinus elliotii* var. *densa* (South Florida slash pine). Subcanopy development is rare in well-maintained pine rocklands, with only occasional hardwoods such as *Lysiloma bahamensis* (wild tamarind) and *Quercus virginiana* (live oak) growing to tree size in Miami Rock Ridge pinelands (Snyder *et al.* 1990, p. 253). The shrub/understory layer is also characteristically open, although the height and density of the shrub layer varies based on fire frequency, with understory plants growing taller and more dense as time since fire increases. Subcanopy/shrub species that typically occur include, but may not be limited to, *Serenoa repens* (saw palmetto), *Sabal palmetto* (cabbage palm), *Coccothrinax argentata* (silver palm), *Thrinax morrisii* (brittle thatch palm), *Myrica cerifera* (wax myrtle), *Rapanea punctata* (myrsine), *Metopium toxiferum* (poisonwood), *Byrsonima lucida* (locustberry), *Dodonaea viscosa* (varnishleaf), *Tetrazygia bicolor* (tetrazygia), *Guettarda scabra* (rough velvetseed), *Ardisia escallonioides* (marlberry), *Psidium longipes* (mangroveberry), *Sideroxylon salicifolium* (willow bastic), and *Rhus copallinum* (winged sumac) (FNAI 2010, pp. 61–62). Short-statured shrubs may include, but are not limited to, *Quercus elliotii* (running oak), *Randia aculeata* (white indigoberry), *Crossopetalum ilicifolium* (Christmas berry), *Morinda royoc* (redgal), and *Chiococca alba* (snowberry) (FNAI 2010, p. 62). Understory vegetation may

include, but is not limited to, *Andropogon* spp.; *Schizachyrium gracile*, *S. rhizomatum*, and *S. sanguineum* (bluestems); *Aristida purpurascens* (arrowfeather threeawn); *Sorghastrum secundum* (lopsided Indiangrass); *Muhlenbergia capillaris* (hairawn muhly); *Rhynchospora floridensis* (Florida white-top sedge); *Tragia saxicola* (pineland noseburn); *Echites umbellata* (devil's potato); *Croton linearis* (pineland croton); *Chamaesyce* spp. (sandmats); *Chamaecrista fasciculata* (partridge pea); *Zamia pumila* (coontie); and *Anemia adiantifolia* (maidenhair pineland fern) (FNAI 2010, p. 62). An open canopy and understory are required to allow sufficient sunlight to reach the herbaceous layer and permit growth and flowering of *Brickellia mosieri* and *Linum carteri* var. *carteri*. Therefore, based on the information above, we identify vegetation composition and structure that allows for adequate sunlight, and space for individual growth and population expansion, to be a PBF for these plants.

Sites for Breeding, Reproduction, or Rearing (or Development) of Offspring

Brickellia mosieri—The reproductive biology and needs of *Brickellia mosieri* have not been studied (Bradley and Gann 1999, p. 12), and our knowledge of the ecology of the species related to reproduction needs primarily consists of observed habitat requirements and demographic trends. Field observations indicate that the species does not usually occur in great abundance; populations are typically sparse and contain a low density of plants, even in well-maintained pine rockland habitat (Bradley and Gann 1999, p. 12). Bradley (2013b, pers. comm.) estimated that, based on this observation, the minimum habitat patch size to support a sustaining population may be approximately 2 ha (5 ac), although no studies have been conducted to evaluate this estimate. Some occupied sites are less than 2 ha (5 ac) in size, but it is not known whether these populations are sustainable in the long term.

Reproduction is sexual (Bradley and Gann 1999, p. 12), but specific pollinators or dispersers are unknown. Flower morphology suggests the species may be pollinated by butterflies, bees, or both (Koptur 2013, pers. comm.). Wind is one likely dispersal vector (Gann 2013b, pers. comm.), as is seed dispersal by animals. Within pine rocklands, more than 50 species of butterflies have been observed that may act as pollinators for *Brickellia mosieri*. Similarly, a large variety of native and nonnative bee species are known to

pollinate pine rockland plants, which may include *B. mosieri*. Declines in pollinator visitation may cause decreased seed set or fruit production, which could lead to lower seedling establishment and numbers of mature plants. The availability of pollinators of appropriate type and sufficient numbers is necessary for *B. mosieri* to reproduce and ensure sustainable populations. Because the specific type(s) and number of pollinators of *B. mosieri* are unknown, and may include non-generalist species closely tied to pine rockland habitats, preserving and restoring connectivity of pine rockland habitat fragments is essential to the long-term conservation of the species. Sufficient connectivity of pine rockland habitat is also necessary to support establishment of new populations through seed dispersal, and to preserve and enhance genetic diversity.

Therefore, based on the information above, we identify habitat connectivity of sufficient size and suitability, or habitat that can be restored to these conditions that supports the species' growth, distribution, and population expansion, to be a PBF for *Brickellia mosieri*.

Linum carteri var. *carteri*—The reproductive needs of *Linum carteri* var. *carteri* are not well understood. Maschinski (2006, p. 83) reported that *L. c.* var. *carteri* has typical behavior for an early successional plant—plants grow to reproductive status quickly, and populations typically contain a higher density of plants. The minimum habitat patch size to support a sustaining population may be smaller than that needed for *Brickellia mosieri*, possibly as small as 0.4 ha (1 ac) (Bradley 2013b, pers. comm.), although no studies have been conducted to evaluate this estimate. Reproduction is believed to be sexual (Bradley and Gann 1999, p. 71), but specific pollinators are unknown. Flower morphology suggests this variety may also be pollinated by butterflies or bees, or both (Koptur 2013, pers. comm.). Alternatively, Mosquin and Hayley (1967, p. 1278) suggested *L. c.* var. *carteri* may be self-pollinated. Dispersal agents are unknown, but most likely include animal and human-related vectors in the existing landscape.

Therefore, given the uncertainty regarding specific pollinators and dispersal vectors, the importance of connectivity of pine rockland habitat discussed above for *Brickellia mosieri* also applies to *Linum carteri* var. *carteri*. We identify habitat connectivity of sufficient size and suitability, or habitat that can be restored to these conditions to support the plant's growth,

distribution, and population expansion, to also be a PBF for *L. c.* var. *carteri*.

Habitats Protected From Disturbance or Representative of the Historical, Geographic, and Ecological Distributions of *Brickellia mosieri* and *Linum carteri* var. *carteri*

Brickellia mosieri and *Linum carteri* var. *carteri* continue to occur in habitats that are protected from incompatible human-generated disturbances and are only partially representative of the plants' historical, geographical, and ecological distributions because their ranges within these habitats has been reduced. These plants are still found in their representative plant communities of pine rocklands. Representative communities are located on Federal, State, local, and private lands that implement habitat management activities which benefit these plants.

Disturbance Regime—Pine rockland is dependent on some degree of disturbance, most importantly from natural or prescribed fires (Loope and Dunevitz 1981, p. 5; Snyder *et al.* 2005, p. 1; Bradley and Saha 2009, p. 4; Saha *et al.* 2011, pp. 169–184; FNAI 2010, p. 63). These fires are a vital component in maintaining native vegetation, such as *Brickellia mosieri* and *Linum carteri* var. *carteri*, which require high light conditions and exposed substrate. Without fire, succession from pine rockland to rockland hammock (an upland tropical hardwood forest occurring over limestone) is rapid, and understory species such as *B. mosieri* and *L. c.* var. *carteri* are shaded out by dense canopy and deep leaf litter. In addition, displacement of native species by invasive, nonnative plants often occurs.

Hurricanes and other significant weather events also create openings in the pine rockland canopy (FNAI 2010, p. 63), although these types of disturbances are more sporadic in nature and may pose a threat to small, isolated populations such as those that remain of *Brickellia mosieri* and *Linum carteri* var. *carteri*. For *L. c.* var. *carteri*, mowing may also serve as another means of maintaining an open canopy where the plant occurs in firebreaks, rights-of-way, and cleared fields. However, in order to avoid potential negative impacts, the timing of mowing is critical and should be conducted after flowering has occurred (see *Demographics, Reproductive Biology and Population Genetics of L. c.* var. *carteri* in the proposed listing rule published elsewhere in today's **Federal Register**). Mechanical control of hardwoods may also help maintain an open canopy in pine rockland, but

cannot entirely replace fire since it does not have the same benefits related to removal of leaf litter and nutrient cycling. Natural and prescribed fire remains the primary and ecologically preferred disturbance regime for pine rockland.

Brickellia mosieri tends to occur on exposed limestone with minimal organic litter and in areas with only minor amounts of substrate disturbance (Bradley and Gann 1999, p. 11). In contrast, *Linum carteri* var. *carteri* is currently associated with pine rocklands that have undergone some sort of substrate disturbance (e.g., firebreaks, canal banks, edges of railway beds). All known occurrences over the last 15 years have been within either scarified pine rockland, disturbed areas adjacent to or within pine rocklands, or in completely disturbed areas having a limestone substrate (Bradley and Gann 1999, p. 71; Bradley 2013a, pers. comm.). Inadequate fire management, resulting in closed canopy conditions, may have excluded *L. c.* var. *carteri* (which responds positively to low competition and high light environments) from otherwise suitable pine rocklands habitat (Bradley and Gann 1999, p. 71). Alternatively, this variety may only proliferate on sites where exposed substrate occurs following disturbance; historically this may have occurred following hurricanes (e.g., under tip-up mounds of fallen trees), animal disturbance, or fire (Gann 2013a, pers. comm.). Whether current occurrences of *L. c.* var. *carteri* reflect a need for higher light conditions than *B. mosieri*, a requirement for disturbed substrate, or some combination of these, or other unidentified factors, is unknown, and microhabitat data for either plant are generally lacking. The best available scientific data suggest that both plants require a similar disturbance regime to maintain the open canopy and low litter conditions characteristics of pine rockland habitat, and thereby maintain persistent populations.

Therefore, based on the information above, we identify natural or prescribed fire or other disturbance regimes that maintain the pine rockland habitat, to be a PBF for these plants.

Primary Constituent Elements

Under the Act and its implementing regulations, we are required to identify the PBFs essential to the conservation of both *Brickellia mosieri* and *Linum carteri* var. *carteri* in areas occupied at the time of listing, focusing on the features' primary constituent elements (PCEs). PCEs are those specific elements of the PBFs that provide for a species'

life-history processes and are essential to the conservation of the species.

We derived the PCEs for *Brickellia mosieri* and *Linum carteri* var. *carteri* primarily from those PBFs that support the successful functioning of the habitat upon which the plants depend. Both plants are dependent upon functioning pine rockland habitat to provide their fundamental life requirements, such as substrate, species composition and structure of vegetation, disturbance regimes, and connectivity. The PCEs collectively provide the suite of PBFs essential to meeting the requirements of both *B. mosieri* and *L. c. var. carteri*.

Based on our current knowledge of the PBFs and habitat characteristics required to sustain these plants' life-history processes, we determine that the PCEs for *Brickellia mosieri* and *Linum carteri* var. *carteri* are:

(1) Areas of pine rockland habitat that contain:

(a) Open canopy, semi-open subcanopy, and understory;

(b) Substrate of oolitic limestone rock; and

(c) A plant community of predominately native vegetation that may include, but is not limited to:

(i) Canopy vegetation dominated by *Pinus elliottii* var. *densa* (South Florida slash pine);

(ii) Subcanopy vegetation that may include, but is not limited to, *Serenoa repens* (saw palmetto), *Sabal palmetto* (cabbage palm), *Coccothrinax argentata* (silver palm), *Thrinax morrisii* (brittle thatch palm), *Myrica cerifera* (wax myrtle), *Rapanea punctata* (myrsine), *Metopium toxiferum* (poisonwood), *Byrsonima lucida* (locustberry), *Dodonaea viscosa* (varnishleaf), *Tetrazygia bicolor* (tetrazygia), *Guettarda scabra* (rough velvetseed), *Ardisia escallonioides* (marlberry), *Psidium longipes* (mangroveberry), *Sideroxylon salicifolium* (willow bustic), and *Rhus copallinum* (winged sumac);

(iii) Short-statured shrubs that may include, but are not limited to, *Quercus elliottii* (running oak), *Randia aculeata* (white indigoberry), *Crossopetalum ilicifolium* (Christmas berry), *Morinda royoc* (redgal), and *Chiococca alba* (snowberry); and

(iv) Understory vegetation that may include, but is not limited to, *Andropogon* spp.; *Schizachyrium gracile*, *S. rhizomatum*, and *S. sanguineum* (bluestems); *Aristida purpurascens* (arrowfeather threawn); *Sorghastrum secundum* (lopsided Indiangrass); *Muhlenbergia capillaris* (hairawn muhly); *Rhynchospora floridensis* (Florida white-top sedge); *Tragia saxicola* (pineland noseburn);

Echites umbellata (devil's potato); *Croton linearis* (pineland croton); *Chamaesyce* spp. (sandmats); *Chamaecrista fasciculata* (partridge pea); *Zamia pumila* (coontie); and *Anemia adiantifolia* (maidenhair pineland fern).

(2) A disturbance regime that naturally or artificially duplicates natural ecological processes (e.g., fire, hurricanes, or other weather events) and that maintains the pine rockland habitat as described in PCE (1).

(3) Habitats that are connected and of sufficient area to sustain viable populations of *Brickellia mosieri* and *Linum carteri* var. *carteri* in the pine rockland habitat as described in PCE (1).

Special Management Considerations or Protection

When designating critical habitat, we assess whether the specific areas within the geographic area occupied by the species at the time of listing contain features which are essential to the conservation of the species and which may require special management considerations or protection. The features essential to the conservation of *Brickellia mosieri* and *Linum carteri* var. *carteri* may require special management considerations or protection to reduce threats related to habitat loss, fragmentation, and modification primarily due to development; inadequate fire management; nonnative, invasive plants; and sea level rise. (For an indepth discussion of threats, see Summary of Factors Affecting the Species in our proposed listing rule published elsewhere in today's **Federal Register**.)

Destruction of the pinelands for economic development has reduced pine rockland habitat on the Miami Rock Ridge outside of ENP by over 98 percent, and remaining habitat in this area is highly fragmented. Both *Brickellia mosieri* and *Linum carteri* var. *carteri* occur on a mix of private and publicly owned lands, only some of which are managed for conservation. Populations of the plants that occur on private land or non-conservation public land are vulnerable to habitat loss, while populations on conservation lands are vulnerable to the effects of habitat degradation if natural disturbance regimes are disrupted (e.g., through inadequate fire management). Prolonged lack of fire in pine rockland typically results in succession to rockland hammock, and displacement of native species by invasive, nonnative plants often occurs. Further development and degradation of pine rocklands increase fragmentation and decrease the conservation value of the

remaining functioning pine rockland habitat. In addition, pine rocklands are expected to be further degraded and fragmented due to anticipated sea level rise, which would fully or partially inundate some pine rocklands along the coast and in the southern portion of Miami-Dade County (near Navy Wells Pineland Preserve), and cause increases in the salinity of the water table and soils resulting in vegetation shifts in additional pine rocklands across the Miami Rock Ridge. Many existing pine rockland fragments are also projected to be developed for housing as the human population grows and adjusts to changing sea levels.

Special management considerations and protections that will address these threats include increased coordination and conservation of these plants and their habitat on Federal lands, and improved habitat restoration and management efforts (including fire management and nonnative plant treatments) of high-priority and high-elevation sites.

Criteria Used To Identify Critical Habitat

As required by section 4(b)(2) of the Act, we use the best scientific data available to designate critical habitat. In accordance with the Act and our implementing regulations at 50 CFR 424.12(b), we review available information pertaining to the habitat requirements of the species and identify occupied areas at the time of listing that contain the features essential to the conservation of the species. When designating critical habitat, we also consider future recovery efforts and conservation of the species. If after identifying currently occupied areas, a determination is made that those areas are inadequate to ensure conservation of the species, in accordance with the Act and our implementing regulations at 50 CFR 424.12(e), we then consider whether designating additional areas, outside those currently occupied, are essential for the conservation of the species. Although the discussion below of our analyses and proposed critical habitat units are combined for simplicity to address both plants, a separate analysis was conducted for each plant to determine the specific habitat patches and status (occupied or unoccupied) for each in this proposed designation.

With the exception of one occurrence of *Linum carteri* var. *carteri*, we have determined that all currently known occupied habitat for *Brickellia mosieri* and *L. c. var. carteri* meets the definition of critical habitat. We are proposing to designate critical habitat in all

geographical areas occupied by these plants at the time of listing (i.e., currently occupied), with the exception of the occurrence of a single individual of *L. c. var. carteri* found on a canal bank (not included due to the anomalous nature of the occurrence and because we were not able to define habitat patch boundaries based on the criteria described below). Occupied habitat for each plant consists of a relatively small amount of highly fragmented habitat (number or size of occupied patches), and occupied patches are generally isolated from one another within the landscape (see the *Current Range, Population Estimates, and Status* section for each plant in our proposed listing rule published elsewhere in today's **Federal Register**). In addition, the extent of the geographic areas currently occupied by these plants is substantially (up to 30 percent) smaller than their historical ranges. Based on these factors in relation to the threats to *B. mosieri* and *L. c. var. carteri*, we have determined that additional habitat is essential to allow sufficient habitat (total area, and number of patches) and connectivity for the long-term conservation of these plants. Therefore, we are proposing to designate as critical habitat unoccupied habitat both within the geographical area occupied by these plants at the time of listing (i.e., currently occupied), and outside the geographical area occupied by these plants at the time of listing but within their historical range, because such areas are essential for the conservation of these plants. We used habitat and historical occurrence data, and applied general conservation design principles, to identify unoccupied habitat essential for the conservation of these plants.

To determine the general extent, location, and boundaries of critical habitat, the Service used the following sources of information:

(1) Historical and current records of *Brickellia mosieri* and *Linum carteri* var. *carteri* occurrences and distributions found in publications, reports, personal communications, and associated voucher specimens housed at museums and private collections;

(2) FNAI, Institute for Regional Conservation (IRC), and Fairchild Tropical Botanic Gardens (FTBG) geographic information system (GIS) data showing the location and extent of documented occurrences of *Brickellia mosieri* and *Linum carteri* var. *carteri*;

(3) Reports and databases prepared by botanists with IRC and FTBG. Some of these were funded by the Service, while others were requested or volunteered by biologists with IRC or FTBG;

(4) ESRI ArcGIS online basemap aerial imagery (collected December, 2010) and Digital Orthophoto Quarter Quadrangles (DOQQs; 1-m true color; collected 2004) of Miami-Dade County. Because pine rockland habitat has a recognizable signature in these aerial photographs, the presence of PCEs was partially determined through evaluation of this imagery; and

(5) GIS data depicting soils (Soil Service Geographic (SSURGO) dataset), land cover (South Florida Water Management District Land Use and Cover 2008–2009), and elevation (Dade County LiDAR 88–2003) within Miami-Dade County; these data were also used to determine the presence of PCEs.

Due to the lack of existing tax-specific data or recommendations related to conservation design (e.g., minimum area or number of populations needed for recovery), we used general conservation design principles in conjunction with the best available data for *Brickellia mosieri* and *Linum carteri* var. *carteri* to identify those unoccupied pine rocklands with the highest conservation quality—that is, those areas that currently provide the best quality habitat and are likely to continue to do so in the future, or areas that have the highest restoration potential. Guidelines for conservation design, which have been developed using island biogeography models, are highly relevant to areas such as the fragmented pine rocklands of the Miami Rock Ridge (i.e., pine rockland islands in a sea of urban and agriculture development). Due to the degree of habitat loss that has already occurred, application of all such guidelines are somewhat limited by the nature of the remaining habitat (e.g., sizes, shapes, and locations of individual habitat patches). As such, we evaluated conservation quality of unoccupied pine rockland habitat using the following three major principles:

(1) Geographic spread—Species that are well distributed across their native ranges are less susceptible to extinction than are species confined to small portions of their ranges.

(2) Size—Large habitat patches are superior to small habitat patches, in that larger areas will support larger populations and will be less negatively impacted by edge effects. All else being equal, conservation design options that include greater areal extent are superior. When comparative circumstances are not otherwise equal, factors such as habitat quality, the presence of specific landscape features, and the spatial arrangement of habitat may offset a solely area-driven selection process.

(3) Connectivity—Habitat that occurs in less fragmented, contiguous patches is preferable to habitat that is fragmented or isolated by urban lands. Habitat patches close to one another serve species of concern better than patches situated far apart. Interconnected patches are better than isolated patches. Conservation design alternatives should seek, in order of priority:

(a) Continuity within habitat (minimize additional fragmentation);

(b) Connectedness (increase existing habitat patches); and

(c) Proximity (minimize distance between habitat patches).

Using these guiding principles, we evaluated the remaining unoccupied pine rockland habitat on the Miami Rock Ridge outside of ENP with the intent of identifying the largest patches and highest quality habitat available (patches of sufficient size and quality to support populations), in sufficient amount (i.e., sufficient numbers of populations) and spatial arrangement (to provide opportunities for future migration and colonization) to provide for the conservation of *Brickellia mosieri* and *Linum carteri* var. *carteri*. Our evaluation consisted of the following steps:

(1) Using aerial imagery and GIS-based vegetation and soils data, we delineated pine rockland habitat in Miami Dade County outside of ENP. Pine rocklands were identified based on the presence of specific soil types (see “Food, Water, Air, Light, Minerals, or Other Nutritional or Physiological Requirements,” above) and pine rockland vegetation, including fire-suppressed areas and areas where intergrading with rockland hammock occurs. Some cleared areas occurring over pine rockland soils were also delineated, with the intent that such areas provide opportunities for restoration. The resulting habitat layer consisted of 245 habitat patches.

(2) To maximize geographic spread within the plants’ historical ranges, we divided the extent of delineated habitat into five geographic areas (northeast to southwest).

(3) For each plant, we included occupied patches in proposed critical habitat (25 habitat patches for *Brickellia mosieri*, and 6 patches for *Linum carteri* var. *carteri*). One occurrence of *L. c. var. carteri* (a single plant found on a canal bank) is not included in proposed critical habitat due to the anomalous nature of the occurrence, and because we were not able to define patch boundaries based on any of the criteria described in (1) above.

(4) For each plant, for the remaining (unoccupied) habitat, we excluded patches below the estimated minimum size for each plant based on expert opinion—2 ha (5 ac) for *Brickellia mosieri*, and 0.4 ha (1 ac) for *Linum carteri* var. *carteri* (see “Sites for Breeding, Reproduction, or Rearing (or Development) of Offspring,” above). The resulting layers consisted of 106 habitat patches for *B. mosieri*, and 218 patches for *L. c.* var. *carteri*.

(5) For each plant, for the remaining habitat (unoccupied; 2 ha (5 ac) or ≥ 0.4 ha (1 ac), *Brickellia mosieri* or *Linum carteri* var. *carteri*, respectively), we assigned a score for eight evaluation criteria designed to assess overall conservation quality of the patch, using the following five major objectives (discussed more indepth below and at <http://www.regulations.gov>):

(a) Onsite habitat quality (intact, open pine rocklands scored higher than cleared patches or patches having a closed canopy);

(b) Patch size (larger patches scored higher);

(c) Surrounding landscape composition (pine rocklands surrounded by less development scored higher);

(d) Connectivity (within each geographic area, pine rockland patches in closer proximity to each other and with greater numbers of neighbors scored higher); and

(e) Vulnerability to sea level rise (pine rockland patches located at higher elevations scored higher).

(6) For each plant, within each geographic area, we used a consequence matrix to evaluate the performance of each unoccupied pine rockland patch across the objectives described above in (5). The resulting total score of each patch was a 0.0–1.0 value, summed across all criteria, where a score of 1.0 indicates the patch in each geographic area that has the highest conservation quality, based on the defined objectives.

Using the results of the consequence matrix for each plant, we evaluated potential “cut-off” values for patch total score by visually assessing and comparing habitat amounts and spatial arrangements between various cut-off values in order to identify the best conservation arrangement. Because tax-specific data and recommendations were not available regarding how much area is needed for the conservation and recovery of *Brickellia mosieri* and *Linum carteri* var. *carteri*, we applied the general conservation design principles related to connectivity, above, and principles of population viability and metapopulation theory. Small populations and plant species

with limited distributions, like those of *B. mosieri* and *L. c.* var. *carteri*, are vulnerable to relatively minor environmental disturbances (Frankham 2005, pp. 135–136), and are subject to the loss of genetic diversity from genetic drift, the random loss of genes, and inbreeding (Ellstrand and Elam 1993, pp. 217–237; Leimu *et al.* 2006, pp. 942–952). These factors increase the probability of both local extinctions and population extinction (Barrett and Kohn 1991, pp. 4, 28; Newman and Pilson 1997, p. 360; Palstra and Ruzzante 2008, pp. 3428–3447). To ameliorate these effects, the recovery of many rare plant species includes the creation of new sites or reintroductions to increase population size (each occurrence, and overall) and support genetic diversity. Sufficient area is also required to allow *B. mosieri* and *L. c.* var. *carteri* to expand their current distributions (curtailed compared to historical ranges), use habitat depending on the availability of suitable conditions (dynamic, related to time since disturbance within each patch), and maintain their ability to withstand local- or unit-level environmental fluctuations or catastrophes.

Based on our assessment, as described above, we determined that unoccupied pine rockland patches with a total score for conservation quality greater than 0.50 should be proposed for critical habitat designation. In addition, we determined that 15 supplemental pine rockland patches should also be proposed for critical habitat designation for one or more of the following reasons:

(1) A population of *Brickellia mosieri* was previously observed in the patch (although not recently enough to consider the population extant at this time); (2) addition of the patch increases conservation quality of adjacent proposed critical habitat; (3) addition of the patch increases connectivity of pine rockland habitat across the landscape; and (4) the patch is located at the north end of these plants’ historical ranges (an area not captured using the consequence matrix approach). The last category consists of four patches with conservation quality ≤ 0.50 , due to some combination of lower onsite habitat quality, smaller size, and more development in the surrounding landscape, all of which are related to their position closer to Miami. While these patches may not represent the best habitat currently available, they do provide needed opportunities to increase these plants’ geographic spread and restore the plants to the northernmost intact habitat within their historical ranges, which is more heavily

impacted, and are essential to the conservation of these plants as discussed above.

Habitat Within the Geographic Range at the Time of Listing

We are proposing seven critical habitat units, six of which contain habitat occupied by *Brickellia mosieri* or *Linum carteri* var. *carteri* or both plants. These units include the mapped extent of each plant’s population and contain the PCEs.

Within each of these six proposed units is also unoccupied habitat, which is included based on our determination that such areas are essential to the conservation of these plants, as discussed above. In addition to providing sufficient habitat (area, number of patches, connectivity), this unoccupied habitat allows for the dynamic nature of pine rockland habitat. Conditions within pine rockland patches, such as the openness of the canopy and understory and the accumulation of leaf litter over the limestone substrate, vary greatly across the landscape and across time. Only a portion of the delineated habitat is suitable for *Brickellia mosieri* or *Linum carteri* var. *carteri*, or both plants, at any given time, and the size and location of suitable areas within the population is dynamic over time, being largely driven by the frequency and scale of natural or prescribed fires and other types of disturbance (e.g., for *L. c.* var. *carteri*, mowing or, seemingly, events that disturb the limestone substrate). Although prescribed burns are administered on conservation lands that retain *B. mosieri* or *L. c.* var. *carteri*, or both, populations, fire return intervals and scope are inconsistent. Thus, areas of pine rockland habitat that now support one or both of these plants may not support the plants in the future, as inadequate fire management removes or fragments suitable habitat. Conversely, suitable habitat conditions may return or increase in areas following natural or prescribed fires, allowing opportunities for the plants to expand or colonize these areas in the future.

The delineation of proposed units (occupied plus unoccupied patches) also includes space to plan for the persistence of *Brickellia mosieri* and *Linum carteri* var. *carteri* populations in the face of imminent effects on habitats as a result of sea level rise. Although occupied habitat within each proposed unit contains the PCEs, some of these areas may be altered, as a result of vegetation shifts or salt water intrusion, to an extent which cannot be predicted at this time.

In identifying unoccupied patches with these proposed units, we considered the following additional criteria, which we incorporated into the consequence matrix described above:

(1) *Objective 1 (onsite habitat quality)*: Pine rockland areas of sufficient habitat quality to support the growth and reproduction of *Brickellia mosieri* and *Linum carteri* var. *carteri*. In general, areas of intact pine rockland having an open canopy and understory are more likely to support populations of these plants over the long term. In some cases, disturbed or cleared pine rockland areas have also been included in the designation; these areas possess other desirable characteristics (e.g., size, connectivity) and could allow *B. mosieri* or *L. c.* var. *carteri* to expand from areas already occupied by these plants. These areas are typically habitats within or adjacent to pine rocklands that have been affected by natural or anthropogenic impacts, but that retain areas that are still suitable for the plants. These areas would help to off-set the anticipated loss and degradation of habitat occurring or expected from the effects of climate change (such as sea level rise) or due to development.

(2) *Objective 2 (patch size)*: Pine rockland areas of sufficient size to support ecosystem processes for populations of *Brickellia mosieri* or *Linum carteri* var. *carteri*. Given areas of equal habitat quality, larger areas would be ranked higher in our evaluation.

(3) *Objective 3 (surrounding landscape composition)*: Pine rockland areas within a suitable landscape to allow for natural disturbance regimes—specifically, prescribed fire—and to minimize negative impacts related to changes in hydrology or nutrient/pollution inputs from the surrounding area. Pine rocklands surrounded by other natural communities will likely provide higher quality habitat in the long term than pine rocklands that are imbedded in a highly urbanized or agricultural matrix. Given areas of equal habitat quality and size, areas with more natural communities and less urban development in the surrounding area would be ranked higher in our evaluation.

(4) *Objective 4 (connectivity)*: Pine rockland areas of sufficient amount and arrangement to maintain connectivity of habitat to allow for population sustainability and expansion. Sufficient connectivity of pine rockland habitat will contribute to the availability of pollinators of appropriate type and sufficient numbers to allow *Brickellia mosieri* and *Linum carteri* var. *carteri* to reproduce and ensure sustainable populations, and to allow for population

expansion through seed dispersal. Given areas of equal habitat quality, size, and surrounding landscape composition, those patches having more and closer neighbors (i.e., other pine rockland patches) would be ranked higher in our evaluation.

(5) *Objective 5 (vulnerability to sea level rise)*: Pine rockland areas of suitable elevation to reduce vulnerability to sea level rise. Those pine rocklands situated at higher elevations are less likely to be negatively affected by either inundation or vegetation shifts caused by changes in the salinity of the water table and soils associated with sea level rise. Given areas of equal conservation quality as described above, those patches having a higher average elevation would be ranked higher in our evaluation.

A complete description regarding how these objectives were weighted and evaluated in our consequence matrix can be found in the supplemental materials provided with the rule at <http://www.regulations.gov>.

Habitat Outside of the Geographic Range at the Time of Listing

We are proposing one critical habitat unit that is unoccupied by either *Brickellia mosieri* or *Linum carteri* var. *carteri* but has been determined to be essential to the conservation of both plants. This unit represents a portion of these plants' historical ranges in which the plants have been extirpated (see *Current Range, Population Estimates, and Status* for both plants in our proposed listing rule published elsewhere in today's **Federal Register**), and the unoccupied proposed critical habitat patches are the only pine rockland habitat that remains in this area. While the full extent of *B. mosieri*'s historical range is unknown, due to limited data, comparing its current distribution to historical observations suggests that its range has contracted at least 13 percent. Likewise, the historical range of *L. c.* var. *carteri* has been reduced approximately 30 percent. The reductions in the historical ranges of these plants have occurred almost entirely in their northern portions, between Pinecrest and South Miami/Coconut Grove. As noted earlier, little pine rockland habitat has escaped urban development in this area, and those patches that remain are of lesser conservation quality due to lower onsite habitat quality, smaller patch sizes, and higher amounts of development in the surrounding landscape. While these patches may not represent the best pine rockland habitat currently available, they provide needed habitat to increase

these plants' geographic spread to currently unoccupied portions of their historical ranges, and are essential for the conservation of the two plants.

In summary, for occupied habitat within the geographic area occupied by *Brickellia mosieri* or *Linum carteri* var. *carteri* at the time of listing (i.e., currently occupied), we delineated proposed critical habitat unit boundaries by evaluating habitat suitability of pine rockland habitat within this geographic area, and retained those areas that contain some or all of the PCEs to support life-history functions essential for conservation of these plants.

For unoccupied habitat within the geographic area occupied by *Brickellia mosieri* or *Linum carteri* var. *carteri* at the time of listing (i.e., currently unoccupied), we delineated proposed critical habitat unit boundaries by evaluating five objectives incorporated into the consequence matrix (see discussion above).

For habitat outside the geographic area occupied by the plant at the time of listing, we delineated proposed critical habitat unit boundaries based on the availability of remaining pine rockland habitat in the unit. All four available patches were included in the delineation in order to provide sufficient area for *Brickellia mosieri* and *Linum carteri* var. *carteri* to expand their current restricted ranges.

When determining proposed critical habitat boundaries, we made every effort to avoid including developed areas such as lands covered by buildings, pavement, and other structures. The scale of the maps we prepared under the parameters for publication within the Code of Federal Regulations may not reflect the exclusion of such developed lands. Any such lands inadvertently left inside proposed critical habitat boundaries shown on the maps of this proposed rule have been excluded by text in the proposed rule and are not proposed for designation as critical habitat. Therefore, if the critical habitat is finalized as proposed, a Federal action involving these lands would not trigger section 7 consultation with respect to critical habitat and the requirement of no adverse modification unless the specific action would affect the adjacent critical habitat.

The critical habitat designation is defined by the map or maps, as modified by any accompanying regulatory text, presented at the end of this document in Proposed Regulation Promulgation section. In this proposed rule, we present one set of maps that show the proposed critical habitat

designations for both plants. In the final rule, we plan to present a separate set of maps for each plant. We include more detailed information on the boundaries of the critical habitat designation in the preamble of this document. We will make the coordinates or plot points or both on which each map is based available to the public on <http://www.regulations.gov> at Docket No. FWS-R4-ES-2013-0108, on our Internet site at www.fws.gov/verobeach/, and at the field office responsible for the designation (see **FOR FURTHER INFORMATION CONTACT**, above).

Proposed Critical Habitat Designation

None of the seven critical habitat units proposed for *Brickellia mosieri* or *Linum carteri* var. *carteri* is currently designated as critical habitat for other species under the Act. Two of the critical habitat units (Units 4 and 7) proposed for these plants overlap areas that have been proposed as critical habitat for the Florida leafwing butterfly (*Anaea troglodyta floralis*), and three of the critical habitat units (Units 4, 6, and 7) proposed for these plants overlap areas that have been proposed as critical habitat for the Bartram's scrub-hairstreak butterfly (*Strymon acis*

bartrami), under the Act (see 78 FR 49831; August 15, 2013), but the Service has not yet made a final determination on these designations.

The seven units (all located in Miami-Dade County, Florida) we propose as critical habitat are: (1) Unit 1: Trinity Pineland and surrounding areas; (2) Unit 2: Nixon Smiley Pineland Preserve and surrounding areas; (3) Unit 3: U.S. Department of Agriculture (USDA) Subtropical Horticultural Research Station and surrounding areas; (4) Unit 4: Richmond Pinelands and surrounding areas; (5) Unit 5: Quail Roost Pineland and surrounding areas; (6) Unit 6: Camp Owaissa Bauer and surrounding areas; and (7) Unit 7: Navy Wells Pineland Preserve and surrounding areas. Because of the highly fragmented nature of the remaining pine rockland habitat, these large overall unit boundaries have been identified that encompass the small, multiple designations within each unit; only the specific patches within the unit boundaries (see unit maps in the Proposed Regulation Promulgation section, below) are proposed as critical habitat. Within each unit, we determined the specific habitat patches to include in the proposed

critical habitat for each plant, using the methods described above. In many cases, the same habitat patch may be included in the proposed critical habitat for both plants, resulting in overlap of proposed critical habitat within the unit. Thus, the "combined" area of critical habitat within a unit, which encompasses all proposed habitat patches within a unit, is less than the sum of critical habitat for each plant, due to the large overlap. Table 1 shows land ownership, area, and occupancy of each critical habitat unit, broken down by plant and using the combined approach. Land ownership within the combined proposed critical habitat consists of Federal (12 percent), State (20 percent), County/local (46 percent), and private and other (22 percent; category consists of private individuals, companies, associations, and organizations, including nonprofit organizations). State lands are interspersed within Miami-Dade County Parks and Recreation Department lands that are managed for conservation. Except for Unit 1 (which is entirely unoccupied by either plant), the critical habitat units are composed of both occupied and unoccupied habitat.

TABLE 1—PROPOSED CRITICAL HABITAT UNITS FOR *Brickellia mosieri* AND *Linum carteri* VAR. *carteri*—OWNERSHIP FOR EACH UNIT IS DESCRIBED AS THE PERCENT (%) OF THE TOTAL AND AREA (HECTARES = HA, ACRES = AC) WITHIN EACH UNIT AND ACROSS ALL UNITS

Unit No.	Unit name	Ownership	<i>Brickellia mosieri</i>			<i>Linum carteri</i> var. <i>carteri</i>			Combined			Occupied*
			%	(ha)	(ac)	%	(ha)	(ac)	%	(ha)	(ac)	
1	Trinity Pineland and surrounding areas.	State	23	4	10	21	4	10	21	4	10	No.
		County/Local	28	5	12	34	7	16	34	7	16	
		Private/Other	49	9	21	45	9	21	45	9	21	
		Total	100	18	43	100	19	48	100	19	48	
2	Nixon Smiley Pineland Preserve and surrounding areas.	State	45	48	119	45	48	119	45	48	119	<i>B. mosieri</i> = Yes. <i>L. c. var. carteri</i> = Yes.
		County/Local	54	58	143	54	58	143	54	58	143	
		Private/Other	1	1	2	1	1	2	1	1	2	
		Total	100	107	264	100	107	264	100	107	264	
3	USDA Subtropical Horticultural Research Station and surrounding areas.	Federal	49	59	145	49	59	145	49	59	145	<i>B. mosieri</i> = No. <i>L. c. var. carteri</i> = Yes.
		State	38	45	112	38	45	112	38	45	112	
		County/Local	6	7	18	6	7	18	6	7	18	
		Private/Other	7	8	20	7	9	21	7	9	21	
4	Richmond Pinelands and surrounding areas.	Total	100	119	295	100	120	297	100	120	297	<i>B. mosieri</i> = Yes. <i>L. c. var. carteri</i> = No.
		Federal	20	77	191	20	77	191	20	77	191	
		County/Local	59	231	570	61	231	571	59	231	571	
		Private/Other	21	83	205	19	73	180	21	84	208	
5	Quail Roost Pineland and surrounding areas.	Total	100	391	965	100	381	942	100	392	970	<i>B. mosieri</i> = Yes. <i>L. c. var. carteri</i> = No.
		State	43	42	103	42	42	103	40	42	103	
		County/Local	12	11	28	14	13	33	13	13	33	
		Private/Other	45	43	107	44	43	106	47	49	120	
		Total	100	96	238	100	98	242	100	104	256	

TABLE 1—PROPOSED CRITICAL HABITAT UNITS FOR *Brickellia mosieri* AND *Linum carteri* VAR. *carteri*—OWNERSHIP FOR EACH UNIT IS DESCRIBED AS THE PERCENT (%) OF THE TOTAL AND AREA (HECTARES = HA, ACRES = AC) WITHIN EACH UNIT AND ACROSS ALL UNITS—Continued

Unit No.	Unit name	Ownership	<i>Brickellia mosieri</i>			<i>Linum carteri</i> var. <i>carteri</i>			Combined			Occupied*
			%	(ha)	(ac)	%	(ha)	(ac)	%	(ha)	(ac)	
6	Camp Owaissa Bauer and sur- rounding areas.	State	15	18	44	14	18	44	14	18	44	<i>B. mosieri</i> = Yes. <i>L. c. var. carteri</i> = Yes.
		County/Local	51	58	144	46	58	144	46	58	144	
		Private/Other	34	39	97	40	52	127	40	52	127	
		Total	100	115	285	100	128	315	100	128	315	
7	Navy Wells Pine- land Preserve and surrounding areas.	State	29	65	159	28	57	141	29	65	159	<i>B. mosieri</i> = Yes. <i>L. c. var. carteri</i> = No.
		County/Local	56	125	309	61	122	302	55	125	309	
		Private/Other	16	35	87	11	22	54	16	36	89	
		Total	100	225	555	100	201	497	100	226	558	
	TOTAL ALL UNITS ...	FEDERAL	13	136	336	13	136	336	12	136	336	
		STATE	21	222	547	20	214	529	20	222	548	
		COUNTY/LOCAL	46	495	1,224	47	497	1,228	46	500	1,235	
		PRIVATE/OTHER	20	218	538	20	207	512	22	238	589	
		Total	100	1,071	2,646	100	1,054	2,605	100	1,096	2,707	

Note: Area sizes may not sum due to rounding

* Occupancy varies by patch within each unit, but each unit contains occupied patches for the plant listed. Patch groupings (i.e., into a small number of units) were done to provide a more efficient rule framework.

We present brief descriptions of all units, and reasons why they meet the definition of critical habitat for *Brickellia mosieri* or *Linum carteri* var. *carteri* or both plants, below. If additional information is needed regarding individual parcels, including unnamed, smaller parcels in private or other ownership, that can be obtained from the U.S. Fish and Wildlife Service, South Florida Ecological Services Field Office (see **FOR FURTHER INFORMATION CONTACT**).

Unit 1: Trinity Pineland and Surrounding Areas, Miami-Dade County, Florida

Unit 1 consists of approximately 18 ha (43 ac) of habitat for *Brickellia mosieri* and approximately 19 ha (48 ac) for *Linum carteri* var. *carteri*. The critical habitat proposed for these plants overlap in this unit, for a combined total of approximately 19 ha (48 ac) in Miami-Dade County. The unit is comprised of State lands within Trinity Pineland County Park (4 ha (10 ac)); County lands within Tropical Park and A. D. "Doug" Barnes Park (7 ha (16 ac)); and parcels in private ownership (9 ha (21 ac)). This unit is bordered on the north by SW 24 Street, on the south by the Snapper Creek Expressway (State Road (SR) 878), on the east by SW 67 Avenue, and on the west by SW 87 Avenue.

The unit is within the historical ranges of both *Brickellia mosieri* and *Linum carteri* var. *carteri*, although data are lacking regarding historical occupancy of the specific proposed

critical habitat patches in the unit. This unit includes the only remaining pine rockland habitat in this northern portion of the Miami Rock Ridge. None of the habitat in this unit is currently occupied, but it is essential to the conservation of both plants because it serves to protect habitat needed to recover these plants, reestablish wild populations within the historical ranges of these plants, and maintain populations throughout the historical distribution of these plants in Miami-Dade County. It also provides habitat for recovery in the case of stochastic events, should one or both plants be extirpated from one of their current locations.

Unit 2: Nixon Smiley Pineland Preserve and Surrounding Areas, Miami-Dade County, Florida

Unit 2 consists of approximately 107 ha (264 ac) of habitat in Miami-Dade County for both *Brickellia mosieri* and *Linum carteri* var. *carteri*; the critical habitat proposed for each of these plants is identical within this unit. The unit is comprised of State lands within Camp Matecumbe, Tamiami Pineland Complex Addition, and Rockdale Pineland (48 ha (119 ac)); County/local lands within Ron Ehman Park, Pine Shore Pineland Preserve, Nixon Smiley Pineland Preserve, Tamiami #8 (Nixon Smiley Addition) Pineland, and Rockdale Pineland Addition (58 ha (143 ac)); and parcels in private or other ownership (1 ha (2 ac)). This unit is bordered on the north by SW 104 Street, on the south by SW 152 Street (Coral Reef Drive), on the east by U.S. 1 (South

Dixie Highway), and on the west by SW 177 Avenue (Krome Avenue).

This unit is composed of both occupied and unoccupied habitat. Some habitat within the unit is currently occupied by *Brickellia mosieri* (3 occurrences; approximately 21 ha (52 ac)) or *Linum carteri* var. *carteri* (1 occurrence; approximately 16 ha (39 ac)) or both plants. This occupied habitat contains some or all of the PCEs, including pine rockland habitat, oolitic limestone substrate, suitable vegetation composition and structure, natural or artificial disturbance regimes, and habitat connectivity of sufficient size and suitability. The PCEs in this unit may require special management considerations or protection to address threats of habitat fragmentation; inadequate fire management; competition with nonnative, invasive plants; and sea level rise. Some of the unoccupied habitat within this unit was historically occupied by *B. mosieri*, although it is not currently occupied by either *B. mosieri* or *L. c. var. carteri*. This unoccupied habitat is essential to the conservation of these plants because it serves to protect habitat needed to recover these plants, reestablish wild populations within the historical ranges of these plants, and maintain populations throughout the historical distribution of these plants in Miami-Dade County. It also provides habitat for recovery in the case of stochastic events, should one or both plants be extirpated from one of their current locations.

Unit 3: USDA Subtropical Horticultural Research Station and Surrounding Areas, Miami-Dade County, Florida

Unit 3 consists of approximately 119 ha (295 ac) of habitat for *Brickellia mosieri* and approximately 120 ha (297 ac) for *Linum carteri* var. *carteri*. The critical habitat proposed for each of these plants is nearly identical within this unit, for a combined total of approximately 120 ha (297 ac) in Miami-Dade County. The unit is comprised of Federal lands within the USDA Subtropical Horticultural Research Station (59 ha (145 ac)); State lands within the R. Hardy Matheson Preserve, Ludlam Pineland, Deering Estate at Cutler, and Deering Estate South Addition (45 ha (112 ac)); County/local lands within the Ned Glenn Nature Preserve and Coral Reef Park (7 ha (18 ac)); and parcels in private ownership (9 ha (21 ac)). This unit is bordered on the north by SW 112 Street, on the south by the intersection of Old Cutler Road and Franjo Road (County Road (CR) 977), on the east by the Atlantic Ocean, and on the west by U.S. 1 (South Dixie Highway).

This unit is composed of both occupied and unoccupied habitat. Some of the habitat in the unit is currently occupied by *Linum carteri* var. *carteri* (3 occurrences; approximately 62 ha (153 ac)). This occupied habitat contains some or all of the PCEs, including pine rockland habitat, oolitic limestone substrate, suitable vegetation composition and structure, natural or artificial disturbance regimes, and habitat connectivity of sufficient size and suitability. The PCEs in this unit may require special management considerations or protection to address threats of habitat loss and fragmentation; inadequate fire management; competition with nonnative, invasive plants; and sea level rise, including storm surge. Unoccupied habitat in the unit is essential to the conservation of *Brickellia mosieri* and *L. c. var. carteri* because it serves to protect habitat needed to recover these plants, reestablish wild populations within the historical ranges of these plants, and maintain populations throughout the historical distribution of these plants in Miami-Dade County. It also provides habitat for recovery in the case of stochastic events, should one or both plants be extirpated from one of their current locations.

Unit 4: Richmond Pinelands and Surrounding Areas, Miami-Dade County, Florida

Unit 4 consists of approximately 391 ha (965 ac) of habitat for *Brickellia*

mosieri and approximately 381 ha (942 ac) for *Linum carteri* var. *carteri*. The critical habitat proposed for these plants overlap in this unit, for a combined total of approximately 392 ha (970 ac) in Miami-Dade County. The unit is comprised of Federal lands owned by the U.S. Coast Guard (Homeland Security), U.S. Army Corps of Engineers (Department of Defense), U.S. Prisons Bureau, and the U.S. Department of Commerce/National Oceanic and Atmospheric Administration (77 ha (191 ac)); County/local lands within and adjacent to Larry and Penny Thompson Park, Martinez Pineland, and Zoo Miami (231 ha (571 ac)); and parcels in private or other ownership (84 ha (208 ac)). This unit is bordered on the north by SW 152 Street (Coral Reef Drive), on the south by SW 200 St (Quail Drive/SR 994), on the east by U.S. 1 (South Dixie Highway), and on the west by SW 177 Avenue (Krome Avenue).

This unit is composed of both occupied and unoccupied habitat. Some habitat in the unit is currently occupied by *Brickellia mosieri* (4 occurrences; approximately 267 ha (660 ac)). All four occurrences are within the Richmond Pinelands, which together compose the largest remaining group of contiguous fragments of pine rockland habitat outside of ENP. This occupied habitat contains all of the PCEs, including pine rockland habitat, oolitic limestone substrate, suitable vegetation composition and structure, natural or artificial disturbance regimes, and habitat connectivity of sufficient size and suitability. The PCEs in this unit may require special management considerations or protection to address threats of habitat loss and fragmentation; inadequate fire management; competition with nonnative, invasive plants; and sea level rise. Some of the unoccupied habitat within this unit was historically occupied by *B. mosieri*, although it is not currently occupied by either *B. mosieri* or *Linum carteri* var. *carteri*. This unoccupied habitat is essential to the conservation of these plants because it serves to protect habitat needed to recover these plants, reestablish wild populations within the historical ranges of these plants, and maintain populations throughout the historical distribution of these plants in Miami-Dade County. It also provides habitat for recovery in the case of stochastic events, should one or both plants be extirpated from one of their current locations.

Unit 5: Quail Roost Pineland and Surrounding Areas, Miami-Dade County, Florida

Unit 5 consists of approximately 96 ha (238 ac) of habitat for *Brickellia mosieri* and approximately 98 ha (242 ac) for *Linum carteri* var. *carteri*. The critical habitat proposed for these plants overlap in this unit, for a combined total of approximately 104 ha (256 ac) in Miami-Dade County. The unit is comprised of State lands within Quail Roost Pineland, Goulds Pineland and Addition, and Silver Palm Groves Pineland (42 ha (103 ac)); County/local lands including Medsouth Park, Black Creek Forest, and Rock Pit #46 (13 ha (33 ac)); and parcels in private ownership (49 ha (120 ac)), including Porter-Russell Pineland owned by the Tropical Audubon Society. This unit is bordered on the north by SW 200 St (Quail Drive/SR 994), on the south by SW 248 Street, on the east by the Florida Turnpike, and on the west by SW 194 Avenue.

This unit is composed of both occupied and unoccupied habitat. Some habitat in the unit is currently occupied by *Brickellia mosieri* (2 occurrences; approximately 28 ha (70 ac)). This occupied habitat contains some or all of the PCEs, including pine rockland habitat, oolitic limestone substrate, suitable vegetation composition and structure, natural or artificial disturbance regimes, and habitat connectivity of sufficient size and suitability. The PCEs in this unit may require special management considerations or protection to address threats of habitat fragmentation; inadequate fire management; competition with nonnative, invasive plants; and sea level rise. Unoccupied habitat in the unit is essential to the conservation of *B. mosieri* and *Linum carteri* var. *carteri* because it serves to protect habitat needed to recover these plants, reestablish wild populations within the historical ranges of these plants, and maintain populations throughout the historical distribution of these plants in Miami-Dade County. It also provides habitat for recovery in the case of stochastic events, should one or both plants be extirpated from one of their current locations.

Unit 6: Camp Owaissa Bauer and Surrounding Areas, Miami-Dade County, Florida

Unit 6 consists of approximately 115 ha (285 ac) of habitat for *Brickellia mosieri* and approximately 128 ha (315 ac) for *Linum carteri* var. *carteri*. The critical habitat proposed for these plants overlap in this unit, for a combined total

of approximately 128 ha (315 ac) in Miami-Dade County. The unit is comprised of State lands within Owaissa Bauer Pineland Addition, West Biscayne Pineland, Ingram Pineland, and Fuchs Hammock Addition (18 ha (44 ac)); County/local lands including Camp Owaissa Bauer, Pine Island Lake Park, Seminole Wayside Park, and Northrop Pineland (58 ha (144 ac)); and parcels in private ownership (52 ha (127 ac)), including the private conservation area, Pine Ridge Sanctuary. This unit is bordered on the north by SW 248 Street, on the south by SW 312 Street, on the east by SW 112 Avenue, and on the west by SW 217 Avenue.

This unit is composed of both occupied and unoccupied habitat. Some habitat in the unit is currently occupied by either *Brickellia mosieri* (5 occurrences; approximately 27 ha (67 ac)) or *Linum carteri* var. *carteri* (2 occurrences; approximately 9 ha (23 ac)). This occupied habitat contains some or all of the PCEs, including pine rockland habitat, oolitic limestone substrate, suitable vegetation composition and structure, natural or artificial disturbance regimes, and habitat connectivity of sufficient size and suitability. The PCEs in this unit may require special management considerations or protection to address threats of habitat loss and fragmentation; inadequate fire management; competition with nonnative, invasive plants; and sea level rise. Some of the unoccupied habitat within this unit was historically occupied by *B. mosieri*, although it is not currently occupied by either *B. mosieri* or *L. c.* var. *carteri*. This unoccupied habitat is essential to the conservation of these plants because it serves to protect habitat needed to recover these plants, reestablish wild populations within the historical ranges of these plants, and maintain populations throughout the historical distribution of these plants in Miami-Dade County. It also provides habitat for recovery in the case of stochastic events, should one or both plants be extirpated from one of their current locations.

Unit 7: Navy Wells Pineland Preserve and Surrounding Areas, Miami-Dade County, Florida

Unit 7 consists of approximately 225 ha (555 ac) of habitat for *Brickellia mosieri* and approximately 201 ha (497 ac) for *Linum carteri* var. *carteri*. The critical habitat proposed for these plants overlap in this unit, for a combined total of approximately 226 ha (558 ac) in Miami-Dade County. The unit is comprised of State lands within Florida City Pineland, Palm Drive Pineland,

Navy Wells Pineland Preserve (portion), Navy Wells Pineland #23, and Navy Wells Pineland #39 (65 ha (159 ac)); County/local lands including Navy Wells Pineland Preserve (portion) and Sunny Palms Pineland (125 ha (309 ac)); and parcels in private ownership (36 ha (89 ac)). This unit is bordered on the north by SW 320 Street, on the south by SW 368 Street, on the east by U.S. 1 (South Dixie Highway), and on the west by SW 217 Avenue.

This unit is composed of both occupied and unoccupied habitat. Some habitat in the unit is currently occupied by *Brickellia mosieri* (1 occurrence; approximately 134 ha (330 ac)). This occurrence is on Navy Wells Pineland Preserve, which is one of the largest remaining areas of pine rockland habitats outside of ENP. This occupied habitat contains all of the PCEs, including pine rockland habitat, oolitic limestone substrate, suitable vegetation composition and structure, natural or artificial disturbance regimes, and habitat connectivity of sufficient size and suitability. The PCEs in this unit may require special management considerations or protection to address threats of habitat fragmentation; inadequate fire management; competition with nonnative, invasive plants; and sea level rise. Some of the unoccupied habitat within this unit was historically occupied by *B. mosieri*, although it is not currently occupied by either *B. mosieri* or *Linum carteri* var. *carteri*. This unoccupied habitat is essential to the conservation of these plants because it serves to protect habitat needed to recover these plants, reestablish wild populations within the historical ranges of these plants, and maintain populations throughout the historical distribution of these plants in Miami-Dade County. It also provides habitat for recovery in the case of stochastic events, should one or both plants be extirpated from one of their current locations.

Effects of Critical Habitat Designation

Section 7 Consultation

Section 7(a)(2) of the Act requires Federal agencies, including the Service, to ensure that any action they fund, authorize, or carry out is not likely to jeopardize the continued existence of any endangered species or threatened species or result in the destruction or adverse modification of designated critical habitat of such species. In addition, section 7(a)(4) of the Act requires Federal agencies to confer with the Service on any agency action which is likely to jeopardize the continued existence of any species proposed to be

listed under the Act or result in the destruction or adverse modification of proposed critical habitat.

Decisions by the 5th and 9th Circuit Courts of Appeals have invalidated our regulatory definition of “destruction or adverse modification” (50 CFR 402.02) (see *Gifford Pinchot Task Force v. U.S. Fish and Wildlife Service*, 378 F.3d 1059 (9th Cir. 2004) and *Sierra Club v. U.S. Fish and Wildlife Service*, 245 F.3d 434 (5th Cir. 2001)), and we do not rely on this regulatory definition when analyzing whether an action is likely to destroy or adversely modify critical habitat. Under the provisions of the Act, we determine destruction or adverse modification on the basis of whether, with implementation of the proposed Federal action, the affected critical habitat would continue to serve its intended conservation role for the species.

If a Federal action may affect a listed species or its critical habitat, the responsible Federal agency (action agency) must enter into consultation with us. Examples of actions that are subject to the section 7 consultation process are actions on State, tribal, local, or private lands that require a Federal permit (such as a permit from the U.S. Army Corps of Engineers under section 404 of the Clean Water Act (33 U.S.C. 1251 *et seq.*) or a permit from the Service under section 10 of the Act) or that involve some other Federal action (such as funding from the Federal Highway Administration, Federal Aviation Administration, or the Federal Emergency Management Agency). Federal actions not affecting listed species or critical habitat, and actions on State, tribal, local, or private lands that are not federally funded or authorized, do not require section 7 consultation.

As a result of section 7 consultation, we document compliance with the requirements of section 7(a)(2) through our issuance of:

(1) A concurrence letter for Federal actions that may affect, but are not likely to adversely affect, listed species or critical habitat; or

(2) A biological opinion for Federal actions that may affect and are likely to adversely affect, listed species or critical habitat.

When we issue a biological opinion concluding that a project is likely to jeopardize the continued existence of a listed species and/or destroy or adversely modify critical habitat, we provide reasonable and prudent alternatives to the project, if any are identifiable, that would avoid the likelihood of jeopardy and/or destruction or adverse modification of

critical habitat. We define “reasonable and prudent alternatives” (at 50 CFR 402.02) as alternative actions identified during consultation that:

(1) Can be implemented in a manner consistent with the intended purpose of the action,

(2) Can be implemented consistent with the scope of the Federal agency’s legal authority and jurisdiction,

(3) Are economically and technologically feasible, and

(4) Would, in the Director’s opinion, avoid the likelihood of jeopardizing the continued existence of the listed species and/or avoid the likelihood of destroying or adversely modifying critical habitat.

Reasonable and prudent alternatives can vary from slight project modifications to extensive redesign or relocation of the project. Costs associated with implementing a reasonable and prudent alternative are similarly variable.

Regulations at 50 CFR 402.16 require Federal agencies to reinstate consultation on previously reviewed actions in instances where we have listed a new species or subsequently designated critical habitat that may be affected and the Federal agency has retained discretionary involvement or control over the action (or the agency’s discretionary involvement or control is authorized by law). Consequently, Federal agencies sometimes may need to request reinitiation of consultation with us on actions for which formal consultation has been completed, if those actions with discretionary involvement or control may affect subsequently listed species or designated critical habitat.

Application of the “Adverse Modification” Standard

The key factor related to the adverse modification determination is whether, with implementation of the proposed Federal action, the affected critical habitat would continue to serve its intended conservation role for the species. Activities that may destroy or adversely modify critical habitat are those that alter the physical or biological features to an extent that appreciably reduces the conservation value of critical habitat for *Brickellia mosieri* or *Linum carteri* var. *carteri*. As discussed above, the role of critical habitat is to support life-history needs of these plants and provide for the conservation of these plants.

Section 4(b)(8) of the Act requires us to briefly evaluate and describe, in any proposed or final regulation that designates critical habitat, activities involving a Federal action that may

destroy or adversely modify such habitat, or that may be affected by such designation.

Activities that may affect critical habitat, when carried out, funded, or authorized by a Federal agency, should result in consultation for *Brickellia mosieri* and *Linum carteri* var. *carteri*. These activities include, but are not limited to:

(1) Actions that would significantly alter the pine rockland ecosystem, including significant alterations to hydrology or substrate. Such activities may include, but are not limited to, residential, commercial, or recreational development, including associated infrastructure.

(2) Actions that would significantly alter vegetation structure or composition, such as suppression of natural fires or excessive prescribed burning, or clearing vegetation for construction of residential, commercial, or recreational development and associated infrastructure.

(3) Actions that would introduce nonnative plant species that would significantly alter vegetation structure or composition. Such activities may include, but are not limited to, residential and commercial development, and associated infrastructure.

Exemptions

Application of Section 4(a)(3) of the Act

Specifically, section 4(a)(3)(B)(i) of the Act (16 U.S.C. 1533(a)(3)(B)(i)) provides that: “The Secretary shall not designate as critical habitat any lands or other geographic areas owned or controlled by the Department of Defense, or designated for its use, that are subject to an integrated natural resources management plan (INRMP) prepared under section 101 of the Sikes Act (16 U.S.C. 670a), if the Secretary determines in writing that such plan provides a benefit to the species for which critical habitat is proposed for designation.” There are Department of Defense lands (owned by the U.S. Coast Guard (Homeland Security) and U.S. Army Corps of Engineers) within the critical habitat designation area; however, none of the lands are covered by an INRMP. Accordingly, no lands that otherwise meet the definition of critical habitat are exempt under section 4(a)(3)(B)(i).

Exclusions

Application of Section 4(b)(2) of the Act

Section 4(b)(2) of the Act states that the Secretary shall designate and make revisions to critical habitat on the basis of the best available scientific data after

taking into consideration the economic impact, national security impact, and any other relevant impact of specifying any particular area as critical habitat. The Secretary may exclude an area from critical habitat if she determines that the benefits of such exclusion outweigh the benefits of specifying such area as part of the critical habitat, unless she determines, based on the best scientific data available, that the failure to designate such area as critical habitat will result in the extinction of the species. In making that determination, the statute on its face, as well as the legislative history, are clear that the Secretary has broad discretion regarding which factor(s) to use and how much weight to give to any factor.

Under section 4(b)(2) of the Act, we may exclude an area from designated critical habitat based on economic impacts, impacts on national security, or any other relevant impacts. In considering whether to exclude a particular area from the designation, we identify the benefits of including the area in the designation, identify the benefits of excluding the area from the designation, and evaluate whether the benefits of exclusion outweigh the benefits of inclusion. If the analysis indicates that the benefits of exclusion outweigh the benefits of inclusion, the Secretary may exercise her discretion to exclude the area only if such exclusion would not result in the extinction of the species.

Exclusions Based on Economic Impacts

Under section 4(b)(2) of the Act, we consider the economic impacts of specifying any particular area as critical habitat. We are preparing an analysis of economic impacts of the proposed critical habitat designation and related factors.

During the development of a final designation, we will consider economic impacts based on information in our economic analysis, public comments, and other new information, and areas may be excluded from the final critical habitat designation under section 4(b)(2) of the Act and our implementing regulations at 50 CFR 424.19.

Exclusions Based on National Security Impacts

Under section 4(b)(2) of the Act, we consider whether there are lands where a national security impact might exist. In preparing this proposal, we have determined that some lands within the proposed designation of critical habitat for *Brickellia mosieri* and *Linum carteri* var. *carteri* are owned or managed by the Department of Defense and the Department of Homeland Security.

However, we anticipate no impact on national security. Consequently, the Secretary does not anticipate exercising her discretion to exclude any areas from the final designation based on impacts on national security.

Exclusions Based on Other Relevant Impacts

Under section 4(b)(2) of the Act, we consider any other relevant impacts, in addition to economic impacts and impacts on national security. We consider a number of factors, including whether the landowners have developed any HCPs or other management plans for the area, or whether there are conservation partnerships that would be encouraged by designation of, or exclusion from, critical habitat. In addition, we look at any tribal issues, and consider the government-to-government relationship of the United States with tribal entities. We also consider any social impacts that might occur because of the designation.

In preparing this proposed rule, we have determined that there are currently no HCPs or other management plans specifically for *Brickellia mosieri* or *Linum carteri* var. *carteri*. Properties under Miami-Dade County's Environmentally Endangered Lands (EEL) Covenant Program (i.e., properties with temporary conservation easements) are required to have habitat management plans in place for the easement's 10-year duration (which can be renewed). However, because such easements are temporary and voluntary, and without information regarding the type or amount of habitat management that is required for each property or whether there is any mechanism to ensure the management occurs, we do not propose to exclude such areas at this time. We are requesting additional information on these sites. The proposed designation does not include any tribal lands or additional trust resources. We anticipate no impact on tribal lands, partnerships, or HCPs from this proposed critical habitat designation. Accordingly, although it is possible that some areas may be excluded from the final rule based on additional information on conservation easements, at this point the Secretary does not propose to exercise her discretion to exclude any areas from the final designation based on other relevant impacts.

Peer Review

In accordance with our joint policy on peer review published in the **Federal Register** on July 1, 1994 (59 FR 34270), we will seek the expert opinions of at least three appropriate and independent

specialists regarding this proposed rule. The purpose of peer review is to ensure that our proposed critical habitat designation is based on scientifically sound data, assumptions, and analyses. We will invite these peer reviewers to comment during this public comment.

We will consider all comments and information we receive during the comment period on this proposed rule during our preparation of a final determination. Accordingly, the final decision may differ from this proposal.

Public Hearings

Section 4(b)(5) of the Act provides for one or more public hearings on this proposal, if requested. Requests must be received within 45 days after the date of publication of this proposed rule in the **Federal Register**. Such requests must be sent to the address shown in the **FOR FURTHER INFORMATION CONTACT** section. We will schedule public hearings on this proposal, if any are requested, and announce the dates, times, and places of those hearings, as well as how to obtain reasonable accommodations, in the **Federal Register** and local newspapers at least 15 days before the hearing.

Required Determinations

Regulatory Planning and Review (Executive Orders 12866 and 13563)

Executive Order 12866 provides that the Office of Information and Regulatory Affairs will review all significant rules. The Office of Information and Regulatory Affairs has determined that this rule is not significant.

Executive Order 13563 reaffirms the principles of E.O. 12866 while calling for improvements in the nation's regulatory system to promote predictability, to reduce uncertainty, and to use the best, most innovative, and least burdensome tools for achieving regulatory ends. The executive order directs agencies to consider regulatory approaches that reduce burdens and maintain flexibility and freedom of choice for the public where these approaches are relevant, feasible, and consistent with regulatory objectives. Executive Order 13563 emphasizes further that regulations must be based on the best available science and that the rulemaking process must allow for public participation and an open exchange of ideas. We have developed this rule in a manner consistent with these requirements.

Regulatory Flexibility Act (5 U.S.C. 601 *et seq.*)

Under the Regulatory Flexibility Act (RFA; 5 U.S.C. 601 *et seq.*) as amended by the Small Business Regulatory

Enforcement Fairness Act of 1996 (SBREFA; 5 U.S.C. 801 *et seq.*), whenever an agency is required to publish a notice of rulemaking for any proposed or final rule, it must prepare and make available for public comment a regulatory flexibility analysis that describes the effects of the rule on small entities (small businesses, small organizations, and small government jurisdictions). However, no regulatory flexibility analysis is required if the head of the agency certifies the rule will not have a significant economic impact on a substantial number of small entities. The SBREFA amended the RFA to require Federal agencies to provide a certification statement of the factual basis for certifying that the rule will not have a significant economic impact on a substantial number of small entities.

According to the Small Business Administration, small entities include small organizations such as independent nonprofit organizations; small governmental jurisdictions, including school boards and city and town governments that serve fewer than 50,000 residents; and small businesses (13 CFR 121.201). Small businesses include such businesses as manufacturing and mining concerns with fewer than 500 employees, wholesale trade entities with fewer than 100 employees, retail and service businesses with less than \$5 million in annual sales, general and heavy construction businesses with less than \$27.5 million in annual business, special trade contractors doing less than \$11.5 million in annual business, and forestry and logging operations with fewer than 500 employees and annual business less than \$7 million. To determine whether small entities may be affected, we will consider the types of activities that might trigger regulatory impacts under this designation as well as types of project modifications that may result. In general, the term "significant economic impact" is meant to apply to a typical small business firm's business operations.

Importantly, the incremental impacts of a rule must be *both* significant and substantial to prevent certification of the rule under the RFA and to require the preparation of an initial regulatory flexibility analysis. If a substantial number of small entities are affected by the proposed critical habitat designation, but the per-entity economic impact is not significant, the Service may certify. Likewise, if the per-entity economic impact is likely to be significant, but the number of affected entities is not substantial, the Service may also certify.

Under the RFA, as amended, and following recent court decisions, Federal agencies are only required to evaluate the potential incremental impacts of rulemaking on those entities directly regulated by the rulemaking itself, and not the potential impacts to indirectly affected entities. The regulatory mechanism through which critical habitat protections are realized is section 7 of the Act, which requires Federal agencies, in consultation with the Service, to ensure that any action authorized, funded, or carried by the agency is not likely to adversely modify critical habitat. Therefore, only Federal action agencies are directly subject to the specific regulatory requirement (avoiding destruction and adverse modification) imposed by critical habitat designation. Under these circumstances, it is our position that only Federal action agencies will be directly regulated by this designation. Therefore, because Federal agencies are not small entities, the Service certifies that the proposed critical habitat rule will not have a significant economic impact on a substantial number of small entities.

In conclusion, based on our interpretation of directly regulated entities under the RFA and relevant case law, this designation of critical habitat would only directly regulate Federal agencies, which are not by definition small business entities. As such, we certify that, if promulgated, this designation of critical habitat will not have a significant economic impact on a substantial number of small business entities. Therefore, an initial regulatory flexibility analysis is not required.

Energy Supply, Distribution, or Use—Executive Order 13211

Executive Order 13211 (Actions Concerning Regulations That Significantly Affect Energy Supply, Distribution, or Use) requires agencies to prepare Statements of Energy Effects when undertaking certain actions. We do not expect that the designation of this proposed critical habitat would significantly affect energy supplies, distribution, or use. Therefore, this action is not a significant energy action, and no Statement of Energy Effects is required. However, we will further evaluate this issue as we conduct our economic analysis, and review and revise this assessment as warranted.

Unfunded Mandates Reform Act (2 U.S.C. 1501 et seq.)

In accordance with the Unfunded Mandates Reform Act (2 U.S.C. 1501 et seq.), we make the following findings:

(1) This proposed rule would not produce a Federal mandate. In general, a Federal mandate is a provision in legislation, statute, or regulation that would impose an enforceable duty upon State, local, or tribal governments, or the private sector, and includes both “Federal intergovernmental mandates” and “Federal private sector mandates.” These terms are defined in 2 U.S.C. 658(5)–(7). “Federal intergovernmental mandate” includes a regulation that “would impose an enforceable duty upon State, local, or tribal governments” with two exceptions. It excludes “a condition of Federal assistance.” It also excludes “a duty arising from participation in a voluntary Federal program,” unless the regulation “relates to a then-existing Federal program under which \$500,000,000 or more is provided annually to State, local, and tribal governments under entitlement authority,” if the provision would “increase the stringency of conditions of assistance” or “place caps upon, or otherwise decrease, the Federal Government’s responsibility to provide funding,” and the State, local, or tribal governments “lack authority” to adjust accordingly. At the time of enactment, these entitlement programs were: Medicaid; Aid to Families with Dependent Children work programs; Child Nutrition; Food Stamps; Social Services Block Grants; Vocational Rehabilitation State Grants; Foster Care, Adoption Assistance, and Independent Living; Family Support Welfare Services; and Child Support Enforcement. “Federal private sector mandate” includes a regulation that “would impose an enforceable duty upon the private sector, except (i) a condition of Federal assistance or (ii) a duty arising from participation in a voluntary Federal program.”

The designation of critical habitat does not impose a legally binding duty on non-Federal Government entities or private parties. Under the Act, the only regulatory effect is that Federal agencies must ensure that their actions do not destroy or adversely modify critical habitat under section 7. While non-Federal entities that receive Federal funding, assistance, or permits, or that otherwise require approval or authorization from a Federal agency for an action, may be indirectly impacted by the designation of critical habitat, the legally binding duty to avoid destruction or adverse modification of critical habitat rests squarely on the Federal agency. Furthermore, to the extent that non-Federal entities are indirectly impacted because they receive Federal assistance or participate

in a voluntary Federal aid program, the Unfunded Mandates Reform Act would not apply, nor would critical habitat shift the costs of the large entitlement programs listed above onto State governments.

(2) We lack the available economic information to determine if a Small Government Agency Plan is required. Therefore, we defer this finding until completion of the draft economic analysis is prepared under section 4(b)(2) of the Act.

Takings—Executive Order 12630

In accordance with Executive Order 12630 (“Government Actions and Interference with Constitutionally Protected Private Property Rights”), this rule is not anticipated to have significant takings implications. As discussed above, the designation of critical habitat affects only Federal actions. Critical habitat designation does not affect landowner actions that do not require Federal funding or permits, nor does it preclude development of habitat conservation programs or issuance of incidental take permits to permit actions that do require Federal funding or permits to go forward. Once the economic analysis is available, we will review and revise this preliminary assessment as warranted, and prepare a takings implication assessment.

Federalism—Executive Order 13132

In accordance with Executive Order 13132 (Federalism), this proposed rule does not have significant Federalism effects. A federalism summary impact statement is not required. In keeping with Department of the Interior and Department of Commerce policy, we requested information from, and coordinated development of, this proposed critical habitat designation with appropriate State resource agencies in Florida. From a federalism perspective, the designation of critical habitat directly affects only the responsibilities of Federal agencies. The Act imposes no other duties with respect to critical habitat, either for States and local governments, or for anyone else. As a result, the rule would not have substantial direct effects either on the States, or on the relationship between the national government and the States, or on the distribution of powers and responsibilities among the various levels of government. The designation could have some benefit to these governments because the areas that contain the features essential to the conservation of the species are more clearly defined, and the physical and biological features of the habitat necessary to the conservation of the

species are specifically identified. This information does not alter where and what federally sponsored activities may occur. However, it may assist these local governments in long-range planning (because these local governments no longer have to wait for case-by-case section 7 consultations to occur).

Where State and local governments require approval or authorization from a Federal agency for actions that may affect critical habitat, consultation under section 7(a)(2) would be required. While non-Federal entities that receive Federal funding, assistance, or permits, or that otherwise require approval or authorization from a Federal agency for an action, may be indirectly impacted by the designation of critical habitat, the legally binding duty to avoid destruction or adverse modification of critical habitat rests squarely on the Federal agency.

Civil Justice Reform—Executive Order 12988

In accordance with Executive Order 12988 (Civil Justice Reform), the Office of the Solicitor has determined that the rule does not unduly burden the judicial system and that it meets the requirements of sections 3(a) and 3(b)(2) of the Order. We are proposing to designate critical habitat in accordance with the provisions of the Act. To assist the public in understanding the habitat needs of the species, the rule identifies the elements of physical or biological features essential to the conservation of the species. The areas of proposed critical habitat are presented on maps, and the rule provides several options for the interested public to obtain more detailed location information, if desired.

Paperwork Reduction Act of 1995 (44 U.S.C. 3501 et seq.)

This rule does not contain any new collections of information that require approval by OMB under the Paperwork Reduction Act of 1995 (44 U.S.C. 3501 et seq.). This rule will not impose recordkeeping or reporting requirements on State or local governments, individuals, businesses, or organizations. An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB control number.

National Environmental Policy Act (42 U.S.C. 4321 et seq.)

It is our position that, outside the jurisdiction of the U.S. Court of Appeals for the Tenth Circuit, we do not need to prepare environmental analyses pursuant to the National Environmental Policy Act in connection with

designating critical habitat under the Act. We published a notice outlining our reasons for this determination in the **Federal Register** on October 25, 1983 (48 FR 49244). This position was upheld by the U.S. Court of Appeals for the Ninth Circuit (*Douglas County v. Babbitt*, 48 F.3d 1495 (9th Cir. 1995), cert. denied 516 U.S. 1042 (1996)).

Government-to-Government Relationship With Tribes

In accordance with the President's memorandum of April 29, 1994 (Government-to-Government Relations with Native American Tribal Governments; 59 FR 22951), Executive Order 13175 (Consultation and Coordination With Indian Tribal Governments), and the Department of the Interior's manual at 512 DM 2, we readily acknowledge our responsibility to communicate meaningfully with recognized Federal Tribes on a government-to-government basis. In accordance with Secretarial Order 3206 of June 5, 1997 (American Indian Tribal Rights, Federal-Tribal Trust Responsibilities, and the Endangered Species Act), we readily acknowledge our responsibilities to work directly with tribes in developing programs for healthy ecosystems, to acknowledge that tribal lands are not subject to the same controls as Federal public lands, to remain sensitive to Indian culture, and to make information available to tribes.

We determined that there are no tribal lands that are currently occupied by *Brickellia mosieri* or *Linum carteri* var. *carteri* that contain the features essential for conservation of these plants, and no tribal lands unoccupied by either plant that are essential for the conservation of these plants. Therefore, we are not proposing to designate critical habitat for *B. mosieri* or *L. c.* var. *carteri* on tribal lands.

Clarity of the Rule

We are required by Executive Orders 12866 and 12988 and by the Presidential Memorandum of June 1, 1998, to write all rules in plain language. This means that each rule we publish must:

- (1) Be logically organized;
- (2) Use the active voice to address readers directly;
- (3) Use clear language rather than jargon;
- (4) Be divided into short sections and sentences; and
- (5) Use lists and tables wherever possible.

If you feel that we have not met these requirements, send us comments by one of the methods listed in the **ADDRESSES** section. To better help us revise the

rule, your comments should be as specific as possible. For example, you should tell us the numbers of the sections or paragraphs that are unclearly written, which sections or sentences are too long, the sections where you feel lists or tables would be useful, etc.

References Cited

A complete list of references cited in this rulemaking is available on the Internet at <http://www.regulations.gov> and upon request from the South Florida Ecological Services Field Office (see **FOR FURTHER INFORMATION CONTACT**).

Authors

The primary authors of this package are the staff members of the South Florida Ecological Services Field Office.

List of Subjects in 50 CFR Part 17

Endangered and threatened species, Exports, Imports, Reporting and recordkeeping requirements, Transportation.

Proposed Regulation Promulgation

Accordingly, we propose to amend part 17, subchapter B of chapter I, title 50 of the Code of Federal Regulations, as set forth below:

PART 17—ENDANGERED AND THREATENED WILDLIFE AND PLANTS

- 1. The authority citation for part 17 continues to read as follows:

Authority: 16 U.S.C. 1361–1407; 1531–1544; 4201–4245, unless otherwise noted.

- 2. Amend § 17.96(a) by:
- a. Adding Family Linaceae in alphabetical order to the list of families;
 - b. Adding an entry for “*Brickellia mosieri* (Florida brickell-bush)” in alphabetical order under the family Asteraceae; and
 - c. Adding an entry for “*Linum carteri* var. *carteri* (Carter’s small-flowered flax)” in alphabetical order under the family Linaceae.

The additions read as follows:

§ 17.96 Critical habitat—plants.

(a) Flowering plants.

* * * * *

Family Asteraceae: *Brickellia mosieri* (Florida brickell-bush)

(1) Critical habitat units for *Brickellia mosieri* are depicted for Miami-Dade County, Florida, on the maps below.

(2) Within these areas, the primary constituent elements of the physical or biological features essential to the conservation of *Brickellia mosieri* are:

- (i) Areas of pine rockland habitat that contain:

- (A) Open canopy, semi-open subcanopy, and understory;

(B) Substrate of oolitic limestone rock; and

(C) A plant community of predominately native vegetation that may include, but is not limited to:

(1) Canopy vegetation dominated by *Pinus elliottii* var. *densa* (South Florida slash pine);

(2) Subcanopy vegetation that may include, but is not limited to, *Serenoa repens* (saw palmetto), *Sabal palmetto* (cabbage palm), *Coccothrinax argentata* (silver palm), *Thrinax morrisii* (brittle thatch palm), *Myrica cerifera* (wax myrtle), *Rapanea punctata* (myrsine), *Metopium toxiferum* (poisonwood), *Byrsonima lucida* (locustberry), *Dodonaea viscosa* (varnishleaf), *Tetrazygia bicolor* (tetrazygia), *Guettarda scabra* (rough velvetseed), *Ardisia escallonioides* (marlberry), *Psidium longipes* (mangroveberry), *Sideroxylon salicifolium* (willow bustic), and *Rhus copallinum* (winged sumac);

(3) Short-statured shrubs that may include, but are not limited to, *Quercus elliottii* (running oak), *Randia aculeata* (white indigoberry), *Crossopetalum ilicifolium* (Christmas berry), *Morinda royoc* (redgal), and *Chiococca alba* (snowberry); and

(4) Understory vegetation that may include, but is not limited to, *Andropogon* spp.; *Schizachyrium gracile*, *S. rhizomatum*, and *S. sanguineum* (bluestems); *Aristida purpurascens* (arrowfeather threeawn); *Sorghastrum secundum* (lopsided Indiangrass); *Muhlenbergia capillaris* (hairawn muhly); *Rhynchospora floridensis* (Florida white-top sedge); *Tragia saxicola* (pineland noseburn); *Echites umbellata* (devil's potato); *Croton linearis* (pineland croton); *Chamaesyce* spp. (sandmats); *Chamaecrista fasciculata* (partridge pea); *Zamia pumila* (coontie); and *Anemia adiantifolia* (maidenhair pineland fern).

(ii) A disturbance regime that naturally or artificially duplicates natural ecological processes (e.g., fire, hurricanes, or other weather events) and that maintains the pine rockland habitat described in paragraph (2)(i) of this entry.

(iii) Habitats that are connected and of sufficient area to sustain viable populations of *Brickellia mosieri* and *Linum carteri* var. *carteri* in the pine rockland habitat described in paragraph (2)(i) of this entry.

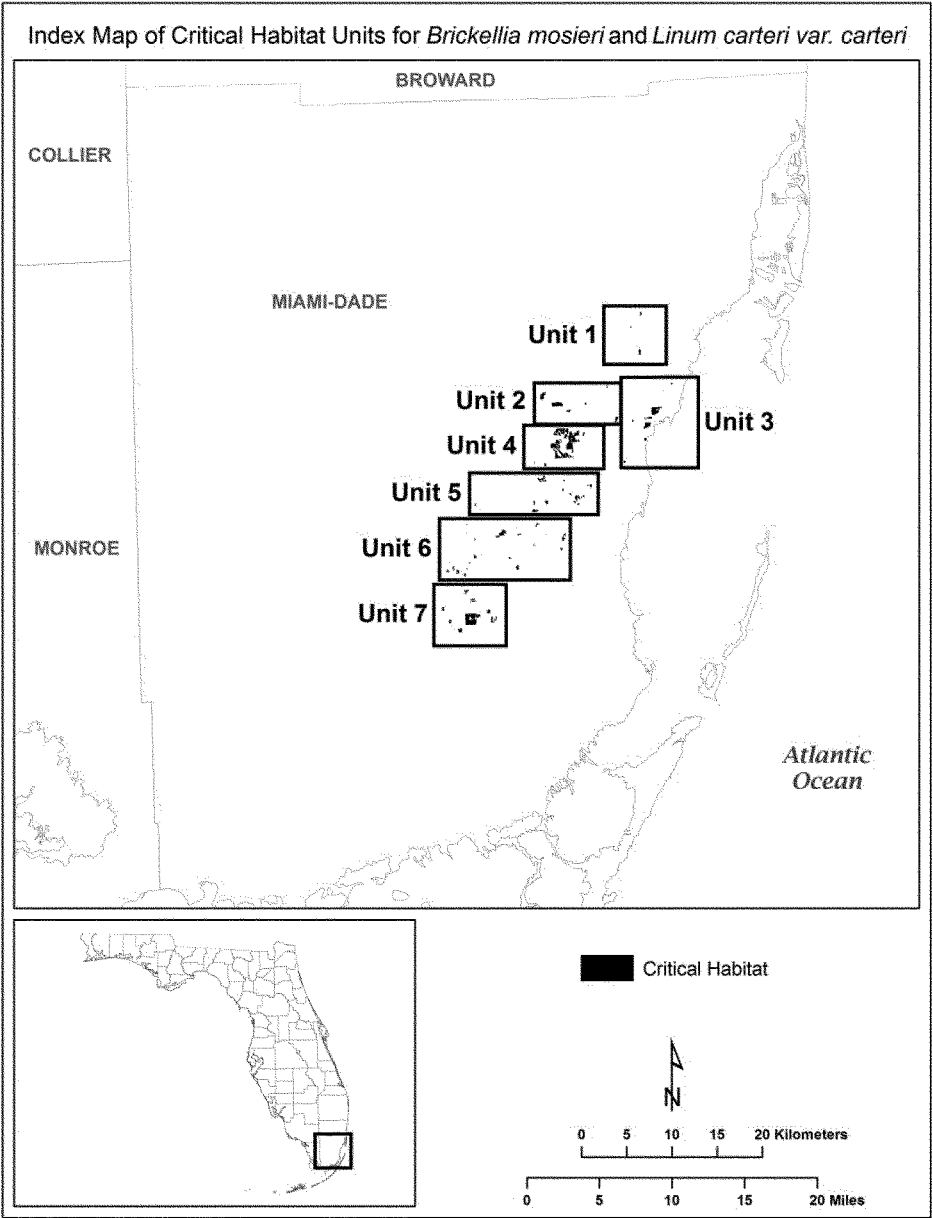
(3) Critical habitat does not include manmade structures (such as buildings,

aqueducts, runways, roads, and other paved areas) and the land on which they are located exists within the legal boundaries on the effective date of this rule.

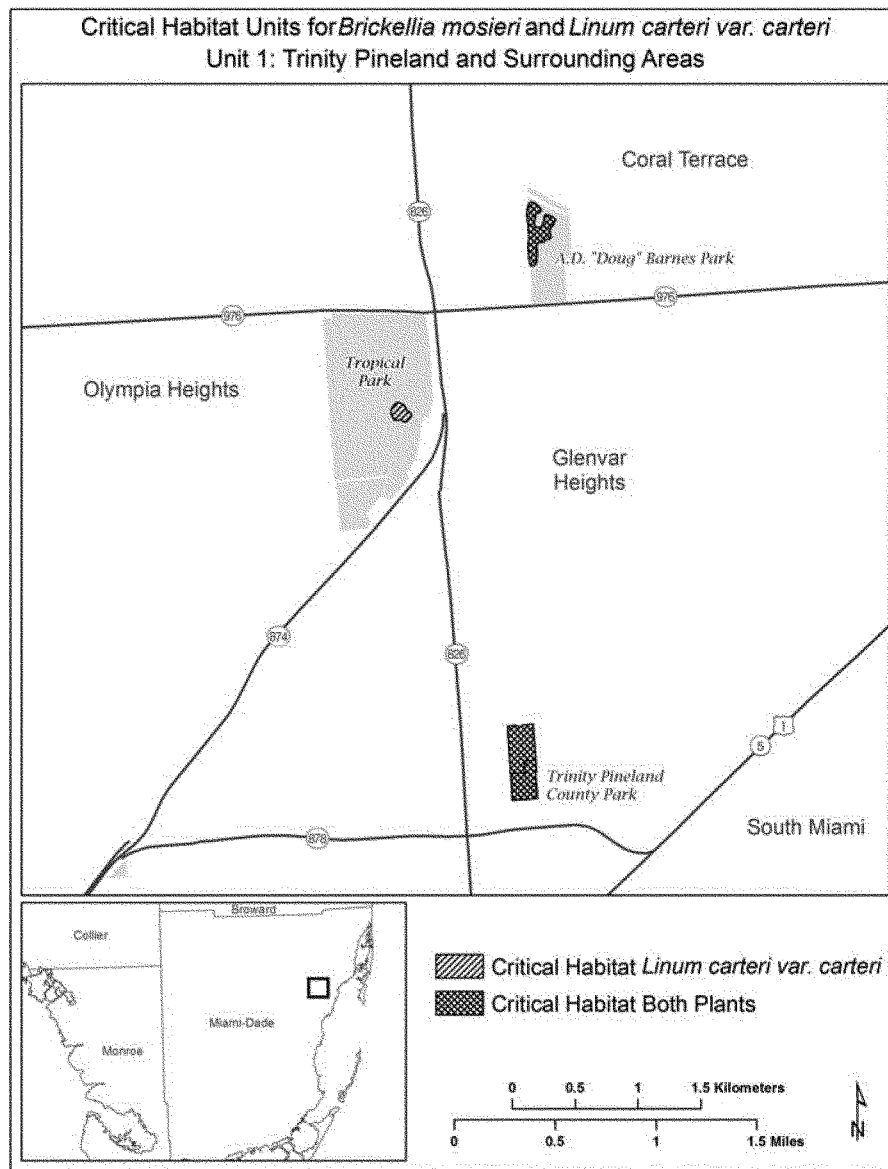
(4) *Critical habitat map units.* Unit maps were developed using ESRI ArcGIS mapping software along with various spatial data layers. ArcGIS was also used to calculate the size of habitat areas. The projection used in mapping and calculating distances and locations within the units was North American Albers Equal Area Conic, NAD 83. The maps in this entry, as modified by any accompanying regulatory text, establish the boundaries of the critical habitat designation. The coordinates or plot points or both on which each map is based are available to the public at the Service's Internet site at <http://www.fws.gov/verobeach/>, at the Federal eRulemaking Portal (<http://www.regulations.gov> at Docket No. FWS-R4-ES-2013-0108), and at the field office responsible for this designation. You may obtain field office location information by contacting one of the Service regional offices, the addresses of which are listed at 50 CFR 2.2.

(5) Index map follows:

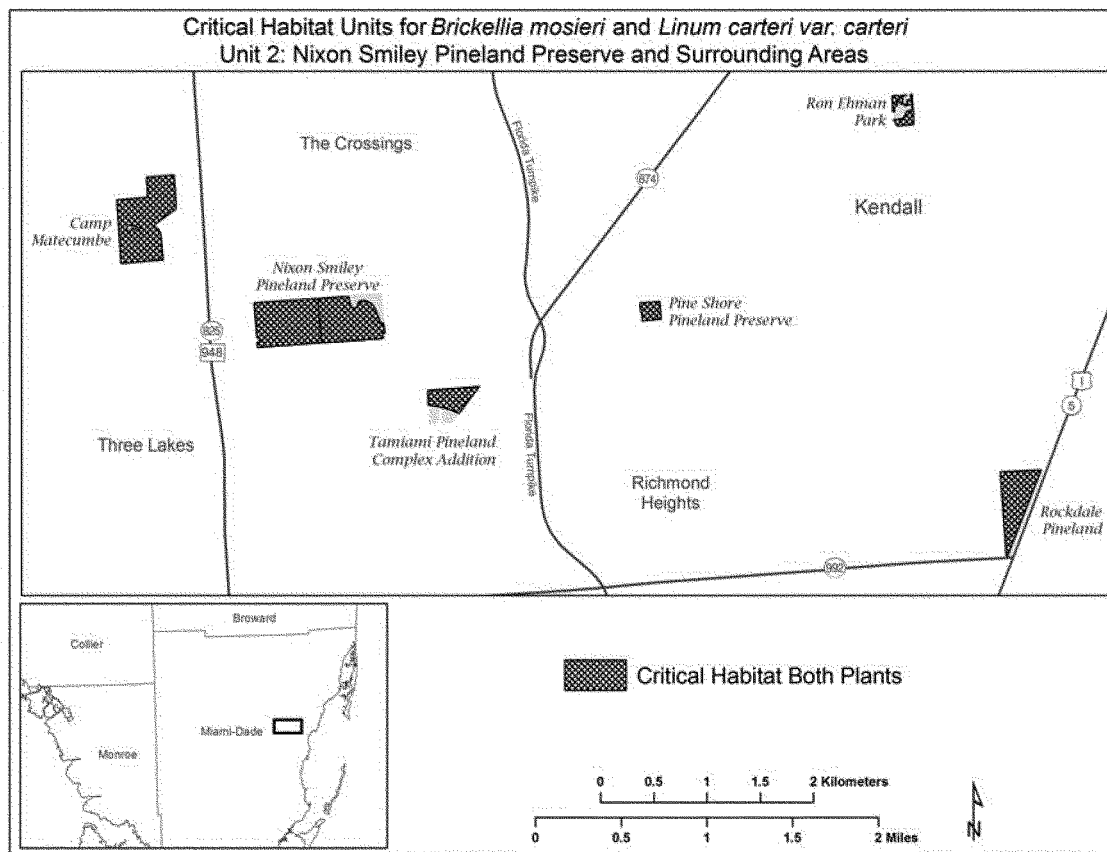
BILLING CODE 4310-55-P



(6) Unit 1: Trinity Pineland and surrounding areas, Miami-Dade County, Florida. Map of Unit 1 follows:

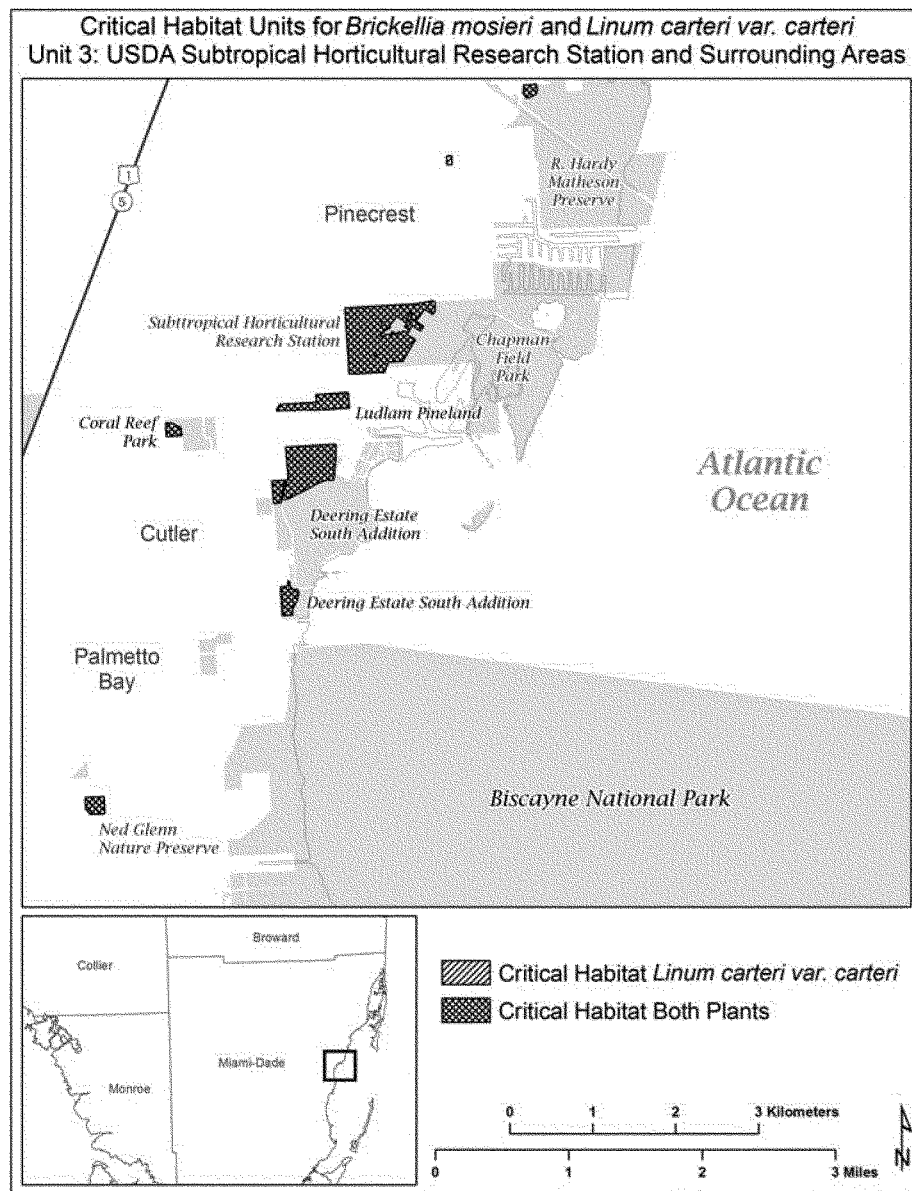


(7) Unit 2: Nixon Smiley Pineland Preserve and surrounding areas, Miami-Dade County, Florida. Map of Unit 2 follows:



(8) Unit 3: USDA Subtropical
Horticultural Research Station and

surrounding areas, Miami-Dade County,
Florida. Map of Unit 3 follows:



Critical Habitat Units for *Brickellia mosieri* and *Linum carteri* var. *carteri*
Unit 4: Richmond Pinelands and Surrounding Areas

Richmond West

Gold Coast Railroad Museum Park

Martinez Pineland

Zoo Miami

US Coast Guard Communication Station

University of Miami Richmond Campus

Perrine

South Miami Heights

Larry and Penny Thompson Park

Florida Turnpike

Collier

Broward

Monroe

Miami-Dade

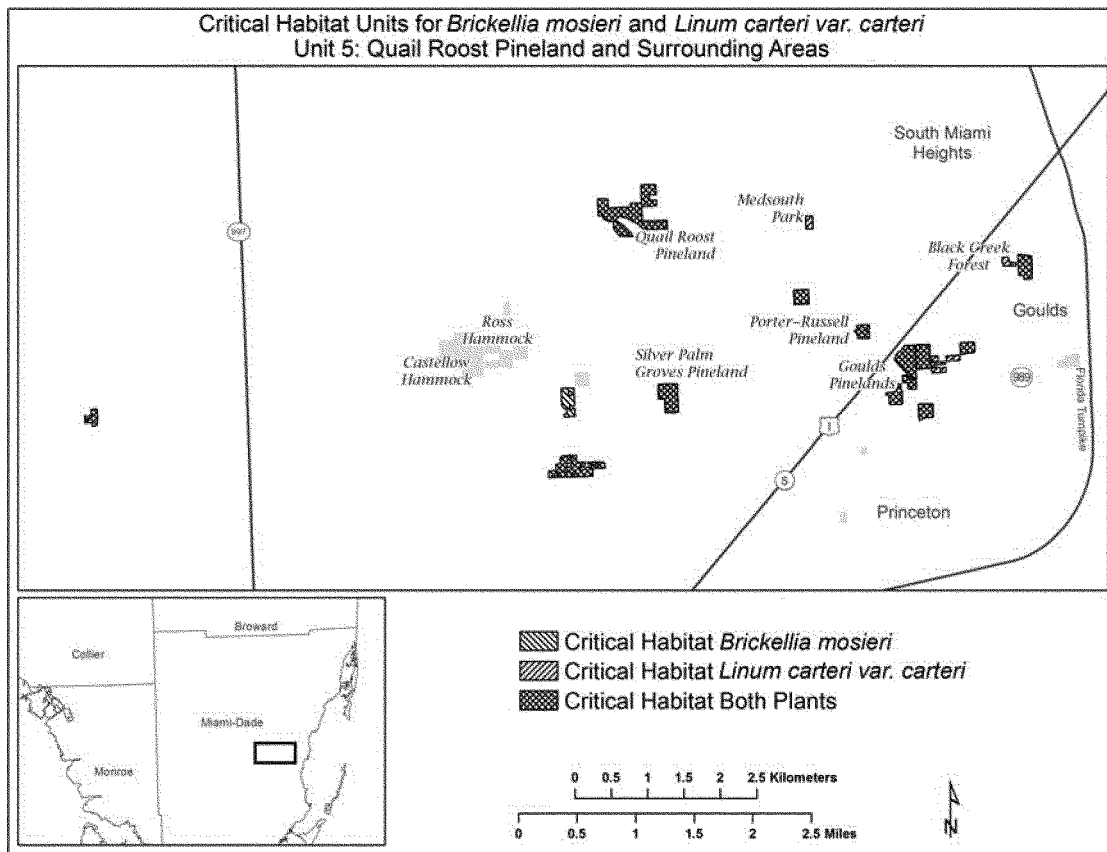
0 0.5 1 1.5 2 Kilometers

0 0.5 1 1.5 2 Miles

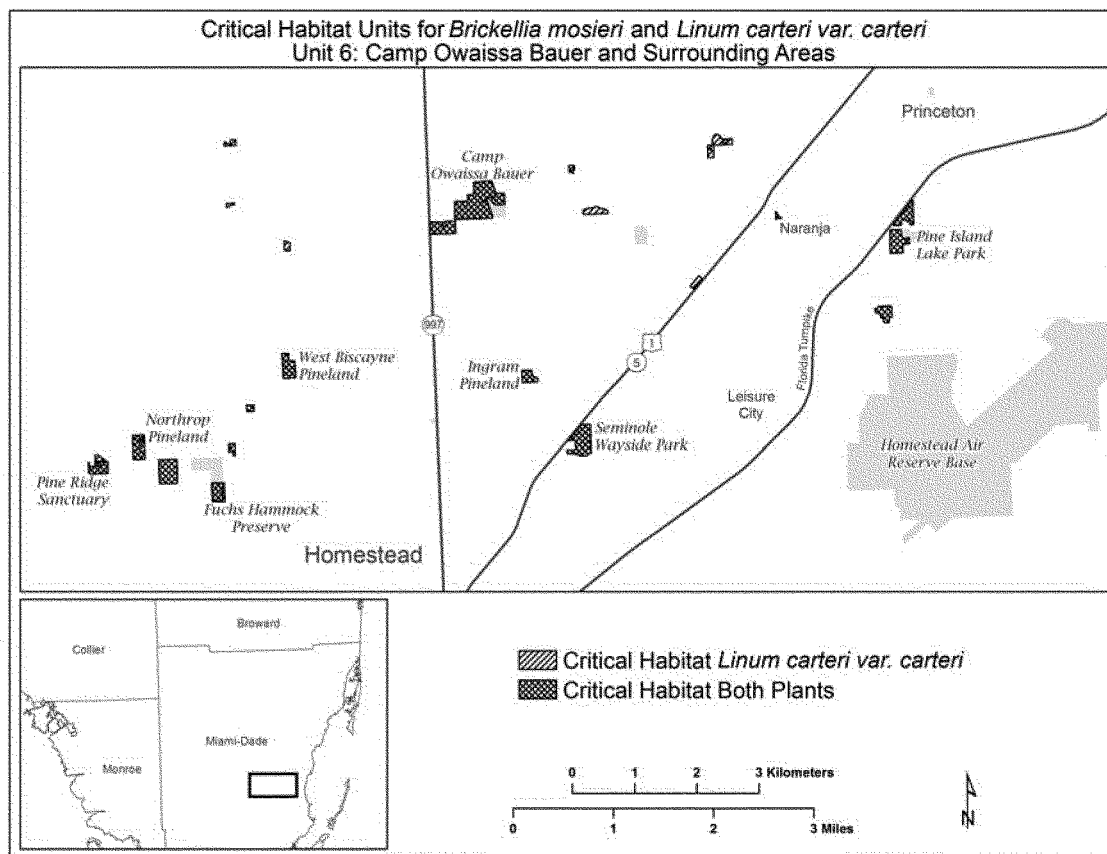
Legend:

- Critical Habitat *Brickellia mosieri*
- Critical Habitat *Linum carteri* var. *carteri*
- Critical Habitat Both Plants

(10) Unit 5: Quail Roost Pineland and surrounding areas, Miami-Dade County, Florida. Map of Unit 5 follows:

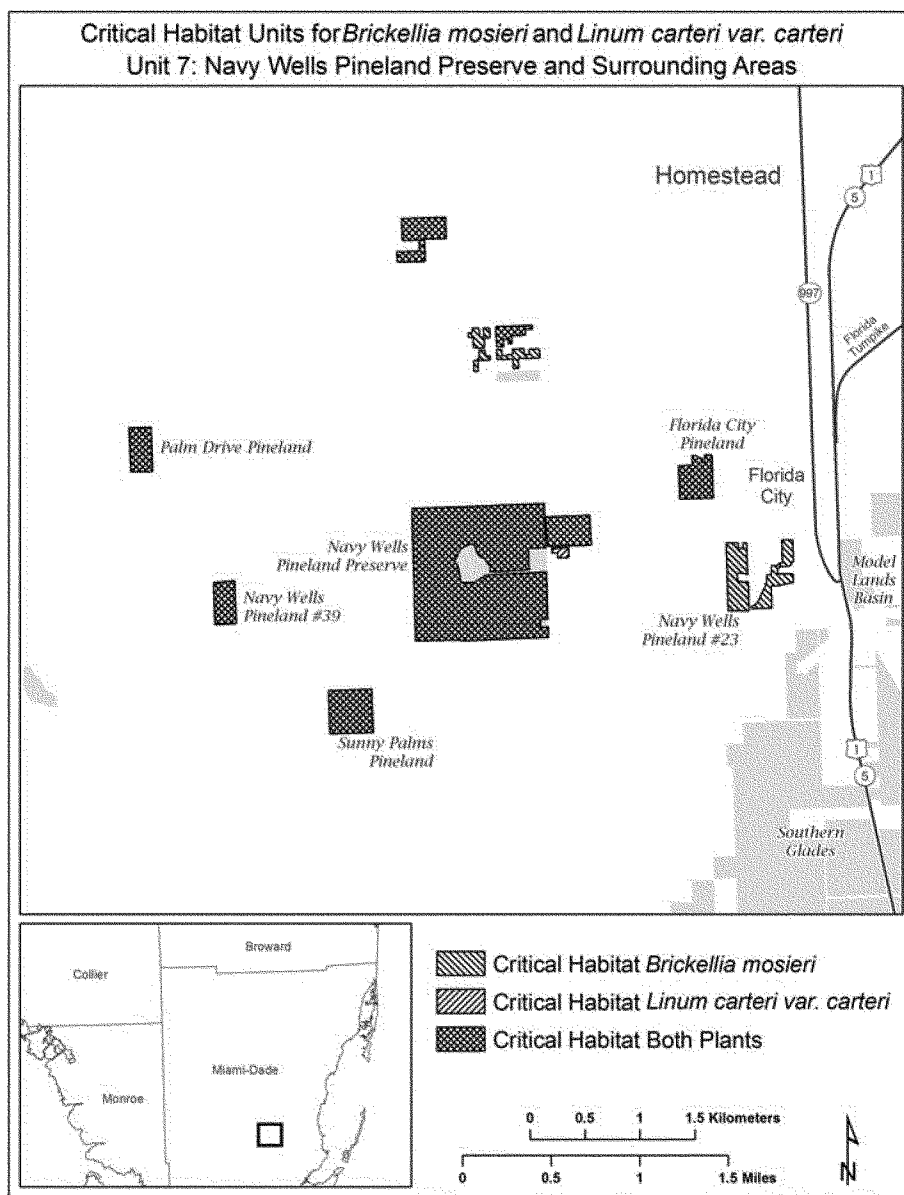


(11) Unit 6: Camp Owaissa Bauer and surrounding areas, Miami-Dade County, Florida. Map of Unit 6 follows:



(12) Unit 7: Navy Wells Pineland Preserve and surrounding areas, Miami-

Dade County, Florida. Map of Unit 7 follows:



BILLING CODE 4310-55-C

* * * * *

Family Linaceae: *Linum carteri* var. *carteri* (Carter's small-flowered flax)

(1) Critical habitat units for *Linum carteri* var. *carteri* in Miami-Dade County, Florida, are the same as those set forth in this paragraph (a) for Family Asteraceae: *Brickellia mosieri* (Florida

brickell-bush). The index map of all of the critical habitat units, and the specific unit maps of critical habitat for Units 1 through 7, for *Linum carteri* var. *carteri* are provided at paragraphs (5), (6), (7), (8), (9), (10), (11), and (12) of the entry for Family Asteraceae: *Brickellia mosieri* (Florida brickell-bush) in this paragraph (a).

(2) Within these areas, the primary constituent elements of, and the statements regarding developed lands in, critical habitat for *Linum carteri* var. *carteri* are identical to those set forth at paragraphs (2) and (3) of the entry for Family Asteraceae: *Brickellia mosieri* (Florida brickell-bush) in this paragraph (a).

(3) *Critical habitat map units.* Unit maps were developed using ESRI ArcGIS mapping software along with various spatial data layers. ArcGIS was also used to calculate the size of habitat areas. The projection used in mapping and calculating distances and locations within the units was North American Albers Equal Area Conic, NAD 83. The maps in the entry for Family Asteraceae: *Brickellia mosieri* (Florida brickell-bush) in this paragraph (a), as modified

by any accompanying regulatory text, establish the boundaries of the critical habitat designation for *Linum carteri* var. *carteri*. The coordinates or plot points or both on which each map is based are available to the public at the Service's Internet site at <http://www.fws.gov/verobeach/>, at the Federal eRulemaking Portal (<http://www.regulations.gov>) at Docket No. FWS-R4-ES-2013-0108), and at the field office responsible for this

designation. You may obtain field office location information by contacting one of the Service regional offices, the addresses of which are listed at 50 CFR 2.2.

* * * * *

Dated: September 26, 2013.

Rachel Jacobson,

Principal Deputy Assistant Secretary for Fish and Wildlife and Parks.

[FR Doc. 2013-24174 Filed 10-2-13; 8:45 am]

BILLING CODE 4310-55-P

Notices

Federal Register

Vol. 78, No. 192

Thursday, October 3, 2013

This section of the FEDERAL REGISTER contains documents other than rules or proposed rules that are applicable to the public. Notices of hearings and investigations, committee meetings, agency decisions and rulings, delegations of authority, filing of petitions and applications and agency statements of organization and functions are examples of documents appearing in this section.

AFRICAN DEVELOPMENT FOUNDATION

Board of Directors Executive Session Meeting

Meeting: African Development Foundation, Board of Directors Executive Session Meeting

Time: Tuesday, October 22, 2013 9:00 a.m. to 1:00 p.m.

Place: 1400 Eye Street NW., Suite 1000, Washington, DC 20005

Date: Tuesday, October 22, 2013

Status:

1. Open session, Tuesday, October 22, 2013, 9:00 a.m. to 12:00 p.m.
2. Closed session, Tuesday, October 22, 2013, 12:00 p.m. to 1:00 p.m.

Shari Berenbach,
President/CEO, USADF.

[FR Doc. 2013-24236 Filed 10-2-13; 8:45 am]

BILLING CODE 6117-01-P

DEPARTMENT OF AGRICULTURE

Animal and Plant Health Inspection Service

[Docket No. APHIS-2013-0074]

Notice of Request for Revision to and Extension of Approval of an Information Collection; Importation of Live Swine, Pork, and Pork Products from Certain Regions Free of Classical Swine Fever in Brazil, Chile, and Mexico

AGENCY: Animal and Plant Health Inspection Service, USDA.

ACTION: Revision to and extension of approval of an information collection; comment request.

SUMMARY: In accordance with the Paperwork Reduction Act of 1995, this notice announces the Animal and Plant Health Inspection Service's intention to request a revision to and extension of approval of an information collection

associated with the regulations for the importation of live swine, pork, and pork products from certain regions free of classical swine fever in Brazil, Chile, and Mexico.

DATES: We will consider all comments that we receive on or before December 2, 2013.

ADDRESSES: You may submit comments by either of the following methods:

- Federal eRulemaking Portal: Go to <http://www.regulations.gov/#!documentDetail;D=APHIS-2013-0074-0001>.

- Postal Mail/Commercial Delivery: Send your comment to Docket No. APHIS-2013-0074, Regulatory Analysis and Development, PPD, APHIS, Station 3A-03.8, 4700 River Road Unit 118, Riverdale, MD 20737-1238.

Supporting documents and any comments we receive on this docket may be viewed at <http://www.regulations.gov/#!docketDetail;D=APHIS-2013-0074> or in our reading room, which is located in room 1141 of the USDA South Building, 14th Street and Independence Avenue SW., Washington, DC. Normal reading room hours are 8 a.m. to 4:30 p.m., Monday through Friday, except holidays. To be sure someone is there to help you, please call (202) 799-7039 before coming.

FOR FURTHER INFORMATION CONTACT: For information on the regulations for the importation of live swine, pork, and pork products from certain regions free of classical swine fever in Brazil, Chile, and Mexico, contact Dr. Magde Elshafie, Senior Staff Veterinary Medical Officer, TTS, NCIE, VS, APHIS, 4700 River Road Unit 40, Riverdale, MD 20737; (301) 851-3300. For copies of more detailed information on the information collection, contact Mrs. Celeste Sickles, APHIS' Information Collection Coordinator, at (301) 851-2908.

SUPPLEMENTARY INFORMATION:

Title: Importation of Live Swine, Pork, and Pork Products From Certain Regions Free of Classical Swine Fever in Brazil, Chile, and Mexico.

OMB Number: 0579-0230.

Type of Request: Revision to and extension of approval of an information collection.

Abstract: Under the Animal Health Protection Act (7 U.S.C. 8301 *et seq.*), the Animal and Plant Health Inspection Service (APHIS) of the United States Department of Agriculture is authorized,

among other things, to prohibit or restrict the importation and interstate movement of animals and animal products to prevent the introduction into and dissemination within the United States of livestock diseases and pests. To carry out this mission, APHIS regulates the importation of animals and animal products into the United States. The regulations for the importation of animals and animal products are contained in 9 CFR parts 92 through 98.

Part 94 allows the importation, under certain conditions, of live swine, pork, and pork products from certain regions that are free of classical swine fever (CSF) in Brazil, Chile, and Mexico to prevent the introduction of CSF into the United States. In accordance with § 94.25, APHIS recognizes certain regions in Brazil, Chile, and Mexico as free of CSF but places restrictions on the importation of live swine, pork, and pork products from these regions. These restrictions are placed because these regions either supplement their pork supplies by importing fresh (chilled or frozen) pork from CSF-affected regions, supplement their pork supplies with pork from CSF-affected regions that is not processed in accordance with the requirements in part 94, share a common land border with CSF-affected regions, or import live swine from such regions under conditions less restrictive than would be acceptable for importation into the United States.

To ensure that the importation of live swine, pork, and pork products from Brazil, Chile, and Mexico do not introduce CSF into the United States, the regulations include certain information collection activities, including certificates, compliance agreements, and cooperative service agreements. These information collection activities were previously approved by the Office of Management and Budget (OMB) for Chile and Mexico. However, on November 16, 2010 (75 FR 69851-69857, Docket No. APHIS-2009-0034), APHIS amended the regulations to add the Brazilian State of Santa Catarina to the list of regions in § 94.25.

In addition, since the last approval of this collection, the demand for imported pork and pork products has increased, which is reflected by an increased number of certificates issued by foreign veterinarians. As a result, we have increased the estimated annual number

of responses and the estimated total annual burden on respondents from 86 to 768.

We are asking OMB to approve our use of these information collection activities, as described, for an additional 3 years.

The purpose of this notice is to solicit comments from the public (as well as affected agencies) concerning our information collection. These comments will help us:

(1) Evaluate whether the collection of information is necessary for the proper performance of the functions of the Agency, including whether the information will have practical utility;

(2) Evaluate the accuracy of our estimate of the burden of the collection of information, including the validity of the methodology and assumptions used;

(3) Enhance the quality, utility, and clarity of the information to be collected; and

(4) Minimize the burden of the collection of information on those who are to respond, through use, as appropriate, of automated, electronic, mechanical, and other collection technologies; e.g., permitting electronic submission of responses.

Estimate of burden: The public reporting burden for this collection of information is estimated to average 1.0 hours per response.

Respondents: Federal animal health officials of the Governments of Brazil, Chile, and Mexico.

Estimated annual number of respondents: 11.

Estimated annual number of responses per respondent: 69.8.

Estimated annual number of responses: 768.

Estimated total annual burden on respondents: 768 hours. (Due to averaging, the total annual burden hours may not equal the product of the annual number of responses multiplied by the reporting burden per response.)

All responses to this notice will be summarized and included in the request for OMB approval. All comments will also become a matter of public record.

Done in Washington, DC, this 26th day of September 2013.

Michael C. Gregoire,

Acting Administrator, Animal and Plant Health Inspection Service.

[FR Doc. 2013-24095 Filed 10-2-13; 8:45 am]

BILLING CODE 3410-34-P

DEPARTMENT OF AGRICULTURE

Animal and Plant Health Inspection Service

[Docket No. APHIS-2013-0083]

Notice of Request for Extension of Approval of an Information Collection; Importation of Fresh Baby Kiwi From Chile

AGENCY: Animal and Plant Health Inspection Service, USDA.

ACTION: Extension of approval of an information collection; comment request.

SUMMARY: In accordance with the Paperwork Reduction Act of 1995, this notice announces the Animal and Plant Health Inspection Service's intention to request an extension of approval of an information collection associated with the regulations for the importation of fresh baby kiwi from Chile into the continental United States.

DATES: We will consider all comments that we receive on or before December 2, 2013.

ADDRESSES: You may submit comments by either of the following methods:

- *Federal eRulemaking Portal:* Go to <http://www.regulations.gov/#!documentDetail;D=APHIS-2013-0083-0001>.

- *Postal Mail/Commercial Delivery:* Send your comment to Docket No. APHIS-2013-0083, Regulatory Analysis and Development, PPD, APHIS, Station 3A-03.8, 4700 River Road Unit 118, Riverdale, MD 20737-1238.

Supporting documents and any comments we receive on this docket may be viewed at <http://www.regulations.gov/#!docketDetail;D=APHIS-2013-0083> or in our reading room, which is located in Room 1141 of the USDA South Building, 14th Street and Independence Avenue SW., Washington, DC. Normal reading room hours are 8 a.m. to 4:30 p.m., Monday through Friday, except holidays. To be sure someone is there to help you, please call (202) 799-7039 before coming.

FOR FURTHER INFORMATION CONTACT: For information on the importation of fresh baby kiwi from Chile, contact Mr. David Lamb, Regulatory Policy Specialist, RCC, RPM, PHP, PPQ, APHIS, 4700 River Road Unit 133, Riverdale, MD 20737; (301) 851-2103. For copies of more detailed information on the information collection, contact Mrs. Celeste Sickles, APHIS' Information Collection Coordinator, at (301) 851-2908.

SUPPLEMENTARY INFORMATION:

Title: Importation of Fresh Baby Kiwi From Chile.

OMB Number: 0579-0374.

Type of Request: Extension of approval of an information collection.

Abstract: The Plant Protection Act (PPA, 7 U.S.C. 7701 *et seq.*) authorizes the Secretary of Agriculture to restrict the importation, entry, or interstate movement of plants, plant products, and other articles to prevent the introduction of plant pests into the United States or their dissemination within the United States. As authorized by the PPA, the Animal and Plant Health Inspection Service regulates the importation of certain fruits and vegetables in accordance with the regulations in "Subpart—Fruits and Vegetables" (7 CFR 319.56-1 through 319.56-61).

Under these regulations, fresh baby kiwi from Chile may be imported into the continental United States under certain conditions, as listed in 7 CFR 319.56-53, to prevent the introduction of plant pests into the United States. The regulations require information collection activities, including production site registration, labeling of containers with the registered production site identified, and a phytosanitary certificate with an additional declaration.

We are asking the Office of Management and Budget (OMB) to approve our use of these information collection activities for an additional 3 years.

The purpose of this notice is to solicit comments from the public (as well as affected agencies) concerning our information collection. These comments will help us:

(1) Evaluate whether the collection of information is necessary for the proper performance of the functions of the Agency, including whether the information will have practical utility;

(2) Evaluate the accuracy of our estimate of the burden of the collection of information, including the validity of the methodology and assumptions used;

(3) Enhance the quality, utility, and clarity of the information to be collected; and

(4) Minimize the burden of the collection of information on those who are to respond, through use, as appropriate, of automated, electronic, mechanical, and other collection technologies; e.g., permitting electronic submission of responses.

Estimate of burden: The public reporting burden for this collection of information is estimated to average 0.26 hours per response.

Respondents: Fresh baby kiwi production sites, packinghouses,

importers of fresh baby kiwi from Chile, and the national plant protection organization of Chile.

Estimated annual number of respondents: 8.

Estimated annual number of responses per respondent: 45.5.

Estimated annual number of responses: 364.

Estimated total annual burden on respondents: 93 hours. (Due to averaging, the total annual burden hours may not equal the product of the annual number of responses multiplied by the reporting burden per response.)

All responses to this notice will be summarized and included in the request for OMB approval. All comments will also become a matter of public record.

Done in Washington, DC, this 26th day of September 2013.

Michael C. Gregoire,

Acting Administrator, Animal and Plant Health Inspection Service.

[FR Doc. 2013-24097 Filed 10-2-13; 8:45 am]

BILLING CODE 3410-34-P

DEPARTMENT OF AGRICULTURE

Animal and Plant Health Inspection Service

[Docket No. APHIS-2013-0084]

Notice of Request for Extension of Approval of an Information Collection; Importation of Tomatoes With Stems From the Republic of Korea

AGENCY: Animal and Plant Health Inspection Service, USDA.

ACTION: Extension of approval of an information collection; comment request.

SUMMARY: In accordance with the Paperwork Reduction Act of 1995, this notice announces the Animal and Plant Health Inspection Service's intention to request an extension of approval of an information collection associated with the regulations for the importation of tomatoes with stems from the Republic of Korea.

DATES: We will consider all comments that we receive on or before December 2, 2013.

ADDRESSES: You may submit comments by either of the following methods:

- Federal eRulemaking Portal: Go to <http://www.regulations.gov/#!documentDetail;D=APHIS-2013-0084-0001>.

- Postal Mail/Commercial Delivery: Send your comment to Docket No. APHIS-2013-0084, Regulatory Analysis and Development, PPD, APHIS, Station 3A-03.8, 4700 River Road Unit 118, Riverdale, MD 20737-1238.

Supporting documents and any comments we receive on this docket may be viewed at <http://www.regulations.gov/#!docketDetail;D=APHIS-2013-0084> or in our reading room, which is located in room 1141 of the USDA South Building, 14th Street and Independence Avenue SW., Washington, DC. Normal reading room hours are 8 a.m. to 4:30 p.m., Monday through Friday, except holidays. To be sure someone is there to help you, please call (202) 799-7039 before coming.

FOR FURTHER INFORMATION CONTACT: For information on the regulations for the importation of tomatoes with stems from the Republic of Korea, contact Mr. Andrew Wilds, Trade Director, PPQ, APHIS, 4700 River Road Unit 140, Riverdale, MD 20737;

(301) 851-2275. For copies of more detailed information on the information collection, contact Mrs. Celeste Sickles, APHIS' Information Collection Coordinator, at (301) 851-2908.

SUPPLEMENTARY INFORMATION:

Title: Importation of Tomatoes With Stems From the Republic of Korea.

OMB Number: 0579-0371.

Type of Request: Extension of approval of an information collection.

Abstract: Under the Plant Protection Act (PPA, 7 U.S.C. 7701 *et seq.*), the Secretary of Agriculture is authorized to prohibit or restrict the importation, entry, or interstate movement of plants, plant products, and other articles to prevent the introduction of plant pests into the United States or their dissemination within the United States. As authorized by the PPA, the Animal and Plant Health Inspection Service (APHIS) regulates the importation of certain fruits and vegetables in accordance with the regulations contained in "Subpart-Fruits and Vegetables" (7 CFR 319.56 through 319.56-61).

Under the regulations, tomatoes with stems from the Republic of Korea may be imported into the United States under certain conditions, as listed in 7 CFR 319.56-52, to prevent the introduction of plant pests into the United States. These regulations require information collection activities, including registered pest-exclusionary structures, monthly inspection of pest-exclusionary structures, records of trap placement, and a phytosanitary certificate with an additional declaration stating that the tomatoes were produced in accordance with the regulations.

We are asking the Office of Management and Budget (OMB) to approve our use of these information

collection activities for an additional 3 years.

The purpose of this notice is to solicit comments from the public (as well as affected agencies) concerning our information collection. These comments will help us:

(1) Evaluate whether the collection of information is necessary for the proper performance of the functions of the Agency, including whether the information will have practical utility;

(2) Evaluate the accuracy of our estimate of the burden of the collection of information, including the validity of the methodology and assumptions used;

(3) Enhance the quality, utility, and clarity of the information to be collected; and

(4) Minimize the burden of the collection of information on those who are to respond, through use, as appropriate, of automated, electronic, mechanical, and other collection technologies; e.g., permitting electronic submission of responses.

Estimate of burden: The public reporting burden for this collection of information is estimated to average 1.2 hours per response.

Respondents: Growers, importers, and exporters of tomatoes with stems from the Republic of Korea; the national plant protection organization of the Republic of Korea.

Estimated annual number of respondents: 3.

Estimated annual number of responses per respondent: 1.7.

Estimated annual number of responses: 5.

Estimated total annual burden on respondents: 6 hours. (Due to averaging, the total annual burden hours may not equal the product of the annual number of responses multiplied by the reporting burden per response.)

All responses to this notice will be summarized and included in the request for OMB approval. All comments will also become a matter of public record.

Done in Washington, DC, this 26th day of September 2013.

Michael C. Gregoire,

Acting Administrator, Animal and Plant Health Inspection Service.

[FR Doc. 2013-24098 Filed 10-2-13; 8:45 am]

BILLING CODE 3410-34-P

DEPARTMENT OF AGRICULTURE**Food and Nutrition Service****Agency Information Collection
Activities: Proposed Collection;
Comment Request—Special Nutrition
Program Operations Study (SNPOS)**

AGENCY: Food and Nutrition Service (FNS), United States Department of Agriculture (USDA).

ACTION: Notice and request for comments.

SUMMARY: In accordance with the Paperwork Reduction Act of 1995, this notice invites the the general public and other public agencies to comment on this proposed information collection. This collection is a revision of a currently approved collection for the Special Nutrition Program Operations Study.

DATES: Written comments on this notice must be received by December 2, 2013.

ADDRESSES: Comments are invited on: (a) Whether the proposed collection of information is necessary for the proper performance of the functions of the agency, including whether the information shall have practical utility; (b) the accuracy of the agency's estimate of the burden of the proposed collection of information, including the validity of the methodology and assumptions that were used; (c) ways to enhance the quality, utility, and clarity of the information to be collected; and (d) ways to minimize the burden of the collection of information on those who are to respond, including use of appropriate automated, electronic, mechanical, or other technological collection techniques or other forms of information technology.

Written comments may be sent to: Allison Magness, Social Science Research Analyst, Office of Policy Support, Food and Nutrition Service, USDA, 3101 Park Center Drive, Room 1014, Alexandria, VA 22302. Comments may also be submitted via fax to the attention of Allison Magness at 703–305–2576 or via email to Allison.Magness@fns.usda.gov.

Comments will also be accepted through the Federal eRulemaking Portal. Go to <http://www.regulations.gov>, and follow the online instructions for submitting comments electronically.

All responses to this notice will be summarized and included in the request for Office of Management and Budget approval. All comments will be a matter of public record.

FOR FURTHER INFORMATION CONTACT: To request more information on the proposed project or to obtain a copy of the data collection plans, contact Allison Magness, Social Science Research Analyst, Office of Policy Support, Food and Nutrition Service, USDA, 3101 Park Center Drive, Room 1014, Alexandria, VA 22302; Fax: 703–305–2576; Email: Allison.Magness@fns.usda.gov.

SUPPLEMENTARY INFORMATION:

Title: Special Nutrition Program Operations Study.

Form Number: N/A.

OMB Number: 0584–0562.

Expiration Date: 04/30/2016.

Type of Request: Revision of a currently approved collection.

Abstract: The U.S. Department of Agriculture, Food and Nutrition Service (FNS), is currently conducting a study to collect information needed to address current policy issues related to the Special Nutrition Programs. The study is designed to collect data from a nationally representative sample of public School Food Authorities (SFAs) and all Child Nutrition (CN) State Agencies. Data collection for the Special Nutrition Program Operations Study—Year 2 will conclude in September 2013; the existing approved burden hours for Year 2 are 5,094. Special Nutrition Program Operations Study—Year 3 will include the third year of data collection for School Year (SY) 2013/14. Year 3 will add an additional 1,956 burden hours to the existing collection. The reduction in burden hours for Year 3 is due to Year 3 not including the on-site data collection that was included in Year 2.

The study will provide general descriptive information on the characteristics of the school-based CN

programs necessary for the preparation of program budgets, data on various aspects of the program administration to inform program policy and regulations, as well as data to identify areas in need of technical assistance and training. Specifically, this study will help FNS obtain:

- General descriptive data on the CN programs characteristics to help FNS respond to questions about the nutrition programs in schools;

- Data related to program administration for designing and revising program regulations, managing resources, and reporting requirements; and

- Data related to program operations to help FNS develop and provide training and technical assistance for SFAs and State Agencies responsible for administering the CN programs.

The activities to be undertaken subject to this notice include:

- Conducting a multi-modal (e.g. paper, Web, and telephone) survey of approximately 1,900 SFA Directors.

- Conducting a paper survey of all 56 State Agency CN Directors.

Affected Public: State, Local and Tribal Governments.

Estimated Number of Respondents: The total estimated number of respondents is 1,956. This includes 1,900 SFA Directors and 56 State Agency CN Directors.

Estimated Number of Responses per Respondent: Once annually.

Estimated Total Annual Responses: 1,956.

Estimated Time per Response: Public reporting burden for this collection of information is estimated to average sixty (60) minutes per Self Administered Survey for the SFA Directors and the State Agency CN Directors (this includes 30 minutes for data gathering and 30 minutes to respond to the questionnaire).

Estimated Total Annual Burden on Respondents: The annual reporting burden is estimated at 6605.46 hours. See the table below for estimated total annual burden for each type of respondent.

Affected public	Data collection activity	Respondents	Estimated number of respondents	Frequency of response	Total annual responses	Average burden hours per response	Total annual burden estimate (hours)
Local and Tribal	Self Administered Paper/Web/ Telephone Survey.	Non-Responders	475	1	475	0.07	33.25
		School Food Authority Directors.	1,425	1	1,425	1	1,425
State	Self Administered Paper Survey.	Non-Responders	3	1	3	0.07	0.21

Affected public	Data collection activity	Respondents	Estimated number of respondents	Frequency of response	Total annual responses	Average burden hours per response	Total annual burden estimate (hours)
		State Agency Child Nutrition Directors.	53	1	53	1	53
TOTAL—YEAR 3			1,956	1	1,956	0.7727	1,511.46
TOTAL—YEAR 2 (Existing Burden).			1,938	4.9355	9,565	.5346	5,094
TOTAL BURDEN FOR #0584–0562.			1,956	5.8901	11,521	.5733	6605.46

Dated: September 25, 2013.

Audrey Rowe,

Administrator, Food and Nutrition Service.

[FR Doc. 2013–24143 Filed 10–2–13; 8:45 am]

BILLING CODE 3410–30–P

DEPARTMENT OF AGRICULTURE

Food and Nutrition Service

Agency Information Collection

Activities: Proposed Collection; Comment Request—School Nutrition and Meal Cost Study

AGENCY: Food and Nutrition Service, USDA.

ACTION: Notice.

SUMMARY: In accordance with the Paperwork Reduction Act of 1995, the Food and Nutrition Service (FNS) invites the general public and other public agencies to comment on this proposed information collection. This collection is a new collection for the School Nutrition and Meal Cost Study.

DATES: Written comments on this notice must be received on or before December 2, 2013.

ADDRESSES: Comments are invited on: (a) Whether the proposed collection of information is necessary for the proper performance of the functions of the agency, including whether the information shall have practical utility; (b) the accuracy of the agency's estimate of the burden of the proposed collection of information, including the validity of the methodology and assumptions used; (c) ways to enhance the quality, utility, and clarity of the information to be collected; and (d) ways to minimize the burden of the collection of information on those who are to respond, including use of appropriate automated, electronic, mechanical, or other technological collection techniques or other forms of information technology.

Comments may be sent to: John Endahl, Senior Program Analyst, Office of Policy Support, Food and Nutrition Service, U.S. Department of Agriculture,

3101 Park Center Drive, Room 1004, Alexandria, VA 22302. Comments may also be submitted via fax to the attention of John Endahl at 703–305–2576 or via email to john.endahl@fns.usda.gov. Comments will also be accepted through the Federal eRulemaking Portal. Go to <http://www.regulations.gov>, and follow the online instructions for submitting comments electronically.

All responses to this notice will be summarized and included in the request for Office of Management and Budget approval. All comments will be a matter of public record.

FOR FURTHER INFORMATION CONTACT:

Requests for additional information or copies of this information collection should be directed to John Endahl at 703–305–2127.

SUPPLEMENTARY INFORMATION:

Title: School Nutrition and Meal Cost Study.

Form Number: N/A.

OMB Number: Not yet assigned.

Expiration Date: Not yet determined.

Type of Request: New collection.

Abstract: The School Nutrition and Meal Cost Study (SNMCS) comes at a time of unprecedented change for the National School Lunch Program (NSLP) and School Breakfast Program (SBP). In the 2012–2013 school year (SY), the school meal programs began to undergo far-reaching changes, mainly stemming from the Healthy, Hunger Free Kids Act (HHFKA). Key reforms enacted by this legislation include new, more stringent meal pattern and nutrient requirements for school meals, new offer-versus-serve (OVS) rules, gradually increased prices for paid meals, and introduction of nutrition standards for competitive foods. School food service practices are being revised dramatically. Changes in practices, prices, and available foods may influence which students participate in the programs. The new requirements are intended to better align USDA meals and snacks with the Dietary Guidelines for Americans and to improve participating students' food and nutrient intake. Complying with the new requirements might affect the costs

of producing school lunches and breakfasts. Conducting the SNMCS at this historic juncture will provide FNS with crucial information about the effects of the new meal standards on nutritional quality and the cost of school meals. No national study has concurrently examined the cost of producing school meals, the nutritional profile of school meals and the amount of plate waste in school meals.

The SNMCS will collect a broad range of data from nationally representative samples of public school food authorities (SFAs), schools, students, and parents during SY 2014–2015. These data will provide Federal, State, and local policymakers with needed information about how federally sponsored school meal programs are operating after implementation of the new nutrition standards and other changes in regulations. Comparisons of results from the SNMCS with previous studies (the School Nutrition and Dietary Assessment [SNDA] and the School Lunch and Breakfast Cost [SLBC] studies) will provide information to assess the effects of the new nutrition standards on foodservice operations, the nutrient content of school meals as offered and served, meal costs and revenues, and student consumption of school meals and dietary intake. The SNMCS will be the first assessment of school meals after implementation of these major changes.

The SNMCS sample will include 502 unique SFAs, 1,200 schools, 2,400 students and their parents, and observations of plate waste from 5,040 lunches and 3,360 breakfasts. The sample is designed to provide required levels of statistical precision and data quality while minimizing data collection costs and respondent burden. The SNMCS sample will be divided into three groups of SFAs, with various levels of data collected from each group. The data collection includes the administration of several different types of instruments and modes, including self-administered web-based SFA director and school principal surveys, a

food service manager survey, an electronic menu survey, competitive foods checklists, cafeteria environment observation, plate waste observation, Automated Multiple Pass Method 24-hour dietary recalls, measurement of student's height and weight, student/parent surveys, meal cost interviews, and collection of administrative cost data.

Affected Public: Respondent groups include: (1) Directors of school food authorities (SFAs); (2) State child nutrition officials; (3) local education agency business managers, (4) school foodservice managers (FSMs); (5) principals; (6) school staff appointed by principals to complete observation checklists (school liaisons); and (7) students and their parents.

Estimated Number of Respondents: The proposed final samples will include 502 unique SFAs; 1,200 schools; 2,400 students and their parents; and 5,040 and 3,360 plate waste observations at lunch and breakfast, respectively. Group 1 includes 106 SFAs but no schools. These SFAs will participate in the SFA Director Survey to provide the precision required for estimates of SFA

characteristics and policies. Group 2 comprises 100 SFAs and 300 schools. The Group 2 sample will include the 4 largest SFAs and 12 schools sampled from them plus a sample of 96 other SFAs and 288 of their schools (3 per SFA). Group 2 SFAs and schools will participate in the SFA Director Survey, FSM Survey, and Principal Survey; in addition, their FSMs will complete the Basic Menu Survey. Interviews will be completed with 2,400 students and their parents from these schools to provide information on meal program participation, satisfaction, and students' dietary intake from school meals and food outside school over 24 hours. Group 3 includes 300 SFAs and 900 schools (3 per SFA). The Group 3 sample will include the 4 largest SFAs and 12 of their schools, plus a sample of 296 other SFAs and 888 of their schools (3 per SFA). This group includes participants in the SFA Director Survey, Pre-Visit SFA Director Questionnaire and Forms, SFA Director and Business Manager Cost Interviews and follow-up interviews, interviews to collect administrative data on food prices, FSM Survey, and Principal

Survey. The additional cost interviews from this group will provide data for the meal cost estimates, along with completing the Expanded Menu Survey. Plate waste will be observed at a subsample of Group 3 schools; we will observe 5,040 NSLP lunches and 3,360 SBP breakfasts from 56 SFAs and 168 schools. In both the Group 2 and 3 schools, school liaisons will complete two checklists to provide information on competitive foods, and interviewers will complete a Cafeteria Observation Form.

Estimated Number of Responses per Respondent: All respondents will be asked to respond to each instrument only once.

Estimated Total Annual Responses: 24,031.

Estimated Time per Response: 55 minutes (0.91 hours). The estimated response varies from 15 minutes to 600 minutes (10 hours), depending on the survey and the respondent group, as shown in the following table.

Estimated Total Annual Burden on Respondents: 21,912. See the table below for each type of respondent.

Affected public	Data collection activity	Respondents	Estimated number of respondents	Frequency of response	Total annual responses	Average burden hours per response	Total annual burden estimate (hours)
State	Telephone Survey (Administrative Data on Indirect Cost Rates).	Non-respondents	3	1	3	0.07	0.2
		State education agency financial officer (Group 3).	47	1	47	0.33	16
Local and Tribal	Self-Administered Web Survey (Basic Menu Survey).	Non-respondents	15	1	15	0.07	1
		Foodservice managers (Group 2).	300	1	300	8	2,400
Local and Tribal	Self-Administered Web Survey (Expanded Menu Survey).	Non-respondents	49	1	49	0.07	3
		Foodservice managers (Group 3).	975	1	975	10	9,750
Local and Tribal	Self-Administered Web Survey (SFA Director Survey).	Non-respondents	41	1	41	0.07	3
		SFA directors (Groups 1, 2, 3).	366	1	366	0.67	245
Local and Tribal	Self-Administered Web Survey (FSM Survey).	Non-respondents	64	1	64	0.07	5
		Foodservice managers (Groups 2, 3).	1,200	1	1,200	0.33	396
Local and Tribal	Self-Administered Web Survey (Principal Survey).	Non-respondents	127	1	127	0.07	9
		Principals (Groups 2 and 3).	1,137	1	1,137	0.5	569

Affected public	Data collection activity	Respondents	Estimated number of respondents	Frequency of response	Total annual responses	Average burden hours per response	Total annual burden estimate (hours)
Local and Tribal	Telephone Survey (SFA Director Planning Interview).	Non-respondents	2	1	2	0.07	0.1
		SFA directors (Group 2).	73	1	73	0.33	24
Local and Tribal	Self-Administered Web Survey (SFA Director Pre-visit Questionnaire and Forms).	Non-respondents	7	1	7	0.07	0.5
		SFA directors (Group 3).	219	1	219	0.83	182
Local and Tribal	In-person Interview (SFA Director and Business Manager Cost Interview).	Non-respondents	11	1	11	0.07	0.8
		SFA Directors/ LEA business managers (Group 3).	219	1	219	3	657
Local and Tribal	Telephone Survey (FSM Pre-visit Questionnaire).	Non-respondents	45	1	45	0.07	3
		Foodservice managers (Group 3).	900	1	900	0.25	225
Local and Tribal	In-person Interview (FSM Cost Interview).	Non-respondents	49	1	49	0.07	3
		Foodservice managers (Group 3).	975	1	975	0.5	488
Local and Tribal	Telephone Survey (Principal Cost Interview).	Non-respondents	45	1	45	0.07	3
		Principals (Group 3).	900	1	900	0.75	675
Local and Tribal	In-person Interview (Follow-Up SFA Director Prep Forms).	Non-respondents	11	1	11	0.07	0.8
		SFA directors/ LEA business managers (Group 3).	208	1	208	0.17	35
Local and Tribal	In-person Interview (Follow-Up SFA Director and Business Manager Cost Interview).	Non-respondents	11	1	11	0.07	0.8
		SFA directors/ LEA business managers (Group 3).	208	1	208	2	416
Local and Tribal	In-person Interview (Competitive Foods Checklist).	Non-respondents	190	1	190	0.07	13
		School staff liaisons (Groups 2 and 3).	760	1	760	0.5	380
Local and Tribal	Self-Administered Observation Form (Point-of-Sale Form).	Foodservice managers (Group 2).	300	1	300	0.17	51
Local and Tribal	Self-Administered Observation Form (Plate Waste Observations).	Foodservice managers (Group 3).	168	1	168	0.17	29
Subtotal State, Local & Tribal Governments.	.....	.....	9,625	1	9,625	1.72	16,583
Private Sector for-Profit	Self-Administered Web Survey (SFA Director Survey).	Non-respondents	15	1	15	0.07	1

Affected public	Data collection activity	Respondents	Estimated number of respondents	Frequency of response	Total annual responses	Average burden hours per response	Total annual burden estimate (hours)
Private Sector for-Profit	Telephone Survey (SFA Director Planning Interview).	SFA directors (Groups 1, 2, 3).	136	1	136	0.67	91
		Non-respondents	1	1	1	0.07	0.1
Private Sector or-Profit	Self-Administered Web Survey (SFA Director Pre-visit Questionnaire).	SFA directors (Group 2).	27	1	27	0.33	9
		Non-respondents	2	1	2	0.07	0.1
Private Sector for-Profit	In-person Interview (SFA Director and Business Manager Cost Interview).	SFA directors (Group 3).	81	1	81	0.83	67
		Non-respondents	4	1	4	0.07	0.3
Private Sector for-Profit	In-person Interview (Follow Up SFA Director Prep Forms).	SFA directors/ LEA business managers (Group 3).	81	1	81	3	243
		Non-respondents	4	1	4	0.07	0.3
Private Sector for-Profit	In-person Interview (Follow-Up SFA Director and Business Manager Cost Interview).	SFA directors/ LEA business managers (Group 3).	77	1	77	0.17	13
		Non-respondents	4	1	4	0.07	0.3
Private Sector for-Profit	In-person Interview (Follow-Up SFA Director and Business Manager Cost Interview).	SFA directors/ LEA business managers (Group 3).	77	1	77	2	154
		Non-respondents	4	1	4	0.07	0.3
Subtotal Private Sector for-Profit Business.	.....	.....	509	1	509	1.13	579.1
Individual	In-person Interview (24-Hour Dietary Recall, Day 1).	Non-respondents	359	1	359	0.07	25
Individual	Telephone Survey (24-Hour Dietary Recall, Day 2).	Students	2,400	1	2,400	0.83	1992
		Parents	800	1	800	0.50	400
		Non-respondents	106	1	106	0.07	7
Individual	Self-Administered Form (Food Diary, Day 1).	Students	600	1	600	0.75	450
		Parents	200	1	200	0.75	150
		Non-respondents	120	1	120	0.07	8
Individual	Self-Administered Form (Food Diary, Day 2).	Parents	800	1	800	0.17	136
		Non-respondents	35	1	35	0.07	3
Individual	In-person Interview (Child/ Youth Interview).	Parents	200	1	200	0.17	34
		Non-respondents	359	1	359	0.07	25
Individual	In-person or Telephone Interview (Parent Interview).	Students	2,400	1	2,400	0.17	408
		Non-respondents	359	1	359	0.07	25
Individual	In-person Interview (Height and Weight Measurement Form).	Parents	2,400	1	2,400	0.42	1008
		Non-respondents	359	1	359	0.02	7

Affected public	Data collection activity	Respondents	Estimated number of respondents	Frequency of response	Total annual responses	Average burden hours per response	Total annual burden estimate (hours)
		Students	2,400	1	2,400	0.03	72
Subtotal Individuals			13,897	1	13,897	0.34	4,750
Grand Total			24,031	1	24,031	.....	21,912

Dated: September 26, 2013.

Audrey Rowe,

Administrator, Food and Nutrition Service.

[FR Doc. 2013-24142 Filed 10-2-13; 8:45 am]

BILLING CODE 3410-30-P

DEPARTMENT OF AGRICULTURE

Forest Service

Revision of the Land Management Plan for the Nantahala and Pisgah National Forests

AGENCY: Forest Service, USDA.

ACTION: Notice of Initiating the development of a land management plan revision for the Nantahala and Pisgah National Forests.

SUMMARY: The Nantahala and Pisgah National Forests, located in North Carolina, are initiating the development of a land management plan revision (forest plan) for the Nantahala and Pisgah National Forests (NFs). A Draft Assessment has been posted to our Web site. We are inviting the public to help us develop a preliminary “need for change” and a proposed action for the land management plan revision.

DATES: A draft of the Assessment report for the revision of the Nantahala and Pisgah NFs land management plan was posted on the following Web site at www.fs.usda.gov/goto/nfsnc/nprevision on September 20, 2013.

Public meetings associated with the development of the preliminary “need for change” and a proposed action will be announced on the Web site cited above.

It is anticipated that the Notice of Intent to prepare an environmental impact statement (which will accompany the land management plan revision for the Nantahala and Pisgah NFs), will be published in the **Federal Register** around December 2013 to January 2014.

ADDRESSES: Written comments or questions concerning this notice should be addressed to National Forests in North Carolina, Nantahala and Pisgah Plan Revision, 160 Zillicoa St., Suite A, Asheville, North Carolina 28801. Comments or questions may also be sent via email to NCplanrevision@fs.fed.us. All correspondence, including names

and addresses when provided, are placed in the record and are available for public inspection and copying.

FOR FURTHER INFORMATION CONTACT:

Ruth Berner, Forest Planner, 828-257-4200. Individuals who use telecommunication devices for the deaf (TDD) may call the Federal Information Relay Service (FIRS) at 1-800-877-8339 between 8:00 a.m. and 8:00 p.m. (Eastern time), Monday through Friday.

More information on the planning process can also be found on the Nantahala and Pisgah Plan Revision Web site at www.fs.usda.gov/goto/nfsnc/nprevision.

SUPPLEMENTARY INFORMATION: Pursuant to the 2012 Forest Planning Rule (36 CFR Part 219), the planning process encompasses three-stages: Assessment, plan revision, and monitoring. The first stage of the planning process involves assessing social, economic, and ecological conditions of the planning area, which is documented in an assessment report. A draft of the assessment report for the Nantahala and Pisgah NFs was posted on the Forest Web site at www.fs.usda.gov/goto/nfsnc/nprevision on September 20, 2013.

This notice announces the start of the second stage of the planning process, which is the development of the land management plan revision. The first task of plan revision is to develop a preliminary “need for change”, which identifies the need to change management direction in current plans due to changing conditions or other monitoring information. The next task is to develop a proposed action, which is a proposal on how to respond to needs for changes. We are inviting the public to help us develop our preliminary “need for change” and a proposed action.

A proposed action will initiate our compliance with the National Environmental Policy Act. A Notice of Intent to prepare an environmental impact statement for the land management plan revision, which will include a description of the preliminary need for change and a description of the proposed action, will be published around December 2013 to January 2014 in the **Federal Register**.

Forest plans developed under the National Forest Management Act

(NFMA) of 1976 describe the strategic direction for management of forest resources for ten to fifteen years, and are adaptive and amendable as conditions changes over time. The Forest Plan for the Nantahala and Pisgah NFs was approved in 1987, with a Significant Amendment to the Forest Plan approved in 1994. On November 20, 2012, a public announcement was made that the Nantahala and Pisgah NFs were beginning to work on the Assessment for revising their Forest Plan. This notice announces the start of the second stage of the planning process, the development of the land management plan revision. Once the plan revision is completed, it will be subject to the objection procedures of 36 CFR Part 219, Subpart B, before it can be approved. The third stage of the planning process is the monitoring and evaluation of the revised plan, which is ongoing over the life of the revised plan.

As public meetings, other opportunities for public engagement, and public review and comment opportunities are identified to assist with the development of the forest plan revision, public announcements will be made, notifications will be posted on the Forest's Web site at www.fs.usda.gov/goto/nfsnc/nprevision and information will be sent out to the Forest's mailing list. If anyone is interested in being on the Forest's mailing list to receive these notifications, please contact Ruth Berner, the Forest Planner, at the address identified below, or by sending an email to NCplanrevision@fs.fed.us.

Responsible Official

The responsible official for the revision of the land management plan for the Nantahala and Pisgah National Forests is Kristin Bail, Forest Supervisor, National Forests in North Carolina, 160 Zillicoa St., Suite A, Asheville, North Carolina 28801.

Dated: September 25, 2013.

Kristin Bail,

Forest Supervisor.

[FR Doc. 2013-24218 Filed 10-2-13; 8:45 am]

BILLING CODE 3410-11-P

DEPARTMENT OF COMMERCE**Submission for OMB Review;
Comment Request**

The Department of Commerce will submit to the Office of Management and Budget (OMB) for clearance the following proposal for collection of information under the provisions of the Paperwork Reduction Act (44 U.S.C. Chapter 35).

Agency: Bureau of Economic Analysis (BEA), Commerce.

Title: Annual Survey of U.S. Direct Investment Abroad.

OMB Control Number: 0608-0053.

Form Number: BE-11.

Type of Request: Regular submission.

Number of Respondents: 1,900 annually (filing for 18,700 foreign affiliates).

Average Hours per Response: 91 hours is the average, but may vary considerably among respondents because of differences in company size and complexity.

Estimated Total Annual Burden Hours: 172,600.

Needs and Uses: The Annual Survey of U.S. Direct Investment Abroad (Form BE-11) obtains financial and operating data covering the operations of U.S. parents and their foreign affiliates, including their balance sheets; income statements; property, plant, and equipment; employment and employee compensation; merchandise trade; sales of goods and services; taxes; and research and development activity. The survey is a sample survey that covers all foreign affiliates above a size-exemption level and their U.S. parents. The sample data are used to derive universe estimates in nonbenchmark years from similar data reported in the BE-10, Benchmark Survey of U.S. Direct Investment Abroad, which is conducted every five years. The data are needed to measure the size and economic significance of direct investment abroad, measure changes in such investment, and assess its impact on the U.S. and foreign economies.

The data from the survey are primarily intended as general purpose statistics. They should be readily available to answer any number of research and policy questions related to U.S. direct investment abroad.

Affected Public: Businesses or other for-profit organizations.

Frequency: Annual.

Respondent's Obligation: Mandatory.

OMB Desk Officer: Paul Bugg, (202) 395-3093.

Copies of the above information collection proposal can be obtained by calling or writing Jennifer Jessup,

Departmental Paperwork Clearance Officer, Department of Commerce, Room 6616, 14th Street and Constitution Avenue NW., Washington, DC 20230, or via email at jjessup@doc.gov.

Written comments and recommendations for the proposed information collection should be sent within 30 days of publication of this notice to Paul Bugg, OMB Desk Officer, number (202) 395-7245, or via email at pbugg@omb.eop.gov.

Dated: September 30, 2013.

Glenna Mickelson,

Management Analyst, Office of the Chief Information Officer.

[FR Doc. 2013-24184 Filed 10-2-13; 8:45 am]

BILLING CODE 3510-06-P

DEPARTMENT OF COMMERCE**Submission for OMB Review;
Comment Request**

The Department of Commerce will submit to the Office of Management and Budget (OMB) for clearance the following proposal for collection of information under the provisions of the Paperwork Reduction Act (44 U.S.C. Chapter 35).

Agency: National Oceanic and Atmospheric Administration (NOAA).

Title: Socio-Economic Assessment of Gulf of Mexico (SAGM) Fisheries Under the Grouper-Tilefish Individual Fishing Quota Program.

OMB Control Number: None.

Form Number(s): NA.

Type of Request: Regular submission (request for a new information collection).

Number of Respondents: 334 (annualized).

Average Hours per Response: 1 hour.

Burden Hours: 334.

Needs and Uses: This request is for a new information collection.

The National Marine Fisheries Service (NMFS) proposes to collect demographic, cultural, economic and social information about Gulf of Mexico fisheries managed under the Grouper-Tilefish Individual Fishing Quota (IFQ) Program. The survey also intends to inquire about the industry's perceptions, attitudes and beliefs about the performance of the Grouper-Tilefish IFQ Program. The data gathered will be used to describe the social and economic changes brought about by the Grouper-Tilefish IFQ Program, assess the economic performance of the industry under the Grouper-Tilefish IFQ Program, and evaluate the socioeconomic impacts of future federal regulatory actions. In addition, the information will be used to strengthen

and improve fishery management decision-making, satisfy legal mandates under Executive Order 12866, the Magnuson-Stevens Fishery Conservation and Management Act (U.S.C. 1801 et seq.), the Regulatory Flexibility Act, the Endangered Species Act, and the National Environmental Policy Act, and other pertinent statutes.

Affected Public: Business or other for-profit organizations.

Frequency: One time.

Respondent's Obligation: Voluntary.

OMB Desk Officer: OIRA_
Submission@omb.eop.gov.

Copies of the above information collection proposal can be obtained by calling or writing Jennifer Jessup, Departmental Paperwork Clearance Officer, (202) 482-0336, Department of Commerce, Room 6616, 14th and Constitution Avenue NW., Washington, DC 20230 (or via the Internet at jjessup@doc.gov).

Written comments and recommendations for the proposed information collection should be sent within 30 days of publication of this notice to OIRA_Submission@omb.eop.gov.

Dated: September 27, 2013.

Gwellnar Banks,

Management Analyst, Office of the Chief Information Officer.

[FR Doc. 2013-24106 Filed 10-2-13; 8:45 am]

BILLING CODE 3510-22-P

DEPARTMENT OF COMMERCE**Foreign-Trade Zones Board**

[B-56-2013]

Subzone 141F, Authorization of Production Activity, John D. Brush & Co., dba Sentry Group, (Safes and Secured Storage Devices), Pittsford and East Rochester, New York

On May 30, 2013, the County of Monroe, New York, grantee of FTZ 141, submitted a notification of proposed production activity to the Foreign-Trade Zones (FTZ) Board on behalf of John D. Brush & Co., dba Sentry Group, within Subzone 141F, in Pittsford and East Rochester, New York.

The notification was processed in accordance with the regulations of the FTZ Board (15 CFR part 400), including notice in the **Federal Register** inviting public comment (78 FR 34335, 6-7-2013). The FTZ Board has determined that no further review of the activity is warranted at this time. The production activity described in the notification is authorized, subject to the FTZ Act and the Board's regulations, including Section 400.14.

Dated: September 27, 2013.

Andrew McGilvray,

Executive Secretary.

[FR Doc. 2013–24284 Filed 10–2–13; 8:45 am]

BILLING CODE 3510–DS–P

DEPARTMENT OF COMMERCE

International Trade Administration

[A–570–848]

Freshwater Crawfish Tail Meat From the People's Republic of China: Preliminary Results of Antidumping Duty Administrative Review and New Shipper Review; 2011–2012

AGENCY: Import Administration, International Trade Administration, Department of Commerce.

SUMMARY: The Department of Commerce (the Department) is conducting an administrative review and new shipper review of the antidumping duty order on freshwater crawfish tail meat from the People's Republic of China (PRC). The period of review (POR) for the administrative review is September 1, 2011, through August 31, 2012, and the POR for the new shipper review is September 1, 2011, through September 30, 2012. The Department preliminarily determines that Deyan Aquatic Products and Food Co., Ltd. (Deyan Aquatic) (the new shipper), Nanjing Gensen International Co., Ltd. (Nanjing Gensen), Xiping Opeck Food Co., Ltd. (Xiping Opeck), and Yancheng Hi-King Agriculture Developing Co., Ltd., (Yancheng Hi-King) have not made sales of subject merchandise in the United States at prices below normal value.

DATES: *Effective Date:* October 3, 2013.

FOR FURTHER INFORMATION CONTACT: Sandra Dreisonstok or Minoo Hatten, AD/CVD Operations, Office 1, Import Administration, International Trade Administration, U.S. Department of Commerce, 14th Street and Constitution Avenue NW., Washington, DC 20230; telephone: (202) 482–0768, and (202) 482–1690, respectively.

SUPPLEMENTARY INFORMATION:

Scope of the Order

The merchandise subject to the antidumping duty order is freshwater crawfish tail meat, which is currently classified in the Harmonized Tariff Schedule of the United States (HTSUS) under item numbers 1605.40.10.10, 1605.40.10.90, 0306.19.00.10, and 0306.29.00.00. On February 10, 2012, the Department added HTSUS classification number 0306.29.01.00 to the scope description pursuant to a request by U.S. Customs and Border

Protection (CBP). The HTSUS numbers are provided for convenience and customs purposes. A full description of the scope of the order is contained in the memorandum from Christian Marsh, Deputy Assistant Secretary for Antidumping and Countervailing Duty Operations, to Paul Piquado, Assistant Secretary for Import Administration, “Decision Memorandum for the Preliminary Results of the Antidumping Duty Administrative Review and New Shipper Review: Freshwater Crawfish Tail Meat from the People's Republic of China” (Preliminary Decision Memorandum), which is hereby adopted by this notice. The written description is dispositive.

The Preliminary Decision Memorandum is a public document and is on file electronically *via* Import Administration's Antidumping and Countervailing Duty Centralized Electronic Service System (IA ACCESS). IA ACCESS is available to registered users at <http://iaaccess.trade.gov> and in the Central Records Unit, Room 7046 of the main Department of Commerce building. In addition, a complete version of the Preliminary Decision Memorandum can be accessed directly on the internet at <http://www.trade.gov/ia/>. The signed Preliminary Decision Memorandum and the electronic versions of the Preliminary Decision Memorandum are identical in content.

Methodology

The Department has conducted these reviews in accordance with section 751(a)(2) of the Tariff Act of 1930, as amended (the Act). Export Price is calculated in accordance with section 772(c) of the Act. Because the PRC is a non-market economy (NME) within the meaning of section 771(18) of the Act, normal value has been calculated in accordance with section 773(c) of the Act. For a full description of the methodology underlying our conclusions, *see* Preliminary Decision Memorandum.

Treatment of Affiliated Parties as a Single Entity

Consistent with the 2010–2011 administrative review,¹ the Department preliminarily finds that Yancheng Hi-King is affiliated with certain entities, pursuant to sections 771(33)(A), (E) and (F) of the Act, based on ownership and common control. Further, for these preliminary results, the Department is treating Yancheng Hi-King and its

affiliates, Yancheng Seastar Seafood Co., Ltd., Wuhan Hi-King Agriculture Development Co., Ltd., Yancheng Hi-King Frozen Food Co., Ltd., Jiangxi Hi-King Poyang Lake Seafood Co., Ltd., and Yancheng Hi-King Aquatic Growing Co., Ltd. as a single entity for the purpose of calculating an antidumping duty margin.²

Preliminary Determination of No Shipments

China Kingdom (Beijing) Import & Export Co., Ltd. (China Kingdom), Shanghai Ocean Flavor International Trading Co., Ltd. (Shanghai Ocean Flavor), and Xuzhou Jinjiang Foodstuffs Co., Ltd. (Xuzhou Jinjiang), which have separate rates, reported that they did not have any exports of subject merchandise during the POR.³ This is consistent with the CBP data for the POR, which showed no evidence of imports from these companies.⁴ Additionally, we requested that CBP report any contrary information. To date, CBP has not responded to our inquiries and we have not received any evidence that these entities had any shipments to the United States of subject merchandise during the POR.⁵ Consistent with the Department's refinement to its assessment practice in NME cases regarding no shipment claims, we are completing the review with respect to China Kingdom, Shanghai Ocean Flavor, and Xuzhou Jinjiang, and will issue appropriate instructions to CBP based on the final results of the review.⁶

Preliminary Results of Reviews

The Department has determined that the following preliminary dumping margins exist for the administrative

² See memorandum entitled “Freshwater Crawfish Tail Meat from the People's Republic of China—Collapsing of Yancheng Hi-King Agriculture Developing Co., Ltd., and its Affiliates” (October 1, 2012). The aforementioned document was placed on the record of this administrative review; *see* memorandum to file entitled “Placement of the 2010–2011 Collapsing Memorandum on the Record” (August 19, 2013), at attachment.

³ See no shipment letters filed by China Kingdom and Shanghai Ocean Flavor, dated November 14, 2012, and Xuzhou Jinjiang, dated November 30, 2012.

⁴ See the memorandum entitled “Freshwater Crawfish Tail Meat From the People's Republic of China—placing CBP Data on the record of this review” (November 16, 2012).

⁵ CBP only responds to the Department's inquiry when there are records of shipments from the company in question. *See, e.g., Certain Hot-Rolled Flat-Rolled Carbon Quality Steel Flat Products From Brazil: Notice of Rescission of Antidumping Duty Administrative Review*, 75 FR 65453, 65454 (October 25, 2010).

⁶ See *Non-Market Economy Antidumping Proceedings: Assessment of Antidumping Duties*, 76 FR 65694 (October 24, 2011) and the “Assessment Rates” section below.

¹ See *Freshwater Crawfish Tail Meat From the People's Republic of China: Final Results of Antidumping Duty Administrative Review and Partial Rescission; 2010–2011*, 78 FR 2228 (April 15, 2013).

review covering the period September 1, 2011, through August 31, 2012:

Exporter	Margin (percent)
Nanjing Gemsen International Co., Ltd	0.00
Xiping Opeck Food Co., Ltd	0.00
Yancheng Hi-King Agriculture Developing Co., Ltd	0.00

As a result of the new shipper review, the Department has preliminarily determined that a dumping margin of 0.00 percent exists for merchandise produced and exported by Deyan Aquatic Products and Food Co., Ltd. covering the period September 1, 2011, through September 30, 2012.⁷

Disclosure and Public Comment

The Department will disclose calculations performed in these preliminary results to the parties within five days after the date of publication of this notice.⁸ Because the Department intends to conduct verification pursuant to 19 CFR 351.307(v)(B), the Department will establish the briefing schedule at a later time and will notify parties of that schedule.⁹ Parties who submit arguments are requested to submit with the argument: (1) A statement of the issue; (2) a brief summary of the argument; and (3) a table of authorities. Rebuttals briefs, limited to issues raised in case briefs, may be filed no later than five days after the time limit for filing the case briefs, as specified by 19 CFR 351.309(d).

Interested parties who wish to request a hearing, or to participate if one is requested, must submit a written request to the Assistant Secretary for Import Administration, U.S. Department of Commerce, filed electronically using IA ACCESS. An electronically filed document must be received successfully in its entirety by the Department's IA ACCESS by 5:00 p.m. Eastern Time within 30 days after the date of publication of this notice.¹⁰ Hearing requests should contain the party's name, address, and telephone number, the number of participants, and a list of issues to be discussed. Oral presentations will be limited to issues raised in the briefs. If a request for a hearing is made, we will inform parties of the scheduled date for the hearing which will be held at the U.S. Department of Commerce, 14th Street and Constitution Avenue NW.,

Washington DC 20230, at a time and location to be determined.¹¹ Parties should confirm by telephone the date, time, and location of the hearing.

Unless the deadline is extended pursuant to section 751(a)(2)(B)(iv) of the Act, the Department will issue the final results of these reviews, including the results of its analysis of issues raised by parties in their comments, within 120 days after the publication of these preliminary results, pursuant to section 751(a)(3)(A) of the Act and 19 CFR 351.213(h).

Deadline for Submission of Publicly Available Surrogate Value Information

In accordance with 19 CFR 351.301(c)(3)(ii), the deadline for submission of publicly available information to value FOPs under 19 CFR 351.408(c) is 20 days after the date of publication of these preliminary results. In accordance with 19 CFR 351.301(c)(1), if an interested party submits factual information less than ten days before, on, or after (if the Department has extended the deadline), the applicable deadline for submission of such factual information, an interested party may submit factual information to rebut, clarify, or correct the factual information no later than ten days after such factual information is served on the interested party. However, the Department notes that 19 CFR 351.301(c)(1), permits new information only insofar as it rebuts, clarifies, or corrects information previously placed on the record.¹² Furthermore, the Department generally will not accept business proprietary information in either the surrogate value submissions or the rebuttals thereto, as the regulation regarding the submission of surrogate values allows only for the submission of publicly available information.¹³

Assessment Rates

Upon issuance of the final results, the Department shall determine, and CBP shall assess, antidumping duties on all appropriate entries covered by these reviews.¹⁴ The Department intends to issue assessment instructions to CBP 15 days after the date of publication of the final results of these reviews. If a respondent's weighted average dumping margin is above *de minimis* (i.e., 0.50 percent) in the final results of these

reviews, the Department will calculate an importer-specific assessment rate on the basis of the ratio of the total amount of dumping calculated for the importer's examined sales and, where possible, the total entered value of sales, in accordance with 19 CFR 351.212(b)(1). In these preliminary results, the Department applied the assessment rate calculation method adopted in the *Final Modification for Reviews*, i.e., on the basis of monthly average-to-average comparisons using only the transactions associated with the importer with offsets being provided for non-dumped comparisons.¹⁵ Where an importer- (or customer-) specific *ad valorem* rate is zero or *de minimis*, we will instruct CBP to liquidate appropriate entries without regard to antidumping duties.¹⁶

On October 24, 2011, the Department announced a refinement to its assessment practice in NME cases.¹⁷ Pursuant to this refinement in practice, for entries that were not reported in the U.S. sales databases submitted by companies individually examined during this review, the Department will instruct CBP to liquidate such entries at the PRC-wide rate. In addition, if the Department determines that an exporter under review had no shipments of the subject merchandise, any suspended entries that entered under that exporter's case number (i.e., at that exporter's rate) will be liquidated at the PRC-wide rate.

Cash Deposit Requirements

The following cash deposit requirements will be effective upon publication of the final results of these reviews for shipments of the subject merchandise from the PRC entered, or withdrawn from warehouse, for consumption on or after the publication date, as provided by section 751(a)(2)(C) of the Act: (1) For the companies listed above that have a separate rate, except for Deyan Aquatic, the cash deposit rate will be that established in the final results of these reviews (except if the rate is zero or *de minimis*, i.e., less than 0.5 percent, then no cash deposit will be required); (2) for previously investigated or reviewed PRC and non-PRC exporters not listed above that received a separate rate in a prior segment of this proceeding, the cash deposit rate will

¹⁵ See *Antidumping Proceeding: Calculation of the Weighted-Average Dumping Margin and Assessment Rate in Certain Antidumping Duty Proceedings: Final Modification*, 77 FR 8101 (February 14, 2012) (*Final Modification for Reviews*).

¹⁶ See 19 CFR 351.106(c)(2).

¹⁷ For a full discussion of this practice, see *Non-Market Economy Antidumping Proceedings: Assessment of Antidumping Duties*, 76 FR 65694 (October 24, 2011).

⁷ See the Preliminary Decision Memorandum at 2–3 for a discussion regarding the POR for the new shipper review.

⁸ See 19 CFR 351.224(b).

⁹ See 19 CFR 351.309.

¹⁰ See 19 CFR 351.310(c).

¹¹ *Id.*

¹² See, e.g., *Glycine from the People's Republic of China: Final Results of Antidumping Duty Administrative Review and Final Rescission*, in *Part*, 72 FR 58809 (October 17, 2007), and accompanying Issues and Decision Memorandum at comment 2.

¹³ See 19 CFR 351.301(c)(3).

¹⁴ See 19 CFR 351.212(b)(1).

continue to be the existing exporter-specific rate; (3) for all PRC exporters of subject merchandise that have not been found to be entitled to a separate rate, the cash deposit rate will be that for the PRC-wide entity; and (4) for all non-PRC exporters of subject merchandise which have not received their own rate, the cash deposit rate will be the rate applicable to the PRC exporter that supplied that non-PRC exporter.

With respect to Deyan Aquatic, the new shipper respondent, the Department has established a combination cash deposit rate for this company consistent with its practice as follows: (1) For subject merchandise produced and exported by Deyan Aquatic, the cash deposit rate will be the rate established for Deyan Aquatic in the final results of the NSR; (2) for subject merchandise exported by Deyan Aquatic, but not produced by Deyan Aquatic, the cash deposit rate will be the rate for the PRC-wide entity; and (3) for subject merchandise produced by Deyan Aquatic but not exported by Deyan Aquatic, the cash deposit rate will be the rate applicable to the exporter.

These deposit requirements, when imposed, shall remain in effect until further notice.

Notification to Importers

This notice serves as a preliminary reminder to importers of their responsibility under 19 CFR 351.402(f)(2) to file a certificate regarding the reimbursement of antidumping duties prior to liquidation of the relevant entries during these PORs. Failure to comply with this requirement could result in the Department's presumption that reimbursement of antidumping duties occurred and the subsequent assessment of double antidumping duties.

We are issuing and publishing the preliminary results of these reviews in accordance with sections 751(a)(1), 751(a)(2)(B)(iv), 751(a)(3), 777(i) of the Act and 19 CFR 351.213(h), 351.214 and 351.221(b)(4).

Dated: September 26, 2013.

Paul Piquado,

Assistant Secretary for Import Administration.

Appendix

List of Topics Discussed in the Preliminary Decision Memorandum

1. Summary
2. Background
3. Period of Review for the New Shipper Review
4. Scope of the Order
5. Bona Fides Analysis
6. Treatment of Affiliated Parties as a Single

- Entity
7. Non-Market-Economy Country Status
8. Surrogate Country
9. Separate Rates
10. Absence of De Jure Control
11. Absence of De Facto Control
12. Fair Value Comparisons
13. U.S. Price
14. Normal Value
15. Surrogate Values
16. Currency Conversion
17. Conclusion

[FR Doc. 2013-24268 Filed 10-2-13; 8:45 am]

BILLING CODE 3510-DS-P

DEPARTMENT OF COMMERCE

International Trade Administration

[A-821-808]

Certain Cut-to-Length Carbon Steel Plate From the Russian Federation; 2012; Preliminary Results of Administrative Review of Antidumping Duty Suspension Agreement

AGENCY: Import Administration, International Trade Administration, Department of Commerce.

DATES: *Effective Date:* October 3, 2013.

SUMMARY: The Department of Commerce (the Department) preliminarily determines that Joint Stock Company Severstal (Severstal) is in compliance with the Agreement Suspending the Antidumping Investigation of Certain Cut-to-Length Carbon Steel Plate from the Russian Federation (Agreement) for the period January 1, 2012 through December 31, 2012, and that the Agreement is functioning as intended. The preliminary results are set forth in the section titled "Methodology and Preliminary Results," *infra*. We intend to issue the final results within 120 days after publication of these preliminary results in the **Federal Register**.

FOR FURTHER INFORMATION CONTACT:

Sally C. Gannon or Anne D'Alauro, Import Administration, International Trade Administration, U.S. Department of Commerce, 14th Street and Constitution Avenue NW., Washington, DC 20230, telephone: (202) 482-0162 or (202) 482-4830.

SUPPLEMENTARY INFORMATION:

Scope of Review

The products covered by the Agreement are certain cut-to-length carbon steel plate from the Russian Federation. This merchandise is currently classified in the Harmonized Tariff Schedule of the United States (HTS) under item numbers 7208.40.3030, 7208.40.3060, 7208.51.0030, 7208.51.0045, 7208.51.0060, 7208.52.0000,

7208.53.0000, 7208.90.0000, 7210.70.3000, 7210.90.9000, 7211.13.0000, 7211.14.0030, 7211.14.0045, 7211.90.0000, 7212.40.1000, 7212.40.5000, 7212.50.0000. Although the HTS subheadings are provided for convenience and customs purposes, our written description of the scope of this Agreement is dispositive.

A full description of the scope of the order is contained in "Decision Memorandum for Preliminary Results of Administrative Review of the Agreement Suspending the Antidumping Investigation of Certain Cut-to-Length Carbon Steel Plate from the Russian Federation" from Lynn Fischer Fox, Deputy Assistant Secretary of Policy and Negotiations to Ronald K. Lorentzen, Deputy Assistant Secretary for Import Administration (Preliminary Decision Memorandum), dated September 27, 2013, and hereby adopted by this notice. The Preliminary Decision Memorandum is a public document and is made available to the public via Import Administration's Antidumping and Countervailing Duty Centralized Electronic Service System (IA ACCESS). IA ACCESS is available to registered users at <https://iaaccess.trade.gov> and in the Department's Central Records Unit, located in Room 7046 of the main Department of Commerce building. In addition, a complete version of the Preliminary Decision Memorandum can be found on the Internet at <http://www.trade.gov/ia>. The signed Preliminary Decision Memorandum and the electronic version of the Preliminary Decision Memorandum are identical in content.

Methodology and Preliminary Results

On December 20, 2002, the Department signed an agreement under section 734(b) of the Tariff Act of 1930, as amended (the Act), with Russian steel producers/exporters, including Severstal, which suspended the antidumping duty investigation on certain cut-to-length carbon steel plate (CTL plate) from the Russian Federation. *See Suspension of Antidumping Duty Investigation of Certain Cut-to-Length Carbon Steel Plate from the Russian Federation*, 68 FR 3859 (January 27, 2003). On January 31, 2013, Nucor submitted a request for an administrative review of the Agreement pursuant to *Antidumping or Countervailing Duty Order, Finding, or Suspended Investigation; Opportunity to Request Administrative Review*, 78 FR 288 (January 3, 2013). The review was initiated on February 28, 2013, for the January 1, 2012 through December

31, 2012 period of review. *See Initiation of Antidumping and Countervailing Duty Administrative Reviews and Request for Revocation in Part*, 78 FR 13631 (February 28, 2013). The Department examined U.S. Customs and Border Protection (CBP) import data for the 2012 calendar year and determined that CTL plate produced by Severstal accounted for substantially all (not less than 85 percent) of the subject merchandise imported into the United States during the January 1, 2012 through December 31, 2012 period of review. *See Memo to the file from Anne D'Alauro dated September 27, 2013*, with attached summary of CBP import data for 2012. On March 14, 2013, and May 31, 2013, the Department issued its questionnaire and supplemental questionnaire, respectively, to Severstal. Severstal submitted its responses on April 23, 2013, and June 27, 2013, respectively.

The Department has conducted this review in accordance with section 751(a)(1)(C) of the Act, which specifies that the Department shall "review the current status of, and compliance with, any agreement by reason of which an investigation was suspended." In this case, the Department and Severstal signed the Agreement, suspending the underlying antidumping duty investigation, on December 20, 2002. Pursuant to the Agreement, each signatory producer/exporter individually agrees to make any necessary price revisions to eliminate completely any amount by which the normal value (NV) of the subject merchandise exceeds the U.S. price of its merchandise subject to the Agreement. *See Agreement*, 68 FR at 3860–61. Our review of the information submitted by Severstal indicates that the company has adhered to the terms of the Agreement and that the Agreement is functioning as intended. For a full description of the methodology underlying our conclusions, see the Preliminary Decision Memorandum.

Public Comment

Pursuant to 19 CFR 351.309(c)(1)(ii), interested parties may submit case briefs not later than 30 days after the date of publication of this notice. Rebuttal briefs, limited to issues raised in the case briefs, may be filed not later than five days after the date for filing case briefs in accordance with 19 CFR 351.309(d)(1). Parties who submit case briefs or rebuttal briefs in this proceeding are encouraged to provide: (1) A statement of the issue; (2) a brief summary of the argument; and (3) a table of authorities. *See* 19 CFR 351.309(c)(2) and (d)(2).

Pursuant to 19 CFR 351.310(c), interested parties who wish to request a hearing, or to participate if one is requested, must submit a written request to the Assistant Secretary for Import Administration, filed electronically via IA ACCESS. An electronically filed document must be received successfully in its entirety by the Department's electronic records system, IA ACCESS, by 5:00 p.m. Eastern Standard Time within 30 days after the date of publication of this notice. Requests should contain: (1) The party's name, address and telephone number; (2) the number of participants; and (3) a list of issues to be discussed. Issues raised in the hearing will be limited to those raised in the respective case briefs. The Department intends to issue the final results of this administrative review, including the results of its analysis of the issues raised in any written briefs, not later than 120 days after the date of publication of this notice, pursuant to section 751(a)(3)(A) of the Act.

We are issuing and publishing these results in accordance with sections 751(a)(1) and 777(i)(1) of the Act.

Dated: September 27, 2013.

Ronald K. Lorentzen,

Deputy Assistant Secretary for Import Administration.

[FR Doc. 2013–24279 Filed 10–2–13; 8:45 am]

BILLING CODE 3510–DS–P

DEPARTMENT OF COMMERCE

International Trade Administration

[A–821–817]

Silicon Metal From the Russian Federation: Final Results of the Expedited Second Sunset Review of the Antidumping Duty Order

AGENCY: Import Administration, International Trade Administration, Department of Commerce.

DATES: *Effective Date:* October 3, 2013.

SUMMARY: On June 3, 2013, the Department of Commerce ("Department") initiated the second sunset review of the antidumping duty order on silicon metal from the Russian Federation.¹ The Department finds that revocation of this antidumping duty order would be likely to lead to continuation or recurrence of dumping at the rates identified in the "Final Results of Review" section of this notice.

FOR FURTHER INFORMATION CONTACT: Elfi Blum, AD/CVD Operations, Office 6,

¹ *See Initiation of Five Year ("Sunset") Review*, 78 FR 33063 (June 3, 2013) (*Sunset Initiation Notice*).

Import Administration, International Trade Administration, U.S. Department of Commerce, 14th Street and Constitution Avenue NW., Washington, DC 20230; telephone (202) 482–0197.

SUPPLEMENTARY INFORMATION:

Background

The antidumping duty order on silicon metal from the Russian Federation was published on March 26, 2003.²

On June 3, 2013, the Department initiated the second sunset review of this order, pursuant to section 751(c) of the Tariff Act of 1930, as amended ("the Act").³ On June 13, 2013, the Department received a timely notice of intent to participate in this sunset review from a domestic interested party, Globe Metallurgical Inc. (Globe), pursuant to 19 CFR 351.218(d)(1). Globe claimed interested party status under section 771(9)(C) of the Act as a manufacturer in the United States of the domestic like product and as a petitioner in the investigation.

On July 3, 2013, the Department received an adequate substantive response in this sunset review from Globe within the 30-day deadline in accordance with 19 CFR 351.218(d)(3)(i). The Department did not receive a substantive response from any respondent interested party in this sunset review. As a result, pursuant to section 751(c)(3)(B) of the Act and 19 CFR 351.218(e)(1)(ii)(C)(2), the Department determined to conduct an expedited sunset review of the antidumping duty order on silicon metal from Russia.

As a result of this sunset review, the Department finds that revocation of the antidumping duty order is likely to lead to continuation or recurrence of dumping at the rates indicated in the "Final Results of Review" section of this notice.

Scope of the Order

The product covered by this order is silicon metal, which generally contains at least 96.00 percent but less than 99.99 percent silicon by weight. The merchandise covered by this order also includes silicon metal from Russia containing between 89.00 and 96.00 percent silicon by weight, but containing more aluminum than the silicon metal which contains at least

² *See Antidumping Duty Order: Silicon Metal From Russia*, 68 FR 14578 (March 26, 2003) (*Antidumping Duty Order*), amended by *Silicon Metal From the Russian Federation; Notice of Amended Final Determination Pursuant to Court Decision*, 71 FR 8277 (February 16, 2006) (*Amended Final Determination*).

³ *See Sunset Initiation Notice*.

96.00 percent but less than 99.99 percent silicon by weight. Silicon metal currently is classifiable under subheadings 2804.69.10 and 2804.69.50 of the Harmonized Tariff Schedule of the United States (HTSUS). This order covers all silicon metal meeting the above specification, regardless of tariff classification.

Analysis of Comments Received

All issues raised in this review are addressed in the Issues and Decision Memorandum (“Decision Memorandum”) from Christian Marsh, Deputy Assistant Secretary for Antidumping and Countervailing Duty Operations, to Paul Piquado, Assistant Secretary for Import Administration, dated September 26, 2013, which is hereby adopted by this notice. The issues discussed in the Decision Memorandum include the likelihood of continuation or recurrence of dumping and the magnitude of the margins of dumping likely to prevail if the order were revoked. Parties can find a complete discussion of all issues raised in this review and the corresponding recommendations in this public memorandum, which is on file electronically via Import Administration’s Antidumping and Countervailing Duty Centralized Electronic Service System (“IA ACCESS”). IA ACCESS is available to registered users at <http://iaaccess.trade.gov> and is available to all parties in the Central Records Unit in room 7046 of the main Commerce building. In addition, a complete version of the Decision Memorandum can be accessed directly on the Internet at <http://ia.ita.doc.gov/frn/>. The signed Decision Memorandum and electronic versions of the Decision Memorandum are identical in content.

Final Results of Review

Pursuant to sections 752(c)(1) and (3) of the Act, we determine that revocation of the antidumping duty order on silicon metal from the Russian Federation would be likely to lead to continuation or recurrence of dumping, and that the magnitude of the margins of dumping likely to prevail if the order were revoked are as follows:

Exporters/producers	Rate (percent)
ZAO Kremny and SUAL-Kremny-Ural, Ltd	61.61
Bratsk Aluminum Smelter and Rual Trade Limited	87.08
Russia-Wide	79.42

This notice also serves as the only reminder to parties subject to

administrative protective order (“APO”) of their responsibility concerning the return or destruction of proprietary information disclosed under APO in accordance with 19 CFR 351.305. Timely written notification of the return or destruction of APO materials, or conversion to judicial protective order, is hereby requested. Failure to comply with the regulations and terms of an APO is a violation which is subject to sanction.

The Department is issuing and publishing the final results and notice in accordance with sections 751(c), 752(c), and 777(i)(1) of the Act and 19 CFR 351.218.

Dated: September 26, 2013.

Paul Piquado,

Assistant Secretary for Import Administration.

[FR Doc. 2013–24273 Filed 10–2–13; 8:45 am]

BILLING CODE 3510–DS–P

DEPARTMENT OF COMMERCE

International Trade Administration

[A–570–910]

Circular Welded Carbon-Quality Steel Pipe From the People’s Republic of China: Final Results of the Expedited First Sunset Review of the Antidumping Duty Order

AGENCY: Import Administration, International Trade Administration, Department of Commerce.

SUMMARY: On June 3, 2013, the Department of Commerce (“the Department”) initiated the first sunset review of the antidumping duty order on circular welded carbon-quality steel pipe (“CWP”) from the People’s Republic of China (“PRC”) pursuant to section 751(c) of the Tariff Act of 1930, as amended (“the Act”). Based on the notice of intent to participate and adequate substantive response filed by the domestic interested party, and the lack of response from any respondent interested party, the Department conducted an expedited (120-day) sunset review of the antidumping duty order on CWP from the PRC, pursuant to section 751(c)(3)(B) of the Act and 19 CFR 351.218(e)(1)(ii)(C)(2). As a result of this sunset review, the Department finds that revocation of the antidumping duty order would be likely to lead to continuation or recurrence of dumping. The magnitude of the dumping margins likely to prevail is indicated in the “Final Results of Sunset Review” section of this notice, *infra*.

DATES: *Effective Date:* October 3, 2013.

FOR FURTHER INFORMATION CONTACT: Erin Kearney or Howard Smith, AD/CVD Operations, Office 4, Import Administration, International Trade Administration, U.S. Department of Commerce, 14th Street and Constitution Avenue NW., Washington, DC 20230; telephone: (202) 482–0167 or (202) 482–5193, respectively.

SUPPLEMENTARY INFORMATION:

Background

On July 22, 2008, the Department published the antidumping duty order on CWP from the PRC.¹ On June 3, 2013, the Department published the notice of initiation of the first sunset review of the antidumping duty order on CWP from the PRC, pursuant to section 751(c) of the Act.² Between June 12 and June 18, 2013, pursuant to 19 CFR 351.218(d)(1), the Department received a timely and complete notice of intent to participate in the sunset review from Allied Tube and Conduit, EXLTUBE, JMC Steel Group, Maruichi American Corporation, TMK IPSCO, United States Steel Corporation, and Western Tube & Conduit, domestic producers of CWP. On July 2, 2013, pursuant to 19 CFR 351.218(d)(3), Allied Tube and Conduit, EXLTUBE, JMC Steel Group, Maruichi American Corporation, TMK IPSCO, United States Steel Corporation, and Western Tube & Conduit filed a timely and adequate substantive response. The Department did not receive substantive responses from any respondent interested party. As a result, pursuant to section 751(c)(3)(B) of the Act and 19 CFR 351.218(e)(1)(ii)(C)(2), the Department conducted an expedited (120-day) sunset review of the antidumping duty order on CWP from the PRC.

Scope of the Order

The merchandise subject to the order is certain welded carbon quality steel pipes and tubes, of circular cross-section, and with an outside diameter of 0.372 inches (9.45 mm) or more, but not more than 16 inches (406.4 mm), whether or not stenciled, regardless of wall thickness, surface finish (e.g., black, galvanized, or painted), end finish (e.g., plain end, beveled end, grooved, threaded, or threaded and coupled), or industry specification (e.g., ASTM, proprietary, or other), generally known as standard pipe and structural pipe (they may also be referred to as

¹ See *Notice of Antidumping Duty Order: Circular Welded Carbon Quality Steel Pipe from the People’s Republic of China*, 73 FR 42547 (July 22, 2008).

² See *Initiation of Five-Year (“Sunset”) Review*, 78 FR 33063 (June 3, 2013).

circular, structural, or mechanical tubing).

The pipe products that are the subject of the order are currently classifiable in HTSUS statistical reporting numbers 7306.30.10.00, 7306.30.50.25, 7306.30.50.32, 7306.30.50.40, 7306.30.50.55, 7306.30.50.85, 7306.30.50.90, 7306.50.10.00, 7306.50.50.50, 7306.50.50.70, 7306.19.10.10, 7306.19.10.50, 7306.19.51.10, and 7306.19.51.50. However, the product description, and not the Harmonized Tariff Schedule of the United States (“HTSUS”) classification, is dispositive of whether merchandise imported into the United

States falls within the scope of the order.³

Analysis of Comments Received

A complete discussion of all issues raised in this sunset review is provided in the accompanying I&D Memorandum, which is hereby adopted by this notice. The issues discussed in the I&D Memorandum include the likelihood of continuation or recurrence of dumping and the magnitude of the margins likely to prevail if the order is revoked. The I&D Memorandum is a public document and is on file electronically via Import Administration’s Antidumping and Countervailing Duty Centralized Electronic Service System (“IA

ACCESS”). Access to IA ACCESS is available in the Central Records Unit (“CRU”), room 7046 of the main Department of Commerce building. In addition, a complete version of the I&D Memorandum can be accessed directly on the internet at <http://www.trade.gov/ia/>. The signed I&D Memorandum and the electronic versions of the I&D Memorandum are identical in content.

Final Results of Sunset Review:

The Department determines that revocation of the antidumping duty order on CWP from the PRC would be likely to lead to continuation or recurrence of dumping at the following weighted-average percentage margins:⁴

Exporter	Producer	Weighted-average percentage margin
Beijing Sai Lin Ke Hardware Co., Ltd	Xuzhou Guang Huan Steel Tube Products Co., Ltd	45.35
Wuxi Fastube Industry Co., Ltd	Wuxi Fastube Industry Co., Ltd	45.35
Jiangsu Guoqiang Zinc-Plating Industrial Co., Ltd	Jiangsu Guoqiang Zinc-Plating Industrial Co., Ltd	45.35
Wuxi Eric Steel Pipe Co., Ltd	Wuxi Eric Steel Pipe Co., Ltd	45.35
Qingdao Xiangxing Steel Pipe Co., Ltd	Qingdao Xiangxing Steel Pipe Co., Ltd	45.35
Wah Cit Enterprises	Guangdong Walsall Steel Pipe Industrial Co., Ltd	45.35
Guangdong Walsall Steel Pipe Industrial Co., Ltd	Guangdong Walsall Steel Pipe Industrial Co., Ltd	45.35
Hengshui Jinghua Steel Pipe Co., Ltd	Hengshui Jinghua Steel Pipe Co., Ltd	45.35
Zhangjiagang Zhongyuan Pipe-Making Co., Ltd	Zhangjiagang Zhongyuan Pipe-Making Co., Ltd	45.35
Weifang East Steel Pipe Co., Ltd	Weifang East Steel Pipe Co., Ltd	45.35
Shijiazhuang Zhongqing Imp & Exp Co., Ltd	Bazhou Zhuofa Steel Pipe Co., Ltd	45.35
Tianjin Baolai Int'l Trade Co., Ltd	Tianjin Jinghai County Baolai Business and Industry Co., Ltd	45.35
Wai Ming (Tianjin) Int'l Trading Co., Ltd	Bazhou Dong Sheng Hot-dipped Galvanized Steel Pipes Co., Ltd.	45.35
Kunshan Lets Win Steel Machinery Co., Ltd	Kunshan Lets Win Steel Machinery Co., Ltd	45.35
Shenyang Boyu M/E Co., Ltd	Bazhou Dong Sheng Hot-dipped Galvanized Steel Pipes Co., Ltd.	45.35
Dalian Brollo Steel Tubes Ltd	Dalian Brollo Steel Tubes Ltd	45.35
Benxi Northern Pipes Co., Ltd	Benxi Northern Pipes Co., Ltd	45.35
Shanghai Metals & Minerals Import & Export Corp	Huludao Steel Pipe Industrial Co	45.35
Shanghai Metals & Minerals Import & Export Corp	Benxi Northern Pipes Co., Ltd	45.35
Huludao Steel Pipe Industrial Co	Huludao Steel Pipe Industrial Co	45.35
Tianjin Xingyuda Import & Export Co., Ltd	Tianjin Lifengyuanda Steel Group	45.35
Tianjin Xingyuda Import & Export Co., Ltd	Tianjin Xingyunda Steel Pipe Co	45.35
Tianjin Xingyuda Import & Export Co., Ltd	Tianjin Lituo Steel Products Co	45.35
Tianjin Xingyuda Import & Export Co., Ltd	Tangshan Fengnan District Xinlida Steel Pipe Co., Ltd	45.35
Jiangyin Jianye Metal Products Co., Ltd	Jiangyin Jianye Metal Products Co., Ltd	45.35
Rizhao Xingye Import & Export Co., Ltd	Shandong Xinyuan Group Co., Ltd	45.35
Tianjin No. 1 Steel Rolled Co., Ltd	Tianjin Hexing Steel Co., Ltd	45.35
Tianjin No. 1 Steel Rolled Co., Ltd	Tianjin Ruitong Steel Co., Ltd	45.35
Tianjin No. 1 Steel Rolled Co., Ltd	Tianjin Yayi Industrial Co	45.35
Kunshan Hongyuan Machinery Manufacture Co., Ltd	Kunshan Hongyuan Machinery Manufacture Co., Ltd	45.35
Qingdao Yongjie Import & Export Co., Ltd	Shandong Xinyuan Group Co., Ltd	45.35
PRC-Wide Entity .....	.....	68.24

Notification Regarding Administrative Protective Order

This notice also serves as the only reminder to parties subject to administrative protective order (“APO”)

of their responsibility concerning the return or destruction of proprietary information disclosed under APO in accordance with 19 CFR 351.305. Timely notification of the return or

destruction of APO materials or conversion to judicial protective orders is hereby requested. Failure to comply with the regulations and terms of an

³ See Memorandum to Paul Piquado, Assistant Secretary for Import Administration from Christian Marsh, Deputy Assistant Secretary for Antidumping and Countervailing Duty Operations, “Issues and Decision Memorandum for the Expedited First Sunset Review of the Antidumping Duty Order on Circular Welded Carbon-Quality Steel Pipe from the

People’s Republic of China,” dated concurrently with this notice (“I&D Memorandum”), for full scope language.

⁴ These margins were from the order of the original investigation, as modified by the section 129 determination. See *Notice of Antidumping Duty Order: Circular Welded Carbon Quality Steel Pipe*

from the People’s Republic of China, 73 FR 42547 (July 22, 2008); *Correction to Notice of Implementation of Determinations Under Section 129 of the Uruguay Round Agreements Act: Circular Welded Carbon Quality Steel Pipe from the People’s Republic of China*, 77 FR 65672 (October 30, 2012).

APO is a violation which is subject to sanction.

We are issuing and publishing the results and notice in accordance with sections 751(c), 752(c), and 777(i)(1) of the Act.

Dated: September 26, 2013.

Paul Piquado,

Assistant Secretary for Import Administration.

Appendix—List of Topics Discussed in the Issues and Decision Memorandum

1. Likelihood of continuation or recurrence of dumping; and
2. Magnitude of the dumping margin likely to prevail.

[FR Doc. 2013–24285 Filed 10–2–13; 8:45 am]

BILLING CODE 3510–DS–P

DEPARTMENT OF COMMERCE

National Technical Information Service

National Technical Information Service Advisory Board

AGENCY: National Technical Information Service, Commerce.

ACTION: Notice of open meeting

SUMMARY: This notice announces the next meeting of the National Technical Information Service Advisory Board (the Advisory Board), which advises the Secretary of Commerce and the Director of the National Technical Information Service (NTIS) on policies and operations of the Service.

DATES: The Advisory Board will meet on Friday, November 1, 2013, from 9:00 a.m. to approximately 4:00 p.m.

ADDRESSES: The Advisory Board will be held in Room 116 of the NTIS Facility at 5301 Shawnee Road, Alexandria, Virginia 22312. Please note admittance instructions under the **SUPPLEMENTARY INFORMATION** section of this notice.

FOR FURTHER INFORMATION CONTACT: Mr. Bruce Borzino, (703) 605–6405, bborzino@ntis.gov.

SUPPLEMENTARY INFORMATION: The NTIS Advisory Board is established by Section 3704b(c) of Title 15 of the United States Code. The charter has been filed in accordance with the requirements of the Federal Advisory Committee Act, as amended (5 U.S.C. App.).

The morning session will focus on a review of NTIS performance and accomplishments in Fiscal Year 2013. The afternoon session is expected to focus on NTIS strategic direction in Fiscal Year 2014. A final agenda and summary of the proceedings will be posted at the NTIS Web site as soon as

they are available (<http://www.ntis.gov/about/advisorybd.aspx>).

The NTIS Facility is a secure one. Accordingly persons wishing to attend should call the NTIS Visitors Center, (703) 605–6040, to arrange for admission. If there are sufficient expressions of interest, up to one-half hour will be reserved for public comments during the afternoon session. Questions from the public will not be considered by the Board but any person who wishes to submit a written question for the Board's consideration should mail or email it to the NTIS Visitor Center, bookstore@ntis.gov, not later than April 10, 2013.

Dated: September 30, 2013.

Bruce Borzino,

Director.

[FR Doc. 2013–24223 Filed 10–2–13; 8:45 am]

BILLING CODE 3510–04–P

DEPARTMENT OF COMMERCE

United States Patent and Trademark Office

National Telecommunications and Information Administration

[Docket No. 130927852–3852–01]

Request for Comments on Department of Commerce Green Paper, Copyright Policy, Creativity, and Innovation in the Digital Economy

AGENCY: Office of the Secretary, U.S. Department of Commerce; United States Patent and Trademark Office, U.S. Department of Commerce; National Telecommunications and Information Administration, U.S. Department of Commerce.

ACTION: Request for public comments and notice of public meeting.

SUMMARY: Consistent with the Department of Commerce's Internet Policy Task Force (Task Force) Green Paper on Copyright Policy, Creativity, and Innovation in the Digital Economy (Green Paper) released on July 31, 2013, the Task Force seeks public comment from all interested stakeholders on the following copyright policy issues critical to economic growth, job creation, and cultural development: The legal framework for the creation of remixes; the relevance and scope of the first sale doctrine in the digital environment; the appropriate calibration of statutory damages in the contexts of individual file sharers and of secondary liability for large-scale infringement; whether and how the government can facilitate the further

development of a robust online licensing environment; and establishing a multistakeholder dialogue on improving the operation of the notice and takedown system for removing infringing content from the Internet under the Digital Millennium Copyright Act (DMCA). The Task Force will also hold an initial public meeting on October 30, 2013, to discuss these topics.

DATES: Comments are due on or before November 13, 2013. Any comments received before October 15, 2013 will be considered in the discussions in the public meeting.

The public meeting will be held on October 30, 2013, from 8:30 a.m. to 5:00 p.m., Eastern Daylight Time. Registration will begin at 8:00 a.m.

ADDRESSES: The Task Force intends to hold the public meeting in the Amphitheatre of the Ronald Reagan Building and International Trade Center, 1300 Pennsylvania Avenue NW., Washington, DC 20004. All major entrances to the building are accessible to people with disabilities. Confirmation of the venue for the public meeting will be available at least seven (7) days prior to the meeting on the Internet Policy Task Force Web site, <http://www.ntia.doc.gov/internetpolicytaskforce> and the USPTO's Web site, <http://www.uspto.gov>.

Interested parties are encouraged to file comments electronically by email to: CopyrightComments2013@uspto.gov. Comments submitted by email should be machine-searchable and should not be copy-protected. Written comments also may be submitted by mail to Office of Policy and External Affairs, United States Patent and Trademark Office, Mail Stop External Affairs, P.O. Box 1450, Alexandria, VA 22313–1450. Responders should include the name of the person or organization filing the comment, as well as a page number, on each page of their submissions. Paper submissions should also include a CD or DVD containing the submission in Word, WordPerfect, or pdf format. CDs or DVDs should be labeled with the name and organizational affiliation of the filer, and the name of the word processing program used to create the document. All comments received are a part of the public record and will be made available to the public at <http://www.ntia.doc.gov/category/internet-policy-task-force> without change. All personally identifiable information (for example, name, address, etc.) voluntarily submitted by the commenter may be publicly accessible. Do not submit confidential

business information or otherwise sensitive or protected information. The Task Force will accept anonymous comments (enter "N/A" in the required fields if you wish to remain anonymous).

FOR FURTHER INFORMATION CONTACT: For further information regarding the meeting, contact Hollis Robinson or Ben Golant, Office of Policy and External Affairs, United States Patent and Trademark Office, Madison Building, 600 Dulany Street, Alexandria, VA 22314; telephone (571) 272-9300; email hollis.robinson@uspto.gov or benjamin.golant@uspto.gov.

For further information regarding the public comments, contact Garrett Levin or Ben Golant, Office of Policy and External Affairs, United States Patent and Trademark Office, Madison Building, 600 Dulany Street, Alexandria, VA 22314; telephone (571) 272-9300; email garrett.levin@uspto.gov or benjamin.golant@uspto.gov.

Please direct all media inquiries to the Office of the Chief Communications Officer, USPTO, at (571) 272-8400.

SUPPLEMENTARY INFORMATION:

Background

The Department of Commerce's Internet Policy Task Force (Task Force) released *Copyright Policy, Creativity, and Innovation in the Digital Economy* on July 31, 2013 (Green Paper).¹ The Green Paper is the product of extensive public consultation led by the United States Patent and Trademark Office (USPTO) and the National Telecommunications and Information Administration (NTIA). It provides a comprehensive review of the current policy landscape related to copyright and the Internet, and identifies important issues that call for attention and possible solutions. The paper focuses on three goals: maintaining an appropriate balance between rights and exceptions as the law continues to be updated; ensuring that copyright can be meaningfully enforced on the Internet; and furthering the development of an efficient online marketplace. It emphasizes the need to maintain a balanced and effective copyright system that continues to drive the production of creative works, while at the same time preserving the innovative power of the Internet and the free flow of information.

The Green Paper does not set out substantive policy recommendations, except where the Administration is already on record with a stated position.

Rather, it describes changes that have already occurred in adapting copyright law to the digital environment, identifies issues on which more work should be done, and sets out paths to move that work forward. As to some of these issues, the paper expresses support for efforts already under way to address them in other forums—notably Congressional attention to music licensing, the Copyright Office's work on orphan works and mass digitization, and the Intellectual Property Enforcement Coordinator's facilitation of cooperative efforts by stakeholders to curb online infringement.

On five other topics, the Green Paper proposes to undertake further work to develop policy recommendations by soliciting public comment and convening roundtables or forums: (1) The legal framework for the creation of remixes; (2) the relevance and scope of the first sale doctrine in the digital environment; (3) the appropriate calibration of statutory damages in the contexts of individual file sharers and of secondary liability for large-scale infringement; (4) whether and how the government can facilitate the further development of a robust online licensing environment; and (5) establishing a multistakeholder dialogue on improving the operation of the notice and takedown system for removing infringing content from the Internet under the DMCA. For each topic, the Task Force anticipates further public discussion following the submission of comments. The contours of those public discussions will be determined after reviewing the comments. Ultimately, the information obtained through this public process will be used to formulate the Administration's views and recommendations regarding copyright policy.

Request for Comment

Commenters are free to address any or all of the issues identified below, as well as to provide information on other aspects of these issues that are relevant to developing copyright policy for the Internet economy. When responding, commenters should provide evidence to support their positions and assist in developing evidence-based policy recommendations. Please note that the government will not pay for response preparation or for the use of any information contained in the response.

Legal Framework for Remixes

Advances in digital technology have made the creation of "remixes" or "mashups"—creative new works produced through changing and combining portions of existing works—

easier and cheaper than ever before, providing greater opportunities for enhanced creativity. These types of "user-generated content" are a hallmark of today's Internet, in particular on video-sharing sites. But because remixes typically rely on copyrighted works as source material—often using portions of multiple works—they can raise daunting legal and licensing issues.

As explained in the Green Paper, there are two general methods for permitting legal remixes in today's marketplace—fair use and licensing mechanisms.² Many remixes may qualify as fair uses of the copyrighted material they draw on. Remixers may also rely in some contexts on licensing mechanisms such as YouTube's Content ID system, Creative Commons licenses, and other online licensing tools.³ There have been additional efforts to provide guidance through the creation of best practices and industry-specific guidelines to help those looking to use existing works make informed choices.⁴

Despite these alternatives, a considerable area of legal uncertainty remains, given the fact-specific balancing required by fair use and the fact that licenses may not always be easily available.

1. Is the creation of remixes being unacceptably impeded by this uncertainty? If not, why not? If so, how? In what way would clearer legal options result in even more valuable creativity?

2. In what ways, if any, can right holders be efficiently compensated for this form of value in cases where fair use does not apply?

3. What licensing mechanisms currently exist, or are currently under development, for remixes and for which categories of works?

4. Can more widespread implementation of intermediary licensing, such as YouTube's Content ID system, play a constructive role? If so, how? If not, why not?

5. Should alternatives such as microlicensing to individual consumers, a compulsory license, or a specific exception be considered? Why or why not?

6. What specific changes to the law, if any, should be considered? To what extent are there approaches that do not require legislation that could constructively address these issues?

First Sale in the Digital Environment

The first sale doctrine, which limits the scope of the exclusive distribution right and allows the owner of a physical

¹ The Green Paper is available at <http://www.uspto.gov/news/publications/copyrightgreenpaper.pdf>.

² Green Paper at 28–29.

³ *Id.* at 29, 87–89.

⁴ *Id.* at 29.

copy of a work to resell or otherwise dispose of that copy without the copyright owner's consent,⁵ does not apply to digital transmissions where copies are created implicating the reproduction right.⁶

In 2001, in a report requested by Congress, the Copyright Office considered whether the first sale doctrine should be amended to extend to digital transmissions.⁷ It recommended against doing so, noting the fact that a digital transmission creates a perfect copy of the work, which could both negatively affect the development of the digital marketplace and fuel piracy.⁸ The Office also noted that the issue might be one that Congress would want to revisit as the digital marketplace developed and matured.

Proponents of a digital first sale doctrine argue that the extension of the doctrine would have pro-competitive effects, and would preserve the traditional benefits of users sharing works with friends or family, and students being able to purchase less expensive copies of textbooks. Proponents have also suggested that technological advances would lessen the potential risk of piracy.⁹ But others assert that the risk of piracy remains too great for adoption of the doctrine in the digital environment, and that the market is evolving in ways that make its application unnecessary.¹⁰

7. What are the benefits of the first sale doctrine? And to what extent are those benefits currently being experienced in the digital marketplace?

8. To what extent does the online market today provide opportunities to engage in actions made possible by the first sale doctrine in the analog world, such as sharing favorite books with friends, or enabling the availability of less-than-full-price versions to students?

9. If the market does not currently provide such opportunities, will it do so in the near future? If not, are there alternative means to incorporate the benefits of the first sale doctrine in the digital marketplace? How would adoption of those alternatives impact the markets for copyrighted works?

10. Are there any changes in technological capabilities since the Copyright Office's 2001 conclusions that

should be considered? If so, what are they? For example, could some technologies ensure that the original copy of a work no longer exists after it has been redistributed?

11. To what extent are there particular market segments or categories of users that may warrant particularized legal treatment?

12. How will the Supreme Court's decision in *Kirtsaeng v. John Wiley & Sons, Inc.*, 133 S.Ct. 1351 (2013), impact the ability of right holders to offer their works at different prices and different times in different online markets? How will any such changes impact the availability of and access to creative content in the United States and elsewhere?

Statutory Damages

Because actual damages for copyright infringement can be difficult to prove, the Copyright Act permits a right holder to elect to seek damages within a statutorily defined range instead.¹¹ In the online environment, where the scope of the infringing use will often not be ascertainable, making it hard to prove actual damages, the availability of statutory damages is increasingly important.

In recent years, concerns have been raised about the level of statutory damage awards in certain contexts; in particular: (1) The use of orphan works; (2) secondary liability claims against online services; and (3) private individuals making infringing content available online. The Copyright Office has already recommended addressing the issue of statutory damages in the context of orphan works by limiting their availability in certain circumstances.¹² With respect to statutory damages for secondary liability, there are competing arguments about the potential negative impact on investment and the need for a proportionate level of deterrence.¹³ Finally, there have been calls for further calibration of the levels of statutory damages for individual file sharers in the wake of large jury awards in the two file-sharing cases that have gone to trial.¹⁴

13. To what extent is application of the current range of statutory damages necessary for effective deterrence with respect to (a) direct infringement by individual file sharers and (b) secondary liability by online services?

14. Is the potential availability of statutory damages against online

services for large scale secondary infringement hindering the development of new, legitimate services or platforms for delivering content? If so, how? What is the evidence of any such impact?

15. If statutory damages for individual file sharers and/or services found secondarily liable for infringement were to be recalibrated, how should that be accomplished? Would legislation be required?

Government Role in Improving the Online Licensing Environment

Great strides have been made toward fulfilling the Internet's promise as a market for copyrighted works, with legitimate services delivering a wide variety of works in a wide variety of formats, as well as the increasing availability of online licensing.¹⁵ Building the online marketplace is fundamentally a function of the private sector, and that process is well under way. In order to achieve its full promise, however, there remains a need for more comprehensive and reliable ownership data, interoperable standards enabling communication among databases, and more streamlined licensing mechanisms. In reaching these goals, there may be an appropriate and useful role for government in facilitating the process, whether by removing obstacles or taking steps to encourage faster and more collaborative action.

One possible area for government involvement is helping to provide better access to standardized rights ownership information. The Copyright Office is working to improve the reliability of the public registration and recordation systems, and considering educational efforts and stronger incentives that could further increase the use of the system and enhance its comprehensiveness.¹⁶ The expertise and resources of the private sector could also be drawn on to create innovative public/private partnerships improving or linking rights databases. Such an approach was highlighted in the Copyright Office's Notice of Inquiry in March 2013, seeking public comment on the integration of private databases with the Office's public database.¹⁷

With respect to creating new platforms for online licensing, such efforts should continue to be primarily driven by the industries involved. But

¹⁵ *Id.* at 77–80, 87–98.

¹⁶ *Id.* at 89–92.

¹⁷ See U.S. Copyright Office, *Technological Upgrades to Registration and Recordation Functions*, 78 FR 17722 (Mar. 22, 2013). This Notice also discussed the Office's recent exploration of issues related to data standards and the need for bulk data transfer. *Id.* at 17723.

⁵ 17 U.S.C. 109.

⁶ Green Paper at 35.

⁷ *Id.* at 35–36 (citing U.S. Copyright Office, *A Report of the Register of Copyrights Pursuant to § 104 of the Digital Millennium Copyright Act*, 78–79 (2001) available at <http://www.copyright.gov/reports/studies/dmca/sec-104-report-vol-1.pdf>).

⁸ *Id.* at 35–36.

⁹ *Id.* at 36.

¹⁰ *Id.*

¹¹ *Id.* at 51 (citing 17 U.S.C. 504(c)).

¹² Green Paper at 51–52.

¹³ *Id.* at 52.

¹⁴ *Id.*

there may be ways in which the U.S. government can play a helpful role on both the domestic and international fronts. This could include pursuing the concept of a digital copyright hub similar to that under discussion in the U.K.,¹⁸ launching the kind of multistakeholder dialogue recently begun by the European Commission through the “Licences for Europe” initiative,¹⁹ participating in the development of international initiatives such as the World Intellectual Property Organization’s (WIPO) International Music Registry,²⁰ and/or facilitating the involvement of U.S. stakeholders.

16. What are the biggest obstacles to improving access to and standardizing rights ownership information? How can the government best work with the private sector to overcome those obstacles?

17. To what extent is a lack of access to standardized, comprehensive, and reliable rights information impeding the growth of the online marketplace? What approaches could be taken to improve the situation?

18. Are there other obstacles that exist to developing a more robust, effective, or comprehensive online licensing environment? If so, what are they?

19. In addition to those efforts to develop standardized, comprehensive, and reliable rights databases and online licensing platforms described in the Green Paper, are there other efforts under way by the private sector or public entities outside the United States? If so, what are they?

20. Would a central, online licensing platform for high-volume, low-value uses (a “copyright hub”) be a useful endeavor in the United States? If not, why not? If so, how can the government support such a project?

21. What role should the United States government play in international initiatives at WIPO or elsewhere?

Operation of the DMCA Notice and Takedown System

In 1998, the DMCA established safe harbors to shield online service providers that act responsibly from unreasonable monetary liability for copyright infringement. The DMCA safe harbors protect providers that comply with certain conditions when they are engaged in one of four covered

activities: serving as a conduit for transmitting content (“mere conduit”), caching, hosting, or providing information location tools. One of the conditions on the availability of the safe harbors is that an Internet service provider (ISP), to the extent it is engaging in covered activities going beyond mere transmission, must block or remove infringing content for which it has received a valid notice. A “put-back” mechanism allows content to be restored that was removed through mistake or misidentification. This structure has essentially created a new, extrajudicial tool—notice and takedown—for curbing infringement.²¹

After more than a decade of experience with the DMCA notice and takedown system, right holders, ISPs, and content creators, have all identified respects in which its operation can become unwieldy or burdensome. On one side, there are complaints that the system can be too resource-intensive and require constant re-notification as to the same content;²² on the other, that the volume has become too high, and notices may be inaccurate or otherwise misused.²³ Right holders have also found unwieldy the application of notice and takedown to services, such as cyberlockers, where stored content is not directly searchable; infringing URLs must be located through other sites that aggregate links and then right holders must send takedown notices directly to the cyberlockers, adding a step to the process. And consumer and free speech advocates have raised concerns about notices claiming that fair uses or other permissible activities are infringing.²⁴

These problems taken together may be undermining the benefits of the notice and takedown system for all parties. The Task Force believes that one potential solution to ease burdens and improve results that would not require legislation is the creation of best practices. Such agreements would benefit right holders, ISPs and end users alike, by supporting a more efficient and reliable notice and takedown system. To that end, the Task Force will convene a multistakeholder dialogue involving right holders (both large and small), ISPs, consumer and public interest representatives and companies in the business of identifying infringing content, on how to improve the operation of the notice and takedown system. The goal of this process is not to identify ways to change the law, but rather to determine how the operation of

the existing system can be improved within the existing legal framework.

Although the details of the process will be developed following review of public comments, the Task Force anticipates a structure of regular meetings over a finite period of time to address a series of discrete topics. Since the notice and takedown system is already widely used, the Task Force wants to ensure participation by a wide variety of its current users—both right holders and service providers—as well as stakeholders that wish to use the system and those that are otherwise directly affected. Transparency is necessary to allow the public to understand how participants reach their decisions.²⁵ Consensus of a broad set of stakeholders, achieved through a transparent process, would lend legitimacy to the outcome.

The Task Force’s role will be to provide a forum for discussion and consensus-building among stakeholders. Stakeholder groups convened for this process will not be advisory committees, as neither the Task Force nor any other Federal agency or office will seek advice or recommendations on policy issues from participants.

To identify potential topics that would benefit from this process, and to develop a productive structure, the Task Force seeks comment from stakeholders. Commenters may wish to provide their views on how discussions of the proposed issue(s) should be structured to ensure openness, transparency, and consensus-building. Experiences with other Internet-related multistakeholder processes on policy or technical issues could be valuable, taking into account the fact that the notice and takedown process may differ because of the existing legal framework.²⁶

22. The Task Force believes that at least the following issues could be

²⁵ See Memorandum for the Heads of Executive Departments and Agencies, Open Government Directive, Dec. 8, 2009, available at <http://www.whitehouse.gov/open/documents/open-government-directive>; Memorandum for the Heads of Executive Departments and Agencies, “Transparency and Open Government,” Jan. 21, 2009, available at <http://www.whitehouse.gov/the-press-office/TransparencyandOpenGovernment/>.

²⁶ Potentially relevant examples include NTIA’s ongoing privacy multistakeholder process arising out of the Executive Office of the President’s Privacy and Innovation Blueprint, <http://www.ntia.doc.gov/other-publication/2013/privacy-multistakeholder-process-mobile-application-transparency>, the Internet Corporation for Assigned Names and Numbers (ICANN), the Internet Engineering Task Force (IETF), and the Internet Governance Forum (IGF). The Task Force welcomes discussion of these and any other examples of multistakeholder policy development processes that commenters believe are relevant to developing consensus for improvements to the notice and takedown system.

¹⁸ Green Paper at 96.

¹⁹ See Licences for Europe, Structured stakeholder dialogue 2013 at <http://ec.europa.eu/licences-for-europe-dialogue/> (focusing on four areas: “Cross-border access and portability of services; User-generated content and licensing; Audiovisual sector and cultural heritage; [and] Text and data mining.”)

²⁰ Green Paper at 96.

²¹ *Id.* at 53.

²² *Id.* at 56.

²³ *Id.* at 57.

²⁴ *Id.* at 57–58.

constructively addressed through a notice and takedown multistakeholder dialogue:

- a. Reducing the volume of takedown notices sent to service providers;
- b. Minimizing reappearance of infringing material;
- c. Inaccurate takedown requests;
- d. Misuse of takedown requests; and
- e. Difficulties in using the system for individuals or small and medium-size enterprises (SME).

What other issues could be considered? For each issue to be considered, who are the stakeholders needed at the table?

23. How can the Task Force ensure participation by all relevant stakeholders, as well as effective and informed representation of their interests?

24. Are there lessons from existing multistakeholder processes in the realms of Internet policy, intellectual property policy, or technical standard-setting that could be applied here? If so, what are they and to what extent are they applicable?

25. In what ways could the stakeholder discussions be structured to best facilitate consensus?

Public Meeting

On October 30, 2013, the Task Force will hold an initial public meeting to hear stakeholder views and to initiate discussion of the five topics identified above. The event will seek participation and comment from interested stakeholders, including creators, right holders, Internet intermediaries, consumer representatives, public interest groups, and academics.

The agenda for the public meeting will be available at least one week prior to the meeting and the meeting will be webcast. The agenda and webcast information will be available on the Internet Policy Task Force Web site, <http://www.ntia.doc.gov/internetpolicytaskforce> and the USPTO's Web site, <http://www.uspto.gov>.

The meeting will be open to members of the public to attend, space permitting, on a first-come, first-served basis. Pre-registration for the meeting is available at: <http://events.SignUp4.com/GreenPaper>. The meeting will be physically accessible to people with disabilities. Individuals requiring accommodation, such as sign language interpretation, real-time captioning of the webcast or other ancillary aids, should communicate their needs to Hollis Robinson or Ben Golant, Office of Policy and External Affairs, United States Patent and Trademark Office, Madison Building, 600 Dulany Street,

Alexandria, VA 22314; telephone (571) 272-9300; email hollis.robinson@uspto.gov or benjamin.golant@uspto.gov at least seven (7) business days prior to the meeting. Attendees should arrive at least one-half hour prior to the start of the meeting, and must present a valid government-issued photo identification upon arrival. Persons who have pre-registered (and received confirmation) will have seating held until 15 minutes before the program begins. Members of the public will have an opportunity to ask questions at the meeting.

Dated: September 30, 2013.

Teresa Stanek Rea,

Deputy Under Secretary of Commerce for Intellectual Property and Deputy Director of the United States Patent and Trademark Office.

Lawrence E. Strickling,

Assistant Secretary of Commerce for Communications and Information.

[FR Doc. 2013-24309 Filed 10-2-13; 8:45 am]

BILLING CODE 3510-16-P

CORPORATION FOR NATIONAL AND COMMUNITY SERVICE

Proposed Information Collection; Comment Request

AGENCY: Corporation for National and Community Service.

ACTION: Notice.

SUMMARY: The Corporation for National and Community Service (CNCS), as part of its continuing effort to reduce paperwork and respondent burden, conducts a pre-clearance consultation program to provide the general public and federal agencies with an opportunity to comment on proposed and/or continuing collections of information in accordance with the Paperwork Reduction Act of 1995 (PRA95) (44 U.S.C. 3506(c)(2)(A)). This program helps to ensure that requested data can be provided in the desired format, reporting burden (time and financial resources) is minimized, collection instruments are clearly understood, and the impact of collection requirement on respondents can be properly assessed. Individuals who use a telecommunications device for the deaf (TTY-TDD) may call (202) 565-2799 between 8:30 a.m. and 5:00 p.m. eastern time, Monday through Friday.

Currently, CNCS is soliciting comments concerning AmeriCorps Application Instructions related to the *Presidential Memorandum on Expanding National Service through Partnerships*. Applicants will respond to the questions included in this information collection request in order

to apply for funding through these grant competitions.

Copies of the information collection request can be obtained by contacting the office listed in the addresses section of this notice.

DATES: Written comments must be submitted to the individual and office listed in the **ADDRESSES** section by December 2, 2013.

ADDRESSES: You may submit comments, identified by the title of the information collection activity, by any of the following methods:

(1) By mail sent to: Corporation for National and Community Service; Attention Jennifer Bastress Tahmasebi, Deputy Director, AmeriCorps State and National, Room 9501; 1201 New York Avenue NW., Washington, DC 20525.

(2) By hand delivery or by courier to the CNCS mailroom at Room 8100 at the mail address given in paragraph (1) above, between 9:00 a.m. and 4:00 p.m. Monday through Friday, except Federal holidays.

(3) Electronically through the CNCS email address system: jbastrestahmasebi@cns.gov or www.regulations.gov.

FOR FURTHER INFORMATION CONTACT: Jennifer Bastress Tahmasebi, (202) 606-6667, or by email at jbastrestahmasebi@cns.gov.

SUPPLEMENTARY INFORMATION:

CNCS is particularly interested in comments that:

- Evaluate whether the proposed collection of information is necessary for the proper performance of the functions of the agency, including whether the information will have practical utility;
- Evaluate the accuracy of the agency's estimate of the burden of the proposed collection of information, including the validity of the methodology and assumptions used;
- Enhance the quality, utility, and clarity of the information to be collected; and
- Minimize the burden of the collection of information on those who are expected to respond, including the use of appropriate automated, electronic, mechanical, or other technological collection techniques or other forms of information technology (e.g., permitting electronic submissions of responses).

Background: These application instructions will be used by applicants for funding through AmeriCorps State and National grant competitions related to the President's Memorandum on Expanding National Service. These competitions are designed and conducted in partnership with other

federal and non-federal entities, when appropriations are available, to address the Corporation's strategic initiatives or other priorities. Applicants will respond to the questions included in these instructions in order to apply for funding in these competitions.

Current Action: CNCS seeks approval for an alternative version of the AmeriCorps State and National Application Instructions. The Application Instructions are being revised to align with the initiative outlined in the President's Memorandum on Expanding National Service. The Application Instructions will be used in the same manner as the existing Application Instructions.

Type of Review: New.

Agency: Corporation for National and Community Service.

Title: AmeriCorps Application Instructions related to the President's Memo on Expanding National Service.

OMB Number: TBD.

Agency Number: None.

Affected Public: Nonprofit organizations, State, Local and Tribal.

Total Respondents: 350.

Frequency: Annually.

Average Time per Response: 24 hours.

Estimated Total Burden Hours: 8,400.

Total Burden Cost (capital/startup): None.

Total Burden Cost (operating/maintenance): None.

Comments submitted in response to this notice will be summarized and/or included in the request for Office of Management and Budget approval of the information collection request; they will also become a matter of public record.

Dated: September 27, 2013.

Bill Basl,

Director, AmeriCorps State and National.

[FR Doc. 2013-24057 Filed 10-2-13; 8:45 am]

BILLING CODE 6050-28-P

DEPARTMENT OF DEFENSE

Office of the Secretary

Meeting of the National Commission on the Structure of the Air Force

AGENCY: Director of Administration and Management, DoD.

ACTION: Notice of Advisory Committee Meeting.

SUMMARY: The Department of Defense is publishing this notice to announce that the following Federal Advisory Committee meeting of the National Commission on the Structure of the Air Force ("the Commission") will take place.

DATES: *Date of Open Meeting, including Hearing and Commission Discussion:* Wednesday, October 9, 2013.

Registration will begin at 12:30 p.m. The meeting will begin at 1:00 p.m. and adjourn at 5:00 p.m. local time.

ADDRESSES: Civilian Passenger Terminal Lounge and Conference Room, Westover Metropolitan Airport, 255 Padgette Street, Chicopee, MA 01022.

FOR FURTHER INFORMATION CONTACT: Mrs. Marcia Moore, Designated Federal Officer, National Commission on the Structure of the Air Force, 1950 Defense Pentagon, Room 3A874, Washington, DC 20301-1950. Email: marcia.l.moore12.civ@mail.mil. Desk (703) 545-9113. Facsimile (703) 692-5625.

SUPPLEMENTARY INFORMATION: This meeting is being held under the provisions of the Federal Advisory Committee Act (FACA) of 1972 (5 U.S.C., Appendix, as amended), the Government in the Sunshine Act of 1976 (5 U.S.C. 552b, as amended), and 41 CFR 102-3.150.

Purpose of Meeting: The members of the Commission will hear testimony from individual witnesses and then will discuss the information presented at the hearings.

Agenda: The morning of October 9, 2013, a subset of members from the Commission will tour units located at Westover Air Reserve Base, Massachusetts. On October 8, 2013, a subset of members from the Commission will tour units located at Pease Air National Guard Base, New Hampshire. The afternoon hearing and meeting on Wednesday, October 9, 2013 is expected to include representatives from the Massachusetts Governor's office, local U.S. Air Force and Massachusetts National Guard leadership who have been asked to testify and address the evaluation factors under consideration by the Commission for a U.S. Air Force structure that—(a) meets current and anticipated requirements of the combatant commands; (b) achieves an appropriate balance between the regular and reserve components of the Air Force, taking advantage of the unique strengths and capabilities of each; (c) ensures that the regular and reserve components of the Air Force have the capacity needed to support current and anticipated homeland defense and disaster assistance missions in the United States; (d) provides for sufficient numbers of regular members of the Air Force to provide a base of trained personnel from which the personnel of the reserve components of the Air Force could be recruited; (e) maintains a peacetime rotation force to support

operational tempo goals of 1:2 for regular members of the Air Forces and 1:5 for members of the reserve components of the Air Force; and (f) maximizes and appropriately balances affordability, efficiency, effectiveness, capability, and readiness. Individual Commissioners will also report their activities, information collection, and analyses to the full Commission.

Meeting Accessibility: Pursuant to 5 U.S.C. 552b, as amended, and 41 CFR 102-3.140 through 102-3.165, and the availability of space, the meeting is open to the public. The building is fully handicap accessible. There is parking at the Westover Metropolitan Airport. More information about the hearing space can be found at: <http://www.wmass-arptcef.com/index.html>.

Meeting Announcement: Due to difficulties finalizing the meeting agenda for the National Commission on the Structure of the Air Force's meeting of October 9, 2013, the requirements of 41 CFR 102-3.150(a) were not met. Accordingly, the Advisory Committee Management Officer for the Department of Defense, pursuant to 41 CFR 102-3.150(b), waives the 15-calendar day notification requirement.

Written Comments: Pursuant to 41 CFR 102-3.105(j) and 102-3.140 and section 10(a)(3) of the FACA, the public or interested organizations may submit written comments to the Commission in response to the stated agenda of the open meeting or the Commission's mission. The Designated Federal Officer (DFO) will review all submitted written statements. Written comments should be submitted to Mrs. Marcia Moore, DFO, via facsimile or electronic mail, the preferred modes of submission. Each page of the comment must include the author's name, title or affiliation, address, and daytime phone number. All contact information may be found in the **FOR FURTHER INFORMATION CONTACT** section.

Oral Comments: In addition to written statements, one hour will be reserved for individuals or interested groups to address the Commission on Wednesday, October 9. Interested oral commenters must summarize their oral statement in writing and submit with their registration. The Commission's staff will assign time to oral commenters at the meeting, for no more than 5 minutes each. While requests to make an oral presentation to the Commission will be honored on a first come, first served basis, other opportunities for oral comments will be provided at future meetings.

Registration: Individuals who wish to attend the public hearing and meeting on Wednesday, October 9, 2013 are

encouraged to register for the event in advance with the Designated Federal Officer, using the electronic mail and facsimile contact information found in the **FOR FURTHER INFORMATION CONTACT** section. The communication should include the registrant's full name, title, affiliation or employer, email address, and daytime phone number. If applicable, include written comments and a request to speak during the oral comment session. (Oral comment requests must be accompanied by a summary of your presentation.) Registrations and written comments must be typed.

Background: The National Commission on the Structure of the Air Force was established by the National Defense Authorization Act for Fiscal Year 2013 (Pub. L. 112-239). The Department of Defense sponsor for the Commission is the Director of Administration and Management, Office of the Secretary of Defense. The Commission is tasked to submit a report, containing a comprehensive study and recommendations, by February 1, 2014 to the President of the United States and the Congressional defense committees. The report will contain a detailed statement of the findings and conclusions of the Commission, together with its recommendations for such legislation and administrative actions it may consider appropriate in light of the results of the study. The comprehensive study of the structure of the U.S. Air Force will determine whether, and how, the structure should be modified to best fulfill current and anticipated mission requirements for the U.S. Air Force in a manner consistent with available resources.

Dated: September 30, 2013.

Aaron Siegel,

Alternate OSD Federal Register Liaison Officer, Department of Defense.

[FR Doc. 2013-24245 Filed 10-2-13; 8:45 am]

BILLING CODE 5001-06-P

DEPARTMENT OF DEFENSE

Office of the Secretary

Meeting of the National Commission on the Structure of the Air Force

AGENCY: Director of Administration and Management, DoD.

ACTION: Notice of Advisory Committee Meeting.

SUMMARY: The Department of Defense (DoD) announces that the following Federal advisory committee meeting of the National Commission on the

Structure of the Air Force ("the Commission") will take place.

DATES: *Date of Open Meeting, including Hearing and Commission Discussion:* Thursday, October 24, 2013, from 1:00 p.m. to 5:00 p.m. and Friday, October 25, 2013, from 8:30 to 5:00 p.m. Registration will begin at 12:30 p.m. on October 24, 2013 and again at 8:00 a.m. on October 25, 2013.

ADDRESSES: 2521 South Clark Street, Suite 200, Crystal City, VA 22202.

FOR FURTHER INFORMATION CONTACT: Mrs. Marcia Moore, Designated Federal Officer, National Commission on the Structure of the Air Force, 1950 Defense Pentagon, Room 3A874, Washington, DC 20301-1950. Email:

marcia.l.moore12.civ@mail.mil. Desk (703) 545-9113. Facsimile (703) 692-5625. Information can also be found at the following Web site: *http://afcommission.whs.mil/*.

SUPPLEMENTARY INFORMATION: This meeting is being held under the provisions of the Federal Advisory Committee Act (FACA) of 1972 (5 U.S.C., Appendix, as amended), the Government in the Sunshine Act of 1976 (5 U.S.C. 552b, as amended), and 41 CFR 102-3.150.

Purpose of Meeting: The members of the Commission will hear testimony from individual witnesses and then will discuss testimonies, site visits, and other data collected to date.

Agenda: The agenda for October 24-25, 2013 tentatively includes testimony from representatives of the Federal Emergency Management Agency, the Government Accountability Office, leaders of the U.S. Air Force, U.S. Air Force Reserve, U.S. Air National Guard, the Office of the Assistant Secretary of Defense for Reserve Affairs, and other leadership from the Department of Defense. The meeting will adjourn following the Commissioners' deliberations.

These witnesses are also asked to address the evaluation factors under consideration by the Commission for a U.S. Air Force structure that—(a) Meets current and anticipated requirements of the combatant commands; (b) achieves an appropriate balance between the regular and reserve components of the Air Force, taking advantage of the unique strengths and capabilities of each; (c) ensures that the regular and reserve components of the Air Force have the capacity needed to support current and anticipated homeland defense and disaster assistance missions in the United States; (d) provides for sufficient numbers of regular members of the Air Force to provide a base of trained personnel from which the

personnel of the reserve components of the Air Force could be recruited; (e) maintains a peacetime rotation force to support operational tempo goals of 1:2 for regular members of the Air Forces and 1:5 for members of the reserve components of the Air Force; and (f) maximizes and appropriately balances affordability, efficiency, effectiveness, capability, and readiness. Individual Commissioners will also report their activities, information collection, and analyses to the full Commission.

Meeting Accessibility: The building is fully handicap accessible. Visitors must show a picture I.D. and complete a security screening. Public parking is available within walking distance.

Registration: Individuals who wish to attend the public hearing and meeting on October 24-25, 2013 are encouraged to register for the event with the Designated Federal Officer, using the electronic mail and facsimile contact information found in the **FOR FURTHER INFORMATION CONTACT** section. The communication should include the registrant's full name, title, affiliation or employer, email address, and day-time phone number. If applicable, include written comments, Congressional statements, and requests to make oral comments. Registrations and written input must be typed.

Public Comments: One hour will be reserved for the public to make oral comments to the Commission on October 25, 2013. Requests to make an oral comment should be included in the registration information. The Designated Federal Officer (DFO) will review all submitted written statements. Written comments should be submitted to Mrs. Marcia Moore, DFO, via facsimile or electronic mail, the preferred modes of submission. Each page of the comment must include the author's name, title or affiliation, address, and daytime phone number. All contact information may be found in the **FOR FURTHER INFORMATION CONTACT** section. All public comments and Congressional statements are due by November 15, 2013 if emailed or faxed. Mailed comments must be postmarked by October 31, 2013.

Background: The National Commission on the Structure of the Air Force was established by the National Defense Authorization Act for Fiscal Year 2013 (Pub. L. 112-239). The Department of Defense sponsor for the Commission is the Director of Administration and Management, Mr. Michael L. Rhodes. The Commission is tasked to submit a report, containing a comprehensive study and recommendations, by February 1, 2014 to the President of the United States and the Congressional defense committees.

The report will contain a detailed statement of the findings and conclusions of the Commission, together with its recommendations for such legislation and administrative actions it may consider appropriate in light of the results of the study. The comprehensive study of the structure of the U.S. Air Force will determine whether, and how, the structure should be modified to best fulfill current and anticipated mission requirements for the U.S. Air Force in a manner consistent with available resources.

Dated: September 30, 2013.

Aaron Siegel,

Alternate OSD Federal Register Liaison Officer, Department of Defense.

[FR Doc. 2013-24255 Filed 10-2-13; 8:45 am]

BILLING CODE 5001-06-P

DEPARTMENT OF DEFENSE

Office of the Secretary

Board of Regents, Uniformed Services University of the Health Sciences; Notice of Federal Advisory Committee Meeting

AGENCY: Uniformed Services University of the Health Sciences (USU), DoD.

ACTION: Quarterly meeting notice.

SUMMARY: The Department of Defense is publishing this notice to announce the following meeting of the Board of Regents, Uniformed Services University of the Health Sciences.

DATES: Wednesday, October 23, 2013, from 8:30 a.m. to 10:30 a.m. (Open Session) and 10:30 a.m. to 11:30 a.m. (Closed Session).

ADDRESSES: Tower Suite 2, Hershey Lodge, 325 University Drive, Hershey, Pennsylvania 17033.

FOR FURTHER INFORMATION CONTACT: S. Leeann Ori, Designated Federal Officer, 4301 Jones Bridge Road, D3011, Bethesda, Maryland 20814; telephone 301-295-3066; email sherri.ori@usuhs.edu.

SUPPLEMENTARY INFORMATION: This meeting notice is being published under the provisions of the Federal Advisory Committee Act of 1972 (5 U.S.C., Appendix, as amended), the Government in the Sunshine Act of 1976 (5 U.S.C. 552b, as amended), and 41 CFR 102-3.150.

Purpose of the Meeting: The purpose of the meeting is to review the operations of USU, particularly the academic affairs, and provide advice to the USU President and the Assistant Secretary of Defense for Health Affairs. These actions are necessary for the

University to pursue its mission, which is to provide outstanding healthcare practitioners and scientists to the uniformed services, and to obtain institutional accreditation.

Agenda: The actions that will take place include the approval of minutes from the Board of Regents Meeting held on July 30, 2013; recommendations regarding the approval of faculty appointments and promotions; recommendations regarding the awarding of master's and doctoral degrees in the biomedical sciences and public health; and the approval of awards and honors. The USU President will provide a report and information from both academic and administrative USU officials will be provided during the meeting. A closed session will be held to discuss personnel actions and active investigations.

Meeting Accessibility: Pursuant to Federal statute and regulations (5 U.S.C. 552b and 41 CFR 102-3.140 through 102-3.165) and the availability of space, the meeting is open to the public from 8:30 a.m. to 10:30 a.m. Seating is on a first-come basis. Members of the public wishing to attend the meeting should contact S. Leeann Ori at the address and phone number noted in the **FOR FURTHER INFORMATION CONTACT** section. Pursuant to 5 U.S.C. 552b(c)(2, 5-7) the Department of Defense has determined that a portion of the meeting shall be closed to the public. The Acting Under Secretary of Defense (Personnel and Readiness), in consultation with the Office of the DoD General Counsel, has determined in writing that a portion of the committee's meeting will be closed as the discussion will disclose sensitive personnel information, will include matters that relate solely to the internal personnel rules and practices of the agency, will involve accusing a person of a crime or censuring an individual, and may disclose investigatory records compiled for law enforcement purposes.

Written Statements: Pursuant to 41 CFR 102-3.140, 102-3.150, 102-3.155, and 102-3.160, interested persons may submit a written statement for consideration by the Board. Individuals submitting a written statement must submit their statement to the Designated Federal Officer at the address listed in **FOR FURTHER INFORMATION CONTACT**. If such statement is not received at least 5 calendar days prior to the meeting, it may not be provided to or considered by the Board of Regents until its next open meeting. The Designated Federal Officer will compile all timely submissions with the Board's Chairman and ensure such submissions are provided to Board Members before the meeting.

Dated: September 30, 2013.

Aaron Siegel,

Alternate OSD Federal Register Liaison Officer, Department of Defense.

[FR Doc. 2013-24264 Filed 10-2-13; 8:45 am]

BILLING CODE 5001-06-P

DEPARTMENT OF DEFENSE

Office of the Secretary

Reserve Forces Policy Board (RFPB); Notice of Federal Advisory Committee Meeting; Cancellation of Meeting

AGENCY: Office of the Secretary of Defense, Reserve Forces Policy Board, DoD.

ACTION: Notice of Federal Advisory Committee meeting; cancellation of meeting.

SUMMARY: On Friday, September 13, 2013 (78 FR 56680-56681), the Department of Defense published a notice announcing a meeting of the Reserve Forces Policy Board (RFPB) that was to take place on Wednesday, October 2, 2013. The meeting of October 2, 2013 was cancelled.

FOR FURTHER INFORMATION CONTACT: Reserve Forces Policy Board. (703) 681-0600 (Voice), (703) 681-0002 (Facsimile), Mailing address is Reserve Forces Policy Board, 5113 Leesburg Pike, Suite 601, Falls Church, VA 22041. Web site: <http://ra.defense.gov/rfpb/>. The most up-to-date changes to the meeting can be found on the RFPB Web site.

SUPPLEMENTARY INFORMATION: Due to the uncertainty surrounding the Fiscal Year 2014 budget, the previously scheduled meeting of October 2, 2013, of the Reserve Forces Policy Board the requirements of 41 CFR 102-3.150(a) were not met. Accordingly, the Advisory Committee Management Officer for the Department of Defense, pursuant to 41 CFR 102-3.150(b), waives the 15-calendar day notification requirement.

Dated: September 30, 2013.

Aaron Siegel,

Alternate OSD Federal Register Liaison Officer, Department of Defense.

[FR Doc. 2013-24228 Filed 10-2-13; 8:45 am]

BILLING CODE 5001-06-P

DEPARTMENT OF DEFENSE**Office of the Secretary****[Docket ID: DoD–2013–OS–0202]****Privacy Act of 1974; System of Records****AGENCY:** Office of the Secretary of Defense, DoD.**ACTION:** Notice to alter a System of Records.

SUMMARY: The Office of the Secretary of Defense proposes to alter a system of records, DA&M 01, entitled “Civil Liberties Program Case Management System”, in its inventory of record systems subject to the Privacy Act of 1974, as amended. This system will receive, log and track the processing of allegations of civil liberties violations by the DoD, its civilian employees, members of the Military Services, DoD contractors, or others acting under the authority of the DoD and document the review, investigation, and redress provided.

DATES: This proposed action will be effective on November 4, 2013 unless comments are received which result in a contrary determination. Comments will be accepted on or before November 4, 2013.

ADDRESSES: You may submit comments, identified by docket number and title, by any of the following methods:

* *Federal Rulemaking Portal:* <http://www.regulations.gov>. Follow the instructions for submitting comments.

* *Mail:* Federal Docket Management System Office, 4800 Mark Center Drive, East Tower, 2nd Floor, Suite 02G09, Alexandria, VA 22350–3100.

Instructions: All submissions received must include the agency name and docket number for this **Federal Register** document. The general policy for comments and other submissions from members of the public is to make these submissions available for public viewing on the Internet at <http://www.regulations.gov> as they are received without change, including any personal identifiers or contact information.

FOR FURTHER INFORMATION CONTACT: Ms. Cindy Allard, Chief, OSD/JS Privacy Office, Freedom of Information Directorate, Washington Headquarters Service, 1155 Defense Pentagon, Washington, DC 20301–1155, or by phone at (571) 372–0461.

SUPPLEMENTARY INFORMATION: The Office of the Secretary of Defense notices for systems of records subject to the Privacy Act of 1974 (5 U.S.C. 552a), as amended, have been published in the **Federal**

Register and are available from the address in **FOR FURTHER INFORMATION CONTACT** or at the Defense Privacy and Civil Liberties Office Web site <http://dpclo.defense.gov/privacy/SORNs/component/osd/index.html>.

The proposed system report, as required by 5 U.S.C. 552a(r) of the Privacy Act of 1974, as amended, was submitted on September 26, 2013, to the House Committee on Oversight and Government Reform, the Senate Committee on Governmental Affairs, and the Office of Management and Budget (OMB) pursuant to paragraph 4c of Appendix I to OMB Circular No. A–130, “Federal Agency Responsibilities for Maintaining Records About Individuals,” dated February 8, 1996 (February 20, 1996, 61 FR 6427).

Dated: September 30, 2013.

Aaron Siegel,

Alternate OSD Federal Register Liaison Officer, Department of Defense.

DA&M 01**SYSTEM NAME:**

Civil Liberties Program Case Management System (January 19, 2011, 76 FR 3099).

CHANGES:**SYSTEM LOCATION:**

Delete entry and replace with “Defense Privacy and Civil Liberties Office, 241 18th Street South, Suite 101, Arlington, VA 22202–3405. Records are maintained by offices within the Office of the Secretary of Defense (OSD) and Joint Staff (JS). For a complete list of these offices contact the system manager.”

* * * * *

AUTHORITY FOR MAINTENANCE OF THE SYSTEM:

Delete entry and replace with “10 U.S.C. 113, Secretary of Defense; 42 U.S.C. 2000ee–1, Privacy and Civil Liberties Officers; and DoD Instruction 1000.29, DoD Civil Liberties Program.”

* * * * *

ROUTINE USES OF RECORDS MAINTAINED IN THE SYSTEM, INCLUDING CATEGORIES OF USERS AND THE PURPOSES OF SUCH USES:

Delete entry and replace with “In addition to those disclosures generally permitted under 5 U.S.C. 552a(b) of the Privacy Act of 1974, as amended, the records contained herein may specifically be disclosed outside the DoD as a routine use pursuant to 5 U.S.C. 552a(b)(3) as follows:

To the Office of Management and Budget (OMB), the Department of Justice (DOJ), or the Office of Special Counsel (OSC), to obtain advice

regarding statutory and other requirements related to civil liberties.

The DoD Blanket Routine Uses set forth at the beginning of the OSD compilation of systems of records notices may apply to this system.”

* * * * *

SYSTEM MANAGER(S) AND ADDRESS:

Delete entry and replace with “Director, Defense Privacy and Civil Liberties Office, 241 18th Street South, Suite 101, Arlington, VA 22202–3404.”

NOTIFICATION PROCEDURE:

Delete entry and replace with “Individuals seeking to determine if information about themselves is contained in this system should address written inquiries to the Director, Defense Privacy and Civil Liberties Office, 241 18th Street South, Suite 101, Arlington, VA 22202–3405.

For verification purposes, the requestor should provide his/her full name, home or work address, home or work telephone number, email addresses, Military Service or DoD component involved, and case number.”

* * * * *

[FR Doc. 2013–24213 Filed 10–2–13; 8:45 am]

BILLING CODE 5001–06–P

DEPARTMENT OF DEFENSE**Department of the Navy****[Docket ID: USN–2013–0036]****Privacy Act of 1974; System of Records****AGENCY:** Department of the Navy, DoD.**ACTION:** Notice to alter a System of Records.

SUMMARY: The Department of the Navy proposes to alter a system of records in its inventory of record systems subject to the Privacy Act of 1974, as amended.

DATES: This proposed action will be effective on November 4, 2013 unless comments are received which result in a contrary determination. Comments will be accepted on or before November 4, 2013.

ADDRESSES: You may submit comments, identified by docket number and title, by any of the following methods:

• *Federal Rulemaking Portal:* <http://www.regulations.gov>. Follow the instructions for submitting comments.

• *Mail:* Federal Docket Management System Office, 4800 Mark Center Drive, East Tower, 2nd Floor, Suite 02G09, Alexandria, VA 22350–3100.

Instructions: All submissions received must include the agency name and docket number for this **Federal Register**

document. The general policy for comments and other submissions from members of the public is to make these submissions available for public viewing on the Internet at <http://www.regulations.gov> as they are received without change, including any personal identifiers or contact information.

FOR FURTHER INFORMATION CONTACT: Ms. Robin Patterson, Head, PA/FOIA Office (DNS-36), Department of the Navy, 2000 Navy Pentagon, Washington, DC 20350-2000, or by phone at (202) 685-6545.

SUPPLEMENTARY INFORMATION: The Department of the Navy's notices for systems of records subject to the Privacy Act of 1974 (5 U.S.C. 552a), as amended, have been published in the **Federal Register** and are available from the address in **FOR FURTHER INFORMATION CONTACT** or from the Defense Privacy and Civil Liberties Office Web site at <http://dpclo.defense.gov/privacy/SORNs/component/navy/index.html>. The proposed system report, as required by 5 U.S.C. 552a(r) of the Privacy Act of 1974, as amended, was submitted on April 15, 2013, to the House Committee on Oversight and Government Reform, the Senate Committee on Governmental Affairs, and the Office of Management and Budget (OMB) pursuant to paragraph 4c of Appendix I to OMB Circular No. A-130, "Federal Agency Responsibilities for Maintaining Records About Individuals," dated February 8, 1996 (February 20, 1996, 61 FR 6427).

Dated: September 30, 2013.

Aaron Siegel,

Alternate OSD Federal Register Liaison Officer, Department of Defense.

N01306-1

SYSTEM NAME:

Career Management/Interactive Detailing System (CMS/ID) Records (April 23, 2010, 75 FR 21260).

CHANGES:

* * * * *

SYSTEM NAME:

Delete entry and replace with "Career Management System—Interactive Detailing (CMS-ID)."

SYSTEM LOCATION:

Delete entry and replace with "SPAWAR Systems Center Atlantic (SSC LANT), 2251 Lakeshore Drive, New Orleans, LA 70122-0001. The system shifts operations (relocates) to SPAWAR Systems Center Pacific (SSC PAC), 53560 Hull Street, San Diego, California 92152-5001 during

Contingency of Operations Planning (COOP)."

CATEGORIES OF INDIVIDUALS COVERED BY THE SYSTEM:

Delete entry and replace with "All Active and Reserve Navy personnel. This includes: Active Duty, Selected Reserve (SELRES), and Full Time Support (FTS) enlisted and officer personnel."

CATEGORIES OF RECORDS IN THE SYSTEM:

Delete entry and replace with "Personnel data in automated form displaying basic qualifications to include name, Social Security Number (SSN), Department of Defense Identification Number (DOD ID Number), date of birth, rate, rank, pay grade, military status, record status, activity, email address and phone number."

* * * * *

PURPOSE(S):

Delete entry and replace with "To assist Navy officials (government and designated contractors) in the initiation, development, and implementation of policies pertaining to enlisted personnel assignment, placement, retention, career enhancement and motivation, and other career related matters to meet manpower allocations and requirements. This system primarily displays a listing of available billets from which a Sailor or designated representative can submit a request for transfer and be assigned in the billet."

* * * * *

RETRIEVABILITY:

Delete entry and replace with "Name, SSN and/or DoD ID Number, rate/pay grade, activity, and/or record status within command."

SAFEGUARDS:

Delete entry and replace with "The system is only accessible utilizing the Department of Defense (DoD) Common Access Card (CAC) and Personal Identification Number (PIN). The use and display of the Social Security Number (SSN) will be minimized to only authorize personnel with a need to know and wherever possible encrypted and/or masked to prevent further disclosure. Computer printouts are available only to authorized personnel having a need-to-know. Personnel submit a signed and approved System Authorization Access Request Navy (SAAR-N) form to Commander, Navy Personnel Command (PERS-455), 5720 Integrity Drive, Millington, TN 38055-0600 for access for any roles above basic user."

* * * * *

NOTIFICATION PROCEDURE:

Delete entry and replace with "Individuals seeking to determine whether this system of records contains information about themselves should address written inquiries to the Commander, Navy Personnel Command (PERS-455), 5720 Integrity Drive, Millington, TN 38055-4550.

The request should contain full name, DoD ID and/or SSN, rate, military status, and signature of the requester. The system manager may require an original signature or a notarized signature as a means of proving the identity of the individual requesting access to the records."

RECORD ACCESS PROCEDURES:

Delete entry and replace with "Individuals seeking access to records about themselves contained in this system of records should address written inquiries to the Commander, Navy Personnel Command (PERS-455), 5720 Integrity Drive, Millington, TN 38055-4550.

The request should contain the full name, DoD ID and/or SSN, rate, military status, and signature of the requester. The system manager may require an original signature or a notarized signature as a means of proving the identity of the individual requesting access to the records."

* * * * *

[FR Doc. 2013-24200 Filed 10-2-13; 8:45 am]

BILLING CODE 5001-06-P

DEPARTMENT OF EDUCATION

[Docket No.: ED-2013-ICCD-0097]

Agency Information Collection Activities; Submission to the Office of Management and Budget for Review and Approval; Comment Request; Student Assistance General Provisions—Subpart K—Cash Management

AGENCY: Federal Student Aid (FSA), Department of Education (ED).

ACTION: Notice.

SUMMARY: In accordance with the Paperwork Reduction Act of 1995 (44 U.S.C. chapter 3501 *et seq.*), ED is proposing an extension of an existing information collection.

DATES: Interested persons are invited to submit comments on or before November 4, 2013.

ADDRESSES: Comments submitted in response to this notice should be submitted electronically through the Federal eRulemaking Portal at <http://www.regulations.gov> by selecting

Docket ID number ED–2013–ICCD–0097 or via postal mail, commercial delivery, or hand delivery. *Please note that comments submitted by fax or email and those submitted after the comment period will not be accepted.* Written requests for information or comments submitted by postal mail or delivery should be addressed to the Director of the Information Collection Clearance Division, U.S. Department of Education, 400 Maryland Avenue SW., LBJ, Room 2E103, Washington, DC 20202–4537.

FOR FURTHER INFORMATION CONTACT: For questions related to collection activities or burden, please call Kate Mullan, 202–401–0563 or electronically mail ICDocketMgr@ed.gov. Please do not send comments here.

SUPPLEMENTARY INFORMATION: The Department of Education (ED), in accordance with the Paperwork Reduction Act of 1995 (PRA) (44 U.S.C. 3506(c)(2)(A)), provides the general public and Federal agencies with an opportunity to comment on proposed, revised, and continuing collections of information. This helps the Department assess the impact of its information collection requirements and minimize the public's reporting burden. It also helps the public understand the Department's information collection requirements and provide the requested data in the desired format. ED is soliciting comments on the proposed information collection request (ICR) that is described below. The Department of Education is especially interested in public comment addressing the following issues: (1) Is this collection necessary to the proper functions of the Department; (2) will this information be processed and used in a timely manner; (3) is the estimate of burden accurate; (4) how might the Department enhance the quality, utility, and clarity of the information to be collected; and (5) how might the Department minimize the burden of this collection on the respondents, including through the use of information technology. Please note that written comments received in response to this notice will be considered public records.

Title of Collection: Student Assistance General Provisions—Subpart K—Cash Management.

OMB Control Number: 1845–0106.

Type of Review: Extension without change of an existing collection of information.

Respondents/Affected Public: Private Sector, State, Local, or Tribal Governments.

Total Estimated Number of Annual Responses: 682,848.

Total Estimated Number of Annual Burden Hours: 59,999.

Abstract: These regulations require institutions to provide a method for a Federal Pell Grant eligible student to obtain or purchase, by the seventh day of a payment period, the books and supplies required for the payment period when certain conditions are met. If, 10 days before the beginning of the payment period the institution could disburse Title IV, Higher Education Act of 1965, as amended (HEA) program funds for which the student was eligible, and if disbursed a credit balance would result, the institution is required to provide to the student the lesser of the presumed credit balance or the amount needed by the student for books and supplies, as determined by the institution.

Kate Mullan,

Acting Director, Information Collection Clearance Division, Privacy, Information and Records Management Services, Office of Management.

[FR Doc. 2013–24185 Filed 10–2–13; 8:45 am]

BILLING CODE 4000–01–P

DEPARTMENT OF EDUCATION

[Docket No.: ED–2013–ICCD–0099]

Agency Information Collection Activities; Submission to the Office of Management and Budget for Review and Approval; Comment Request; William D. Ford Federal Direct Loan Program Repayment Plan Selection Form

AGENCY: Federal Student Aid (FSA), Department of Education (ED).

ACTION: Notice.

SUMMARY: In accordance with the Paperwork Reduction Act of 1995 (44 U.S.C. chapter 3501 *et seq.*), ED is proposing an extension of an existing information collection.

DATES: Interested persons are invited to submit comments on or before November 4, 2013.

ADDRESSES: Comments submitted in response to this notice should be submitted electronically through the Federal eRulemaking Portal at <http://www.regulations.gov> by selecting Docket ID number ED–2013–ICCD–0099 or via postal mail, commercial delivery, or hand delivery. *Please note that comments submitted by fax or email and those submitted after the comment period will not be accepted.* Written requests for information or comments submitted by postal mail or delivery should be addressed to the Director of the Information Collection Clearance Division, U.S. Department of Education,

400 Maryland Avenue SW., LBJ, Room 2E103, Washington, DC 20202–4537.

FOR FURTHER INFORMATION CONTACT: For questions related to collection activities or burden, please call Kate Mullan, 202–401–0563 or electronically mail ICDocketMgr@ed.gov. Please do not send comments here.

SUPPLEMENTARY INFORMATION: The Department of Education (ED), in accordance with the Paperwork Reduction Act of 1995 (PRA) (44 U.S.C. 3506(c)(2)(A)), provides the general public and Federal agencies with an opportunity to comment on proposed, revised, and continuing collections of information. This helps the Department assess the impact of its information collection requirements and minimize the public's reporting burden. It also helps the public understand the Department's information collection requirements and provide the requested data in the desired format. ED is soliciting comments on the proposed information collection request (ICR) that is described below. The Department of Education is especially interested in public comment addressing the following issues: (1) Is this collection necessary to the proper functions of the Department; (2) will this information be processed and used in a timely manner; (3) is the estimate of burden accurate; (4) how might the Department enhance the quality, utility, and clarity of the information to be collected; and (5) how might the Department minimize the burden of this collection on the respondents, including through the use of information technology. Please note that written comments received in response to this notice will be considered public records.

Title of Collection: William D. Ford Federal Direct Loan Program Repayment Plan Selection Form.

OMB Control Number: 1845–0014.

Type of Review: Extension without change of an existing collection of information.

Respondents/Affected Public: Individuals or households.

Total Estimated Number of Annual Responses: 660,000.

Total Estimated Number of Annual Burden Hours: 110,220.

Abstract: The Repayment Plan Selection form serves as the means by which Direct Loan borrowers notify us of their choice of an initial repayment plan before their loans enter repayment. The form may also be used by borrowers to request a change in repayment plans after their loans have entered repayment. If a borrower does not select an initial repayment plan, the borrower is placed on the Standard Repayment

Plan in accordance with 34 CFR 685.210(a)(2).

Kate Mullan,

Acting Director, Information Collection Clearance Division, Privacy, Information and Records Management Services, Office of Management.

[FR Doc. 2013-24187 Filed 10-2-13; 8:45 am]

BILLING CODE 4000-01-P

DEPARTMENT OF EDUCATION

[Docket No.: ED-2013-ICCD-0098]

Agency Information Collection Activities; Submission to the Office of Management and Budget for Review and Approval; Comment Request; Foreign Schools Eligibility Criteria Apply To Participate in Title IV HEA Programs

AGENCY: Federal Student Aid (FSA), Department of Education (ED).

ACTION: Notice.

SUMMARY: In accordance with the Paperwork Reduction Act of 1995 (44 U.S.C. chapter 3501 *et seq.*), ED is proposing an extension of an existing information collection.

DATES: Interested persons are invited to submit comments on or before November 4, 2013.

ADDRESSES: Comments submitted in response to this notice should be submitted electronically through the Federal eRulemaking Portal at <http://www.regulations.gov> by selecting Docket ID number ED-2013-ICCD-0098 or via postal mail, commercial delivery, or hand delivery. Please note that comments submitted by fax or email and those submitted after the comment period will not be accepted. Written requests for information or comments submitted by postal mail or delivery should be addressed to the Director of the Information Collection Clearance Division, U.S. Department of Education, 400 Maryland Avenue SW., LBJ, Room 2E103, Washington, DC 20202-4537.

FOR FURTHER INFORMATION CONTACT: For questions related to collection activities or burden, please call Kate Mullan, 202-401-0563 or electronically mail ICDocketMgr@ed.gov. Please do not send comments here.

SUPPLEMENTARY INFORMATION: The Department of Education (ED), in accordance with the Paperwork Reduction Act of 1995 (PRA) (44 U.S.C. 3506(c)(2)(A)), provides the general public and Federal agencies with an opportunity to comment on proposed, revised, and continuing collections of information. This helps the Department assess the impact of its information

collection requirements and minimize the public's reporting burden. It also helps the public understand the Department's information collection requirements and provide the requested data in the desired format. ED is soliciting comments on the proposed information collection request (ICR) that is described below. The Department of Education is especially interested in public comment addressing the following issues: (1) Is this collection necessary to the proper functions of the Department; (2) will this information be processed and used in a timely manner; (3) is the estimate of burden accurate; (4) how might the Department enhance the quality, utility, and clarity of the information to be collected; and (5) how might the Department minimize the burden of this collection on the respondents, including through the use of information technology. Please note that written comments received in response to this notice will be considered public records.

Title of Collection: Foreign Schools Eligibility Criteria Apply to Participate in Title IV HEA Programs.

OMB Control Number: 1845-0106.

Type of Review: Extension without change of an existing collection of information.

Respondents/Affected Public: Private sector, individuals or households, State, Local, or Tribal Governments.

Total Estimated Number of Annual Responses: 2,718.

Total Estimated Number of Annual Burden Hours: 285.

Abstract: These regulations (34 CFR 600.54, 600.55, 600.57) contain some of the criteria foreign schools must meet for determinations of eligibility for participation in Title IV programs under the Higher Education Act of 1965, as amended. There has been no change to the language of the regulations. This is a request to extend the collection of information to ensure the eligibility of foreign graduate medical schools and foreign nursing schools meet the requirements to participate in the Direct Loan program.

Kate Mullan,

Acting Director, Information Collection Clearance Division, Privacy, Information and Records Management Services, Office of Management.

[FR Doc. 2013-24186 Filed 10-2-13; 8:45 am]

BILLING CODE 4000-01-P

DEPARTMENT OF ENERGY

Environmental Management Site-Specific Advisory Board, Portsmouth

AGENCY: Department of Energy.

ACTION: Notice of Cancellation of Open Meeting.

SUMMARY: On September 16, 2013, in FR Doc. 2013-22453, on page 56871, the Department of Energy (DOE) published a notice of open meeting announcing a meeting on October 2, 2013 of the Environmental Management Site-Specific Advisory Board, Portsmouth (78 FR 56871). This notice announces the cancellation of this meeting.

FOR FURTHER INFORMATION CONTACT:

Catherine Alexander Brennan, Designated Federal Officer, U.S. Department of Energy, 1000 Independence Avenue SW., Washington, DC 20585; Phone: (202) 586-7711.

Issued at Washington, DC, on September 30, 2013.

LaTanya R. Butler,

Deputy Committee Management Officer.

[FR Doc. 2013-24247 Filed 9-30-13; 4:15 pm]

BILLING CODE 6450-01-P

DEPARTMENT OF ENERGY

Electricity Advisory Committee

AGENCY: Department of Energy.

ACTION: Notice of Cancellation of Open Meeting.

SUMMARY: On September 11, 2013, in FR Doc. 2013-22119, on pages 55692-55693, the Department of Energy (DOE) published a notice of open meeting announcing a meeting on October 2-3, 2013 of the Electricity Advisory Committee (78 FR 55692). This notice announces the cancellation of this meeting.

FOR FURTHER INFORMATION CONTACT:

Matthew Rosenbaum, U.S. Department of Energy, 1000 Independence Avenue SW., Washington, DC 20585; Phone: (202) 586-1060.

Issued at Washington, DC on September 30, 2013.

LaTanya R. Butler,

Deputy Committee Management Officer.

[FR Doc. 2013-24246 Filed 9-30-13; 4:15 pm]

BILLING CODE 6450-01-P

FEDERAL COMMUNICATIONS COMMISSION

Information Collection Being Reviewed by the Federal Communications Commission Under Delegated Authority

AGENCY: Federal Communications Commission.

ACTION: Notice and request for comments.

SUMMARY: The Federal Communications Commission (FCC), as part of its continuing effort to reduce paperwork burdens, invites the general public and other Federal agencies to take this opportunity to comment on the following information collection, as required by the Paperwork Reduction Act (PRA) of 1995. Comments are requested concerning whether the proposed collection of information is necessary for the proper performance of the functions of the Commission, including whether the information shall have practical utility; the accuracy of the Commission's burden estimate; ways to enhance the quality, utility, and clarity of the information collected; ways to minimize the burden of the collection of information on the respondents, including the use of automated collection techniques or other forms of information technology; and ways to further reduce the information collection burden on small business concerns with fewer than 25 employees.

The FCC may not conduct or sponsor a collection of information unless it displays a currently valid control number. No person shall be subject to any penalty for failing to comply with a collection of information subject to the PRA that does not display a valid Office of Management and Budget (OMB) control number.

DATES: Written PRA comments should be submitted on or before December 2, 2013. If you anticipate that you will be submitting comments, but find it difficult to do so within the period of time allowed by this notice, you should advise the contact listed below as soon as possible.

ADDRESSES: Direct all PRA comments to Cathy Williams, FCC, via email PRA@fcc.gov <<mailto:PRA@fcc.gov>> and to Cathy.Williams@fcc.gov <<mailto:Cathy.Williams@fcc.gov>>.

FOR FURTHER INFORMATION CONTACT: For additional information about the information collection, contact Cathy Williams at (202) 418-2918.

SUPPLEMENTARY INFORMATION:

OMB Control No.: 3060-1013.

Title: Mitigation of Orbital Debris.
Form No.: N/A.

Type of Review: Extension of a currently approved collection.

Respondents: Business or other for-profit.

Number of Respondents: 53 respondents; 53 responses.

Estimated Time per Response: 3 hours.

Frequency of Response: On occasion reporting requirement; third party disclosure requirement.

Obligation to Respond: Required to obtain or retain benefits. The statutory authority for this collection is contained in 47 U.S.C. 151, 154(i), 301, 303, 308, 309 and 310.

Total Annual Burden: 159 hours.

Annual Cost Burden: \$102,025.

Privacy Act Impact Assessment: No impact(s).

Nature and Extent of Confidentiality: In general, there is no need for confidentiality with this collection of information.

Needs and Uses: This collection will be submitted as an extension (no change in reporting or recordkeeping requirements) after this 60-day comment period to Office of Management and Budget (OMB) in order to obtain the full three year clearance.

Disclosure of debris mitigation plans as part of requests for FCC authorization will help preserve the United States' continued affordable access to space, the continued provision of reliable U.S. space-based services—including communications and remote sensing satellite services for the U.S. commercial, government, and homeland security purposes—as well as the continued safety of persons and property in space and on the surface of the Earth. Disclosure of debris mitigation plans will allow the Commission and potentially affected third parties to evaluate satellite operators' debris mitigation plans prior to the issuance of a FCC approval for communications activities in space. Disclosure may also aid in the wider dissemination of information concerning debris mitigation techniques and may provide a base-line of information that will aid in analyzing and refining those techniques. Without disclosure of orbital debris mitigation plans as part of applications for FCC authority, the Commission would be denied any opportunity to ascertain whether satellite operators are in fact considering and adopting reasonable debris mitigation practices, which could result in an increase in orbital debris and a decrease in the utility of space for communications and other uses. Furthermore, the effects of collisions involving orbital debris can be catastrophic and may cause significant damage to functional spacecraft or to persons or property on the surface of the Earth, if the debris re-enters the Earth's atmosphere in an uncontrolled manner.

Federal Communications Commission.

Marlene H. Dortch,

Secretary, Office of the Secretary, Office of Managing Director.

[FR Doc. 2013-24181 Filed 10-2-13; 8:45 am]

BILLING CODE 6712-01-P

FEDERAL COMMUNICATIONS COMMISSION

Information Collection Being Submitted for Review and Approval to the Office of Management and Budget

AGENCY: Federal Communications Commission.

ACTION: Notice; request for comments.

SUMMARY: As part of its continuing effort to reduce paperwork burden and as required by the Paperwork Reduction Act (PRA) of 1995, the Federal Communications Commission invites the general public and other Federal agencies to take this opportunity to comment on the following information collection(s). Comments are requested concerning: Whether the proposed collection of information is necessary for the proper performance of the functions of the Commission, including whether the information shall have practical utility; the accuracy of the Commission's burden estimate; ways to enhance the quality, utility, and clarity of the information collected; ways to minimize the burden of the collection of information on the respondents, including the use of automated collection techniques or other forms of information technology; and ways to further reduce the information burden for small business concerns with fewer than 25 employees. The FCC may not conduct or sponsor a collection of information unless it displays a currently valid OMB control number. No person shall be subject to any penalty for failing to comply with a collection of information subject to the Paperwork Reduction Act (PRA) that does not display a valid OMB control number.

DATES: Written Paperwork Reduction Act (PRA) comments should be submitted on or before November 4, 2013. If you anticipate that you will be submitting PRA comments, but find it difficult to do so within the period of time allowed by this notice, you should advise the FCC contact listed below as soon as possible.

ADDRESSES: Submit your PRA comments to Nicholas A. Fraser, Office of Management and Budget (OMB), via fax at 202-395-5167 or via internet at Nicholas_A_Fraser@omb.eop.gov *mailto: Nicholas_A_Fraser@*

omb.eop.gov mailto: Nicholas_A_Fraser@eop.gov mailto: Nicholas_A_Fraser@eop.gov and to Benish Shah, Federal Communications Commission, via the Internet at Benish.Shah@fcc.gov mailto: Benish.Shah@fcc.gov. To submit your PRA comments by email send them to: PRA@fcc.gov mailto: PRA@fcc.gov mailto: PRA@fcc.gov.

FOR FURTHER INFORMATION CONTACT:

Benish Shah, Office of Managing Director, FCC (202) 418-7866.

SUPPLEMENTARY INFORMATION:

OMB Control No.: 3060-0936.

Title: Sections 95.1215, 95.1217, 95.1223 and 95.1225—Medical Device Radiocommunications Service (MedRadio).

Form No.: N/A.

Type of Review: Revision of a currently approved collection.

Respondents: Business or other for-profit and not-for-profit institutions.

Number of Respondents: 3,120 respondents; 3,120 responses.

Estimated Time per Response: 1-3 hours.

Frequency of Response: On occasion reporting requirement, third party disclosure requirement and recordkeeping requirement.

Obligation to Respond: Required to obtain or retain benefits. Statutory authority for this information collection is contained in 47 U.S.C. 151 and 303 of the Communications Act of 1934, as amended.

Total Annual Burden: 9,120 hours.

Total Annual Cost: \$462,600.

Privacy Act Impact Assessment: N/A.

Nature and Extent of Confidentiality: No information is requested that would require assurance of confidentiality.

Needs and Uses: The Commission will submit this information collection to the Office of Management and Budget (OMB) after this 30 day comment period in order to obtain the full three year clearance from them. The Commission is requesting a revision (there has been a program change in the reporting, recordkeeping requirements and/or third party disclosure requirements, the number of respondents/operators increased from 100 to 2,620, therefore, the annual burden and cost has also increased). The Commission is requesting OMB approval for a revision.

On May 24, 2012, the Commission released a Report and Order, ET Docket No. 08-59, FCC 12-54, Amendment of Parts 2 and 95 of the Commission's rules which revised the requirements for manufacturers of transmitters for the "Medical Device Radiocommunication Service" to include with each transmitting device a statement regarding harmful interference and to

label the device in a conspicuous location on the device. The Report and Order also adopted rules for "Medical Body Area Network" (MBAN), which requires the Commission to establish a process by which MBAN users will register and coordinate the use of certain medical devices. The frequency coordinator will make the database available to equipment manufacturers and the public. The coordinator will also notify users of potential frequency conflicts.

Federal Communications Commission.

Marlene H. Dortch,

Secretary, Office of the Secretary, Office of Managing Director.

[FR Doc. 2013-24180 Filed 10-2-13; 8:45 am]

BILLING CODE 6712-01-P

FEDERAL COMMUNICATIONS COMMISSION

[AU Docket No. 13-53; DA 13-1986, DA 13-1978]

Tribal Mobility Fund Phase I Auction (Auction 902); Short-Form Application Filing Window Rescheduled To Open on September 30, 2013; Updated List of Eligible Areas; Petition for Reconsideration of Auction 902 Procedures Public Notice Granted in Part

AGENCY: Federal Communications Commission.

ACTION: Notice.

SUMMARY: In this document, the Wireless Telecommunications and Wireline Competition Bureaus (Bureaus) announce the rescheduling of the filing window for short-form applications and release an updated list of eligible areas for Auction 902.

FOR FURTHER INFORMATION CONTACT:

Wireless Telecommunications Bureau, Auctions and Spectrum Access Division: For Tribal Mobility Fund Phase I questions: Patricia Robbins at (202) 418-0660. To request materials in accessible formats (Braille, large print, electronic files, audio format) for people with disabilities, send an email to fcc504@fcc.gov or call the Consumer and Governmental Affairs Bureau at (202) 418-0530 or (202) 418-0432 (TTY).

SUPPLEMENTARY INFORMATION: This is a summary of the *Auction 902 Public Notices* released on September 25 and 27, 2013. The complete text of the *Auction 902 Public Notices*, including attachments and related Commission documents, are available for public inspection and copying from 8:00 a.m. to 4:30 p.m. Eastern Time (ET) Monday through Thursday or from 8:00 a.m. to

11:30 a.m. ET on Fridays in the FCC Reference Information Center, 445 12th Street SW., Room CY-A257, Washington, DC 20554. The *Auction 902 Public Notices*, including attachments and related Commission documents, also may be purchased from the Commission's duplicating contractor, Best Copy and Printing, Inc. (BCPI), 445 12th Street SW., Room CY-B402, Washington, DC 20554, telephone 202-488-5300, fax 202-488-5563, or you may contact BCPI at its Web site: <http://www.BCPIWEB.com>. When ordering documents from BCPI, please provide the appropriate FCC document number, for example, DA 13-1986 and DA 13-1978 for the *Auction 902 Public Notices*. The *Auction 902 Public Notices*, including attachments and related Commission documents, also are available on the Internet at the Commission's Web site: <http://wireless.fcc.gov/auctions/902/>, or by using the search function for AU Docket No. 13-53 on the Commission's Electronic Comment Filing System (ECFS) Web page at <http://www.fcc.gov/cgb/ecfs/>.

Short-Form Application Filing Window Rescheduled To Open on September 30, 2013

1. The Bureaus announce that the filing window for short-form applications to participate in Auction 902, the reverse auction that will award up to \$50 million in one-time Tribal Mobility Fund Phase I support, will now open at 12 noon Eastern Time (ET) on September 30, 2013. This filing window was previously scheduled to open on September 25, 2013, but the opening has been delayed to provide time for implementing revisions to the list of census blocks to be eligible for support in this auction. The Auction 902 filing window will remain open on a 24 hour basis from 12 noon ET on September 30, 2013, until 6:00 p.m. ET on October 9, 2013. All other dates and deadlines for Auction 902 remain as previously announced.

2. An online tutorial, which provides information about pre-auction procedures, completing short-form applications, auction conduct, the FCC Auction System, auction rules, and Mobility Fund rules, available at <http://wireless.fcc.gov/auctions/902/> will be updated prior to the opening of the short-form application filing window to reflect this new opening date.

List of Eligible Areas Updated

3. The Bureaus release an updated list of eligible areas for Auction 902. The updated list (1) reflects changes to the

eligible areas for Auction 902 based on authorizations of support and default determinations from the initial auction of Mobility Fund Phase I support (Auction 901), and (2) incorporates 40 additional census blocks in northwestern New Mexico based on a partial grant of a petition for reconsideration.

4. The updated list of bidding areas is released as Attachment A to the *Auction 902 Public Notice* released on September 27, 2013. An updated version of the file containing detailed information about the census blocks of all of the bidding areas is available on the Auction 902 Web site at <http://wireless.fcc.gov/auctions/902>.

Changes Based on Auction 901 Authorizations and Defaults

5. The eligible areas for Tribal Mobility Fund Phase I (Auction 902) have been updated to reflect Auction 901 support authorizations and default determinations. In the list of bidding areas released with the *Auction 902 Procedures Public Notice*, 78 FR 56875, September 16, 2013, the Bureaus identified with an asterisk the items with one or more census blocks that were the subject of a winning bid in Auction 901 for which the relevant long-form application remained pending. The Bureaus explained that, if any winning bids from Auction 901 covering blocks that would otherwise be eligible for Auction 902 could not be authorized prior to Auction 902, then such eligible blocks would be made available in the auction. The Bureaus explained that they would exclude certain blocks if they were to authorize Auction 901 support in those blocks prior to Auction 902.

6. The Bureaus announce the removal of certain census blocks for which support has been authorized for Auction 901 winning bids, as these areas will not be available for support in Auction 902. Also, for those blocks on which Auction 901 winning bidders have defaulted, the Bureaus removed the asterisks in the list that previously identified the relevant census blocks as having received winning bids in Auction 901, and these areas will be eligible for bidding in Auction 902. Some Auction 901 long-form applications remain pending, and the Bureaus plan to update the list of Auction 902 eligible areas prior to the date of the auction to reflect any further Auction 901 authorizations of support or default determinations.

Addition of Certain Blocks in Northwestern New Mexico

7. The Bureaus grant in part a petition for reconsideration of the *Auction 902*

Procedures Public Notice and they add certain census blocks in northwestern New Mexico to the list of eligible areas for Auction 902. Specifically, the Bureaus add census blocks that were drive tested, but only to the extent that such blocks are on Tribal lands, are populated, and are not served, as demonstrated in the record, by other carriers.

8. The petitioner sought reconsideration of the Bureaus' determination in the *Auction 902 Procedures Public Notice*, that the petitioner had submitted drive test data that was not sufficiently verifiable to justify the addition of the census blocks requested. In support of its request that several thousand census blocks in northwestern New Mexico be added to the list of eligible areas for Auction 902, the petition for reconsideration provides additional information regarding the drive tests that the petitioner previously had conducted in support of its comments, including a certified statement from a radiofrequency engineer who conducted the drive tests. The petitioner also supplied two lists of census blocks, one listing census blocks containing roads on which it had conducted tests and the second listing untested areas. Three commenters jointly oppose the petition, contending that the petitioner did not test one network at all, and thus that it is probable that the petitioner's drive test failed to identify the presence of 4G 700 MHz operations in certain census blocks. The petitioner concedes that it did not test this network. The joint filers also argue that the Bureaus should not consider the petitioner's additional information. Another commenter asserts that it provides service to certain census blocks in these areas using the 850 MHz band. This commenter claims that the petitioner did not test the 850 MHz frequency. The petitioner does not respond to this comment.

9. The Bureaus find that it is in the public interest to consider the additional information provided in the petition for reconsideration. The Bureaus note that the petition does not present wholly new evidence or newly discovered evidence, but rather more fully explains the drive tests that the petitioner already conducted. However, in light of the Commission's goal of promoting provision of 3G or better mobile voice and broadband services to Tribal lands that lack such services, the Bureaus believe that consideration of the information in the petition is warranted.

10. The Bureaus grant the petition as to certain census blocks in which the petitioner conducted drive tests that

show no 3G or 4G service. The Bureaus are not, however, persuaded by the petitioner's argument that nearby census blocks untested by the petitioner should be presumed to have a similar lack of 3G or better service. Such an assumption is not sufficient to rebut the Mosaik data indicating that 3G or better service is available in those areas. The Bureaus also will not add census blocks where other carriers show that they provide 3G or better mobile voice and broadband service. The petitioner admits that it did not conduct testing of one network, and thus it fails to rebut that carrier's showing regarding its service coverage, which includes maps, an explanation of methodologies for determining coverage, and certifications as to the veracity of the material provided. In addition, the petitioner's earlier uncertified statement that it tested another carrier's 850 MHz frequencies is insufficient to rebut the evidence submitted by that carrier regarding its service coverage, which includes a map, an explanation of methodologies for determining coverage, and certifications as to the veracity of the material provided. Finally, Tribal Mobility Fund Phase I support is only available in populated census blocks on Tribal lands. The Bureaus therefore will not add census blocks that have a population of zero, and they will not add census blocks that are beyond the external borders of the Navajo Nation (and that are not otherwise identified as Tribal lands in the 2010 Census data). The Bureaus also note that some of the census blocks that the petitioner requested were already included in the list of eligible areas. In sum, the Bureaus add 40 census blocks that the petitioner drive tested, that are not served by other carriers, as demonstrated in the record, and that are both located on Tribal lands and populated. A list of those 40 census blocks is provided as Attachment B to the *Auction 902 Public Notice* released on September 27, 2013.

Eligible Areas Map and GIS Data

11. The interactive map of eligible areas has been updated to reflect these changes to the eligible areas for Auction 902. The link to the interactive map is available on the Auction 902 Web site at <http://wireless.fcc.gov/auctions/902/>, and the map itself is at <http://www.fcc.gov/maps/tribal-mobility-fund-phase-1-eligible-areas>. The Bureaus are also making available geographic information system (GIS) data for the eligible areas. The GIS data, which is simply another format of the eligible census block data, is being provided as a downloadable shapefile that is

available on the Auction 902 Web site at <http://wireless.fcc.gov/auctions/902/>.

Federal Communications Commission.

Gary D. Michaels,

Deputy Chief, Auctions and Spectrum Access Division, WTB.

[FR Doc. 2013-24303 Filed 10-2-13; 8:45 am]

BILLING CODE 6712-01-P

FEDERAL RESERVE SYSTEM

Change in Bank Control Notices; Acquisitions of Shares of a Bank or Bank Holding Company

The notificants listed below have applied under the Change in Bank Control Act (12 U.S.C. 1817(j)) and § 225.41 of the Board's Regulation Y (12 CFR 225.41) to acquire shares of a bank or bank holding company. The factors that are considered in acting on the notices are set forth in paragraph 7 of the Act (12 U.S.C. 1817(j)(7)).

The notices are available for immediate inspection at the Federal Reserve Bank indicated. The notices also will be available for inspection at the offices of the Board of Governors. Interested persons may express their views in writing to the Reserve Bank indicated for that notice or to the offices of the Board of Governors. Comments must be received not later than October 17, 2013.

A. Federal Reserve Bank of Chicago (Colette A. Fried, Assistant Vice President) 230 South LaSalle Street, Chicago, Illinois 60690-1414:

1. *Jay D. Bergman*, Joliet, Illinois, to acquire voting shares of Community Holdings Corp., Palos Hills, Illinois; and thereby indirectly acquire voting shares of FirstSecure Bank and Trust Company, Palos Hill, IL.

B. Federal Reserve Bank of Minneapolis (Jacqueline G. King, Community Affairs Officer) 90 Hennepin Avenue, Minneapolis, Minnesota 55480-0291:

1. *Roderick J. Heneman*, Warroad, Minnesota; to retain voting shares of Warroad Bancshares, Inc., and thereby indirectly retain voting shares of Security State Bank of Warroad, both in Warroad, Minnesota.

C. Federal Reserve Bank of Kansas City (Dennis Denney, Assistant Vice President) 1 Memorial Drive, Kansas City, Missouri 64198-0001:

1. *Christopher S. Caley*, Silver Creek, Nebraska; to retain voting shares of Clark Bancshares, Inc., and thereby indirectly retain voting shares of Bank of Clarks, both in Clarks, Nebraska.

2. *Glory Burns*, Fort Collins, Colorado, *Robin Isham*, Templeton, California,

Andrea Voss, Chadron, Nebraska, *Julie Jennings*, Lone Tree, Colorado, and *R. Will Isham*, Gordon, Nebraska, in their individual capacities and as fiduciaries of the following trusts: *E. Joy Isham Irrevocable Trust*, and the *RWI Marital Deduction Testamentary Trust*, both of Gordon, Nebraska, all as members of the Isham Family Group, to retain shares of Isham Management Company, and thereby retain shares of The First National Bank of Gordon, both of Gordon, Nebraska.

Board of Governors of the Federal Reserve System, September 27, 2013.

Michael J. Lewandowski,

Associate Secretary of the Board.

[FR Doc. 2013-24101 Filed 10-2-13; 8:45 am]

BILLING CODE 6210-01-P

FEDERAL RESERVE SYSTEM

Formations of, Acquisitions by, and Mergers of Bank Holding Companies

The companies listed in this notice have applied to the Board for approval, pursuant to the Bank Holding Company Act of 1956 (12 U.S.C. 1841 *et seq.*) (BHC Act), Regulation Y (12 CFR Part 225), and all other applicable statutes and regulations to become a bank holding company and/or to acquire the assets or the ownership of, control of, or the power to vote shares of a bank or bank holding company and all of the banks and nonbanking companies owned by the bank holding company, including the companies listed below.

The applications listed below, as well as other related filings required by the Board, are available for immediate inspection at the Federal Reserve Bank indicated. The applications will also be available for inspection at the offices of the Board of Governors. Interested persons may express their views in writing on the standards enumerated in the BHC Act (12 U.S.C. 1842(c)). If the proposal also involves the acquisition of a nonbanking company, the review also includes whether the acquisition of the nonbanking company complies with the standards in section 4 of the BHC Act (12 U.S.C. 1843). Unless otherwise noted, nonbanking activities will be conducted throughout the United States.

Unless otherwise noted, comments regarding each of these applications must be received at the Reserve Bank indicated or the offices of the Board of Governors not later than October 28, 2013.

A. Federal Reserve Bank of Atlanta (Chapelle Davis, Assistant Vice President) 1000 Peachtree Street NE., Atlanta, Georgia 30309:

1. *Community & Southern Holdings, Inc.*, Atlanta, Georgia; to merge with Verity Capital Group, Inc., and thereby indirectly acquire Verity Bank, both in Winder, Georgia.

B. Federal Reserve Bank of Kansas City (Dennis Denney, Assistant Vice President) 1 Memorial Drive, Kansas City, Missouri 64198-0001:

1. *Summerfield Financial Services, LLC*, Lincoln, Nebraska; to acquire 100 percent of the voting shares of State Bank of Chester, Chester, Nebraska.

Board of Governors of the Federal Reserve System, September 27, 2013.

Michael J. Lewandowski,

Associate Secretary of the Board.

[FR Doc. 2013-24100 Filed 10-2-13; 8:45 am]

BILLING CODE 6210-01-P

FEDERAL TRADE COMMISSION

Agency Information Collection Activities; Proposed Collection; Comment Request

AGENCY: Federal Trade Commission (FTC).

ACTION: Notice and request for public comment.

SUMMARY: The FTC is soliciting public comments on proposed information requests to Patent Assertion Entities ("PAEs") and other entities asserting patents in the wireless communications sector, including manufacturers and other non-practicing entities and organizations engaged in licensing. For purposes of this notice, PAEs are firms with a business model based primarily on purchasing patents and then attempting to generate revenue by asserting the intellectual property against persons who are already practicing the patented technology.¹

These comments will be considered before the FTC submits a request for Office of Management and Budget (OMB) review of the compulsory process orders described in this notice under the Paperwork Reduction Act (PRA). The compulsory process orders will seek information from those firms concerning, among other things, patent acquisition, litigation, and licensing practices.

DATES: Comments must be received on or before December 2, 2013.

¹ The Commission distinguishes PAEs from other non-practicing entities or NPEs that primarily seek to develop and transfer technology, such as universities, research entities and design firms. Fed. Trade Comm'n, *The Evolving IP Marketplace: Aligning Patent Notice and Remedies With Competition*, 8 n.5 (2011), available at <http://www.ftc.gov/os/2011/03/110307patentreport.pdf>.

ADDRESSES: Interested parties may file a comment online or on paper, by following the instructions in the Request for Comment part of the **SUPPLEMENTARY INFORMATION** section below. Write "PAE Reports: Paperwork Comment; Project No. P131203" on your comment, and file your comment online at <https://ftcpublic.commentworks.com/ftc/paestudypra>, by following the instructions on the web-based form. If you prefer to file your comment on paper, mail or deliver your comment to the following address: Federal Trade Commission, Office of the Secretary, Room H-113 (Annex J), 600 Pennsylvania Avenue NW., Washington, DC 20580.

FOR FURTHER INFORMATION CONTACT: Requests for additional information should be addressed to William F. Adkinson, Jr., Attorney Advisor, Office of Policy Planning, Federal Trade Commission, 600 Pennsylvania Avenue NW., Washington, DC 20580; (202) 326-2096; paestudy@ftc.gov.

SUPPLEMENTARY INFORMATION: On December 10, 2012, the FTC and the Antitrust Division of the United States Department of Justice (DOJ) jointly sponsored a workshop to explore the impact of PAE activity on innovation and competition.² The FTC and DOJ also received public comments in conjunction with the workshop. While workshop panelists and commenters identified potential harms and efficiencies of PAE activity, they noted a lack of empirical data in this area, and recommended that the Federal Trade Commission use its authority under Section 6(b) of the Federal Trade Commission Act, 15 U.S.C. 46(b), to collect information on PAE acquisition, litigation, and licensing practices. Senator Amy Klobuchar and Representative Daniel Lipinski likewise have called on the Commission to conduct a Section 6(b) study of PAE activity.³ Responding to these requests, and recognizing its own role in competition policy and advocacy, the Commission proposes a Section 6(b) study that will provide a better understanding of PAE activity and its costs and benefits.

² See Patent Assertion Entity Activities Workshop, Fed. Trade Comm'n, <http://www.ftc.gov/opp/workshops/pae/>.

³ Letter from Senator Amy Klobuchar to The Honorable Edith Ramirez, Chairwoman, The Honorable Julie Brill, Commissioner, The Honorable Maureen K. Ohlhausen, Commissioner, and The Honorable Joshua D. Wright, Commissioner (June 24, 2013), and Letter from Representative Daniel Lipinski to The Honorable Edith Ramirez, Chairwoman (June 25, 2013).

I. Description of the Collection of Information and Proposed Use

The proposed study will add significantly to the existing literature and evidence on PAE behavior. Earlier studies have focused primarily on publicly available litigation data and concluded that PAE litigation activity is on the rise. The Commission, however, has unique Congressional authority to collect nonpublic information, such as licensing agreements, patent acquisition information, and cost and revenue data, which will provide a more complete picture of PAE activity.

Because the Commission believes a broader study will enhance the quality of the policy debate surrounding PAE activity, it proposes information requests directed to the following questions:

- How do PAEs organize their corporate legal structure, including parent and subsidiary entities? (Request B)
- What types of patents do PAEs hold, and how do they organize their holdings? (Request C & D)
- How do PAEs acquire patents, and how do they compensate prior patent owners? (Request E)
- How do PAEs engage in assertion activity (i.e. demand, litigation, and licensing behavior)? (Request F)
- What does assertion activity cost PAEs? (Request G); and
- What do PAEs earn through assertion activity? (Request H)

The FTC proposes to send these information requests to approximately 25 PAEs (PAE Firms). To understand how PAE behavior compares with patent assertion activity by other patent owners, the FTC also proposes sending information requests to approximately 15 other entities asserting patents in the wireless communications sector, including manufacturing firms (Manufacturing Firms), and other non-practicing entities and organizations engaged in licensing (Other Firms).

Definitions

The following definitions apply to Information Requests A–H:

"Acquire" and "Acquisition" mean to purchase or obtain all legal rights to a Patent from another Person.

"Assert," "Assertion," and "Asserted" mean: (i) Any attempt to license any Patent, in whole or in part, including any communication relating to licensing of the Patent, (ii) any communication relating to alleged infringement of the Patent by the recipient of the communication, (iii) any Demand that a Person obtain a license, or (iv) any civil action threatened or

filed (by the Firm or other Person) relating to any Patent.

"Class," "Subclass," and "Art Unit" have the meanings defined by the United States Patent and Trademark Office (USPTO).

"Firm" means the Person or entity served with the information requests described in this notice and also includes all domestic and foreign parents, predecessors, divisions, subsidiaries, affiliates, partnerships and joint ventures, directors, officers, employees, agents, representatives, and all other persons acting or purporting to act on its behalf, regardless of how it is legally organized and established.

"Demand" means any communication, whether by letter or otherwise, to any Person, Relating to any effort to Assert Patent(s) held by the Firm since January 1, 2008. Demand does not include complaints or pleadings filed with a United States District Court or the United States International Trade Commission.

"Economic Interest" means rights or claims to current or future revenues derived from a Patent, whether as lump sum payments, royalty streams, or access to other Patents as part of a cross-licensing agreement.

"Litigation" means any civil action arising from a complaint filed in a United States District Court or with the United States International Trade Commission.

"Maintenance Fee(s)" has the meaning defined by the USPTO.

"Patent" means a United States patent or United States patent application as defined by 35 U.S.C. 101, *et seq.*

"Patent Portfolio" means a collection of patents held by a single entity, including all of the patents held by the entity and any sub-groups into which the entity organizes its patents.

"Person" means any natural person, corporation, association, Firm, partnership, joint venture, trust, estate, agency, department, bureau, governmental, judicial, or legal entity, however organized or established.

"Relating to" means, in whole or in part, addressing, analyzing, concerning, constituting, containing, commenting, in connection with, dealing with, discussing, describing, identifying, reflecting, stating, or summarizing.

"Standard-Setting Organization" or "SSO" means any organization, group, joint venture or consortia that develops standards for the design, performance or other characteristics of products or technologies.

Information Requests

The FTC will have PAE Firms and Other Firms respond to Information

Requests A–H. The FTC will have Manufacturing Firms respond to Information Requests A–B and E–H. The instructions will specify the Information Requests to which the Firm is required to respond.

A. Identification of Report Author: Identify by full name, title, business address, telephone number, and official capacity the Person(s) who prepared or supervised the preparation of the Firm's response to the Information Requests and specify the steps taken by the Firm to respond to the Information Requests.

B. Company Information:

1. State the Firm's complete legal name and all other names under which it has done business, its corporate mailing address, all addresses from which it does or has done business, and the dates and states of its incorporation.

2. Describe the Firm's business or corporate structure, and state the names of all parents, subsidiaries (whether wholly or partially owned), divisions (whether incorporated or not), affiliates, branches, joint ventures, franchises, operations under assumed names, Web sites, or entities over which the Firm exercises supervision or control, or any other Person(s) or entities with a contractual or other legal right to a share of revenues, profits, or other Economic Interest tied to profitability or financial performance of the Firm. For each such entity, describe the relationship with the Firm, including the percentage of ownership, control, or other legal entitlement to a share of revenues, profits or financial performance between the Firm and the entity. When responding to Requests A–H, provide all information for the Firm and all related entities identified in response to this request.

3. Identify each Person or entity having an ownership interest in the Firm, or other legal entitlement to share in the financial performance of the Firm, as well as their individual ownership or financial performance stakes, and, if relevant, their positions and responsibilities within the Company.

C. Patent Information:

1. Identify each Patent held by the Firm since January 1, 2008, and specify:

- a. the Patent number;
- b. the date the Patent was acquired;
- c. the Patent title;
- d. the Patent's Class, Subclass, and Art Unit;
- e. the Patent's filing date;
- f. the Patent's issuance date;
- g. the Patent's expiration date;
- h. the maintenance status of the

Patent, including whether the Patent has expired for failure to pay Maintenance Fees;

i. whether the Firm is engaged in pre-grant prosecution for any identified Patent application;

j. whether the Firm has abandoned any identified Patent application;

k. whether the Firm is engaged in post-grant prosecution for any identified Patent, and describe the nature of the post-grant prosecution;

l. whether the Firm has engaged in any research and development activities Relating to the Patent, and specify the nature and estimated cost of this research and development activity;

m. whether any Person(s), other than the Firm, holds any legal rights to the Patent. As part of your response:

(1) identify the Person(s) who holds any legal rights to the Patent;

(2) describe the nature of the legal rights held;

(3) submit all documents(s) Relating to the legal rights held;

n. whether any Person, other than the Firm, has an Economic Interest in the Patent, and:

(1) identify the Person(s) who hold an Economic Interest in the Patent;

(2) describe the nature of the Economic Interest held by the Person(s);

(3) submit all documents Relating to this Economic Interest;

o. whether the Patent (or any claims therein) is subject to a licensing commitment made to a Standard-Setting Organization and specify:

(1) all Standard-Setting Organizations to which a licensing commitment has been made;

(2) all standards to which such a licensing commitment applies;

(3) the Person(s) who made the licensing commitment;

(4) the date(s) on which the licensing commitment was made;

(5) all encumbrances, including, but not limited to, all commitments to license the Patent or any of its claims on reasonable and non-discriminatory (RAND), fair, reasonable, and non-discriminatory (FRAND), or royalty-free (RF) terms;

p. whether the Firm has included the Patent in any Demand;

q. whether the Firm has Litigated the Patent; and

r. whether the Firm has licensed the Patent to any Person(s).

2. Provide the assignment and Assertion history for each Patent held by the Firm since January 1, 2008. As part of your response, specify:

a. all Person(s) to whom the Patent was assigned before the Firm Acquired the Patent and the date(s) of assignment;

b. all Person(s) to whom the Patent was licensed before the Firm Acquired the Patent and the date(s) and term(s) of license;

c. whether the Patent was Asserted before the Firm Acquired the Patent, and list the Person(s) who Asserted the Patent, the Person(s) against whom the Patent was Asserted and identify whether the Assertion resulted in Litigation(s) or license(s);

(1) if the Assertion identified in C.2.c resulted in Litigation, provide all information requested in Request F.2;

(2) if the Assertion identified in C.2.c resulted in a license agreement, provide all information requested in F.3;

(3) state whether the Assertion identified in C.2.c involved a technology transfer provision, and provide all technology transfer agreements Relating to this response.

3. Submit all documents Relating to any communication since January 1, 2008 between the Firm and any investor or potential investor, financial or otherwise, Relating to any Patent(s) held by the Firm since January 1, 2008.

D. Patent Portfolio Information:

1. Describe all Patent Portfolios held by the Firm since January 1, 2008; and specify:

a. how the Firm organizes the Patent Portfolio(s);

b. the numbers of the Patents included in the Patent Portfolio(s); and

c. the Firm's valuation of the Patent Portfolio(s) and the date of the valuation.

2. Submit all documents Relating to the Firm's reasons or business strategy for organizing the Patent(s) into Portfolio(s), including but not limited to, market analyses, financial analyses, business plans, statements to investors and potential investors, and disclosures required by the Securities and Exchange Commission or any other Person.

E. Patent Acquisition and Transfer Information:

1. For each Patent Acquired by the Firm since January 1, 2008, state whether the Firm Acquired the Patent individually or as part of a Patent Portfolio, and provide the following information:

a. for all Patents that the Firm Acquired individually, identify the Patent, and specify:

(1) the Person(s) from whom the Firm Acquired the Patent and state whether that Person(s) was the original inventor;

(2) the date on which the Firm Acquired the Patent;

(3) whether the Patent was Acquired in bankruptcy;

(4) the financial terms of the Firm's Acquisition of the Patent. As part of your response, specify:

(a) whether the Firm paid a lump sum, the amount of the lump sum; the Person(s) to whom the lump sum was paid, and the date the payment was made;

(b) whether the Firm paid, or is paying, an ongoing payment, and specify:

- i. how the ongoing payment is calculated;
- ii. the total amount of the ongoing payment paid as of the date of this Request;
- iii. the amount of each individual payment paid as of the date of this Request, the Person(s) to whom each payment was made, and the date of each payment;
- iv. the total amount of the ongoing payment expected to be paid in the future, and all Person(s) expected to receive future payments;

(c) whether another Person(s) contributed financially to the purchase of the Patent(s), and if so, identify the Person(s) and percentage share of ownership or other legal entitlement to the licensing or other revenue derived from such Patent(s).

b. for all Patents that the Firm Acquired as part of a Patent Portfolio, specify:

- (1) all Patents included in the Patent Portfolio;
- (2) the Person(s) from whom the Firm Acquired the Patent Portfolio;
- (3) the date on which the Firm Acquired the Patent Portfolio;
- (4) the circumstances in which the Firm Acquired the Patent Portfolio, including, but not limited to, whether the Patent Portfolio was Acquired in bankruptcy, or whether it was acquired from the original inventor;
- (5) the financial terms of the Firm's Acquisition of the Patent Portfolio;

As part of your response, specify:

(a) whether the Firm paid a lump sum, the amount of the lump sum; the Person(s) to whom the lump sum was paid, and the date the payment was made;

(b) whether the Firm paid, or is paying, an ongoing payment, and specify:

- i. how the ongoing payment is calculated;
- ii. the total amount of the ongoing payment paid as of the date of this Request;
- iii. the amount of each individual payment paid as of the date of this Request; the Person(s) to whom each payment was made; and the date of each payment;
- iv. the total amount of the ongoing payment expected to be paid in the future; and all Person(s) expected to receive future payments; and

(c) whether another Person(s) contributed financially to the purchase of the Patent Portfolio, and if so, identify the Person(s) and percentage share of ownership or other legal

entitlement to the licensing or other revenue derived from such Patent(s).

2. Identify each Patent the Firm has sold or transferred since January 1, 2008. As part of your response, specify:

- a. the Person(s) who Acquired the Patent;
- b. the date(s) on which the Person(s) Acquired the Patent;
- c. the financial terms of the Person(s)' Acquisition of the Patent. As part of your response, specify:

(1) whether the Person(s) paid a lump sum, the amount of the lump sum, the Person(s) to whom the lump sum was paid, and the date the payment was made;

(2) whether the Person(s) paid, or is paying, an ongoing payment, and specify:

- (a) how the ongoing payment is calculated;
- (b) the total amount of the ongoing payment paid as of the date of this Request;

(c) the amount of each individual payment paid as of the date of this Request, the Person(s) to whom each payment was made; and the date of each payment;

(d) the total amount of the ongoing payment expected to be paid in the future, and all Person(s) expected to receive future payments, and

(3) whether another Person(s) contributed financially to the purchase of the Patent(s), and if so, identify the Person(s) and percentage share of ownership or other legal entitlement to the licensing or other revenue derived from such Patent(s).

3. Identify any Patent not identified in response to E.1 or E.2 for which, since January 1, 2008, the Firm has had standing to sue and submit a copy of the license agreement that grants the Firm standing to sue.

4. Submit the Patent purchase or Acquisition agreement for all Acquisitions identified in response to Request E.1.

5. Submit all documents Relating to the Firm's Acquisitions identified in response to Request E.1, including but not limited to, market analyses, financial analyses, business plans, statements to investors and potential investors, and disclosures required by the Securities and Exchange Commission or any other Person.

6. Submit all documents Relating to the Firm's sales and transfers identified in response to Request E.2, including but not limited to, market analyses, financial analyses, business plans statements to investors and potential investors, and disclosures required by the Securities and Exchange Commission or any other Person.

F. Patent Assertion Information:

1. Demand Information:

a. identify all Demands sent by, or on behalf of the Firm since January 1, 2008 and specify:

(a) all Person(s) to which the Demand was sent;

(b) the Patent(s) Relating to the Demand;

(c) the total time spent and costs incurred by the Firm, or any Person working on behalf of the Firm, for any research Relating to the Demand, including but not limited to any attempt to compare the allegedly infringing product(s) or process(es) with the Asserted Patent claims;

(d) any Litigation initiated by the Firm Relating to the Demand, and the outcome of any such Litigation;

(e) any license agreement Relating to the Demand;

(f) any revenue obtained by the Firm Relating to each Demand, separately listed for each year since January 1, 2008, and for each Patent Portfolio held by the Firm.

b. for each year since January 1, 2008, identify the Firm's total expenses Relating to all Demands identified in response to Request F.1;

c. for each year since January 1, 2008, identify the Firm's total revenue Relating to all Demands identified in response to Request F.1;

d. submit a copy of each Demand identified in response to Request F.1, and all documents reflecting communications Relating the Demand;

e. submit all documents that reflect business strategy or financial research Relating to the Demand(s) identified in response to Request 6.A; and

f. submit all license or settlement agreements Relating to the Demand.

2. Litigation Information:

a. identify all Litigation(s) pending since January 1, 2008 to which the Firm is a party involving any Patent(s) held by the Firm since January 1, 2008. As part of your response, specify:

(1) whether the Firm is a plaintiff or defendant in the Litigation;

(2) the Patent(s) and claim(s) Asserted;

(3) the court, date filed, docket number, parties, current or final status (including dates);

(4) the remedies sought in the Litigation, including, but not limited to damages, enhanced damages, injunctive relief, or an exclusion order;

(5) whether the Patent was found infringed, invalid, or unenforceable and whether an injunction or an exclusion order issued;

(6) whether past damages were awarded, and the amount of any such award;

(7) whether future damages were awarded, and all projected revenue expected by the Firm as a result of the award for future damages, by year, together with the method for calculating future damages (e.g. as a fraction of revenue or a fee per unit sold);

(8) if the Litigation resulted in a settlement agreement, provide a copy of that agreement and specify:

(a) the stage of Litigation at which settlement was reached, e.g. before an order on a motion to dismiss, before an order on a motion for summary judgment;

(b) whether the Court issued an order construing any claim(s) of the Patent(s) Asserted before settlement was reached;

(c) the terms of the settlement agreement, and if the settlement included a license or cross-license, all licensing information requested in Request F.3;

(9) for each year since January 1, 2008, the costs the Firm incurred for the Litigation;

b. for each Litigation identified in Response to Request F.2, submit all orders Relating to disposition of any dispositive motions;

c. state whether the Firm has any contingency fee agreement(s) Relating to any Litigation(s) identified in response to Request F.2; and specify:

(1) the Person(s) with whom the Firm shares the contingency fee agreement(s);

(2) how the contingency fee is calculated;

(3) for each year since January 1, 2008, the amount paid pursuant to the contingency fee arrangement; and

(4) submit a copy of the contingency fee agreement(s).

3. License Information:

a. identify all license agreements the Firm entered into with any other Person(s) since January 1, 2008 Relating to any Patent(s) held by the Firm since January 1, 2008. As part of your response, specify:

(1) the Patent(s) licensed;

(2) the date and length of the license agreement;

(3) the licensor(s) and licensee(s);

(4) whether the license agreement Relates to any Litigation. As part of your response:

(a) identify the Litigation to which the license agreement Relates;

(b) for license agreements Relating to any Litigation, state when settlement was reached and when the license agreement was executed, e.g. after an order on a dispositive motion, on the eve of trial;

(c) state whether the Court issued an order construing any claim(s) of the Patent(s) Asserted before the license agreement was executed;

(5) all revenue obtained by the Firm Relating to each license agreement, separately listed for each year since January 1, 2008, and for each Patent Portfolio held by the Firm; and specify:

(a) the effective royalty rate, and the base to which it is to be applied;

(b) state whether this revenue was shared with any Person;

(c) identify the Person and the revenue shared;

(d) submit the revenue sharing agreement(s);

(6) all projected revenue expected by the Firm as a result of the license agreement, by year, and the method for calculating the projected revenue, e.g. as a fraction of revenue or a fee per unit sold;

(7) whether the license agreement includes any cross-license, and submit a copy of the cross-license;

(8) whether the Firm conducted a valuation of the cross-license, and submit all documents Relating to the valuation; and

(9) whether the license agreement includes any provisions for technology transfer from the Firm to the licensee(s).

4. For each license agreement identified in Response to Request F.3, submit a copy of the agreement and all documents Relating to the agreement, including but not limited to, documents reflecting communications Relating to the license, documents summarizing sales made by the licensee, and documents reflecting arrangements to share revenue generated by the license.

5. Submit all documents Relating to the Firm's rationale for all Assertions identified in response to Request F, including but not limited to, market analyses, financial analyses, business plans, statements to investors and potential investors, and disclosures required by the Securities and Exchange Commission or any other Person.

6. Submit all documents Relating to the Firm's projected gross revenue or return-on-investment for all Assertions identified in response to Request F, including, but not limited to, market analyses, financial analyses, business plans, statements to investors and potential investors, and disclosures required by the Securities and Exchange Commission or any other Person.

G. Aggregate Cost Information:

1. For each year since January 1, 2008, identify:

a. The total cost to and amount paid by the Firm Relating to all Acquisitions identified in response to Request E.1. State whether the Firm shares any fraction of this cost with any Person(s), and if the answer is yes, specify:

(1) The Person(s) with whom costs are shared;

(2) how this amount is calculated;

(3) the total cost shared to date;

(4) any cost expected to be shared in the future;

b. the total cost to and amount paid by the Firm Relating to all Assertions identified in response to Request F, and specify:

(1) The total cost to and amount paid by the Firm Relating to all Demands identified in response to Request F.1.

State whether the Firm shares any fraction of this cost with any Person(s), and if the answer is yes, specify:

(a) The Person(s) with whom costs are shared;

(b) how this amount is calculated;

(c) the total cost shared to date;

(d) any cost expected to be shared in the future;

(2) the total cost to and amount paid by the Firm Relating to all Litigations identified in response to Request F.2.

State whether the Firm shares any fraction of this cost with any Person(s), and if the answer is yes, specify:

(a) The Person(s) with whom costs are shared;

(b) how this amount is calculated;

(c) the total cost shared to date;

(d) any cost expected to be shared in the future;

(3) the total cost to and amount paid by the Firm Relating to all License Agreements identified in response to Request F.3. State whether the Firm shares any fraction of this cost with any Person(s), and if the answer is yes, specify:

(a) The Person(s) with whom costs are shared;

(b) how this amount is calculated;

(c) the total cost shared to date; and

(d) any cost expected to be shared in the future.

2. Submit all documents Relating to all costs and payments identified in response to Request G.

H. Aggregate Revenue Information:

1. For each year since January 1, 2008, identify:

a. The total revenue received by the Firm Relating to all transfers identified in response to Request E.2. State whether the Firm shares any fraction of this revenue with any Person(s), and if the answer is yes, specify:

(1) The Person(s) with whom revenue is shared;

(2) how this amount is calculated;

(3) the total revenue shared to date;

(4) any revenue expected to be shared in the future;

b. the total revenue received by the Firm Relating to all Assertions identified in response to Request F, and specify:

(1) The total revenue received by the Firm Relating to all Demands identified

in response to Request F.1. State whether the Firm shares any fraction of this revenue with any Person(s), and if the answer is yes, specify:

(a) The Person(s) with whom revenue is shared;

(b) how this amount is calculated;

(c) the total revenue shared to date;

(d) any revenue expected to be shared in the future;

(2) the total revenue received by the Firm Relating to all Litigations identified in response to Request F.2.

State whether the Firm shares any fraction of this revenue with any Person(s), and if the answer is yes, specify:

(a) The Person(s) with whom revenue is shared;

(b) how this amount is calculated;

(c) the total revenue shared to date;

(d) any revenue expected to be shared in the future;

(3) the total revenue received by the Firm Relating to all License Agreements identified in response to Request F.3. State whether the Firm shares any fraction of this revenue with any Person(s), and if the answer is yes, specify:

(a) The Person(s) with whom revenue is shared;

(b) how this amount is calculated;

(c) the total revenue shared to date;

(d) any revenue expected to be shared in the future;

(4) any revenue not identified above, shared with any Person(s) and specify:

(a) The Person(s) with whom revenue is shared;

(b) how this amount is calculated;

(c) the total revenue shared to date;

and

(d) any revenue expected to be shared in the future.

2. Submit all documents Relating to all revenue identified in response to Request 8.

It should be noted that pending this information collection, the destruction, mutilation, alteration, or falsification of documentary evidence within the possession or control of a person, partnership or corporation subject to the FTC Act is subject to criminal prosecution. 15 U.S.C. 50, *see also* 18 U.S.C. 1505.

II. Estimated Burden Hours

Staff will ask respondents to answer several written questions and to provide documents related to the answers provided. Because the responses will necessarily vary depending on the respondent, we have provided a range of estimated response times from 90 to 400 hours. The total estimated burden of answering the questions and producing documents per respondent is based on the following:

Organize document and information retrieval: 15–50 hours.

Identify requested information: 15–150 hours.

Retrieve responsive information: 20–80 hours.

Copy requested information: 20–40 hours.

Prepare response: 20–80 hours.

Thus the cumulative hours burden to produce documents and prepare the response sought will be between 3,600 (90 hours × 40 companies) to 16,000 (400 hours × 40 companies).

III. Estimated Cost Burden

It is not possible to calculate with precision labor costs associated with answering the questions and producing the documents requested, as each will entail various levels of management and/or support staff among many different companies. Individuals among some or all of those labor categories may be involved in the information collection process. Nonetheless, we have assumed that mid-management level personnel will handle most (estimate: 90%) of the tasks involved in gathering and producing the responsive information and we have applied a mean hourly wage of \$52.20⁴ for their labor. We also have applied a mean hourly wage of \$16.54 for the labor of clerical employees⁵ who will prepare the responsive materials for copying or electronic production. Thus the labor costs per company should range between \$3,984.80 [(81 hours × \$52.20/hour) + (9 hours × \$16.54/hour)] to \$19,097 [(360 hours × \$52.20/hour) + (40 hours × \$16.54/hour)].

Staff anticipates that the capital or other non-labor costs associated with the information requests will be minimal. Although the information requests may require the respondent to store copies of the requested information provided to the Commission, industry members should already have in place the means to store information of the volume requested. Respondents may need to purchase minimal office supplies to respond to the request. Staff estimates that each respondent will spend \$500 for such costs regarding the information request, for a total additional non-labor cost burden of \$20,000 (\$500 × 40 companies).

⁴ Bureau of Labor Statistics, May 2012 National Occupational Employment and Wage Estimates for the United States, Management Occupations: http://www.bls.gov/oes/current/oes_nat.htm.

⁵ *Id.* (Office and Administrative Support Occupations).

IV. Request for Comment

Under the PRA, 44 U.S.C. 3501–3521, federal agencies must obtain approval from OMB for each collection of information they conduct or sponsor. “Collection of information” means agency requests or requirements that members of the public submit reports, keep records, or provide information to a third party. 44 U.S.C. 3502(3); 5 CFR 1320.3(c). As required by Section 3506(c)(2) of the PRA, 44 U.S.C. 3506, the FTC is providing this opportunity for public comment before requesting that OMB approve the study. Specifically, the FTC invites comments on: (1) Whether the proposed collection of information is necessary for the proper performance of the functions of the FTC, including whether the information will have practical utility; (2) the accuracy of the FTC’s estimate of the burden of the proposed collection of information; (3) ways to enhance the quality, utility, and clarity of the information to be collected; and (4) ways to minimize the burden of collecting information. The FTC encourages recipients of prior compulsory process orders to offer suggestions on how the burden of the proposed collection may be reduced. All comments should be filed as prescribed below, and must be received on or before December 2, 2013.

You can file a comment online or on paper. For the Commission to consider your comment, we must receive it on or before December 2, 2013. Write “PAE Reports: Paperwork Comment; Project No. P131203” on your comment. Your comment—including your name and your state—will be placed on the public record of this proceeding, including, to the extent practicable, on the public Commission Web site, at <http://www.ftc.gov/os/publiccomments.shtm>. As a matter of discretion, the Commission tries to remove individuals’ home contact information from comments before placing them on the Commission Web site.

Because your comment will be made public, you are solely responsible for making sure that your comment does not include any sensitive personal information, like anyone’s Social Security number, date of birth, driver’s license number or other state identification number or foreign country equivalent, passport number, financial account number, or credit or debit card number. You are also solely responsible for making sure that your comment does not include any sensitive health information, like medical records or other individually identifiable health information. In addition, do not include

any “[t]rade secret or any commercial or financial information which is obtained from any person and which is privileged or confidential,” as provided in Section 6(f) of the FTC Act, 15 U.S.C. 46(f), and FTC Rule 4.10(a)(2), 16 CFR 4.10(a)(2). In particular, do not include competitively sensitive information such as costs, sales statistics, inventories, formulas, patterns, devices, manufacturing processes, or customer names.

If you want the Commission to give your comment confidential treatment, you must file it in paper form, with a request for confidential treatment, and you have to follow the procedure explained in FTC Rule 4.9(c), 16 CFR 4.9(c).⁶ Your comment will be kept confidential only if the FTC General Counsel grants your request in accordance with the law and the public interest. Postal mail addressed to the Commission is subject to delay due to heightened security screening. As a result, we encourage you to submit your comments online. To make sure that the Commission considers your online comment, you must file it at <https://ftcpublic.commentworks.com/ftc/paestudypra>, by following the instructions on the web-based form. If this Notice appears at <http://www.regulations.gov/#/home>, you also may file a comment through that Web site.

If you file your comment on paper, write “PAE Reports: Paperwork Comment; Project No. P131203” on your comment and on the envelope, and mail or deliver it to the following address: Federal Trade Commission, Office of the Secretary, Room H-113 (Annex J), 600 Pennsylvania Avenue NW, Washington, DC 20580. If possible, submit your paper comment to the Commission by courier or overnight service.

Visit the Commission Web site at <http://www.ftc.gov> to read this Notice and the news release describing it. The FTC Act and other laws that the Commission administers permit the collection of public comments to consider and use in this proceeding as appropriate. The Commission will consider all timely and responsive public comments that it receives on or before December 2, 2013. You can find more information, including routine uses permitted by the Privacy Act, in the Commission’s privacy policy, at <http://www.ftc.gov/ftc/privacy.htm>.

⁶In particular, the written request for confidential treatment that accompanies the comment must include the factual and legal basis for the request, and must identify the specific portions of the comment to be withheld from the public record. See FTC Rule 4.9(c), 16 CFR 4.9(c).

By direction of the Commission.

Donald S. Clark,

Secretary.

[FR Doc. 2013–24230 Filed 10–2–13; 8:45 am]

BILLING CODE 6750–01–P

FEDERAL TRADE COMMISSION

[File No. 131 0112]

Mylan, Inc., Agila Specialties Global Pte. Limited, Agila Specialties Private Limited and Strides Arcolab Limited; Analysis of Agreement Containing Consent Orders To Aid Public Comment

AGENCY: Federal Trade Commission.

ACTION: Proposed Consent Agreement.

SUMMARY: The consent agreement in this matter settles alleged violations of federal law prohibiting unfair or deceptive acts or practices or unfair methods of competition. The attached Analysis to Aid Public Comment describes both the allegations in the draft complaint and the terms of the consent order—embodied in the consent agreement—that would settle these allegations.

DATES: Comments must be received on or before October 28, 2013.

ADDRESSES: Interested parties may file a comment at <https://ftcpublic.commentworks.com/ftc/mylanagilaconsent> online or on paper, by following the instructions in the Request for Comment part of the **SUPPLEMENTARY INFORMATION** section below. Write “Mylan, File No. 131 0112” on your comment and file your comment online at <https://ftcpublic.commentworks.com/ftc/mylanagilaconsent> by following the instructions on the web-based form. If you prefer to file your comment on paper, mail or deliver your comment to the following address: Federal Trade Commission, Office of the Secretary, Room H-113 (Annex D), 600 Pennsylvania Avenue NW., Washington, DC 20580.

FOR FURTHER INFORMATION CONTACT: Amy Posner (202–326–2614), FTC, Bureau of Competition, 600 Pennsylvania Avenue NW., Washington, DC 20580.

SUPPLEMENTARY INFORMATION: Pursuant to Section 6(f) of the Federal Trade Commission Act, 15 U.S.C. 46(f), and FTC Rule 2.34, 16 CFR 2.34, notice is hereby given that the above-captioned consent agreement containing a consent order to cease and desist, having been filed with and accepted, subject to final approval, by the Commission, has been placed on the public record for a period

of thirty (30) days. The following Analysis to Aid Public Comment describes the terms of the consent agreement, and the allegations in the complaint. An electronic copy of the full text of the consent agreement package can be obtained from the FTC Home Page (for September 26, 2013), on the World Wide Web, at <http://www.ftc.gov/os/actions.shtm>. A paper copy can be obtained from the FTC Public Reference Room, Room 130–H, 600 Pennsylvania Avenue NW., Washington, DC 20580, either in person or by calling (202) 326–2222.

You can file a comment online or on paper. For the Commission to consider your comment, we must receive it on or before October 28, 2013. Write “Mylan, File No. 131 0112” on your comment. Your comment—including your name and your state—will be placed on the public record of this proceeding, including, to the extent practicable, on the public Commission Web site, at <http://www.ftc.gov/os/publiccomments.shtm>. As a matter of discretion, the Commission tries to remove individuals’ home contact information from comments before placing them on the Commission Web site.

Because your comment will be made public, you are solely responsible for making sure that your comment does not include any sensitive personal information, like anyone’s Social Security number, date of birth, driver’s license number or other state identification number or foreign country equivalent, passport number, financial account number, or credit or debit card number. You are also solely responsible for making sure that your comment does not include any sensitive health information, like medical records or other individually identifiable health information. In addition, do not include any “[t]rade secret or any commercial or financial information which . . . is privileged or confidential,” as discussed in Section 6(f) of the FTC Act, 15 U.S.C. 46(f), and FTC Rule 4.10(a)(2), 16 CFR 4.10(a)(2). In particular, do not include competitively sensitive information such as costs, sales statistics, inventories, formulas, patterns, devices, manufacturing processes, or customer names.

If you want the Commission to give your comment confidential treatment, you must file it in paper form, with a request for confidential treatment, and you have to follow the procedure explained in FTC Rule 4.9(c), 16 CFR 4.9(c).¹ Your comment will be kept

¹In particular, the written request for confidential treatment that accompanies the comment must

confidential only if the FTC General Counsel, in his or her sole discretion, grants your request in accordance with the law and the public interest.

Postal mail addressed to the Commission is subject to delay due to heightened security screening. As a result, we encourage you to submit your comments online. To make sure that the Commission considers your online comment, you must file it at <https://ftcpublic.commentworks.com/ftc/mylanagilaconsent> by following the instructions on the web-based form. If this Notice appears at <http://www.regulations.gov/#/home>, you also may file a comment through that Web site.

If you file your comment on paper, write "Mylan, File No. 131 0112" on your comment and on the envelope, and mail or deliver it to the following address: Federal Trade Commission, Office of the Secretary, Room H-113 (Annex D), 600 Pennsylvania Avenue NW., Washington, DC 20580. If possible, submit your paper comment to the Commission by courier or overnight service.

Visit the Commission Web site at <http://www.ftc.gov> to read this Notice and the news release describing it. The FTC Act and other laws that the Commission administers permit the collection of public comments to consider and use in this proceeding as appropriate. The Commission will consider all timely and responsive public comments that it receives on or before October 28, 2013. You can find more information, including routine uses permitted by the Privacy Act, in the Commission's privacy policy, at <http://www.ftc.gov/ftc/privacy.htm>.

Analysis of Agreement Containing Consent Order To Aid Public Comment Introduction

The Federal Trade Commission ("Commission") has accepted, subject to final approval, an Agreement Containing Consent Orders ("Consent Agreement") from Mylan Inc. ("Mylan"), Agila Specialties Global Pte. Limited and Agila Specialties Private Limited (collectively, "Agila"), and Strides Arcolab Limited ("Strides") that is designed to remedy the anticompetitive effects that otherwise would have resulted in eleven generic injectable pharmaceutical markets from Mylan's proposed acquisition of Agila. Under the terms of the proposed Consent Agreement, Mylan is required

to divest either Mylan or Agila/Strides products as follows: (1) To Intas Pharmaceuticals Ltd. ("Intas"), Mylan's fluorouracil injection and methotrexate sodium preservative-free injection; (2) to JHP Pharmaceuticals, LLC ("JHP"), Mylan's etomidate injection, ganciclovir injection, meropenem injection, and mycophenolate mofetil injection and Agila/Strides' amiodarone hydrochloride injection and fomepizole injection; and (3) to Sagent Pharmaceuticals, Inc. ("Sagent"), Agila/Strides' acetylcysteine injection and mesna injection. In addition, Mylan is required to release all of its rights relating to labetalol hydrochloride injection to Gland Pharma Ltd. ("Gland").

The proposed Consent Agreement has been placed on the public record for thirty days for receipt of comments from interested persons. Comments received during this period will become part of the public record. After thirty days, the Commission will again evaluate the proposed Consent Agreement, along with the comments received, in order to make a final decision as to whether it should withdraw from the proposed Consent Agreement, or make final the Decision and Order ("Order").

Mylan proposes to acquire Agila for approximately \$1.85 billion pursuant to a Sale and Purchase Agreement dated February 27, 2013 ("Proposed Acquisition"). The Commission alleges in its Complaint that the Proposed Acquisition, if consummated, would violate Section 7 of the Clayton Act, as amended, 15 U.S.C. 18, and Section 5 of the Federal Trade Commission Act, as amended, 15 U.S.C. 45, by lessening current and future competition in eleven generic injectable pharmaceutical product markets in the United States. The eleven product markets are: (1) Amiodarone hydrochloride injection; (2) etomidate injection; (3) fluorouracil injection; (4) labetalol hydrochloride injection; (5) mesna injection; (6) methotrexate sodium preservative-free injection; (7) acetylcysteine injection; (8) fomepizole injection; (9) ganciclovir injection; (10) meropenem injection; and (11) mycophenolate mofetil injection. The proposed Consent Agreement will remedy the alleged violations by replacing the competition that would otherwise be eliminated by the Proposed Acquisition.

The Relevant Products and Structure of the Markets

Mylan's proposed purchase of Agila will lessen current and future competition in each of the eleven generic injectable pharmaceutical

product markets, in part, because the Proposed Acquisition will reduce the number of suppliers competing for customers in each market. Injectable drugs are administered intravenously, usually via a syringe or hollow needle. Generic versions of these drugs are usually launched after a branded product's patents expire, or a generic supplier successfully challenges such patents in court or reaches a legal settlement with the branded manufacturer. Once multiple generic suppliers enter a market, the branded drug manufacturer usually ceases to provide any competitive constraint on the prices for generic versions of the drug. Rather, the generic suppliers compete only against each other. Sometimes, however, a branded injectable drug manufacturer may choose to lower its price and compete against generic versions of the drug, in which case it would be a participant in the generic drug market.

The number of suppliers in generic pharmaceutical markets is critical because prices generally decrease as the number of competing generic suppliers increases. In addition, the injectable pharmaceutical industry generally, and the generic products at issue in this investigation in particular, are highly susceptible to supply disruptions caused by the inherent difficulties of producing sterile liquid drugs. Recent manufacturing problems have made it difficult for customers to obtain sufficient quantities of, and contributed to price increases of, several of the generic injectable products impacted by this transaction. By reducing the number of competitors in these markets, the Proposed Acquisition will likely create a direct and substantial anticompetitive effect on prices for each of the relevant products, absent the remedies required by the proposed Consent Agreement.

The Proposed Acquisition will reduce current (or imminent) competition in the markets for each of the following generic injectable products: (1) Amiodarone hydrochloride injection; (2) etomidate injection; (3) fluorouracil injection; (4) labetalol hydrochloride injection; (5) mesna injection; and (6) methotrexate sodium preservative-free injection. The structure of these markets is as follows:

- Amiodarone hydrochloride injection is an anti-arrhythmic cardiac drug of last resort used to treat patients with frequently recurring ventricular fibrillation or unstable ventricular tachycardia. The market for amiodarone hydrochloride injection is highly concentrated with only three current suppliers for the drug—Mylan,

include the factual and legal basis for the request, and must identify the specific portions of the comment to be withheld from the public record. See FTC Rule 4.9(c), 16 CFR 4.9(c).

Fresenius Kabi AG ("Fresenius"), and Hikma Pharmaceuticals PLC. Mylan has a 60% share of the market. Agila has an approved Abbreviated New Drug Application ("ANDA") from the U.S. Food and Drug Administration ("FDA") and is about to enter this market, as is one other firm. Thus, the Proposed Acquisition would reduce the number of suppliers of generic amiodarone hydrochloride injection from five to four.

- Etomidate injection is an anesthetic agent used to induce general anesthesia and sedation for surgical procedures. There are currently four significant suppliers in this highly concentrated market—Mylan, Agila (which distributes its product through Pfizer Inc. and Sagent), Hospira, Inc. ("Hospira"), and American Regent, Inc. Absent a remedy, the Proposed Acquisition would substantially increase concentration in this market, provide the combined firm a market share of 46%, and reduce the number of suppliers of generic etomidate injection from four to three.

- Fluorouracil injection treats colon, rectal, breast, stomach, and pancreatic cancers. In this highly concentrated market, four firms have supplied fluorouracil injection in the recent past—Mylan, Fresenius, Teva Pharmaceutical Industries Ltd. ("Teva"), and Sandoz International GmbH. ("Sandoz"). A number of these suppliers, however, have experienced significant manufacturing issues. Agila is the only other company that currently holds an approved ANDA to sell generic fluorouracil in the United States. The Proposed Acquisition would reduce the number of firms capable of supplying generic fluorouracil injection from five to four.

- Labetalol hydrochloride injection treats severe hypertension. The market for labetalol hydrochloride injection is highly concentrated and only five firms are capable of supplying the drug today—Mylan, Agila, Hospira, Akorn, Inc., and Apotex Inc. Currently, Hospira and Akorn make most of the sales in this market, and Mylan, Agila, and Apotex are the only other firms with approved ANDAs and manufacturing facilities currently capable of producing this product. The Proposed Acquisition would reduce the number of firms capable of supplying generic labetalol hydrochloride injection from five to four.

- Mesna injection is a detoxifying agent used to prevent damage to the urinary tract caused by ifosfamide, a third-line chemotherapy drug used to treat germ cell testicular cancer. There are four current, significant suppliers of

generic mesna injection—Mylan, Agila, Fresenius, and Baxter International Inc. The Proposed Acquisition would increase concentration in this market substantially, and reduce the number of current suppliers of generic mesna injection from four to three.

- Methotrexate sodium preservative-free injection treats several types of pediatric cancers, as well as certain autoimmune disorders such as rheumatoid arthritis and multiple sclerosis. Five firms currently supply the market for methotrexate sodium preservative-free injection—Mylan, Agila, Fresenius, Teva, and Hospira. The Proposed Acquisition would reduce the number of current suppliers of this drug from five to four.

In addition, the Proposed Acquisition will significantly reduce future competition in the markets for the following generic injectable products: (1) Acetylcysteine injection; (2) fomepizole injection; (3) ganciclovir injection; and (4) meropenem injection. In each of these markets, either Mylan or Agila, or both, currently do not supply an existing generic product, but will likely do so in the near future, and entry by one or both of the parties will likely increase price competition in that market significantly absent the Proposed Acquisition. The structure of each of these markets is as follows:

- Acetylcysteine injection prevents or minimizes liver damage resulting from acetaminophen overdose. There are two generic acetylcysteine injection products currently on the market, and Mylan and Agila are two of only a limited number of firms that have generic products in development. Therefore, the Proposed Acquisition would significantly reduce the number of likely future suppliers of generic acetylcysteine injection.

- Injectable fomepizole treats accidental poisoning caused by ethylene glycol or methanol ingestion. Three firms currently supply the highly concentrated market for generic fomepizole injection—Mylan, X-Gen Pharmaceuticals, Inc., and Sandoz. Agila is developing its own generic fomepizole injection product and likely would be the next firm to enter the market. As a result, the Proposed Acquisition would significantly reduce the number of suppliers of generic fomepizole injection in the near future.

- Ganciclovir injection is an antiviral medication used to treat patients with weakened immune systems, such as patients with HIV/AIDS and transplant recipients, to slow the growth of cytomegalovirus, a form of herpes virus that can lead to blindness. Currently, Roche Palo Alto, LLC ("Roche") sells a

branded product, Cytovene. Fresenius sells the only generic version of this drug. Mylan and Agila are two of only a limited number of firms that have this drug in development. Therefore, the Proposed Acquisition would result in the reduction of likely future suppliers of generic ganciclovir injection.

- Meropenem injection is an ultra-broad spectrum antibiotic used as a last resort to treat serious bacterial infections in an intensive care setting. There are currently four suppliers of the drug—AstraZeneca PLC, Fresenius, Hospira, and Sandoz. All four of these companies, however, obtain their supplies of meropenem from two manufacturers. Mylan and Agila are two of only a limited number of firms that have a generic meropenem injection product in development. They are also the only likely entrants that will source their meropenem products from alternative manufacturing facilities. As a result, the Proposed Acquisition would significantly reduce the number of marketers, as well as the sources of manufacturing, of generic meropenem injection in the future.

Finally, the Proposed Acquisition will significantly reduce potential competition in one generic market that does not yet exist—the market for mycophenolate mofetil injections. This market would be highly concentrated when Mylan and Agila would likely enter it in the future. Mycophenolate mofetil injection is an immunosuppressant used in transplant medicine to subdue T-cell and B-cell production, reducing the risk of transplant rejection. Today, Roche sells its branded product, CellCept. When generic entry occurs, Mylan and Agila would likely be among a limited number of suppliers. Thus, the Proposed Acquisition would significantly reduce the number of likely future suppliers of this drug to the detriment of consumers.

Entry

Entry into each of these generic injectable product markets will not be timely, likely, or sufficient in magnitude, character, and scope to deter or counteract the likely anticompetitive effects of the Proposed Acquisition. The combination of drug development times and regulatory requirements, including FDA approval, takes well in excess of two years.

Competitive Effects

Absent a remedy, the Proposed Acquisition would likely cause significant anticompetitive harm to consumers in the relevant generic injectable pharmaceutical markets,

either by eliminating significant current or potential competition in concentrated existing markets, or by eliminating significant potential competition among a limited number of likely competitors in a future market. In each of these markets, Mylan and Agila are two of only a limited number of current or likely future suppliers of the drugs in the United States. The evidence shows that prices may continue to decrease even after a number of suppliers have entered a generic injectable drug market. Thus, although Mylan or Agila have not entered some of the markets at issue yet, both companies likely will compete in those markets in the future, and that competition is expected to reduce prices for consumers. The evidence also shows that the removal of an independent generic injectable drug supplier from the relevant markets in which Mylan and Agila currently compete would result in significantly higher prices post-acquisition. Therefore, by eliminating the significant current and future competition between the parties, the Proposed Acquisition will likely cause U.S. consumers to pay significantly higher prices for these generic injectable drugs, absent a remedy.

The Consent Agreement

The Consent Agreement effectively remedies the Proposed Acquisition's anticompetitive effects in each relevant market. Under the Consent Agreement, the parties are required to divest either Mylan's or Agila's rights and assets related to (1) Amiodarone hydrochloride injection, (2) etomidate injection, (3) fluorouracil injection, (4) mesna injection, (5) methotrexate sodium preservative-free injection, (6) acetylcysteine injection, (7) fomepizole injection, (8) ganciclovir injection, (9) meropenem injection, and (10) mycophenolate mofetil injection. In addition, Mylan is required to release all of its rights and assets related to labetalol hydrochloride injection. The parties must accomplish these divestitures and relinquish their rights no later than ten days after the acquisition.

The proposed Consent Agreement requires Mylan to terminate its contract with Gland and to release all rights related to labetalol hydrochloride injection. Gland, a global pharmaceutical company based in India, is Mylan's contract manufacturer for this drug. Given its experience with this drug, Gland is well positioned to replicate the competition that would otherwise have been lost as a result of the Proposed Acquisition. The proposed Consent Agreement also requires Mylan to divest assets related to fluorouracil

injection and methotrexate sodium preservative-free injection to Intas and to divest assets related to etomidate injection, ganciclovir injection, meropenem injection, and mycophenolate mofetil injection to JHP. In addition, the proposed Consent Agreement requires Agila and Strides to divest assets related to acetylcysteine injection and mesna injection to Sagent and to divest assets related to amiodarone hydrochloride injection and fomepizole injection to JHP. Intas is a global pharmaceutical company based in India with approximately 79 prescription drugs approved for sale in the United States, as well as an active product development pipeline. JHP is a New Jersey based pharmaceutical company with approximately 22 approved ANDAs and an active product development pipeline. Finally, Sagent, a pharmaceutical company based in Illinois, has approximately 58 approved ANDAs and an active product development pipeline. With their experience in generic markets, Intas, JHP, and Sagent are expected to replicate fully the competition that would otherwise have been lost as a result of the Proposed Acquisition.

The Commission's goal in evaluating possible acquirers of divested assets is to maintain the competitive environment that existed prior to the acquisition. If the Commission determines that Intas, JHP, Sagent, or Gland are not acceptable acquirers, or that the manner of the divestitures or releases is not acceptable, the parties must unwind the sale or release of rights to Intas, JHP, Sagent, or Gland and divest the products to a Commission-approved acquirer within six months of the date the Order becomes final. In that circumstance, the Commission may appoint a trustee to divest the products if the parties fail to divest the products as required.

The proposed Consent Agreement contains several provisions to help ensure that the divestitures are successful. The Order requires Mylan, Agila, and Strides to take all action to maintain the economic viability, marketability, and competitiveness of the products to be divested until such time that they are transferred to a Commission-approved acquirer. Mylan and Agila must transfer their respective manufacturing technologies for generic amiodarone hydrochloride injection, etomidate injection, and fomepizole injection to JHP and must supply JHP with these drugs during the transition period. Further, Agila and Strides must transfer the manufacturing technology for acetylcysteine injection and mesna injection to Sagent and must supply

Sagent with the two drugs during the transition period.

The purpose of this analysis is to facilitate public comment on the proposed Consent Agreement, and it is not intended to constitute an official interpretation of the proposed Order or to modify its terms in any way.

By direction of the Commission.

Donald S. Clark,

Secretary.

[FR Doc. 2013-24144 Filed 10-2-13; 8:45 am]

BILLING CODE 6750-01-P

GENERAL SERVICES ADMINISTRATION

[Notice-MK-2013-09; Docket No. 2013-0002; Sequence 31]

The President's Management Advisory Board (PMAB); Notification of Upcoming Public Advisory Meeting

AGENCY: Office of Executive Councils, U.S. General Services Administration (GSA).

ACTION: Meeting Notice.

SUMMARY: The President's Management Advisory Board (PMAB), a Federal Advisory Committee established in accordance with the Federal Advisory Committee Act (FACA), 5 U.S.C., App., and Executive Order 13538, will hold a public teleconference meeting on Monday, October 21, 2013.

DATES: Meeting date: The meeting will be held on Monday, October 21, 2013, beginning at 11:00 a.m. eastern time, ending no later than 12:30 p.m.

FOR FURTHER INFORMATION CONTACT: Mr. Stephen Brockelman, Designated Federal Officer, President's Management Advisory Board, Office of Executive Councils, General Services Administration, 1800 F Street NW., Washington, DC 20006, at stephen.brockelman@gsa.gov.

SUPPLEMENTARY INFORMATION:

Background: The PMAB was established to provide independent advice and recommendations to the President and the President's Management Council on a wide range of issues related to the development of effective strategies for the implementation of best business practices to improve Federal Government management and operation.

Agenda: The main purpose for this meeting is for the PMAB to discuss and define areas of work for the PMAB emerging from the new President's Management Agenda. Focal areas are likely to involve recommendations for

initiatives designed to improve the effectiveness of federal government operations. The meeting will also cover planning and logistics for PMAB during the coming year.

Meeting Access: The teleconference meeting is open to the public; interested members of the public may listen to the PMAB discussion using 1-888-673-9806 and pass code 7836092. Members of the public will not have the opportunity to ask questions or otherwise participate in the teleconference. However, members of the public wishing to comment should follow the steps detailed in *Procedures for Providing Public Comments* below.

Availability of Materials for the Meeting: Please see the PMAB Web site (<http://www.whitehouse.gov/administration/advisory-boards/pmab>) for any materials available in advance of the meeting and for meeting minutes that will be made available after the meeting. Detailed meeting minutes will be posted within 90 days of the meeting.

Procedures for Providing Public Comments: In general, public statements will be posted on the PMAB Web site (see above). Non-electronic documents will be made available for public inspection and copying in PMAB offices at GSA, 1800 F Street NW., Washington, DC 20006, on official business days between the hours of 10 a.m. and 5 p.m. eastern time. You can make an appointment to inspect statements by telephoning 202-501-1398. All statements, including attachments and other supporting materials, received are part of the public record and subject to public disclosure. Any statements submitted in connection with the PMAB meeting will be made available to the public under the provisions of the Federal Advisory Committee Act (FACA).

The public is invited to submit written statements for this meeting until 12:30 p.m. eastern time on Friday, October 18, 2013, by either of the following methods: *Electronic or Paper Statements:* Submit electronic statements to Mr. Brockelman, Designated Federal Officer at stephen.brockelman@gsa.gov; or send paper statements in triplicate to Mr. Brockelman at the PMAB GSA address above.

Dated: September 27, 2013.

Anne Rung,

Associate Administrator, Office of Government-wide Policy, General Services Administration.

[FR Doc. 2013-24145 Filed 10-2-13; 8:45 am]

BILLING CODE 6820-BR-P

DEPARTMENT OF HEALTH AND HUMAN SERVICES

Advisory Council on Alzheimer's Research, Care, and Services; Meeting

AGENCY: Assistant Secretary for Planning and Evaluation, HHS.

ACTION: Notice of meeting.

SUMMARY: This notice announces the public meeting of the Advisory Council on Alzheimer's Research, Care, and Services (Advisory Council). The Advisory Council on Alzheimer's Research, Care, and Services provides advice on how to prevent or reduce the burden of Alzheimer's disease and related dementias on people with the disease and their caregivers. During the October meeting, the Advisory Council will welcome new members and discuss the timeline for the 2014 recommendations. The subcommittees will discuss priorities and areas for recommendations. The Advisory Council will hear presentations on work underway to harness "big data" to address Alzheimer's research.

DATES: The meeting will be held on October 28, 2013 from 9:00 a.m. to 5:00 p.m. EDT.

ADDRESSES: The meeting will be held in the Great Hall of the U.S. Department of Health and Human Services, 200 Independence Avenue SW., Washington, DC 20201.

Comments: Time is allocated on the agenda to hear public comments. In lieu of oral comments, formal written comments may be submitted for the record to Helen Lamont, Ph.D., OASPE, 200 Independence Avenue SW., Room 424E, Washington, DC 20201. Comments may also be sent to napa@hhs.gov. Those submitting written comments should identify themselves and any relevant organizational affiliations.

FOR FURTHER INFORMATION CONTACT: Helen Lamont, Ph.D. (202) 690-7996, helen.lamont@hhs.gov. Note: Seating may be limited. Those wishing to attend the meeting must send an email to napa@hhs.gov and put "October 28 meeting attendance" in the Subject line by Friday, October 18, 2013, so that their names may be put on a list of expected attendees and forwarded to the security officers at the Department of Health and Human Services. Any interested member of the public who is a non-U.S. citizen should include this information at the time of registration to ensure that the appropriate security procedure to gain entry to the building is carried out. Although the meeting is open to the public, procedures

governing security and the entrance to Federal buildings may change without notice. If you wish to make a public comment, you must note that within your email.

SUPPLEMENTARY INFORMATION: Notice of these meetings is given under the Federal Advisory Committee Act (5 U.S.C. App. 2, section 10(a)(1) and (a)(2)). Topics of the Meeting: The Advisory Council will welcome new members and discuss the timeline for the 2014 recommendations. The subcommittees will discuss priorities and areas for recommendations. The Advisory Council will hear presentations on work underway to harness "big data" to address Alzheimer's research.

Procedure and Agenda: This meeting is open to the public.

Authority: 42 U.S.C. 11225; Section 2(e)(3) of the National Alzheimer's Project Act. The panel is governed by provisions of Public Law 92-463, as amended (5 U.S.C. Appendix 2), which sets forth standards for the formation and use of advisory committees.

Dated: October 1, 2013.

Donald Moulds,

Acting Assistant Secretary for Planning and Evaluation.

[FR Doc. 2013-24206 Filed 10-2-13; 8:45 am]

BILLING CODE P

DEPARTMENT OF HEALTH AND HUMAN SERVICES

Agency for Healthcare Research and Quality

Notice of Meetings

AGENCY: Agency for Healthcare Research and Quality (AHRQ), HHS.

ACTION: Notice of Five AHRQ Subcommittee Meetings.

SUMMARY: The subcommittees listed below are part of AHRQ's Health Services Research Initial Review Group Committee. Grant applications are to be reviewed and discussed at these meetings. Each subcommittee meeting will commence in open session before closing to the public for the duration of the meeting. These meetings will be closed to the public in accordance with 5 U.S.C. App. 2 section 10(d), 5 U.S.C. 552b(c)(4), and 5 U.S.C. 552b(c)(6).

DATES: See below for dates of meetings:

1. Healthcare Effectiveness and Outcomes Research (HEOR)

Date: October 16, 2013 (Open from 8:00 a.m. to 8:30 a.m. on October 16 and closed for remainder of the meeting)

2. Health System and Value Research (HSVR)

Date: October 16, 2013 (Open from 8:00 a.m. to 8:30 a.m. on October 16 and closed for remainder of the meeting)

3. *Health Care Research and Training (HCRT)*

Date: October 17–18, 2013 (Open from 8:00 a.m. to 8:30 a.m. on October 17 and closed for remainder of the meeting)

4. *Healthcare Safety and Quality Improvement Research (HSQR)*

Date: October 23–24, 2013 (Open from 8:00 a.m. to 8:30 a.m. on October 23 and closed for remainder of the meeting)

5. *Healthcare Information Technology Research (HITR)*

Date: October 31–November 1, 2013 (Open from 8:00 a.m. to 8:30 a.m. on October 31 and closed for remainder of the meeting)

ADDRESSES: The five meetings will take place at the following location: Hyatt Regency Hotel Bethesda, One Metro Center, Bethesda, MD 20814.

FOR FURTHER INFORMATION CONTACT: (To obtain a roster of members, agenda or minutes of the non-confidential portions of the meetings.) Mrs. Bonnie Campbell, Committee Management Officer, Office of Extramural Research Education and Priority Populations, AHRQ, 540 Gaither Road, Suite 2000, Rockville, Maryland 20850, Telephone (301) 427–1554.

SUPPLEMENTARY INFORMATION: In accordance with section 10(a)(2) of the Federal Advisory Committee Act (5 U.S.C. App. 2), AHRQ announces meetings of the scientific peer review groups listed above, which are subcommittees of AHRQ's Health Services Research Initial Review Group Committee. Each subcommittee meeting will commence in open session before closing to the public for the duration of the meeting. The subcommittee meetings will be closed to the public in accordance with the provisions set forth in 5 U.S.C. App. 2 section 10(d), 5 U.S.C. 552b(c)(4), and 5 U.S.C. 552b(c)(6). The grant applications and the discussions could disclose confidential trade secrets or commercial property such as patentable material, and personal information concerning individuals associated with the grant applications, the disclosure of which would constitute a clearly unwarranted invasion of personal privacy.

Agenda items for these meetings are subject to change as priorities dictate.

Dated: September 25, 2013.

Richard Kronick,
Director.

[FR Doc. 2013–24178 Filed 10–2–13; 8:45 am]

BILLING CODE 4160–90–P

DEPARTMENT OF HEALTH AND HUMAN SERVICES

Agency for Healthcare Research and Quality

Correction—Scientific Information Request on Medication Therapy Management

The original date of publication for this **Federal Register** notice was September 17, 2013, 78 FR 57159. On this publication, the Web site that appears under **ADDRESSES** is incorrect in page 57159. The correct Web site is: <http://effectivehealthcare.AHRQ.gov/index.cfm/submit-scientific-information-packets/>

Dated: September 27, 2013.

Richard Kronick,
AHRQ Director.

[FR Doc. 2013–24182 Filed 10–2–13; 8:45 am]

BILLING CODE 4160–90–P

DEPARTMENT OF HEALTH AND HUMAN SERVICES

Centers for Disease Control and Prevention

[60Day–13–0787]

Proposed Data Collections Submitted for Public Comment and Recommendations

In compliance with the requirement of Section 3506(c)(2)(A) of the Paperwork Reduction Act of 1995 for opportunity for public comment on proposed data collection projects, the Centers for Disease Control and Prevention (CDC) will publish periodic summaries of proposed projects. To request more information on the proposed projects or to obtain a copy of the data collection plans and instruments, call 404–639–7570 or send comments to LeRoy Richardson, at CDC 1600 Clifton Road, MS–D74, Atlanta, GA 30333 or send an email to omb@cdc.gov.

Comments are invited on: (a) Whether the proposed collection of information is necessary for the proper performance of the functions of the agency, including whether the information shall have practical utility; (b) the accuracy of the agency's estimate of the burden of the proposed collection of information; (c) ways to enhance the quality, utility, and clarity of the information to be collected; and (d) ways to minimize the burden of the collection of information on respondents, including through the use of automated collection techniques or other forms of information technology. Written comments should

be received within 60 days of this notice.

Proposed Project

Personal Flotation Devices (PFDs) and Commercial Fishermen: Preconceptions and Evaluation in Actual Use—Reinstatement with Change—(OMB Number 0920–0787, expiration date 8/31/2010) National Institute for Occupational Safety and Health (NIOSH), Centers for Disease Control and Prevention (CDC).

Background and Brief Description

NIOSH has the responsibility under Pub. L. 91–596 section 20 (Occupational Safety and Health Act of 1970) to conduct research relating to innovative methods, techniques, and approaches for dealing with occupational safety and health problems.

Commercial fishing is one of the most dangerous occupations in the United States, with a fatality rate 30 times higher than the national average. Most fishermen who die on the job drown subsequent to a vessel sinking (52%) or fall overboard (31%). Because drowning is the leading cause of death for commercial fishermen, its prevention is one of the highest priorities for those who work to make the industry safer.

The risk of drowning for commercial fisherman is high, yet most fishermen do not wear Personal Flotation Devices (PFDs) while on deck. Of the 182 fishermen who died from falls overboard between 2000 and 2011 none of them were wearing a personal flotation device (PFD). Many were within minutes of being rescued when they lost their strength and disappeared under the surface of the water.

NIOSH recently conducted a study to establish a baseline understanding of Alaska fishermen's perceptions of risk, safety attitudes, and beliefs about PFDs; and to evaluate a variety of modern PFDs with commercial fishermen to discover the features and qualities that they like and dislike. Based upon these results, NIOSH developed an intensive risk communication strategy to raise awareness to newer (potentially more satisfactory) PFD models, to address barriers, and to encourage increased PFD use among fishermen working in Alaska.

The purpose of this study is to first, determine if fishermen's perception of risk, safety attitudes, and beliefs about PFDs has shifted or remained the same since the implementation of the initial survey (2008–2009); and second, to evaluate the effectiveness of the NIOSH intensive risk communication intervention.

NIOSH is requesting Office of Management and Budget (OMB) approval to administer a survey to fishermen operating in Alaska fisheries. This questionnaire will contain questions that measure fishermen's risk perceptions, safety attitudes, and beliefs about PFDs, as well as recognition and influence of NIOSH risk communication activities. The questionnaire will take approximately 20 minutes to complete.

Consistent with the previous OMB-approved data collection protocol, the sample size was determined to be 400 total respondents to achieve a 95% confidence level. Two hundred independent respondents will be sampled just prior to the 2014 season and an additional two hundred will be sampled just prior to the 2015 season.

This study has the potential to greatly benefit the fishing industry. As a result

of previous research, NIOSH has gained a baseline understanding of fishermen's reasons for not wearing PFDs. With this empirical data at hand, an intensive risk communication intervention has been developed to address fishermen's concerns and remove the barriers that are currently in place.

There are no costs to respondents other than their time.

ESTIMATED ANNUALIZED BURDEN HOURS

Type of respondent	Form name	Number of respondents	Number of responses per respondent	Average burden per response (in hrs)	Total burden (in hrs)
Fishermen (2014 fishing season)	PFD Survey	200	1	20/60	67
Fishermen (2015 fishing season)	PFD Survey	200	1	20/60	67
Total .....	.....	.....	.....	.....	134

Leroy Richardson,

Chief, Information Collection Review Office,
Office of Scientific Integrity, Office of the
Associate Director for Science, Office of the
Director, Centers for Disease Control and
Prevention (CDC).

[FR Doc. 2013-24244 Filed 10-2-13; 8:45 am]

BILLING CODE 4163-18-P

DEPARTMENT OF HEALTH AND HUMAN SERVICES

Centers for Medicare & Medicaid Services

[Document Identifiers CMS-10484, CMS-R-39 and CMS-10471]

Agency Information Collection Activities: Submission for OMB Review; Comment Request

ACTION: Notice.

SUMMARY: The Centers for Medicare & Medicaid Services (CMS) is announcing an opportunity for the public to comment on CMS' intention to collect information from the public. Under the Paperwork Reduction Act of 1995 (PRA), federal agencies are required to publish notice in the **Federal Register** concerning each proposed collection of information, including each proposed extension or reinstatement of an existing collection of information, and to allow a second opportunity for public comment on the notice. Interested persons are invited to send comments regarding the burden estimate or any other aspect of this collection of information, including any of the following subjects: (1) The necessity and utility of the proposed information collection for the proper performance of the agency's functions; (2) the accuracy

of the estimated burden; (3) ways to enhance the quality, utility, and clarity of the information to be collected; and (4) the use of automated collection techniques or other forms of information technology to minimize the information collection burden.

DATES: Comments on the collection(s) of information must be received by the OMB desk officer by November 4, 2013.

ADDRESSES: When commenting on the proposed information collections, please reference the document identifier or OMB control number. To be assured consideration, comments and recommendations must be received by the OMB desk officer via one of the following transmissions: OMB, Office of Information and Regulatory Affairs, Attention: CMS Desk Officer, Fax Number: (202) 395-6974 OR Email: OIRA_submission@omb.eop.gov.

To obtain copies of a supporting statement and any related forms for the proposed collection(s) summarized in this notice, you may make your request using one of following:

1. Access CMS' Web site address at <http://www.cms.hhs.gov/PaperworkReductionActof1995>.

2. Email your request, including your address, phone number, OMB number, and CMS document identifier, to Paperwork@cms.hhs.gov.

3. Call the Reports Clearance Office at (410) 786-1326.

FOR FURTHER INFORMATION CONTACT: Reports Clearance Office at (410) 786-1326.

SUPPLEMENTARY INFORMATION: Under the Paperwork Reduction Act of 1995 (PRA) (44 U.S.C. 3501-3520), federal Agencies must obtain approval from the Office of Management and Budget (OMB) for each

collection of information they conduct or sponsor. The term "collection of information" is defined in 44 U.S.C. 3502(3) and 5 CFR 1320.3(c) and includes agency requests or requirements that members of the public submit reports, keep records, or provide information to a third party. Section 3506(c)(2)(A) of the PRA (44 U.S.C. 3506(c)(2)(A)) requires federal agencies to publish a 30-day notice in the **Federal Register** concerning each proposed collection of information, including each proposed extension or reinstatement of an existing collection of information, before submitting the collection to OMB for approval. To comply with this requirement, CMS is publishing this notice that summarizes the following proposed collection(s) of information for public comment:

1. *Type of Information Collection Request:* New collection (Request for a new OMB control number); *Title of Information Collection:* End Stage Renal Disease (ESRD) Application Access Request Form; *Use:* We are developing a new suite of systems to support the End Stage Renal Disease (ESRD) program. Due to the sensitivity of the data being collected and reported, we must ensure that only authorized personnel have access to data. Personnel are given access to the ESRD systems through the creation of user IDs and passwords within the QualityNet Identity Management System (QIMS); however, once within the system, the system determines the rights and privileges the personnel has over the data within the system. Such access rights include: Viewing and reporting, updating adding and deleting.

The sole purpose of the ESRD Application Access Request Form is to

identify the individual's data access rights once within the ESRD system. This data collection is currently being accomplished under "Part B" of the QualityNet Identity Management System Account Form. Once the ESRD Application Access Form is approved, the QualityNet Identity Management System (QIMS) Account Form will be revised to remove Part B from the QIMS data collection. The ESRD Application Access Request Form will be a new form and will be assigned its own OMB Control number. The ESRD system accounts created using the current QIMS Account Form—Part B will not need to submit an ESRD Application Access Form for the creation of their account since that information was collected under Part B.

The QIMS Account Registration and the ESRD Application Access Request forms are required for identity and security management of individuals accessing the Consolidated Renal Operations in a Web Enabled Network (CROWNWeb) system and the End Stage Renal Disease Quality Incentive Program (ESRD QIP) system. The CROWNWeb system is the system that is mandated for the Medicare and Medicaid Programs Conditions of Coverage for End-Stage Renal Disease Facilities, Final Rule published April 15, 2008. *Form Number:* CMS-10484 (OCN: 0938—NEW); *Frequency:* Annually; *Affected Public:* Business and other for-profits and not-for-profits; *Number of Respondents:* 27,000; *Total Annual Responses:* 27,000; *Total Annual Hours:* 6,750. (For policy questions regarding this collection contact Victoria Schlining at 410-786-6878.)

2. Type of Information Collection Request: Reinstatement with change of a previously approved collection; *Title of Information Collection:* Home Health Conditions of Participation (CoP) and Supporting Regulations; *Use:* The information collection requirements contained in this request are part of the requirements classified as the conditions of participation (CoPs) which are based on criteria prescribed in law and are standards designed to ensure that each facility has properly trained staff to provide the appropriate safe physical environment for patients. These particular standards reflect comparable standards developed by industry organizations such as the Joint Commission on Accreditation of Healthcare Organizations, and the Community Health Accreditation Program. The primary users of this information will be state agency surveyors, the regional home health intermediaries, CMS and home health

agencies (HHAs) for the purpose of ensuring compliance with Medicare CoPs as well as ensuring the quality of care provided by HHA patients. *Form Numbers:* CMS-R-39 (OCN: 0938-0365); *Frequency:* Occasionally; *Affected Public:* Business or for-profits, Not-for-profit institutions, and State, Local or Tribal governments; *Number of Respondents:* 13,577; *Total Annual Responses:* 20,202,576; *Total Annual Hours:* 6,422,694. (For policy questions regarding this collection contact Danielle Shearer at 410-786-6617.)

3. Type of Information Collection Request: New collection (Request for a new OMB control number); *Title of Information Collection:* Medicare Prior Authorization of Power Mobility Devices (PMDs) Demonstration; *Use:* The purpose of the Medicare Prior Authorization of Power Mobility Devices Demonstration (the Demonstration) is to ensure that payments for PMDs are appropriate before the claims are paid, thereby preventing the fraud, waste, and abuse in the seven states participating in the Demonstration: California, Florida, Illinois, Michigan, New York, North Carolina and Texas. Additional benefits of the Demonstration include ensuring that a beneficiary's medical condition warrants their medical equipment under existing coverage guidelines and preserving their ability to receive quality products from accredited suppliers. In order to gather qualitative information for analysis, the evaluation team will use semi-structured interview guides that focus on the direct impact of the Demonstration on stakeholder groups. Stakeholders will be drawn from advocacy organizations, power mobility device supply companies, state and local government, and healthcare practitioners. This information collection request explains the research methodology and data collection strategies designed to minimize the burden placed on research participants, while effectively gathering the data needed for the evaluation of the Demonstration. *Form Number:* CMS-10471 (OCN: 0938—NEW); *Frequency:* Yearly; *Affected Public:* Private sector (business or other for-profit and not-for-profit institutions) and State and Local Governments; *Number of Respondents:* 281; *Total Annual Responses:* 281; *Total Annual Hours:* 317. (For policy questions regarding this collection contact Andrea Glasgow at 410-786-4695. For all other issues call 410-786-1326.)

Dated: September 26, 2013.

Martique Jones,

Deputy Director, Regulations Development Group, Office of Strategic Operations and Regulatory Affairs.

[FR Doc. 2013-24033 Filed 10-2-13; 8:45 am]

BILLING CODE 4120-01-P

DEPARTMENT OF HEALTH AND HUMAN SERVICES

Food and Drug Administration

[Docket No. FDA-2013-N-0747]

Assessment of the Risk of Human Salmonellosis Associated With the Consumption of Tree Nuts; Request for Comments, Scientific Data and Information; Extension of Comment Period

AGENCY: Food and Drug Administration, HHS.

ACTION: Notice; extension of comment period.

SUMMARY: The Food and Drug Administration (FDA or we) is extending the comment period for the notice entitled "Assessment of the Risk of Human Salmonellosis Associated With the Consumption of Tree Nuts; Request for Comments, Scientific Data and Information" that appeared in the **Federal Register** of July 18, 2013 (78 FR 42963). In the notice, FDA requested comments and data relevant to conducting an assessment of the risk of human salmonellosis associated with the consumption of tree nuts. We are taking this action in response to requests for an extension to allow interested persons additional time to submit comments, scientific data, and information.

DATES: We are extending the comment period on the notice. Submit either electronic or written comments and scientific data and information by December 16, 2013.

ADDRESSES: Submit electronic comments and scientific data and information to <http://www.regulations.gov>. Submit written comments and scientific data and information to the Division of Dockets Management (HFA-305), Food and Drug Administration, 5630 Fishers Lane, Rm. 1061, Rockville, MD 20852.

FOR FURTHER INFORMATION CONTACT: Sherri Dennis, Center for Food Safety and Applied Nutrition (HFS-06), Food and Drug Administration, 5100 Paint Branch Pkwy., College Park, MD 20740, 240-402-1914.

SUPPLEMENTARY INFORMATION:

I. Background

In the **Federal Register** of July 18, 2013 (78 FR 42963), we published a notice entitled “Assessment of the Risk of Human Salmonellosis Associated With the Consumption of Tree Nuts; Request for Comments, Scientific Data and Information.” The notice provided a 90-day comment period for comments, scientific data, and information relevant to conducting an assessment of the risk of human salmonellosis associated with the consumption of tree nuts.

We have received three requests for an extension of the comment period for the notice. Each request conveyed concern that the current 90-day comment period is not adequate to develop a response to the notice.

We have considered these requests and are extending the comment period for the notice for 60 days, until December 16, 2013. We believe that a 60-day extension allows adequate time for interested persons to submit comments, scientific data, and information without significantly delaying the risk assessment.

II. Comments

Interested persons may submit either electronic comments and scientific data and information to <http://www.regulations.gov> or written comments and scientific data and information to the Division of Dockets Management (see **ADDRESSES**). It is only necessary to send one set of comments. Identify comments with the docket number found in brackets in the heading of this document. Received comments may be seen in the Division of Dockets Management between 9 a.m. and 4 p.m., Monday through Friday, and will be posted to the docket at <http://www.regulations.gov>.

Dated: September 27, 2013.

Leslie Kux,

Assistant Commissioner for Policy.

[FR Doc. 2013-24171 Filed 10-2-13; 8:45 am]

BILLING CODE 4160-01-P

DEPARTMENT OF HEALTH AND HUMAN SERVICES

Health Resources and Services Administration

Agency Information Collection Activities: Submission to OMB for Review and Approval; Public Comment Request

AGENCY: Health Resources and Services Administration, HHS.

ACTION: Notice.

SUMMARY: In compliance with Section 3507(a)(1)(D) of the Paperwork Reduction Act of 1995, the Health Resources and Services Administration (HRSA) has submitted an Information Collection Request (ICR) to the Office of Management and Budget (OMB) for review and approval. Comments submitted during the first public review of this ICR will be provided to OMB. OMB will accept further comments from the public during the review and approval period.

DATES: Comments on this ICR should be received within 30 days of this notice.

ADDRESSES: Submit your comments, including the Information Collection Request Title, to the desk officer for HRSA, either by email to OIRA_submission@omb.eop.gov or by fax to 202-395-5806.

FOR FURTHER INFORMATION CONTACT: To request a copy of the clearance requests submitted to OMB for review, email the HRSA Information Collection Clearance Officer at paperwork@hrsa.gov or call (301) 443-1984.

SUPPLEMENTARY INFORMATION:

Information Collection Request Title: Nurse Anesthetist Traineeship (NAT) Program Application

OMB No. 0915-xxxx-NEW.

Abstract: The Health Resources and Services Administration (HRSA) provides advanced education nursing training grants to educational institutions to increase the numbers of Nurse Anesthetists through the NAT Program. The NAT Program is governed by Title VIII, Section 811(a)(2) of the Public Health Service Act, (42 U.S.C. 296j(a)(2)), as amended by Section 5308 of the Patient Protection and Affordable Care Act, Public Law 111-148. The NAT application will use the SF-424 R & R Short Form which includes the Project Abstract, Program Narrative, NAT Attachments, and the NAT Tables. The application and proposed NAT Tables will request information on program participants such as the number of enrollees, number of enrollees/trainees supported, number of graduates, number of graduates supported, projected data on enrollees/trainees and graduates for the previous fiscal year, the types of programs they are enrolling into and/or from which enrollees/trainees are graduating, and the distribution of Nurse Anesthetists to practice in underserved, rural, or public health practice settings.

Need and Proposed Use of the Information: Funds appropriated for the NAT Program are distributed among eligible institutions based on a formula. NAT award amounts are based on enrollment and graduate data and two funding factors (Statutory Funding Preference and Special Consideration) reported on the NAT Tables. HRSA will use the data from the application, specifically the NAT Tables, to determine the award, ensure programmatic compliance, and provide information to the public and Congress.

Likely Respondents: Eligible applicants are collegiate schools of nursing, nursing centers, academic health centers, state or local governments, and other public or private nonprofit entities determined appropriate by the Secretary that submit an application and are accredited for the provision of nurse anesthesia educational program by designated accrediting organizations. Eligible applicants must be accredited by the Council on Accreditation (COA) of Nurse Anesthesia Educational Programs of the American Association of Nurse Anesthetists. The school must be located in the 50 states, the District of Columbia, the Commonwealth of Puerto Rico, the Northern Mariana Islands, American Samoa, Guam, the U.S. Virgin Islands, the Federated States of Micronesia, the Republic of the Marshall Islands, or the Republic of Palau.

Burden Statement: Burden in this context means the time expended by persons to generate, maintain, retain, disclose or provide the information requested. This includes the time needed to review instructions; to develop, acquire, install and utilize technology and systems for the purpose of collecting, validating and verifying information, processing and maintaining information, and disclosing and providing information; to train personnel and to be able to respond to a collection of information; to search data sources; to complete and review the collection of information; and to transmit or otherwise disclose the information. The total annual burden hours estimated for this ICR are summarized in the table below.

TOTAL ESTIMATED ANNUALIZED BURDEN—HOURS

Type of respondent	Form name	Number of respondents	Number of responses per respondent	Average burden per response (in hours)	Total burden hours
Grantee	NAT Application including attachments	100	1	4.02	402
Grantee	Table 1—NAT: Enrollment, Traineeship Support, Graduate, Graduates Supported, and Projected Data.	100	1	3.40	340
Grantee	Table 2A—NAT: Graduate Data—Rural, Underserved, or Public Health (7/01/XX–6/30/XX).	100	1	2.78	278
Grantee	Table 2B—NAT: Graduates Supported by Traineeship Data—Rural, Underserved, or Public Health (7/01/XX–6/30/XX).	100	1	1.84	184
Total .....	.....	100	.....	.....	1204

Dated: September 26, 2013.

Bahar Niakan,

Director, Division of Policy and Information Coordination.

[FR Doc. 2013–24269 Filed 10–2–13; 8:45 am]

BILLING CODE 4165–15–P

DEPARTMENT OF HEALTH AND HUMAN SERVICES

Health Resources and Services Administration

Agency Information Collection Activities; Proposed Collection; Public Comment Request

AGENCY: Health Resources and Services Administration, HHS.

ACTION: Notice.

SUMMARY: In compliance with the requirement for opportunity for public comment on proposed data collection projects (Section 3506(c)(2)(A) of the Paperwork Reduction Act of 1995), the Health Resources and Services Administration (HRSA) announces plans to submit an Information Collection Request (ICR), described below, to the Office of Management and Budget (OMB). Prior to submitting the ICR to OMB, HRSA seeks comments from the public regarding the burden estimate, below, or any other aspect of the ICR.

DATES: Comments on this Information Collection Request must be received within 60 days of this notice.

ADDRESSES: Submit your comments to paperwork@hrsa.gov or mail the HRSA Information Collection Clearance Officer, Room 10–29, Parklawn Building, 5600 Fishers Lane, Rockville, MD 20857.

FOR FURTHER INFORMATION CONTACT: To request more information on the proposed project or to obtain a copy of the data collection plans and draft instruments, email paperwork@hrsa.gov

or call the HRSA Information Collection Clearance Officer at (301) 443–1984.

SUPPLEMENTARY INFORMATION: When submitting comments or requesting information, please include the information request collection title for reference.

Information Collection Request Title: Understanding and Monitoring Funding Streams in Ryan White Clinics.

OMB No. 0915–xxxx—New.

Abstract: The HRSA's HIV/AIDS Bureau (HAB) administers the Ryan White HIV/AIDS Program (RWHAP) authorized under Title XXVI of the Public Health Service Act as amended by the Ryan White HIV/AIDS Treatment Extension Act of 2009. Established in 1990, the RWHAP is a federally funded program designed to provide HIV-related medical care and treatment as well as support service for individuals and families affected by the disease who are uninsured or underinsured. The Program consists of several “Parts,” corresponding to sections of the statute, through which funding is provided to states, cities, providers, and other organizations. Part A provides emergency relief for areas with substantial need for HIV/AIDS care and support services that are most severely affected by the HIV/AIDS epidemic, including eligible metropolitan areas (EMAs) and transitional grant areas (TGAs). Part B provides grants to states and U.S. territories to improve the quality, availability, and organization of HIV/AIDS health care and support services. Part B grants include a base grant; the AIDS Drug Assistance Program (ADAP) award; ADAP Supplemental Drug Treatment Program funds; and supplemental grants to states with “emerging communities,” defined as jurisdictions reporting between 500 and 999 cumulative AIDS cases over the most recent 5 years. The Part C Early Intervention Services (EIS) component of the Ryan White HIV/AIDS Program funds comprehensive primary health

care in outpatient settings for people living with HIV disease. Part D grantees provide outpatient or ambulatory family-centered primary medical care for women, infants, children, and youth with HIV/AIDS.

In 2010, the Patient Protection and Affordable Care Act (ACA) was enacted into law. The ACA is expansive and will likely impact the RWHAP. Some of the reforms have already been implemented (including the creation of Pre-Existing Insurance Plans) and the barring of insurance carriers from denying coverage to children with pre-existing conditions such as HIV/AIDS, cancelling coverage for adults with health conditions because of unintentional mistakes on the application, and imposing lifetime dollar caps on essential health benefits. Effective January 2014, states will have the option to expand Medicaid to individuals younger than 65 years of age with incomes up to 133 percent of the federal poverty level (FPL). On October 1, 2013, insurance marketplaces (exchanges) from which individuals can purchase health insurance will begin open enrollment, with coverage to begin as early as January 1, 2014. Individuals with incomes from up to 400 percent FPL may be eligible for tax credits to reduce premium costs. Individuals with lower incomes may also be eligible for reductions in cost-sharing.

The proposed study will provide HAB and policymakers with a better understanding of how the RWHAP currently provides primary outpatient health care and essential support services to both uninsured and underinsured clients. It will identify what types of core medical services and subservices, and support services are currently not covered or not fully covered by Medicaid, Medicare, and private insurance, which are needed to provide high quality HIV/AIDS care. The study also will provide information on how grantees monitor patient

healthcare coverage (e.g., payer source, type of insurance) and the cost of care. Together, this information will help HAB understand the abilities of Part C and Part D grantees to support and track expanded health insurance enrollment for their clients and to adapt to the changing funding landscape. The study will also collect information on what processes are used and what types of data are stored within their data information systems. Information about data information systems will be used to support the development of a technical assistance tracker for RWHAP grantees to monitor and assess changes in the mix of funding sources used to pay for primary health care and essential support services to PLWHA as the ACA is fully implemented.

Lastly, the study will gather information regarding Part C and Part D grantees' level of participation in state-sponsored initiatives for the development of health homes, their relationship with managed care organizations, and their status regarding

recognition as a Patient Centered Medical Home. This information will provide some basic information regarding grantees' abilities to continue to service PLWHA as the ACA is implemented differently among the states.

The Ryan White Funding Streams Survey (Survey) will be used to collect this information. The survey will collect both qualitative and quantitative data and will be administered online to program directors from a representative sample of Part C and Part D grantees. The Survey contains 32 questions that capture information about the different funding streams used for the provision of services to PLWHA; grantees' abilities to track health insurance, funding sources, and costs of care; and their relationship with managed care organizations. The data provided through the survey will not contain individual or personally identifiable information. This information will inform HAB in the development of future RWHAP policy. It will also assist

HAB in the final development of the technical assistance tracking tool for grantees.

Burden Statement: Burden in this context means the time expended by persons to generate, maintain, retain, disclose or provide the information requested. This includes the time needed to review instructions; to develop, acquire, install and utilize technology and systems for the purpose of collecting, validating and verifying information, processing and maintaining information, and disclosing and providing information; to train personnel and to be able to respond to a collection of information; to search data sources; to complete and review the collection of information; and to transmit or otherwise disclose the information. The total annual burden hours estimated for this Information Collection Request are summarized in the table below.

Total Estimated Annualized burden hours:

Form	Number of respondents	Number of responses per respondent	Total responses	Average burden per response (in hours)	Total burden hours
Survey	120	1	120	4.7	564

HRSA specifically requests comments on (1) the necessity and utility of the proposed information collection for the proper performance of the agency's functions, (2) the accuracy of the estimated burden, (3) ways to enhance the quality, utility, and clarity of the information to be collected, and (4) the use of automated collection techniques or other forms of information technology to minimize the information collection burden.

Dated: September 26, 2013.

Bahar Niakan,

Director, Division of Policy and Information Coordination.

[FR Doc. 2013-24251 Filed 10-2-13; 8:45 am]

BILLING CODE 4165-15-P

DEPARTMENT OF HEALTH AND HUMAN SERVICES

Health Resources and Services Administration

Agency Information Collection Activities: Submission to OMB for Review and Approval; Public Comment Request

AGENCY: Health Resources and Services Administration, HHS.

ACTION: Notice.

SUMMARY: In compliance with Section 3507(a)(1)(D) of the Paperwork Reduction Act of 1995, the Health Resources and Services Administration (HRSA) has submitted an Information Collection Request (ICR) to the Office of Management and Budget (OMB) for review and approval. Comments submitted during the first public review of this ICR will be provided to OMB. OMB will accept further comments from the public during the review and approval period.

DATES: Comments on this ICR should be received within 30 days of this notice.

ADDRESSES: Submit your comments, including the Information Collection Request Title, to the desk officer for HRSA, either by email to OIRA_submission@omb.eop.gov or by fax to 202-395-5806.

FOR FURTHER INFORMATION CONTACT: To request a copy of the clearance requests submitted to OMB for review, email the HRSA Information Collection Clearance Officer at paperwork@hrsa.gov or call (301) 443-1984.

SUPPLEMENTARY INFORMATION:

Information Collection Request Title: Advanced Education Nursing Traineeship (AENT) Program Application

OMB No. 0915-xxxx-NEW

Abstract: The Health Resources and Services Administration (HRSA) provides advanced education nursing training grants to educational institutions to increase the numbers of advanced education nurses through the AENT Program. The AENT Program is governed by Title VIII, Section 811(a)(2) of the Public Health Service Act, (42 U.S.C. 296j(a)(2)). This new request includes the Project Abstract, Program Narrative, Attachments and Tables. The proposed AENT Tables will include data on the distribution of graduates from the organization who are working in rural, underserved, or public health settings, as well as the distribution of graduates who received traineeship support and are working in rural, underserved, or public health settings; and the number of projected students to receive traineeship support by their enrollment status (full-time or part-time), the degree program (master's, post-nursing master's certificate or doctoral) and the specialty they are enrolled in (nurse practitioner or nurse

midwifery) by budget year one and by budget year two.

Need and Proposed Use of the Information: The Project Abstract is often distributed to provide information to the public and Congress. HRSA will use this information gathered from the tables in determining the amount of traineeship support to be awarded per student, per institution, and to succinctly capture data for the number of projected students for determining eligibility for Special Consideration and Statutory Funding Preference.

Likely Respondents: Eligible applicants are schools of nursing, nursing centers, academic health centers, state or local governments, and other public or private nonprofit entities

determined appropriate by the Secretary that submit an application and are accredited for the provision of primary care nurse practitioner and nurse midwifery programs by a national nurse education accrediting agency recognized by the Secretary of the U.S. Department of Education. The school must be located in the 50 states, the District of Columbia, Guam, the Commonwealth of Puerto Rico, the Northern Mariana Islands, American Samoa, the U.S. Virgin Islands, the Federated States of Micronesia, the Republic of the Marshall Islands, or the Republic of Palau.

Burden Statement: Burden in this context means the time expended by

persons to generate, maintain, retain, disclose or provide the information requested. This includes the time needed to review instructions; to develop, acquire, install and utilize technology and systems for the purpose of collecting, validating and verifying information, processing and maintaining information, and disclosing and providing information; to train personnel and to be able to respond to a collection of information; to search data sources; to complete and review the collection of information; and to transmit or otherwise disclose the information. The total annual burden hours estimated for this ICR are summarized in the table below.

TOTAL ESTIMATED ANNUALIZED BURDEN—HOURS

Type of respondent	Form name	Number of respondents	Number responses per respondent	Average burden per response (in hours)	Total hour burden
Grantee	AENT application and attachments	70	1	49.2	3444
Grantee	Table 1a: Rural, Underserved, or Public health Practice Settings: Graduate Data.	70	1	3.19	223
Grantee	Table 1b: Rural, Underserved, or Public health Practice Settings: Graduates Supported Data.	70	1	3.19	223
Grantee	Table 2a: Number of Projected Master Degree and Post Nursing Master's Certificate Student to Receive Traineeship Support by Role (budget year 1 and budget year 2).	70	1	3.1	217
Grantee	Table 2b: Number of Projected Doctoral (PhD and/or DNP) Degree Nursing Students to Receive Traineeship Support by Role (budget year 1 and budget year 2).	70	1	3.1	217
Total .....	.....	70	.....	.....	4324

Dated: September 26, 2013.

Bahar Niakan,

Director, Division of Policy and Information Coordination.

[FR Doc. 2013-24308 Filed 10-2-13; 8:45 am]

BILLING CODE 4165-15-P

DEPARTMENT OF HEALTH AND HUMAN SERVICES

Health Resources and Services Administration

Agency Information Collection Activities: Submission to OMB for Review and Approval; Public Comment Request

AGENCY: Health Resources and Services Administration, HHS.

ACTION: Notice.

SUMMARY: In compliance with Section 3507(a)(1)(D) of the Paperwork Reduction Act of 1995, the Health Resources and Services Administration (HRSA) has submitted an Information

Collection Request (ICR) to the Office of Management and Budget (OMB) for review and approval. Comments submitted during the first public review of this ICR will be provided to OMB. OMB will accept further comments from the public during the review and approval period.

DATES: Comments on this ICR should be received within 30 days of this notice.

ADDRESSES: Submit your comments, including the Information Collection Request Title, to the desk officer for HRSA, either by email to OIRA_submission@omb.eop.gov or by fax to 202-395-5806.

FOR FURTHER INFORMATION CONTACT: To request a copy of the clearance requests submitted to OMB for review, email the HRSA Information Collection Clearance Officer at paperwork@hrsa.gov or call (301) 443-1984.

SUPPLEMENTARY INFORMATION:

Information Collection Request Title: Scholarships for Disadvantaged

Students Application Program Specific Form.

OMB No.: 0915-0149—Revision.

Abstract: The purpose of the Scholarships for Disadvantaged Students (SDS) Program is to promote diversity among health profession students and practitioners by providing funds to eligible schools to provide scholarships to full-time, financially needy students from disadvantaged backgrounds enrolled in health professions and nursing programs. To qualify for participation in the SDS program, a school must be carrying out a program for recruiting and retaining students from disadvantaged backgrounds, including students who are members of racial and ethnic minority groups (section 737(d)(1)(B) of the Public Health Service Act). A school must meet the eligibility criteria to demonstrate that the program has achieved success based on the number and/or percentage of disadvantaged students who graduate from the school. In awarding SDS funds to eligible

schools, funding points must be given to schools based on the proportion of graduate students practicing in primary care, the proportion of underrepresented minority students, and the proportion of graduates working in medically underserved communities (section 737(c) of the Public Health Service Act).

Need and Proposed Use of Information: Information collected for the SDS application is needed by the Department to determine whether applicant schools meet the statutory and regulatory requirements, to determine eligibility for program participation, and to establish priority points for funding. Applicant schools are requested to complete an application for each discipline or program. Data are provided on the applicant school's number of full-time student enrollment and its racial/ethnicity data, disadvantaged full-time enrollment by class year, full-time

students graduated, full-time disadvantaged students graduated, and full-time graduates serving in Medically Underserved Communities. Numbers of full-time graduates serving primary care must be provided only for schools of medicine, osteopathic medicine, dentistry, nursing (graduate degree program), physician assistants, dental hygiene, and mental and behavioral health. Each school will determine the eligibility of students based on financial need and whether a student is from a disadvantaged background.

Likely Respondents: Schools that participate in the SDS program. Students must be from a disadvantaged background as defined by the U.S. Department of Health and Human Services and must be a citizen, national, or a lawful permanent resident of the United States (see definition at [http://](http://www.hrsa.gov/loanscholarships/scholarships/disadvantaged.html)

www.hrsa.gov/loanscholarships/scholarships/disadvantaged.html).

Burden Statement: Burden in this context means the time expended by persons to generate, maintain, retain, disclose or provide the information requested. This includes the time needed to review instructions; to develop, acquire, install and utilize technology and systems for the purpose of collecting, validating and verifying information, processing and maintaining information, and disclosing and providing information; to train personnel and to be able to respond to a collection of information; to search data sources; to complete and review the collection of information; and to transmit or otherwise disclose the information. The total annual burden hours estimated for this ICR are summarized in the table below.

TOTAL ESTIMATED ANNUALIZED BURDEN—HOURS

Form name	Number of respondents	Number of responses per respondent	Total responses	Average burden per response (in hours)	Total burden hours
Application—Program Specific Form	400	1	400	22	8,800
Total	400	1	400	22	8,800

Dated: September 26, 2013.

Bahar Niakan,

Director, Division of Policy and Information Coordination.

[FR Doc. 2013-24306 Filed 10-2-13; 8:45 am]

BILLING CODE 4165-15-P

DEPARTMENT OF HEALTH AND HUMAN SERVICES

Health Resources and Services Administration

National Vaccine Injury Compensation Program; List of Petitions Received

AGENCY: Health Resources and Services Administration, HHS.

ACTION: Notice.

SUMMARY: The Health Resources and Services Administration (HRSA) is publishing this notice of petitions received under the National Vaccine Injury Compensation Program (“the Program”), as required by Section 2112(b)(2) of the Public Health Service (PHS) Act, as amended. While the Secretary of Health and Human Services is named as the respondent in all proceedings brought by the filing of petitions for compensation under the Program, the United States Court of

Federal Claims is charged by statute with responsibility for considering and acting upon the petitions.

FOR FURTHER INFORMATION CONTACT: For information about requirements for filing petitions, and the Program in general, contact the Clerk, United States Court of Federal Claims, 717 Madison Place NW., Washington, DC 20005, (202) 357-6400. For information on HRSA's role in the Program, contact the Director, National Vaccine Injury Compensation Program, 5600 Fishers Lane, Room 11C-26, Rockville, MD 20857; (301) 443-6593.

SUPPLEMENTARY INFORMATION: The Program provides a system of no-fault compensation for certain individuals who have been injured by specified childhood vaccines. Subtitle 2 of Title XXI of the PHS Act, 42 U.S.C. 300aa-10 *et seq.*, provides that those seeking compensation are to file a petition with the U.S. Court of Federal Claims and to serve a copy of the petition on the Secretary of Health and Human Services, who is named as the respondent in each proceeding. The Secretary has delegated her responsibility under the Program to HRSA. The Court is directed by statute to appoint special masters who take evidence, conduct hearings as

appropriate, and make initial decisions as to eligibility for, and amount of, compensation.

A petition may be filed with respect to injuries, disabilities, illnesses, conditions, and deaths resulting from vaccines described in the Vaccine Injury Table (the Table) set forth at Section 2114 of the PHS Act or as set forth at 42 CFR 100.3, as applicable. This Table lists for each covered childhood vaccine the conditions which may lead to compensation and, for each condition, the time period for occurrence of the first symptom or manifestation of onset or of significant aggravation after vaccine administration. Compensation may also be awarded for conditions not listed in the Table and for conditions that are manifested outside the time periods specified in the Table, but only if the petitioner shows that the condition was caused by one of the listed vaccines.

Section 2112(b)(2) of the PHS Act, 42 U.S.C. 300aa-12(b)(2), requires that “[w]ithin 30 days after the Secretary receives service of any petition filed under section 2111 the Secretary shall publish notice of such petition in the **Federal Register**.” Set forth below is a list of petitions received by HRSA on August 1, 2013, through August 30, 2013. This list provides the name of

petitioner, city and state of vaccination (if unknown then city and state of person or attorney filing claim), and case number. In cases where the Court has redacted the name of a petitioner and/or the case number, the list reflects such redaction.

Section 2112(b)(2) also provides that the special master “shall afford all interested persons an opportunity to submit relevant, written information” relating to the following:

1. The existence of evidence “that there is not a preponderance of the evidence that the illness, disability, injury, condition, or death described in the petition is due to factors unrelated to the administration of the vaccine described in the petition,” and

2. Any allegation in a petition that the petitioner either:

(a) “Sustained, or had significantly aggravated, any illness, disability, injury, or condition not set forth in the Vaccine Injury Table but which was caused by” one of the vaccines referred to in the Table, or

(b) “Sustained, or had significantly aggravated, any illness, disability, injury, or condition set forth in the Vaccine Injury Table the first symptom or manifestation of the onset or significant aggravation of which did not occur within the time period set forth in the Table but which was caused by a vaccine” referred to in the Table.

In accordance with Section 2112(b)(2), all interested persons may submit written information relevant to the issues described above in the case of the petitions listed below. Any person choosing to do so should file an original and three (3) copies of the information with the Clerk of the U.S. Court of Federal Claims at the address listed above (under the heading **FOR FURTHER INFORMATION CONTACT**), with a copy to HRSA addressed to Director, Division of Vaccine Injury Compensation Program, Healthcare Systems Bureau, 5600 Fishers Lane, Room 11C-26, Rockville, MD 20857. The Court’s caption (Petitioner’s Name v. Secretary of Health and Human Services) and the docket number assigned to the petition should be used as the caption for the written submission. Chapter 35 of title 44, United States Code, related to paperwork reduction, does not apply to information required for purposes of carrying out the Program.

Dated: September 27, 2013.

Mary K. Wakefield,
Administrator.

List of Petitions Filed

1. Bettine DeLea, Venice, Florida, Court of Federal Claims No: 13–0531V
2. Janet Louise Stone, Bolivar, West Virginia, Court of Federal Claims No: 13–0533V
3. Rhonda Throldahl on behalf of Raymond Black, Jr., Deceased, Mankato, Minnesota, Court of Federal Claims No: 13–0534V
4. Bridget Bartsch, Pewaukee, Wisconsin, Court of Federal Claims No: 13–0536V
5. William K. Lavelle, Wilkes-Barre, Pennsylvania, Court of Federal Claims No: 13–0537V
6. Lana Como, Hudson, New York, Court of Federal Claims No: 13–0538V
7. Brooke Etter, Palmyra, Pennsylvania, Court of Federal Claims No: 13–0540V
8. Kevin McErlean, Colts Neck, New Jersey, Court of Federal Claims No: 13–0543V
9. Terry L. Kegler, Ft. Braggs, North Carolina, Court of Federal Claims No: 13–0544V
10. Susan Carlisle, Dallas, Texas, Court of Federal Claims No: 13–0547V
11. Sharon Rosenbaum, Pawleys Island, South Carolina, Court of Federal Claims No: 13–0548V
12. Teresa Valdez, Denver, Colorado, Court of Federal Claims No: 13–0549V
13. Christopher Marconi, Phoenix, Arizona, Court of Federal Claims No: 13–0550V
14. Iluminada Casillas, Port Richey, Florida, Court of Federal Claims No: 13–0551V
15. Gigi H. Corum, Wentworth, North Carolina, Court of Federal Claims No: 13–0554V
16. Laura M. Hidalgo, St. Paul, Minnesota, Court of Federal Claims No: 13–0555V
17. Korey Floyd, Roanoke Rapids, North Carolina, Court of Federal Claims No: 13–0556V
18. Gabriela Gomez, Canoga Park, California, Court of Federal Claims No: 13–0557V
19. Anthony DeCosta, Cranston, Rhode Island, Court of Federal Claims No: 13–0559V
20. Jimmy Tillman, Baton Rouge, Louisiana, Court of Federal Claims No: 13–0561V
21. Ishwar and Penny Gopichand on behalf of Chelsea Kathryn Gopichand, Jacksonville, North Carolina, Court of Federal Claims No: 13–0562V
22. Kathleen Schram, Chicago, Illinois, Court of Federal Claims No: 13–0566V
23. Dawn Brown on behalf of Britteny Dews, Deceased, Marblehead, Massachusetts, Court of Federal Claims No: 13–0569V
24. Catherine Gertrude McCabe, Somers Point, New Jersey, Court of Federal Claims No: 13–0570V
25. Alicia Crawford on behalf of K.C., Richardson, Texas, Court of Federal Claims No: 13–0574V
26. Heather and Matthew Scheidegger on behalf of Troy Scheidegger, Boca Raton, Florida, Court of Federal Claims No: 13–0577V
27. Kenneth P. Silverman on behalf of John N. Kump, Deceased, Medford, New York, Court of Federal Claims No: 13–0579V
28. Melanie Wood on behalf of L.W., Deceased, Jackson, Tennessee, Court of Federal Claims No: 13–0580V
29. Amber Franklin on behalf of Sydnie Franklin, Farmington Hills, Michigan, Court of Federal Claims No: 13–0582V
30. Elizabeth Buneo on behalf of Nicholas Buneo, Rome, New York, Court of Federal Claims No: 13–0589V
31. Greg and Angela Palattao on behalf of Ryan Palattao, Minneapolis, Minnesota, Court of Federal Claims No: 13–0591V
32. Hazel Brown, Gaithersburg, Maryland, Court of Federal Claims No: 13–0594V
33. Joanna King, Federal Way, Washington, Court of Federal Claims No: 13–0627V
34. Shagufta Malik, Jersey City, New Jersey, Court of Federal Claims No: 13–0595V
35. Eric P. Cabrera and Carol Cabrera on behalf of Liam Cabrera, Orlando, Florida, Court of Federal Claims No: 13–0598V
36. Ronda Morris, Mt. Pleasant, North Carolina, Court of Federal Claims No: 13–0601V
37. Lucille Dalpe, East Providence, Rhode Island, Court of Federal Claims No: 13–0602V
38. Bruce A. Goldsmith, San Francisco, California, Court of Federal Claims No: 13–0603V
39. Anthony Inskeep, Mayfield Heights, Ohio, Court of Federal Claims No: 13–0604V
40. Victoria McWilliams, Newtown Square, Pennsylvania, Court of Federal Claims No: 13–0605V
41. Leonard Kazmierski, Pittsburg, Kansas, Court of Federal Claims No: 13–0606V
42. Joseph Buhler, Oshkosh, Wisconsin, Court of Federal Claims No: 13–0609V
43. Amy Cowen, Boston, Massachusetts, Court of Federal Claims No: 13–0610V
44. Chase Boatman and Maurina Cupid on behalf of J.B., Deceased, Boston,

- Massachusetts, Court of Federal Claims No: 13-0611V
45. Mordichai and Chana Pshemish on behalf of Y.P., Boca Raton, Florida, Court of Federal Claims No: 13-0612V
 46. Bryan Krehnbrink, Boston, Massachusetts, Court of Federal Claims No: 13-0613V
 47. Saro Manoukian, Worcester, Massachusetts, Court of Federal Claims No: 13-0614V
 48. Howard S. Kahn, Baraboo, Wisconsin, Court of Federal Claims No: 13-0615V
 49. James E. Smith, Lake City, Tennessee, Court of Federal Claims No: 13-0617V
 50. John Ryng, Bristol, Connecticut, Court of Federal Claims No: 13-0618V
 51. Ruth Day, Denton, Texas, Court of Federal Claims No: 13-0620V
 52. Latasha George, Lake Charles, Louisiana, Court of Federal Claims No: 13-0621V
 53. Danya Wright, Tarrant, Texas, Court of Federal Claims No: 13-0622V
 54. Joseph Wojtanowski, Providence, Rhode Island, Court of Federal Claims No: 13-0623V
 55. Cynthia M. Morris (Sabin), Dekalb, Illinois, Court of Federal Claims No: 13-0624V
 56. Steven Carpenter, Lander, Wyoming, Court of Federal Claims No: 13-0628V
 57. Cathy L. Jackson, Raleigh, North Carolina, Court of Federal Claims No: 13-0630V
 58. Douglas Orton on behalf of Walter J. Orton, III, Deceased, Grand Island, New York, Court of Federal Claims No: 13-0631V

[FR Doc. 2013-24220 Filed 10-2-13; 8:45 am]

BILLING CODE 4165-15-P

DEPARTMENT OF HEALTH AND HUMAN SERVICES

Health Resources and Services Administration

Advisory Commission of Childhood Vaccines; Request for Nominations for Voting Members

AGENCY: Health Resources and Services Administration, HHS.

ACTION: Notice.

SUMMARY: The Health Resources and Services Administration (HRSA) is requesting nominations of qualified candidates to fill three vacancies on the Advisory Commission on Childhood Vaccines (ACCV). The ACCV was established by Title XXI of the Public

Health Service Act (the Act), as enacted by Public Law (Pub. L.) 99-660 and as subsequently amended, and advises the Secretary of Health and Human Services (the Secretary) on issues related to implementation of the National Vaccine Injury Compensation Program (VICP).

DATES: The agency must receive nominations on or before 60 days after date of publication in the **Federal Register**.

ADDRESSES: All nominations are to be submitted to the Director, Division of Vaccine Injury Compensation, Healthcare Systems Bureau (HSB), HRSA, Parklawn Building, Room 11C-26, 5600 Fishers Lane, Rockville, Maryland 20857.

FOR FURTHER INFORMATION CONTACT: Ms. Amber Berrian, Principal Staff Liaison, Division of Vaccine Injury Compensation, HSB, HRSA, at (301) 443-0845 or email aberrian@hrsa.gov.

SUPPLEMENTARY INFORMATION: Under the authorities that established the ACCV, the Federal Advisory Committee Act of October 6, 1972 (Pub. L. 92-463) and section 2119 of the Act, 42 U.S.C. 300aa-19, as added by Public Law 99-660 and amended, HRSA is requesting nominations for three voting members of the ACCV.

The ACCV advises the Secretary on the implementation of the VICP. The activities of the ACCV include: Recommending changes in the Vaccine Injury Table at its own initiative or as the result of the filing of a petition; advising the Secretary in implementing section 2127 regarding the need for childhood vaccination products that result in fewer or no significant adverse reactions; surveying federal, state, and local programs and activities related to gathering information on injuries associated with the administration of childhood vaccines, including the adverse reaction reporting requirements of section 2125(b); advising the Secretary on the methods of obtaining, compiling, publishing, and using credible data related to the frequency and severity of adverse reactions associated with childhood vaccines; consulting on the development or revision of the Vaccine Information Statements; and recommending to the Director of the National Vaccine Program that vaccine safety research be conducted on various vaccine injuries.

The ACCV consists of nine voting members appointed by the Secretary as follows: (1) Three health professionals, who are not employees of the United States Government and have expertise in the health care of children, and the epidemiology, etiology, and prevention of childhood diseases, and the adverse

reactions associated with vaccines, at least two shall be pediatricians; (2) three members from the general public, at least two shall be legal representatives (parents or guardians) of children who have suffered a vaccine-related injury or death; and (3) three attorneys, at least one shall be an attorney whose specialty includes representation of persons who have suffered a vaccine-related injury or death, and one shall be an attorney whose specialty includes representation of vaccine manufacturers. In addition, the Director of the National Institutes of Health, the Assistant Secretary for Health, the Director of the Centers for Disease Control and Prevention, and the Commissioner of the Food and Drug Administration (or the designees of such officials) serve as nonvoting ex officio members.

Specifically, HRSA is requesting nominations for three voting members of the ACCV representing: (1) A health professional, who has expertise in the health care of children; and the epidemiology, etiology, and prevention of childhood diseases; and (2) a member of the general public who is the legal representative (parent or guardian) of a child who has suffered a vaccine related injury or death; and (3) an attorney with no specific affiliation. Nominees will be invited to serve a 3-year term beginning January 1, 2014, and ending December 31, 2016.

The Department of Health and Human Services (HHS) will consider nominations of all qualified individuals with a view to ensuring that the ACCV includes the areas of subject matter expertise noted above. Individuals may nominate themselves or other individuals, and professional associations and organizations may nominate one or more qualified persons for membership on the ACCV. Nominations shall state that the nominee is willing to serve as a member of the ACCV and appears to have no conflict of interest that would preclude the ACCV membership. Potential candidates will be asked to provide detailed information concerning financial interests, consultancies, research grants, and/or contracts that might be affected by recommendations of the ACCV to permit evaluation of possible sources of conflicts of interest.

A nomination package should include the following information for each nominee: (1) A letter of nomination stating the name, affiliation, and contact information for the nominee, the basis for the nomination (i.e., what specific attributes, perspectives, and/or skills does the individual possess that would benefit the workings of ACCV), and the nominee's field(s) of expertise; (2) a

biological sketch of the nominee and a copy of his/her curriculum vitae; and (3) the name, address, daytime telephone number, and email address at which the nominator can be contacted.

HHS strives to ensure that the membership of HHS federal advisory committee is fairly balanced in terms of points of view presented and the committees function. Every effort is made to ensure that the views of women, all ethnic and racial groups, and people with disabilities are represented on HHS federal advisory committees and, therefore, the Department encourages nominations of qualified candidates from these groups. The Department also encourages geographic diversity in the composition of the Committee. Appointment to this Committee shall be made without discrimination on basis of age, race, ethnicity, gender, sexual orientation, disability, and cultural, religious, or socioeconomic status.

Dated: September 26, 2013.

Bahar Niakan,

Director, Division of Policy and Information Coordination.

[FR Doc. 2013-24304 Filed 10-2-13; 8:45 am]

BILLING CODE 4165-15-P

DEPARTMENT OF HEALTH AND HUMAN SERVICES

National Institutes of Health

Animal Center Master Plan Record of Decision

SUMMARY: The Department of Health and Human Services, the National Institutes of Health (NIH), has decided, after completion of a Final Environmental Impact Statement (FEIS) and a thorough consideration of the public comments on the Draft EIS, to implement the Proposed Action, referred to as the Proposed Action in the Final EIS. This action is for a long-range physical Master Plan for National Institutes of Health Animal Center (NIHAC) located in Dickerson, Maryland. This alternative accounts for potential growth in NIHAC personnel, new construction, additions, renovations, demolitions, and upgrades in site utilities.

Responsible Official: Daniel G. Wheeland, Director, Office of Research Facilities Development and Operations, NIH.

FOR FURTHER INFORMATION CONTACT: Valerie Nottingham, Deputy Director, DEP, ORF, NIH, Building 13, Room 2S11, 9000 Rockville Pike, Bethesda, MD 20892, Phone 301-496-7775, nihnepa@mail.nih.gov.

SUPPLEMENTARY INFORMATION:

Decision

After careful review of the environmental consequences in the Final Environmental Impact Statement for the Master Plan, National Institutes of Health Animal Center, and consideration of public comment throughout the NEPA process, the NIH has decided to implement the Proposed Action described below as the Selected Alternative.

Selected Alternative

The Selected Alternative is intended to be a strategic tool for the efficient allocation of campus resources, the orderly accommodation of future growth, and the creation of an environment, which is both functionally and aesthetically conducive to accomplishing the NIHAC mission. The Selected Alternative will provide a guide for the reasoned and orderly development of the NIHAC campus, one that values and builds on existing resources, corrects current deficiencies and meets changing needs through new construction or renovation. The plan sets forth implementation priorities and a logical sequencing of planned development.

The Selected Alternative is for a long-range physical Master Plan for NIHAC. This alternative covers a 20-year planning period, with reviews every 5 years to ensure that the plan continues to address issues affecting the campus. The alternative addresses the future development of the NIHAC site, including placement of future construction; vehicular and pedestrian circulation on and off-campus; parking within the property boundaries; open space in and around the campus; required setbacks; historic properties; natural and scenic resources; noise; and lighting. This alternative accounts for potential growth in NIHAC personnel, and consequent construction of space over the planning period. Future construction on the site could include such facilities as new animal holding, research laboratories, and support facilities.

NIH will continue to develop NIHAC to accommodate NIH's research needs and required programmatic adjacencies consistent with the commitment to maintain the "campus" character of the site. The alternative advances this objective by programming and locating future NIHAC growth so that new development would tie into the existing utility services and utilities are available to support growth, and establishing development guidelines for future changes to the site that ensure that as the campus grows new development

would be responsive to the context of adjacent neighborhoods or developments. Under the selected alternative, NIHAC's population is anticipated to grow in the next twenty years to a total campus population of 212. The primary growth at the campus would be in intramural research personnel and the administrative and facility staff to support them.

Alternatives Considered

The Proposed Action Alternative and No Action Alternative were the two alternatives analyzed in the Final EIS. The Master Plan covers a 20-year planning period, but will be reviewed every 5 years to ensure that the plan continues to remain current and relevant to the key issues affecting the campus. The alternatives addressed the future development of the NIHAC site, including placement of future construction; vehicular and pedestrian circulation on and off-campus; parking within the property boundaries; open space in and around the campus; required setbacks; historic properties; natural and scenic resources; noise; and lighting. They account for potential growth in NIHAC personnel, and consequent construction of space over the planning period. Future construction on the site could include such facilities as new animal holding, research laboratories, and support facilities.

Factors Involved in the Decision

The Department of Health and Human Services (HHS) requires that NIH facilities have a Master Plan; however, the previous Master Plan for the NIHAC campus was outdated. In addition, factors such as the aging of facilities that were designed only to accommodate temporary use, animal housing facilities that do not provide adequate space for projected increases in animal populations, and research support facilities not being adequate to sustain current and projected programs played a key role. The Master Plan contains information and recommendations to guide development of individual projects. It also serves as a means of informing city and county officials and utilities of future NIHAC development plans so they can anticipate and plan for the potential effects of NIHAC proposals on their systems.

Resources Impacts

The Final EIS describes potential environmental effects of the Selected Alternative. These potential effects are documented in Chapter 3 of the Final EIS. Any potential adverse environmental effects will be avoided or

mitigated through design elements, procedures, and compliance with regulatory and NIH requirements. Potential impacts on air quality are all within government standards (federal, state, and local). NIH does not expect negative effects on the environment or on the citizens of Dickerson from construction and operations at NIHAC.

Summary of Impacts

The following is a summary of potential impacts resulting from the Selected Alternative that the NIH considered when making its decision. No adverse cumulative effects have been identified during the NEPA process. Likewise, no unavoidable or adverse impacts from implementation of the Selected Action have been identified. The Selected Alternative will be beneficial to the long-term productivity of the national and world health communities. Biomedical research conducted at the NIHAC facility will have the potential to advance techniques in disease prevention, develop disease immunizations, and prepare defenses against naturally emerging and re-emerging diseases and against bioweapons. Additionally, the local community will benefit from increased employment, income and, government and public finance.

Housing

NIHAC is located in a very rural area of Dickerson. Temporary impacts during construction are expected to have a minimal effect on the existing rural community.

Education

The current public school capacity in nearby Poolesville would be adequate to accommodate the expected minimal growth caused by the Selected Alternative.

Transportation

The potential increase in vehicular traffic generated by the Master Plan would only minimally contribute to the slight decrease in the level of service on the roadways in the vicinity of the campus. Existing arterial, connector, and local roads surrounding NIHAC are underutilized and have the capacity to support projected traffic increases associated with the Master Plan and the population growth. In addition, NIHAC is relatively isolated from existing and projected local centers of employment, residences, or retail, limiting potential effects on road infrastructure or traffic levels. Therefore, the minor increase in traffic volume associated with the Master plan is not expected to

contribute to significant traffic concerns in the vicinity of NIHAC.

Security

The Master Plan would provide an entrance security and screening center, 100-foot vehicle separation from buildings, access control at loading docks, perimeter fence repair, and an emergency access for the campus to meet recently enacted safety requirements for government facilities.

Employment

If the Selected Alternative is fully implemented, up to only 13 new employees over the current 199 employees would be hired. Some of the new staff members are likely to move to Montgomery County, and possibly the Poolesville area, from outside the region.

Environmental Justice

As no minority or low-income populations occur within the analysis, Environmental Justice will not be discussed.

Visual Quality

The Master Plan's land use plan provides a framework to help organize future development at NIHAC so that similar land use types are consolidated while open space and natural features are preserved. NIHAC would exhibit the same basic types of land use as it does currently, but in a slightly different configuration. The Master Plan does not propose any land use changes outside NIHAC. Therefore, the NIHAC campus is anticipated to remain consistent with the county plan and zoning regulations.

Noise

To limit impacts to nearby residences, NIH would limit construction activities to normal daytime working hours. Under the Master Plan, the ambient noise levels at NIHAC would remain within Maryland and Montgomery County noise thresholds. Furthermore, any minor change in noise levels is not expected to affect the rural character of the site.

Air Quality

Air monitoring data at the stations closest to NIHAC demonstrate that ozone and PM ambient air quality pollutant concentrations have been steadily declining over the past 10 to 20 years (USEPA, 2012a). Therefore, the moderate increase in air emissions under the Master Plan is not expected to result in cumulative negative impacts to regional air quality.

Wastewater/Water Supply

The Master Plan recommends system upgrades and water conservation measures to address the Waste Water Treatment Plant (WWTP) capacity concern. The Master Plan would install an additional filter at the WWTP to increase the treatment capacity. Installation of the new filter, combined with implementation of the potable water conservation measures, should provide sufficient capacity to accommodate wastewater generated under the Master Plan and would accommodate a 20 percent factor of safety. NIH would evaluate the water demands and potential implementation of system upgrades and water conservation measures as they proceed through planning and design for each new facility.

If potable water conservation measures are not fully implemented, or the actual building designs result in greater than anticipated flows, the WWTP would likely require replacement or a major component upgrade. NIH would conduct a detailed study during Phase 1 of the Master Plan to evaluate the need for upgrades to the WWTP. Following the Phase 1 study, NIH would implement WWTP upgrades during Phases 2 and/or 3 of the Master Plan.

Expansion of the WWTP treatment capacity under the Master Plan may require a revised NPDES permit from MDE with updated effluent limitations. Prior to implementing upgrades, NIH would consult with MDE to identify the appropriate review and NPDES permitting requirements, which may involve opportunities for public comment. NIH would continue to operate the WWTP in accordance with the applicable NPDES permit limitations.

Historic Resources

NIH would comply with NHPA Section 106 by consulting with Maryland Historical Trust on the need for particular archeological studies as individual Master Plan project elements are funded, designed, and executed. In the event that eligible prehistoric resources are identified and adverse effects are anticipated, NIH would continue Section 106 consultation with the appropriate consulting parties (which would include MHT and may also include ACHP and Native American tribes) to establish a Memorandum of Agreement (MOA) to resolve adverse effects. Mitigation measures identified through this consultation could include in-place preservation through site avoidance,

protection, or easement acquisition; development and implementation of a data recovery plan to retrieve and analyze the site's resources-implementation of innovative, alternative mitigation measures- or a combination of these measures.

Practicable Means to Avoid or Minimize Potential Environmental Harm From the Selected Alternative

All practicable means to avoid or minimize adverse environmental effects from the Selected Action have been identified and incorporated into the action. The proposed Master Plan construction will be subject to the existing NIHAC pollution prevention, waste management, and safety, security, and emergency response procedures as well as existing environmental permits. Best management practices, spill prevention and control, and stormwater management plans will be followed to appropriately address the construction and operation of the new Master Plan and comply with applicable regulatory and NIH requirements. No additional mitigation measures have been identified.

Pollution Prevention

Air quality permit standards will be met, as will all federal, state, and local requirements to protect the environment and public health.

Conclusion

Based upon review and careful consideration, the NIH has decided to implement the Selected Alternative for a long-range physical Master Plan for NIH Animal Center located in Dickerson, Maryland. The decision accounts for potential growth at NIHAC personnel, and consequent construction of space over the planning period.

The decision was based upon review and careful consideration of the impacts identified in the Final EIS and public comments received throughout the NEPA process.

Dated: September 27, 2013.

Daniel G. Wheeland,

Director, Office of Research Facilities Development and Operations, National Institutes of Health.

[FR Doc. 2013-24205 Filed 10-2-13; 8:45 am]

BILLING CODE 4140-01-P

DEPARTMENT OF HEALTH AND HUMAN SERVICES

National Institutes of Health

Prospective Grant of Exclusive License: Use of Quaking-Induced Conversion (QUIC) for Detection of Prions

AGENCY: National Institutes of Health, HHS.

ACTION: Notice.

SUMMARY: This is notice, in accordance with 35 U.S.C. 209 and 37 CFR part 404, that the National Institutes of Health (NIH), Department of Health and Human Services, is contemplating the grant of an exclusive license to practice the inventions embodied in U.S. provisional Application 60/961,364 filed July 20, 2007 [E-109-2007/0-US-01], PCT/US2008/070656, filed July 21, 2008; [E-109-2007/1-PCT-01], EPC application No 08796382.3 filed July 21, 2008 [E-109-2007/1-EP-03], US Application No. 12/177,012, filed July 21, 2008 and issued as US patent 8,216,788 on July 10, 2012 [E-109-2007/1-US-02], and US Application No. 13/489,321, filed June 5, 2012 [E-109-2007/1-US-04]; Each entitled "*Detection of Infectious Prion Protein by Seeded Conversion of Recombinant Prion Protein*" By Byron Caughey et al. to Prionics AG having a place of business at Wagistrasse 27a CH-8952 Schlieren-Zurich, Switzerland. The patent rights in this invention have been assigned to the United States of America.

DATES: Only written comments and/or application for a license that are received by the NIH Office of Technology Transfer on or before November 4, 2013 will be considered.

ADDRESSES: Requests for a copy of the patent application, inquiries, comments and other materials relating to the contemplated license should be directed to: Tedd Fenn, Office of Technology Transfer, National Institutes of Health, 6011 Executive Boulevard, Suite 325, Rockville, MD 20852-3804; Email: Tedd.Fenn@mail.nih.gov; Telephone: 301-435-5031; Facsimile: 301-402-0220.

SUPPLEMENTARY INFORMATION:

The prospective worldwide exclusive license will be royalty bearing and will comply with the terms and conditions of 35 U.S.C. 209 and 37 CFR part 404. The prospective exclusive license may be granted unless, within thirty (30) days from the date of this published Notice, NIH receives written evidence and argument that establishes that the grant of the license would not be

consistent with the requirements of 35 U.S.C. 209 and 37 CFR part 404.

The invention relates to methods and compositions for the detection of infectious proteins or prions and diagnosis of prion related diseases. Prion diseases are neurodegenerative diseases of great public concern because humans may be infected from hoofed animals used as food, food products such as milk, or blood products. Currently available tests for disease-causing prions are either incapable of detecting low concentrations of prions and must be used post-mortem or are incapable of detecting low concentrations of prions economically or accurately. This technology enables rapid and economical detection of sub-lethal concentrations of prions by using recombinant, normal, prion protein (rPrP-sen) as a marker or indicator of infectious prions in a sample. Specifically, prions (contained in a sample) seed the polymerization of rPrP-sen, and polymerized rPrP-sen is detected as an amplified indicator of prions in the sample. This assay differs from the protein-misfolding cyclic amplification assay (PMCA) because it enables the effective use of rPrP-sen and does not require multiple amplification cycles unless a higher degree of sensitivity is required. It is anticipated that this technology can be combined with additional prion-detection technologies to further improve the sensitivity of the assay. In its current embodiment, this assay has been used to detect prions in brain tissue or cerebral spinal fluid (CSF) from humans (variant CJD), sheep (scrapie), and hamsters (scrapie).

The proposed field of exclusivity may be limited to diagnostics requiring premarket approval by a U.S. or a foreign regulatory agency.

Properly filed competing applications for a license filed in response to this notice will be treated as objections to the contemplated license. Comments and objections submitted in response to this notice will not be made available for public inspection, and, to the extent permitted by law, will not be released under the Freedom of Information Act, 5 U.S.C. 552.

Dated: September 27, 2013.

Richard U. Rodriguez,

Director, Division of Technology Development & Transfer, Office of Technology Transfer, National Institutes of Health.

[FR Doc. 2013-24141 Filed 10-2-13; 8:45 am]

BILLING CODE 4140-01-P

DEPARTMENT OF HEALTH AND HUMAN SERVICES

National Institutes of Health

Center for Scientific Review; Notice of Closed Meetings

Pursuant to section 10(d) of the Federal Advisory Committee Act, as amended (5 U.S.C. App.), notice is hereby given of the following meetings.

The meetings will be closed to the public in accordance with the provisions set forth in sections 52b(c)(4) and 552b(c)(6), Title 5 U.S.C., as amended. The grant applications and the discussions could disclose confidential trade secrets or commercial property such as patentable material, and personal information concerning individuals associated with the grant applications, the disclosure of which would constitute a clearly unwarranted invasion of personal privacy.

Name of Committee: Center for Scientific Review Special Emphasis Panel; Skeletal; Biology Structure and Regeneration Overflow.

Date: October 9, 2013.

Time: 6:30 a.m. to 7:30 a.m.

Agenda: To review and evaluate grant applications.

Place: Admiral Fell Inn, 888 South Broadway, Baltimore, MD 21231.

Contact Person: Daniel F. McDonald, Ph.D., Scientific Review Officer, Center for Scientific Review, National Institutes of Health, 6701 Rockledge Drive, Room 4110, MSC 7814, Bethesda, MD 20892, (301) 435-1215, mcdonald@csr.nih.gov.

This notice is being published less than 15 days prior to the meeting due to the timing limitations imposed by the review and funding cycle.

Name of Committee: Center for Scientific Review Special Emphasis Panel; PAR 12-251: Behavioral Science Track Award for Rapid Transition (B/START), (R03).

Date: October 18, 2013.

Time: 1:00 p.m. to 4:30 p.m.

Agenda: To review and evaluate grant applications.

Place: National Institutes of Health, 6701 Rockledge Drive, Bethesda, MD 20892, (Telephone Conference Call).

Contact Person: Jose H. Guerrier, Ph.D., Scientific Review Officer, Center for Scientific Review, National Institutes of Health, 6701 Rockledge Drive, Room 5218, MSC 7852, Bethesda, MD 20892, 301-435-1137, guerrier@csr.nih.gov.

Name of Committee: Center for Scientific Review Special Emphasis Panel Molecular Mechanisms of Neurodegeneration.

Date: October 24, 2013.

Time: 1:30 p.m. to 2:30 p.m.

Agenda: To review and evaluate grant applications.

Place: Hotel Monaco, 2 North Charles Street, Baltimore, MD 20724.

Contact Person: Laurent Taupenot, Ph.D., Scientific Review Officer, Center for

Scientific Review, National Institutes of Health, 6701 Rockledge Drive, Room 4811, MSC 7850, Bethesda, MD 20892, 301-435-1203, taupeno@csr.nih.gov.

Name of Committee: Center for Scientific Review Special Emphasis Panel, Member Conflict: Bone and Connective Tissue Pathophysiology and Regeneration.

Date: October 29-2013.

Time: 8:00 a.m. to 5:00 p.m.

Agenda: To review and evaluate grant applications.

Place: National Institutes of Health, 6701 Rockledge Drive, Bethesda, MD 20892, (Virtual Meeting).

Contact Person: Rajiv Kumar, Ph.D., Chief, MOSS IRG, Center for Scientific Review, National Institutes of Health, 6701 Rockledge Drive, Room 4216, MSC 7802, Bethesda, MD 20892, 301-435-1212, kumarra@csr.nih.gov.

Name of Committee: Center for Scientific Review Special Emphasis Panel; Member Conflict: Pain.

Date: October 29-30, 2013.

Time: 8:00 a.m. to 6:00 p.m.

Agenda: To review and evaluate grant applications.

Place: National Institutes of Health, 6701 Rockledge Drive, Bethesda, MD 20892, (Virtual Meeting).

Contact Person: John Bishop, Ph.D., Scientific Review Officer, Center for Scientific Review, National Institutes of Health, 6701 Rockledge Drive, Room 5182, MSC 7844, Bethesda, MD 20892, (301) 408-9664, bishopj@csr.nih.gov.

Name of Committee: Center for Scientific Review Special Emphasis Panel, Genetic Epidemiology.

Date: October 29, 2013.

Time: 9:30 a.m. to 10:30 a.m.

Agenda: To review and evaluate grant applications.

Place: Wingate by Wyndham, 105 State Street, York, PA 17404, (Telephone Conference Call).

Contact Person: Valerie Durrant, Ph.D., Scientific Review Officer, Center for Scientific Review, National Institutes of Health, 6701 Rockledge Drive, Room 3148, MSC 7770, Bethesda, MD 20892, (301) 827-6390, durrant@csr.nih.gov.

Name of Committee: Center for Scientific Review Special Emphasis Panel; Small Business; Bioengineering Research Grants (BRGs) Nephrology.

Date: October 29, 2013.

Time: 10:00 a.m. to 3:00 p.m.

Agenda: To review and evaluate grant applications.

Place: National Institutes of Health, 6701 Rockledge Drive, Bethesda, MD 20892, (Virtual Meeting).

Contact Person: Martha Garcia, Ph.D., Scientific Review Officer, Center for Scientific Review, National Institutes of Health, 6701 Rockledge Drive, Room 2186, Bethesda, MD 20892, 301-435-1243, garciam@nih.gov.

Name of Committee: Center for Scientific Review Special Emphasis Panel; RFA Panel: Molecular and Cellular Substrates of Complex Brain Disorders.

Date: October 30, 2013.

Time: 8:00 a.m. to 5:30 p.m.

Agenda: To review and evaluate grant applications.

Place: Embassy Suites at the Chevy Chase Pavilion, 4300 Military Road NW., Washington, DC 20015.

Contact Person: Deborah L. Lewis, Ph.D., Scientific Review Officer, Center for Scientific Review, National Institutes of Health, 6701 Rockledge Drive, Room 4183, MSC 7850, Bethesda, MD 20892, 301-408-9129, lewisdeb@csr.nih.gov.

Name of Committee: Center for Scientific Review Special Emphasis Panel, Member Conflict: Cardiovascular Sciences.

Date: October 30, 2013.

Time: 10:00 a.m. to 8:00 p.m.

Agenda: To review and evaluate grant applications.

Place: National Institutes of Health, 6701 Rockledge Drive, Bethesda, MD (Virtual Meeting).

Contact Person: Sara Ahlgren, Ph.D., Scientific Review Officer, Center for Scientific Review, National Institutes of Health, 6701 Rockledge Drive, MSC 4136, Bethesda, MD 20892, 301-435-0904, sara.ahlgren@nih.gov.

Name of Committee: Center for Scientific Review Special Emphasis Panel, Member Conflict: Bioengineering and Vision.

Date: October 30, 2013.

Time: 11:00 a.m. to 2:00 p.m.

Agenda: To review and evaluate grant applications.

Place: National Institutes of Health, 6701 Rockledge Drive, Bethesda, MD 20892, (Telephone Conference Call).

Contact Person: Eugene Carstea, Ph.D., Scientific Review Officer, Center for Scientific Review, National Institutes of Health, 6701 Rockledge Drive, Room 5194, MSC 7846, Bethesda, MD 20892, (301) 408-9756, carsteae@csr.nih.gov.

Name of Committee: Center for Scientific Review Special Emphasis Panel, Member Conflict: Epidemiology.

Date: October 30, 2013.

Time: 1:00 p.m. to 5:00 p.m.

Agenda: To review and evaluate grant applications.

Place: National Institutes of Health, 6701 Rockledge Drive, Bethesda, MD 20892, (Telephone Conference Call).

Contact Person: Julia Krushkal, Ph.D., Scientific Review Officer, Center for Scientific Review, National Institutes of Health, 6701 Rockledge Drive, Room 3148, MSC 7770, Bethesda, MD 20892, 301-435-1782, krushkalj@csr.nih.gov.

Name of Committee: Center for Scientific Review Special Emphasis Panel, Drug Discovery for the Nervous System.

Date: October 30, 2013.

Time: 1:30 p.m. to 3:30 p.m.

Agenda: To review and evaluate grant applications.

Place: National Institutes of Health, 6701 Rockledge Drive, Bethesda, MD 20892, (Telephone Conference Call).

Contact Person: Geoffrey G. Schofield, Ph.D., Scientific Review Officer, Center for Scientific Review, National Institutes of Health, 6701 Rockledge Drive, Room 4040-A, MSC 7850, Bethesda, MD 20892, 301-435-1235, geoffrey@csr.nih.gov.

(Catalogue of Federal Domestic Assistance Program Nos. 93.306, Comparative Medicine; 93.333, Clinical Research, 93.306, 93.333, 93.337, 93.393–93.396, 93.837–93.844, 93.846–93.878, 93.892, 93.893, National Institutes of Health, HHS)

Dated: September 27, 2013.

Carolyn A. Baum,

Program Analyst, Office of Federal Advisory Committee Policy.

[FR Doc. 2013–24140 Filed 10–2–13; 8:45 am]

BILLING CODE 4140–01–P

DEPARTMENT OF HEALTH AND HUMAN SERVICES

National Institutes of Health

Center for Scientific Review; Notice of Closed Meetings

Pursuant to section 10(d) of the Federal Advisory Committee Act, as amended (5 U.S.C. App.), notice is hereby given of the following meetings.

The meetings will be closed to the public in accordance with the provisions set forth in sections 552b(c)(4) and 552b(c)(6), Title 5 U.S.C., as amended. The grant applications and the discussions could disclose confidential trade secrets or commercial property such as patentable material, and personal information concerning individuals associated with the grant applications, the disclosure of which would constitute a clearly unwarranted invasion of personal privacy.

Name of Committee: Center for Scientific Review Special Emphasis Panel; Members Conflicts: Biomaterials, Nanotechnology, Drug Screening and Delivery, Bioengineering Sciences.

Date: October 30, 2013.

Time: 1:00 p.m. to 2:00 p.m.

Agenda: To review and evaluate grant applications.

Place: National Institutes of Health, 6701 Rockledge Drive, Bethesda, MD 20892, (Telephone Conference Call).

Contact Person: Ping Fan, MD, Ph.D., Scientific Review Officer, Center for Scientific Review, National Institutes of Health, 6701 Rockledge Drive, Room 5154, MSC 7840, Bethesda, MD 20892, 301–408–9971, fanp@csr.nih.gov.

Name of Committee: Center for Scientific Review Special Emphasis Panel; Small Business: Drug Discovery for Aging, Neuropsychiatric and Neurologic Disorders.

Date: October 31–November 1, 2013.

Time: 8:00 a.m. to 2:00 p.m.

Agenda: To review and evaluate grant applications.

Place: Embassy Suites Chevy Chase Pavilion, 4300 Military Road NW., Washington, DC 20015.

Contact Person: Yuan Luo, Ph.D., Scientific Review Officer, Center for Scientific Review, National Institutes of Health, 6701 Rockledge Drive, Room 5207, MSC 7846, Bethesda, MD 20892, 301–915–6303, luoy2@mail.nih.gov.

Name of Committee: Center for Scientific Review Special Emphasis Panel; Image-Guided Drug Delivery In Cancer.

Date: October 31, 2013.

Time: 11:45 a.m. to 5:00 p.m.

Agenda: To review and evaluate grant applications.

Place: National Institutes of Health, 6701 Rockledge Drive, Bethesda, MD 20892, (Virtual Meeting).

Contact Person: Mehrdad Mohseni, MD, Scientific Review Officer, Center for Scientific Review, National Institutes of Health, 6701 Rockledge Drive, Room 5211, MSC 7854, Bethesda, MD 20892, 301–435–0484, mohsenim@csr.nih.gov.

Name of Committee: Center for Scientific Review Special Emphasis Panel; PAR–13–007: Early-Stage Pharmacological Validation of Novel Targets and Accompanying Pre-Therapeutic Leads for Diseases of Interest to the NIDDK.

Date: October 31, 2013.

Time: 12:00 p.m. to 5:00 p.m.

Agenda: To review and evaluate grant applications.

Place: National Institutes of Health, 6701 Rockledge Drive, Bethesda, MD 20892, (Telephone Conference Call).

Contact Person: John Bleasdale, Ph.D., Scientific Review Officer, Center for Scientific Review, National Institutes of Health, 6701 Rockledge Drive, Room 6170, MSC 7892, Bethesda, MD 20892, 301–435–4514, bleasdaleje@csr.nih.gov.

Name of Committee: Center for Scientific Review Special Emphasis Panel, Member Conflict: Cognition and Perception.

Date: October 31, 2013.

Time: 12:30 p.m. to 1:30 p.m.

Agenda: To review and evaluate grant applications.

Place: National Institutes of Health, 6701 Rockledge Drive, Bethesda, MD 20892, (Telephone Conference Call).

Contact Person: Maribeth Champoux, Ph.D., Scientific Review Officer, Center for Scientific Review, National Institutes of Health, 6701 Rockledge Drive, Room 3170, MSC 7848, Bethesda, MD 20892, 301–594–3163, champoux@csr.nih.gov.

(Catalogue of Federal Domestic Assistance Program Nos. 93.306, Comparative Medicine; 93.333, Clinical Research, 93.306, 93.333, 93.337, 93.393–93.396, 93.837–93.844, 93.846–93.878, 93.892, 93.893, National Institutes of Health, HHS)

Dated: September 27, 2013.

Anna Snouffer,

Deputy Director, Office of Federal Advisory Committee Policy.

[FR Doc. 2013–24137 Filed 10–2–13; 8:45 am]

BILLING CODE 4140–01–P

DEPARTMENT OF HEALTH AND HUMAN SERVICES

National Institutes of Health

Office of the Director, National Institutes of Health; Notice of Closed Meeting

Pursuant to section 10(d) of the Federal Advisory Committee Act, as amended (5 U.S.C. App.), notice is hereby given of the following meeting.

The meeting will be closed to the public in accordance with the provisions set forth in sections 552b(c)(4) and 552b(c)(6), Title 5 U.S.C., as amended. The grant applications and the discussions could disclose confidential trade secrets or commercial property such as patentable material, and personal information concerning individuals associated with the grant applications, the disclosure of which would constitute a clearly unwarranted invasion of personal privacy.

Name of Committee: Office of Research Infrastructure Programs Special Emphasis Panel; Biomedical Research Conference Review.

Date: October 22, 2013.

Time: 3:00 p.m. to 4:30 p.m.

Agenda: To review and evaluate grant applications.

Place: National Institutes of Health, One Democracy Plaza, 6701 Democracy Boulevard, Bethesda, MD 20892.

Contact Person: Sailaja Koduri, Ph.D., Scientific Review Officer, Office of Scientific Review, National Center for Advancing, Translational Sciences, 6701 Democracy Blvd., Room 1074, Bethesda, MD 20892; 301–435–0813; Sailaja.koduri@nih.gov.

(Catalogue of Federal Domestic Assistance Program Nos. 93.14, Intramural Research Training Award; 93.22, Clinical Research Loan Repayment Program for Individuals from Disadvantaged Backgrounds; 93.232, Loan Repayment Program for Research Generally; 93.39, Academic Research Enhancement Award; 93.936, NIH Acquired Immunodeficiency Syndrome Research Loan Repayment Program; 93.187, Undergraduate Scholarship Program for Individuals from Disadvantaged Backgrounds, National Institutes of Health, HHS)

Dated: September 27, 2013.

David Clary,

Program Analyst, Office of Federal Advisory Committee Policy.

[FR Doc. 2013–24138 Filed 10–2–13; 8:45 am]

BILLING CODE 4140–01–P

DEPARTMENT OF HOMELAND SECURITY

U.S. Customs and Border Protection

Agency Information Collection Activities: Small Vessel Reporting System

AGENCY: U.S. Customs and Border Protection, Department of Homeland Security.

ACTION: 60-Day notice and request for comments; extension of an existing collection of information.

SUMMARY: As part of its continuing effort to reduce paperwork and respondent burden, CBP invites the general public and other Federal agencies to comment on an information collection requirement concerning the Small Vessel Reporting System (SVRS). This request for comment is being made pursuant to the Paperwork Reduction Act of 1995 (Pub. L. 104-13).

DATES: Written comments should be received on or before December 2, 2013, to be assured of consideration.

ADDRESSES: Direct all written comments to U.S. Customs and Border Protection, Attn: Tracey Denning, Regulations and Rulings, Office of International Trade, 90 K Street NE., 10th Floor, Washington, DC 20229-1177.

FOR FURTHER INFORMATION CONTACT: Requests for additional information should be directed to Tracey Denning, U.S. Customs and Border Protection, Regulations and Rulings, Office of International Trade, 90 K Street NE., 10th Floor, Washington, DC 20229-1177, at 202-325-0265.

SUPPLEMENTARY INFORMATION: Customs and Border Protection (CBP) invites the general public and other Federal agencies to comment on proposed and/or continuing information collections pursuant to the Paperwork Reduction Act of 1995 (Pub. L. 104-13). The comments should address: (a) Whether the collection of information is necessary for the proper performance of the functions of the agency, including whether the information shall have practical utility; (b) the accuracy of the agency's estimates of the burden of the collection of information; (c) ways to enhance the quality, utility, and clarity of the information to be collected; (d) ways to minimize the burden including the use of automated collection techniques or the use of other forms of information technology; and (e) the annual costs burden to respondents or record keepers from the collection of information (a total capital/startup costs and operations and maintenance costs). The comments that are submitted will

be summarized and included in the CBP request for Office of Management and Budget (OMB) approval. All comments will become a matter of public record. In this document CBP is soliciting comments concerning the following information collection:

Title: Small Vessel Reporting System.

OMB Number: 1651-0137.

Form Number: None.

Abstract: The Small Vessel Reporting System (SVRS) is a program that allows certain participants using small pleasure boats to report their arrival telephonically instead of having to appear in person for inspection by a CBP officer each time they enter the United States. In some cases, a participant may also be asked to report to CBP for an in person inspection upon arrival. Participants may be U.S. citizens, U.S. lawful permanent residents, Canadian citizens, and permanent residents of Canada who are nationals of Visa Waiver Program countries listed in 8 CFR 217.2(a). In addition, participants of one or more Trusted Traveler programs and current Canadian Border Boater Landing Permit (CBP Form I-68) holders may participate in SVRS.

In order to register for the SVRS pilot program, participants enter data via the SVRS Web site which collects information such as biographical information and vessel information. Participants will go through the in person CBP inspection process during SVRS registration, and in some cases, upon arrival in the United States.

For each voyage, SVRS participants will be required to submit a float plan about their voyage via the SVRS Web site in advance of arrival in the United States. The float plan includes vessel information, listing of all persons on board, estimated dates and times of departure and return, and information on the locations to be visited on the trip. Participants in SVRS can create a float plan for an individual voyage or a template for a float plan that can be used multiple times.

SVRS is authorized by 8 U.S.C. 1103, 8 U.S.C. 1225, 8 U.S.C. 1365b, 8 CFR 235.1, 19 U.S.C. 1433, 19 U.S.C. 1498, and 19 CFR 4.2. The SVRS Web site is accessible at: <https://svrs.cbp.dhs.gov/>.

Current Actions: CBP proposes to extend the expiration date of this information collection with a change to the burden hours resulting from updated estimates of the number of participants. There is no change to the information being collected.

Type of Review: Extension (with change).

Affected Public: Individuals.

SVRS Application

Estimated Number of Respondents: 8,840.

Estimated Number of Responses per Respondent: 1.

Estimated Total Annual Responses: 8,840.

Estimated Time per Response: 30 minutes.

Estimated Total Annual Burden Hours: 4,420.

Float Plan

Estimated Number of Respondents: 984.

Estimated Number of Responses per Respondent: 1.36.

Estimated Total Annual Responses: 1,338.

Estimated Time per Response: 10.9 minutes.

Estimated Total Annual Burden Hours: 243.

Dated: September 30, 2013.

Tracey Denning,

Agency Clearance Officer, U.S. Customs and Border Protection.

[FR Doc. 2013-24265 Filed 10-2-13; 8:45 am]

BILLING CODE 9111-14-P

DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT

[Docket No. FR-5689-N-09]

60 Day Notice of Proposed Information Collection for Public Comment: Survey of Market Absorption of New Multifamily Units

AGENCY: Office of Policy Development and Research, HUD.

ACTION: Notice.

SUMMARY: HUD is seeking approval from the Office of Management and Budget (OMB) for the information collection described below. In accordance with the Paperwork Reduction Act, HUD is requesting comment from all interested parties on the proposed collection of information. The purpose of this notice is to allow for 60 days of public comment.

DATES: Comments Due Date: December 2, 2013.

ADDRESSES: Interested persons are invited to submit comments regarding this proposal. Comments should refer to the proposal by name and/or OMB Control Number and should be sent to: Colette Pollard, Reports Management Officer, QDAM, Department of Housing and Urban Development, 451 7th Street SW., Room 4176, Washington, DC 20410-5000, telephone (202) 402-3400 (this is not a toll-free number) or email

at Colette.Pollard@hud.gov for a copy of the proposed forms or other available information. Persons with hearing or speech impairments may access this number through TTY by calling the toll-free Federal Relay Service at (800) 877-8339.

FOR FURTHER INFORMATION CONTACT:

Colette Pollard, Reports Management Officer, QDAM, Department of Housing and Urban Development, 451 7th Street SW., Washington, DC 20410, email Colette.Pollard@hud.gov or telephone (202) 402-3400. This is not a toll-free number. Persons with hearing or speech impairments may access this number through TTY by calling the toll-free Federal Relay Service at (800) 877-8339.

Copies of available documents submitted to OMB may be obtained from Ms. Pollard.

SUPPLEMENTARY INFORMATION: The Department of Housing and Urban Development will submit the proposed information collection package to OMB for review as required by the Paperwork Reduction Act of 1995 (44 U.S.C. Chapter 35, as amended).

A. Overview of Information Collection

Title of Information Collection: Survey of Market Absorption of New Multifamily Units.

OMB Control Number: 2528-0013 (Expires 5/31/2014).

Form Number: H-31.

Type of Review: Regular Submission.

Description of the need for the information and proposed use: The Survey of Market Absorption (SOMA) provides the data necessary to measure the rate at which new rental apartments and new condominium apartments are absorbed, that is, taken off the market, usually by being rented or sold, over the course of the first twelve months following completion of a building. The data are collected at quarterly intervals until the twelve months conclude, or until the units in a building are completely absorbed. The survey also provides estimates of certain characteristics, including asking rent/price, number of units, and number of bedrooms. The survey provides a basis for analyzing the degree to which new apartment construction is meeting the present and future needs of the public. Beginning April 2014, the survey will transition from paper questionnaire to Computer-Assisted Personal Interviewing (CAPI).

Members of affected public: Rental Agents/Builders.

Estimated Number of Respondents: 12,000 yearly (maximum).

Estimated Time Per Response: 15 minutes/initial interview and 5 minutes

for any subsequent interviews (up to three additional, if necessary).

Frequency of Response: Four times (maximum).

Estimated Total Annual Burden Hours: 6,000 (12,000 buildings × 30 minutes).

Estimated Total Annual Cost: The only cost to respondents is that of their time. The total estimated cost in FY 2014 is \$1,750,000.

Respondent's Obligation: Voluntary.

Legal Authority: The survey is taken under Title 12, United States Code, Section 1701Z.

B. Solicitation of Public Comment

This notice is soliciting comments from members of the public and affected parties concerning the collection of information described in Section A on the following:

(1) Whether the proposed collection of information is necessary for the proper performance of the functions of the agency, including whether the information will have practical utility;

(2) The accuracy of the agency's estimate of the burden of the proposed collection of information;

(3) Ways to enhance the quality, utility, and clarity of the information to be collected; and

(4) Ways to minimize the burden of the collection of information on those who are to respond, including through the use of appropriate automated collection techniques or other forms of information technology, e.g., permitting electronic submission of responses.

HUD encourages interested parties to submit comments in response to these questions. Comments submitted in response to this notice will be summarized and/or included in the request for OMB approval of this information collection. Submitted comments will become a matter of public record.

Authority: Section 3507 of the Paperwork Reduction Act of 1995, 44 U.S.C. Chapter 35.

Dated: September 27, 2013.

Jean Lin Pao,

General Deputy Assistant Secretary, Office of Policy Development and Research.

[FR Doc. 2013-24258 Filed 10-2-13; 8:45 am]

BILLING CODE 4210-67-P

DEPARTMENT OF THE INTERIOR

Fish and Wildlife Service

[FWS-R7-MM-2013-N229; FF07CAMM00 FXFR133707PB000]

Proposed Information Collection; Incidental Take of Marine Mammals During Specified Oil and Gas Industry Activities

AGENCY: Fish and Wildlife Service, Interior.

ACTION: Notice; request for comments.

SUMMARY: We (U.S. Fish and Wildlife Service) will ask the Office of Management and Budget (OMB) to approve the information collection (IC) described below. As required by the Paperwork Reduction Act of 1995 and as part of our continuing efforts to reduce paperwork and respondent burden, we invite the general public and other Federal agencies to take this opportunity to comment on this IC. This IC is scheduled to expire on January 31, 2014. We may not conduct or sponsor and a person is not required to respond to a collection of information unless it displays a currently valid OMB control number.

DATES: To ensure that we are able to consider your comments on this IC, we must receive them by December 2, 2013.

ADDRESSES: Send your comments on the IC to the Service Information Collection Clearance Officer, U.S. Fish and Wildlife Service, MS 2042-PDM, 4401 North Fairfax Drive, Arlington, VA 22203 (mail); or hope_grey@fws.gov (email). Please include "1018-0070" in the subject line of your comments.

FOR FURTHER INFORMATION CONTACT: To request additional information about this IC, contact Hope Grey at hope_grey@fws.gov (email) or 703-358-2482 (telephone).

SUPPLEMENTARY INFORMATION:

I. Abstract

This information collection includes requirements associated with specified oil and gas industry activities and their incidental taking of polar bears and Pacific walrus in the Beaufort and Chukchi Seas. The Marine Mammal Protection Act (MMPA) of 1972, as amended (16 U.S.C. 1361 *et seq.*) imposed, with certain exceptions, a moratorium on the taking of marine mammals. Section 101(a)(5)(A) of the MMPA directs the Secretary of the Interior to allow, upon request by citizens of the United States, the taking of small numbers of marine mammals incidental to specified activities (other than commercial fishing) if the

Secretary makes certain findings and prescribes specific regulations that, among other things, establish permissible methods of taking.

Applicants seeking to conduct activities must request a Letter of Authorization (LOA) for the specific activity and submit onsite monitoring reports and a final report of the activity to the Secretary. This is a nonform collection. Regulations at 50 CFR 18.27 outline the procedures and requirements for submitting a request. Specific regulations governing authorized activities in the Beaufort Sea are in 50 CFR part 18, subpart J. Regulations governing authorized activities in the Chukchi Sea are in 50

CFR part 18, subpart I. These regulations provide the applicant with a detailed description of information that we need to evaluate the proposed activity and determine whether or not to issue specific regulations and, subsequently, LOAs.

We use the information to verify the finding required to issue incidental take regulations, to decide if we should issue an LOA, and, if issued, what conditions should be in the LOA. In addition, we analyze the information to determine impacts to polar bears and Pacific walruses and the availability of those marine mammals for subsistence purposes of Alaska Natives.

II. Data

OMB Control Number: 1018-0070.

Title: Incidental Take of Marine Mammals During Specified Oil and Gas Industry Activities, 50 CFR 18.27 and 50 CFR Part 18, Subparts I and J.

Service Form Number: None.

Type of Request: Revision of a currently approved collection.

Description of Respondents: Oil and gas industry companies.

Respondent's Obligation: Required to obtain or retain a benefit (incidental take regulations and/or a LOA).

Estimated Number of Respondents: 20.

Frequency of Collection: On occasion.

Activity	Number of annual responses	Completion time per response (hours)	Total annual burden hours
Application for procedural regulations ¹	2	125	250
LOA Requests	30	8	240
Onsite Monitoring and Observation Reports	300	1.5	450
Final Monitoring Report	30	10	300
Polar Bear Den Report	4	40	160
Totals	366	.....	1,400

¹ Occurs once every 5 years.

III. Comments

We invite comments concerning this information collection on:

- Whether or not the collection of information is necessary, including whether or not the information will have practical utility;
- The accuracy of our estimate of the burden for this collection of information;
- Ways to enhance the quality, utility, and clarity of the information to be collected; and
- Ways to minimize the burden of the collection of information on respondents.

Comments that you submit in response to this notice are a matter of public record. We will include or summarize each comment in our request to OMB to approve this IC. Before including your address, phone number, email address, or other personal identifying information in your comment, you should be aware that your entire comment, including your personal identifying information, may be made publicly available at any time. While you can ask us in your comment to withhold your personal identifying information from public review, we cannot guarantee that we will be able to do so.

Dated: September 27, 2013.

Tina A. Campbell,

Chief, Division of Policy and Directives Management, U.S. Fish and Wildlife Service.

[FR Doc. 2013-24183 Filed 10-2-13; 8:45 am]

BILLING CODE 4310-55-P

DEPARTMENT OF THE INTERIOR

Bureau of Land Management

[LLNV930000.L1430000.EU0000 241A; N-85116; 13-08807; MO#4500053892; TAS: 14X5260]

Notice of Realty Action: Modified Competitive Sealed-Bid Sale of Public Land at Schoolhouse Butte (N-85116), Humboldt County, NV

Correction

In notice document 2013-23339, appearing on pages 59055 through 59058 in the issue of Wednesday, September 25, 2013, make the following correction:

On page 59055, in the second column, on the fourth line below the table, "November 25, 2013" should read "November 26, 2013".

[FR Doc. C1-2013-23339 Filed 10-2-13; 8:45 am]

BILLING CODE 1505-01-D

DEPARTMENT OF THE INTERIOR

National Park Service

[NPS-SER-BICY-13588; PPSEBICY00, PPMPSPD1Z.YM0000]

Notice of Renewal of Big Cypress National Preserve Off-Road Vehicle Advisory Committee Charter

AGENCY: National Park Service, Interior.

ACTION: Notice of renewal of the big cypress national preserve off-road vehicle advisory committee.

SUMMARY: The Secretary of the Interior is giving notice of renewal of the Big Cypress National Preserve Off-Road Vehicle Advisory Committee to offer recommendations, alternatives and possible solutions to management of off-road vehicles at Big Cypress National Preserve.

FOR FURTHER INFORMATION CONTACT:

Pedro Ramos, Superintendent, Big Cypress National Preserve, 33100 Tamiami Trail E, Ochopee, Florida 34141; (239) 695-1103.

SUPPLEMENTARY INFORMATION: The Big Cypress National Preserve Off-Road Vehicle Advisory Committee has been established as directed in the *Off-Road Vehicle Management Plan, 2000*. This plan guides the National Park Service in its management of recreational off-road vehicle (ORV) use in Big Cypress

National Preserve, and tiers off of the Preserve's 1991 General Management Plan. The National Park Service agreed to prepare an ORV management plan as part of a settlement agreement negotiated in 1995 between the Florida Biodiversity Project and several Federal agencies and bureaus. The agreement settled a lawsuit which alleged failure by the agencies to comply with Federal statutes, including the Clean Water Act, the Endangered Species Act, and the National Environmental Policy Act.

The *Off-Road Vehicle Management Plan, 2000* (p. 29) states "Under the proposed action, the National Park Service would establish an advisory committee of concerned citizens to examine issues and make recommendations regarding the management of ORVs in the Preserve. The establishment of the Committee meets the legal requirements of the 1972 Federal Advisory Committee Act (FACA) (Pub. L. 92-463, 1972, as amended). The advisory Committee provides access to the extensive knowledge available in the public arena and offers advice to the National Park Service in the decision-making process in a manner consistent with the FACA. This Committee is an element of the adaptive management approach used to develop best management practices for ORV use."

As part of the ORV management plan, NPS committed to establishing the ORV Advisory Committee. In addition, the establishment of the Committee fulfills the agency's policy of civic engagement. This Committee strengthens the relationship that the NPS has with its partners and communities. The Committee is composed of individuals that represent (1) Sportsmen/ORV users; (2) landowners; (3) academia; (4) environmental advocates; (5) the state government; and (6) Tribes.

Certification: I hereby certify that the renewal of the Big Cypress Off-Road Vehicle Advisory Committee is necessary and in the public interest in connection with the performance of duties imposed on the Department of the Interior by the Act of August 25, 1916, 16 U.S.C. 1 *et seq.*, and other statutes relating to the administration of the National Park System.

Dated: September 27, 2013.

Elizabeth Klein,

Associate Deputy Secretary.

[FR Doc. 2013-24274 Filed 10-2-13; 8:45 am]

BILLING CODE 4310-JD-P

DEPARTMENT OF THE INTERIOR

National Park Service

**[NPS-WASO-NRNHL-14150;
PPWOCRADIO, PCU00RP14.R50000]**

National Register of Historic Places; Notification of Pending Nominations and Related Actions

Nominations for the following properties being considered for listing or related actions in the National Register were received by the National Park Service before September 14, 2013. Pursuant to section 60.13 of 36 CFR part 60, written comments are being accepted concerning the significance of the nominated properties under the National Register criteria for evaluation. Comments may be forwarded by United States Postal Service, to the National Register of Historic Places, National Park Service, 1849 C St. NW., MS 2280, Washington, DC 20240; by all other carriers, National Register of Historic Places, National Park Service, 1201 Eye St. NW., 8th floor, Washington, DC 20005; or by fax, 202-371-6447. Written or faxed comments should be submitted by October 18, 2013. Before including your address, phone number, email address, or other personal identifying information in your comment, you should be aware that your entire comment—including your personal identifying information—may be made publicly available at any time. While you can ask us in your comment to withhold your personal identifying information from public review, we cannot guarantee that we will be able to do so.

Dated: September 20, 2013.

J. Paul Loether,

*Chief, National Register of Historic Places/
National Historic Landmarks Program.*

FLORIDA

Gilchrist County

Cannon Farm, 5470 NW. 37th Ct., Bell, 13000851

Hillsborough County

Fort Homer W. Hesterly National Guard Armory, 522 N. Howard Ave., Tampa, 13000852

Lee County

Captiva School and Chapel-by-the-Sea Historic District, 11580 Chapin Ln., Captiva, 13000853

ILLINOIS

Jo Daviess County

Galena Historic District (Boundary Increase and Decrease), Roughly bounded by Davis Cr., 4th, 5th, Adams, Field, Wann, N. Dodge, Fulton, N. Hickory, Hill, Ridge & Spring Sts., Galena, 13000854

KANSAS

Butler County

El Dorado Historic District, Roughly 1 blk. E. & W. of N. & S. Main Sts. from E. 3rd to E. Locust Aves., El Dorado, 13000855

Wabaunsee County

Thoes, Peter, Barn, (Agriculture-Related Resources of Kansas MPS) 25709 Hessdale Rd., Alma, 13000856

MISSOURI

Lincoln County

Downtown Troy Historic District, Bounded by Annie Ave., 2nd, Marble & Court Sts., Troy, 13000857

St. Louis Independent city

Dorris Row, 1105-9 Olive St., St. Louis (Independent City), 13000858

OREGON

Deschutes County

Petersen Rock Garden, 7930 SW. 77th St., Redmond, 13000859

WISCONSIN

Brown County

Hotel Northland, 304 N. Adams St., Green Bay, 13000860

[FR Doc. 2013-24167 Filed 10-2-13; 8:45 am]

BILLING CODE 4312-51-P

DEPARTMENT OF THE INTERIOR

Bureau of Ocean Energy Management

**[OMB Control Number 1010-0187];
[MMAA104000]**

Information Collection; Proposed Collection for OMB Review; Comment Request: Project Planning for the Use of Outer Continental Shelf Sand, Gravel, and Shell Resources in Construction Projects That Qualify for a Negotiated Noncompetitive Agreement

ACTION: 60-day notice.

SUMMARY: To comply with the Paperwork Reduction Act of 1995 (PRA), the Bureau of Ocean Energy Management (BOEM) is inviting comments on a renewal of a collection of information that we will submit to the Office of Management and Budget (OMB) for review and approval. The information collection request (ICR) concerns the paperwork requirements that respondents will submit to BOEM to obtain Outer Continental Shelf (OCS) sand, gravel, and shell resources for use in shore protection, beach and coastal restoration and other authorized projects, which qualify for a noncompetitive negotiated agreement. **DATES:** Submit written comments by December 2, 2013.

ADDRESSES: Please send your comments on this ICR to the BOEM Information Collection Clearance Officer, Arlene Bajusz, Bureau of Ocean Energy Management, 381 Elden Street, HM-3127, Herndon, Virginia 20170 (mail); or arlene.bajusz@boem.gov (email); or 703-787-1209 (fax). Please reference ICR 1010-0187 in your comment and include your name and return address.

FOR FURTHER INFORMATION CONTACT: To obtain information pertaining to this notice and/or the Marine Minerals Program, contact the Program at (703) 787-1215. For a copy of the ICR, contact Arlene Bajusz under **ADDRESSES**.

SUPPLEMENTARY INFORMATION:

OMB Control Number: 1010-0187.

Title: Project Planning for the Use of Outer Continental Shelf Sand, Gravel, and Shell Resources in Construction Projects that Qualify for a Negotiated Noncompetitive Agreement.

Abstract: Under the authority delegated by the Secretary of the Interior, BOEM is authorized, pursuant to section 8(k)(2) of the OCS Lands Act (43 U.S.C. 1337(k)(2)), to convey rights to OCS sand, gravel, and shell resources by noncompetitive negotiated agreement (NNA) for use in shore protection and beach and coastal restoration, or for use in construction projects funded in whole or part by, or authorized by, the Federal Government.

Background

Since 1994, 39 shore protection or beach and coastal restoration projects have been completed using OCS sand resources, conveying more than 75 million cubic yards of OCS material and restoring more than 225 miles of shoreline. Recently, the program has seen an increase in demand for OCS resources due to the decreasing availability of sand sources located in State waters and an increase in coastal storm intensity, duration, and frequency. In order for BOEM to continue to meet the needs of local, State and regional entities, information regarding upcoming projects must be acquired to plan for future projects and anticipated workload. Therefore, BOEM will issue calls for information about needed resources and locations from interested parties to develop and maintain a project schedule. This ICR addresses the information needed from States, local governments, Federal agencies, environmental and other interest organizations, and all other interested parties to update and maintain the project schedule. It includes the potential for an annual call for information and the potential for a call in response to an emergency declaration, such as a tropical storm.

BOEM's calls for information (e.g., letters or **Federal Register** notices) will request interested parties to submit, in writing or electronically, a description of their proposed projects for which OCS resources will be used. The description must include the offshore borrow sites if known; the estimated date of construction; a short description of current project funding; the name of a primary point of contact with that person's mailing address, telephone number, and email address; as well as any additional information concerning the status of the project that would be useful to BOEM. This information may include detailed maps; geospatial data and coordinates of desired sand resources and sites that would be nourished; a description of the environmental documents that have been completed to date concerning any portion of the project; a cited reference list; status of geological and geophysical permit (if required); information concerning known or suspected archaeological or historic artifacts; interpretations of geology and extent of sand areas; known volumes of sand resource site; historical data related to the proposed borrow or placement area; and a description of the status of Federal, State, and/or local permits required for the project.

In order to meet the needs of the States under the current BOEM staff and funding resources, BOEM may request the relevant States to prioritize their own projects based on several criteria including likelihood of project funding and progress of environmental work.

The information provided by States will help BOEM determine appropriate future resource allocation, identify potential conflicts of use, conduct environmental analyses, develop NNAs, and meet all necessary environmental and legal requirements. With this renewal, we are also including a provision for a call in response to emergency declarations, such as a tropical storm. Hurricane Sandy demonstrated BOEM's need for accurate and timely information following a natural disaster declaration. Therefore, we are increasing the estimated hour burden for this collection.

We will protect information from respondents considered proprietary under the Freedom of Information Act (5 U.S.C. 552) and its implementing regulations (43 CFR part 2). No items of a sensitive nature are collected. Responses are required to obtain or retain benefits.

Frequency: Annually and on occasion.

Description of Respondents: Potential respondents comprise States, counties, localities and tribes.

Estimated Reporting and Recordkeeping Hour Burden: We are estimating that the annual reporting burden for this collection is about 200 hours, assuming an emergency declaration is made each year.

Individual Entity Compilation: 25 entities $\times$ 1 hour/entity $\times$ 2 responses/year = 50 hours; *Individual State Compilation:* 15 States $\times$ 5 hours/State $\times$ 2 responses/year = 150 hours (50 county hours + 150 State hours = 200 total burden hours).

Estimated Reporting and Recordkeeping Non-Hour Cost Burden: We have identified no non-hour paperwork cost burdens for this collection.

Public Disclosure Statement: The PRA (44 U.S.C. 3501, *et seq.*) provides that an agency may not conduct or sponsor a collection of information unless it displays a currently valid OMB control number. Until OMB approves a collection of information, you are not obligated to respond.

Comments: Before submitting an ICR to OMB, PRA section 3506(c)(2)(A) requires each agency ". . . to provide notice . . . and otherwise consult with members of the public and affected agencies concerning each proposed collection of information . . .". Agencies must specifically solicit comments on: (a) Whether or not the collection of information is necessary, including whether or not the information will have practical utility; (b) the accuracy of the burden estimates; (c) ways to enhance the quality, utility, and clarity of the information to be collected; and (d) ways to minimize the burden on respondents.

Agencies must also estimate the non-hour cost burdens to respondents or recordkeepers resulting from the collection of information. Therefore, if you have costs to generate, maintain, and disclose this information, you should comment and provide your total capital and startup costs or annual operation, maintenance, and purchase of service costs. You should describe the methods you use to estimate major cost factors, including system and technology acquisition, expected useful life of capital equipment, discount rate(s), and the period over which you incur costs. Capital and startup costs include, among other items, computers and software you purchase to prepare for collecting information, monitoring, and record storage facilities. You should not include estimates for equipment or services purchased: (a) Before October 1, 1995; (b) to comply with requirements not associated with the information collection; (c) for reasons other than to provide information or keep records for

the Government; or (d) as part of customary and usual business or private practices.

We will summarize written responses to this notice and address them in our submission for OMB approval. As a result of your comments, we will make any necessary adjustments to the burden in our submission to OMB.

Public Availability of Comments: Before including your address, phone number, email address, or other personal identifying information in your comment, you should be aware that your entire comment—including your personal identifying information—may be made publicly available at any time. While you can ask us in your comment to withhold your personal identifying information from public review, we cannot guarantee that we will be able to do so.

Dated: September 26, 2013.

Deanna Meyer-Pietruszka,

Chief, Office of Policy, Regulations, and Analysis.

[FR Doc. 2013-24248 Filed 10-2-13; 8:45 am]

BILLING CODE 4310-MR-P

INTERNATIONAL TRADE COMMISSION

[Investigation No. 337-TA-896]

Certain Thermal Support Devices For Infants, Infant Incubators, Infant Warmers, and Components Thereof; Institution of Investigation Pursuant to 19 U.S.C. 1337

AGENCY: U.S. International Trade Commission.

ACTION: Notice.

SUMMARY: Notice is hereby given that a complaint was filed with the U.S. International Trade Commission on August 29, 2013, under section 337 of the Tariff Act of 1930, as amended, 19 U.S.C. 1337, on behalf of Draeger Medical Systems, Inc. of Telford, Pennsylvania. A supplement to the complaint was filed on September 18, 2013. The complaint, as supplemented, alleges violations of section 337 based upon the importation into the United States, the sale for importation, and the sale within the United States after importation of certain thermal support devices for infants, infant incubators, infant warmers, and components thereof by reason of infringement of U.S. Patent No. 6,483,080 (“the ‘080 patent”) and U.S. Patent No. 7,335,157 (“the ‘157 patent”). The complaint further alleges that an industry in the United States exists as required by subsection (a)(2) of section 337.

The complainant requests that the Commission institute an investigation and, after the investigation, issue a limited exclusion order and a cease and desist order.

ADDRESSES: The complaint, except for any confidential information contained therein, is available for inspection during official business hours (8:45 a.m. to 5:15 p.m.) in the Office of the Secretary, U.S. International Trade Commission, 500 E Street SW., Room 112, Washington, DC 20436, telephone (202) 205-2000. Hearing impaired individuals are advised that information on this matter can be obtained by contacting the Commission’s TDD terminal on (202) 205-1810. Persons with mobility impairments who will need special assistance in gaining access to the Commission should contact the Office of the Secretary at (202) 205-2000. General information concerning the Commission may also be obtained by accessing its internet server at <http://www.usitc.gov>. The public record for this investigation may be viewed on the Commission’s electronic docket (EDIS) at <http://edis.usitc.gov>.

FOR FURTHER INFORMATION CONTACT: The Office of Unfair Import Investigations, U.S. International Trade Commission, telephone (202) 205-2560.

Authority: The authority for institution of this investigation is contained in section 337 of the Tariff Act of 1930, as amended, and in section 210.10 of the Commission’s Rules of Practice and Procedure, 19 CFR 210.10 (2013).

Scope of Investigation: Having considered the complaint, the U.S. International Trade Commission, on September 27, 2013, *ordered that*—

(1) Pursuant to subsection (b) of section 337 of the Tariff Act of 1930, as amended, an investigation be instituted to determine whether there is a violation of subsection (a)(1)(B) of section 337 in the importation into the United States, the sale for importation, or the sale within the United States after importation of certain thermal support devices for infants, infant incubators, infant warmers, and components thereof by reason of infringement of one or more of claims 1 and 11 of the ‘080 patent and claims 9 and 25 of the ‘157 patent, and whether an industry in the United States exists as required by subsection (a)(2) of section 337;

(2) Pursuant to Commission Rule 201.50(b)(1), 19 CFR 210.50(b)(1), the presiding administrative law judge shall take evidence or other information and hear arguments from the parties and other interested persons with respect to the public interest in this investigation, as appropriate, and provide the

Commission with findings of fact and a recommended determination on this issue;

(3) For the purpose of the investigation so instituted, the following are hereby named as parties upon which this notice of investigation shall be served:

(a) The complainant is: Draeger Medical Systems, Inc., 3135 Quarry Road, Telford, PA 18969.

(b) The respondent is the following entity alleged to be in violation of section 337, and is the party upon which the complaint is to be served: Atom Medical International, Inc., 3-18-16 Hongo, Bunkyo-ku, Tokyo, Japan 113-0033.

(c) The Office of Unfair Import Investigations, U.S. International Trade Commission, 500 E Street SW., Suite 401, Washington, DC 20436; and

(4) For the investigation so instituted, the Chief Administrative Law Judge, U.S. International Trade Commission, shall designate the presiding Administrative Law Judge.

Responses to the complaint and the notice of investigation must be submitted by the named respondent in accordance with section 210.13 of the Commission’s Rules of Practice and Procedure, 19 CFR 210.13. Pursuant to 19 CFR 201.16(e) and 210.13(a), such responses will be considered by the Commission if received not later than 20 days after the date of service by the Commission of the complaint and the notice of investigation. Extensions of time for submitting responses to the complaint and the notice of investigation will not be granted unless good cause therefor is shown.

Failure of the respondent to file a timely response to each allegation in the complaint and in this notice may be deemed to constitute a waiver of the right to appear and contest the allegations of the complaint and this notice, and to authorize the administrative law judge and the Commission, without further notice to the respondent, to find the facts to be as alleged in the complaint and this notice and to enter an initial determination and a final determination containing such findings, and may result in the issuance of an exclusion order or a cease and desist order or both directed against the respondent.

By order of the Commission.

Issued: September 27, 2013.

Lisa R. Barton,

Acting Secretary to the Commission.

[FR Doc. 2013-24151 Filed 10-2-13; 8:45 am]

BILLING CODE 7020-02-P

INTERNATIONAL TRADE COMMISSION

[Investigation No. 731-TA-991 (Review)]

Silicon Metal From Russia; Notice of Commission Determination To Conduct a Full Five-year Review

AGENCY: United States International Trade Commission.

ACTION: Notice

SUMMARY: The Commission hereby gives notice that it will proceed with a full review pursuant to section 751(c)(5) of the Tariff Act of 1930 (19 U.S.C. 1675(c)(5)) to determine whether revocation of the antidumping duty order on silicon metal from Russia would be likely to lead to continuation or recurrence of material injury within a reasonably foreseeable time. A schedule for the review will be established and announced at a later date. For further information concerning the conduct of this review and rules of general application, consult the Commission's Rules of Practice and Procedure, part 201, subparts A through E (19 CFR part 201), and part 207, subparts A, D, E, and F (19 CFR part 207).

DATES: *Effective Date:* September 6, 2013.

FOR FURTHER INFORMATION CONTACT: Elizabeth Haines (202-205-3200), Office of Investigations, U.S. International Trade Commission, 500 E Street SW., Washington, DC 20436. Hearing-impaired persons can obtain information on this matter by contacting the Commission's TDD terminal on 202-205-1810. Persons with mobility impairments who will need special assistance in gaining access to the Commission should contact the Office of the Secretary at 202-205-2000. General information concerning the Commission may also be obtained by accessing its internet server (<http://www.usitc.gov>). The public record for this review may be viewed on the Commission's electronic docket (EDIS) at <http://edis.usitc.gov>.

SUPPLEMENTARY INFORMATION: On September 6, 2013, the Commission determined that it should proceed to a full review in the subject five-year review pursuant to section 751(c)(5) of the Act. The Commission found that both the domestic and respondent interested party group responses to its notice of institution (78 FR 33064, June 3, 2013) were adequate. A record of the Commissioners' votes, the Commission's statement on adequacy, and any individual Commissioner's statements will be available from the

Office of the Secretary and at the Commission's Web site.

Authority: This review is being conducted under authority of title VII of the Tariff Act of 1930; this notice is published pursuant to section 207.62 of the Commission's rules.

By order of the Commission.

Issued: September 30, 2013.

Lisa R. Barton,

Acting Secretary to the Commission.

[FR Doc. 2013-24231 Filed 10-2-13; 8:45 am]

BILLING CODE 7020-02-P

DEPARTMENT OF JUSTICE

Notice of Lodging of Proposed Consent Decree Under the Comprehensive Environmental Response, Compensation and Liability Act

On September 25, 2013, the Department of Justice lodged a proposed Consent Decree with the United States District Court for the Eastern District of Pennsylvania in the lawsuit entitled *United States v. Charles Chrin, et al.*, Civil Action No. 5:13-cv-05625-LS.

In this action under Section 107(a) of the Comprehensive Environmental Response, Compensation, and Liability Act ("CERCLA"), the United States sought reimbursement of response costs incurred or to be incurred for response actions taken or in connection with the release or threatened release of hazardous substances at the Industrial Lane Superfund Site ("Site"), located on Industrial Drive in Williams Township, Northampton County, Pennsylvania. The proposed Decree requires Settling Defendants Charles Chrin, Chrin Bros, Inc., Chrin of Delaware, Inc., Binney & Smith, LLC, Cooper Industries, LLC, CNA Holdings, LLC, STWB, Inc. and Victaulic Co. to pay \$400,000 to the United States in reimbursement of Past Response Costs. The proposed Decree further requires Performing Settling Defendants Chrin Bros., Inc. and Chrin of Delaware, Inc. to pay all Future Response Costs to be incurred.

The publication of this notice opens a period for public comment on the Consent Decree. Comments should be addressed to the Assistant Attorney General, Environment and Natural Resources Division, and should refer to *United States v. Charles Chrin, et al.*, D.J. Ref. No. 90-11-2-908/1. All comments must be submitted no later than thirty (30) days after the publication date of this notice. Comments may be submitted either by email or by mail:

<i>To submit comments:</i>	<i>Send them to:</i>
By e-mail	pubcomment-ees.enrd@usdoj.gov .
By mail	Assistant Attorney General; U.S. DOJ—ENRD, P.O. Box 7611, Washington, DC 20044-7611.

During the public comment period, the Consent Decree may be examined and downloaded at this Justice Department Web site: <http://www.usdoj.gov/enrd/ConsentDecrees.html>. We will provide a paper copy of the Consent Decree upon written request and payment of reproduction costs. Please mail your request and payment to: Consent Decree Library, U.S. DOJ—ENRD, P.O. Box 7611, Washington, DC 20044-7611.

Please enclose a check or money order for \$15.75 (25 cents per page reproduction cost) payable to the United States Treasury.

Robert Brook,

Assistant Section Chief, Environmental Enforcement Section, Environment and Natural Resources Division.

[FR Doc. 2013-24117 Filed 10-2-13; 8:45 am]

BILLING CODE 4410-15-P

DEPARTMENT OF JUSTICE

Federal Bureau of Investigation

Meeting of the Compact Council for the National Crime Prevention and Privacy Compact

AGENCY: Federal Bureau of Investigation, DOJ.

ACTION: Meeting notice.

SUMMARY: The purpose of this notice is to announce a meeting of the National Crime Prevention and Privacy Compact Council (Council) created by the National Crime Prevention and Privacy Compact Act of 1998 (Compact). Thus far, the Federal Government and 30 states are parties to the Compact which governs the exchange of criminal history records for licensing, employment, and similar purposes. The Compact also provides a legal framework for the establishment of a cooperative federal-state system to exchange such records.

The United States Attorney General appointed 15 persons from state and federal agencies to serve on the Council. The Council will prescribe system rules and procedures for the effective and proper operation of the Interstate Identification Index system for noncriminal justice purposes.

Matters for discussion are expected to include:

(1) Advanced Authentication (AA) requirement exemption for indirect access to Criminal Justice Information.

(2) Encryption Standards for Criminal Justice Information at Rest.

(3) The Rap Back Focus Group update.

The meeting will be open to the public on a first-come, first-seated basis. Any member of the public wishing to file a written statement with the Council or wishing to address this session of the Council should notify the Federal Bureau of Investigation (FBI) Compact Officer, Mr. Gary S. Barron at (304) 625-2803, at least 24 hours prior to the start of the session. The notification should contain the individual's name and corporate designation, consumer affiliation, or government designation, along with a short statement describing the topic to be addressed and the time needed for the presentation. Individuals will ordinarily be allowed up to 15 minutes to present a topic.

DATES: The Council will meet in open session from 9 a.m. until 5 p.m., on November 6-7, 2013.

ADDRESSES: The meeting will take place at the Wyndham Tampa Westshore, 700 North Westshore Boulevard, Tampa, Florida, telephone (813) 289-8200.

FOR FURTHER INFORMATION CONTACT: Inquiries may be addressed to Mr. Gary S. Barron, FBI Compact Officer, Module D3, 1000 Custer Hollow Road, Clarksburg, West Virginia 26306, telephone (304) 625-2803, facsimile (304) 625-2868.

Dated: September 25, 2013.

Gary S. Barron,

FBI Compact Officer, Criminal Justice Information Services Division, Federal Bureau of Investigation.

[FR Doc. 2013-24229 Filed 10-2-13; 8:45 am]

BILLING CODE 4410-02-P

DEPARTMENT OF LABOR

Employment and Training Administration

[TA-W-82,388]

Aleris Recycling Bens Run, LLC, a Subsidiary of Aleris Corporation, Including On-Site Leased Workers From Winans Extras Support Staffing and CDI Corporation, Friendly, West Virginia; Notice of Negative Determination on Reconsideration

On May 8, 2013, the Department of Labor (Department) issued an Affirmative Determination Regarding Application for Reconsideration for the workers and former workers of Aleris

Recycling Bens Run, LLC, Friendly, West Virginia (subject firm). The Department's Notice of determination was published in the **Federal Register** on May 24, 2013 (78 FR 31593). The workers were engaged in employment related to the production of pyramid- and cone-shaped deoxidizers, aluminum ingot in multiple alloys, and recycled secondary ingot and sows. Workers were not separately identifiable by article produced. The worker group included on-site leased workers from Winans Extras Support Staffing and CDI Corporation. The subject firm shut down in March 2013.

Pursuant to 29 CFR 90.18(c), reconsideration may be granted under the following circumstances:

(1) If it appears on the basis of facts not previously considered that the determination complained of was erroneous;

(2) If it appears that the determination complained of was based on a mistake in the determination of facts not previously considered; or

(3) If in the opinion of the Certifying Officer, a misinterpretation of facts or of the law justified reconsideration of the decision.

The initial investigation resulted in a negative determination based on the Department's findings that worker separations were not attributable to increased imports of pyramid- and cone-shaped deoxidizers, aluminum ingot in multiple alloys, and recycled secondary ingot and sows (or articles like or directly competitive), by the subject firm or its declining customers, or a shift/acquisition of the production of pyramid- and cone-shaped deoxidizers, aluminum ingot in multiple alloys, and recycled secondary ingot and sows (or articles like or directly competitive) to/from a foreign country by the workers' firm during the time period under investigation (2011 and 2012).

In the request for reconsideration, the petitioner alleged that workers at the subject firm were impacted by foreign competition and that the initial negative determination was erroneous because the Department did not understand the articles produced by the subject firm and their use by the subject firm's customers.

Further, during the course of the reconsideration investigation, the petitioner provided additional information in which he alleged that the subject firm was a supplier to customers whose workers were eligible to apply for Trade Adjustment Assistance (TAA). Therefore, the petitioner alleged that workers of the subject firm are eligible to apply for TAA as secondarily-affected workers.

During the reconsideration investigation, the Department reviewed and confirmed information obtained during the initial investigation, sought clarification of previously-submitted information, and collected additional information from the subject firm and one of its major customers.

The reconsideration investigation findings confirmed that the subject firm did not import articles like or directly competitive with pyramid- and cone-shaped deoxidizers, aluminum ingot in multiple alloys, and recycled secondary ingot and sows in the period under investigation. Additionally, the findings confirmed that the subject firm did not shift the production of pyramid- and cone-shaped deoxidizers, aluminum ingot in multiple alloys, and recycled secondary ingot and sows (or like or directly competitive articles) to a foreign country or acquire the production of these articles, or any like or directly competitive articles, from a foreign country during the period under investigation.

During the initial investigation, the Department conducted a customer survey of the major customers of the subject firm, which captured the majority of the subject firm's sales during the relevant time period. The surveyed customers reported no imports of articles like or directly competitive with those produced by the workers at the subject firm. Because the survey captured the majority of the subject firm's customer volume, no additional customer survey was conducted during the reconsideration investigation. During the reconsideration investigation, however, the Department contacted one of the surveyed customers to confirm information provided by this customer during the initial investigation.

The group eligibility requirements for workers of a firm under Section 222(b) of the Act, 19 U.S.C. 2272(b), can be satisfied if the following criteria are met:

(1) A significant number or proportion of the workers in the workers' firm or an appropriate subdivision of the firm have become totally or partially separated, or are threatened to become totally or partially separated;

(2) the workers' firm is a Supplier or Downstream Producer to a firm that employed a group of workers who received a certification of eligibility under Section 222(a) of the Act, 19 U.S.C. § 2272(a), and such supply or production is related to the article or service that was the basis for such certification; and

(3) either

(A) the workers' firm is a supplier and the component parts it supplied to the firm described in paragraph (2) accounted for at

least 20 percent of the production or sales of the workers' firm;

or

(B) a loss of business by the workers' firm with the firm described in paragraph (2) contributed importantly to the workers' separation or threat of separation.

Section 222(c) of the Act, 19 U.S.C. 2272(c), defines the term "Supplier" as "a firm that produces and supplies directly to another firm component parts for articles, or services used in the production of articles or in the supply of services, as the case may be, that were the basis for a certification of eligibility under subsection (a) [of Section 222 of the Act] of a group of workers employed by such other firm."

With respect to Section 222(b)(2) of the Act, the reconsideration investigation revealed that the subject firm is not a Supplier to a firm that employed a group of workers who received a certification of eligibility under Section 222(a) of the Act, 19 U.S.C. 2272(a).

After careful review of the request for reconsideration, previously-submitted information, and information obtained during the reconsideration investigation, the Department determines that 29 CFR 90.18(c) has not been met.

Conclusion

After careful review, I determine that the requirements of Section 222 of the Act, 19 U.S.C. 2272, have not been met and, therefore, deny the petition for group eligibility of Aleris Recycling Bens Run, LLC, a subsidiary of Aleris Corporation, Friendly, West Virginia, to apply for adjustment assistance, in accordance with Section 223 of the Act, 19 U.S.C. 2273.

Signed in Washington, DC on this 6th day of September, 2013.

Del Min Amy Chen,

Certifying Officer, Office of Trade Adjustment Assistance.

[FR Doc. 2013-24188 Filed 10-2-13; 8:45 am]

BILLING CODE 4510-FN-P

DEPARTMENT OF LABOR

Employment and Training Administration

[TA-W-82,287; TA-W-82,287A]

Hewlett Packard Company, AMS Call Center-Conway, CSS-Americas Support (AMSS) Division, Personal Systems Business Unit, Conway, Arkansas; Hewlett Packard Company, TS AMS GD FS Central on Site, Enterprise Services Organization Business Unit, Bentonville, Arkansas; Notice of Revised Determination on Reconsideration

In accordance with Section 223 of the Trade Act of 1974, as amended ("Act"), 19 U.S.C. 2273, the Department of Labor (Department) herein presents the results of an investigation regarding certification of eligibility to apply for worker adjustment assistance.

Workers of a firm may be eligible for worker adjustment assistance if they satisfy the criteria of subsection (a), (b) or (e) of Section 222 of the Act, 19 U.S.C. 2272(a), (b) and (e). For the Department to issue a certification for workers under Section 222(a) of the Act, 19 U.S.C. 2272(a), the following criteria must be met:

(1) The first criterion (set forth in Section 222(a)(1) of the Act, 19 U.S.C. § 2282(a)(1)) requires that a significant number or proportion of the workers in the workers' firm must have become totally or partially separated or be threatened with total or partial separation.

(2) The second criterion (set forth in Section 222(a)(2) of the Act, 19 U.S.C. § 2272(a)(2)) may be satisfied in one of two ways:

(A) *Increased Imports Path:*

(i) Sales or production, or both, at the workers' firm must have decreased absolutely, AND

(ii) (I) imports of articles or services like or directly competitive with articles or services produced or supplied by the workers' firm have increased, OR

(II)(aa) imports of articles like or directly competitive with articles into which the component part produced by the workers' firm was directly incorporated have increased; OR (II)(bb) imports of articles like or directly competitive with articles which are produced directly using the services supplied by the workers' firm have increased; OR (III) imports of articles directly incorporating component parts not produced in the U.S. that are like or directly competitive with the article into which the component part produced by the workers' firm was directly incorporated have increased.

(iii) the increase in imports described in clause (ii) contributed importantly to such workers' separation or threat of separation and to the decline in the sales or production of such firm.

(B) *Shift in Production or Supply Path:*

(i)(I) There has been a shift by the workers' firm to a foreign country in the production of articles or supply of services like or directly competitive with those produced/supplied by the workers' firm; OR

(II) there has been an acquisition from a foreign country by the workers' firm of articles/services that are like or directly competitive with those produced/supplied by the workers' firm; and

(ii) the shift described in clause (i)(I) or the acquisition of articles or services described in clause (i)(II) contributed importantly to such workers' separation or threat of separation.

For the Department to issue a secondary worker certification under Section 222(b) of the Act, 19 U.S.C. 2272(b), to workers of a Supplier or a Downstream Producer, the following criteria must be met:

(1) A significant number or proportion of the workers in the workers' firm or an appropriate subdivision of the firm have become totally or partially separated, or are threatened to become totally or partially separated;

(2) the workers' firm is a Supplier or Downstream Producer to a firm that employed a group of workers who received a certification of eligibility under Section 222(a) of the Act, 19 U.S.C. § 2272(a), and such supply or production is related to the article or service that was the basis for such certification; and

(3) either

(A) the workers' firm is a supplier and the component parts it supplied to the firm described in paragraph (2) accounted for at least 20 percent of the production or sales of the workers' firm; or

(B) a loss of business by the workers' firm with the firm described in paragraph (2) contributed importantly to the workers' separation or threat of separation.

Section 222(c) of the Act, 19 U.S.C. 2272(c), defines the terms "Supplier" and "Downstream Producer."

Workers of a firm may also be considered eligible if they are publicly identified by name by the International Trade Commission (ITC) as a member of a domestic industry in an investigation resulting in a category of determination that is listed in Section 222(e) of the Act, 19 U.S.C. 2272(e).

The group eligibility requirements for workers of a firm under Section 222(e) of the Act, 19 U.S.C. 2272(e), can be satisfied if the following criteria are met:

(1) The workers' firm is publicly identified by name by the International Trade Commission as a member of a domestic industry in an investigation resulting in—

(A) an affirmative determination of serious injury or threat thereof under section 202(b)(1); (B) an affirmative determination of market disruption or threat thereof under section 421(b)(1); or (C) an affirmative final determination of material injury or threat thereof under section 705(b)(1)(A) or 735(b)(1)(A) of the Tariff Act of 1930 (19 U.S.C. 1671d(b)(1)(A) and 1673d(b)(1)(A));

(2) the petition is filed during the 1-year period beginning on the date on which—(A) a summary of the report submitted to the President by the International Trade Commission under section 202(f)(1) with respect to the affirmative determination described in paragraph (1)(A) is published in the **Federal Register** under section 202(f)(3); or (B) notice of an affirmative determination described in subparagraph (1) is published in the **Federal Register**; and

(3) the workers have become totally or partially separated from the workers' firm within—(A) the 1-year period described in paragraph (2); or (B) notwithstanding section 223(b)(1), the 1-year period preceding the 1-year period described in paragraph (2).

The investigation was initiated in response to a petition filed on December 21, 2012 by a state workforce official on behalf of workers of Hewlett Packard Company, AMS Call Center-Conway, CSS-Americas Support (AMSS) Division, Personal Systems Business Unit, Conway, Arkansas (TA-W-82,287) and Hewlett Packard Company, TS AMS GD FS Central On Site, Enterprise Services Organization Business Unit, Bentonville, Arkansas (TA-W-82,287A) (hereafter referred to as "the Conway Facility" and "the Bentonville Facility," respectively).

Workers at the Conway Facility are engaged in activities related to the supply of customer call center services. Workers at the Bentonville Facility are engaged in activities related to the supply of internal, on-site technical support services. The subject worker groups are separately identifiable from each other.

On January 25, 2013, the Department issued a Notice of Termination of Investigation applicable to workers and former workers of the Conway Facility. On July 9, 2013, the Department issued a Notice of Investigation.

TA-W-82,287 (Conway Facility)

Section 222(a)(1) has been met because a significant number or proportion of the workers at the Conway Facility has become totally or partially separated, or are threatened to become totally or partially separated.

Section 222(a)(2)(B) has been met with regards to workers at the Conway Facility because the workers' firm has shifted to a foreign country the supply of services like or directly competitive with those supplied by the subject worker group, which contributed importantly to worker group separations at Hewlett Packard Company, AMS Call Center-Conway, AMSS Division, Personal Systems Business Unit, Conway, Arkansas.

TA-W-82,287A (Bentonville Facility)

Section 222(a)(2)(A) has not been met with regards to workers at the Bentonville Facility because the workers' firm has not increased its imports of services like or directly competitive with the on-site technical support services supplied by the subject worker group.

Section 222(a)(2)(B) has not been met with regards to workers at the Bentonville Facility because the workers' firm has not shifted to a foreign country the supply of services like or directly competitive with the on-site technical support services supplied by the subject workers.

With respect to Section 222(b)(2) of the Act, the investigation revealed that the Bentonville Facility is not a Supplier or Downstream Producer to a firm that employed a group of workers who received a certification of eligibility under Section 222(a) of the Act, 19 U.S.C. 2272(a).

Finally, the group eligibility requirements under Section 222(e) of the Act, have not been satisfied either because Criterion (1) has not been met since the workers' firm has not been publicly identified by name by the ITC as a member of a domestic industry in an investigation resulting in an affirmative finding of serious injury, market disruption, or material injury, or threat thereof.

Conclusion

After careful review of the facts obtained in the investigation, I determine that, with regards to TA-W-82,287A, the requirements of Section 222 of the Act, 19 U.S.C. 2272, have not been met and, therefore, deny the petition for group eligibility of Hewlett Packard Company, TS AMS GD FS Central On Site, Enterprise Services Organization Business Unit, Bentonville, Arkansas, to apply for adjustment assistance, in accordance with Section 223 of the Act, 19 U.S.C. 2273.

After careful review of the facts obtained in the investigation, I determine that, with regards to TA-W-82,287, workers of Hewlett Packard Company, AMS Call Center-Conway, CSS-Americas Support (AMSS) Division, Personal Systems Business Unit, Conway, Arkansas, who are engaged in activities related to the supply of customer support call center services, meet the worker group certification criteria under Section 222(a) of the Act, 19 U.S.C. 2272(a). In accordance with Section 223 of the Act, 19 U.S.C. 2273, I make the following certification:

All workers of Hewlett Packard Company, AMS Call Center-Conway, CSS-Americas Support (AMSS) Division, Personal Systems Business Unit, Conway, Arkansas, who became totally or partially separated from employment on or after December 20, 2011, through two years from the date of certification, and all workers in the group threatened with total or partial separation from employment on the date of certification through two years from the date of certification, are eligible to apply for adjustment assistance under Chapter 2 of Title II of the Trade Act of 1974, as amended.;

Signed in Washington, DC, this 4th day of September, 2013.

Del Min Amy Chen,

Certifying Officer, Office of Trade Adjustment Assistance.

[FR Doc. 2013-24192 Filed 10-2-13; 8:45 am]

BILLING CODE 4510-FN-P

DEPARTMENT OF LABOR

Employment and Training Administration

[TA-W-82,680A; TA-W-82,680B]

Supermedia LLC, Publishing Operations Division, Account Management Group, a Subsidiary of Dex Media Inc., Including On-Site Leased Workers From TAC Worldwide Companies, St. Petersburg, Florida; Supermedia LLC, Publishing Operations Division, Internet Publishing Operations Group, a Subsidiary of Dex Media Inc., Including On-Site Leased Workers From TAC Worldwide Companies, St. Petersburg, Florida; Supermedia LLC, Publishing Operations Division, Listing Management Group, a Subsidiary of Dex Media Inc., Including On-Site Leased Workers From TAC Worldwide Companies, St. Petersburg, Florida; Notice of Revised Determination on Reconsideration

On August 2, 2013, the Department of Labor (Department) issued a negative determination applicable to workers and former workers of SuperMedia LLC, Publishing Operation Division, Account Management Group, Internet Publishing Operations Group, and Listing Management Group, a subsidiary of Dex Media, Inc., St. Petersburg, Florida. Workers within the Publishing Operations Division are separately identifiable by service supplied.

The subject worker groups include on-site leased workers from TAC Worldwide Companies.

Workers of SuperMedia LLC, Publishing Operation Division, Accounting Management Group (TA-W-82,680) and the Listing Management

Group (TA-W-82,680B), St. Petersburg, Florida were eligible to apply for Trade Adjustment Assistance (TAA) under TA-W-74,033 (expired on July 27, 2012).

The group eligibility requirements for workers of a firm under Section 222(a) of the Act, 19 U.S.C. 2272(a), are satisfied if the following criteria are met:

(1) a significant number or proportion of the workers in such workers' firm have become totally or partially separated, or are threatened to become totally or partially separated;

(2)(B)(i)(I) there has been a shift by the workers' firm to a foreign country in the production of articles or supply of services like or directly competitive with those produced/supplied by the workers' firm; OR

(II) there has been an acquisition from a foreign country by the workers' firm of articles/services that are like or directly competitive with those produced/supplied by the workers' firm; AND

(ii) the shift/acquisition must have contributed importantly to the workers' separation or threat of separation.

After the issuance of the negative determination, the Department received revised information from the subject firm regarding Account Management Group (TA-W-82,680) and Internet Publishing Operations Group (TA-W-82,680A).

With regards to Account Management Group and Internet Publishing Operations Group, the Department determines that Section 222(a)(1) has been met because a significant number or proportion of the workers in each Group have become totally or partially separated.

With regards to Account Management Group (TA-W-82,680) and Internet Publishing Operations Group (TA-W-82,680A), the Department determines that Section 222(a)(2)(B) has been met because SuperMedia LLC has shifted to a foreign country the supply of services like or directly competitive with those supplied by the subject workers, which contributed importantly to worker group separations at SuperMedia LLC, Publishing Operation Division, Account Management Group and Internet Publishing Operations Group, St. Petersburg, Florida.

The Department did not receive new or revised information regarding Listing Management Group (TA-W-82,680B). Consequently, the determination applicable to workers and former workers of SuperMedia LLC, Publishing Operation Division, Listing Management Group, St. Petersburg, Florida is unchanged.

Conclusion

I affirm that, with regards to SuperMedia LLC, Publishing Operation Division, Listing Management Group, St. Petersburg, Florida, the requirements of Section 222 of the Act, 19 U.S.C. § 2272, have not been met and, therefore, deny the petition for group eligibility of SuperMedia LLC, Publishing Operation Division, Listing Management Group, a subsidiary of Dex Media, Inc., St. Petersburg, Florida (TA-W-82,680B), in accordance with Section 223 of the Act, 19 U.S.C. 2273.

After careful review of the new information obtained during the reconsideration investigation, I determine that workers and former workers of SuperMedia LLC, Publishing Operation Division, Account Management Group and Internet Publishing Operations Group, St. Petersburg, Florida, meet the worker group certification criteria under Section 222(a) of the Act, 19 U.S.C. 2272(a). In accordance with Section 223 of the Act, 19 U.S.C. 2273, I make the following certification:

All workers of SuperMedia LLC, Publishing Operation Division, Account Management Group, a subsidiary of Dex Media, Inc., St. Petersburg, Florida (TA-W-82,680) who became totally or partially separated from employment on or after July 28, 2012 through two years from the date of certification, and all workers in the group threatened with total or partial separation from employment on the date of certification through two years from the date of certification, are eligible to apply for adjustment assistance under Chapter 2 of Title II of the Trade Act of 1974, as amended; and

All workers of SuperMedia LLC, Publishing Operation Division, Internet Publishing Operations Group, a subsidiary of Dex Media, Inc., St. Petersburg, Florida (TA-W-82,680A) who became totally or partially separated from employment on or after April 17, 2012 through two years from the date of certification, and all workers in the group threatened with total or partial separation from employment on the date of certification through two years from the date of certification, are eligible to apply for adjustment assistance under Chapter 2 of Title II of the Trade Act of 1974, as amended.

Signed in Washington, DC, this 30th day of August, 2013.

Del Min Amy Chen,

Certifying Officer, Office of Trade Adjustment Assistance.

[FR Doc. 2013-24189 Filed 10-2-13; 8:45 am]

BILLING CODE 4510-FN-P

DEPARTMENT OF LABOR

Employment and Training Administration

TA-W-82,705, the Boeing Company Boeing Commercial Aircraft, (BCA) Including On-Site Leased Workers From Chipton Ross, Inc., CTS Technical Services, Inc., Moseley Technical Services, Inc., PDS Technical Services, Triad Systems International, Volt Services and Yoh Services Auburn, Washington; TA-W-82,705A, the Boeing Company Boeing Commercial Aircraft, (BCA) Including On-Site Leased Workers From Adecco, USA, Inc., Cascade Engineering, CDI Corporation, Chipton Ross, Inc., Comforce Corporation, Computer Staffing Services, CTS Technical Services, Inc., D3 Technologies, Dassault System Services, Fujitsu America, Inc., Kaman Engineering Services, Inc., Kaman Global Aerosystems, Inc., Midcom, Foker Elmo Inc., Moseley Technical Services, Inc., PDS Technical Services, Tass, Inc., Triad Systems International, Volt Services and Yoh Services Everett, Washington; TA-W-82,705B, The Boeing Company Boeing Commercial Aircraft, (BCA) Including On-Site Leased Workers From Comforce Corporation, PDS Technical Services, Triad Systems International and Volt Services Puyallup, Washington; TA-W-82,705C, the Boeing Company Boeing Commercial Aircraft, (BCA) Including On-Site Leased Workers From Adecco USA, Inc., Chipton Ross, Inc., Comforce Corporation, CTS Technical Services, Inc., Midcom, Moseley Technical Services, Inc., PDS Technical Services, Triad Systems International, Volt Services and Yoh Services Renton, Washington; TA-W-82,705D, the Boeing Company Boeing Commercial Aircraft, (BCA) Including On-Site Leased Workers From Adecco USA, Inc., Chipton Ross, Inc., and PDS Technical Services Seattle, Washington; TA-W-82,705E, the Boeing Company Boeing Commercial Aircraft, (BCA) Including On-site Leased Workers from Chipton Ross, Inc., Comforce Corporation, CTS Technical Services, Inc., Moseley Technical Services, Inc., PDS Technical Services, Triad Systems International, Tass Inc., and Volt Services Tukwila, Washington; TA-W-82,705F, the Boeing Company Boeing Commercial Aircraft, (BCA) Including On-Site Leased Workers From Adecco

USA, Inc., Chipton Ross, Inc., Comforce Corporation, CTS Technical Services, Inc., D3 Technologies, Kaman Engineering Services, Inc., Midcom, PDS Technical Services, Triad Systems International, Volt Services and Yoh Services Mukilteo, Washington; Amended Certification Regarding Eligibility to Apply for Worker Adjustment Assistance

In accordance with Section 223 of the Trade Act of 1974, as amended ("Act"), 19 U.S.C. 2273, the Department of Labor issued a Certification of Eligibility to Apply for Worker Adjustment Assistance on June 12, 2013, applicable to workers of The Boeing Company, BCA—Hourly Manufacturing & Quality, Auburn, Washington (TA-W-82,705), Everett, Washington (TA-W-82,705A), Puyallup, Washington (TA-W-82,705B), North 8th and Logan Avenue North, Renton, Washington (TA-W-82,705C), Seattle, Washington (TA-W-82,705D), and Tukwila, Washington (TA-W-82,705E). The workers are engaged in activities related to the production of commercial passenger aircraft. The notice was published in the **Federal Register** on July 2, 2013 (78 FR 39775).

At the request of a company official and union, the Department reviewed the certification for workers of the subject firm.

New information shows that worker separation have occurred during the relevant time period at the Mukilteo, Washington location of The Boeing Company, Boeing Commercial Aircraft (BCA) attributable to an acquisition of articles from a foreign country. Information also shows that workers leased from the above mentioned firms were employed on-site at the above mentioned locations of the subject firm. These workers were sufficiently under the control of The Boeing Company, Boeing Commercial Aircraft (BCA) to be considered leased workers.

Accordingly, the Department is amending the certification to include workers in the Mukilteo, Washington facility of The Boeing Company, Boeing Commercial Aircraft (BCA) and to include on-site leased workers. The amended notice applicable to TA-W-82,705 and TA-W-82,705A-F is hereby issued as follows:

All workers of The Boeing Company, Boeing Commercial Aircraft, (BCA), including on-site leased workers from Chipton Ross, Inc., CTS Technical Services, Inc., Moseley Technical Services, Inc., PDS Technical Services, Triad Systems International, Volt Services and YOH Services, Auburn, Washington (TA-W-82,705), The Boeing Company, Boeing

Commercial Aircraft, (BCA), including on-site leased workers from Adecco USA, Inc., Chipton Ross, Inc., Comforce Corporation, CTS Technical Services, Inc., Midcom, Moseley Technical Services, Inc., PDS Technical Services, Tass, Inc., Triad Systems International, Volt Services and YOH Services, Everett, Washington, (TA-W-82,705A), The Boeing Company, Boeing Commercial Aircraft, (BCA), including on-site leased workers from, Comforce Corporation, PDS Technical Services, Triad Systems International and Volt Services, Puyallup, Washington, (TA-W-82,705B), The Boeing Company, Boeing Commercial Aircraft, (BCA), including on-site leased workers from Adecco USA, Inc., Chipton Ross, Inc., Comforce Corporation, CTS Technical Services, Inc., Midcom, Moseley Technical Services, Inc., PDS Technical Services, Triad Systems International, Volt Services and YOH Services, Renton, Washington, (TA-W-82,705C), The Boeing Company, Boeing Commercial Aircraft, (BCA), including on-site leased workers from Adecco USA, Inc., Chipton Ross, Inc., and PDS Technical Services, Seattle, Washington, (TA-W-82,705D), The Boeing Company, Boeing Commercial Aircraft, (BCA), including on-site leased workers from Chipton Ross, Inc., Comforce Corporation, CTS Technical Services, Inc., Moseley Technical Services, Inc., PDS Technical Services, Triad Systems International, Tass Inc., and Volt Services Tukwila, Washington, (TA-W-82,705E), and The Boeing Company, Boeing Commercial Aircraft, (BCA), including on-site leased workers from Adecco USA, Inc., Chipton Ross, Inc., Comforce Corporation, CTS Technical Services, Inc., D3 Technologies, Kaman Engineering Services, Inc., Midcom, PDS Technical Services, Triad Systems International, Volt Services and YOH Services, Mukilteo, Washington, (TA-W-82,705F), who became totally or partially separated from employment on or after April 26, 2012, through June 12, 2015, and all workers in the group threatened with total or partial separation from employment on the date of certification through two years from the date of certification, are eligible to apply for adjustment assistance under Chapter 2 of Title II of the Trade Act of 1974, as amended.

Signed in Washington, DC, this 9th day of September 2013.

Michael W. Jaffe,

Certifying Officer, Office of Trade Adjustment Assistance.

[FR Doc. 2013-24190 Filed 10-2-13; 8:45 am]

BILLING CODE 4510-FN-P

DEPARTMENT OF LABOR

Employment and Training Administration

[TA-W-82,703]

Sanyo Solar of Oregon, LLC, Wafer Slicing and Quality Control Operations, Including On-Site Leased Workers From Brown and Dunton and Cirk Solutions, Inc., Salem, Oregon; Amended Certification Regarding Eligibility To Apply for Worker Adjustment Assistance

In accordance with Section 223 of the Trade Act of 1974, as amended ("Act"), 19 U.S.C. 2273, the Department of Labor issued a Certification of Eligibility to Apply for Worker Adjustment Assistance on June 7, 2013, applicable to workers of Sanyo Solar of Oregon, LLC, Wafer Slicing and Quality Control Operations, Salem, Oregon, including on-site leased workers from Brown and Dunton, Inc., Salem, Oregon. The Department's notice of determination was published in the **Federal Register** on July 2, 2013 (Volume 78 FR page 39778).

At the request of a company official, the Department reviewed the certification for workers of the subject firm. The workers were engaged in the production of polysilicon wafers and included workers who supplied quality control and support functions.

The company reports that workers leased from Cirk Solutions, Inc. were employed on-site at the Salem, Oregon location of Sanyo Solar of Oregon, LLC, Wafer Slicing and Quality Control Operations. The Department has determined that these workers were sufficiently under the control of the subject firm to be considered leased workers.

Based on these findings, the Department is amending this certification to include workers leased from Cirk Solutions, Inc. working on-site at the Salem, Oregon location of Sanyo Solar of Oregon, LLC, Wafer Slicing and Quality Control Operations.

The amended notice applicable to TA-W-82,703 is hereby issued as follows:

All workers of Cirk Solutions, Inc., reporting to Sanyo Solar of Oregon, LLC, Wafer Slicing and Quality Control Operations, Salem, Oregon, including on-site leased workers from Brown and Dunton, Inc., Salem, Oregon, who became totally or partially separated from employment on or after May 1, 2012, through June 7, 2015, and all workers in the group threatened with total or partial separation from employment on the date of certification through two years from the date of certification, are eligible to apply

for adjustment assistance under Chapter 2 of Title II of the Trade Act of 1974, as amended.

Signed in Washington, DC, this 17th day of September, 2013.

Michael W. Jaffe,

Certifying Officer, Office of Trade Adjustment Assistance.

[FR Doc. 2013-24196 Filed 10-2-13; 8:45 am]

BILLING CODE 4510-FN-P

DEPARTMENT OF LABOR

Employment and Training Administration

[TA-W-82,244]

Philips Lighting, Including Workers Whose Wages Were Paid Under Philips Lightolier, Genlyte Group, and Genlyte Thomas Group LLC, and Including On-Site Leased Workers From Adecco, Wilmington, Massachusetts; Amended Certification Regarding Eligibility To Apply for Worker Adjustment Assistance

On December 27, 2012, the Department of Labor (Department) issued a certification regarding eligibility to apply for Trade Adjustment Assistance (TAA) applicable to workers and former workers of Philips Lighting, Philips Lightolier Division, including on-site leased workers from Adecco, Wilmington, Massachusetts. The workers are engaged in employment related to the production of fluorescent lighting fixtures.

Following the issuance of the certification, the Department received information that Philips Lighting workers separated from (or threatened with separation from) 45 Industrial Way, Wilmington, Massachusetts had (or have, as the case may be) wages paid under Philips Lighting, Philips Lightolier, GENLYTE Group, and Genlyte Thomas Group LLC and under two Federal Employer Identification Numbers (22-258-4333 and 22-360-0475).

Based on these findings, the Department is amending this certification to include workers of the subject firm whose wages were paid under the afore-mentioned names and FEIN.

The amended notice applicable to TA-W-82,244 is hereby issued as follows:

All workers of Philips Lighting, including workers whose wages were paid under Philips Lightolier, GENLYTE Group, and Genlyte Thomas Group LLC, and including on-site leased workers from Adecco, Wilmington, Massachusetts, who became totally or partially separated from employment on or after December 10, 2011,

through December 27, 2014, and all workers in the group threatened with total or partial separation from employment on December 27, 2012 through December 27, 2014, are eligible to apply for adjustment assistance under Chapter 2 of Title II of the Trade Act of 1974, as amended.

Signed in Washington, DC, this 5th day of September, 2013.

Del Min Amy Chen,

Certifying Officer, Office of Trade Adjustment Assistance.

[FR Doc. 2013-24191 Filed 10-2-13; 8:45 am]

BILLING CODE 4510-FN-P

DEPARTMENT OF LABOR

Employment and Training Administration

Notice of Determinations Regarding Eligibility To Apply for Worker Adjustment Assistance

In accordance with Section 223 of the Trade Act of 1974, as amended (19 U.S.C. 2273) the Department of Labor herein presents summaries of determinations regarding eligibility to apply for trade adjustment assistance for workers by (TA-W) number issued during the period of August 26, 2013 through September 6, 2013.

In order for an affirmative determination to be made for workers of a primary firm and a certification issued regarding eligibility to apply for worker adjustment assistance, each of the group eligibility requirements of Section 222(a) of the Act must be met.

I. Under Section 222(a)(2)(A), the following must be satisfied:

(1) A significant number or proportion of the workers in such workers' firm have become totally or partially separated, or are threatened to become totally or partially separated;

(2) The sales or production, or both, of such firm have decreased absolutely; and

(3) One of the following must be satisfied:

(A) Imports of articles or services like or directly competitive with articles produced or services supplied by such firm have increased;

(B) Imports of articles like or directly competitive with articles into which one or more component parts produced by such firm are directly incorporated, have increased;

(C) Imports of articles directly incorporating one or more component parts produced outside the United States that are like or directly competitive with imports of articles incorporating one or more component parts produced by such firm have increased;

(D) Imports of articles like or directly competitive with articles which are produced directly using services supplied by such firm, have increased; and

(4) The increase in imports contributed importantly to such workers' separation or threat of separation and to the decline in the sales or production of such firm; or

II. Section 222(a)(2)(B) all of the following must be satisfied:

(1) A significant number or proportion of the workers in such workers' firm have become totally or partially separated, or are threatened to become totally or partially separated;

(2) One of the following must be satisfied:

(A) There has been a shift by the workers' firm to a foreign country in the production of articles or supply of services like or directly competitive with those produced/supplied by the workers' firm;

(B) There has been an acquisition from a foreign country by the workers' firm of articles/services that are like or directly competitive with those produced/supplied by the workers' firm; and

(3) The shift/acquisition contributed importantly to the workers' separation or threat of separation.

In order for an affirmative determination to be made for adversely affected workers in public agencies and a certification issued regarding eligibility to apply for worker adjustment assistance, each of the group eligibility requirements of Section 222(b) of the Act must be met.

(1) a significant number or proportion of the workers in the public agency have become totally or partially separated, or are threatened to become totally or partially separated;

(2) the public agency has acquired from a foreign country services like or directly competitive with services which are supplied by such agency; and

(3) the acquisition of services contributed importantly to such workers' separation or threat of separation.

In order for an affirmative determination to be made for adversely affected secondary workers of a firm and a certification issued regarding eligibility to apply for worker adjustment assistance, each of the group eligibility requirements of Section 222(c) of the Act must be met.

(1) A significant number or proportion of the workers in the workers' firm have become totally or partially separated, or are threatened to become totally or partially separated;

(2) The workers' firm is a Supplier or Downstream Producer to a firm that employed a group of workers who received a certification of eligibility under Section 222(a) of the Act, and such supply or production is related to the article or service that was the basis for such certification; and

(3) Either—

(A) The workers' firm is a supplier and the component parts it supplied to the firm described in paragraph (2) accounted for at least 20 percent of the production or sales of the workers' firm; or

(B) A loss of business by the workers' firm with the firm described in paragraph (2) contributed importantly to the workers' separation or threat of separation.

In order for an affirmative determination to be made for adversely affected workers in firms identified by the International Trade Commission and a certification issued regarding eligibility to apply for worker adjustment assistance, each of the group

eligibility requirements of Section 222(f) of the Act must be met.

(1) The workers' firm is publicly identified by name by the International Trade Commission as a member of a domestic industry in an investigation resulting in—

(A) An affirmative determination of serious injury or threat thereof under section 202(b)(1);

(B) An affirmative determination of market disruption or threat thereof under section 421(b)(1); or

(C) An affirmative final determination of material injury or threat thereof under section 705(b)(1)(A) or 735(b)(1)(A) of the Tariff Act of 1930 (19 U.S.C. 1671d(b)(1)(A) and 1673d(b)(1)(A));

(2) The petition is filed during the 1-year period beginning on the date on which—

(A) A summary of the report submitted to the President by the International Trade Commission under section 202(f)(1) with respect to the affirmative determination described in paragraph (1)(A) is published in the

Federal Register under section 202(f)(3); or

(B) Notice of an affirmative determination described in subparagraph (1) is published in the **Federal Register**; and

(3) The workers have become totally or partially separated from the workers' firm within—

(A) The 1-year period described in paragraph (2); or

(B) Notwithstanding section 223(b)(1), the 1-year period preceding the 1-year period described in paragraph (2).

Affirmative Determinations for Worker Adjustment Assistance

The following certifications have been issued. The date following the company name and location of each determination references the impact date for all workers of such determination.

The following certifications have been issued. The requirements of Section 222(a)(2)(A) (increased imports) of the Trade Act have been met.

TA-W No.	Subject firm	Location	Impact date
82,777	Cheshire Investments, Inc., TPI Staffing and American Labor	Keene, NH	June 3, 2012.
82,777A	Cheshire Investments, Inc., TPI Staffing and American Labor	Attleboro, MA	June 3, 2012.
82,960	Schmitt E.G., Inc., George Schmitt & Co., Inc., Randstad	Sandston, VA	August 5, 2012.
82,992	Electric Materials Company (The)	North East, PA	October 1, 2012.

The following certifications have been issued. The requirements of Section 222(a)(2)(B) (shift in production or services) of the Trade Act have been met.

TA-W No.	Subject firm	Location	Impact date
82,807	General Motors Saginaw Metal Castings Operations, Powertrain Division, Developmental Dimensions International.	Saginaw, MI	June 12, 2012.
82,838A	Apria Healthcare LLC, Document Imaging Department	Overland Park, KS	June 20, 2012.
82,921	Staples, Inc., Human Resources Services Division, BTHR Benetemps and Davis Temps.	Framingham, MA	July 18, 2012.
82,930	International Paper Company, Xpedx-Olathe, Kansas Credit Department	Olathe, KS	July 24, 2012.
82,931	Tenneco Automotive Operating Company, Inc. (TAOC), Naoerc Division, Maintenance Department, Tenneco, Inc., Elite Staffing.	Cozad, NE	January 14, 2013.
82,948	Rosemount Analytical, Inc., Emerson	Solon, OH	July 31, 2012.
82,954	Blue Lynx Media, Tribune Company, Addison Group and Robert Half Accounting.	Lewisville, TX	August 1, 2012.
82,980	Sunrise Medical, Labor Max Staffing	Fresno, CA	August 9, 2012.
82,989	Ricon Corporation, A Wabtec Company, Volt Workforce Solutions and Aerotek.	Panorama City, CA	August 13, 2012.
83,009	Horsehead Corporation, Horsehead Holding Corporation	Monaca, PA	August 20, 2012.
83,010	CTS Automotive LLC, CTS Corporation, Metro Staff, Inc., Aerotek	Carol Stream, IL	August 20, 2012.

Negative Determinations for Worker Adjustment Assistance

In the following cases, the investigation revealed that the eligibility

criteria for worker adjustment assistance have not been met for the reasons specified.

The investigation revealed that the criteria under paragraphs (a)(2)(A)(i)

(decline in sales or production, or both) and (a)(2)(B) (shift in production or services to a foreign country) of section 222 have not been met.

TA-W No.	Subject firm	Location	Impact date
82,962	Horror Entertainment, LLC, d/b/a FEARnet, Eleventh Hour	Santa Monica, CA	

The investigation revealed that the criteria under paragraphs(a)(2)(A) (increased imports) and (a)(2)(B) (shift in production or services to a foreign country) of section 222 have not been met.

TA-W No.	Subject firm	Location	Impact date
82,290	Hewlett Packard Company, PSG Americas Commercial Products.	Houston, TX	
82,751	Hewlett Packard Company, Enterprise Group, Enterprise Storage Servers and Networking, etc.	Fort Collins, CO.	
82,838	Apria Healthcare LLC, Billing Department	Overland Park, KS.	
82,851	Cascades Enviropac HPM, Cascades of Canada, Express Employment, Labor Ready.	Grand Rapids, MI.	
82,864	Homestead Technologies, Intuit, Inc., Endurance International Group, Inc.	Centennial, CO.	
82,894	International Paper Company, Industrial Packaging Division, Manpower.	Modesto, CA.	
82,938	Webcrafters, Inc., Quali Temps, Inc	Madison, WI	

Determinations Terminating Investigations Of Petitions for Worker Adjustment Assistance

After notice of the petitions was published in the **Federal Register** and

on the Department's Web site, as required by Section 221 of the Act (19 U.S.C. 2271), the Department initiated investigations of these petitions.

The following determinations terminating investigations were issued because the petitioner has requested that the petition be withdrawn.

TA-W No.	Subject firm	Location	Impact date
82,959	Global Resource Services LLC	Darrington, WA.	
83,013	Graymont	St. Helens, OR.	

I hereby certify that the aforementioned determinations were issued during the period of August 26, 2013 through September 6, 2013. These determinations are available on the Department's Web site tradeact/taa/taa_search_form.cfm under the searchable listing of determinations or by calling the Office of Trade Adjustment Assistance toll free at 888-365-6822.

Signed at Washington DC this 12th day of September 2013.

Michael W. Jaffe,

Certifying Officer, Office of Trade Adjustment Assistance.

[FR Doc. 2013-24193 Filed 10-2-13; 8:45 am]

BILLING CODE 4510-FN-P

DEPARTMENT OF LABOR

Employment and Training Administration

Notice of Determinations Regarding Eligibility To Apply for Worker Adjustment Assistance

In accordance with Section 223 of the Trade Act of 1974, as amended (19 U.S.C. 2273) the Department of Labor herein presents summaries of determinations regarding eligibility to apply for trade adjustment assistance for workers by (TA-W) number issued during the period of September 9, 2013 through September 13, 2013.

In order for an affirmative determination to be made for workers of

a primary firm and a certification issued regarding eligibility to apply for worker adjustment assistance, each of the group eligibility requirements of Section 222(a) of the Act must be met.

I. Under Section 222(a)(2)(A), the following must be satisfied:

(1) A significant number or proportion of the workers in such workers' firm have become totally or partially separated, or are threatened to become totally or partially separated;

(2) The sales or production, or both, of such firm have decreased absolutely; and

(3) One of the following must be satisfied:

(A) Imports of articles or services like or directly competitive with articles produced or services supplied by such firm have increased;

(B) Imports of articles like or directly competitive with articles into which one or more component parts produced by such firm are directly incorporated, have increased;

(C) Imports of articles directly incorporating one or more component parts produced outside the United States that are like or directly competitive with imports of articles incorporating one or more component parts produced by such firm have increased;

(D) Imports of articles like or directly competitive with articles which are produced directly using services supplied by such firm, have increased; and

(4) The increase in imports contributed importantly to such workers' separation or threat of separation and to the decline in the sales or production of such firm; or

II. Section 222(a)(2)(B) all of the following must be satisfied:

(1) A significant number or proportion of the workers in such workers' firm have become totally or partially separated, or are threatened to become totally or partially separated;

(2) One of the following must be satisfied:

(A) There has been a shift by the workers' firm to a foreign country in the production of articles or supply of services like or directly competitive with those produced/supplied by the workers' firm;

(B) There has been an acquisition from a foreign country by the workers' firm of articles/services that are like or directly competitive with those produced/supplied by the workers' firm; and

(3) The shift/acquisition contributed importantly to the workers' separation or threat of separation.

In order for an affirmative determination to be made for adversely affected workers in public agencies and a certification issued regarding eligibility to apply for worker adjustment assistance, each of the group eligibility requirements of Section 222(b) of the Act must be met.

(1) A significant number or proportion of the workers in the public agency have

become totally or partially separated, or are threatened to become totally or partially separated;

(2) the public agency has acquired from a foreign country services like or directly competitive with services which are supplied by such agency; and

(3) the acquisition of services contributed importantly to such workers' separation or threat of separation.

In order for an affirmative determination to be made for adversely affected secondary workers of a firm and a certification issued regarding eligibility to apply for worker adjustment assistance, each of the group eligibility requirements of Section 222(c) of the Act must be met.

(1) A significant number or proportion of the workers in the workers' firm have become totally or partially separated, or are threatened to become totally or partially separated;

(2) the workers' firm is a Supplier or Downstream Producer to a firm that employed a group of workers who received a certification of eligibility under Section 222(a) of the Act, and such supply or production is related to the article or service that was the basis for such certification; and

(3) either—

(A) the workers' firm is a supplier and the component parts it supplied to the

firm described in paragraph (2) accounted for at least 20 percent of the production or sales of the workers' firm; or

(B) a loss of business by the workers' firm with the firm described in paragraph (2) contributed importantly to the workers' separation or threat of separation.

In order for an affirmative determination to be made for adversely affected workers in firms identified by the International Trade Commission and a certification issued regarding eligibility to apply for worker adjustment assistance, each of the group eligibility requirements of Section 222(f) of the Act must be met.

(1) The workers' firm is publicly identified by name by the International Trade Commission as a member of a domestic industry in an investigation resulting in—

(A) an affirmative determination of serious injury or threat thereof under section 202(b)(1);

(B) an affirmative determination of market disruption or threat thereof under section 421(b)(1); or

(C) an affirmative final determination of material injury or threat thereof under section 705(b)(1)(A) or 735(b)(1)(A) of the Tariff Act of 1930 (19 U.S.C. 1671d(b)(1)(A) and 1673d(b)(1)(A));

(2) the petition is filed during the 1-year period beginning on the date on which—

(A) a summary of the report submitted to the President by the International Trade Commission under section 202(f)(1) with respect to the affirmative determination described in paragraph (1)(A) is published in the **Federal Register** under section 202(f)(3); or

(B) notice of an affirmative determination described in subparagraph (1) is published in the **Federal Register**; and

(3) the workers have become totally or partially separated from the workers' firm within—

(A) the 1-year period described in paragraph (2); or

(B) notwithstanding section 223(b)(1), the 1-year period preceding the 1-year period described in paragraph (2).

Affirmative Determinations for Worker Adjustment Assistance

The following certifications have been issued. The date following the company name and location of each determination references the impact date for all workers of such determination.

The following certifications have been issued. The requirements of Section 222(a)(2)(A) (increased imports) of the Trade Act have been met.

TA-W No.	Subject firm	Location	Impact date
82,745	Zumtobel Lighting, Inc., Zumtobel AG	Fair Lawn, NJ	May 15, 2012.
82,796	Harbor Paper LLC	Hoquiam, WA	June 7, 2012.
83,033	Felman Production, LLC, Georgian American Alloys, Inc., Extras Support, Winans Robert Half, PRC.	Letart, WV	August 27, 2012.

The following certifications have been issued. The requirements of Section 222(a)(2)(B) (shift in production or services) of the Trade Act have been met.

TA-W No.	Subject firm	Location	Impact date
82,924	International Business Machines (IBM), SWG-B2B Commerce, Gata Center, Oxford, Infinite and Experis.	Dublin, OH	July 22, 2012.
82,942	BuySeason, Inc., Call Center, Liberty Interactive, Manpower, Masterson Staffing Sol., etc.	New Berlin, WI	June 29, 2012.
82,946	Broadcom Corporation, Infrastructure and Networking, Controller, IC Compliance, Apex, Wincorp.	Irvine, CA	July 30, 2012.
82,955	Bank of America, North America, Group Operations Derivatives Division	Concord, CA	August 1, 2012.
82,964	Easy Way Leisure Corporation, Trustaff Personnel, CFA Staffing, Employee Management, CBS Personnel, etc.	Cincinnati, OH	August 7, 2012.
82,977	Pall Corporation, Finance Organization, Accounts Payable and General Ledger, Kelly Services.	Port Washington, NY	August 12, 2012.
82,979	CardioNet, LLC, BioTelemetry, Inc., Insurance Verification and ECG Report Interpretation.	Conshohocken, PA	August 9, 2012.
82,982	Gates Corporation, Ashe County Plant, Kelly Services	Jefferson, NC	August 12, 2012.
82,990	Prudential Insurance Company of America (The), Prudential Group Insurance, Service Delivery Organization.	Dresher, PA	July 31, 2012.
83,004	Thomson Reuters (Markets) LLC, F&R Trading, The Instrument and Pricing Content Team.	New York, NY	August 16, 2012.
83,028	Nevion USA, Inc., Nevion Europe, ASA, Prohire, Inc	Oxnard, CA	August 6, 2013.

TA-W No.	Subject firm	Location	Impact date
83,035	Hewlett Packard Company, HP Enterprise Services, America Sales Operations.	Omaha, NE	August 28, 2012.

The following certifications have been issued. The requirements of Section 222(c) (supplier to a firm whose workers are certified eligible to apply for TAA) of the Trade Act have been met.

TA-W No.	Subject firm	Location	Impact date
82,997	H&T Waterbury, Inc., Heitkamp and Thumann Group, The Hire Source.	Waterbury, CT	August 15, 2012

Negative Determinations for Worker Adjustment Assistance

In the following cases, the investigation revealed that the eligibility

criteria for worker adjustment assistance have not been met for the reasons specified.

The investigation revealed that the criterion under paragraph (a)(1), or

(b)(1), or (c)(1) (employment decline or threat of separation) of section 222 has not been met.

TA-W No.	Subject firm	Location	Impact date
82,942A	BuySeason, Inc., Call Center, Liberty Interactive, Seasonal Workers, Seasonal On-Site Leased.	New Berlin, WI	
82,998	Innovative Dental, Inc	Reno, NV	
83,001	Allen Truck Brokers	Gilmer, TX	

The investigation revealed that the criteria under paragraphs (a)(2)(A) (increased imports) and (a)(2)(B) (shift in production or services to a foreign country) of section 222 have not been met.

TA-W No.	Subject firm	Location	Impact date
82,696	RR Donnelley, Los Angeles Manufacturing Division, Staffmark	Torrance, CA.	
82,879	PDM Bridge, LLC, d/b/a Dynamic Structural Steel, Kelly Services	Proctor, MN.	
82,952	Verizon Services Organization, Inc., Wholesale Customer Application Support Team.	Tulsa, OK.	
82,958	Novartis Animal Health, US, Finance Department, Novartis AG, ProUnlimited.	Greensboro, NC.	
82,984	The Berry Company, LLC	Rochester, NY.	

Determinations Terminating Investigations of Petitions for Worker Adjustment Assistance

After notice of the petitions was published in the **Federal Register** and on the Department's Web site, as

required by Section 221 of the Act (19 U.S.C. 2271), the Department initiated investigations of these petitions.

The following determinations terminating investigations were issued because the petitioning groups of

workers are covered by active certifications. Consequently, further investigation in these cases would serve no purpose since the petitioning group of workers cannot be covered by more than one certification at a time.

TA-W No.	Subject firm	Location	Impact date
82,971	Hartford Financial Services Group, Inc., Corporate/Finance/Controllers ...	Hartford, CT.	

The following determinations terminating investigations were issued because the petitions are the subject of ongoing investigations under petitions filed earlier covering the same petitioners.

TA-W No.	Subject firm	Location	Impact date
83,055	CQ Sourcing, Inc., General Parts, Inc., Distribution Center	New Castle, IN	

I hereby certify that the aforementioned determinations were issued during the period of September 9, 2013 through September 13, 2013. These determinations are available on the Department's Web site tradeact/taa/taa_search_form.cfm under the searchable listing of determinations or by calling the Office of Trade Adjustment Assistance toll free at 888-365-6822.

Signed at Washington, DC, this 19th day of September 2013.

Michael W. Jaffe,

Certifying Officer, Office of Trade Adjustment Assistance.

[FR Doc. 2013-24195 Filed 10-2-13; 8:45 am]

BILLING CODE 4510-FN-P

DEPARTMENT OF LABOR

Employment and Training Administration

Investigations Regarding Eligibility To Apply for Worker Adjustment Assistance

Petitions have been filed with the Secretary of Labor under Section 221(a)

of the Trade Act of 1974 ("the Act") and are identified in the Appendix to this notice. Upon receipt of these petitions, the Director of the Office of Trade Adjustment Assistance, Employment and Training Administration, has instituted investigations pursuant to Section 221(a) of the Act.

The purpose of each of the investigations is to determine whether the workers are eligible to apply for adjustment assistance under Title II, Chapter 2, of the Act. The investigations will further relate, as appropriate, to the determination of the date on which total or partial separations began or threatened to begin and the subdivision of the firm involved.

The petitioners or any other persons showing a substantial interest in the subject matter of the investigations may request a public hearing, provided such request is filed in writing with the Director, Office of Trade Adjustment Assistance, at the address shown below, not later than October 15, 2013.

Interested persons are invited to submit written comments regarding the subject matter of the investigations to the Director, Office of Trade Adjustment Assistance, at the address shown below, not later than October 15, 2013.

The petitions filed in this case are available for inspection at the Office of the Director, Office of Trade Adjustment Assistance, Employment and Training Administration, U.S. Department of Labor, Room N-5428, 200 Constitution Avenue NW., Washington, DC 20210.

Signed at Washington, DC, this 12th day of September 2013.

Michael W. Jaffe,

Certifying Officer, Office of Trade Adjustment Assistance.

APPENDIX

[42 TAA petitions instituted between 8/26/13 and 9/6/13]

TA-W	Subject firm (petitioners)	Location	Date of institution	Date of petition
83021	Ver-Res Manufacturing Company (State/One-Stop)	West Branch, IA	08/26/13	08/23/13
83022	The Spencer Turbine Co. (State/One-Stop)	Windsor, CT	08/26/13	08/23/13
83023	Lumenis Inc. (State/One-Stop)	Salt Lake City, UT	08/26/13	08/21/13
83024	Blount International (Company)	Portland, OR	08/26/13	08/23/13
83025	Baxter Healthcare Corporation (State/One-Stop)	Buffalo Grove, IL	08/27/13	08/26/13
83026	Axiom Corporation (State/One-Stop)	Little Rock, AR	08/27/13	08/26/13
83027	Meritor Heavy Vehicle Systems, AKA Arvin Meritor (Union)	Heath, OH	08/27/13	08/19/13
83028	Nevion USA, Inc., (Company)	Oxnard, CA	08/27/13	08/19/13
83029	Psion Corporation (Workers)	Hebron, KY	08/27/13	08/12/13
83030	J.R. Simplot Company (Union)	Boise, ID	08/27/13	08/14/13
83031	Flextronics (Workers)	Longview, TX	08/27/13	08/26/13
83032	Hireright (State/One-Stop)	Irvine, CA	08/28/13	08/27/13
83033	Felman Production, LLC (Union)	Letart, WV	08/28/13	08/27/13
83034	West Point Products Acquisition, LLC (Company)	Valley Grove, WV	08/29/13	08/28/13
83035	Americas Sales Operations (Company)	Omaha, NE	08/29/13	08/28/13
83036	Manpower on site at IBM, Parts Planning Analyzers (Workers).	Camp-Hill, PA	08/29/13	08/28/13
83037	BCforward (Workers)	Indianapolis, IN	08/30/13	08/29/13
83038	PolyOne FKA Spartech (State/One-Stop)	Cape Girardeau, MO	08/30/13	08/29/13
83039	Mitchell International, Inc., ACS Service Center (Company)	San Diego, CA	08/30/13	08/29/13
83040	Home Dimension, Inc. (Company)	Woodstock, GA	08/30/13	08/30/13
83041	American Customer Care, Haier Tier One Group (Workers)	Montoursville, PA	08/30/13	08/28/13
83042	Wellpoint (Anthem BlueCross/Blueshield), PSSCR (State/One-Stop).	Wallingford, CT	08/30/13	08/29/13
83043	Volcano Corporation (State/One-Stop)	Rancho Cordova, CA	08/30/13	08/29/13
83044	Spirit Aerosystems Inc. (Union)	Wichita, KS	08/30/13	08/29/13
83045	Georgia Pacific Corporation (Union)	Halsey, OR	08/30/13	08/21/13
83046	Fairchild Semiconductor (Company)	West Jordan, UT	09/03/13	08/12/13
83047	Mount Ida Footwear Co. (State/One-Stop)	Mount Ida, AR	09/03/13	08/30/13
83048	Goldman Sachs (State/One-Stop)	New York, NY	09/03/13	08/30/13
83049	Societe Generale C.I.B. (State/One-Stop)	Jersey City, NJ	09/03/13	08/30/13
83050	Resolute Forest Products (Company)	Catawba, SC	09/04/13	09/03/13
83051	Medtronic (State/One-Stop)	Minneapolis (Coon Rapids), MN.	09/04/13	08/26/13
83052	Commercial Metals Company (CMC) (State/One-Stop)	Magnolia, AR	09/04/13	09/03/13
83053	Pitney Bowes (State/One-Stop)	Neenah, WI	09/05/13	08/29/13
83054	Cooper Lighting, LLC (part of Eaton Corporation) (Company).	Eufaula, AL	09/05/13	09/04/13
83055	CQ Sourcing (Workers)	New Castle, IN	09/05/13	08/20/13

APPENDIX—Continued

[42 TAA petitions instituted between 8/26/13 and 9/6/13]

TA–W	Subject firm (petitioners)	Location	Date of institution	Date of petition
83056	Dairy Farmers of America (State/One-Stop)	Monett, MO	09/05/13	09/04/13
83057	Alpha Wire and Cable (State/One-Stop)	Leominster, MA	09/05/13	08/29/13
83058	Sysco Corporation (State/One-Stop)	Denver, CO	09/06/13	09/04/13
83059	Biolitec U.S. Inc. (State/One-Stop)	East Longmeadow, MA	09/06/13	09/04/13
83060	Lonza Biologics (Company)	Hopkinton, MA	09/06/13	09/03/13
83061	Bank of America, 7201 North Palm Ave Call Center, Ref: WARN 07/13/13 (State/One-Stop).	Fresno, CA	09/06/13	08/27/13
83062	Micron Technology Manassas (Workers)	Manassas, VA	09/06/13	08/28/13

[FR Doc. 2013–24194 Filed 10–2–13; 8:45 am]

BILLING CODE 4510–FN–P

DEPARTMENT OF LABOR

Employment and Training Administration

Investigations Regarding Eligibility To Apply for Worker Adjustment Assistance

Petitions have been filed with the Secretary of Labor under Section 221(a) of the Trade Act of 1974 (“the Act”) and are identified in the Appendix to this notice. Upon receipt of these petitions, the Director of the Office of Trade Adjustment Assistance, Employment and Training Administration, has

instituted investigations pursuant to Section 221(a) of the Act.

The purpose of each of the investigations is to determine whether the workers are eligible to apply for adjustment assistance under Title II, Chapter 2, of the Act. The investigations will further relate, as appropriate, to the determination of the date on which total or partial separations began or threatened to begin and the subdivision of the firm involved.

The petitioners or any other persons showing a substantial interest in the subject matter of the investigations may request a public hearing, provided such request is filed in writing with the Director, Office of Trade Adjustment Assistance, at the address shown below, not later than October 15, 2013.

Interested persons are invited to submit written comments regarding the subject matter of the investigations to the Director, Office of Trade Adjustment Assistance, at the address shown below, not later than October 15, 2013.

The petitions filed in this case are available for inspection at the Office of the Director, Office of Trade Adjustment Assistance, Employment and Training Administration, U.S. Department of Labor, Room N–5428, 200 Constitution Avenue NW., Washington, DC 20210.

Signed at Washington, DC this 20th day of September 2013.

Michael W. Jaffe,

Certifying Officer, Office of Trade Adjustment Assistance.

APPENDIX

[18 TAA petitions instituted between 9/9/13 and 9/13/13]

TA–W	Subject firm (petitioners)	Location	Date of institution	Date of petition
83063	Henkel Corporation (State/One-Stop)	Rocky Hill, CT	09/09/13	09/06/13
83064	IBM Inc. (State/One-Stop)	Boulder, CO	09/09/13	09/06/13
83065	Imation, remaining workers (State/One-Stop)	Oakdale, MN	09/09/13	09/06/13
83066	PCC Airfoils, LLC (Company)	Crooksville & Minerva, OH ...	09/09/13	09/05/13
83067	Infiniti Plastic Technologies (Workers)	Paducah, KY	09/09/13	09/06/13
83068	FLSmith Salt Lake City, Inc. (Company)	Midvale, UT	09/09/13	09/05/13
83069	FLSmith Spokane, Inc. (Company)	Spokane, WA	09/09/13	09/05/13
83070	Harrison Medical Ctr. (Workers)	Bremerton, WA	09/09/13	08/14/13
83071	Applied Discovery (State/One-Stop)	Bellevue, WA	09/09/13	08/26/13
83072	TGM2 Inc. (Workers)	Clearwater, FL	09/09/13	09/06/13
83073	Metavation LLC. (Union)	Vassar, MI	09/10/13	09/04/13
83074	Grede Radford LLC (foundry) (Workers)	Radford, VA	09/10/13	09/09/13
83075	Power-One (Workers)	Phoenix, AZ	09/10/13	09/05/13
83076	Berry Plastics Corporation and Subsidiaries (State/One-Stop).	Anaheim, CA	09/12/13	09/11/13
83077	Mitel (Workers)	Mesa, AZ	09/13/13	09/12/13
83078	TE Connectivity (Industrial Relays) (Company)	Winston-Salem, NC	09/13/13	09/12/13
83079	TTelectronics/BiTechnologies (Company)	Fullerton, CA	09/13/13	09/12/13
83080	HSBC Bank USA, N.A. International Banking Center (State/One-Stop).	Buffalo, NY	09/13/13	09/12/13

[FR Doc. 2013-24197 Filed 10-2-13; 8:45 am]

BILLING CODE 4510-FN-P

DEPARTMENT OF LABOR**Veterans' Employment and Training Service****Stand Down Grant Requests; Extension of Availability of Funds****AGENCY:** Veterans' Employment and Training Service, Department of Labor.*Announcement Type:* Extension of Availability of Funds for Stand Downs
Funding Opportunity Number: FR Doc. 2011-5347*Key Dates:* FR Doc. 2011-5347 will now expire December 31, 2013*Funding Opportunity Description:* Section 2021 of Title 38 of the United States Code (U.S.C.) reauthorizes the Homeless Veterans Reintegration Program through fiscal year (FY) 2013 and indicates: "the Secretary of Labor shall conduct, directly or through grant or contract, such programs as the Secretary determines appropriate to provide job training, counseling, and placement services (including job readiness and literacy and skills training) to expedite the reintegration of homeless veterans into the labor force."USDOL VETS is extending FR Doc. 2011-5347, published on March 10, 2011 (76 FR 13236), through December 31, 2013 to support local Stand Down events for the first quarter of FY 2014, contingent upon congressional appropriation. Please follow all instructions and submit all required documents to the Director for Veterans' Employment and Training (DVET) for your state. You will find address and contact information for DVET(s) at <http://www.dol.gov/vets/aboutvets/contacts/map.htm>.

If you need to speak to a person concerning this extension, you may telephone Cassandra Mitchell at 202-693-4570 (not a toll-free number).

Signed at Washington, DC this 23rd day of September, 2013.

Cassandra R. Mitchell,
Grant Officer.

[FR Doc. 2013-23930 Filed 10-2-13; 8:45 am]

BILLING CODE 4510-79-P

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

[Notice: (13-121)]

Notice of Information Collection**AGENCY:** National Aeronautics and Space Administration (NASA).**ACTION:** Notice of information collection.**SUMMARY:** The National Aeronautics and Space Administration, as part of its continuing effort to reduce paperwork and respondent burden, invites the general public and other Federal agencies to take this opportunity to comment on proposed and/or continuing information collections, as required by the Paperwork Reduction Act of 1995 (Pub. L. 104-13, 44 U.S.C. 3506(c)(2)(A)).**DATES:** All comments should be submitted within 30 calendar days from the date of this publication.**ADDRESSES:** Interested persons are invited to submit written comments on the proposed information collection to the Office of Information and Regulatory Affairs, Office of Management and Budget, 725 17th Street NW., Washington, DC 20503. Attention: Desk Officer for the Office of NASA.**FOR FURTHER INFORMATION CONTACT:** Requests for additional information or copies of the information collection instrument(s) and instructions should be directed to Frances Teel, NASA Clearance Officer, NASA Headquarters, 300 E Street SW., JF0000, Washington, DC 20546, (202) 358-2225.**SUPPLEMENTARY INFORMATION:****I. Abstract**

Homeland Security Presidential Directive 12 (HSPD-12) established a mandatory requirement for a Government-wide identify verification standard. In compliance with HSPD-12 and the National Institute of Standards and Technology (NIST) Federal Information Processing Standard (FIPS) 201: Personal Identity Verification of Federal Employees and Contractors, and OMB Policy memorandum M-05-24 Implementation of Homeland Security Presidential Directive 12, NASA must collect information from members of the public to: (1) Validate identity and (2) issue secure and reliable federal credentials to enable access to NASA facilities/sites and NASA information systems. Information collected is consistent with background investigation data to include but not limited to name, date of birth, citizenship, social security number (SSN), address, employment history, biometric identifiers (e.g. fingerprints), signature, digital photograph. NASA collects information from U.S. Citizens requiring access 30 or more days in a calendar year. NASA also collects information from foreign nationals regardless of their affiliation time. NASA collects, stores, and secures information from individuals identified above in the NASA Identify Management System (IdMAX) in a

manner consistent with the Constitution and applicable laws, including the Privacy Act (5 U.S.C. 552a.)

Information is collected via a combination of electronic and paper processes and stored in the NASA Identify Account Exchange (IdMAX) System.

II. Method of Collection

Electronic (90%) and paper (10%).

III. Data*Title:* Personal Identity Validation for Routine and Intermittent Access to NASA Facilities, Sites, and Information Systems.*OMB Number:* 2700-XXXX.*Type of review:* Active Information Collection without OMB Approval.*Affected Public:* Individuals.*Estimated Number of Respondents:* 52,000.*Estimated Time per Response:* 10 minutes.*Estimated Total Annual Public**Burden Hours:* 8,667.*Estimated Total Annual Government Cost:* \$1,189,350.00.**IV. Request for Comments**

Comments are invited on: (1) Whether the proposed collection of information is necessary for the proper performance of the functions of NASA, including whether the information collected has practical utility; (2) the accuracy of NASA's estimate of the burden (including hours and cost) of the proposed collection of information; (3) ways to enhance the quality, utility, and clarity of the information to be collected; and (4) ways to minimize the burden of the collection of information on respondents, including automated collection techniques or the use of other forms of information technology.

Comments submitted in response to this notice will be summarized and included in the request for OMB approval of this information collection. They will also become a matter of public record.

Frances Teel,*NASA PRA Clearance Officer.*

[FR Doc. 2013-24226 Filed 10-2-13; 8:45 am]

BILLING CODE 7510-13-P

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

[Notice: (13-120)]

Notice of Information Collection**AGENCY:** National Aeronautics and Space Administration (NASA).**ACTION:** Notice of information collection.

SUMMARY: The National Aeronautics and Space Administration, as part of under arental/adult supervision its continuing effort to reduce paperwork and respondent burden, invites the general public and other Federal agencies to take this opportunity to comment on proposed and/or continuing information collections, as required by the Paperwork Reduction Act of 1995 (Pub. L. 104-13, 44 U.S.C. 3506(c)(2)(A)).

DATES: All comments should be submitted within 30 calendar days from the date of this publication.

ADDRESSES: Interested persons are invited to submit written comments on the proposed information collection to the Office of Information and Regulatory Affairs, Office of Management and Budget, 725 17th Street NW., Washington, DC 20503. Attention: Desk Officer for the Office of NASA.

FOR FURTHER INFORMATION CONTACT: Requests for additional information or copies of the information collection instrument(s) and instructions should be directed to Frances Teel, NASA Clearance Officer, NASA Headquarters, 300 E Street SW., JF000, Washington, DC 20546, Frances.C.Teel@nasa.gov.

SUPPLEMENTARY INFORMATION:

I. Abstract

In accordance with the President's initiative to create opportunities to advance science, technology, engineering, and mathematics (STEM) education, this clearance request pertains to the collection of information associated with the administration of electronic application/registration/volunteer forms, parental consent forms, media release forms, safety rules acknowledgement forms, and participant feedback forms for the NASA Great Moonbuggy Race. This vehicular engineering activity connects classroom training to tangible activities that enable practical application of STEM disciplines, cultivates innovative thinking, and embraces teamwork. This event is inspired by the original lunar rover that piloted across the moon's surface on the early 1970's during Apollo 15, 16, and 17 missions. Participation is voluntary and targets high school and college students. Registration is required to participate.

II. Method of Collection

Electronic.

III. Data

Title: NASA Great Moonbuggy Race.
OMB Number: 2700-XXXX.

Type of review: New Information Collection.

Affected Public: Individuals or households, private sector.

Estimated Number of Respondents: 1,765.

Estimated Time per Response: Variable.

Estimated Total Annual Burden Hours: 118.

Estimated Total Annual Cost: \$16,460.00.

IV. Request for Comments

Comments are invited on: (1) Whether the proposed collection of information is necessary for the proper performance of the functions of NASA, including whether the information collected has practical utility; (2) the accuracy of NASA's estimate of the burden (including hours and cost) of the proposed collection of information; (3) ways to enhance the quality, utility, and clarity of the information to be collected; and (4) ways to minimize the burden of the collection of information on respondents, including automated collection techniques or the use of other forms of information technology.

Comments submitted in response to this notice will be summarized and included in the request for OMB approval of this information collection. They will also become a matter of public record.

Frances Teel,

NASA PRA Clearance Officer.

[FR Doc. 2013-24225 Filed 10-2-13; 8:45 am]

BILLING CODE 7510-13-P

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

[Notice 13-117]

Notice of Intent To Grant Exclusive License

AGENCY: National Aeronautics and Space Administration.

ACTION: Notice of intent to grant exclusive license.

SUMMARY: This notice is issued in accordance with 35 U.S.C. 209(e) and 37 CFR 404.7(a)(1)(i). NASA hereby gives notice of its intent to grant an exclusive license in the United States to practice the invention described and claimed in U.S. Patent Application No. 12/834,416; NASA Case No. KSC-12890-2 DIV entitled "Aerogel/Polymer Composite Materials;" to AeroPlastic LP, having its principal place of business at 1325 White Drive, Titusville, FL 32780. The patent rights in this invention has been assigned to the United States of America as represented by the Administrator of the National Aeronautics and Space Administration. The prospective exclusive license will comply with the

terms and conditions of 35 U.S.C. 209 and 37 CFR 404.7.

DATES: The prospective exclusive license may be granted unless, within fifteen (15) days from the date of this published notice, NASA receives written objections including evidence and argument that establish that the grant of the license would not be consistent with the requirements of 35 U.S.C. 209 and 37 CFR 404.7. Competing applications completed and received by NASA within fifteen (15) days of the date of this published notice will also be treated as objections to the grant of the contemplated exclusive license.

Objections submitted in response to this notice will not be made available to the public for inspection and, to the extent permitted by law, will not be released under the Freedom of Information Act, 5 U.S.C. 552.

ADDRESSES: Objections relating to the prospective license may be submitted to Patent Counsel, Office of the Chief Counsel, Mail Code CC-A, NASA John F. Kennedy Space Center, Kennedy Space Center, FL 32899. Telephone: 321-867-2076; Facsimile: 321-867-1817.

FOR FURTHER INFORMATION CONTACT: Shelley Ford, Patent Counsel, Office of the Chief Counsel, Mail Code CC-A, NASA John F. Kennedy Space Center, Kennedy Space Center, FL 32899. Telephone: 321-867-2076; Facsimile: 321-867-1817. Information about other NASA inventions available for licensing can be found online at <http://technology.nasa.gov/>.

Sumara M. Thompson-King,
Deputy General Counsel.

[FR Doc. 2013-24254 Filed 10-2-13; 8:45 am]

BILLING CODE 7510-13-P

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

[Notice 13-119]

Notice of Intent To Grant Exclusive Research License

AGENCY: National Aeronautics and Space Administration.

ACTION: Notice of Intent to Grant Exclusive Research License.

SUMMARY: This notice is issued in accordance with 35 U.S.C. 209(e) and 37 CFR 404.7(a)(1)(i). NASA hereby gives notice of its intent to grant an exclusive, research only license in the United States to evaluate the invention described and claimed in U.S. Patent Application No. 61/770,194; NASA Case

Nos. KSC-13702 entitled "Insulative Aerogel and Carbon Fiber Systems for Composites," and KSC-13595 entitled "Aerogel Insulation and Composites Integrated into Unique Lay-Ups," to AeroPlastic LP, having its principal place of business at 1325 White Drive, Titusville, FL 32780. The patent rights in these inventions have been assigned to the United States of America as represented by the Administrator of the National Aeronautics and Space Administration. The prospective exclusive, research only license will comply with the terms and conditions of 35 U.S.C. 209 and 37 CFR 404.7.

DATES: The prospective exclusive research license may be granted unless, within fifteen (15) days from the date of this published notice, NASA receives written objections including evidence and argument that establish that the grant of the license would not be consistent with the requirements of 35 U.S.C. 209 and 37 CFR 404.7. Competing applications completed and received by NASA within fifteen (15) days of the date of this published notice will also be treated as objections to the grant of the contemplated exclusive, research only license. Objections submitted in response to this notice will not be made available to the public for inspection and, to the extent permitted by law, will not be released under the Freedom of Information Act, 5 U.S.C. 552.

ADDRESSES: Objections relating to the prospective license may be submitted to Patent Counsel, Office of the Chief Counsel, Mail Code CC-A, NASA John F. Kennedy Space Center, Kennedy Space Center, FL 32899. Telephone: 321-867-2076; Facsimile: 321-867-1817.

FOR FURTHER INFORMATION CONTACT: Shelley Ford, Patent Attorney, Office of the Chief Counsel, Mail Code CC-A, NASA John F. Kennedy Space Center, Kennedy Space Center, FL 32899. Telephone: 321-867-2076; Facsimile: 321-867-1817. Information about other NASA inventions available for licensing can be found online at <http://technology.nasa.gov/>.

Sumara M. Thompson-King,
Deputy General Counsel.

[FR Doc. 2013-24252 Filed 10-2-13; 8:45 am]

BILLING CODE 7510-13-P

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

[Notice 13-118]

Notice of Intent To Grant Exclusive Research License

AGENCY: National Aeronautics and Space Administration.

ACTION: Notice of intent to grant exclusive research license.

SUMMARY: This notice is issued in accordance with 35 U.S.C. 209(e) and 37 CFR 404.7(a)(1)(i). NASA hereby gives notice of its intent to grant an exclusive, research only license in the United States to evaluate the invention described and claimed in U.S. Patent Application No. 61/770,194; NASA Case Nos. KSC-13702 entitled "Insulative Aerogel and Carbon Fiber Systems for Composites," and KSC-13595 entitled "Aerogel Insulation and Composites Integrated into Unique Lay-Ups," to AeroPlastic LP, having its principal place of business at 1325 White Drive, Titusville, FL 32780. The patent rights in these inventions have been assigned to the United States of America as represented by the Administrator of the National Aeronautics and Space Administration. The prospective exclusive, research only license will comply with the terms and conditions of 35 U.S.C. 209 and 37 CFR 404.7.

DATES: The prospective exclusive research license may be granted unless, within fifteen (15) days from the date of this published notice, NASA receives written objections including evidence and argument that establish that the grant of the license would not be consistent with the requirements of 35 U.S.C. 209 and 37 CFR 404.7. Competing applications completed and received by NASA within fifteen (15) days of the date of this published notice will also be treated as objections to the grant of the contemplated exclusive, research only license. Objections submitted in response to this notice will not be made available to the public for inspection and, to the extent permitted by law, will not be released under the Freedom of Information Act, 5 U.S.C. 552.

ADDRESSES: Objections relating to the prospective license may be submitted to Patent Counsel, Office of the Chief Counsel, Mail Code CC-A, NASA John F. Kennedy Space Center, Kennedy Space Center, FL 32899. Telephone: 321-867-2076; Facsimile: 321-867-1817.

FOR FURTHER INFORMATION CONTACT: Shelley Ford, Patent Attorney, Office of the Chief Counsel, Mail Code CC-A,

NASA John F. Kennedy Space Center, Kennedy Space Center, FL 32899. Telephone: 321-867-2076; Facsimile: 321-867-1817. Information about other NASA inventions available for licensing can be found online at <http://technology.nasa.gov/>.

Sumara M. Thompson-King,
Deputy General Counsel.

[FR Doc. 2013-24253 Filed 10-2-13; 8:45 am]

BILLING CODE 7510-13-P

NATIONAL FOUNDATION ON THE ARTS AND THE HUMANITIES

National Council on the Arts 180th Meeting

AGENCY: National Endowment for the Arts, National Foundation on the Arts and Humanities.

ACTION: Notice of meeting.

SUMMARY: Pursuant to section 10 (a) (2) of the Federal Advisory Committee Act (Pub. L. 92-463), as amended, notice is hereby given that a meeting of the National Council on the Arts will be held at the Nancy Hanks Center, 1100 Pennsylvania Avenue NW., Washington, DC 20506. Agenda times are approximate.

DATES: October 25, 2013 from 9:00 a.m. to 11:30 a.m. in Room M-09.

FOR FURTHER INFORMATION CONTACT: Office of Public Affairs, National Endowment for the Arts, Washington, DC 20506, at 202/682-5570.

SUPPLEMENTARY INFORMATION: The meeting, on Friday, October 25th will be open to the public on a space available basis and also will be webcast. The meeting will begin with opening remarks, presentation of Guidelines, and voting on recommendations for funding and rejection, followed by updates by the Senior Deputy Chairman. From 10:00 a.m. to 10:45 a.m. there will be a joint presentation by the NEA Office of Research and Analysis and the U.S. Bureau of Economic Analysis on the Arts and Cultural Production Satellite Account. Other business will be discussed from 10:45-11:15 a.m., with concluding remarks and voting results at 11:15 a.m.. The meeting will adjourn at 11:30 a.m.

For information about webcasting of the open session of this meeting, go to the Open Government page at www.arts.gov.

If, in the course of the open session discussion, it becomes necessary for the Council to discuss non-public commercial or financial information of intrinsic value, the Council will go into closed session pursuant to subsection

(c)(4) of the Government in the Sunshine Act, 5 U.S.C. 552b, and in accordance with the February 15, 2012 determination of the Chairman. Additionally, discussion concerning purely personal information about individuals, such as personal biographical and salary data or medical information, may be conducted by the Council in closed session in accordance with subsection (c)(6) of 5 U.S.C. 552b.

Any interested persons may attend, as observers, Council discussions and reviews that are open to the public. If you need special accommodations due to a disability, please contact the Office of Accessibility, National Endowment for the Arts, 1100 Pennsylvania Avenue NW., Washington, DC 20506, 202/682-5733, Voice/T.T.Y. 202/682-5496, at least seven (7) days prior to the meeting.

Dated: September 30, 2013.

Kathy Plowitz-Worden,

Panel Coordinator, Office of Guidelines and Panel Operations.

[FR Doc. 2013-24227 Filed 10-2-13; 8:45 am]

BILLING CODE 7537-01-P

NATIONAL SCIENCE FOUNDATION

Astronomy and Astrophysics Advisory Committee #13883; Notice of Meeting

In accordance with the Federal Advisory Committee Act (Pub. L. 92-463, as amended), the National Science Foundation announces the following Astronomy and Astrophysics Advisory Committee (#13883) meeting:

Date and Time: November 13, 2013, 9:00 a.m.–5:00 p.m., November 14, 2013, 9:00 a.m.–1:00 p.m.

Place: National Science Foundation, Room 555-II, Stafford II Building, 4221 Wilson Blvd., Arlington, VA 22230.

Type of Meeting: Open.

Contact Person: Dr. Jim Ulvestad, Division Director, Division of Astronomical Sciences, Suite 1045, National Science Foundation, 4201 Wilson Blvd., Arlington, VA 22230. Telephone: 703-292-7165.

Purpose of Meeting: To provide advice and recommendations to the National Science Foundation (NSF), the National Aeronautics and Space Administration (NASA) and the U.S. Department of Energy (DOE) on issues within the field of astronomy and astrophysics that are of mutual interest and concern to the agencies.

Agenda: To hear presentations of current programming by representatives from NSF, NASA, DOE and other agencies relevant to astronomy and astrophysics; to discuss current and potential areas of cooperation between

the agencies; to formulate recommendations for continued and new areas of cooperation and mechanisms for achieving them.

Dated: September 30, 2013.

Susanne E. Bolton,

Committee Management Officer.

[FR Doc. 2013-24198 Filed 10-2-13; 8:45 am]

BILLING CODE 7555-01-P

NATIONAL SCIENCE FOUNDATION

Advisory Committee for Education and Human Resources; Notice of Meeting

In accordance with the Federal Advisory Committee Act (Pub. L. 92-463, as amended), the National Science Foundation announces the following meeting:

Name: Advisory Committee for Education and Human Resources (#1119).

Date/Time: November 6, 2013; 8:30 a.m. to 5:00 p.m.; November 7, 2013; 8:30 a.m. to 2:00 p.m.

Place: National Science Foundation, Room 375, 4201 Wilson Boulevard, Arlington, VA 22230.

Type of Meeting: Open.

Contact Person: Teresa Caravelli, National Science Foundation, 4201 Wilson Boulevard, Arlington, VA 22230, (703) 292-8600, tcaravel@nsf.gov.

To help facilitate your entry into the building, please contact Teresa Caravelli on or prior to Monday, November 4, 2013.

Purpose of Meeting: To provide advice with respect to the Foundation's science, technology, engineering, and mathematics (STEM) education and human resources programming.

Agenda

November 6, 2013

- Remarks by the Committee Chair and NSF Assistant Director for Education and Human Resources (EHR)
- Brief updates on EHR and Committee of Visitor Reports
- Presentation, Discussion, and Committee Endorsement of Subcommittee Reports
 - STEM Learning and Learning Environments Subcommittee
 - STEM Broadening Participation Subcommittee
 - STEM Workforce Development Subcommittee
- Continued Committee discussion of Next Steps for Subcommittee Reports
 - Stakeholder Development, Partnerships, and Networks
 - Goal Setting and Evidence

- Gathering
- Panel Discussion with Outgoing Committee Members

November 7, 2013

- Panel Discussion on NSF's Role in the National Dialogue on Standards, Instruction, and Indicators
- Committee visit with NSF Acting Director Marrett
- Action Plan Development

Dated: September 30, 2013.

Susanne Bolton,

Committee Management Officer.

[FR Doc. 2013-24199 Filed 10-2-13; 8:45 am]

BILLING CODE 7555-01-P

NUCLEAR REGULATORY COMMISSION

[NRC-2012-0186; Docket No. 50-293; License No. DPR-35]

Entergy Nuclear Operations, Inc., Pilgrim Nuclear Power Station, Issuance of Director's Decision

Notice is hereby given that the Director, Office of Nuclear Reactor Regulation, U.S. Nuclear Regulatory Commission (NRC) has issued a Director's Decision on a petition filed by Pilgrim Watch (hereafter referred to as "the petitioner"). The petition, dated July 19, 2010, as supplemented by letter dated August 6, 2010 (available as Agencywide Documents Access and Management System (ADAMS) Accession No. ML102090024 and ML102210411, respectively), concerns the operation of Pilgrim Nuclear Power Station (Pilgrim), owned by Entergy Nuclear Generation Company and operated by Entergy Nuclear Operations, Inc. (Entergy, the licensee).

The Petitioner requested that the NRC issue a Demand for Information requiring Entergy Nuclear Operations, Inc. (Entergy or the Licensee) to demonstrate that all non-environmentally qualified (non-EQ) inaccessible cables at Pilgrim Nuclear Power Station (Pilgrim) are capable of performing their required function, be it safety or nonsafety-related. The Petitioner further requested that the NRC: (i) Certify that the location, age, and repair history of all cables (accessible and inaccessible) have been identified, (ii) ensure that the Licensee monitors all cables before continued operation to demonstrate that the cables can perform their design functions, and (iii) ensure that the Licensee incorporates in its monitoring program, at a minimum, recommendations from certain aging management guidelines and NRC generic guidance. The

Petitioner also asked that the NRC commit to verifying, during the license renewal period, Entergy's implementation through routine baseline inspections and to a timely upgrade of the regulatory guidance for maintaining cable qualification and the verification that the cables can perform their design functions.

As the basis of the request, the Petitioner asserted, in part, the following concerns:

- The NRC regulations require that plant owners ensure that electrical wiring is qualified to perform in the environmental conditions experienced during normal operation and during accidents. Pilgrim has no program today, as required by NRC regulations, to ensure operability of the submerged and/or wetted wires.
- Most electrical cables at Pilgrim have been exposed to significant moisture over the 40 years since their initial construction. The wires, and possibly the connections and splices inside conduits, are designed to operate properly only in a dry environment and are not designed to operate in a moist or wet environment. Thus, there is no assurance that these electrical cables will not fail if they are wet, submerged, or previously exposed to moisture.
- Wires degrade with age, and the oldest wires are most susceptible to degradation. Pilgrim is one of the oldest operating commercial reactors in the country, and the majority of the conduits and wires at Pilgrim were installed during the initial construction. There are no existing methods to ensure operability, short of visual inspection or replacing cables with ones designed to operate in a wet or submerged environment.

As identified in several pertinent sections of Pilgrim's license renewal application and safety evaluation report, Pilgrim's aging management program, for the period 2012–2032, is insufficient and does not provide reasonable assurance to the public. The Petitioner further stated that compliance with the NRC's regulations is intended to provide reasonable assurance that an electrical wire failure will neither initiate an accident nor make an accident more severe. The Petitioner also noted that Pilgrim has a long history of cables being submerged and/or wetted with no verification of the long-term operability that provides reasonable assurance of continued operation of these cables.

The NRC sent a copy of the proposed Director's Decision to the petitioner and the licensee for comment on March 20, 2013. The Petitioner and the licensee were asked to provide comments within 30 days on any part of the proposed

Director's Decision that was considered to be erroneous or any issues in the petition that were not addressed. Comments were received from the Petitioner and are addressed in an attachment to the final Director's Decision.

The Director of the Office of Nuclear Reactor Regulation denied the petitioner's request to issue a Demand for Information to require Entergy to demonstrate that all inaccessible cables at Pilgrim are capable of performing their functions. The Office has also denied the Petitioner's request for the NRC to take certain actions to demonstrate that accessible and inaccessible cables can perform their design functions. These actions included requests for NRC to certify that (1) All cables have been identified as to their location, age, and repair history, (2) all cables are monitored by the Licensee prior to continued operation, and (3) the Licensee's monitoring program incorporates at a minimum, recommendations for certain aging management guidelines and NRC generic guidance. The NRC staff has determined that the Licensee's programs for cable condition monitoring and managing aging effects of inaccessible power cables have been adequately implemented, to the extent that there is reasonable assurance that cables subject to moisture will be adequately managed during the period of extended operation. The Director's Decision (DD–13–02) under part 2.206 of Title 10 of the *Code of Federal Regulations*, "Requests for Action under This Subpart," explains the reasons for this decision. The complete text is available in ADAMS under Accession No. ML13255A189 for inspection at the Commission's Public Document Room located at One White Flint North, Public File Area 01 F21, 11555 Rockville Pike (first floor), Rockville, Maryland, and online in the NRC library at <http://www.nrc.gov/reading-rm.html>.

The NRC will file a copy of the Director's Decision with the Secretary of the Commission for the Commission's review in accordance with 10 CFR 2.206. As a provision of this regulation, the Director's Decision will constitute the final action of the Commission 25 days after the date of the Decision unless the Commission, on its own motion, institutes a review of the Director's Decision in that time.

Dated at Rockville, Maryland, this 26th day of September 2013.

For the Nuclear Regulatory Commission.

Eric J. Leeds,

Director, Office of Nuclear Reactor Regulation.

[FR Doc. 2013–24272 Filed 10–2–13; 8:45 am]

BILLING CODE 7590–01–P

NUCLEAR REGULATORY COMMISSION

[Docket Nos. 50–155; 72–43 and NRC–2013–0218]

Entergy Nuclear Operations, Inc.; Big Rock Point; Independent Spent Fuel Storage Installation

AGENCY: Nuclear Regulatory Commission.

ACTION: Exemption; issuance.

SUMMARY: The U.S. Nuclear Regulatory Commission (NRC) is issuing an exemption in response to a request submitted by Entergy Nuclear Operations, Inc. (ENO) on June 20, 2012, for the Big Rock Point (BRP) Independent Spent Fuel Storage Installation (ISFSI).

ADDRESSES: Please refer to Docket ID NRC–2013–0218 when contacting the NRC about the availability of information regarding this document. You may access publicly-available information related to this action by the following methods:

- *Federal Rulemaking Web site:* Go to <http://www.regulations.gov> and search for Docket ID NRC–2013–0218. Address question about NRC dockets to Carol Gallagher; telephone: 301–287–3422; email: Carol.Gallagher@nrc.gov. For technical questions, contact the individual listed in the **FOR FURTHER INFORMATION CONTACT** section of this document.

- *NRC's Agencywide Documents Access and Management System (ADAMS):* You may access publicly available documents online in the NRC Library at <http://www.nrc.gov/reading-rm/adams.html>. To begin the search, select "ADAMS Public Documents" and then select "Begin Web-based ADAMS Search." For problems with ADAMS, please contact the NRC's Public Document Room (PDR) reference staff at 1–800–397–4209, 301–415–4737, or by email to pdr.resource@nrc.gov. The ADAMS accession number for each document referenced in this document (if that document is available in ADAMS) is provided the first time that a document is referenced.

- *NRC's PDC:* You may examine and purchase copies of public documents at the NRC's PDR, Room O1–F21, One White Flint North, 11555 Rockville Pike, Rockville, Maryland 20852.

FOR FURTHER INFORMATION CONTACT: Dr. Pamela Longmire, Office of Nuclear Material Safety and Safeguards, U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001; telephone: 301-287-0829; email: Pamela.Longmire@nrc.gov.

1.0 Introduction

On November 23, 2011 (76 FR 72560), the NRC issued a final rule (EP Final Rule) modifying or adding certain emergency planning (EP) requirements in §§ 50.47, 50.54, and appendix E of Title 10 of the *Code of Federal Regulations* (10 CFR). The EP Final Rule was effective on December 23, 2011, with specific implementation dates for each of the rule changes.

Entergy Nuclear Operations, Inc. (ENO) is the holder of Facility Operating License DPR-6 for the BRP facility. The license, issued pursuant to the Atomic Energy Act of 1954, as amended, and 10 CFR part 50, allows ENO to possess and store spent nuclear fuel at the permanently shutdown and decommissioned facility under the provision of 10 CFR part 72, subpart K, "General License for Storage of Spent Fuel at Power Reactor Sites." In a letter dated June 26, 1997 (ADAMS Legacy Accession No. 9707030167), Consumers Energy Company (CEC) informed the NRC that the BRP facility had permanently ceased power operations. In a letter dated September 23, 1997 (ADAMS Legacy Accession No. 9709300363), CEC informed the NRC that it had permanently moved the fuel from the reactor to the spent fuel pool.

After ceasing operations at the reactor, CEC began transferring spent nuclear fuel from the spent fuel pool to the BRP ISFSI for long term dry storage. As discussed in letters dated September 8, 2005, and November 16, 2006 (ADAMS Accession Nos. ML052550366 and ML063260085, respectively), these activities were completed in 2003, and final decommissioning of the reactor site was completed in 2006. The BRP ISFSI is a stand-alone ISFSI located on approximately 30 acres in Charlevoix County, on the northern shore of Michigan's Lower Peninsula. In a letter dated July 30, 2007 (ADAMS Accession No. ML072220219), ENO applied for an order approving indirect transfer of control of licenses for BRP. By letter dated July 28, 2008 (ADAMS Accession No. ML080940528), the NRC consented to the proposal.

On June 20, 2012, ENO submitted a letter, "Request for Exemption from Emergency Planning and Preparedness Requirements" (ADAMS Accession No. ML12173A066), requesting exemption from specific emergency planning

requirements of 10 CFR 50.47 and appendix E to 10 CFR part 50 for the BRP ISFSI.

ENO states that this exemption request and its impact on the corresponding emergency plan: (1) Is authorized by law; (2) will not present an undue risk to the public health and safety; and (3) is consistent with the common defense and security in accordance with 10 CFR 50.12. ENO states that its intent in submitting this exemption request is to maintain the regulatory structure in place prior to the issuance of the EP Final Rule and, therefore, does not propose any changes to its emergency plan or implementing procedures other than simple regulatory reference changes that can be implemented under 10 CFR 50.54(q).

2.0 Discussion

On September 19, 1997 (ADAMS Legacy Accession No. 9709240386), CEC requested an exemption from the provisions of 10 CFR 50.54(q) that required emergency plans to meet all of the standards of 10 CFR 50.47(b) and all of the requirements of appendix E to 10 CFR part 50 so that the licensee would have to meet only certain EP standards and requirements. Additionally, in a letter dated September 19, 1997 (ADAMS Legacy Accession No. 9709240383), CEC requested approval of a proposed BRP Defueled Emergency Plan (DEP) that proposed to meet those limited standards and requirements.

The NRC approved the requested exemption and the BRP DEP on September 30, 1998 (ADAMS Legacy Accession No. 9810080019). The safety evaluation report (SER) established EP requirements for BRP as documented in the DEP. The NRC staff (staff) concluded that the licensee's emergency plan was acceptable in view of the greatly reduced offsite radiological consequences associated with the decommissioning plant status. The staff found that the postulated dose to the general public from any reasonably conceivable accident would not exceed the U.S. Environmental Protection Agency (EPA) Protective Action Guides (PAGs), and for the bounding accident, the length of time available to respond to a loss of spent fuel cooling or reduction in water level gave confidence that offsite measures for the public could be taken without preparation.

CEC completed moving spent nuclear fuel and Greater-Than-Class-C (GTCC) waste into dry storage at the BRP ISFSI in March of 2003. On September 9, 2004, CEC submitted a request for approval of the BRP Emergency Plan to reflect that only an ISFSI remained at the site (ADAMS Accession No.

ML042530611). The NRC approved the BRP ISFSI Emergency Plan on October 13, 2005 (ADAMS Accession No. ML052690042). The NRC staff concluded that the BRP ISFSI Emergency Plan met the emergency planning requirements contained in 10 CFR part 72 for an ISFSI not located on the site of an operating nuclear power reactor, and thus provided for an acceptable level of emergency preparedness. Since this approval, BRP has not requested nor received substantive exemptions from emergency planning requirements.

Revision 4 of the BRP ISFSI Emergency Plan, dated September 9, 2008 (Reference 13), reflects the current conditions, where only the ISFSI and its related support systems, structures, and components remain.

With the EP Final Rule, several requirements in 10 CFR part 50 were modified or added, including changes in §§ 50.47, 50.54, and appendix E. The EP Final Rule codified certain voluntary protective measures contained in NRC Bulletin 2005-02, "Emergency Preparedness and Response Actions for Security-Based Events," and generically applicable requirements similar to those previously imposed by NRC Order EA-02-026, "Order for Interim Safeguards and Security Compensatory Measures," dated February 25, 2002.

In addition, the EP Final Rule amended other licensee emergency plan requirements to: (1) Enhance the ability of licensees in preparing for and in taking certain protective actions in the event of a radiological emergency; (2) address, in part, security issues identified after the terrorist events of September 11, 2001; (3) clarify regulations to effect consistent emergency plan implementation among licensees; and (4) modify certain EP requirements to be more effective and efficient. However, the EP Final Rule was only an enhancement to the NRC's regulations and was not necessary for adequate protection. On page 72563 of the **Federal Register** notice for the EP Final Rule, the Commission "determined that the existing regulatory structure ensures adequate protection of public health and safety and common defense and security."

3.0 Regulatory Evaluation

In the Final Rule for Storage of Spent Fuel in NRC-Approved Storage Casks at Power Reactor Sites (55 FR 29181; July 18, 1990), the NRC amended its regulations to provide for the storage of spent nuclear fuel under a general license on the site of any nuclear power reactor. In its Statement of Considerations (SOC) for the Final Rule

(55 FR 29185), the Commission responded to comments related to emergency preparedness for spent fuel dry storage, stating, “The new 10 CFR 72.32(c) . . . states that, ‘For an ISFSI that is located on the site of a nuclear power reactor licensed for operation by the Commission, the emergency plan required by 10 CFR 50.47 shall be deemed to satisfy the requirements of this Section.’ One condition of the general license is that the reactor licensee must review the reactor emergency plan and modify it as necessary to cover dry cask storage and related activities. If the emergency plan is in compliance with 10 CFR 50.47, then it is in compliance with the Commission’s regulations with respect to dry cask storage.”

In the SOC for the Final Rule for EP requirements for ISFSIs and Monitored Retrievable Storage Installation (MRS) (60 FR 32430; June 22, 1995), the Commission stated, in part, that “current reactor emergency plans cover all at-or near reactor ISFSI’s. An ISFSI that is to be licensed for a stand-alone operation will need an emergency plan established in accordance with the requirements in this rulemaking” (60 FR 32431). The Commission responded to comments (60 FR 32435) concerning offsite emergency planning for ISFSIs or an MRS and concluded that “the offsite consequences of potential accidents at an ISFSI or a MRS would not warrant establishing Emergency Planning Zones.”

As part of the review for ENO’s current exemption request, the staff also used the EP regulations in 10 CFR 72.32 and Spent Fuel Project Office Interim Staff Guidance (ISG)—16, “Emergency Planning,” (ADAMS Accession No. ML003724570) as references to ensure consistency between specific-licensed and general-licensed ISFSIs.

4.0 Technical Evaluation

Pursuant to 10 CFR 50.12, the Commission may, upon application by any interested person or upon its own initiative, grant exemptions from the requirements of 10 CFR part 50 when: (1) The exemptions are authorized by law, will not present an undue risk to public health or safety, and are consistent with the common defense and security; and (2) when special circumstances are present. The staff reviewed this request to determine whether the specific exemptions should be granted, and the staff evaluation (SE) is provided in its letter to ENO, dated September 26, 2013 (ADAMS Accession No. ML13268A501). After evaluating the exemption requests, the staff determined that the ENO should be

granted the exemptions detailed in the SE.

The NRC has found that the ENO meets the criteria for an exemption in 10 CFR 50.12. The NRC has determined that granting the exemption will not result in a violation of the Atomic Energy Act of 1954, as amended, or the Commission’s regulations. Therefore, the exemption is authorized by law.

As noted in Section 2.0, “Discussion,” above, the ENO’s compliance with the EP requirements that were in effect before the effective date of the EP Final Rule demonstrated reasonable assurance of adequate protection of public health and safety and common defense and security. In its SE, the NRC staff explains that the ENO’s implementation of its Emergency Plan, with the exemptions, will continue to provide this reasonable assurance of adequate protection. Thus, granting the exemptions will not present an undue risk to public health or safety and is not inconsistent with the common defense and security.

For the Commission to grant an exemption, special circumstances must exist. Under 10 CFR 50.12(a)(2)(ii), special circumstances are present when “[a]pplication of the regulation in the particular circumstances would not serve the underlying purpose of the rule or is not necessary to achieve the underlying purpose of the rule.” These special circumstances exist here. The NRC has determined that the ENO’s compliance with the regulations that the staff describes in its SE is not necessary for the licensee to demonstrate that, under its emergency plan, there is reasonable assurance that adequate protective measures can and will be taken in the event of a radiological emergency. Consequently, special circumstances are present because requiring the ENO to comply with the regulations that the staff describes in its SE is not necessary to achieve the underlying purpose of the EP regulations.

5.0 Environmental Assessment (EA)

The NRC staff also considered in the review of this exemption request whether there would be any significant environmental impacts associated with the exemption. For this proposed action, the NRC staff performed an environmental assessment pursuant to 10 CFR 51.30. The proposed action is the approval of a request to exempt the applicant from certain requirements of 10 CFR 50.47(b) and portions of 10 CFR part 50, appendix E.

The environmental assessment concluded that the proposed action would not significantly impact the

quality of the human environment. The NRC staff concludes that the proposed action will not result in any changes in the types or amounts of any radiological effluents that may be released offsite, and there is no significant increase in occupational or public radiation exposure because of the proposed action. The Environmental Assessment and the Finding of No Significant Impact was published on September 24, 2013 (78 FR 58570).

6.0 Conclusion

The NRC concludes that the licensee’s request for an exemption from certain requirements of 10 CFR 50.47(b) and 10 CFR part 50, appendix E, section IV as specified in this SE is acceptable in view of the greatly reduced offsite radiological consequences associated with the ISFSI.

The BRP ISFSI Emergency Plan has been reviewed against the acceptance criteria included in 10 CFR 50.47, appendix E to 10 CFR part 50, 10 CFR 72.32 and Interim Staff Guidance—16. The review considered the ISFSI and the low likelihood of any credible accident resulting in radiological releases requiring offsite protective measures. These evaluations were supported by the previously documented licensee and staff accident analyses. The staff concludes that: The BRP ISFSI Emergency Plan provides: (1) An adequate basis for an acceptable state of emergency preparedness; and (2) in conjunction with arrangements made with offsite response agencies, reasonable assurance that adequate protective measures can and will be taken in the event of a radiological emergency at the BRP facility.

The NRC has determined that pursuant to 10 CFR 50.12, the exemptions described in the SE are authorized by law, will not endanger life or property or the common defense and security, and are otherwise in the public interest, and special circumstances are present.

This exemption is effective upon issuance.

Dated at Rockville, Maryland, this 26th day of September, 2013.

For the Nuclear Regulatory Commission.

Anthony H. Hsia,

Deputy Director, Division of Spent Fuel Storage and Transportation, Office of Nuclear Material Safety and Safeguards.

[FR Doc. 2013–24302 Filed 10–2–13; 8:45 am]

BILLING CODE 7590–01–P

**OFFICE OF PERSONNEL
MANAGEMENT****Federal Salary Council; Meeting**

AGENCY: Office of Personnel Management.

ACTION: Notice of meeting.

SUMMARY: The Federal Salary Council will meet on November 5, 2013, at the time and location shown below. The Council is an advisory body composed of representatives of Federal employee organizations and experts in the fields of labor relations and pay policy. The Council makes recommendations to the President's Pay Agent (the Secretary of Labor and the Directors of the Office of Management and Budget and the Office of Personnel Management) about the locality pay program for General Schedule employees under section 5304 of title 5, United States Code. The Council's recommendations cover the establishment or modification of locality pay areas, the coverage of salary surveys, the process of comparing Federal and non-Federal rates of pay, and the level of comparability payments that should be paid.

The Council will hear public testimony about the locality pay program, review the results of pay comparisons, and formulate its recommendations to the President's Pay Agent on pay comparison methods, locality pay rates, and locality pay areas and boundaries for 2015. The meeting is open to the public. Please contact the Office of Personnel Management at the address shown below if you wish to submit testimony or present material to the Council at the meeting.

DATES: November 5, 2013, at 9:00 a.m.

ADDRESSES: *Location:* Office of Personnel Management, 1900 E Street NW., Pendleton Room 5th Floor, Washington, DC.

FOR FURTHER INFORMATION CONTACT: Mark A. Allen, Acting Deputy Associate Director, Pay and Leave, Office of Personnel Management, 1900 E Street NW., Room 7H31, Washington, DC 20415-8200. Phone (202) 606-2838; FAX (202) 606-0824; or email at pay-leave-policy@opm.gov.

For The President's Pay Agent.

Elaine Kaplan,
Acting Director.

[FR Doc. 2013-24267 Filed 10-2-13; 8:45 am]

BILLING CODE 6325-39-P

**SECURITIES AND EXCHANGE
COMMISSION**

[Release No. IC-30739; File No. 812-14061]

**Stellus Capital Investment
Corporation, et al.; Notice of
Application**

September 30, 2013.

AGENCY: Securities and Exchange Commission ("Commission").

ACTION: Notice of application for an order under section 57(a)(4) and 57(i) of the Investment Company Act of 1940 (the "Act") and rule 17d-1 under the Act to permit certain joint transactions otherwise prohibited by section 57(a)(4) of the Act.

SUMMARY OF APPLICATION: Applicants request an order to permit a business development company ("BDC") to co-invest with certain affiliated investment funds in portfolio companies.

APPLICANTS: Stellus Capital Investment Corporation (the "Company"), Stellus Credit Fund I, LP (the "Existing Fund"), Stellus Credit Fund GP, LLC (the "Fund GP") and Stellus Capital Management, LLC (the "Adviser").

DATES: *Filing Dates:* The application was filed on July 20, 2012, and amended on January 10, 2013, May 22, 2013, September 20, 2013, and September 26, 2013.

HEARING OR NOTIFICATION OF HEARING: An order granting the requested relief will be issued unless the Commission orders a hearing. Interested persons may request a hearing by writing to the Commission's Secretary and serving applicants with a copy of the request, personally or by mail. Hearing requests should be received by the Commission by 5:30 p.m. on October 22, 2013 and should be accompanied by proof of service on applicants, in the form of an affidavit or, for lawyers, a certificate of service. Hearing requests should state the nature of the writer's interest, the reason for the request, and the issues contested. Persons who wish to be notified of a hearing may request notification by writing to the Commission's Secretary.

ADDRESSES: Elizabeth M. Murphy, Secretary, U.S. Securities and Exchange Commission, 100 F St. NE., Washington, DC 20549-1090. Applicants: Robert T. Ladd, Stellus Capital Investment Corporation, 4400 Post Oak Parkway, Suite 2200, Houston, TX 77027.

FOR FURTHER INFORMATION CONTACT: Barbara T. Heussler, Senior Counsel, at (202) 551-6990, or Jennifer L. Sawin, Branch Chief, at (202) 551-6821 (Exemptive Applications Office, Division of Investment Management).

SUPPLEMENTARY INFORMATION: The following is a summary of the application. The complete application may be obtained via the Commission's Web site by searching for the file number, or for an applicant using the Company name box, at <http://www.sec.gov/search/search.htm> or by calling (202) 551-8090.

Applicants' Representations:

1. The Company is an externally managed, non-diversified, closed-end management investment company that has elected to be regulated as a BDC under the Act.¹ The Company's investment objective is to maximize total return to its stockholders in the form of current income and capital appreciation by primarily investing in private middle-market companies (typically with \$5 million to \$50 million of EBITDA) through first lien, second lien, unitranche and mezzanine debt financing and corresponding equity investments. The Company's board of directors currently consists of seven members (the "Board"), four of whom are not "interested persons" of the Company within the meaning of section 2(a)(19) of the Act (the "Independent Directors").

2. The Adviser is registered as an investment adviser under the Investment Advisers Act of 1940 (the "Advisers Act"). The Adviser serves as investment adviser to the Company pursuant to an investment advisory agreement and also serves as investment adviser to each Fund.²

3. The Existing Fund was formed as a Delaware limited partnership. In reliance on the exclusion from the definition of "investment company" provided by section 3(c)(1) or 3(c)(7) of the Act, none of the Funds will be registered under the Act. The Existing Fund and any Future Fund that co-invests with the Company has, or will have, investment objectives and strategies that are identical to the Company's Objectives and Strategies.³

¹ Section 2(a)(48) defines a BDC to be any closed-end investment company that operates for the purpose of making investments in securities described in sections 55(a)(1) through 55(a)(3) of the Act and makes available significant managerial assistance with respect to the issuers of such securities.

² "Fund" means (i) the Existing Fund and (ii) any Future Fund. Future Fund means an entity (i) whose investment adviser is the Adviser; and (ii) that would be an investment company but for section 3(c)(1) or 3(c)(7) of the Act.

³ "Objectives and Strategies" means the Company's investment objectives and strategies, as described in the Company's registration statement on Form N-2, other filings the Company has made with the Commission under the Securities Act of 1933, as amended (the "1933 Act") or under the Securities Exchange Act of 1934, as amended, and the Company's reports to stockholders.

4. Applicants request relief permitting the Company, on the one hand, and one or more Funds, on the other hand, to participate in the same investment opportunities through a proposed co-investment program where such participation would otherwise be prohibited under section 57(a)(4) and the rules under the Act (the “Co-Investment Program”).⁴ For purposes of the application, a “Co-Investment Transaction” means any transaction in which the Company or a Wholly-Owned Investment Sub (as defined below) participated together with one or more Funds in reliance on the requested order (the “Order”). “Potential Co-Investment Transaction” means any investment opportunity in which the Company or a Wholly-Owned Investment Sub could not participate together with one or more Funds without obtaining and relying on the Order.

5. The Company may, from time to time, form one or more Wholly-Owned Investment Subs.⁵ Such a subsidiary would be prohibited from investing in a Co-Investment Transaction with any Fund because it would be a company controlled by the Company for purposes of section 57(a)(4) and rule 17d–1. Applicants request that each Wholly-Owned Investment Sub be permitted to participate in Co-Investment Transactions in lieu of the Company and that the Wholly-Owned Investment Sub’s participation in any such transaction be treated, for purposes of the Order, as though the Company were participating directly. Applicants represent that this treatment is justified because a Wholly-Owned Investment Sub would have no purpose other than

serving as a holding vehicle for the Company’s investments and, therefore, no conflicts of interest could arise between the Company and the Wholly-Owned Investment Sub. The Board would make all relevant determinations under the conditions with regard to a Wholly-Owned Investment Sub’s participation in a Co-Investment Transaction, and the Board would be informed of, and take into consideration, any proposed use of a Wholly-Owned Investment Sub in the Company’s place. If the Company proposes to participate in the same Co-Investment Transaction with any of its Wholly-Owned Investment Subs, the Board will also be informed of, and take into consideration, the relative participation of the Company and the Wholly-Owned Investment Sub.

6. Each Potential Co-Investment Transaction would be allocated among the Company, on the one hand, and the Funds, on the other hand. In selecting investments for the Company, the Adviser will consider only the investment objective, investment policies, investment position, capital available for investment, and other pertinent factors applicable to the Company. Likewise, when selecting investments for the Funds, the Adviser will select investments considering, in each case, only the investment objective, investment policies, investment position, capital available for investment, and other pertinent factors applicable to that particular investing entity. However, as described herein, each of the Funds has, or will have, investment objectives and strategies that are identical to the Company’s Objectives and Strategies. Therefore, for each investment that falls within the Objectives and Strategies and is a Potential Co-Investment Transaction, the Company intends to co-invest with the Funds, with certain exceptions based on available capital or diversification. Each Potential Co-Investment Transaction and the proposed allocation of each investment opportunity would be approved prior to the actual investment by the Required Majority.⁶

7. All subsequent activity (i.e. to sell, exchange or otherwise dispose of an investment or to complete a Follow-On Investment (as defined below) in respect of an investment acquired in a Co-Investment Transaction will also be made in accordance with the terms and

conditions set forth in the application.⁷ The Company may participate in a pro rata disposition or Follow-On Investment without obtaining prior approval of the Required Majority, if, among other things: (i) The proposed participation of each Fund and the Company in such disposition or Follow-On Investment is proportionate to its outstanding investments in the issuer immediately preceding the disposition or Follow-On Investment, as the case may be; and (ii) the Board has approved the Company’s participation in pro rata dispositions and Follow-On Investments as being in the best interests of the Company. In addition, no Independent Director will have any direct or indirect financial interest in any Co-Investment Transaction or any interest in any portfolio company, other than through an interest (if any) in the securities of the Company.

Applicants’ Legal Analysis:

1. Section 57(a)(4) of the Act prohibits certain affiliated persons of a BDC from participating in joint transactions with the BDC in contravention of rules as prescribed by the Commission. Under section 57(b)(2) of the Act, any person who is directly or indirectly controlling, controlled by, or under common control with a BDC is subject to section 57(a)(4). Applicants submit that each of the Funds could be deemed to be a person related to the Company in a manner described by section 57(b) by virtue of being under common control with the Company.

2. Section 57(i) of the Act provides that, until the Commission prescribes rules under section 57(a)(4), the Commission’s rules under section 17(d) of the Act applicable to registered closed-end investment companies will be deemed to apply to BDCs. Because the Commission has not adopted any rules under section 57(a)(4), rule 17d–1 applies.

3. Section 17(d) of the Act and rule 17d–1 under the Act prohibit affiliated persons of a registered investment company from participating in joint transactions with the company unless the Commission has granted an order permitting such transactions. Rule 17d–1, as made applicable to BDCs by section 57(i), prohibits any person who is related to a BDC in a manner described in section 57(b), acting as principal, from participating in, or effecting any transaction in connection with, any joint enterprise or other joint arrangement or profit-sharing plan in

⁴ All existing entities that currently intend to rely on the Order (as defined below) have been named as applicants and any entities that may rely on the Order in the future will comply with the terms and conditions of the application.

⁵ The term “Wholly-Owned Investment Sub” means an entity (a) whose sole business purpose is to hold one or more investment on behalf of the Company (and, in the case of an SBIC Subsidiary (as defined below), maintain a license under the SBA Act (as defined below) and issue debentures guaranteed by the SBA (as defined below)), (b) that is wholly-owned by the Company (with the Company at all times holding, beneficially and of record, 100% of the voting and economic interests), (c) with respect to which the Board has the sole authority to make all determinations with respect to the entity’s participation under the conditions to the application, and (d) that would be an investment company but for section 3(c)(1) or 3(c)(7) of the Act. All subsidiaries of the Company participating in Co-Investment Transactions will be Wholly-Owned Investment Subs and will have Objectives and Strategies that are either the same as, or a subset of, the Company’s Objectives and Strategies. The term “SBIC Subsidiary” means a Wholly-Owned Subsidiary that is licensed by the Small Business Administration (the “SBA”) to operate under the Small Business Investment Act of 1958, as amended, (the “SBA Act”) as a small business investment company (an “SBIC”).

⁶ “Required Majority” has the meaning provided in section 57(o) of the Act. The term “Eligible Directors” means the directors who are eligible to vote under section 57(o).

⁷ “Follow-On Investment” means any additional investment in an existing portfolio company, including the exercise of warrants, conversion privileges or other similar rights to acquire additional securities of the portfolio company.

which the BDC is a participant, absent an order from the Commission. In passing upon applications under rule 17d-1, the Commission considers whether the company's participation in the joint transaction is consistent with the provisions, policies, and purposes of the Act and the extent to which such participation is on a basis different from or less advantageous than that of other participants.

4. Applicants state that they expect that co-investment in portfolio companies by the Company and the Funds will increase the number of favorable investment opportunities for the Company and that the Co-Investment Program will be implemented only if the Required Majority approves it.

5. Applicants submit that the Required Majority's approval of each Co-Investment Transaction before investment, and other protective conditions set forth in the application, will ensure that the Company will be treated fairly. Applicants state that the Company's participation in the Co-Investment Transactions will be consistent with the provisions, policies, and purposes of the Act and on a basis that is not different from or less advantageous than that of other participants.

Applicants' Conditions:

Applicants agree that any order granting the requested relief will be subject to the following conditions:

1. Each time the Adviser considers a Potential Co-Investment Transaction for a Fund that falls within the Company's then current Objectives and Strategies, the Adviser will make an independent determination of the appropriateness of the investment for the Company in light of the Company's then-current circumstances.

2. (a) If the Adviser deems the Company's participation in any Potential Co-Investment Transaction to be appropriate for the Company, it will then determine an appropriate level of investment for the Company.

(b) If the aggregate amount recommended by the Adviser to be invested in the Potential Co-Investment Transaction by the Company, together with the amount proposed to be invested by the Funds, collectively, in the same transaction, exceeds the amount of the investment opportunity, the amount proposed to be invested by each party will be allocated among them pro rata based on each party's total assets, up to the amount proposed to be invested by each. The Adviser will provide the Eligible Directors with information concerning each participating Fund's total assets to assist

the Eligible Directors with their review of the Company's investments for compliance with these allocation procedures.

(c) After making the determinations required in conditions 1 and 2(a), the Adviser will distribute written information concerning the Potential Co-Investment Transaction, (including the amount proposed to be invested by each Fund), to the Eligible Directors for their consideration. The Company will co-invest with one or more Funds only if, prior to participating in the Potential Co-Investment Transaction, a Required Majority concludes that:

(i) The terms of the transaction, including the consideration to be paid, are reasonable and fair to the Company and its shareholders and do not involve overreaching in respect of the Company or its shareholders on the part of any person concerned;

(ii) the transaction is consistent with (A) the interests of the shareholders of the Company; and

(B) the Company's then-current Objectives and Strategies;

(iii) the investment by the Funds would not disadvantage the Company, and participation by the Company would not be on a basis different from or less advantageous than that of the Funds; provided, that, if any Fund, but not the Company itself, gains the right to nominate a director for election to a portfolio company's board of directors or the right to have a board observer or any similar right to participate in the governance or management of the portfolio company, such event shall not be interpreted to prohibit the Required Majority from reaching the conclusions required by this condition (2)(c)(iii), if

(A) the Eligible Directors will have the right to ratify the selection of such director or board observer, if any;

(B) the Adviser agrees to, and does, provide periodic reports to the Board with respect to the actions of the director or the information received by the board observer or obtained through the exercise of any similar right to participate in the governance or management of the portfolio company; and

(C) any fees or other compensation that any Fund or any affiliated person of any Fund receives in connection with the right of the Fund to nominate a director or appoint a board observer or otherwise to participate in the governance or management of the portfolio company will be shared proportionately among the participating Funds (who may, in turn, share their portion with their affiliated persons) and the Company in accordance with

the amount of each party's investment; and

(iv) the proposed investment by the Company will not benefit the Adviser or the Funds or any affiliated person of any of them (other than the parties to the Co-Investment Transaction), except (A) to the extent permitted by condition 13, (B) to the extent permitted by section 17(e) or 57(k) of the Act, as applicable, (C) indirectly, as a result of an interest in securities issued by one of the parties to the Co-Investment Transaction, or (D) in the case of fees or other compensation described in condition 2(c)(iii)(C).

3. The Company has the right to decline to participate in any Potential Co-Investment Transaction or to invest less than the amount proposed.

4. The Adviser will present to the Board, on a quarterly basis, a record of all investments in Potential Co-Investment Transactions made by the Funds during the preceding quarter that fell within the Company's then-current Objectives and Strategies that were not made available to the Company, and an explanation of why the investment opportunities were not offered to the Company. All information presented to the Board pursuant to this condition will be kept for the life of the Company and at least two years thereafter, and will be subject to examination by the Commission and its staff.

5. Except for Follow-On Investments made in accordance with condition 8, the Company will not invest in reliance on the Order in any issuer in which any Fund or any affiliated person of the Funds is an existing investor.

6. The Company will not participate in any Potential Co-Investment Transaction unless the terms, conditions, price, class of securities to be purchased, settlement date, and registration rights will be the same for the Company as for each participating Fund. The grant to a Fund, but not the Company, of the right to nominate a director for election to a portfolio company's board of directors, the right to have an observer on the board of directors or similar rights to participate in the governance or management of the portfolio company will not be interpreted so as to violate this condition 6, if conditions 2(c)(iii)(A), (B) and (C) are met.

7. (a) If any Fund elects to sell, exchange, or otherwise dispose of an interest in a security that was acquired in a Co-Investment Transaction, the Adviser will:

(i) Notify the Company of the proposed disposition at the earliest practical time; and

(ii) formulate a recommendation as to participation by the Company in the disposition.

(b) The Company will have the right to participate in such disposition on a proportionate basis, at the same price and on the same terms and conditions as those applicable to the participating Funds.

(c) The Company may participate in such disposition without obtaining prior approval of the Required Majority if: (i) The proposed participation of the Company and each Fund in such disposition is proportionate to its outstanding investment in the issuer immediately preceding the disposition; (ii) the Board has approved as being in the best interests of the Company the ability to participate in such dispositions on a pro rata basis (as described in greater detail in the application); and (iii) the Board is provided on a quarterly basis with a list of all dispositions made in accordance with this condition. In all other cases, the Adviser will provide its written recommendation as to the Company's participation to the Eligible Directors, and the Company will participate in such disposition solely to the extent that a Required Majority determines that it is in the Company's best interests.

(d) The Company and each participating Fund will bear its own expenses in connection with any such disposition.

8. (a) If any Fund desires to make a Follow-On Investment in a portfolio company whose securities were acquired in a Co-Investment Transaction, the Adviser will:

(i) Notify the Company of the proposed transaction at the earliest practical time; and

(ii) formulate a recommendation as to the proposed participation, including the amount of the proposed Follow-On Investment, by the Company.

(b) The Company may participate in such Follow-On Investment without obtaining prior approval of the Required Majority if: (i) The proposed participation of the Company and each Fund in such investment is proportionate to its outstanding investments in the issuer immediately preceding the Follow-On Investment; and (ii) the Board has approved as being in the best interests of the Company the ability to participate in Follow-On Investments on a pro rata basis (as described in greater detail in this application). In all other cases, the Adviser will provide its written recommendation as to the Company's participation to the Eligible Directors, and the Company will participate in such Follow-On Investment solely to the

extent that a Required Majority determines that it is in the Company's best interests.

(c) If, with respect to any Follow-On Investment:

(i) The amount of the opportunity is not based on the Company's and the Funds' outstanding investments immediately preceding the Follow-On Investment; and

(ii) the aggregate amount recommended by the Adviser to be invested by the Company in the Follow-On Investment, together with the amount proposed to be invested by the participating Funds in the same transaction, exceeds the amount of the opportunity; then the amount invested by each such party will be allocated among them pro rata based on each party's total assets, up to the amount proposed to be invested by each.

(d) The acquisition of Follow-On Investments as permitted by this condition will be considered a Co-Investment Transaction for all purposes and subject to the other conditions set forth in the application.

9. The Independent Directors will be provided quarterly for review all information concerning Potential Co-Investment Transactions and Co-Investment Transactions, including investments made by the Funds that the Company considered but declined to participate in, so that the Independent Directors may determine whether all investments made during the preceding quarter, including those investments that the Company considered but declined to participate in, comply with the conditions of the order. In addition, the Independent Directors will consider at least annually the continued appropriateness for the Company of participating in new and existing Co-Investment Transactions.

10. The Company will maintain the records required by section 57(f)(3) of the Act as if each of the investments permitted under these conditions were approved by the Required Majority under section 57(f).

11. No Independent Director will also be a director, general partner, managing member or principal, or otherwise an "affiliated person" (as defined in the Act), of any of the Funds.

12. The expenses, if any, associated with acquiring, holding or disposing of any securities acquired in a Co-Investment Transaction (including, without limitation, the expenses of the distribution of any such securities registered for sale under the 1933 Act) will, to the extent not payable by the Adviser under its respective investment

advisory agreements with the Company and the Funds, be shared by the Company and the Funds in proportion to the relative amounts of the securities held or being acquired or disposed of, as the case may be.

13. Any transaction fee (including break-up or commitment fees but excluding broker's fees contemplated by section 17(e) or 57(k), as applicable) received in connection with a Co-Investment Transaction will be distributed to the Company and the participating Funds on a pro rata basis based on the amounts they invested or committed, as the case may be, in such Co-Investment Transaction. If any transaction fee is to be held by the Adviser pending consummation of the transaction, the fee will be deposited into an account maintained by the Adviser at a bank or banks having the qualifications prescribed in section 26(a)(1), and the account will earn a competitive rate of interest that will also be divided pro rata among the Company and the participating Funds based on the amounts they invest in such Co-Investment Transaction. None of the Adviser, the Funds nor any affiliated person of the Company will receive additional compensation or remuneration of any kind as a result of or in connection with a Co-Investment Transaction (other than (a) in the case of the Company and the participating Funds, the pro rata transaction fees described above and fees or other compensation described in condition 2(c)(iii)(C), and (b) in the case of the Adviser, investment advisory fees paid in accordance with the respective agreements between the Adviser and the Company or the Funds).

For the Commission, by the Division of Investment Management, under delegated authority.

Kevin M. O'Neill,
Deputy Secretary.

[FR Doc. 2013-24239 Filed 10-2-13; 8:45 am]

BILLING CODE 8011-01-P

SECURITIES AND EXCHANGE COMMISSION

[Release No. IC-30738]

Notice of Applications for Deregistration Under Section 8(f) of the Investment Company Act of 1940

September 27, 2013.

The following is a notice of applications for deregistration under section 8(f) of the Investment Company Act of 1940 for the month of September 2013. A copy of each application may be obtained via the Commission's Web site

by searching for the file number, or for an applicant using the Company name box, at <http://www.sec.gov/search/search.htm> or by calling (202) 551-8090. An order granting each application will be issued unless the SEC orders a hearing. Interested persons may request a hearing on any application by writing to the SEC's Secretary at the address below and serving the relevant applicant with a copy of the request, personally or by mail. Hearing requests should be received by the SEC by 5:30 p.m. on October 22, 2013, and should be accompanied by proof of service on the applicant, in the form of an affidavit or, for lawyers, a certificate of service. Hearing requests should state the nature of the writer's interest, the reason for the request, and the issues contested. Persons who wish to be notified of a hearing may request notification by writing to the Secretary, U.S. Securities and Exchange Commission, 100 F Street NE., Washington, DC 20549-1090.

For Further Information Contact: Diane L. Titus at (202) 551-6810, SEC, Division of Investment Management, Exemptive Applications Office, 100 F Street NE., Washington, DC 20549-8010.

Claymore China Strategy Fund

[File No. 811-22124]

Summary: Applicant, a closed-end investment company, seeks an order declaring that it has ceased to be an investment company. Applicant has never made a public offering of its securities and does not propose to engage in any business activity other than those necessary for winding up its affairs.

Filing Date: The application was filed on September 17, 2013.

Applicant's Address: 2455 Corporate West Drive, Lisle, IL 60532.

Dominion Funds, Inc.

[File No. 811-6727]

Summary: Applicant seeks an order declaring that it has ceased to be an investment company. On June 27, 2013, applicant made a liquidating distribution to its shareholders, based on net asset value. Expenses of \$2,970 incurred in connection with the liquidation were paid by applicant and its investment adviser.

Filing Date: The application was filed on September 11, 2013.

Applicant's Address: c/o Fairfax Global Markets, LLC, 2 West Washington St., Middleburg, VA 20118.

Grosvenor Registered Multi-Strategy Fund (TE), LLC

[File No. 811-22354]

Summary: Applicant, a closed-end investment company, seeks an order declaring that it has ceased to be an investment company. Applicant transferred its assets to Grosvenor Registered Multi-Strategy Fund (TI2), LLC, and on January 1, 2013, made a distribution to its shareholders based on net asset value. Applicant has retained \$24,109 in outstanding assets to pay off its outstanding liabilities. Expenses of \$152,274 incurred in connection with the reorganization were paid by Grosvenor Registered Multi-Strategy Master Fund, LLC, applicant's master fund.

Filing Date: The application was filed on September 13, 2013.

Applicant's Address: 900 North Michigan Ave., Suite 1100, Chicago, IL 60611.

RiverSource Dimensions Series Inc.

[File No. 811-1629]

Summary: Applicant seeks an order declaring that it has ceased to be an investment company. Applicant has transferred its assets to corresponding series of Columbia Funds Series Trust and Columbia Funds Series Trust I, and, on May 31, 2011, made a distribution to its shareholders based on net asset value. Expenses of \$82,382 incurred in connection with the reorganization were paid by applicant and applicant's investment adviser, Columbia Management Investment Advisers, LLC.

Filing Dates: The application was filed on March 8, 2013, and amended on July 17, 2013, and September 11, 2013.

Applicant's Address: 901 Marquette Ave. South, Suite 2810, Minneapolis, MN 55402-3268.

Seligman Growth Fund, Inc.

[File No. 811-229]

Seligman LaSalle Real Estate Fund Series, Inc.

[File No. 811-21365]

Summary: Each applicant seeks an order declaring that it has ceased to be an investment company. Applicants transferred their assets to corresponding series of Columbia Fund Series Trust I, and on or prior to April 5, 2011, made final distributions to their shareholders based on net asset value. Expenses of \$729,844 and \$77,689, respectively, incurred in connection with the reorganization were paid by applicants and Columbia Management Investment Advisers, LLC, applicants' investment adviser.

Filing Date: The applications were filed on September 10, 2013.

Applicants' Address: 901 Marquette Avenue South, Suite 2810, Minneapolis, MN 55402-3268.

International Equity Portfolio/MA

[File No. 811-21867]

Summary: Applicant seeks an order declaring that it has ceased to be an investment company. On April 21, 2011, applicant made a liquidating distribution to its shareholders, based on net asset value. Applicant incurred no expenses in connection with the liquidation.

Filing Dates: The application was filed on November 30, 2012, and amended on September 20, 2013.

Applicant's Address: Two International Place, Boston, MA 02110.

For the Commission, by the Division of Investment Management, pursuant to delegated authority.

Kevin M. O'Neill,

Deputy Secretary.

[FR Doc. 2013-24222 Filed 10-2-13; 8:45 am]

BILLING CODE 8011-01-P

SECURITIES AND EXCHANGE COMMISSION

[Release No. 34-70535; File No. SR-NASDAQ-2013-128]

Self-Regulatory Organizations; The NASDAQ Stock Market LLC; Notice of Filing and Immediate Effectiveness of Proposed Rule Change To Amend the NASDAQ Listing Standards Related to Compliance Determinations for Market Value of Listed Securities and Market Value of Publicly-Held Shares Deficiencies

September 27, 2013.

Pursuant to Section 19(b)(1) of the Securities Exchange Act of 1934 ("Act"),¹ and Rule 19b-4 thereunder,² notice is hereby given that on September 26, 2013, The NASDAQ Stock Market LLC ("NASDAQ" or "Exchange") filed with the Securities and Exchange Commission ("SEC" or "Commission") the proposed rule change as described in Items I, II, and III, below, which Items have been prepared by the Exchange. The Commission is publishing this notice to solicit comments on the proposed rule change from interested persons.

¹ 15 U.S.C. 78s(b)(1).

² 17 CFR 240.19b-4.

I. Self-Regulatory Organization's Statement of the Terms of Substance of the Proposed Rule Change

The Exchange proposes to amend the NASDAQ listing standards related to compliance determinations for Market Value of Listed Securities and Market Value of Publicly-Held Shares deficiencies. The text of the proposed rule change is below. Proposed new language is *italicized*; proposed deletions are in brackets.

* * * * *

5810. Notification of Deficiency by the Listing Qualifications Department

When the Listing Qualifications Department determines that a Company does not meet a listing standard set forth in the Rule 5000 Series, it will immediately notify the Company of the deficiency. As explained in more detail below, deficiency notifications are of four types:

(1) Staff Delisting Determinations, which are notifications of deficiencies that, unless appealed, subject the Company to immediate suspension and delisting;

(2) notifications of deficiencies for which a Company may submit a plan of compliance for staff review;

(3) notifications of deficiencies for which a Company is entitled to an automatic cure or compliance period; and

(4) Public Reprimand Letters.

Notifications of deficiencies that allow for submission of a compliance plan or an automatic cure or compliance period may result, after review of the compliance plan or expiration of the cure or compliance period, in issuance of a Staff Delisting Determination or a Public Reprimand Letter.

(a)–(b) No change.

(c) Types of Deficiencies and Notifications

The type of deficiency at issue determines whether the Company will be immediately suspended and delisted, or whether it may submit a compliance plan for review or is entitled to an automatic cure or compliance period before a Staff Delisting Determination is issued. In the case of a deficiency not specified below, Staff will issue the Company a Staff Delisting Determination or a Public Reprimand Letter.

(1)–(2) No change.

(3) Deficiencies for which the Rules Provide a Specified Cure or Compliance Period

With respect to deficiencies related to the standards listed in (A)–(E) below,

Staff's notification will inform the Company of the applicable cure or compliance period provided by these Rules and discussed below. If the Company does not regain compliance within the specified cure or compliance period, the Listing Qualifications Department will immediately issue a Staff Delisting Determination letter.

(A)–(B) No change.

(C) Market Value of Listed Securities

A failure to meet the continued listing requirements for Market Value of Listed Securities shall be determined to exist only if the deficiency continues for a period of 30 consecutive business days. Upon such failure, the Company shall be notified promptly and shall have a period of 180 calendar days from such notification to achieve compliance. Compliance can be achieved by meeting the applicable standard for a minimum of 10 consecutive business days during the 180 day compliance period, *unless Staff exercises its discretion to extend this 10 day period as discussed in Rule 5810(c)(3)(F)*.

(D) Market Value of Publicly Held Shares

A failure to meet the continued listing requirement for Market Value of Publicly Held Shares shall be determined to exist only if the deficiency continues for a period of 30 consecutive business days. Upon such failure, the Company shall be notified promptly and shall have a period of 180 calendar days from such notification to achieve compliance. Compliance can be achieved by meeting the applicable standard for a minimum of 10 consecutive business days during the 180 day compliance period, *unless Staff exercises its discretion to extend this 10 day period as discussed in Rule 5810(c)(3)(F)*.

(E) No change.

(F) Staff Discretion Relating to the [Bid] Price-based Requirements

If a Company fails to meet the Market Value of Listed Securities, Market Value of Publicly Held Shares, or Bid Price requirements, each of which is related to the Company's security price and collectively called the "Price-based Requirements," compliance is generally achieved by meeting the requirement for a minimum of ten consecutive business days. However, Staff may, in its discretion, require a Company to [maintain a bid price of at least \$1.00 per share] satisfy the applicable Price-based Requirement for a period in excess of ten consecutive business days, but generally no more than 20 consecutive business days, before

determining that the Company has demonstrated an ability to maintain long-term compliance. In determining whether to require a Company to meet the [minimum \$1.00 bid price standard] *applicable Price-based-requirement* beyond ten business days, Staff [will] *may consider all relevant facts and circumstances, including without limitation*[the following four factors]:

(i) *the margin of compliance* (the amount by which a Company exceeds the [bid price is above the \$1.00 minimum standard] *applicable Price-based Requirement*);

(ii) *the trading volume* (a lack of trading volume may indicate a lack of bona fide market interest in the security at the posted bid price);

(iii) *the Market Maker montage* (the number of Market Makers quoting at or above \$1.00 *or the minimum price necessary to satisfy another Price-based Requirement*; and the size of their quotes); and

(iv) *the trend of the stock price* (is it up or down).

* * * * *

II. Self-Regulatory Organization's Statement of the Purpose of, and Statutory Basis for, the Proposed Rule Change

In its filing with the Commission, the Exchange included statements concerning the purpose of and basis for the proposed rule change and discussed any comments it received on the proposed rule change. The text of these statements may be examined at the places specified in Item IV below. The Exchange has prepared summaries, set forth in sections A, B, and C below, of the most significant aspects of such statements.

A. Self-Regulatory Organization's Statement of the Purpose of, and Statutory Basis for, the Proposed Rule Change

1. Purpose

The purpose of this proposed rule change is to increase transparency of the fact that NASDAQ Staff ("Staff") may consider periods longer than ten days when evaluating whether a company has regained compliance with the minimum Market Value of Listed Securities ("MVLS") and Market Value of Publicly-Held Shares ("MVPHS") requirements, while also generally limiting such review to twenty days. Currently, NASDAQ Rules provide that compliance with the MVLS and MVPHS requirements "can be achieved by meeting the applicable standard for a *minimum* of 10 consecutive business days." (emphasis added). As such,

while a company cannot regain compliance in a period less than ten days, the rule does not require Staff to limit its review for compliance with the MVLS and MVPHS requirements to exactly ten days. Further, Staff's broad discretionary authority under Rule 5101 supports Staff's consideration of a longer period when necessary.³

By contrast, Rule 5810(c)(3)(F) explicitly describes Staff's discretion to extend the compliance period for a bid price deficiency beyond ten days (but generally not more than 20 days) and identifies factors for Staff to consider in making a decision to do so.⁴ In the ten years since adopting these factors,⁵ Staff has found them useful in determining whether to extend the bid price compliance period beyond ten days and thus typically uses these same factors, and, generally, the 20 day limit, when evaluating compliance with the MVLS and MVPHS requirements. The proposed change to Rule 5810(c)(3)(F) would describe this practice and thereby provide transparency to the manner in which Staff applies its existing discretion.

2. Statutory Basis

The Exchange believes that its proposal is consistent with Section 6(b) of the Act⁶ in general, and furthers the objectives of Section 6(b)(5) of the Act⁷ in particular, in that it is designed to promote just and equitable principles of trade, to remove impediments to and perfect the mechanism of a free and open market and a national market system, and, in general to protect investors and the public interest. The proposed rule change will add greater transparency to the rule administration process by permitting issuers to better understand how NASDAQ evaluates compliance with the MVLS and MVPHS listing rules. At the same time, it describes NASDAQ Staff discretion to apply a higher standard in determining which companies are suitable for

continued listing on the exchange, thus protecting investors.

B. Self-Regulatory Organization's Statement on Burden on Competition

The Exchange does not believe that the proposed rule change will impose any burden on competition not necessary or appropriate in furtherance of the purposes of the Act. In this regard, NASDAQ notes that the competition among exchanges for listings is robust and vigorous, and the proposed rule change is not intended, nor is it expected, to reduce or diminish such competition. The rule brings added transparency to NASDAQ's vigilant enforcement of the Listing Rules, which already allow NASDAQ Staff to use discretion to apply more stringent listing standards. However, it does not allow the Staff any discretion to apply diminished listing standards in order to attract or retain listing business. The proposed rule change offers NASDAQ no advantages over its competitors beyond those created by enhancing the Exchange's regulatory effectiveness.

C. Self-Regulatory Organization's Statement on Comments on the Proposed Rule Change Received From Members, Participants, or Others

No written comments were either solicited or received.

III. Date of Effectiveness of the Proposed Rule Change and Timing for Commission Action

Because the foregoing proposed rule change does not: (i) Significantly affect the protection of investors or the public interest; (ii) impose any significant burden on competition; and (iii) become operative for 30 days from the date on which it was filed, or such shorter time as the Commission may designate, it has become effective pursuant to Section 19(b)(3)(A)(ii) of the Act⁸ and subparagraph (f)(6) of Rule 19b-4 thereunder.⁹ The proposed rule change will add greater transparency by clarifying how NASDAQ applies its existing authority to evaluate compliance with the MVLS and MVPHS listing rules for periods longer than ten consecutive business days. As such, given that the proposed change merely describes, and does not modify, NASDAQ's authority to determine compliance with the MVLS and MVPHS

requirements, it does not significantly affect the protection of investors or the public interest and does not impose any significant burden on competition.

At any time within 60 days of the filing of the proposed rule change, the Commission summarily may temporarily suspend such rule change if it appears to the Commission that such action is: (i) Necessary or appropriate in the public interest; (ii) for the protection of investors; or (iii) otherwise in furtherance of the purposes of the Act. If the Commission takes such action, the Commission shall institute proceedings to determine whether the proposed rule should be approved or disapproved.

IV. Solicitation of Comments

Interested persons are invited to submit written data, views, and arguments concerning the foregoing, including whether the proposed rule change is consistent with the Act. Comments may be submitted by any of the following methods:

Electronic Comments

- Use the Commission's Internet comment form (<http://www.sec.gov/rules/sro.shtml>); or
- Send an email to rule-comments@sec.gov. Please include File Number SR-NASDAQ-2013-128 on the subject line.

Paper Comments

- Send paper comments in triplicate to Elizabeth M. Murphy, Secretary, Securities and Exchange Commission, 100 F Street NE., Washington, DC 20549-1090.

All submissions should refer to File Number SR-NASDAQ-2013-128. This file number should be included on the subject line if email is used. To help the Commission process and review your comments more efficiently, please use only one method. The Commission will post all comments on the Commission's Internet Web site (<http://www.sec.gov/rules/sro.shtml>). Copies of the submission, all subsequent amendments, all written statements with respect to the proposed rule change that are filed with the Commission, and all written communications relating to the proposed rule change between the Commission and any person, other than those that may be withheld from the public in accordance with the provisions of 5 U.S.C. 552, will be available for Web site viewing and printing in the Commission's Public Reference Room, 100 F Street NE., Washington, DC 20549, on official business days between the hours of 10:00 a.m. and 3:00 p.m. Copies of such filing also will be available for

³ Rule 5101 provides NASDAQ with broad discretionary authority over the initial and continued listing of securities, and allows the application of additional or more stringent criteria for the continued listing of particular securities based on any event, condition, or circumstance that exists or occurs, even though the securities meet all enumerated criteria for initial or continued listing on NASDAQ.

⁴ These factors are: (i) The margin of compliance; (ii) the trading volume; (iii) the market maker montage; and (iv) the trend of the stock price.

⁵ Current Rule 5810(c)(3)(F) was originally adopted in 2003 as Rule 4310(c)(8)(E). Exchange Act Release No. 47181 (January 14, 2003), 68 FR 3074 (January 22, 2003).

⁶ 15 U.S.C. 78f(b).

⁷ 15 U.S.C. 78f(b)(5).

⁸ 15 U.S.C. 78s(b)(3)(a)(ii).

⁹ 17 CFR 240.19b-4(f)(6). In addition, Rule 19b-4(f)(6) requires a self-regulatory organization to give the Commission written notice of its intent to file the proposed rule change at least five business days prior to the date of filing of the proposed rule change, or such shorter time as designated by the Commission. The Exchange has satisfied this requirement.

inspection and copying at the principal office of the Exchange. All comments received will be posted without change; the Commission does not edit personal identifying information from submissions. You should submit only information that you wish to make available publicly. All submissions should refer to File Number SR–NASDAQ–2013–128 and should be submitted on or before October 24, 2013.

For the Commission, by the Division of Trading and Markets, pursuant to delegated authority.¹⁰

Kevin M. O'Neill,
Deputy Secretary.

[FR Doc. 2013–24156 Filed 10–2–13; 8:45 am]

BILLING CODE 8011–01–P

SECURITIES AND EXCHANGE COMMISSION

[Release No. 34–70570; File No. SR–NYSEArca–2013–97]

Self-Regulatory Organizations; NYSE Arca, Inc.; Notice of Filing and Immediate Effectiveness of Proposed Rule Change Reflecting Changes to the Means of Achieving the Investment Objective Applicable to Shares of the PowerShares China A-Share Portfolio

September 30, 2013.

Pursuant to Section 19(b)(1) ¹ of the Securities Exchange Act of 1934 (“Act”) ² and Rule 19b–4 thereunder, ³ notice is hereby given that, on September 19, 2013, NYSE Arca, Inc. (“Exchange” or “NYSE Arca”) filed with the Securities and Exchange Commission (“Commission”) the proposed rule change as described in Items I and II below, which Items have been prepared by the self-regulatory organization. The Commission is publishing this notice to solicit comments on the proposed rule change from interested persons.

I. Self-Regulatory Organization’s Statement of the Terms of Substance of the Proposed Rule Change

The Exchange proposes to reflect changes to the means of achieving the investment objective applicable to shares of the PowerShares China A-Share Portfolio (the “Fund”). The text of the proposed rule change is available on the Exchange’s Web site at www.nyse.com, at the principal office of the Exchange, and at the Commission’s Public Reference Room.

II. Self-Regulatory Organization’s Statement of the Purpose of, and Statutory Basis for, the Proposed Rule Change

In its filing with the Commission, the self-regulatory organization included statements concerning the purpose of, and basis for, the proposed rule change and discussed any comments it received on the proposed rule change. The text of those statements may be examined at the places specified in Item IV below. The Exchange has prepared summaries, set forth in sections A, B, and C below, of the most significant parts of such statements.

A. Self-Regulatory Organization’s Statement of the Purpose of, and Statutory Basis for, the Proposed Rule Change

1. Purpose

The Commission has approved listing and trading on the Exchange of shares (“Shares”) of the PowerShares China A-Share Portfolio, a series of PowerShares Actively Managed Exchange-Traded Trust (the “Trust”), ⁴ under NYSE Arca Equities Rule 8.600, which governs the listing and trading of Managed Fund Shares. Shares of the Fund have not commenced listing and trading on the Exchange.

The Shares are offered by the Trust, a statutory trust organized under the laws of the State of Delaware and registered with the Commission as an open-end management investment company. ⁵ The investment advisor to the Fund will be Invesco PowerShares Capital Management LLC (the “Adviser”).

In this proposed rule change, the Exchange proposes to reflect changes to the description of the measures the Adviser will utilize to implement the

Fund’s investment objective, as described below. ⁶

First, the Prior Release stated that, under normal circumstances, ⁷ the Fund generally will invest at least 80% of its net assets in a combination of investments whose collective performance is designed to correspond to the performance of the FTSE China A50 Index (the “Benchmark”). The Adviser now represents that, rather than being designed to correspond to the performance of the Benchmark, the Fund will seek to achieve its investment objective by providing exposure to the China “A-Shares” market using a quantitative, rules-based investment strategy. The Fund will be actively managed by the Adviser and will not be obligated to invest in the instruments included in the Benchmark or to track the performance of the Benchmark or of any index. However, although the Fund will seek to exceed the performance of the Benchmark, there can be no assurance that the Fund will do so at any time.

Second, the Prior Release stated that the Trust has filed a notice of eligibility for exclusion from the definition of the term “commodity pool operator” (“CPO”) in accordance with Rule 4.5 of the Commodity Exchange Act (“CEA”). ⁸ As stated in the Prior Release, under amendments to Rule 4.5 adopted in February 2012, an investment adviser of a registered investment company may claim exclusion from registration as a CPO only if the registered investment company it advises uses futures contracts solely for “bona fide hedging purposes” or limits its use of futures contracts for non-bona fide hedging purposes in specified ways. The Prior Release stated that, because the Fund did not expect to use futures contracts solely for “bona fide hedging purposes,” the Fund would be subject to rules that would require it to limit its use of positions in futures contracts in accordance with the requirements of amended Rule 4.5 unless the Adviser otherwise complies with CPO

⁴ See Securities Exchange Act Release No. 69915 (July 2, 2013), 78 FR 41145 (July 9, 2013) (SR–NYSEArca–2013–56) (“Prior Order”). See also Securities Exchange Act Release No. 69634 (May 23, 2013), 78 FR 32487 (May 30, 2013) (SR–NYSEArca–2013–56) (“Prior Notice,” and together with the Prior Order, the “Prior Release”).

⁵ The Trust is registered under the Investment Company Act of 1940 (15 U.S.C. 80a–1) (“1940 Act”). On August 30, 2013, the Trust filed with the Commission a post-effective amendment to its registration statement on Form N–1A under the Securities Act of 1933 (15 U.S.C. 77a) (“Securities Act”), and under the 1940 Act relating to the Fund (File Nos. 333–147622 and 811–22148) (“Registration Statement”). The description of the operation of the Trust and the Fund herein is based, in part, on the Registration Statement. In addition, the Commission has issued an order granting certain exemptive relief to the Trust under the 1940 Act. See Investment Company Act Release No. 28171 (February 27, 2008) (File No. 812–13386) (“Exemptive Order”).

⁶ The changes described herein will be effective contingent upon effectiveness of the Trust’s most recent post-effective amendment to its Registration Statement. See note 5, *supra*. The Adviser represents that the Adviser will not implement the changes described herein until the instant proposed rule change is operative.

⁷ The term “under normal circumstances” includes, but is not limited to, the absence of: Extreme volatility or trading halts in the equity markets or the financial markets generally; operational issues causing dissemination of inaccurate market information; or force majeure type events such as systems failure, natural or man-made disaster, act of God, armed conflict, act of terrorism, riot or labor disruption or any similar intervening circumstance.

⁸ 7 U.S.C. 1.

¹⁰ 17 CFR 200.30–3(a)(12).

¹ 15 U.S.C. 78s(b)(1).

² 15 U.S.C. 78a.

³ 17 CFR 240.19b–4.

regulation. The Adviser now represents that, because the Fund does not expect to use futures contracts solely for “bona fide hedging purposes,” nor limit its use of positions in futures contracts in accordance with the requirements of amended Rule 4.5, the Fund is unable to rely on the exclusion from amended Rule 4.5, and therefore will be subjected to regulation under the CEA and Commodity Futures Trading Commission (“CFTC”) rules as a commodity pool. As noted in the Prior Release, the Adviser is registered as a CPO.

Third, the Prior Release stated that, according to the Registration Statement, the Fund may seek to gain exposure to the A-Shares market through investments in a subsidiary organized in the Cayman Islands (“Subsidiary”) that in turn would make investments in futures contracts that provide exposure to China A-Shares. The Adviser now represents that the Trust will not utilize a Subsidiary and that the Fund will make its investments directly. Therefore, all references to the Subsidiary in the Prior Release are of no effect.

Fourth, the Prior Release stated that the Fund may enter into repurchase and reverse repurchase agreements. The Adviser now represents that the Fund will not enter into such agreements. Therefore, all references in the Prior Release to the Fund’s investments in repurchase and reverse repurchase agreements are of no effect.

The Adviser represents that there is no change to the Fund’s investment objective. The Fund will continue to comply with all initial and continued listing requirements under NYSE Arca Equities Rule 8.600.

Except for the changes noted above, all other facts presented and representations made in the Prior Release remain unchanged.

All terms referenced but not defined herein are defined in the Prior Release.

2. Statutory Basis

The basis under the Act for this proposed rule change is the requirement under Section 6(b)(5)⁹ that an exchange have rules that are designed to prevent fraudulent and manipulative acts and practices, to promote just and equitable principles of trade, to remove impediments to, and perfect the mechanism of a free and open market and, in general, to protect investors and the public interest.

The Exchange believes that the proposed rule change is designed to prevent fraudulent and manipulative

acts and practices, and is designed to promote just and equitable principles of trade and to protect investors and the public interest, in that the Adviser represents that there is no change to the Fund’s investment objective and the Adviser is clarifying that the Fund will seek to achieve its investment objective by providing exposure to the China “A-Shares” market, rather than being designed to correspond to the performance of the Benchmark. As an actively-managed fund, the Fund will not be obligated to invest in the instruments included in the Benchmark or to track the performance of the Benchmark or of any index and the Fund will seek to exceed the performance of the Benchmark. These changes are intended to conform more closely with requirements of the 1940 Act, as a result of guidance from the Commission staff. This change is consistent with the operation of other issues of Managed Fund Shares traded on the Exchange that seek to outperform rather than track a benchmark index, as is the case for index funds. The Adviser also is clarifying the representation in the Prior Release regarding regulations applicable to CPOs to clarify that the Trust is unable to rely on the exclusion from amended Rule 4.5 and therefore will be subjected to regulation under the CEA and CFTC rules as a commodity pool. The Adviser is registered as a CPO. The Adviser also is clarifying that, in seeking to achieve its investment objective, the Trust will not utilize a Subsidiary and that the Fund will make its investments directly, and the Fund will not enter into repurchase or reverse repurchase agreements. The Exchange notes that the advisers for other issues of actively managed funds may be subject to regulation under the CEA and CFTC rules as a commodity pool. In addition, other issues of actively managed funds do not make investments through a subsidiary and do not invest in repurchase and reverse repurchase agreements. The proposed rule change is designed to perfect the mechanism of a free and open market and, in general, to protect investors and the public interest in that the Fund will continue to comply with all initial and continued listing requirements under NYSE Arca Equities Rule 8.600. The Adviser represents that there is no change to the Fund’s investment objective. Except for the changes noted above, all other representations made in the Prior Release remain unchanged.

B. Self-Regulatory Organization’s Statement on Burden on Competition

The Exchange does not believe that the proposed rule change will impose

any burden on competition that is not necessary or appropriate in furtherance of the purposes of the Act. The proposed changes will accommodate Exchange listing and trading of an issue of Managed Fund Shares that seeks to exceed the performance of a benchmark of non-U.S. securities and will enhance competition among issues of Managed Fund Shares that invest in equity securities. The changes from the Prior Release described above are consistent with other issues of actively managed funds, and the strategy utilized by the Fund is different from other issues of Managed Fund Shares traded on the Exchange and will provide another choice for investors investing in Managed Fund Shares.

C. Self-Regulatory Organization’s Statement on Comments on the Proposed Rule Change Received From Members, Participants or Others

No written comments were solicited or received with respect to the proposed rule change.

III. Date of Effectiveness of the Proposed Rule Change and Timing for Commission Action

Because the foregoing proposed rule change: (1) Does not significantly affect the protection of investors or the public interest; (2) does not impose any significant burden on competition; and (3) by its terms does not become operative for 30 days after the date of this filing, or such shorter time as the Commission may designate if consistent with the protection of investors and the public interest, the proposed rule change has become effective pursuant to Section 19(b)(3)(A) of the Act¹⁰ and Rule 19b-4(f)(6) thereunder.¹¹

A proposed rule change filed under Rule 19b-4(f)(6) normally does not become operative for 30 days after the date of filing. However, Rule 19b-4(f)(6)(iii) permits the Commission to designate a shorter time if such action is consistent with the protection of investors and the public interest. The Exchange requests that the Commission waive the 30-day operative delay to accommodate investments by the Fund and Exchange trading of the Shares of the Fund without delay. The Commission believes that waiving the 30-day operative delay is consistent

¹⁰ 15 U.S.C. 78s(b)(3)(A).

¹¹ 17 CFR 240.19b-4(f)(6). In addition, Rule 19b-4(f)(6)(iii) requires a self-regulatory organization to provide the Commission with written notice of its intent to file the proposed rule change, along with a brief description and text of the proposed rule change, at least five business days prior to the date of filing of the proposed rule change, or such shorter time as designated by the Commission. The Exchange has fulfilled this requirement.

⁹ 15 U.S.C. 78f(b)(5).

with the protection of investors and the public interest.¹² As stated in the proposal, the proposed changes do not alter the Fund's investment objective. Under the proposal, the Fund will seek to achieve its investment objective by providing exposure to the China A-Shares market, rather than being designed to correspond to the performance of the Benchmark. In addition, the Fund will not be obligated to invest in the instruments included in the Benchmark or to track the performance of the Benchmark or of any index, and will seek to exceed the performance of the Benchmark. Further, the proposal provides that in seeking to achieve its investment objective, the Trust will not utilize a Subsidiary and that the Fund will make its investments directly. As proposed, the Fund also will not enter into repurchase or reverse repurchase agreements. Moreover, the proposal states that the Trust is unable to rely on the exclusion from amended CFTC Rule 4.5 and will be subject to regulation under the CEA and CFTC rules as a commodity pool. The proposal reiterates that the Adviser is registered as a CPO. Because the proposed changes do not alter the Fund's investment objective and conforms the Fund more closely with the requirements of the 1940 Act, the Commission designates the proposed rule change as operative upon filing.

At any time within 60 days of the filing of the proposed rule change, the Commission summarily may temporarily suspend such rule change if it appears to the Commission that such action is necessary or appropriate in the public interest, for the protection of investors, or otherwise in furtherance of the purposes of the Act.

IV. Solicitation of Comments

Interested persons are invited to submit written data, views, and arguments concerning the foregoing, including whether the proposed rule change is consistent with the Act. Comments may be submitted by any of the following methods:

Electronic Comments

- Use the Commission's Internet comment form (<http://www.sec.gov/rules/sro.shtml>); or
- Send an email to rule-comments@sec.gov. Please include File Number SR-NYSEArca-2013-97 on the subject line.

¹² For purposes only of waiving the 30-day operative delay, the Commission has also considered the proposed rule's impact on efficiency, competition, and capital formation. See 15 U.S.C. 78c(f).

Paper Comments

- Send paper comments in triplicate to Elizabeth M. Murphy, Secretary, Securities and Exchange Commission, 100 F Street NE., Washington, DC 20549-1090.

All submissions should refer to File Number SR-NYSEArca-2013-97. This file number should be included on the subject line if email is used. To help the Commission process and review your comments more efficiently, please use only one method. The Commission will post all comments on the Commission's Internet Web site (<http://www.sec.gov/rules/sro.shtml>). Copies of the submission, all subsequent amendments, all written statements with respect to the proposed rule change that are filed with the Commission, and all written communications relating to the proposed rule change between the Commission and any person, other than those that may be withheld from the public in accordance with the provisions of 5 U.S.C. 552, will be available for Web site viewing and printing in the Commission's Public Reference Room, 100 F Street NE., Washington, DC 20549, on official business days between the hours of 10:00 a.m. and 3:00 p.m. Copies of the filing also will be available for inspection and copying at the principal office of the Exchange. All comments received will be posted without change; the Commission does not edit personal identifying information from submissions. You should submit only information that you wish to make available publicly. All submissions should refer to File Number SR-NYSEArca-2013-97 and should be submitted on or before October 24, 2013.

For the Commission, by the Division of Trading and Markets, pursuant to delegated authority.¹³

Kevin M. O'Neill,

Deputy Secretary.

[FR Doc. 2013-24263 Filed 10-2-13; 8:45 am]

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SECURITIES AND EXCHANGE COMMISSION

[Release No. 34-70546; File No. SR-CHX-2013-18]

Self-Regulatory Organizations; Chicago Stock Exchange, Inc.; Notice of Filing and Immediate Effectiveness of Proposed Rule Change To Adopt a Market Data Revenue Rebates Program

September 27, 2013.

Pursuant to Section 19(b)(1) of the Securities Exchange Act of 1934 ("Act")¹, and Rule 19b-4² thereunder, notice is hereby given that on September 26, 2013, the Chicago Stock Exchange, Inc. ("CHX" or the "Exchange") filed with the Securities and Exchange Commission ("Commission") the proposed rule change as described in Items I and II below, which Items have been prepared by CHX. CHX has filed this proposal pursuant to Exchange Act Rule 19b-4(f)(6)³ which is effective upon filing with the Commission. The Commission is publishing this notice to solicit comments on the proposed rule change from interested persons.

I. Self-Regulatory Organization's Statement of the Terms of the Substance of the Proposed Rule Change

CHX proposes to amend its Schedule of Fees and Assessments (the "Fee Schedule") by adopting Section P to implement the Market Data Revenue Rebates program. The text of this proposed rule change is available on the Exchange's Web site at (www.chx.com) and in the Commission's Public Reference Room.

II. Self-Regulatory Organization's Statement of the Purpose of, and Statutory Basis for, the Proposed Rule Change

In its filing with the Commission, the CHX included statements concerning the purpose of and basis for the proposed rule changes and discussed any comments it received on the proposed rule change. The text of these statements may be examined at the places specified in Item IV below. The CHX has prepared summaries, set forth in sections A, B and C below, of the most significant aspects of such statements.

¹ 15 U.S.C. 78s(b)(1).

² 17 CFR 240.19b-4.

³ 17 CFR 240.19b-4(f)(6).

¹³ 17 CFR 200.30-3(a)(12).

A. Self-Regulatory Organization's Statement of the Purpose of, and Statutory Basis for, the Proposed Rule Change

1. Purpose

The Exchange proposes to amend its Fee Schedule to adopt Section P to implement the Market Data Revenue ("MDR") Rebate program. In sum, the proposed MDR Rebate program calls for 50% of MDR that exceeds fixed thresholds in any one of three pools ("Excess MDR") to be shared with Participants in proportion to their respective eligible quoting activity in Tapes A, B and C securities. The proposed MDR Rebate program is designed to improve display liquidity and promote order flow to the Exchange by offering an incentive for market participants to quote on the Exchange.

Background

The Securities Information Processors ("SIPs"), which include the Securities Information [sic] Automation Corporation ("SIAC") and the Unlisted Trading Privilege Plan Quotation Data Feed ("UQDF"), collect fees from

subscribers for trade and quote tape data received from trading centers and reporting facilities, such as the CHX (collectively "SIP Participants"). After deducting the cost of operating each tape, the profits are allocated among the SIP Participants on a quarterly basis, according to a complex set of calculations that consider estimates of anticipated MDR, adjustments to comport to actual MDR from previous quarters and a non-linear aggregation of total trading and quoting activity in Tapes A, B and C securities in attributing MDR to each SIP Participant. Based on these calculations, the SIPs provide MDR payments to each SIP Participant during the first month of each quarter for trade and quote data from the previous calendar quarter, which are subject to adjustment through subsequent quarterly payments. These payments can be divided into six pools (*i.e.*, trade and quote activity in Tape A, B and C securities).

Proposed MDR Rebate Program

As the Exchange does not currently share MDR with Participants, the

Exchange now proposes to implement an MDR Rebate program to share MDR attributed to quote activity only by adopting proposed Section P of the Fee Schedule.⁴ Specifically, proposed Section P(1) provides that assuming that the requirements of this proposed Section are met, a Participant will receive a quarterly MDR Rebate attributable to the Participant's quoting of displayed orders in Tapes A, B and C securities, collectively referred to as "eligible quote activity," from the previous calendar quarter.⁵ Furthermore, proposed Section P(2) provides that MDR will be calculated separately for quote activity in Tape A, B and C securities, for a total of three pools. Specifically, if the MDR received by the Exchange in any given pool exceeds the following proposed thresholds in any given calendar quarter, 50% of such Excess MDR will be paid to Participants in proportion to their respective eligible quote activity in that pool.

Source	Tape A	Tape B	Tape C
Quotes	\$3,000	\$204,000	\$12,000

In addition, proposed Section P(3) provides a *de minimis* requirement that states that a Participant will not receive an MDR Rebate in any calendar quarter in which the total MDR Rebate attributed to a Participant is less than \$500.

In attributing eligible quote activity to Participants, the Exchange proposes to utilize a set of calculations similar to those used by the SIPs in allocating MDR to SIP Participants. In sum, if Excess MDR exists in any given pool, the Exchange will allocate quote credits to each Participant for eligible quote activity in that pool, which will take into account the actual dollar amount of the quote and how long the quote was at the National Best Bid or Offer ("NBBO"). In turn, the actual dollar amount of the rebate for a Participant will be the product of the percentage of the total quote credits attributed to the Participant in a given pool and the

Excess MDR in the same pool. If a Participant is eligible for MDR Rebates from multiple pools, the Participant will be eligible to receive an MDR rebate equal to the sum of all the rebates. However, if the sum of the rebates is less than \$500, the Participant will not receive a payment and the rebate will be kept by the Exchange. The purpose of the *de minimis* requirement is to encourage significant quote activity and for the Exchange to avoid having to pay Participants for *de minimis* Excess MDR.⁶

As for calculating the pool of funds from which MDR Rebates will be paid, unlike the SIPs, the Exchange will derive MDR Rebate allocation from a fixed value that will not be subject to adjustment (*i.e.*, the amount of MDR actually received by the Exchange on a quarterly basis). This avoids the problem of having to adjust MDR rebates that have already been paid to

Participants to comport to adjustments to MDR made by the SIPs.⁷

In addition, the Exchange proposes to adopt three of the six MDR pools utilized by the SIPs, by excluding the three pools for trading activity, for the purposes of attributing the proposed MDR Rebates to Participants (*i.e.*, quote activity in each Tape A, B and C security). The proposed thresholds were selected based on historical data of the Exchange's quote activity and MDR that has been paid to the Exchange in previous quarters. The dollar values represent the amount of MDR that must be paid to the Exchange by the SIPs before the Excess MDR would be eligible for distribution.

The following *Examples 1 and 2* illustrate how Excess MDR will be calculated and distributed.

Example 1. The following table represents the proposed MDR pool thresholds:

⁴ The Exchange does not propose to share MDR attributed to trading activity at this time.

⁵ Undisplayed orders are not eligible quote activity.

⁶ For example, it would be unduly burdensome to the Exchange to calculate and pay MDR Rebates to

Participants if the total Excess MDR of all the pools was \$4000 and ten Participants were each attributed \$400 in rebates.

⁷ For example, if MDR paid to the Exchange was less than anticipated in Q3 2014 due to an adjustment to the MDR paid to the Exchange in Q2

2014 (*i.e.*, actual MDR in Q2 fell short of estimates), the Exchange will not recoup the difference from the Participants that had been paid the Q2 MDR Rebate. Instead, the MDR Rebate for Q3 will be calculated based on the actual MDR paid to the Exchange in Q3.

Source	Tape A	Tape B	Tape C
Quotes	\$3,000	\$204,000	\$12,000

Assume that the Q1 2014 MDR paid to the Exchange is apportioned as follows:

Source	Tape A	Tape B	Tape C
Quotes	\$2,900	\$244,000	\$12,000

Under this Example, the Tape B pool has Excess MDR in the amount of \$40,000. However, the Tapes A and C pools have no Excess MDR because the actual MDR received in the Tape A pool was \$100 short of its \$3,000 threshold and the Tape C pool was equal to its \$12,000 threshold. Thus, Participants may be paid MDR Rebates for attributed eligible quoting activity from 50% of the Excess MDR in the Tape B pool, which is \$20,000.

Example 2. Assume the same as Example 1 and there are five Participants (*i.e.*, Participants A, B, C, D and E) that had eligible quote activity in Tape B securities in the previous calendar quarter. After calculating the Tape B quote credits for each Participant, the attributed MDR for each Participant would be as follows:

Participant	Tape B Quote Credits	Attributed MDR
A	24,000	\$480
B	75,000	1,500
C	201,000	4,020
D	300,000	6,000
E	400,000	8,000
TOTAL	1,000,000	20,000

In sum, each Participant would be attributed MDR according to their [sic] respective percentage of the Tape B quote credits allocated. For instance, Participant A was allocated 2.4% (*i.e.*, 24,000 credits) of the total 1,000,000 Tape B quote credits attributed to all five Participants. As such, Participant A would be attributed 2.4% of the Excess MDR, which is \$480 (*i.e.*, $2.4\% \times \$20,000 = \$480$). However, since the attributed MDR is less than \$500 and there are no other MDR pools with Excess MDR, the *de minimis* exception would result in Participant A not receiving an MDR payment. In contrast, since the other Participants were attributed MDR in amounts greater than \$500, these Participants would be paid MDR according to the above amounts.

As a final matter, the Exchange proposes to amend the initial subtitle to the Fee Schedule to accurately reflect

that the Fee Schedule includes “Fees, Assessments, Credits and Rebates,” as opposed to merely “Fees and Assessments.”

2. Statutory Basis

The Exchange believes that the proposed rule change is consistent with Section 6(b) of the Act⁸ in general, and furthers the objectives of Section 6(b)(4) of the Act⁹ in particular, in that it provides for the equitable allocation of MDR Rebates among members and other persons using any facility or system which the Exchange operates or controls. The Exchange believes that the proposed MDR Rebate program will promote display liquidity and order flow to the Exchange. In addition, these changes to the Fee Schedule would equitably allocate MDR Rebates among Participants by paying MDR Rebates according to the total quoting activity in Tape A, B and C securities attributable to a Participant in any given calendar quarter.

B. Self-Regulatory Organization’s Statement on Burden on Competition

The Exchange does not believe that the proposed rule change will impose any burden on competition that is not necessary or appropriate in furtherance of the purposes of the Act. The proposed change to provide MDR Rebates contributes to the protection of investors and the public interest by promoting display liquidity on, and order flow to, the Exchange. Consequently, the proposed MDR rebates will promote competition that is necessary and appropriate in furtherance of the purpose of the Act.

C. Self-Regulatory Organization’s Statement on Comments on the Proposed Rule Change Received From Members, Participants, or Others

No written comments were either solicited or received.

III. Date of Effectiveness of the Proposed Rule Change and Timing for Commission Action

Because the foregoing proposed rule change does not: (i) Significantly affect the protection of investors or the public interest; (ii) impose any significant burden on competition; and (iii) become operative for 30 days from the date on which it was filed, or such shorter time as the Commission may designate, it has become effective pursuant to Section 19(b)(3)(A) of the Act¹⁰ and subparagraph (f)(6) of Rule 19b–4 thereunder.¹¹

A proposed rule change filed under Rule 19b–4(f)(6)¹² normally does not become operative prior to 30 days after the date of the filing. However, pursuant to Rule 19b–4(f)(6)(iii),¹³ the Commission may designate a shorter time if such action is consistent with the protection of investors and the public interest. The Exchange has asked the Commission to waive the 30-day operative delay so that the proposal may become operative immediately upon filing.

The Commission believes that waiving the 30-day operative delay is consistent with the protection of investors and the public interest. The Exchange proposes to implement the program in time for the final calendar quarter for 2013. Waiver would allow the Exchange to adhere to this proposed timetable. Also, prompt implementation of the program may encourage competition among exchanges that have market data revenue sharing programs. For these reasons, and because the proposed rule change presents no novel issues, the Commission hereby waives the 30-day operative delay and designates the proposal operative upon filing.¹⁴

¹⁰ 15 U.S.C. 78s(b)(3)(A).

¹¹ 17 CFR 240.19b–4(f)(6).

¹² 17 CFR 240.19b–4(f)(6).

¹³ 17 CFR 240.19b–4(f)(6)(iii).

¹⁴ For purposes only of waiving the 30-day operative delay, the Commission has considered the

⁸ 15 U.S.C. 78f.

⁹ 15 U.S.C. 78f(b)(4).

At any time within 60 days of the filing of such proposed rule change, the Commission summarily may temporarily suspend such rule change if it appears to the Commission that such action is necessary or appropriate in the public interest, for the protection of investors, or otherwise in furtherance of the purposes of the Act. If the Commission takes such action, the Commission shall institute proceedings under Section 19(b)(2)(B) ¹⁵ of the Act to determine whether the proposed rule change should be approved or disapproved.

IV. Solicitation of Comments

Interested persons are invited to submit written data, views, and arguments concerning the foregoing, including whether the proposed rule change is consistent with the Act. Comments may be submitted by any of the following methods:

Electronic Comments

- Use the Commission's Internet comment form (<http://www.sec.gov/rules/sro.shtml>); or
- Send an email to rule-comments@sec.gov. Please include File Number SR-CHX-2013-18 on the subject line.

Paper Comments

- Send paper comments in triplicate to Elizabeth M. Murphy, Secretary, Securities and Exchange Commission, 100 F Street NE., Washington, DC 20549-1090.

All submissions should refer to File Number SR-CHX-2013-18. This file number should be included on the subject line if email is used. To help the Commission process and review your comments more efficiently, please use only one method. The Commission will post all comments on the Commission's Internet Web site (<http://www.sec.gov/rules/sro.shtml>). Copies of the submission, all subsequent amendments, all written statements with respect to the proposed rule change that are filed with the Commission, and all written communications relating to the proposed rule change between the Commission and any person, other than those that may be withheld from the public in accordance with the provisions of 5 U.S.C. 552, will be available for Web site viewing and printing in the Commission's Public Reference Room on official business days between the hours of 10:00 a.m. and 3:00 p.m. Copies of such filing also

will be available for inspection and copying at the principal offices of the Exchange. All comments received will be posted without change; the Commission does not edit personal identifying information from submissions. You should submit only information that you wish to make available publicly. All submissions should refer to File Number SR-CHX-2013-18, and should be submitted on or before October 24, 2013.

For the Commission, by the Division of Trading and Markets, pursuant to delegated authority.¹⁶

Kevin M. O'Neill,

Deputy Secretary.

[FR Doc. 2013-24164 Filed 10-2-13; 8:45 am]

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SECURITIES AND EXCHANGE COMMISSION

[Release No. 34-70543; File No. SR-MIAX-2013-45]

Self-Regulatory Organizations; Miami International Securities Exchange LLC; Notice of Filing and Immediate Effectiveness of a Proposed Rule Change To Amend Exchange Rule 503

September 27, 2013.

Pursuant to the provisions of Section 19(b)(1) of the Securities Exchange Act of 1934 ("Act") ¹ and Rule 19b-4 thereunder,² notice is hereby given that on September 19, 2013, Miami International Securities Exchange LLC ("MIAX" or "Exchange") filed with the Securities and Exchange Commission ("Commission") a proposed rule change as described in Items I, II, and III below, which Items have been prepared by the Exchange. The Commission is publishing this notice to solicit comments on the proposed rule change from interested persons.

I. Self-Regulatory Organization's Statement of the Terms of the Substance of the Proposed Rule Change

The Exchange is filing a proposal to amend Rule 503.

The text of the proposed rule change is available on the Exchange's Web site at http://www.miaxoptions.com/filter/wotitle/rule_filing, at MIAX's principal office, and at the Commission's Public Reference Room.

II. Self-Regulatory Organization's Statement of the Purpose of, and Statutory Basis for, the Proposed Rule Change

In its filing with the Commission, the Exchange included statements concerning the purpose of and basis for the proposed rule change and discussed any comments it received on the proposed rule change. The text of these statements may be examined at the places specified in Item IV below. The Exchange has prepared summaries, set forth in sections A, B, and C below, of the most significant aspects of such statements.

A. Self-Regulatory Organization's Statement of the Purpose of, and Statutory Basis for, the Proposed Rule Change

1. Purpose

The Exchange proposes to amend Rule 503 to provide details regarding the treatment of market orders to sell in two specific scenarios during the Exchange's Opening Process—when market sell interest outweighs buy interests and (i) the highest quote bid is either zero or the lowest Minimum Trading Increment or (ii) the Expanded Quote Range has been calculated as zero. The proposal codifies existing functionality during the Exchange's Opening Process. Specifically, the Exchange proposes adding the following to Rule 503(f)(3):

In series where the highest quote bid is either zero or the lowest Minimum Trading Increment and market order sell interest has a quantity greater than all of the buy interest, the System will treat the market order(s) like a limit order to sell at the lowest Minimum Trading Increment and the Opening Process will be satisfied with an opening price at the lowest Minimum Increment with any remaining balance of the sell order(s) being placed on the Book in time priority and made available for execution following the Opening Process.

The Exchange believes that this amendment will prevent any confusion on the part of its members on how such orders will be treated during the Exchange's Opening Process. For instance, in the absence of the proposed amendment to Rule 503(f)(3), a member could believe that a market order to sell could be priced at zero in a no bid series. However, the Exchange System avoids this theoretical outcome by converting the sell market order to a limit order with a limit price of the lowest Minimum Trading Increment. This is very similar to how the MIAX Order Monitor, which applies after the Opening Process, converts market orders to sell in certain circumstances to

proposed rule's impact on efficiency, competition, and capital formation. See 15 U.S.C. 78c(f).

¹⁵ 15 U.S.C. 78s(b)(2)(B).

¹⁶ 17 CFR 200.30-3(a)(12).

¹ 15 U.S.C. 78s(b)(1).

² 17 CFR 240.19b-4.

limit orders to sell with a limit price of one Minimum Trading Increment pursuant to Rule 519.³

Additionally, the Exchange proposes adding the following to Rule 503(f)(8)(ii)(E):

However, in a series where the EQR has been calculated to be zero on the bid side and market order sell interest has a quantity greater than all of the buy interest, the System will treat the market order(s) like a limit order(s) to sell at the lowest Minimum Trading Increment and the Opening Process will be satisfied with an opening price at the lowest Minimum Increment with any remaining balance of the sell order(s) being placed on the Book in time priority and made available for execution following the Opening Process.

The Exchange believes that this amendment, similar to the amendment to Rule 503(f)(3) discussed above, will prevent any confusion on the part of its members on how such orders will be treated during the Exchange's Opening Process. For instance, in the absence of the proposed amendment to Rule 503(f)(8)(ii)(E), a member could believe that a market order to sell could be priced at zero in a series where the Expanded Quote Range has been calculated to be zero on the bid side. However, the Exchange System avoids this theoretical outcome by converting the sell market order to a limit order with a limit price of the lowest Minimum Trading Increment. This is also very similar to how the MIAIX Order Monitor, which applies after the Opening Process, converts market orders to sell in certain circumstances to limit orders to sell with a limit price of one Minimum Trading Increment pursuant to Rule 519.

The Exchange notes that neither the proposed language of Rule 519(f)(3) or 519(f)(8)(E) supersedes the functionality of the Opening ("OPG") Order as defined in Rule 516(h). Therefore, the remaining balance of any OPG market order to sell that has been converted to a limit order to sell at the Minimum Trading Increment shall be cancelled rather than placed on the Book following the Opening Process.

2. Statutory Basis

The Exchange believes that the proposed rule change is consistent with Section 6(b) of the Act,⁴ in general, and furthers the objectives of Section 6(b)(5) of the Act,⁵ in particular, because it is designed to prevent fraudulent and manipulative acts and practices, to promote just and equitable principles of trade, to foster cooperation and

coordination with persons engaged in facilitating transactions in securities, and to remove impediments to and perfect the mechanism of a free and open market and a national market system and, in general, to protect investors and the public interest.

The proposed amendments to Exchange Rule 503 removes impediments to and perfects the mechanisms of a free and open market and a national market system and, in general, protects investors and the public interest by providing additional details to the mechanics of the Exchange's Opening Process in order to align the Rule text to existing functionality. Such additional details provide further clarity and transparency around the Opening Process, which, in turn, benefits members by allowing them to better understand how the Exchange System will treat market orders to sell in two specific situations—when market sell interest outweighs buy interests and (i) the highest quote bid is either zero or the lowest Minimum Trading Increment or (ii) the Expanded Quote Range has been calculated as zero. With this information, members can better choose the type of order, such as a market or limit order, to send during the Opening Process.

Additionally, the underlying design of the Exchange System to prevent trades from occurring at a price of zero protects investors and the public interest and promotes just and equitable principles by avoiding trades from occurring at a potentially harmful price, especially for investors entering market orders to sell who would most likely not want to sell a position for no value.

B. Self-Regulatory Organization's Statement on Burden on Competition

The Exchange does not believe that the proposed rule change will impose any burden on competition not necessary or appropriate in furtherance of the purposes of the Act. Specifically, the Exchange believes the proposed changes will not impose any burden on intra-market competition because it applies to all MIAIX participants equally. In addition, the Exchange does not believe the proposal will impose any burden on inter-market competition as the proposal is intended to protect investors by providing further transparency regarding the Exchange's Opening Process. The proposed amendment will place the investing public in a better position when selecting which of the various option exchanges to send an order to be including during the respective opening transaction.

C. Self-Regulatory Organization's Statement on Comments on the Proposed Rule Change Received From Members, Participants, or Others

Written comments were neither solicited nor received.

III. Date of Effectiveness of the Proposed Rule Change and Timing for Commission Action

Because the foregoing proposed rule change does not: (i) Significantly affect the protection of investors or the public interest; (ii) impose any significant burden on competition; and (iii) become operative for 30 days after the date of the filing, or such shorter time as the Commission may designate, it has become effective pursuant to 19(b)(3)(A) of the Act⁶ and Rule 19b-4(f)(6)⁷ thereunder.

At any time within 60 days of the filing of the proposed rule change, the Commission summarily may temporarily suspend such rule change if it appears to the Commission that such action is necessary or appropriate in the public interest, for the protection of investors, or otherwise in furtherance of the purposes of the Act. If the Commission takes such action, the Commission shall institute proceedings to determine whether the proposed rule should be approved or disapproved.

IV. Solicitation of Comments

Interested persons are invited to submit written data, views, and arguments concerning the foregoing, including whether the proposed rule change is consistent with the Act. Comments may be submitted by any of the following methods:

Electronic Comments

- Use the Commission's Internet comment form (<http://www.sec.gov/rules/sro.shtml>); or
- Send an email to rule-comments@sec.gov. Please include File Number SR-MIAIX-2013-45 on the subject line.

Paper Comments

- Send paper comments in triplicate to Elizabeth M. Murphy, Secretary, Securities and Exchange Commission, 100 F Street NE., Washington, DC 20549-1090.

All submissions should refer to File Number SR-MIAIX-2013-45. This file

⁶ 15 U.S.C. 78s(b)(3)(A).

⁷ 17 CFR 240.19b-4(f)(6). In addition, Rule 19b-4(f)(6) requires a self-regulatory organization to give the Commission written notice of its intent to file the proposed rule change at least five business days prior to the date of filing of the proposed rule change, or such shorter time as designated by the Commission. The Exchange has satisfied this requirement.

³ See Exchange Rule 519(a)(1).

⁴ 15 U.S.C. 78f(b).

⁵ 15 U.S.C. 78f(b)(5).

number should be included on the subject line if email is used. To help the Commission process and review your comments more efficiently, please use only one method. The Commission will post all comments on the Commission's Internet Web site (<http://www.sec.gov/rules/sro.shtml>). Copies of the submission, all subsequent amendments, all written statements with respect to the proposed rule change that are filed with the Commission, and all written communications relating to the proposed rule change between the Commission and any person, other than those that may be withheld from the public in accordance with the provisions of 5 U.S.C. 552, will be available for Web site viewing and printing in the Commission's Public Reference Room, 100 F Street NE., Washington, DC 20549, on official business days between the hours of 10:00 a.m. and 3:00 p.m. Copies of such filing also will be available for inspection and copying at the principal offices of the Exchange. All comments received will be posted without change; the Commission does not edit personal identifying information from submissions. You should submit only information that you wish to make available publicly. All submissions should refer to File Number SR-MIAX-2013-45, and should be submitted on or before October 24, 2013.

For the Commission, by the Division of Trading and Markets, pursuant to delegated authority.⁸

Kevin M. O'Neill,
Deputy Secretary.

[FR Doc. 2013-24161 Filed 10-2-13; 8:45 am]

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SECURITIES AND EXCHANGE COMMISSION

[Release No. 34-70539; File No. SR-BX-2013-052]

Self-Regulatory Organizations; NASDAQ OMX BX, Inc.; Notice of Filing and Immediate Effectiveness of Proposed Rule Change Relating to Pricing for Certain Options Symbols

September 27, 2013.

Pursuant to Section 19(b)(1) of the Securities Exchange Act of 1934 ("Act"),¹ and Rule 19b-4 thereunder,² notice is hereby given that on September 23, 2013, NASDAQ OMX BX, Inc. ("BX" or "Exchange") filed with the Securities and Exchange Commission ("SEC" or "Commission") the proposed rule change as described in Items I, II, and III below, which Items have been prepared by the Exchange. The Commission is publishing this notice to solicit comments on the proposed rule change from interested persons.

I. Self-Regulatory Organization's Statement of the Terms of Substance of the Proposed Rule Change

The Exchange proposes to amend BX Options Rules, Chapter XV, Section 2 entitled "BX Options Market—Fees and Rebates" to amend fees and rebates for various options.

While the changes proposed herein are effective upon filing, the Exchange has designated these changes to be operative on October 1, 2013.

The text of the proposed rule change is available on the Exchange's Web site at <http://nasdaqomxbx.cchwallstreet.com>, at the principal office of the Exchange, on the Commission's Web site at <http://www.sec.gov>, and at the Commission's Public Reference Room.

FEES AND REBATES

[Per executed contract]

II. Self-Regulatory Organization's Statement of the Purpose of, and Statutory Basis for, the Proposed Rule Change

In its filing with the Commission, the Exchange included statements concerning the purpose of and basis for the proposed rule change and discussed any comments it received on the proposed rule change. The text of these statements may be examined at the places specified in Item IV below. The Exchange has prepared summaries, set forth in sections A, B, and C below, of the most significant aspects of such statements.

A. Self-Regulatory Organization's Statement of the Purpose of, and the Statutory Basis for, the Proposed Rule Change

1. Purpose

BX proposes to amend certain rebates and fees in Chapter XV, Section 2(1) pertaining to Penny Pilot³ Options overlying the following stocks: Bank of America Corporation ("BAC"), iShares Russell 2000 Index ("IWM"), PowerShares QQQ ("QQQ"), SPDR S&P 500 ("SPY"), and iPath S&P 500 VIX St Futures ETN ("VXX") (collectively the "Specified Penny Pilot Options"). Specifically, the Exchange proposes to amend the BX Options Market Maker⁴ Rebate to Add Liquidity and the Fee to Add Liquidity in the Specified Penny Pilot Options.

The Exchange proposes to decrease the BX Options Market Maker Rebate to Add Liquidity in the Specified Penny Pilot Options from \$0.20 to \$0.00 per contract.⁵ The Exchange also proposes to decrease the BX Options Market Maker Fee to Add Liquidity in the Specified Penny Pilot Options from \$0.10 to \$0.00 per contract.⁶ The fee schedule after the proposed rule change will reflect the fees and rebates as follows:

	Customer	BX options market maker	Non-customer ¹
BAC, IWM, QQQ and SPY: Rebate to Add Liquidity	\$0.00	\$0.00	N/A

⁸ 17 CFR 200.30-3(a)(12).

¹ 15 U.S.C. 78s(b)(1).

² 17 CFR 240.19b-4.

³ The Penny Pilot on BX Options was established in June 2012, and was expanded and extended through December 31, 2013. See Securities Exchange Act Release Nos. 67256 (June 26, 2012), 77 FR 39277 (July 2, 2012) (SR-BX-2012-030) (order approving BX Options rules and establishing Penny Pilot); 67342 (July 3, 2012), 77 FR 40666 (July 10, 2012) (SR-BX-2012-046) (notice of filing

and immediate effectiveness expanding and extending Penny Pilot); 68518 (December 21, 2012), 77 FR 77152 (December 31, 2012) (SR-BX-2012-076) (notice of filing and immediate effectiveness expanding and extending Penny Pilot); 69784 (June 18, 2013), 78 FR 37873 (June 24, 2013) (SR-BX-2013-039).

⁴ A BX Options Market Maker must be registered as such pursuant to Chapter VII, Section 2 of the BX Options Rules, and must also remain in good standing pursuant to Chapter VII, Section 4.

⁵ The Rebate to Add Liquidity is paid to a BX Options Market Maker only when the BX Options Market Maker is contra to a Non-Customer or BX Options Market Maker. A Non-Customer includes a Professional, Firm, Broker-Dealer and Non-BX Options Market Maker.

⁶ The Fee to Add Liquidity is assessed to a BX Options Market Maker is contra to a Customer.

FEES AND REBATES—Continued
[Per executed contract]

	Customer	BX options market maker	Non-customer ¹
Fee to Add Liquidity	0.10	0.00	\$0.45
Rebate to Remove Liquidity	0.00	N/A	N/A
Fee to Remove Liquidity	N/A	0.45	0.45

The Exchange believes that the proposed amended BX Options Market Maker fee and rebate for the Specified Penny Pilot Options is competitive and will encourage BX members to transact business on the Exchange. While the Exchange is reducing the Rebate to Add Liquidity it is also not assessing a Fee to Add Liquidity to BX Options Market Makers which will enable the Exchange to remain competitive with other options exchanges and encourage BX Options Market Makers to make markets at the Exchange.

2. Statutory Basis

BX believes that the proposed rule changes are consistent with the provisions of Section 6 of the Act,⁷ in general, and with Section 6(b)(4) and 6(b)(5) of the Act,⁸ in particular, in that it provides for the equitable allocation of reasonable dues, fees and other charges among members and issuers and other persons using any facility or system which BX operates or controls, and is not designed to permit unfair discrimination between customers, issuers, brokers, or dealers.

The Exchange believes that pricing by symbol is reasonable, equitable and not unfairly discriminatory because it is not novel as other options exchanges differentiate pricing by security today.⁹ Further, the Specified Penny Pilot Options are highly liquid as compared to other Penny Pilot Options and therefore it is reasonable to assess different pricing for these symbols. The Exchange believes that its proposal to assess different fees and rebates for the Specified Penny Pilot Options as compared to all other Penny Pilot Options is equitable and not unfairly discriminatory as described hereafter.

The Exchange believes that for Specified Penny Pilot Options the proposed decrease of the Rebate to Add Liquidity for BX Options Market Makers from \$0.20 (available only when they are contra to a Non-Customer or BX

Options Market Maker) to \$0.00 per contract is reasonable because the Exchange is also proposing not to assess BX Options Market Makers a Fee to Add Liquidity in the Specified Penny Pilot Options. The Exchange believes that BX Options Market Makers will be encouraged to make markets at the Exchange which in turn will benefit other market participants through tighter markets and order interaction. The Exchange believes that for Specified Penny Pilot Options the proposed decrease of the Rebate to Add Liquidity for BX Options Market Makers from \$0.20 (available only when they are contra to a Non-Customer or BX Options Market Maker) to \$0.00 per contract is equitable and not unfairly discriminatory because no market participant on BX Options would be entitled to a Rebate to Add Liquidity in the Specified Penny Pilot Options.

The Exchange believes that for Specified Penny Pilot Options the proposed decrease of the Fee to Add Liquidity for BX Options Market Makers from \$0.10 (available only when they are contra to a Customer) to \$0.00 per contract is reasonable because the Exchange would no longer assess a fee to BX Options Market Makers which should encourage these participants to offer more aggressive markets at the Exchange. The Exchange believes that for Specified Penny Pilot Options the proposed decrease of the Fee to Add Liquidity for BX Options Market Makers from \$0.10 (available only when they are contra to a Customer) to \$0.00 per contract is equitable and not unfairly discriminatory because BX Options Market Makers, unlike other market participants, have obligations to the market and regulatory requirements,¹⁰

¹⁰ Pursuant to Chapter VII (Market Participants), Section 5 (Obligations of Market Makers), in registering as a Market Maker, an Options Participant commits himself to various obligations. Transactions of a Market Maker in its market making capacity must constitute a course of dealings reasonably calculated to contribute to the maintenance of a fair and orderly market, and Market Makers should not make bids or offers or enter into transactions that are inconsistent with such course of dealings. Further, all Market Makers are designated as specialists on BX for all purposes under the Act or rules thereunder. See Chapter VII, Section 5.

which normally do not apply to other market participants. A BX Options Market Maker has the obligation to make continuous markets, engage in course of dealings reasonably calculated to contribute to the maintenance of a fair and orderly market, and not make bids or offers or enter into transactions that are inconsistent with course of dealings. Non-Customers, including Professionals, Firms, Broker-Dealers and Non-BX Options Market Makers, are assessed a Fee to Add Liquidity of \$0.45 per contract in the Specified Penny Pilot Options. Customers are assessed a Fee to Add Liquidity in the Specified Penny Pilot Options of \$0.10 per contract only when they are contra to a Customer.

Assessing Customers Fees to Add Liquidity in the Specified Penny Pilot Options, which are lower than other Non-Customer market participants, and not assessing BX Options Market Makers the fee is reasonable, equitable and not unfairly discriminatory because the model seeks to reward liquidity providers by assessing takers. Other options exchanges similarly provide benefits to liquidity providers.¹¹ The Exchange believes that lowering costs will incentivize BX Options Market Makers to interact with a greater number of Specified Penny Pilot Options orders on the Exchange. The proposed differentiation between BX Options Market Makers and other market participants recognizes the differing contributions made to the liquidity and trading environment on the Exchange by these market participants. Customers would continue to not be assessed a Fee to Remove Liquidity in the Specified Penny Pilot Options while BX Options Market Makers and Non-Customers are assessed a \$0.45 per contract Fee to Remove Liquidity in the Specified Penny Pilot Options. The Exchange would continue to uniformly assess the

⁷ 15 U.S.C. 78f.

⁸ 15 U.S.C. 78f(b)(4) and (5).

⁹ See NASDAQ OMX PHLX LLC's ("Phlx") Pricing Schedule, which has different pricing for SPY. See also the Chicago Board Options Exchange, Incorporated's Fees Schedule, which distinguishes index products.

¹¹ Phlx pays a Simple Order Rebate for Adding Liquidity to Market Makers but not Customers and assesses a Simple Order Fee for Removing Liquidity to all market participants thereby creating a \$0.24 per contract fee differential as between Customers and Market Makers in Simple Orders. See Section I of Phlx's Pricing Schedule.

Fee to Add Liquidity in Specified Penny Pilot Options to all Non-Customers.¹²

B. Self-Regulatory Organization's Statement on Burden on Competition

BX does not believe that the proposed rule change will impose any burden on competition not necessary or appropriate in furtherance of the purposes of the Act. To the contrary, BX has designed its fees and rebates to compete effectively for the execution and routing of options contracts.

The Exchange believes that the proposed amended fees and rebates to add liquidity for the Specified Penny Pilot Options will attract BX Options Market Makers to engage in market making activities at the Exchange which results in tighter markets and order interaction and benefits all market participants. As described herein, BX Options Market Makers have obligations to the market and regulatory requirements,¹³ which normally do not apply to other market participants. While BX Options Market Makers will not be paying a Fee to Add Liquidity in the Specified Penny Pilot Options, Customers will pay a fee which is lower than that assessed to Non-Customers. The Exchange believes that this does not present an undue burden on competition because the pricing seeks to reward liquidity providers, which in turn benefits all market participants. The proposed differentiation between BX Options Market Makers and other market participants recognizes the differing contributions made to the liquidity and trading environment on the Exchange by these market participants.

Additionally, since the fees and rebates are comparable to those present at other options venues,¹⁴ the Exchange believes the proposals discussed herein do not pose an undue burden on intermarket competition. The Exchange operates in a highly competitive market comprised of twelve U.S. options exchanges in which sophisticated and knowledgeable market participants can

and do send order flow to competing exchanges if they deem fee levels at a particular exchange to be excessive. The Exchange believes that the proposed fee and rebate scheme discussed herein is competitive. The Exchange believes that this competitive marketplace materially impacts the fees and rebates present on the Exchange today and substantially influences the proposal set forth above.

C. Self-Regulatory Organization's Statement on Comments on the Proposed Rule Change Received From Members, Participants, or Others

No written comments were either solicited or received.

III. Date of Effectiveness of the Proposed Rule Change and Timing for Commission Action

The foregoing rule change has become effective pursuant to Section 19(b)(3)(A)(ii) of the Act.¹⁵ At any time within 60 days of the filing of the proposed rule change, the Commission summarily may temporarily suspend such rule change if it appears to the Commission that such action is necessary or appropriate in the public interest, for the protection of investors, or otherwise in furtherance of the purposes of the Act. If the Commission takes such action, the Commission shall institute proceedings to determine whether the proposed rule should be approved or disapproved.

IV. Solicitation of Comments

Interested persons are invited to submit written data, views, and arguments concerning the foregoing, including whether the proposed rule change is consistent with the Act. Comments may be submitted by any of the following methods:

Electronic Comments

- Use the Commission's Internet comment form (<http://www.sec.gov/rules/sro.shtml>); or
- Send an email to rule-comments@sec.gov. Please include File Number SR-BX-2013-052 on the subject line.

Paper Comments

- Send paper comments in triplicate to Elizabeth M. Murphy, Secretary, Securities and Exchange Commission, 100 F Street NE., Washington, DC 20549-1090.

All submissions should refer to File Number SR-BX-2013-052. This file number should be included on the subject line if email is used. To help the Commission process and review your comments more efficiently, please use

only one method. The Commission will post all comments on the Commission's Internet Web site (<http://www.sec.gov/rules/sro.shtml>). Copies of the submission, all subsequent amendments, all written statements with respect to the proposed rule change that are filed with the Commission, and all written communications relating to the proposed rule change between the Commission and any person, other than those that may be withheld from the public in accordance with the provisions of 5 U.S.C. 552, will be available for Web site viewing and printing in the Commission's Public Reference Section, 100 F Street NE., Washington, DC 20549-1090 on official business days between the hours of 10:00 a.m. and 3:00 p.m. Copies of the filing will also be available for inspection and copying at the principal office of the Exchange. All comments received will be posted without change; the Commission does not edit personal identifying information from submissions. You should submit only information that you wish to make available publicly. All submissions should refer to File Number SR-BX-2013-052 and should be submitted on or before October 24, 2013.

For the Commission, by the Division of Trading and Markets, pursuant to delegated authority.¹⁶

Kevin M. O'Neill,
Deputy Secretary.

[FR Doc. 2013-24157 Filed 10-2-13; 8:45 am]

BILLING CODE 8011-01-P

SECURITIES AND EXCHANGE COMMISSION

[Release No. 34-70559; File No. SR-CME-2013-20]

Self-Regulatory Organizations; Chicago Mercantile Exchange Inc.; Notice of Filing and Immediate Effectiveness of Proposed Rule Change Regarding Its Acceptance of a New Series of Credit Default Swap Index Products

September 30, 2013.

Pursuant to Section 19(b)(1) of the Securities Exchange Act of 1934 ("Exchange Act" or "Act"),¹ and Rule 19b-4 thereunder,² notice is hereby given that on September 18, 2013, Chicago Mercantile Exchange Inc. ("CME") filed with the Securities and Exchange Commission ("Commission") the proposed rule change described in

¹² No market participant is entitled to a Rebate to Remove Liquidity in the Specified Penny Pilot Options.

¹³ Pursuant to Chapter VII (Market Participants), Section 5 (Obligations of Market Makers), in registering as a Market Maker, an Options Participant commits himself to various obligations. Transactions of a Market Maker in its market making capacity must constitute a course of dealings reasonably calculated to contribute to the maintenance of a fair and orderly market, and Market Makers should not make bids or offers or enter into transactions that are inconsistent with such course of dealings. Further, all Market Makers are designated as specialists on BX for all purposes under the Act or rules thereunder. See Chapter VII, Section 5.

¹⁴ See PHLX's Pricing Schedule.

¹⁵ 15 U.S.C. 78s(b)(3)(A)(ii).

¹⁶ 17 CFR 200.30-3(a)(12).

¹⁷ 15 U.S.C. 78s(b)(1).

² 17 CFR 240.19b-4.

Items I, II and III below, which Items have been prepared primarily by CME. CME filed the proposal pursuant to Section 19(b)(3)(A) of the Act,³ and Rule 19b-4(f)(4)(ii) thereunder,⁴ so that the proposal was effective upon filing with the Commission. The Commission is publishing this notice to solicit comments on the proposed rule change from interested persons.

I. Self-Regulatory Organization's Statement of the Terms of Substance of the Proposed Rule Change

CME is filing proposed rules changes that are limited to its business as a derivatives clearing organization ("DCO"). More specifically, the proposed rule changes involve CME's acceptance of a new credit default swap index product series.

II. Self-Regulatory Organization's Statement of the Purpose of, and Statutory Basis for, the Proposed Rule Change

In its filing with the Commission, the self-regulatory organization included statements concerning the purpose and basis for the proposed rule change and discussed any comments it received on the proposed rule change. The text of these statements may be examined at the places specified in Item IV below. The self-regulatory organization has prepared summaries, set forth in sections A, B, and C below, of the most significant aspects of such statements.

A. Self-Regulatory Organization's Statement of the Purpose of, and Statutory Basis for, the Proposed Rule Change

CME is registered as a DCO with the Commodity Futures Trading Commission ("CFTC") and currently offers clearing services for many different futures and swaps products. CME currently offers clearing services for certain credit default swap index products. Currently, CME offers clearing of the Markit CDX North American Investment Grade Index Series 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19 and 20 and also offers clearing of the Markit CDX North American High Yield Index Series 11, 12, 13, 14, 15, 16, 17, 18, 19 and 20.

The proposed rule changes would expand CME's Markit CDX North American Investment Grade ("CDX IG") Index and Markit CDX North American High Yield ("CDX HY") Index product offerings by incorporating the upcoming Series 21 for both sets of index products.

Although these changes will be effective on filing, CME plans to operationalize the proposed changes as follows: CDX IG 21 will become available for clearing on September 20, 2013 and CDX HY 21 will become available for clearing on September 27, 2013.

The changes that are described in this filing are limited to CME's business as a DCO clearing products under the exclusive jurisdiction of the CFTC and do not materially impact CME's security-based swap clearing business in any way. CME notes that it has also certified the proposed rule changes that are the subject of this filing to its primary regulator, the Commodity Futures Trading Commission, in a separate filing.

CME believes the proposed rule changes are consistent with the requirements of the Exchange Act including Section 17A of the Exchange Act.⁵ The proposed rule changes would expand CME's CDX IG and CDX HY product offerings by incorporating the upcoming Series 21 for both sets of index products and would therefore provide investors with an expanded range of derivatives products for clearing. As such, the proposed changes are designed to promote the prompt and accurate clearance and settlement of securities transactions and, to the extent applicable, derivatives agreements, contracts, and transactions, to assure the safeguarding of securities and funds which are in the custody or control of the clearing agency or for which it is responsible, and, in general, to protect investors and the public interest consistent with Section 17A(b)(3)(F) of the Exchange Act.⁶

Furthermore, the proposed changes are limited in their effect to swaps products offered under CME's authority to act as a DCO. These products are under the exclusive jurisdiction of the CFTC. As such, the proposed CME changes are limited to CME's activities as a DCO clearing swaps that are not security-based swaps; CME notes that the policies of the CFTC with respect to administering the Commodity Exchange Act are comparable to a number of the policies underlying the Exchange Act, such as promoting market transparency for over-the-counter derivatives markets, promoting the prompt and accurate clearance of transactions and protecting investors and the public interest.

Because the proposed changes are limited in their effect to swaps products offered under CME's authority to act as a DCO, the proposed changes are

properly classified as effecting a change in an existing service of CME that:

(a) Primarily affects the clearing operations of CME with respect to products that are not securities, including futures that are not security futures, and swaps that are not security-based swaps or mixed swaps; and

(b) Does not significantly affect any securities clearing operations of CME or any rights or obligations of CME with respect to securities clearing or persons using such securities-clearing service.

As such, the changes are therefore consistent with the requirements of Section 17A of the Exchange Act⁷ and are properly filed under Section 19(b)(3)(A)⁸ and Rule 19b-4(f)(4)(ii)⁹ thereunder.

B. Self-Regulatory Organization's Statement on Burden on Competition

CME does not believe that the proposed rule change will have any impact, or impose any burden, on competition. The rule changes simply facilitate the offering of two new series of credit default swap index products.

C. Self-Regulatory Organization's Statement on Comments on the Proposed Rule Change Received From Members, Participants, or Others

CME has not solicited, and does not intend to solicit, comments regarding this proposed rule change. CME has not received any unsolicited written comments from interested parties.

III. Date of Effectiveness of the Proposed Rule Change and Timing for Commission Action

The foregoing rule change has become effective upon filing pursuant to Section 19(b)(3)(A)¹⁰ of the Act and paragraph (f)(4)(ii) of Rule 19b-4¹¹ thereunder. At any time within 60 days of the filing of the proposed rule change, the Commission summarily may temporarily suspend such rule change if it appears to the Commission that such action is necessary or appropriate in the public interest, for the protection of investors, or otherwise in furtherance of the purposes of the Act.

IV. Solicitation of Comments

Interested persons are invited to submit written data, views and arguments concerning the foregoing, including whether the proposed rule change is consistent with the Act. Comments may be submitted by any of the following methods:

⁷ 15 U.S.C. 78q-1.

⁸ 15 U.S.C. 78s(b)(3)(A).

⁹ 17 CFR 240.19b-4(f)(4)(ii).

¹⁰ 15 U.S.C. 78s(b)(3)(A).

¹¹ 17 CFR 240.19b-4(f)(4)(ii).

³ 15 U.S.C. 78s(b)(3)(A).

⁴ 17 CFR 240.19b-4(f)(4)(ii).

⁵ 15 U.S.C. 78q-1.

⁶ 15 U.S.C. 78q-1(b)(3)(F).

Electronic Comments

- Use the Commission's Internet comment form (<http://www.sec.gov/rules/sro.shtml>); or
- Send an email to rule-comments@sec.gov. Please include File No. SR-CME-2013-20 on the subject line.

Paper Comments

- Send paper comments in triplicate to Elizabeth M. Murphy, Secretary, Securities and Exchange Commission, 100 F Street NE., Washington, DC 20549-1090.

All submissions should refer to File Number SR-CME-2013-20. This file number should be included on the subject line if email is used. To help the Commission process and review your comments more efficiently, please use only one method. The Commission will post all comments on the Commission's Internet Web site (<http://www.sec.gov/rules/sro.shtml>). Copies of the submission, all subsequent amendments, all written statements with respect to the proposed rule change that are filed with the Commission, and all written communications relating to the proposed rule change between the Commission and any person, other than those that may be withheld from the public in accordance with the provisions of 5 U.S.C. 552, will be available for Web site viewing and printing in the Commission's Public Reference Room, 100 F Street NE., Washington, DC 20549, on official business days between the hours of 10:00 a.m. and 3:00 p.m. Copies of such filing also will be available for inspection and copying at the principal office of CME and on CME's Web site at <http://www.cmegroup.com/market-regulation/rule-filings.html>.

All comments received will be posted without change; the Commission does not edit personal identifying information from submissions. You should submit only information that you wish to make available publicly. All submissions should refer to File Number SR-CME-2013-20 and should be submitted on or before October 24, 2013.

For the Commission, by the Division of Trading and Markets, pursuant to delegated authority.¹²

Kevin M. O'Neill,

Deputy Secretary.

[FR Doc. 2013-24243 Filed 10-2-13; 8:45 am]

BILLING CODE 8011-01-P

SECURITIES AND EXCHANGE COMMISSION

[Release No. 34-70548; File No. SR-BATS-2013-052]

Self-Regulatory Organizations; BATS Exchange, Inc.; Notice of Filing and Immediate Effectiveness of a Proposed Rule Change To Modify the Trading Halt Rule of BATS Options

September 27, 2013.

Pursuant to Section 19(b)(1) of the Securities Exchange Act of 1934 (the "Act"),¹ and Rule 19b-4 thereunder,² notice is hereby given that, on September 20, 2013, BATS Exchange, Inc. (the "Exchange" or "BATS") filed with the Securities and Exchange Commission ("Commission") the proposed rule change as described in Items I and II below, which Items have been prepared by the Exchange. The Exchange has designated this proposal as a "non-controversial" proposed rule change pursuant to Section 19(b)(3)(A) of the Act³ and Rule 19b-4(f)(6)(iii) thereunder,⁴ which renders it effective upon filing with the Commission. The Commission is publishing this notice to solicit comments on the proposed rule change from interested persons.

I. Self-Regulatory Organization's Statement of the Terms of Substance of the Proposed Rule Change

The Exchange filed a proposal to amend Rule 20.3, entitled "Trading Halts," to authorize the Exchange to nullify a transaction that occurs after a halt has been issued.

The text of the proposed rule change is available at the Exchange's Web site at <http://www.batstrading.com>, at the principal office of the Exchange, and at the Commission's Public Reference Room.

II. Self-Regulatory Organization's Statement of the Purpose of, and Statutory Basis for, the Proposed Rule Change

In its filing with the Commission, the Exchange included statements concerning the purpose of and basis for the proposed rule change and discussed any comments it received on the proposed rule change. The text of these statements may be examined at the places specified in Item IV below. The Exchange has prepared summaries, set forth in Sections A, B, and C below, of the most significant parts of such statements.

A. Self-Regulatory Organization's Statement of the Purpose of, and Statutory Basis for, the Proposed Rule Change

1. Purpose

The purpose of this filing is to amend Rule 20.3, which is applicable to the Exchange's equity options platform ("BATS Options"), to authorize the Exchange to nullify transactions that occur during a trading halt. Specifically, the Exchange proposes to adopt Interpretation and Policy .01, which will state that the Exchange may nullify any transaction that occurs: (a) During a trading halt in the affected option on the Exchange; or (b) with respect to equity options (including options overlying exchange traded funds ("ETFs")), during a trading halt on the primary listing market for the underlying security. The Exchange believes the proposed rule change will allow the Exchange to avoid any unnecessary harm from allowing erroneous trades to stand if such trades occur after a trading halt has been issued, as explained below.

With respect to a trading halt in the affected option on the Exchange, if any trades occur notwithstanding such halt then the Exchange believes it appropriate to nullify such transactions. While the Exchange may halt options trading for various reasons, such a scenario almost certainly is due to extraordinary circumstances and is potentially the result of market-wide coordination to halt options trading or trading generally. Accordingly, the Exchange does not believe it is appropriate to allow trades to stand if such trades should not have occurred in the first place. Similarly, the Exchange believes that trades occurring during a trading halt on the primary listing market for a security that underlies an equity option should be nullified. Executions in options overlying a halted security do not have proper reference prices and could diverge significantly from the price at which such options will trade when the underlying security is re-opened. Thus, nullification of such trades will protect investors from potential harm. Further, the halt in the underlying security is often issued to prevent harm to investors and the Exchange believes that this same protection should be afforded to investors in the overlying option. The Exchange notes that primary listing markets for equity securities have various authority to halt trading in their listed securities, including for regulatory reasons or based upon certain notifications provided by an issuer. The Exchange also notes that the proposed

¹ 15 U.S.C. 78s(b)(1).

² 17 CFR 240.19b-4.

³ 15 U.S.C. 78s(b)(3)(A).

⁴ 17 CFR 240.19b-4(f)(6)(iii).

¹² 17 CFR 200.30-3(a)(12).

rule change will align the Exchange's rules regarding nullification of trades during a trading halt with the rules of certain other options exchanges.⁵

2. Statutory Basis

The Exchange believes that its proposal is consistent with the requirements of the Act and the rules and regulations thereunder that are applicable to a national securities exchange, and, in particular, with the requirements of Section 6(b) of the Act.⁶ In particular, the proposal is consistent with Section 6(b)(5) of the Act,⁷ because it would promote just and equitable principles of trade, remove impediments to, and perfect the mechanism of, a free and open market and a national market system. The Exchange believes the proposed rule change fulfills these requirements because it will allow the Exchange to avoid harm to investors resulting from trades that execute during a trading halt. Specifically, the proposal will protect market participants from transactions occurring either during extraordinary circumstances with respect to options trading or at a time when there is no adequate source of information regarding the value of the underlying security. Nullifying transactions as proposed in connection with the proposed rule will help to protect investors from harm caused by trading losses during times of uncertainty or during systemic market events. Furthermore, the proposed change is based on the approved rules of certain other options exchanges.⁸

B. Self-Regulatory Organization's Statement on Burden on Competition

The Exchange believes the proposal is consistent with Section 6(b)(8) of the Act⁹ in that it does not impose any burden on competition that is not necessary or appropriate in furtherance of the purposes of the Act. As previously noted, the proposed rule change will align the Exchange's rules regarding the nullification of trades that occur during a trading halt with the rules of certain other exchanges.¹⁰ Therefore, the Exchange does not believe the proposed change will impose any burden on competition.

C. Self-Regulatory Organization's Statement on Comments on the Proposed Rule Change Received From Members, Participants, or Others

The Exchange has neither solicited nor received written comments on the proposed rule change.

III. Date of Effectiveness of the Proposed Rule Change and Timing for Commission Action

Because the proposed rule change does not (i) Significantly affect the protection of investors or the public interest; (ii) impose any significant burden on competition; and (iii) become operative for 30 days from the date on which it was filed, or such shorter time as the Commission may designate, the proposed rule change has become effective pursuant to Section 19(b)(3)(A) of the Act¹¹ and Rule 19b-4(f)(6) thereunder.¹²

The Exchange has asked the Commission to waive the 30-day operative delay so that the proposal may become operative immediately upon filing. The Exchange stated that waiver of this requirement will allow the Exchange to apply the proposed change to the Exchange's trading halt rule immediately, which will in turn protect market participants from transactions occurring either during extraordinary circumstances with respect to options trading or at a time when there is no adequate source of information regarding the value of the underlying security. The Exchange also stated that nullifying transactions as proposed in connection with the proposed rule will help to protect investors from harm caused by trading losses during times of uncertainty or during systemic market events. For these reasons, the Commission believes that waiving the 30-day operative delay is consistent with the protection of investors and the public interest. Therefore, the Commission designates the proposed rule change to be operative upon filing.¹³

At any time within 60 days of the filing of the proposed rule change, the Commission summarily may temporarily suspend such rule change if

it appears to the Commission that such action is necessary or appropriate in the public interest, for the protection of investors, or otherwise in furtherance of the purposes of the Act.

IV. Solicitation of Comments

Interested persons are invited to submit written data, views and arguments concerning the foregoing, including whether the proposal is consistent with the Act. Comments may be submitted by any of the following methods:

Electronic Comments

- Use the Commission's Internet comment form (<http://www.sec.gov/rules/sro.shtml>); or
- Send an email to rule-comments@sec.gov. Please include File Number SR-BATS-2013-052 on the subject line.

Paper Comments

- Send paper comments in triplicate to Elizabeth M. Murphy, Secretary, Securities and Exchange Commission, 100 F Street NE., Washington, DC 20549-1090.

All submissions should refer to File Number SR-BATS-2013-052. This file number should be included on the subject line if email is used. To help the Commission process and review your comments more efficiently, please use only one method. The Commission will post all comments on the Commission's Internet Web site (<http://www.sec.gov/rules/sro.shtml>). Copies of the submission, all subsequent amendments, all written statements with respect to the proposed rule change that are filed with the Commission, and all written communications relating to the proposed rule change between the Commission and any person, other than those that may be withheld from the public in accordance with the provisions of 5 U.S.C. 552, will be available for Web site viewing and printing in the Commission's Public Reference Room, 100 F Street NE., Washington, DC 20549, on official business days between the hours of 10:00 a.m. and 3:00 p.m. Copies of the filing also will be available for inspection and copying at the principal office of the Exchange. All comments received will be posted without change; the Commission does not edit personal identifying information from submissions. You should submit only information that you wish to make available publicly. All submissions should refer to File Number SR-BATS-2013-052 and should be submitted on or before October 24, 2013.

⁵ See MIAx Rule 521(c)(4); see also NASDAQ OMX PHLX Rule 1092(c)(iv); NYSE Arca Options Rule 6.65, Commentary .04; NYSE MKT Rule 953NY, Commentary .04.

⁶ 15 U.S.C. 78f(b).

⁷ 15 U.S.C. 78f(b)(5).

⁸ See *supra* note 5.

⁹ 15 U.S.C. 78f(b)(8).

¹⁰ See *supra* note 5.

¹¹ 15 U.S.C. 78s(b)(3)(A).

¹² 17 CFR 240.19b-4(f)(6). As required under Rule 19b-4(f)(6)(iii), the Exchange provided the Commission with written notice of its intent to file the proposed rule change, along with a brief description and the text of the proposed rule change, at least five business days prior to the date of filing of the proposed rule change, or such shorter time as designated by the Commission.

¹³ For purposes only of waiving the 30-day operative delay, the Commission has also considered the proposed rule's impact on efficiency, competition, and capital formation. See 15 U.S.C. 78c(f).

For the Commission, by the Division of Trading and Markets, pursuant to delegated authority.¹⁴

Kevin M. O'Neill,

Deputy Secretary.

[FR Doc. 2013-24165 Filed 10-2-13; 8:45 am]

BILLING CODE 8011-01-P

SECURITIES AND EXCHANGE COMMISSION

[Release No. 34-70544; File No. SR-NSCC-2013-10]

Self-Regulatory Organizations; National Securities Clearing Corporation; Notice of Filing of Proposed Rule Change to Decommission Its Trade Risk Pro Service

September 27, 2013.

Pursuant to Section 19(b)(1) of the Securities Exchange Act of 1934 ("Act")¹ and Rule 19b-4 thereunder,² notice is hereby given that on September 16, 2013, National Securities Clearing Corporation ("NSCC") filed with the Securities and Exchange Commission ("Commission") a proposed rule change as described in Items I, II and III below, which Items have been prepared primarily by NSCC. The Commission is publishing this notice to solicit comments on the proposed rule change from interested persons.

I. Self-Regulatory Organization's Statement of the Terms of Substance of the Proposed Rule Change

The proposed rule change consists of amendments to the Rules & Procedures ("Rules") of NSCC to decommission the DTCC Trade Risk Pro service as more fully described below.

II. Self-Regulatory Organization's Statement of the Purpose of, and Statutory Basis for, the Proposed Rule Change

In its filing with the Commission, NSCC included statements concerning the purpose of and basis for the proposed rule change and discussed any comments it received on the proposed rule change. The text of these statements may be examined at the places specified in Item IV below. NSCC has prepared summaries, set forth in sections A, B, and C below, of the most significant aspects of such statements.

(A) Self-Regulatory Organization's Statement of the Purpose of, and Statutory Basis for, the Proposed Rule Change

1. Purpose. [sic]

By this filing, NSCC proposes to decommission the DTCC Trade Risk Pro service ("Trade Risk Pro"). Trade Risk Pro was designed to allow Members to monitor intraday trading activity of their organizations and/or their correspondent firms through review of post-trade data.³ While several firms participated in a pilot of Trade Risk Pro, no Members are currently enrolled in Trade Risk Pro and it is not currently cost-effective to maintain the service.

Pending approval by the Commission, NSCC will decommission Trade Risk Pro and revise its Rules to delete the current Rule 54 (Trade Risk Pro) and Procedure XVII (Trade Risk Pro). Rule 54 will be designated as reserved for future use. The effective date of the proposed rule change will be announced via an NSCC Important Notice.

2. Statutory Basis

The proposed rule change is consistent with the requirements of Section 17A(b)(3)(F) of the Act,⁴ as amended, and the rules and regulations thereunder, because, by closing an underutilized service, it allows for the allocation of resources among other clearing agency functions, and therefore facilitates the prompt and accurate clearance and settlement of securities transactions.

(B) Self-Regulatory Organization's Statement on Burden on Competition

NSCC does not believe that the proposed rule change will have any impact, or impose any burden, on competition, as there are no Members that currently use Trade Risk Pro.

(C) Self-Regulatory Organization's Statement on Comments on the Proposed Rule Change Received From Members, Participants, or Others

Written comments relating to the proposed rule change have not yet been solicited or received with respect to this filing.

III. Date of Effectiveness of the Proposed Rule Change and Timing for Commission Action

Within 45 days of the date of publication of this notice in the **Federal Register** or within such longer period

up to 90 days (i) as the Commission may designate if it finds such longer period to be appropriate and publishes its reasons for so finding or (ii) as to which the self-regulatory organization consents, the Commission will:

(A) By order approve or disapprove such proposed rule change, or

(B) institute proceedings to determine whether the proposed rule change should be disapproved.

The clearing agency shall post notice on its Web site of proposed changes that are implemented.

IV. Solicitation of Comments

Interested persons are invited to submit written data, views, and arguments concerning the foregoing, including whether the proposed rule change is consistent with the Act. Comments may be submitted by any of the following methods:

Electronic Comments

- Use the Commission's Internet comment form (<http://www.sec.gov/rules/sro.shtml>); or
- Send an email to rule-comments@sec.gov. Please include File No. SR-NSCC-2013-10 on the subject line.

Paper Comments

- Send paper comments in triplicate to Elizabeth M. Murphy, Secretary, Securities and Exchange Commission, 100 F Street NE., Washington, DC 20549-1090.

All submissions should refer to File No. SR-NSCC-2013-10. This file number should be included on the subject line if email is used. To help the Commission process and review your comments more efficiently, please use only one method. The Commission will post all comments on the Commission's Internet Web site (<http://www.sec.gov/rules/sro.shtml>). Copies of the submission, all subsequent amendments, all written statements with respect to the proposed rule change that are filed with the Commission, and all written communications relating to the proposed rule change between the Commission and any person, other than those that may be withheld from the public in accordance with the provisions of 5 U.S.C. 552, will be available for Web site viewing and printing in the Commission's Public Reference Room, 100 F Street NE., Washington, DC 20549, on official business days between the hours of 10:00 a.m. and 3:00 p.m. Copies of such filings also will be available for inspection and copying at the principal office of NSCC and on NSCC's Web site at http://dtcc.com/legal/rule_filings/

¹⁴ 17 CFR 200.30-3(a)(12).

¹⁵ 15 U.S.C. 78s(b)(1).

² 17 CFR 240.19b-4.

³ See Securities Exchange Act Release No. 66068 (Dec. 29, 2011), 77 FR 528 (Jan. 5, 2012) (File No. SR-DTC-2011-10).

⁴ 15 U.S.C. 78q-1(b)(3)(F).

nsc/2013.php. All comments received will be posted without change; the Commission does not edit personal identifying information from submissions. You should submit only information that you wish to make available publicly.

All submissions should refer to File No. SR–NSCC–2013–10 and should be submitted on or before October 24, 2013.

For the Commission, by the Division of Trading and Markets, pursuant to delegated authority.⁵

Kevin M. O'Neill,
Deputy Secretary.

[FR Doc. 2013–24162 Filed 10–2–13; 8:45 am]

BILLING CODE 8011–01–P

SECURITIES AND EXCHANGE COMMISSION

[Release No. 34–70540; File No. SR–CBOE–2013–089]

Self-Regulatory Organizations; Chicago Board Options Exchange, Incorporated; Notice of Filing and Immediate Effectiveness of a Proposed Rule Change To Amend CBSX Rule 53.22 Related to CBSX Remote Market-Maker Appointments

September 27, 2013.

Pursuant to Section 19(b)(1) of the Securities Exchange Act of 1934 (“Act”) ¹ and Rule 19b–4 thereunder, ² notice is hereby given that on September 17, 2013, Chicago Board Options Exchange, Incorporated (the “Exchange” or “CBOE”) filed with the Securities and Exchange Commission (“Commission”) a proposed rule change as described in Items I and II below, which Items have been prepared by the Exchange. The Commission is publishing this notice to solicit comments on the proposed rule change from interested persons.

I. Self-Regulatory Organization’s Statement of the Terms of the Substance of the Proposed Rule Change

The Exchange proposes to amend CBOE Stock Exchange, LLC (“CBSX”) Rule 53.22 related to CBSX Remote Market-Maker (“RMM”) appointments. The text of the proposed rule change is provided below.

(additions are *italicized*; deletions are [bracketed])

* * * * *

Chicago Board Options Exchange, Incorporated Rules

* * * * *

Rule 53.22 Appointment of CBSX Remote Market-Makers

(a) [On a form or forms] *In a manner* prescribed by CBSX, a registered CBSX Remote Market-Maker (other than CBSX DPMs and CBSX LMMs) may [apply for] *select* an Appointment (having the obligations of Rule 53.23) in one or more non-option securities traded on CBSX. *CBSX may also appoint a registered CBSX Remote Market-Maker in one or more non-option securities traded on CBSX.* In making such Appointments, CBSX shall give attention to (1) the preference of registrants; (2) the maintenance and enhancement of competition among CBSX Remote Market-Makers in each security; and (3) assuring that financial resources available to a CBSX Remote Market-Maker enable it to satisfy the obligations set forth in Rule 53.23 with respect to each security for which it is appointed. CBSX may arrange two or more securities into groupings and make Appointments to those groupings rather than to individual securities. CBSX may suspend or terminate any Appointment of a CBSX Remote Market-Maker under this Rule and may make additional Appointments whenever the interests of a fair and orderly market are best served by such action.

(b)–(c) No changes.

* * * * *

The text of the proposed rule change is also available on the Exchange’s Web site (<http://www.cboe.com/AboutCBOE/CBOELegalRegulatoryHome.aspx>), at the Exchange’s Office of the Secretary, and at the Commission’s Public Reference Room.

II. Self-Regulatory Organization’s Statement of the Purpose of, and Statutory Basis for, the Proposed Rule Change

In its filing with the Commission, the Exchange included statements concerning the purpose of and basis for the proposed rule change and discussed any comments it received on the proposed rule change. The text of these statements may be examined at the places specified in Item IV below. The Exchange has prepared summaries, set forth in sections A, B, and C below, of the most significant aspects of such statements.

A. Self-Regulatory Organization’s Statement of the Purpose of, and Statutory Basis for, the Proposed Rule Change

1. Purpose

The Exchange proposes to amend CBSX Rule 53.22 related to RMM appointments. A “CBSX Remote Market-Maker” or “RMM” is a CBSX Trading Permit Holder that has agreed to fulfill certain market-making obligations thus qualifying for defined benefits as set forth in the CBSX Rules.³ An RMM is an individual (either a Trading Permit Holder or nominee of a Trading Permit Holder organization) who is registered with CBSX for the purpose of making transactions as a dealer-specialist in the CBSX electronic trading system in accordance with the CBSX Rules. Registered RMMs are designated as specialists on CBSX for all purposes under the Securities Exchange Act of 1934 (the “Act”) and the rules and regulations thereunder. RMMs may only operate in a remote capacity.⁴

CBSX Rule 53.22 currently provides, among other things, that RMMs may apply for an appointment (having the obligations of CBSX Rule 53.23)⁵ in one or more non-option securities traded on CBSX on a form or forms prescribed by CBSX. It further provides that in making such appointments, CBSX must give

³ See CBSX Rule 50.3(2).

⁴ See CBSX Rule 53.20.

⁵ Under CBSX Rule 53.23, RMMs must, among other things:

- enter into transactions that constitute a course of dealings reasonably calculated to contribute to the maintenance of a fair and orderly market;
- not enter into transactions or make bids or offers that are inconsistent with such a course of dealings;
- with respect to each security for which it holds an appointment, continuously engage in, to a reasonable degree under the existing circumstances, in dealings for its own account when there exists, or it is reasonably anticipated that there will exist, a lack of price continuity, or a temporary disparity between the supply of and demand for a particular security;
- compete with other CBSX Market-Makers to improve markets;
- make markets which, absent changed market conditions, will be honored for the number of shares entered into the CBSX electronic trading system;
- engage in trading activity of which at least 75% of its total dollar amount traded on CBSX is in securities to which it has an appointment;
- with respect to securities in which an RMM does not hold an appointment, not engage in transactions for an account in which it has an interest that are disproportionate in relation to, or in derogation of, the performance of its obligations with respect to those securities in which it does hold an appointment;
- satisfy RMM obligations in a security in which it does not hold an appointment whenever an RMM submits a two-sided quote in that security; and
- comply with two-sided and minimum size obligations and pricing obligations for bids and offers.

⁵ 17 CFR 200.30–3(a)(12).

¹ 15 U.S.C. 78s(b)(1).

² 17 CFR 240.19b–4.

attention to (1) the preference of registrants; (2) the maintenance and enhancement of competition among RMMs in each security; and (3) whether the financial resources available to an RMM enable it to satisfy the obligations set forth in Rule 53.23 with respect to each security in which it holds an appointment.

The proposed rule change amends Rule 53.22 to allow RMMs to select appointments rather than apply for them and to allow CBSX to appoint RMMs in one or more securities (considering the same factors listed above). The proposed rule change will enable RMMs to manage their appointments with more flexibility and in a timelier manner. The Exchange believes this will provide RMMs with more efficient access to the securities in which they want to make markets and disseminate competitive quotations, which will provide additional liquidity and enhance competition in those securities. CBSX will retain the ability to appoint RMMs in order to maintain a fair and orderly market.⁶ RMMs will continue to be subject to the obligations set forth in Rule 53.23 with respect to their appointments.

The proposed rule change is substantially similar in all material respects to the rules of other self-regulatory organizations.⁷

2. Statutory Basis

The Exchange believes the proposed rule change is consistent with the Act and the rules and regulations thereunder applicable to the Exchange and, in particular, the requirements of Section 6(b) of the Act.⁸ Specifically, the Exchange believes the proposed rule change is consistent with the Section 6(b)(5)⁹ requirements that the rules of an exchange be designed to prevent fraudulent and manipulative acts and practices, to promote just and equitable principles of trade, to foster cooperation and coordination with persons engaged in regulating, clearing, settling, processing information with respect to, and facilitating transactions in securities, to remove impediments to and perfect the mechanism of a free and open market and a national market system, and, in general, to protect investors and the public interest. Additionally, the Exchange believes the proposed rule change is consistent with

the Section 6(b)(5)¹⁰ requirement that the rules of an exchange not be designed to permit unfair discrimination between customers, issuers, brokers, or dealers.

In particular, the proposed rule change removes impediments to a free and open market, because it will enable RMMs to manage their appointments with more flexibility and in a timelier manner. The Exchange believes this will provide RMMs with more efficient access to the securities in which they want to make markets and thus more quickly begin disseminating competitive quotations in those securities, which will provide additional liquidity and enhance competition in those securities. CBSX will still have authority to suspend or terminate any RMM appointment in the interest of a fair and orderly market, including if necessary to prevent fraudulent and manipulative acts and practices and protect investors or if an RMM does not satisfy its obligations with respect to an appointment.

The proposed rule change does not result in unfair discrimination, as it applies to all RMMs. The proposed rule change reduces the burden on RMMs to manage their appointments and thus provide liquidity to CBSX; however, RMMs must still comply with the obligations set forth in CBSX Rule 53.23, which will ensure continuous, two-sided quotations in its appointed securities. CBSX believes it is appropriate to provide RMMs with the ability to select appointments but not Designated Primary Market-Makers ("DPMs") or Lead Market-Makers ("LMMs"). Because DPMs and LMMs are subject to more stringent obligations, for which they receive additional benefits, with respect to their appointments than RMMs, the Exchange believes it is appropriate to continue to approve DPMs and LMMs after a thorough application process to ensure that they have sufficient resources and capabilities to satisfy those obligations.

B. Self-Regulatory Organization's Statement on Burden on Competition

CBOE does not believe that the proposed rule change will impose any burden on competition that is not necessary or appropriate in furtherance of the purposes of the Act because it provides the same relief to a group of similarly situated market participants—RMMs. The proposed rule change reduces the burden on RMMs to manage their appointments and thus provide liquidity to CBSX; however, RMMs must still comply with the obligations set forth in CBSX Rule 53.23, which will

ensure continuous, two-sided quotations in its appointed securities. CBSX believes it is appropriate to provide RMMs with the ability to select appointments but not Designated Primary Market-Makers ("DPMs") or Lead Market-Makers ("LMMs"). Because DPMs and LMMs are subject to more stringent obligations, for which they receive additional benefits, with respect to their appointments than RMMs, the Exchange believes it is appropriate to continue to approve DPMs and LMMs after a thorough application process to ensure that they have sufficient resources and capabilities to satisfy those obligations.

The proposed rule change is substantially similar in all material respects to rules of other self-regulatory organizations. The Exchange does not believe the proposed rule change will help RMMs to the detriment of market participants on other exchanges. RMMs are still subject to the same obligations with respect to its appointments; the proposed rule change is making the appointment process more efficient for RMMs.

CBOE believes that the proposed rule change will relieve any burden on, or otherwise promote, competition, as it will enable RMMs to manage their appointments with more flexibility and in a timelier manner. The Exchange believes this will provide RMMs with more efficient access to the securities in which they want to make markets and thus more quickly begin disseminating competitive quotations in those securities, which will provide additional liquidity and enhance competition in those securities.

C. Self-Regulatory Organization's Statement on Comments on the Proposed Rule Change Received From Members, Participants, or Others

The Exchange neither solicited nor received comments on the proposed rule change.

III. Date of Effectiveness of the Proposed Rule Change and Timing for Commission Action

The Exchange has filed the proposed rule change pursuant to Section 19(b)(3)(A)(iii) of the Act¹¹ and Rule 19b-4(f)(6)¹² thereunder. Because the proposed rule change does not: (i) significantly affect the protection of investors or the public interest; (ii) impose any significant burden on competition; and (iii) become operative for 30 days after the date of the filing, or such shorter time as the Commission

⁶ CBSX also retains the authority under Rule 53.22(a) to suspend or terminate any RMM appointment if in the interest of a fair and orderly market.

⁷ See, e.g., CBOE Rule 8.3(a)(i) and C2 Options Exchange, Incorporated Rule 8.2(b).

⁸ 15 U.S.C. 78f(b).

⁹ 15 U.S.C. 78f(b)(5).

¹⁰ *Id.*

¹¹ 15 U.S.C. 78s(b)(3)(A)(iii).

¹² 17 CFR 240.19b-4(f)(6).

may designate, the proposed rule change has become effective pursuant to 19(b)(3)(A) of the Act and Rule 19b-4(f)(6) thereunder.

A proposed rule change filed under Rule 19b-4(f)(6)¹³ normally does not become operative prior to 30 days after the date of the filing. However, pursuant to Rule 19b-4(f)(6)(iii),¹⁴ the Commission may designate a shorter time if such action is consistent with the protection of investors and the public interest. The Exchange has requested that the Commission waive the 30-day operative delay so that the proposal may become operative immediately upon filing. The Exchange believes that waiver of the operative delay is appropriate because the proposed rule change does not present any new, unique or substantive issues, but rather only changes the manner by which RMMs may obtain appointments. The Exchange also states that RMMs will continue to be subject to the same obligations with respect to their appointments. According to the Exchange, waiver of the operative delay will provide RMMs with more efficient access to the securities in which they want to make markets so that RMMs may more quickly begin disseminating competitive quotations in those securities, which will provide additional liquidity and enhance competition in those securities. The Commission believes that waiving the 30-day operative delay is consistent with the protection of investors and the public interest, as doing so will allow RMMs to manage their appointments in a more flexible and timely manner. For this reason, the Commission designates the proposed rule change to be operative upon filing.¹⁵

At any time within 60 days of the filing of the proposed rule change, the Commission summarily may temporarily suspend such rule change if it appears to the Commission that such action is necessary or appropriate in the public interest, for the protection of investors, or otherwise in furtherance of the purposes of the Act. If the Commission takes such action, the Commission shall institute proceedings to determine whether the proposed rule should be approved or disapproved.

IV. Solicitation of Comments

Interested persons are invited to submit written data, views, and

arguments concerning the foregoing, including whether the proposed rule change is consistent with the Act. Comments may be submitted by any of the following methods:

Electronic Comments

- Use the Commission's Internet comment form (<http://www.sec.gov/rules/sro.shtml>); or
- Send an email to rule-comments@sec.gov. Please include File Number SR-CBOE-2013-089 on the subject line.

Paper Comments

- Send paper comments in triplicate to Elizabeth M. Murphy, Secretary, Securities and Exchange Commission, 100 F Street NE., Washington, DC 20549-1090.

All submissions should refer to File Number SR-CBOE-2013-089. This file number should be included on the subject line if email is used. To help the Commission process and review your comments more efficiently, please use only one method. The Commission will post all comments on the Commission's Internet Web site (<http://www.sec.gov/rules/sro.shtml>). Copies of the submission, all subsequent amendments, all written statements with respect to the proposed rule change that are filed with the Commission, and all written communications relating to the proposed rule change between the Commission and any person, other than those that may be withheld from the public in accordance with the provisions of 5 U.S.C. 552, will be available for Web site viewing and printing in the Commission's Public Reference Room, 100 F Street NE., Washington, DC 20549, on official business days between the hours of 10:00 a.m. and 3:00 p.m. Copies of such filing also will be available for inspection and copying at the principal office of the Exchange. All comments received will be posted without change; the Commission does not edit personal identifying information from submissions. You should submit only information that you wish to make available publicly. All submissions should refer to File Number SR-CBOE-2013-089, and should be submitted on or before October 24, 2013.

For the Commission, by the Division of Trading and Markets, pursuant to delegated authority.¹⁶

Kevin M. O'Neill,

Deputy Secretary.

[FR Doc. 2013-24158 Filed 10-2-13; 8:45 am]

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SECURITIES AND EXCHANGE COMMISSION

[Release No. 34-70542; File No. SR-BX-2013-053]

Self-Regulatory Organizations; NASDAQ OMX BX, Inc.; Notice of Filing and Immediate Effectiveness of Proposed Rule Change to the Clearly Erroneous Rule

September 27, 2013.

Pursuant to Section 19(b)(1) of the Securities Exchange Act of 1934 ("Act"),¹ and Rule 19b-4 thereunder,² notice is hereby given that, on September 26, 2013, NASDAQ OMX BX, Inc. ("BX" or "Exchange"), filed with the Securities and Exchange Commission ("Commission") the proposed rule change as described in Items I and II below, which Items have been prepared by the Exchange. The Commission is publishing this notice to solicit comments on the proposed rule change from interested persons.

I. Self-Regulatory Organization's Statement of the Terms of Substance of the Proposed Rule Change

The Exchange proposes to extend the pilot period of recent amendments to Rule 11890, concerning clearly erroneous transactions, so that the pilot will now expire on April 8, 2014. The Exchange also proposes to remove certain references to individual stock trading pauses contained in Rule 11890(a)(2)(C)(4).

The text of the proposed rule change is available from BX's Web site at <http://nasdaqomxbx.cchwallstreet.com>, at BX's principal office, and at the Commission's Public Reference Room.

II. Self-Regulatory Organization's Statement of the Purpose of, and Statutory Basis for, the Proposed Rule Change

In its filing with the Commission, the Exchange included statements concerning the purpose of and basis for the proposed rule change and discussed any comments it received on the proposed rule change. The text of these statements may be examined at the places specified in Item IV below. The Exchange has prepared summaries, set forth in Sections A, B, and C below, of the most significant aspects of such statements.

¹³ *Id.*

¹⁴ 17 CFR 240.19b-4(f)(6).

¹⁵ For purposes only of waiving the operative delay for this proposal, the Commission has considered the proposed rule's impact on efficiency, competition, and capital formation. See 15 U.S.C. 78c(f).

¹⁶ 17 CFR 200.30-3(a)(12).

¹ 15 U.S.C. 78s(b)(1).

² 17 CFR 240.19b-4.

A. Self-Regulatory Organization's Statement of the Purpose of, and Statutory Basis for, the Proposed Rule Change

1. Purpose

On September 10, 2010, the Commission approved, for a pilot period to end December 10, 2010, a proposed rule change submitted by the Exchange, together with related rule changes of the BATS Exchange, Inc., The NASDAQ Stock Market LLC, Chicago Board Options Exchange, Incorporated, Chicago Stock Exchange, Inc., EDGA Exchange, Inc., EDGX Exchange, Inc., International Securities Exchange LLC, New York Stock Exchange LLC, NYSE MKT LLC (formerly, NYSE Amex LLC), NYSE Arca, Inc., and National Stock Exchange, Inc., to amend certain of their respective rules to set forth clearer standards and curtail discretion with respect to breaking erroneous trades.³ The changes were adopted to address concerns that the lack of clear guidelines for dealing with clearly erroneous transactions may have added to the confusion and uncertainty faced by investors on May 6, 2010. The pilot program was extended several times since its adoption and is currently set to expire on September 30, 2013.⁴ In its rule change that extended the pilot program to September 30, 2013,⁵ the Exchange also adopted a provision designed to address the operation of the National Market System Plan to Address Extraordinary Market Volatility⁶ (the "Limit Up-Limit Down Plan"). The Exchange believes the benefits to market participants from the more objective clearly erroneous executions rule should continue on a pilot basis through April 8, 2014, which is one year following commencement of operations of the Limit Up-Limit Down Plan. The Exchange believes that continuing the pilot during this time will protect against any unanticipated consequences. Thus, the Exchange believes that the protections of the Clearly Erroneous Rule should continue while the industry gains further experience operating the Limit Up-Limit Down Plan.

The Exchange also proposes to eliminate all references in Rule 11890 to individual stock trading pauses issued

by a primary listing market. Specifically, Rule 11890(a)(2)(C)(4) provides specific rules to follow with respect to review of an execution as potentially clearly erroneous when there was an individual stock trading pause issued for that security and the security is included in the S&P 500 Index, the Russell 1000 Index, or a pilot list of Exchange Traded Products ("Subject Securities"). The stock trading pauses described in Rule 11890(a)(2)(C)(4) are being phased out as securities become subject to the Limit Up-Limit Down Plan pursuant to a phased implementation schedule. The Limit Up-Limit Down Plan is already operational with respect to all Subject Securities, and thus, the Exchange believes that all references to individual stock trading pauses should be removed, including all cross-references to Rule 11890(a)(2)(C)(4) contained in other portions of Rule 11890.⁷

The Exchange is also making technical amendments to certain citations within Rule 11890 to make them more accurate.

2. Statutory Basis

The statutory basis for the proposed rule change is Section 6(b)(5) of the Securities Exchange Act of 1934 (the "Act"),⁸ which requires the rules of an exchange to promote just and equitable principles of trade, to remove impediments to and perfect the mechanism of a free and open market and a national market system and, in general, to protect investors and the public interest. The Exchange believes that the pilot program promotes just and equitable principals of trade in that it promotes transparency and uniformity across markets concerning review of transactions as clearly erroneous. More specifically, the Exchange believes that the extension of the pilot would help assure that the determination of whether a clearly erroneous trade has occurred will be based on clear and objective criteria, and that the resolution of the incident will occur promptly through a transparent process. The proposed rule

change would also help assure consistent results in handling erroneous trades across the U.S. markets, thus furthering fair and orderly markets, the protection of investors and the public interest. Although the Limit Up-Limit Down Plan will become fully operational during the same time period as the proposed extended pilot, the Exchange believes that maintaining the pilot will help to protect against unanticipated consequences. To that end, the extension will allow the Exchange to determine whether Rule 11890 is necessary once the Limit Up-Limit Down Plan is fully operational and, if so, whether improvements can be made. Finally, the elimination of references to individual stock trading pauses will help to avoid confusion amongst market participants, which is consistent with the Act. As described above, individual stock trading pauses have been replaced by the Limit Up-Limit Down Plan with respect to all Subject Securities.

B. Self-Regulatory Organization's Statement on Burden on Competition

The Exchange does not believe that the proposed rule change will result in any burden on competition that is not necessary or appropriate in furtherance of the purposes of the Act, as amended. To the contrary, the Exchange believes that the Financial Industry Regulatory Authority and other national securities exchanges are also filing similar proposals, and thus, that the proposal will help to ensure consistency across market centers.

C. Self-Regulatory Organization's Statement on Comments on the Proposed Rule Change Received From Members, Participants, or Others

Written comments were neither solicited nor received.

III. Date of Effectiveness of the Proposed Rule Change and Timing for Commission Action

Because the proposed rule change does not (i) significantly affect the protection of investors or the public interest; (ii) impose any significant burden on competition; and (iii) become operative for 30 days from the date on which it was filed, or such shorter time as the Commission may designate if consistent with the protection of investors and the public interest, the proposed rule change has become effective pursuant to Section 19(b)(3)(A)

³ Securities Exchange Act Release No. 62886 (September 10, 2010), 75 FR 56613 (September 16, 2010).

⁴ Securities Exchange Act Release No. 68818 (February 1, 2013), 78 FR 9100 (February 7, 2013) (SR-BX-2013-010).

⁵ *Id.*

⁶ Securities Exchange Act Release No. 67091 (May 31, 2012), 77 FR 33498 (June 6, 2012); *see also* Rule 11890(g).

⁷ The Exchange notes that certain Exchange Traded Products ("ETPs") are not yet subject to the Limit Up-Limit Down Plan. Because such ETPs are not on the pilot list of securities, such ETPs are not subject to Rule 11890(a)(2)(C)(4). Securities Exchange Act Release No. 65105 (August 11, 2011), 76 FR 51108 (August 17, 2011) (SR-BX-2011-56) (notice of filing and immediate effectiveness to amend the clearly erroneous rule to specify that Rule 11890(a)(2)(C)(4) applies only to the current securities of the Individual Stock Trading Pause pilot). Accordingly, the proposed rule change does not change the status quo with respect to such ETPs. As amended, all securities, including ETPs not subject to the Limit Up-Limit Down Plan, will continue to be subject to Rule 11890(a)(2)(C)(1)-(3).

⁸ 15 U.S.C. 78f(b)(5).

of the Act⁹ and Rule 19b-4(f)(6)(iii) thereunder.¹⁰

The Exchange has asked the Commission to waive the 30-day operative delay so that the proposal may become operative immediately upon filing. The Commission believes that waiving the 30-day operative delay is consistent with the protection of investors and the public interest, as it will allow the pilot program to continue uninterrupted, thereby avoiding investor confusion that could result from a temporary interruption in the pilot program. For this reason, the Commission designates the proposed rule change to be operative upon filing.¹¹

At any time within 60 days of the filing of the proposed rule change, the Commission summarily may temporarily suspend such rule change if it appears to the Commission that such action is necessary or appropriate in the public interest, for the protection of investors, or otherwise in furtherance of the purposes of the Act.

IV. Solicitation of Comments

Interested persons are invited to submit written data, views and arguments concerning the foregoing, including whether the proposal is consistent with the Act. Comments may be submitted by any of the following methods:

Electronic Comments

- Use the Commission's Internet comment form (<http://www.sec.gov/rules/sro.shtml>); or
- Send an email to rule-comments@sec.gov. Please include File Number SR-BX-2013-053 on the subject line.

Paper Comments

- Send paper comments in triplicate to Elizabeth M. Murphy, Secretary, Securities and Exchange Commission, 100 F Street NE., Washington, DC 20549-1090.

All submissions should refer to File Number SR-BX-2013-053. This file number should be included on the subject line if email is used. To help the Commission process and review your

comments more efficiently, please use only one method. The Commission will post all comments on the Commission's Internet Web site (<http://www.sec.gov/rules/sro.shtml>). Copies of the submission, all subsequent amendments, all written statements with respect to the proposed rule change that are filed with the Commission, and all written communications relating to the proposed rule change between the Commission and any person, other than those that may be withheld from the public in accordance with the provisions of 5 U.S.C. 552, will be available for Web site viewing and printing in the Commission's Public Reference Room, 100 F Street NE., Washington, DC 20549, on official business days between the hours of 10:00 a.m. and 3:00 p.m. Copies of the filing also will be available for inspection and copying at the principal office of the Exchange. All comments received will be posted without change; the Commission does not edit personal identifying information from submissions. You should submit only information that you wish to make available publicly. All submissions should refer to File Number SR-BX-2013-053 and should be submitted on or before October 24, 2013.

For the Commission, by the Division of Trading and Markets, pursuant to delegated authority.¹²

Kevin M. O'Neill,

Deputy Secretary.

[FR Doc. 2013-24160 Filed 10-2-13; 8:45 am]

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SECURITIES AND EXCHANGE COMMISSION

[Release No. 34-70555; File No. SR-NASDAQ-2013-125]

Self-Regulatory Organizations; The NASDAQ Stock Market LLC; Notice of Filing and Immediate Effectiveness of a Proposed Rule Change To Reduce the Fees Assessed Under NASDAQ Rule 7034 for Certain Co-Location Services

September 30, 2013.

Pursuant to Section 19(b)(1) of the Securities Exchange Act of 1934 ("Act")¹, and Rule 19b-4² thereunder, notice is hereby given that on September 20, 2013, The NASDAQ Stock Market LLC ("NASDAQ" or "Exchange") filed with the Securities and Exchange Commission ("SEC" or

"Commission") the proposed rule change as described in Items I and II below, which Items have been prepared by NASDAQ. The Commission is publishing this notice to solicit comments on the proposed rule change from interested persons.

I. Self-Regulatory Organization's Statement of the Terms of Substance of the Proposed Rule Change

NASDAQ is proposing changes to reduce the fees assessed under NASDAQ Rule 7034 for certain co-location services.

The text of the proposed rule change is available on the Exchange's Web site at <http://nasdaq.cchwallstreet.com>, at the principal office of the Exchange, and at the Commission's Public Reference Room.

II. Self-Regulatory Organization's Statement of the Purpose of, and Statutory Basis for, the Proposed Rule Change

In its filing with the Commission, the Exchange included statements concerning the purpose of and basis for the proposed rule change. The text of these statements may be examined at the places specified in Item IV below. The Exchange has prepared summaries, set forth in sections A, B, and C below, of the most significant aspects of such statements.

A. Self-Regulatory Organization's Statement of the Purpose of, and the Statutory Basis for, the Proposed Rule Change

1. Purpose

The Exchange proposes to repeat a temporary fee reduction program to attract new customers to its co-location facility in Carteret, New Jersey.³ Specifically, the Exchange proposes to amend Rule 7034 to reduce the monthly recurring cabinet ("MRC") fees assessed for the installation of certain new co-location cabinets. The reduced MRC fees will apply to new cabinets ordered by users using the Co-Lo Console⁴ on or after October 1, 2013 through December 31, 2013. The reduced fee shall apply to any cabinet that increases the number of dedicated cabinets beyond the total number dedicated to that user as of August 31, 2013 ("Baseline Number"), for so long as the total number of

³ See Exchange Act Release No. 69887 (June 29, 2013) [sic], 78 FR 40527 (July 5, 2013) (notice of publication of SR-NASDAQ-2013-088, a two-month reduction in co-location cabinet fees); Exchange Act Release No. 68624 (Jan. 1, 2013), 78 FR 3945 (Jan. 17, 2013).

⁴ The "Co-Lo Console" is NASDAQ's Web-based ordering tool, and it is the exclusive means for ordering co-location services.

⁹ 15 U.S.C. 78s(b)(3)(A).

¹⁰ 17 CFR 240.19b-4(f)(6)(iii). As required under Rule 19b-4(f)(6)(iii), the Exchange provided the Commission with written notice of its intent to file the proposed rule change, along with a brief description and the text of the proposed rule change, at least five business days prior to the date of filing of the proposed rule change, or such shorter time as designated by the Commission.

¹¹ For purposes only of waiving the 30-day operative delay, the Commission has also considered the proposed rule's impact on efficiency, competition, and capital formation. See 15 U.S.C. 78c(f).

¹² 17 CFR 200.30-3(a)(12).

¹ 15 U.S.C. 78s(b)(1).

² 17 CFR 240.19b-4.

dedicated cabinets exceeds that user's Baseline Number. The reduced MRC fees will apply for a period of 24 months from the date the new cabinet becomes

fully operational under NASDAQ rules, provided that the user's total number of cabinets continues to exceed the Baseline Number.

The Exchange proposes to reduce the applicable fees as follows:

Cabinet type	Current ongoing monthly fee	Reduced ongoing monthly fee
Low Density	\$4,000	\$2,000
Medium Density	5,000	2,500
Medium-High Density	6,000	3,500
High Density	7,000	4,500
Super High Density	13,000	8,000

New cabinets shall be assessed standard installation fees.

NASDAQ proposes to reduce co-location cabinet fees by different amounts to maintain a sliding scale of

lower fees for higher density cabinets on a per kilowatt basis. The chart below reflects this scale:

Cabinet type	Max KW	New fee	Discount (percent)	Fee per KW
Super High Density	17 [sic]	\$8,000	38.46%	\$470.59
High Density	10	4,500	35.71%	450.00
Medium High	7	3,500	41.67%	500.00
Medium Density	5	2,500	50.00%	500.00
Low Density	2.88	2,000	50.00%	694.44

2. Statutory Basis

The Exchange believes that the proposed rule change is consistent with the provisions of Section 6 of the Act,⁵ in general, and with Section 6(b)(4) of the Act,⁶ in particular, in that it provides for the equitable allocation of reasonable dues, fees and other charges among members and issuers and other persons using any facility or system which the Exchange operates or controls. The proposed reduced fee will be assessed equally on all customers that place an order for a new cabinet after the designated period. The proposed amendments will provide an incentive for customers to avail themselves of the designated co-location services.

NASDAQ's proposal to reduce fees by differing amounts is fair and equitable because it reflects the economic efficiency of higher density co-location cabinets. First, the underlying costs for co-location cabinets consists of certain fixed costs for the data center facility (space, amortization, etc.) and certain variable costs (electrical power utilized and cooling required). The variable costs are in total higher for the higher power density cabinets, as reflected in their higher current prices. Second, the higher density cabinets were introduced later than the lower density cabinets (the High Density cabinet was introduced in 2009 and the Super High Density cabinet was introduced in

2011). Due to the competitive pressures that existed in 2011, Super High Density cabinets were introduced at lower fees per kilowatt. As a result of these already-reduced rates on higher density cabinets, NASDAQ has greater flexibility to discount fees for lower density cabinets, on a per kilowatt basis.

NASDAQ operates in a highly competitive market in which market participants can readily favor competing venues if they deem fee levels at a particular venue to be excessive. In such an environment, NASDAQ must continually adjust its fees to remain competitive with other exchanges and with alternative trading systems that have been exempted from compliance with the statutory standards applicable to exchanges. NASDAQ believes that the proposed rule change reflects this competitive environment because it is designed to ensure that the charges for use of the NASDAQ co-location facility remain competitive.

B. Self-Regulatory Organization's Statement on Burden on Competition

The Exchange does not believe that the proposed rule change will result in any burden on competition that is not necessary or appropriate in furtherance of the purposes of the Act, as amended. To the contrary, the Exchange's voluntary fee reduction is a response to increased competition for co-location services by other exchanges and trading venues. As more venues offer co-location services, competition drives costs lower. The Exchange, in order to retain existing orders and to attract new

orders, is forced to offer a lower effective rate for aggregate cabinet demand. This competition benefits users, members and investors by lowering the average aggregate cost of trading on the Exchange.

C. Self-Regulatory Organization's Statement on Comments on the Proposed Rule Change Received From Members, Participants, or Others

No written comments were either solicited or received.

III. Date of Effectiveness of the Proposed Rule Change and Timing for Commission Action

The foregoing rule change has become effective pursuant to Section 19(b)(3)(A) of the Act⁷ and paragraph (f) of Rule 19b-4 thereunder.⁸ At any time within 60 days of the filing of the proposed rule change, the Commission summarily may temporarily suspend such rule change if it appears to the Commission that such action is necessary or appropriate in the public interest, for the protection of investors, or otherwise in furtherance of the purposes of the Act. If the Commission takes such action, the Commission shall institute proceedings to determine whether the proposed rule should be approved or disapproved.

IV. Solicitation of Comments

Interested persons are invited to submit written data, views, and arguments concerning the foregoing,

⁵ 15 U.S.C. 78f.

⁶ 15 U.S.C. 78f(b)(4).

⁷ 15 U.S.C. 78s(b)(3)(A).

⁸ 17 CFR 240.19b-4(f).

including whether the proposed rule change is consistent with the Act. Comments may be submitted by any of the following methods:

Electronic Comments

- Use the Commission's Internet comment form (<http://www.sec.gov/rules/sro.shtml>); or
- Send an email to rule-comments@sec.gov. Please include File Number SR-NASDAQ-2013-125 on the subject line.

Paper Comments

- Send paper comments in triplicate to Elizabeth M. Murphy, Secretary, Securities and Exchange Commission, 100 F Street NE., Washington, DC 20549-1090.

All submissions should refer to File Number SR-NASDAQ-2013-125. This file number should be included on the subject line if email is used. To help the Commission process and review your comments more efficiently, please use only one method. The Commission will post all comments on the Commission's Internet Web site (<http://www.sec.gov/rules/sro.shtml>). Copies of the submission, all subsequent amendments, all written statements with respect to the proposed rule change that are filed with the Commission, and all written communications relating to the proposed rule change between the Commission and any person, other than those that may be withheld from the public in accordance with the provisions of 5 U.S.C. 552, will be available for Web site viewing and printing in the Commission's Public Reference Room, 100 F Street NE., Washington, DC 20549, on official business days between the hours of 10:00 a.m. and 3:00 p.m. Copies of the filing also will be available for inspection and copying at the principal office of the Exchange. All comments received will be posted without change; the Commission does not edit personal identifying information from submissions. You should submit only information that you wish to make available publicly. All submissions should refer to File Number SR-NASDAQ-2013-125, and should be submitted on or before October 24, 2013.

For the Commission, by the Division of Trading and Markets, pursuant to delegated authority.⁹

Kevin M. O'Neill,
Deputy Secretary.

[FR Doc. 2013-24240 Filed 10-2-13; 8:45 am]

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SECURITIES AND EXCHANGE COMMISSION

[Release No. 34-70541; File No. SR-Phlx-2013-97]

Self-Regulatory Organizations; NASDAQ OMX PHLX LLC; Notice of Filing and Immediate Effectiveness of Proposed Rule Change to the Clearly Erroneous Rule

September 27, 2013.

Pursuant to Section 19(b)(1) of the Securities Exchange Act of 1934 ("Act"),¹ and Rule 19b-4 thereunder,² notice is hereby given that on September 26, 2013, NASDAQ OMX PHLX LLC ("Phlx" or "Exchange"), filed with the Securities and Exchange Commission ("Commission") the proposed rule change as described in Items I and II below, which Items have been prepared by the Exchange. The Commission is publishing this notice to solicit comments on the proposed rule change from interested persons.

I. Self-Regulatory Organization's Statement of the Terms of Substance of the Proposed Rule Change

The Exchange proposes to extend the pilot period of recent amendments to Rule 3312, concerning clearly erroneous transactions, so that the pilot will now expire on April 8, 2014. The Exchange also proposes to remove certain references to individual stock trading pauses contained in Rule 3312(a)(2)(C)(iv).

The text of the proposed rule change is available from Phlx's Web site at <http://nasdaqomxphlx.cchwallstreet.com>, at Phlx's principal office, and at the Commission's Public Reference Room.

II. Self-Regulatory Organization's Statement of the Purpose of, and Statutory Basis for, the Proposed Rule Change

In its filing with the Commission, the Exchange included statements concerning the purpose of and basis for the proposed rule change and discussed any comments it received on the proposed rule change. The text of these statements may be examined at the places specified in Item IV below. The Exchange has prepared summaries, set forth in Sections A, B, and C below, of the most significant aspects of such statements.

A. Self-Regulatory Organization's Statement of the Purpose of, and Statutory Basis for, the Proposed Rule Change

1. Purpose

On September 10, 2010, the Commission approved, for a pilot period to end December 10, 2010, a proposed rule change submitted by The NASDAQ Stock Market LLC, BATS Exchange, Inc., NASDAQ OMX BX, Inc., Chicago Board Options Exchange, Incorporated, Chicago Stock Exchange, Inc., EDGA Exchange, Inc., EDGX Exchange, Inc., International Securities Exchange LLC, New York Stock Exchange LLC, NYSE MKT LLC (formerly, NYSE Amex LLC), NYSE Arca, Inc., and National Stock Exchange, Inc., to amend certain of their respective rules to set forth clearer standards and curtail discretion with respect to breaking erroneous trades.³ The changes were adopted to address concerns that the lack of clear guidelines for dealing with clearly erroneous transactions may have added to the confusion and uncertainty faced by investors on May 6, 2010. In connection with its resumption of trading of NMS Stocks through PSX, the Exchange amended Rule 3312 to conform it to the newly-adopted changes to the other exchanges' clearly erroneous rules, so that it could participate in the pilot program.⁴ The pilot program was extended several times since its adoption and is currently set to expire on September 30, 2013.⁵ In its rule change that extended the pilot program to September 30, 2013,⁶ the Exchange also adopted a provision designed to address the operation of the National Market System Plan to Address Extraordinary Market Volatility⁷ (the "Limit Up-Limit Down Plan"). The Exchange believes the benefits to market participants from the more objective clearly erroneous executions rule should continue on a pilot basis through April 8, 2014, which is one year following commencement of operations of the Limit Up-Limit Down Plan. The Exchange believes that continuing the pilot during this time will protect against any unanticipated consequences. Thus, the Exchange

³ Securities Exchange Act Release No. 62886 (September 10, 2010), 75 FR 56613 (September 16, 2010).

⁴ Securities Exchange Act Release No. 63023 (September 30, 2010), 75 FR 61802 (October 6, 2010) (SR-Phlx-2010-125).

⁵ Securities Exchange Act Release No. 68820 (February 1, 2013), 78 FR 9436 (February 8, 2013) (SR-Phlx-2013-12).

⁶ *Id.*

⁷ Securities Exchange Act Release No. 67091 (May 31, 2012), 77 FR 33498 (June 6, 2012); *see also* Rule 3312(g).

¹ 15 U.S.C. 78s(b)(1).

² 17 CFR 240.19b-4.

⁹ 17 CFR 200.30-3(a)(12).

believes that the protections of the Clearly Erroneous Rule should continue while the industry gains further experience operating the Limit Up-Limit Down Plan.

The Exchange also proposes to eliminate all references in Rule 3312 to individual stock trading pauses issued by a primary listing market. Specifically, Rule 3312(a)(2)(C)(iv) provides specific rules to follow with respect to review of an execution as potentially clearly erroneous when there was an individual stock trading pause issued for that security and the security is included in the S&P 500 Index, the Russell 1000 Index, or a pilot list of Exchange Traded Products ("Subject Securities"). The stock trading pauses described in Rule 3312(a)(2)(C)(iv) are being phased out as securities become subject to the Limit Up-Limit Down Plan pursuant to a phased implementation schedule. The Limit Up-Limit Down Plan is already operational with respect to all Subject Securities, and thus, the Exchange believes that all references to individual stock trading pauses should be removed, including all cross-references to Rule 3312(a)(2)(C)(iv) contained in other portions of Rule 3312.⁸

2. Statutory Basis

The statutory basis for the proposed rule change is Section 6(b)(5) of the Securities Exchange Act of 1934 (the "Act"),⁹ which requires the rules of an exchange to promote just and equitable principles of trade, to remove impediments to and perfect the mechanism of a free and open market and a national market system and, in general, to protect investors and the public interest. The Exchange believes that the pilot program promotes just and equitable principals of trade in that it promotes transparency and uniformity across markets concerning review of transactions as clearly erroneous. More specifically, the Exchange believes that the extension of the pilot would help assure that the determination of whether a clearly erroneous trade has occurred

will be based on clear and objective criteria, and that the resolution of the incident will occur promptly through a transparent process. The proposed rule change would also help assure consistent results in handling erroneous trades across the U.S. markets, thus furthering fair and orderly markets, the protection of investors and the public interest. Although the Limit Up-Limit Down Plan will become fully operational during the same time period as the proposed extended pilot, the Exchange believes that maintaining the pilot will help to protect against unanticipated consequences. To that end, the extension will allow the Exchange to determine whether Rule 3312 is necessary once the Limit Up-Limit Down Plan is fully operational and, if so, whether improvements can be made. Finally, the elimination of references to individual stock trading pauses will help to avoid confusion amongst market participants, which is consistent with the Act. As described above, individual stock trading pauses have been replaced by the Limit Up-Limit Down Plan with respect to all Subject Securities.

B. Self-Regulatory Organization's Statement on Burden on Competition

The Exchange does not believe that the proposed rule change will result in any burden on competition that is not necessary or appropriate in furtherance of the purposes of the Act, as amended. To the contrary, the Exchange believes that the Financial Industry Regulatory Authority and other national securities exchanges are also filing similar proposals, and thus, that the proposal will help to ensure consistency across market centers.

C. Self-Regulatory Organization's Statement on Comments on the Proposed Rule Change Received From Members, Participants, or Others

Written comments were neither solicited nor received.

III. Date of Effectiveness of the Proposed Rule Change and Timing for Commission Action

Because the proposed rule change does not (i) significantly affect the protection of investors or the public interest; (ii) impose any significant burden on competition; and (iii) become operative for 30 days from the date on which it was filed, or such shorter time as the Commission may designate if consistent with the protection of investors and the public interest, the proposed rule change has become effective pursuant to Section 19(b)(3)(A)

of the Act¹⁰ and Rule 19b-4(f)(6)(iii) thereunder.¹¹

The Exchange has asked the Commission to waive the 30-day operative delay so that the proposal may become operative immediately upon filing. The Commission believes that waiving the 30-day operative delay is consistent with the protection of investors and the public interest, as it will allow the pilot program to continue uninterrupted, thereby avoiding investor confusion that could result from a temporary interruption in the pilot program. For this reason, the Commission designates the proposed rule change to be operative upon filing.¹²

At any time within 60 days of the filing of the proposed rule change, the Commission summarily may temporarily suspend such rule change if it appears to the Commission that such action is necessary or appropriate in the public interest, for the protection of investors, or otherwise in furtherance of the purposes of the Act.

IV. Solicitation of Comments

Interested persons are invited to submit written data, views and arguments concerning the foregoing, including whether the proposal is consistent with the Act. Comments may be submitted by any of the following methods:

Electronic Comments

- Use the Commission's Internet comment form (<http://www.sec.gov/rules/sro.shtml>); or
- Send an email to rule-comments@sec.gov. Please include File Number SR-Phlx-2013-97 on the subject line.

Paper Comments

- Send paper comments in triplicate to Elizabeth M. Murphy, Secretary, Securities and Exchange Commission, 100 F Street NE., Washington, DC 20549-1090.

All submissions should refer to File Number SR-Phlx-2013-97. This file number should be included on the subject line if email is used. To help the Commission process and review your

⁸ The Exchange notes that certain Exchange Traded Products ("ETPs") are not yet subject to the Limit Up-Limit Down Plan. Because such ETPs are not on the pilot list of securities, such ETPs are not subject to Rule 3312(a)(2)(C)(iv). Securities Exchange Act Release No. 65106 (August 11, 2011), 76 FR 51079 (August 17, 2011) (SR-Phlx-2011-114) (notice of filing and immediate effectiveness to amend the clearly erroneous rule to specify that Rule 3312(a)(2)(C)(iv) applies only to the current securities of the Individual Stock Trading Pause pilot). Accordingly, the proposed rule change does not change the status quo with respect to such ETPs. As amended, all securities, including ETPs not subject to the Limit Up-Limit Down Plan, will continue to be subject to Rule 3312(a)(2)(C)(i)-(iii).

⁹ 15 U.S.C. 78f(b)(5).

¹⁰ 15 U.S.C. 78s(b)(3)(A).

¹¹ 17 CFR 240.19b-4(f)(6)(iii). As required under Rule 19b-4(f)(6)(iii), the Exchange provided the Commission with written notice of its intent to file the proposed rule change, along with a brief description and the text of the proposed rule change, at least five business days prior to the date of filing of the proposed rule change, or such shorter time as designated by the Commission.

¹² For purposes only of waiving the 30-day operative delay, the Commission has also considered the proposed rule's impact on efficiency, competition, and capital formation. See 15 U.S.C. 78c(f).

comments more efficiently, please use only one method. The Commission will post all comments on the Commission's Internet Web site (<http://www.sec.gov/rules/sro.shtml>). Copies of the submission, all subsequent amendments, all written statements with respect to the proposed rule change that are filed with the Commission, and all written communications relating to the proposed rule change between the Commission and any person, other than those that may be withheld from the public in accordance with the provisions of 5 U.S.C. 552, will be available for Web site viewing and printing in the Commission's Public Reference Room, 100 F Street NE., Washington, DC 20549, on official business days between the hours of 10:00 a.m. and 3:00 p.m. Copies of the filing also will be available for inspection and copying at the principal office of the Exchange. All comments received will be posted without change; the Commission does not edit personal identifying information from submissions. You should submit only information that you wish to make available publicly. All submissions should refer to File Number SR-Phlx-2013-97 and should be submitted on or before October 24, 2013.

For the Commission, by the Division of Trading and Markets, pursuant to delegated authority.¹³

Kevin M. O'Neill,
Deputy Secretary.

[FR Doc. 2013-24159 Filed 10-2-13; 8:45 am]

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SECURITIES AND EXCHANGE COMMISSION

[Release No. 34-70565; File No. SR-NYSEARCA-2013-98]

Self-Regulatory Organizations; NYSE Arca, Inc.; Notice of Filing and Immediate Effectiveness of Proposed Rule Change Proposes To Amend the Definition of Retail Order in the NYSE Arca Equities Schedule of Fees and Charges for Exchange Services and the Attestation Requirements for ETP Holders That Submit Retail Orders

September 30, 2013.

Pursuant to Section 19(b)(1) ¹ of the Securities Exchange Act of 1934 (the "Act") ² and Rule 19b-4 thereunder,³ notice is hereby given that, on September 20, 2013, NYSE Arca, Inc.

(the "Exchange" or "NYSE Arca") filed with the Securities and Exchange Commission (the "Commission") the proposed rule change as described in Items I, II, and III below, which Items have been prepared by the self-regulatory organization. The Commission is publishing this notice to solicit comments on the proposed rule change from interested persons.

I. Self-Regulatory Organization's Statement of the Terms of Substance of the Proposed Rule Change

The Exchange proposes to amend (1) the definition of "Retail Order" in the NYSE Arca Equities Schedule of Fees and Charges for Exchange Services ("Fee Schedule") and (2) the attestation requirements for ETP Holders that submit Retail Orders. The text of the proposed rule change is available on the Exchange's Web site at www.nyse.com, at the principal office of the Exchange, and at the Commission's Public Reference Room.

II. Self-Regulatory Organization's Statement of the Purpose of, and Statutory Basis for, the Proposed Rule Change

In its filing with the Commission, the self-regulatory organization included statements concerning the purpose of, and basis for, the proposed rule change and discussed any comments it received on the proposed rule change. The text of those statements may be examined at the places specified in Item IV below. The Exchange has prepared summaries, set forth in sections A, B, and C below, of the most significant parts of such statements.

A. Self-Regulatory Organization's Statement of the Purpose of, and the Statutory Basis for, the Proposed Rule Change

1. Purpose

The Exchange proposes to amend (1) the definition of "Retail Order" in the Fee Schedule and (2) the attestation requirements for ETP Holders that submit Retail Orders. The Exchange proposes to implement the changes effective October 1, 2013.

Background

The Fee Schedule provides certain transaction credits for Retail Orders under two tiers, the Retail Order Tier ⁴

⁴ Under this tier, an ETP Holder, including a Market Maker, that executes an average daily volume ("ADV") of Retail Orders during the month that is 0.20% or more of the U.S. consolidated ADV ("CADV") receives a credit of \$0.0033 per share for its Retail Orders that provide liquidity on the Exchange in Tape A, B and C securities. For all

and the Retail Cross-Asset Tier.⁵ The term "Retail Order" is defined in the Fee Schedule as an agency order that originates from a natural person and is submitted to the Exchange by an ETP Holder, provided that no change is made to the terms of the order with respect to price or side of market and the order does not originate from a trading algorithm or any other computerized methodology.

As part of qualifying for the Retail Order Tier, an ETP Holder is required to designate certain of its order entry ports at the Exchange as "Retail Order Ports" or designate orders as Retail Orders within the order entry message. The ETP Holder is required to attest, in a form and/or manner prescribed by the Exchange, that all orders submitted to the Exchange via such Retail Order Ports are Retail Orders. Additionally, an ETP Holder is required to have written policies and procedures reasonably designed to ensure that it will only designate orders as Retail Orders if all requirements of a Retail Order are met.⁶ The Financial Industry Regulatory Authority, Inc. ("FINRA"), on behalf of the Exchange, reviews an ETP Holder's compliance with these requirements through an exam-based review of the ETP Holder's internal controls.

The Exchange notes that the Retail Order Tier and Retail Cross-Asset Tier are optional for ETP Holders. Accordingly, an ETP Holder that does

other fees and credits, Tiered or Basic Rates would apply based on the ETP Holder's qualifying levels.

⁵ Under this tier, an ETP Holder, including a Market Maker, that (1) executes a CADV of Retail Orders during the month that is 0.30% or more of the U.S. CADV and (2) is affiliated with an OTP Holder or OTP Firm that provides an ADV of electronic posted Customer executions in Penny Pilot issues on NYSE Arca Options (excluding mini options) of at least 0.50% of total Customer equity and ETF option ADV as reported by OCC receives a credit of \$0.0034 per share for its Retail Orders that provide liquidity on the Exchange in Tape A, B and C securities. For all other fees and credits, Tiered or Basic Rates would apply based on the ETP Holder's qualifying levels.

⁶ Such written policies and procedures must require the ETP Holder to (1) exercise due diligence before entering a Retail Order to assure that entry as a Retail Order is in compliance with the requirements specified by the Exchange and (2) monitor whether orders entered as Retail Orders meet the applicable requirements. If the ETP Holder represents Retail Orders from another broker-dealer customer, the ETP Holder's supervisory procedures must be reasonably designed to ensure that the orders it receives from such broker-dealer customer that it designates as Retail Orders meet the definition of a Retail Order. The ETP Holder must (i) obtain an annual written representation, in a form acceptable to the Exchange, from each broker-dealer customer that sends it orders to be designated as Retail Orders that the entry of such orders as Retail Orders will be in compliance with the requirements specified by the Exchange, and (ii) monitor whether its broker-dealer customer's Retail Order flow continues to meet the applicable requirements.

¹³ 17 CFR 200.30-3(a)(12).

¹⁵ 15 U.S.C. 78s(b)(1).

²⁵ 15 U.S.C. 78a.

¹⁷ 17 CFR 240.19b-4.

not opt to identify qualified orders as Retail Orders is not required to (1) designate any of its ports as Retail Order Ports or orders as Retail Orders, (2) make an attestation to the Exchange, or (3) maintain required policies and procedures.

Proposed Change

The Exchange proposes two changes to the current requirements. First, the Exchange proposes to include in the definition of Retail Order any riskless principal order that meets the criteria of FINRA Rule 5320.03. Under FINRA Rule 5320.03, a riskless principal order is a proprietary order for the purposes of facilitating the execution, on a riskless principal basis, of an order from a customer (whether its own customer or the customer of another broker-dealer) (the “facilitated order”), provided that the member (1) submits a report, contemporaneously with the execution of the facilitated order, identifying the trade as riskless principal to FINRA (or another self-regulatory organization if not required under FINRA rules); and (2) has written policies and procedures to ensure that riskless principal transactions for which the member is relying on this exception comply with applicable FINRA rules. At a minimum these policies and procedures must require that the customer order was received prior to the offsetting principal transaction, and that the offsetting principal transaction is at the same price as the customer order exclusive of any markup or markdown, commission equivalent or other fee, and is allocated to a riskless principal or customer account in a consistent manner and within 60 seconds of execution. Members must have supervisory systems in place that produce records that enable the member and FINRA to reconstruct accurately, readily, and in a time-sequenced manner all facilitated orders for which the member relies on this exception. The Exchange proposes that the obligations that apply to FINRA members with respect to FINRA under this rule would apply to ETP Holders with respect to the Exchange for purposes of qualifying for the tiers. The Exchange notes that its affiliates, New York Stock Exchange LLC (“NYSE”) and NYSE MKT LLC (“NYSE MKT”), as well as The NASDAQ Stock Market (“NASDAQ”) include such riskless principal orders in their definitions of Retail Order for their retail liquidity programs.⁷

Second, the Exchange proposes to change the required attestation so that the ETP Holder must attest that *substantially all*, rather than *all*, orders submitted to the Exchange via such Retail Order Ports are Retail Orders. This is the same standard that NYSE, NYSE MKT, and NASDAQ apply with respect to their retail liquidity programs.⁸ The Exchange believes that the categorical nature of the current attestation language may be preventing certain ETP Holders from qualifying for the Retail Order Tier and Retail Cross-Asset Tier. In particular, the Exchange understands that some ETP Holders represent both “Retail Orders,” as proposed to be defined in the Fee Schedule, as well as other agency flow that may not meet the strict definition of “Retail Order.” The Exchange further understands that limitations in order management systems and routing networks used by such ETP Holders may make it infeasible for them to isolate 100% of Retail Orders from other agency, non-Retail Order flow that they would direct to the Exchange. Unable to make the categorical attestation required by the Exchange, some ETP Holders may not attempt to qualify for the Retail Order Tier and Retail Cross-Asset Tier, notwithstanding that they have substantial order flow from Retail Orders.

For example, some ETP Holders have explained that their order flow is routed in aggregate for retail execution purposes and that a de minimis amount of such flow may have been generated electronically, thus not meeting the strict Retail Order definition. These ETP Holders have chosen not to direct any of their shares of retail order flow to the Exchange because the cost of complying with the current “any order” standard, such as implementing any necessary systems changes, is too high. These ETP Holders have indicated their willingness to comply with the proposed “substantially all” standard, as well as their ability to implement the proposed standard on their systems with confidence.

Accordingly, the Exchange is proposing a de minimis relaxation of the attestation requirement in order to accommodate these system limitations. Specifically, an ETP Holder would be permitted to send de minimis quantities of agency orders to the Exchange as Retail Orders that cannot be explicitly attested to under the existing definition in the Fee Schedule. The Exchange will issue a Trader Notice to make clear that

the “substantially all” language is meant to permit the presence of only isolated and de minimis quantities of agency orders that do not qualify as Retail Orders and cannot be segregated from Retail Orders due to systems limitations. In this regard, an ETP Holder would need to retain, in its books and records, adequate substantiation that substantially all orders sent to the Exchange as Retail Orders met the strict definition and that those orders not meeting the strict definition are agency orders that cannot be segregated from Retail Orders due to system limitations, and are de minimis in terms of the overall number of Retail Orders sent to the Exchange.

The Exchange notes that it may disqualify an ETP Holder from qualifying for the Retail Order Tier or Retail Cross-Asset Tier if the Exchange determines, in its sole discretion, that the ETP Holder has failed to abide by applicable requirements. Tiered or Basic Rates would apply based on the ETP Holder’s qualifying levels for an ETP Holder that is disqualified from qualifying for the Retail Order Tier or Retail Cross-Asset Tier.

The Exchange also proposes a technical correction to remove a duplicative definition of Retail Order. Consistent with its conventions in the rest of the Fee Schedule, the term needs to be defined only once. The Exchange also proposes to correct a typographical error in the Retail Order Cross-Asset Tier.

The Exchange is not proposing to change the level of credits available under the Retail Order Tier or the Retail Cross-Asset Tier. The proposed change is not otherwise intended to address any other issues, and the Exchange is not aware of any problems that ETP Holders would have in complying with the proposed change.

2. Statutory Basis

The Exchange believes that the proposed rule change is consistent with Section 6(b) of the Act,⁹ in general, and furthers the objectives of Section 6(b)(4) of the Act,¹⁰ in particular, because it provides for the equitable allocation of reasonable dues, fees, and other charges among its members, issuers and other persons using its facilities and does not unfairly discriminate between customers, issuers, brokers or dealers. The Exchange also believes that the proposed rule change furthers the objectives of Section 6(b)(5) of the Act,¹¹ which requires, among other things, that

⁷ See NYSE Rule 107C(a)(3), NYSE MKT Rule 107C(a)(3)—Equities, and NASDAQ Rule 4780(a)(3)[sic].

⁸ See NYSE Rule 107C(b)(2)(C), NYSE MKT Rule 107C(b)(2)(C)—Equities, and NASDAQ Rule 4780(b)(2)(C).

⁹ 15 U.S.C. 78f(b).

¹⁰ 15 U.S.C. 78f(b)(4).

¹¹ 15 U.S.C. 78f(b)(5).

the rules of a national securities exchange be designed to prevent fraudulent and manipulative acts and practices, to promote just and equitable principles of trade, to foster cooperation and coordination with persons engaged in regulating, clearing, settling, processing information with respect to, and facilitating transactions in securities, to remove impediments to and perfect the mechanism of a free and open market and a national market system, and, in general, to protect investors and the public interest; and not be designed to permit unfair discrimination between customers, issuers, brokers or dealers.

The Exchange believes that the proposed inclusion of riskless principal orders in the definition of Retail Order is reasonable because at least three other exchanges include such riskless principal orders in their definitions of Retail Order for their retail liquidity programs.¹² The Exchange further believes that the proposed change is equitable and not unfairly discriminatory because the opportunity to submit riskless principal orders will be available to all ETP Holders.

The Exchange believes that the proposed change with respect to required attestations is designed to prevent fraudulent and manipulative acts and practices because, while it represents a relaxation of the attestation requirements, the change is a de minimis relaxation that still requires the ETP Holder to attest that “substantially all” of its orders will qualify as Retail Orders. The slight relaxation will allow enough flexibility to accommodate system limitations while still ensuring that only a fractional amount of orders submitted to the Exchange would not qualify as Retail Orders.

The Exchange believes that the proposed rule change promotes just and equitable principles of trade because it will ensure that similarly situated member organizations who have only slight differences in the capability of their systems will be able to equally benefit from tiers that provide credits for Retail Orders.

The Exchange believes that the proposed rule change will remove impediments to and perfect the mechanism of a free and open market and a national market system because it will allow an ETP Holder that is concerned that its system limitations would not allow 100% certification that submitted orders are Retail Orders to still send order flow to the Exchange to qualify for the credits available under

the Retail Order Tier and Retail Cross-Asset Tier.

Finally, the Exchange believes that it is subject to significant competitive forces, as described below in the Exchange’s statement regarding the burden on competition.

For these reasons, the Exchange believes that the proposal is consistent with the Act.

B. Self-Regulatory Organization’s Statement on Burden on Competition

In accordance with Section 6(b)(8) of the Act,¹³ the Exchange does not believe that the proposed rule change will impose any burden on competition that is not necessary or appropriate in furtherance of the purposes of the Act. Instead, the Exchange believes that the proposed change would increase the level of competition among ETP Holders and among exchanges for retail order flow such that retail investors would have the potential to receive better prices than they currently do. The Exchange notes that it operates in a highly competitive market in which market participants can readily favor competing venues if they deem fee levels at a particular venue to be excessive or credits to be inadequate. In such an environment, the Exchange must continually review, and consider adjusting, its fees and credits to remain competitive with other exchanges. For the reasons described above, the Exchange believes that the proposed rule change reflects this competitive environment.

C. Self-Regulatory Organization’s Statement on Comments on the Proposed Rule Change Received From Members, Participants, or Others

No written comments were solicited or received with respect to the proposed rule change.

III. Date of Effectiveness of the Proposed Rule Change and Timing for Commission Action

The foregoing rule change is effective upon filing pursuant to Section 19(b)(3)(A)¹⁴ of the Act and subparagraph (f)(2) of Rule 19b-4¹⁵ thereunder, because it establishes a due, fee, or other charge imposed by the Exchange.

At any time within 60 days of the filing of such proposed rule change, the Commission summarily may temporarily suspend such rule change if it appears to the Commission that such action is necessary or appropriate in the

public interest, for the protection of investors, or otherwise in furtherance of the purposes of the Act. If the Commission takes such action, the Commission shall institute proceedings under Section 19(b)(2)(B)¹⁶ of the Act to determine whether the proposed rule change should be approved or disapproved.

IV. Solicitation of Comments

Interested persons are invited to submit written data, views, and arguments concerning the foregoing, including whether the proposed rule change is consistent with the Act. Comments may be submitted by any of the following methods:

Electronic Comments

- Use the Commission’s Internet comment form (<http://www.sec.gov/rules/sro.shtml>); or
- Send an email to rule-comments@sec.gov. Please include File Number SR-NYSEARCA-2013-98 on the subject line.

Paper Comments

- Send paper comments in triplicate to Elizabeth M. Murphy, Secretary, Securities and Exchange Commission, 100 F Street NE., Washington, DC 20549-1090.

All submissions should refer to File Number SR-NYSEARCA-2013-98. This file number should be included on the subject line if email is used. To help the Commission process and review your comments more efficiently, please use only one method. The Commission will post all comments on the Commission’s Internet Web site (<http://www.sec.gov/rules/sro.shtml>). Copies of the submission, all subsequent amendments, all written statements with respect to the proposed rule change that are filed with the Commission, and all written communications relating to the proposed rule change between the Commission and any person, other than those that may be withheld from the public in accordance with the provisions of 5 U.S.C. 552, will be available for Web site viewing and printing in the Commission’s Public Reference Room, 100 F Street NE., Washington, DC 20549, on official business days between the hours of 10:00 a.m. and 3:00 p.m. Copies of the filing also will be available for inspection and copying at the principal office of the Exchange. All comments received will be posted without change; the Commission does not edit personal identifying information from

¹² See *supra* note 7.

¹³ 15 U.S.C. 78f(b)(8).

¹⁴ 15 U.S.C. 78s(b)(3)(A).

¹⁵ 17 CFR 240.19b-4(f)(2).

¹⁶ 15 U.S.C. 78s(b)(2)(B).

submissions. You should submit only information that you wish to make available publicly. All submissions should refer to File Number SR–NYSEARCA–2013–98 and should be submitted on or before October 24, 2013.

For the Commission, by the Division of Trading and Markets, pursuant to delegated authority.¹⁷

Kevin M. O'Neill,
Deputy Secretary.

[FR Doc. 2013–24249 Filed 10–2–13; 8:45 am]

BILLING CODE 8011–01–P

SECURITIES AND EXCHANGE COMMISSION

[Release No. 34–70545; File No. SR–OCC–2013–15]

Self-Regulatory Organizations; The Options Clearing Corporation; Notice of Filing and Immediate Effectiveness of Proposed Rule Change To Correct an Inadvertent Omission in a Prior Rule Change Filing Related to the Definition of Hedge Clearing Member

September 27, 2013.

Pursuant to Section 19(b)(1) of the Securities Exchange Act of 1934 (“Act”) ¹ and Rule 19b–4 thereunder,² notice is hereby given that, on September 19, 2013, The Options Clearing Corporation (“OCC”) filed with the Securities and Exchange Commission (“Commission”) the proposed rule change described in Items I, II and III below, which Items have been prepared primarily by OCC. OCC filed the proposed rule change pursuant to Section 19(b)(3)(A)(iii) ³ of the Act and Rule 19b–4(f)(4)(ii) ⁴ thereunder, so that the proposal was effective upon filing with the Commission. The Commission is publishing this notice to solicit comments on the rule change from interested parties.

I. Clearing Agency’s Statement of the Terms of Substance of the Proposed Rule Change

OCC proposes to correct an inadvertent omission in a prior rule change filing related to the definition of Hedge Clearing Member.

II. Clearing Agency’s Statement of the Purpose of, and Statutory Basis for, the Proposed Rule Change

In its filing with the Commission, OCC included statements concerning

the purpose of and basis for the proposed rule change and discussed any comments it received on the proposed rule change. The text of these statements may be examined at the places specified in Item IV below. OCC has prepared summaries, set forth in sections (A), (B), and (C) below, of the most significant aspects of these statements.

(A) Clearing Agency’s Statement of the Purpose of, and Statutory Basis for, the Proposed Rule Change

The purpose of this proposed rule change is to correct an inadvertent omission in a prior rule change filing related to the definition of “Hedge Clearing Member” in OCC’s By-Laws (“By-Laws”). By way of background, in 2002 OCC proposed, and the SEC approved, certain rule changes to OCC’s Stock Loan/Hedge Program (“Hedge Program”) (SR–OCC–2002–11).⁵ As part of that proposed rule change, OCC deleted and relocated an existing interpretation to Article V, Section 1 relating to the designation of a Hedge Clearing Member. In connection with relocating the interpretation, OCC also amended the interpretation so that designation as a Hedge Clearing Member was no longer pre-conditioned upon the Clearing Member also being a Stock Clearing Member. However, a concurrent change to the definition of Hedge Clearing Member was not made at that time, thereby creating an inconsistency between the description of Hedge Clearing Member found in Article V of the By-Laws and the definition of Hedge Clearing Member found in Article I of the By-Laws. OCC now proposes to resolve this inconsistency by making a technical correction to the definition of Hedge Clearing Member in Article I of the By-Laws so that it is consistent with the description of Hedge Clearing Member found in Article V of the By-Laws.

As described above, through SR–OCC–2002–11, OCC made certain changes its Hedge Program. One such change was that OCC determined that it was no longer necessary to require that a Hedge Clearing Member initially be designated as a “Stock” Clearing Member and, accordingly, updated Article V of the By-Laws. However, through an inadvertent oversight, a concurrent change to Article I of the By-Laws was not made at that time. Accordingly, OCC now proposes to make a technical correction to the Article I definition of Hedge Clearing Member so that it is consistent with the description of Hedge Clearing Member

found in Article V of the By-Laws by removing the reference to “Stock” Clearing Member from the definition of Hedge Clearing Member. This proposed change will resolve the inconsistency within the By-Laws with respect to the definition of Hedge Clearing Member.

The proposed change to OCC’s By-Laws is consistent with the purposes and requirements of Section 17A(b)(3)(F) ⁶ of the Act ⁷ and Rule 17Ad–22(d)(2) ⁸ thereunder because it will prevent unfair discrimination in the admission of participants, or among participants, in the use of OCC’s Hedge Program and ensure that OCC’s By-Laws are reasonably designed to have participation requirements that are objective, publicly disclosed and permit fair and open access. The proposed changes are also intended to remove potential impediments to, and will perfect the mechanism of a national system for, the prompt and accurate clearance and settlement of securities transactions.

(B) Clearing Agency’s Statement on Burden on Competition

OCC does not believe that the proposed rule change would impact, or impose a burden on competition that is not necessary or appropriate in furtherance of the purposes of the Act. The proposed change, which will apply to all clearing members, is administrative in nature and will correct an inconsistency within OCC’s By-Laws. Accordingly, the proposed change will reduce unnecessary administrative burdens on its clearing members, including any such burdens that may impact competition.

(C) Clearing Agency’s Statement on Comments on the Proposed Rule Change Received From Members, Participants or Others

Written comments on the proposed rule change were not and are not intended to be solicited with respect to the proposed rule change and none have been received.

III. Date of Effectiveness of the Proposed Rule Change and Timing for Commission Action

The foregoing rule change has become effective upon filing pursuant to Section 19(b)(3)(A) of the Act ⁹ and Rule 19b–4(f)(1) ¹⁰ thereunder, the proposed rule change is filed for immediate effectiveness inasmuch as it constitutes

¹⁷ 17 CFR 200.30–3(a)(12).

¹ 15 U.S.C. 78s(b)(1).

² 17 CFR 240.19b–4.

³ 15 U.S.C. 78s(b)(3)(A)(iii).

⁴ 17 CFR 240.19b–4(f)(4)(ii).

⁵ Securities and Exchange Act Release No. 34–47898 (May 21, 2003), 68 FR 32164 (May 29, 2003).

⁶ 15 U.S.C. 78q–1(b)(3)(F).

⁷ 15 U.S.C. 78a *et seq.*

⁸ 17 CFR 240.17Ad–22(d)(2).

⁹ 15 U.S.C. 78s(b)(3).

¹⁰ 17 CFR 240.19b–4(f)(1).

a stated policy, practice or interpretation with respect to the meaning, administration or enforcement of an existing rule. OCC will delay the implementation of the rule change until it is deemed certified under CFTC Regulation § 40.6. At any time within 60 days of the filing of such rule change, the Commission summarily may temporarily suspend such rule change if it appears to the Commission that such action is necessary or appropriate in the public interest, for the protection of investors, or otherwise in furtherance of the purposes of the Act.¹¹

IV. Solicitation of Comments

Interested persons are invited to submit written data, views, and arguments concerning the foregoing, including whether the proposed rule change is consistent with the Act. Comments may be submitted by any of the following methods:

Electronic Comments

- Use the Commission's Internet comment form (<http://www.sec.gov/rules/sro.shtml>); or
- Send an email to rule-comments@sec.gov. Please include File Number SR-OCC-2013-15 on the subject line.

Paper Comments

- Send paper comments in triplicate to Elizabeth M. Murphy, Secretary, Securities and Exchange Commission, 100 F Street NE., Washington, DC 20549-1090.

All submissions should refer to File Number SR-OCC-2013-15. This file number should be included on the subject line if email is used. To help the Commission process and review your comments more efficiently, please use only one method of submission. The Commission will post all comments on the Commission's Internet Web site (<http://www.sec.gov/rules/sro.shtml>). Copies of the submission, all subsequent amendments, all written statements with respect to the proposed rule change that are filed with the Commission, and all written communications relating to the proposed rule change between the Commission and any person, other than those that may be withheld from the public in accordance with the provisions of 5 U.S.C. 552, will be available for Web site viewing and printing in the Commission's Public Reference Section, 100 F Street NE., Washington, DC 20549, on official business days between the hours of 10:00 a.m. and 3:00 p.m. Copies of such filing also will be available for

inspection and copying at the principal office of OCC and on OCC's Web site at http://www.theocc.com/components/docs/legal/rules_and_bylaws/sr_occ_13_15.pdf. All comments received will be posted without change; the Commission does not edit personal identifying information from submissions. You should submit only information that you wish to make available publicly.

All submissions should refer to File Number SR-OCC-2013-15 and should be submitted on or before October 24, 2013.

For the Commission, by the Division of Trading and Markets, pursuant to delegated Authority.¹²

Kevin M. O'Neill,

Deputy Secretary.

[FR Doc. 2013-24163 Filed 10-2-13; 8:45 am]

BILLING CODE 8011-01-P

SECURITIES AND EXCHANGE COMMISSION

[Release No. 34-70558; File No. SR-CME-2013-22]

Self-Regulatory Organizations; Chicago Mercantile Exchange Inc.; Notice of Filing and Immediate Effectiveness of Proposed Rule Change Related to the Liquidity Factor of CME's CDS Margin Methodology

September 30, 2013.

Pursuant to Section 19(b)(1) of the Securities Exchange Act of 1934 ("Exchange Act" or "Act"),¹ and Rule 19b-4 thereunder,² notice is hereby given that on September 19, 2013, Chicago Mercantile Exchange Inc. ("CME") filed with the Securities and Exchange Commission ("Commission") the proposed rule change described in Items I and II below, which Items have been prepared primarily by CME. CME filed the proposal pursuant to Section 19(b)(3)(A) of the Act,³ and Rule 19b-4(f)(4)(ii) thereunder,⁴ so that the proposal was effective upon filing with the Commission. The Commission is publishing this notice to solicit comments on the proposed rule change for interested persons.

I. Self-Regulatory Organization's Statement of the Terms of Substance of the Proposed Rule Change

CME proposes to make an adjustment to one particular component of its current CDS margin model. The proposed rule change is described

below. Italicized text indicates additions; bracketed text indicates deletions.

* * * * *

CME CDS Liquidity Margin Factor Calculation Methodology

The Liquidity Factor will be calculated as the sum of two components:

(1) A concentration charge for market exposure as a function of absolute Spread DV01 (a portfolio sensitivity to 1% par spread shock); and

(2) A concentration charge for portfolio basis exposure as a function of Residual Spread DV01 (which is the difference between the Gross Spread DV01 and the Net Spread DV01 of the portfolio).

CME will also establish a floor component to the Liquidity Factor using the current Gross Notional Function with the following modifications: (1) the concentration scalar will be removed; and (2) the maximum DST would be replaced by series-tenor specific DST values based on the series and tenor of the relevant HY and IG positions, as applicable.

* * * * *

II. Self-Regulatory Organization's Statement of the Purpose of, and Statutory Basis for, the Proposed Rule Change

In its filing with the Commission, CME included statements concerning the purpose and basis for the proposed rule change and discussed any comments it received on the proposed rule change. The text of these statements may be examined at the places specified in Item IV below. CME has prepared summaries, set forth in sections A, B, and C below, of the most significant aspects of such statements.

A. Self-Regulatory Organization's Statement of the Purpose of, and Statutory Basis for, the Proposed Rule Change

CME's currently approved credit default swap margin methodology utilizes a "multi-factor" portfolio model to determine margin requirements for the credit default swap ("CDS") index products accepted for clearing at CME. The model incorporates risk-based factors that are designed to represent the different risks inherent to CDS products. The factors are aggregated to determine the total amount of margin required to protect a portfolio against exposures resulting from daily changes in CDS spreads. For both total and minimum margin calculations, CME evaluates each CDS contract held within a portfolio. These positions are

¹¹ 15 U.S.C. 78s(b)(3)(C).

¹² 17 CFR 200.30-3(a)(12).

¹ 15 U.S.C. 78s(b)(1).

² 17 CFR 240.19b-4.

³ 15 U.S.C. 78s(b)(3)(A).

⁴ 17 CFR 240.19b-4(f)(4)(ii).

distinguished by the single name of the underlying entity, the CDS tenor, the notional amount of the position, and the fixed spread or coupon rate. For consistency, margins for CDS indexes in a portfolio are handled based on the required margin for each of the underlying components of the index.

CME proposes to make an adjustment to one particular component of its current CDS margin model, the liquidity risk factor. This CDS margin model component is designed to capture the risk that concentrated positions may be difficult or costly to unwind following the default of a CDS clearing member. The adjustment will only affect the margining of CDS index products at CME which are under the exclusive jurisdiction of the Commodity Futures Trading Commission ("CFTC").

The Liquidity Risk Factor in CME's Current CDS Margin Model

The current liquidity/concentration factor (the "Liquidity Factor") of CME's margin methodology for a portfolio of CDS indices is the product of (1) the gross notional amount for each family (i.e., CDX IG or CDX HY) of CDS positions in a portfolio (2) the current bid/ask of the 5 year tenor of the "on the run" (OTR) contract (3) the Duration/Series/Tenor ("DST") factor and (4) a concentration factor based upon the gross notional for each of the CDX IG and CDX HY contracts (the "Gross Notional Function"). The associated margin for a CDS portfolio attributed to the Liquidity Factor is the sum of the Liquidity Factor calculations for each family of CDS positions in the portfolio.

The calculation of the Liquidity Factor is based on the premise that the 5-year OTR index is the most liquid CDS index product. As such, the methodology is designed to evaluate the liquidity exposure of each position in a CDS portfolio relative to the 5-year OTR index.

For each index family (i.e., CDX IG and CDX HY), a DST matrix is calculated based on the historical bid-ask averages of each cleared position relative to the OTR 5-year historical bid-ask averages. Then, the maximum DST values are used as the DST factors. Such maximum DST factors are then applied to the product of 5-year OTR bid-ask spread (adjusted for duration for CDX IG only) and the Gross Notional of all positions within each index family. The resulting products are further scaled by concentration factors in order to account for oversized (as measured by Gross Notional) portfolios. The concentration factors are based on exponential functions of the Gross Notional of each index family in a given portfolio.

Proposed Changes to the Liquidity Risk Factor

As liquidation costs are dependent on the risk in a portfolio, CME is proposing to use an index portfolio's market risk rather than its gross notional as the basis for determining the margins associated with the Liquidity Factor. The proposed changes would calculate the Liquidity Factor as the sum of two components:

(1) A concentration charge for market exposure as a function of absolute Spread DV01 (a portfolio sensitivity to 1% par spread shock); and

(2) A concentration charge for portfolio basis exposure as a function of Residual Spread DV01 (which is the difference between the Gross Spread DV01 and the Net Spread DV01 of the portfolio).

CME expects that these proposed changes would not generally impact smaller portfolios whose liquidation costs are driven by the market bid/ask spread rather than by the cost of hedging, and are therefore adequately captured by the existing Liquidity Factor methodology. To account for the risks associated with such smaller portfolios, CME also proposes to establish a floor component to the Liquidity Factor using the current Gross Notional Function described above with the following modifications: (1) The concentration scalar would be removed as concentration risk would already be accounted for by the concentration charge component outlined above; and (2) the maximum DST would be replaced by series-tenor specific DST values based on the series and tenor of the relevant HY and IG positions, as applicable. CME expects that large (by notional amount) portfolios will be impacted by the proposed changes more than smaller portfolios.

The changes only affect CME's broad-based CDS index clearing offering and do not materially impact CME's security-based swap clearing business. The proposed liquidity risk factor model adjustments do not require any changes to rule text in the CME rulebook and do not necessitate any changes to CME's CDS Manual of Operations. The change will be announced to CDS market participants in an advisory notice that will be issued prior to implementation. CME also notes that it has also submitted the proposed rule changes that are the subject of this filing to its primary regulator, the CFTC, in a separate filing.

CME believes the proposed rule changes are consistent with the requirements of the Exchange Act including Section 17A of the Exchange

Act.⁵ The proposed rule changes involve enhancements to CME's current CDS margin methodology and are therefore designed to promote the prompt and accurate clearance and settlement of securities transactions and, to the extent applicable, derivatives agreements, contracts, and transactions, to assure the safeguarding of securities and funds which are in the custody or control of the clearing agency or for which it is responsible, and, in general, to protect investors and the public interest consistent with Section 17A(b)(3)(F) of the Exchange Act.⁶ The proposed rule changes accomplish these objectives because the changes are intended to incorporate how the liquidity risk factor is affected by not only portfolio concentration based on gross notional, but also the composition of the portfolio based on an underlying strategy. The proposed rule changes help to better align CME's margin methodology with the liquidity profile of the actual instruments in a given portfolio and as such contribute to the safeguarding of securities and funds in CME's custody or control or for which CME is responsible and the protection of investors.

Furthermore, the proposed changes are limited in their effect to swaps products offered under CME's authority to act as a derivatives clearing organization. These products are under the exclusive jurisdiction of the CFTC. As such, the proposed CME changes are limited to CME's activities as a derivatives clearing organization clearing swaps that are not security-based swaps; CME notes that the policies of the CFTC with respect to administering the Commodity Exchange Act are comparable to a number of the policies underlying the Exchange Act, such as promoting market transparency for over-the-counter derivatives markets, promoting the prompt and accurate clearance of transactions and protecting investors and the public interest.

Because the proposed changes are limited in their effect to swaps products offered under CME's authority to act as a derivatives clearing organization, the proposed changes are properly classified as effecting a change in an existing service of CME that:

(a) Primarily affects the clearing operations of CME with respect to products that are not securities, including futures that are not security futures, and swaps that are not security-based swaps or mixed swaps; and

(b) Does not significantly affect any securities clearing operations of CME or

⁵ 15 U.S.C. 78q-1.

⁶ 15 U.S.C. 78q-1(b)(3)(F).

any rights or obligations of CME with respect to securities clearing or persons using such securities-clearing service.

As such, the changes are therefore consistent with the requirements of Section 17A of the Exchange Act⁷ and are properly filed under Section 19(b)(3)(A)⁸ and Rule 19b-4(f)(4)(ii)⁹ thereunder.

B. Self-Regulatory Organization's Statement on Burden on Competition

CME does not believe that the proposed rule change will have any impact, or impose any burden, on competition. The proposed rule changes simply involve enhancements to CME's current CDS margin methodology.

C. Self-Regulatory Organization's Statement on Comments on the Proposed Rule Change Received from Members, Participants, or Others

CME has not solicited comments regarding this proposed rule change. CME has not received any unsolicited written comments from interested parties.

III. Date of Effectiveness of the Proposed Rule Change and Timing for Commission Action

The foregoing rule change has become effective upon filing pursuant to Section 19(b)(3)(A) of the Act¹⁰ and Rule 19b-4(f)(4)(ii)¹¹ thereunder. At any time within 60 days of the filing of the proposed rule change, the Commission summarily may temporarily suspend such rule change if it appears to the Commission that such action is necessary or appropriate in the public interest, for the protection of investors, or otherwise in furtherance of the purposes of the Act.

IV. Solicitation of Comments

Interested persons are invited to submit written data, views and arguments concerning the foregoing, including whether the proposed rule change is consistent with the Act. Comments may be submitted by any of the following methods:

Electronic Comments:

- Use the Commission's Internet comment form (<http://www.sec.gov/rules/sro.shtml>); or
- Send an email to rule-comments@sec.gov. Please include File Number SR-CME-2013-22 on the subject line.

Paper Comments:

- Send paper comments in triplicate to Elizabeth M. Murphy, Secretary,

Securities and Exchange Commission, 100 F Street NE., Washington, DC 20549-1090.

All submissions should refer to File Number SR-CME-2013-22. This file number should be included on the subject line if email is used. To help the Commission process and review your comments more efficiently, please use only one method. The Commission will post all comments on the Commission's Internet Web site (<http://www.sec.gov/rules/sro.shtml>). Copies of the submission, all subsequent amendments, all written statements with respect to the proposed rule change that are filed with the Commission, and all written communications relating to the proposed rule change between the Commission and any person, other than those that may be withheld from the public in accordance with the provisions of 5 U.S.C. 552, will be available for Web site viewing and printing in the Commission's Public Reference Room, 100 F Street NE., Washington, DC 20549, on official business days between the hours of 10:00 a.m. and 3:00 p.m. Copies of such filing also will be available for inspection and copying at the principal office of CME and on CME's Web site at <http://www.cmegroup.com/market-regulation/rule-filings.html>.

All comments received will be posted without change; the Commission does not edit personal identifying information from submissions. You should submit only information that you wish to make available publicly. All submissions should refer to File Number SR-CME-2013-22 and should be submitted on or before October 24, 2013.

For the Commission, by the Division of Trading and Markets, pursuant to delegated authority.¹²

Kevin M. O'Neill,

Deputy Secretary.

[FR Doc. 2013-24242 Filed 10-2-13; 8:45 am]

BILLING CODE 8011-01-P

SECURITIES AND EXCHANGE COMMISSION

[Release No. 34-70560; File No. NASDAQ-2013-124]

Self-Regulatory Organizations; The NASDAQ Stock Market LLC; Notice of Filing and Immediate Effectiveness of Proposed Rule Change Relating to SQF Port Fees

September 30, 2013.

Pursuant to Section 19(b)(1) of the Securities Exchange Act of 1934 ("Act"),¹ and Rule 19b-4 thereunder,² notice is hereby given that on September 19, 2013, The NASDAQ Stock Market LLC ("NASDAQ" or "Exchange") filed with the Securities and Exchange Commission ("SEC" or "Commission") the proposed rule change as described in Items I, II, and III below, which Items have been prepared by NASDAQ. The Commission is publishing this notice to solicit comments on the proposed rule change from interested persons.

I. Self-Regulatory Organization's Statement of the Terms of Substance of the Proposed Rule Change

NASDAQ proposes to amend the manner in which the Exchange assesses SQF Port fees which are located in Chapter XV, entitled "Options Pricing," which governs pricing for NASDAQ members using the NASDAQ Options Market ("NOM"), NASDAQ's facility for executing and routing standardized equity and index options.

While the changes proposed herein are effective upon filing, the Exchange has designated that the amendments be operative on October 1, 2013.

The text of the proposed rule change is available on the Exchange's Web site at <http://www.nasdaq.cchwallstreet.com>, at the principal office of the Exchange, and at the Commission's Public Reference Room.

II. Self-Regulatory Organization's Statement of the Purpose of, and Statutory Basis for, the Proposed Rule Change

In its filing with the Commission, the Exchange included statements concerning the purpose of and basis for the proposed rule change. The text of these statements may be examined at the places specified in Item IV below. The Exchange has prepared summaries, set forth in sections A, B, and C below, of the most significant aspects of such statements.

¹ 15 U.S.C. 78s(b)(1).

² 17 CFR 240.19b-4.

⁷ 15 U.S.C. 78q-1.

⁸ 15 U.S.C. 78s(b)(3)(A).

⁹ 17 CFR 240.19b-4(f)(4)(iii).

¹⁰ 15 U.S.C. 78s(b)(3)(A).

¹¹ 17 CFR 240.19b-4(f)(4)(ii).

¹² 17 CFR 200.30-3(a)(12).

A. Self-Regulatory Organization's Statement of the Purpose of, and the Statutory Basis for, the Proposed Rule Change

1. Purpose

The Exchange proposes to amend the manner in which SQF Ports are assessed to NOM Participants. SQF ports are ports that receive inbound quotes at any time within that month. The SQF Port allows a NOM Participant to access information such as execution reports and other relevant data through a single feed. For example, this data would show which symbols are trading on NOM and the current state of an options symbol (i.e., open for trading, trading, halted or closed). Auction notifications and execution reports are also available. NOM Market Makers rely on data available through the SQF Port to provide them the necessary information to perform market making activities.

Today, Chapter XV, Section 3 entitled "NASDAQ Options Market—Access Services" states that the Exchange assesses a fee of \$550 per port, per month, per mnemonic for the following port fees: Order Entry Ports,³ CTI Ports,⁴ OTTO Ports,⁵ ITTO Ports,⁶ BONO

³ The Order Entry Port Fee is a connectivity fee in connection with routing orders to the Exchange via an external order entry port. NOM Participants access the Exchange's network through order entry ports. A NOM Participant may have more than one order entry port.

⁴ CTI offers real-time clearing trade updates. A real-time clearing trade update is a message that is sent to a member after an execution has occurred and contains trade details. The message containing the trade details is also simultaneously sent to The Options Clearing Corporation. The trade messages are routed to a member's connection containing certain information. The administrative and market event messages include, but are not limited to: System event messages to communicate operational-related events; options directory messages to relay basic option symbol and contract information for options traded on the Exchange; complex strategy messages to relay information for those strategies traded on the Exchange; trading action messages to inform market participants when a specific option or strategy is halted or released for trading on the Exchange; and an indicator which distinguishes electronic and non-electronically delivered orders.

⁵ OTTO provides a method for subscribers to send orders and receive status updates on those orders. OTTO accepts limit orders from system subscribers, and if there is a matching order, the orders will execute. Non-matching orders are added to the limit order book, a database of available limit orders, where they are matched in price-time priority.

⁶ ITTO is a data feed that provides quotation information for individual orders on the NOM book, last sale information for trades executed on NOM, and Order Imbalance Information as set forth in NOM Rules Chapter VI, Section 8. ITTO is the options equivalent of the NASDAQ TotalView/ITCH data feed that NASDAQ offers under NASDAQ Rule 7023 with respect to equities traded on NASDAQ. As with TotalView, members use ITTO to "build" their view of the NOM book by adding individual orders that appear on the feed, and subtracting individual orders that are executed. See Chapter VI, Section 1 at subsection (a)(3)(A).

Ports,⁷ Order Entry DROP Ports,⁸ OTTO Drop Ports⁹ and SQF Ports. Each NOM Participant is assigned a Market Participant Identifier or "mnemonic"¹⁰ and in some cases, certain NOM Participants request multiple mnemonics for purposes of accounting for trading activity. These mnemonics identify users at a particular NOM Participant. Today, the Exchange bills its port fees based on the number of mnemonics configured for each port. By way of example, if a NOM Participant, ABC, requested 2 ports from the Exchange and further requested that each port be configured to be accessed by 4 mnemonics or in some cases account numbers,¹¹ the NOM Participant would be billed for 8 ports at the rate of \$550 per port for that month. All billing is captured at the Participant level. NOM Participants may choose to have multiple mnemonics or in some case multiple account numbers for the convenience of conducting their business, however only one mnemonic and one account number is required to conduct business on NOM.

The Exchange proposes to amend the manner in which it assesses the SQF Port Fee. The Exchange would continue to assess a \$550 SQF Port Fee but would instead assess that fee on a per port, per month basis. In other words, the Exchange would bill simply based on the number of ports requested by the NOM Participant and would not consider the number of users, account numbers or mnemonics assigned to each SQF Port. In the above example, the Exchange would bill a total of 2 ports for that month. The Exchange is seeking to encourage NOM Market Makers to make markets on NOM.

⁷ BONOSM is a data feed that provides the NOM Best Bid and Offer ("NOM NBBO") and last sale information for trades executed on NOM. The NOM NBBO and last sale information are identical to the information that NOM sends to the Options Price Regulatory Authority ("OPRA") and which OPRA disseminates via the consolidated data feed for options. BONO is the options equivalent of the NASDAQ Basic data feed offered for equities under NASDAQ Rule 7047. See Chapter VI, Section 1 at subsection (a)(3)(B).

⁸ The DROP interface provides real time information regarding orders sent to NOM and executions that occurred on NOM. The DROP interface is not a trading interface and does not accept order messages.

⁹ The OTTO DROP data feed provides real-time information regarding orders entered through OTTO and the execution of those orders. The OTTO DROP data feed is not a trading interface and does not accept order messages.

¹⁰ A mnemonic is a unique identifier consisting of a four character alpha code.

¹¹ Account numbers are assigned by the Exchange and associated with particular NOM Participants.

2. Statutory Basis

NASDAQ believes that the proposed rule change is consistent with the provisions of Section 6 of the Act,¹² in general, and with Section 6(b)(4) and 6(b)(5) of the Act,¹³ in particular, in that it provides for the equitable allocation of reasonable dues, fees and other charges among members and issuers and other persons using any facility or system which NASDAQ operates or controls, and is not designed to permit unfair discrimination between customers, issuers, brokers, or dealers.

The Exchange believes that assessing a \$550 SQF Port Fee per port, instead of per port, per mnemonic by month, is reasonable because the Exchange desires to incentivize more NOM Market Makers to engage in market making activities on NOM. The Exchange believes that amending the methodology by which it assesses SQF Port fees will result in lower costs to NOM Market Makers because the Exchange would not assess fees by mnemonic or account number at a particular NOM Participant and this would allow NOM Participants to request the number of ports necessary for their market making business at a firm level regardless of factors. If a NOM Participant does not have more than one user per port (mnemonic) the NOM Participant would continue to be assessed the same SQF Port fee and would not be impacted by this proposal. In addition, current NOM Market Makers may realize a reduction of SQF Port costs.

The Exchange believes that assessing a \$550 SQF Port Fee per port, instead of per port, per mnemonic by month, is equitable and not unfairly discriminatory because unlike the Order Entry Port, CTI Port, OTTO Port, ITTO Port, BONO Port, Order Entry DROP Port and OTTO Drop Port, the SQF Port is utilized particularly by NOM Market Makers in connection with their market making activities. Unlike other NOM Participants, NOM Market Makers add value to the market through continuous quoting¹⁴ and a commitment of capital. The Exchange has traditionally assessed

¹² 15 U.S.C. 78f.

¹³ 15 U.S.C. 78f(b)(4) and (5).

¹⁴ Pursuant to Chapter VII (Market Participants), Section 5 (Obligations of Market Makers), in registering as a market maker, an Options Participant commits himself to various obligations. Transactions of a Market Maker in its market making capacity must constitute a course of dealings reasonably calculated to contribute to the maintenance of a fair and orderly market, and Market Makers should not make bids or offers or enter into transactions that are inconsistent with such course of dealings. Further, all Market Makers are designated as specialists on NOM for all purposes under the Act or rules thereunder. See Chapter VII, Section 5.

NOM Market Makers lower transaction fees as compared to other NOM Participants because NOM Market Makers have obligations to make continuous markets, engage in a course of dealings reasonably calculated to contribute to the maintenance of a fair and orderly market, and not make bids or offers or enter into transactions that are inconsistent with a course of dealings.¹⁵ Also, because of the volume of message traffic required to quote upwards of 300,000 individual puts and calls, NOM Market Makers that utilize SQF Ports require more technology infrastructure and more ports than NOM Participants that are not engaged in market making. In addition, as previously stated, if a NOM Market Maker has only one mnemonic or account number, per port, the proposal would not yield a cost savings as that NOM Participant is effectively assessed a per port rate today, however that NOM Participant would have the opportunity to obtain other SQF Ports at a lower cost than is offered today. The Exchange believes that it is equitable and not unfairly discriminatory to assess all NOM Market Makers on a firm level rather than by the number of users (mnemonic) on each port and allow Market Makers to segregate their business in a manner that is conducive to their business needs.

The Exchange would continue to assess other port fees, other than the SQF Port, by the number of users (mnemonics) per port. This is the manner in which typically most data is billed. The Exchange is interested in billing NOM Market Makers at the firm level in order to provide them the means to lower costs and incentivize them to make markets on the Exchange which in turn benefits all other market participants through tighter markets and order interaction.

B. Self-Regulatory Organization's Statement on Burden on Competition

NASDAQ does not believe that the proposed rule change will impose any burden on competition not necessary or appropriate in furtherance of the purposes of the Act. The Exchange's proposal seeks to provide NOM Market Makers a cost savings where a particular NOM Participant may have multiple mnemonics and account numbers associated with an SQF Port due to the manner in which they account for their trading activity and operate their technology. The Exchange does not believe that providing certain NOM Market Makers the opportunity to obtain quote information as a lower cost

creates an undue burden on competition because NOM Market Makers have obligations to the market unlike other NOM Participants. Unlike other NOM Participants, NOM Market Makers add value to the market through continuous quoting¹⁶ and a commitment of capital. In addition, other market participants benefit from the tighter markets and order interaction which NOM Market Makers bring to NOM. The proposal would provide all NOM Market Makers with the opportunity to lower costs while also obtaining and utilizing the appropriate number of SQF Ports to conduct their business.

C. Self-Regulatory Organization's Statement on Comments on the Proposed Rule Change Received From Members, Participants, or Others

No written comments were either solicited or received.

III. Date of Effectiveness of the Proposed Rule Change and Timing for Commission Action

The foregoing rule change has become effective pursuant to Section 19(b)(3)(A)(ii) of the Act.¹⁷ At any time within 60 days of the filing of the proposed rule change, the Commission summarily may temporarily suspend such rule change if it appears to the Commission that such action is necessary or appropriate in the public interest, for the protection of investors, or otherwise in furtherance of the purposes of the Act. If the Commission takes such action, the Commission shall institute proceedings to determine whether the proposed rule should be approved or disapproved.

IV. Solicitation of Comments

Interested persons are invited to submit written data, views, and arguments concerning the foregoing, including whether the proposed rule change is consistent with the Act. Comments may be submitted by any of the following methods:

Electronic Comments

- Use the Commission's Internet comment form (<http://www.sec.gov/rules/sro.shtml>); or
- Send an email to rule-comments@sec.gov. Please include File Number NASDAQ-2013-124 on the subject line.

Paper Comments

- Send paper comments in triplicate to Elizabeth M. Murphy, Secretary, Securities and Exchange Commission, 100 F Street NE., Washington, DC 20549-1090.

All submissions should refer to File Number NASDAQ-2013-124. This file number should be included on the subject line if email is used. To help the Commission process and review your comments more efficiently, please use only one method. The Commission will post all comments on the Commission's Internet Web site (<http://www.sec.gov/rules/sro.shtml>). Copies of the submission, all subsequent amendments, all written statements with respect to the proposed rule change that are filed with the Commission, and all written communications relating to the proposed rule change between the Commission and any person, other than those that may be withheld from the public in accordance with the provisions of 5 U.S.C. 552, will be available for Web site viewing and printing in the Commission's Public Reference Room, 100 F Street NE., Washington, DC 20549, on official business days between the hours of 10:00 a.m. and 3:00 p.m. Copies of the filing also will be available for inspection and copying at the principal office of the Exchange. All comments received will be posted without change; the Commission does not edit personal identifying information from submissions. You should submit only information that you wish to make available publicly. All submissions should refer to File Number NASDAQ-2013-124, and should be submitted on or before October 24, 2013.

For the Commission, by the Division of Trading and Markets, pursuant to delegated authority.¹⁸

Kevin M. O'Neill,
Deputy Secretary.

[FR Doc. 2013-24241 Filed 10-2-13; 8:45 am]

BILLING CODE 8011-01-P

SMALL BUSINESS ADMINISTRATION

[Disaster Declaration #13781 and #13782]

Colorado Disaster #CO-00066

AGENCY: U.S. Small Business Administration.

ACTION: Notice.

SUMMARY: This is a Notice of the Presidential declaration of a major disaster for Public Assistance Only for the State of Colorado (FEMA-4145-DR), dated 09/24/2013.

Incident: Severe Storms, Flooding, Landslides, and Mudslides.

Incident Period: 09/11/2013 and continuing.

¹⁵ See Chapter VII, Section 5.

¹⁶ See *supra* note 14.

¹⁷ 15 U.S.C. 78s(b)(3)(A)(ii).

¹⁸ 17 CFR 200.30-3(a)(12).

Effective Date: 09/24/2013.
Physical Loan Application Deadline Date: 11/25/2013.
Economic Injury (EIDL) Loan Application Deadline Date: 06/24/2014.

ADDRESSES: Submit completed loan applications to: U.S. Small Business Administration, Processing and Disbursement Center, 14925 Kingsport Road, Fort Worth, TX 76155.

FOR FURTHER INFORMATION CONTACT: A. Escobar, Office of Disaster Assistance, U.S. Small Business Administration, 409 3rd Street SW., Suite 6050, Washington, DC 20416.

SUPPLEMENTARY INFORMATION: Notice is hereby given that as a result of the President's major disaster declaration on 09/24/2013, Private Non-Profit organizations that provide essential services of governmental nature may file disaster loan applications at the address listed above or other locally announced locations.

The following areas have been determined to be adversely affected by the disaster:

Primary Counties: Boulder, Larimer.

The Interest Rates are:

	Percent
<i>For Physical Damage:</i>	
Non-Profit Organizations With Credit Available Elsewhere ...	2.875
Non-Profit Organizations Without Credit Available Elsewhere	2.875
<i>For Economic Injury:</i>	
Non-Profit Organizations Without Credit Available Elsewhere	2.875

The number assigned to this disaster for physical damage is 137816 and for economic injury is 137826.

(Catalog of Federal Domestic Assistance Numbers 59002 and 59008)

James E. Rivera,
Associate Administrator for Disaster Assistance.

[FR Doc. 2013-24204 Filed 10-2-13; 8:45 am]

BILLING CODE 8025-01-P

SMALL BUSINESS ADMINISTRATION

[Disaster Declaration #13780]

California Disaster #CA-00213 Declaration of Economic Injury

AGENCY: U.S. Small Business Administration.

ACTION: Notice.

SUMMARY: This is a notice of an Economic Injury Disaster Loan (EIDL) declaration for the State of California, dated 09/26/2013.

Incident: Rim Fire.
Incident Period: 08/17/2013 and continuing.

Effective Date: 09/26/2013.
EIDL Loan Application Deadline Date: 06/26/2014.

ADDRESSES: Submit completed loan applications to: U.S. Small Business Administration, Processing and Disbursement Center, 14925 Kingsport Road, Fort Worth, TX 76155.

FOR FURTHER INFORMATION CONTACT: A. Escobar, Office of Disaster Assistance, U.S. Small Business Administration, 409 3rd Street SW., Suite 6050, Washington, DC 20416.

SUPPLEMENTARY INFORMATION: Notice is hereby given that as a result of the Administrator's EIDL declaration, applications for economic injury disaster loans may be filed at the address listed above or other locally announced locations.

The following areas have been determined to be adversely affected by the disaster:

Primary Counties: Mariposa, Tuolumne.

Contiguous Counties: California:

Alpine, Calaveras, Madera, Merced, Mono, Stanislaus.

The Interest Rates are:

	Percent
Businesses And Small Agricultural Cooperatives Without Credit Available Elsewhere	4.000
Non-Profit Organizations Without Credit Available Elsewhere	2.875

The number assigned to this disaster for economic injury is 137800.

The State which received an EIDL Declaration # is California.

(Catalog of Federal Domestic Assistance Number 59002)

Dated: September 26, 2013.

Jeanne Hult,
Acting Administrator.

[FR Doc. 2013-24201 Filed 10-2-13; 8:45 am]

BILLING CODE 8025-01-P

SMALL BUSINESS ADMINISTRATION

[Disaster Declaration #13779]

Idaho Disaster #ID-00027 Declaration of Economic Injury

AGENCY: U.S. Small Business Administration.

ACTION: Notice.

SUMMARY: This is a notice of an Economic Injury Disaster Loan (EIDL) declaration for the State of Idaho, dated 09/25/2013.

Incident: Wildfires Caused by Lightning Strikes on August 7, 2013.

Incident Period: 08/07/2013 through 08/30/2013.

Effective Date: 09/25/2013.
EIDL Loan Application Deadline Date: 06/25/2014.

ADDRESSES: Submit completed loan applications to: U.S. Small Business Administration, Processing and Disbursement Center, 14925 Kingsport Road, Fort Worth, TX 76155.

FOR FURTHER INFORMATION CONTACT: A. Escobar, Office of Disaster Assistance, U.S. Small Business Administration, 409 3rd Street SW., Suite 6050, Washington, DC 20416.

SUPPLEMENTARY INFORMATION: Notice is hereby given that as a result of the Administrator's EIDL declaration, applications for economic injury disaster loans may be filed at the address listed above or other locally announced locations.

The following areas have been determined to be adversely affected by the disaster:

Primary Counties: Blaine.

Contiguous Counties:

Idaho: Bingham, Butte, Camas, Cassia, Custer, Elmore, Lincoln, Minidoka, Power.

The Interest Rates are:

	Percent
Businesses and Small Agricultural Cooperatives Without Credit Available Elsewhere	4.000
Non-Profit Organizations Without Credit Available Elsewhere	2.875

The number assigned to this disaster for economic injury is 137790.

The State which received an EIDL Declaration # is Idaho.

(Catalog of Federal Domestic Assistance Number 59002)

Dated: September 25, 2013.

Jeanne Hult,
Acting Administrator.

[FR Doc. 2013-24212 Filed 10-2-13; 8:45 am]

BILLING CODE 8025-01-P

SMALL BUSINESS ADMINISTRATION

[Disaster Declaration #13783 and #13784]

North Carolina Disaster #NC-00056

AGENCY: U.S. Small Business Administration.

ACTION: Notice.

SUMMARY: This is a Notice of the Presidential declaration of a major disaster for Public Assistance Only for the State of North Carolina (FEMA-4146-DR), dated 09/25/2013.

Incident: Severe Storms, Flooding, Landslides, and Mudslides.

Incident Period: 07/03/2013 through 07/13/2013.

Effective Date: 09/25/2013.

Physical Loan Application Deadline Date: 11/25/2013.

Economic Injury (EIDL) Loan Application Deadline Date: 06/25/2014.

ADDRESSES: Submit completed loan applications to: U.S. Small Business Administration, Processing and Disbursement Center, 14925 Kingsport Road, Fort Worth, TX 76155.

FOR FURTHER INFORMATION CONTACT: A. Escobar, Office of Disaster Assistance, U.S. Small Business Administration, 409 3rd Street SW., Suite 6050, Washington, DC 20416.

SUPPLEMENTARY INFORMATION: Notice is hereby given that as a result of the President's major disaster declaration on 09/25/2013, Private Non-Profit organizations that provide essential services of governmental nature may file disaster loan applications at the address listed above or other locally announced locations.

The following areas have been determined to be adversely affected by the disaster:

Primary Counties: Alleghany, Ashe, Avery, Buncombe, Burke, Caldwell, Jackson, Macon, Madison, Mitchell, Polk, Watauga, Yancey, and the Eastern Band of Cherokee Indians.

The Interest Rates are:

	Percent
<i>For Physical Damage:</i>	
Non-Profit Organizations With Credit Available Elsewhere	2.875
Non-Profit Organizations Without Credit Available Elsewhere	2.875
<i>For Economic Injury:</i>	
Non-Profit Organizations Without Credit Available Elsewhere	2.875

The number assigned to this disaster for physical damage is 13783B and for economic injury is 13784B.

(Catalog of Federal Domestic Assistance Numbers 59002 and 59008)

James E. Rivera,
Associate Administrator for Disaster Assistance.

[FR Doc. 2013-24207 Filed 10-2-13; 8:45 am]

BILLING CODE 8025-01-P

SMALL BUSINESS ADMINISTRATION

Small Business Size Standards: Waiver of the Nonmanufacturer Rule

AGENCY: U.S. Small Business Administration.

ACTION: Notice of Final Action: Partial Waiver Rescission of the Nonmanufacturer Rule for Aerospace Ball and Roller Bearings.

SUMMARY: The U.S. Small Business Administration (SBA) received a request from a small business manufacturer of Aerospace Ball and Roller Bearings to rescind the Class Waiver of the Nonmanufacturer Rule (NMR) for Aerospace Ball and Roller Bearings, under North American Industry Classification System (NAICS) code 332991, Product Service Codes (PSC) 3110. Based on public comments and analysis of data submitted, SBA has determined that several small business manufacturers of aerospace ball and roller bearings exist for many, but not all, of the aerospace ball and roller bearings the Federal government requires. As a result, SBA is partially rescinding the Class Waiver for aerospace ball and roller bearings and replacing it with a class waiver for 305 aerospace ball and roller bearings. A list of the specific 305 aerospace ball and roller bearings can be accessed by accessing the following URL: http://www.sba.gov/sites/default/files/files/NMR_WAIVED_3110_BEARING_LIST.pdf. The partial rescission of this class waiver will require recipients of Federal contracts set aside for small businesses, Service-Disabled Veteran-Owned small businesses, Participants in SBA's 8(a) Business Development Program, or Women-Owned Small Businesses to provide aerospace ball and roller bearings manufactured by small businesses, unless an Individual Waiver of the NMR is granted by SBA or the required bearing is found on the list of aerospace ball and roller bearings for which a class waiver has been granted, maintained by SBA at the aforementioned URL.

DATES: This action is effective the date of publication in the **Federal Register**.

FOR FURTHER INFORMATION CONTACT: Edward Halstead, (202) 205-9885, Edward.halstead@sba.gov.

SUPPLEMENTARY INFORMATION: Sections 8(a)(17) and 46 of the Small Business Act (the Act) and SBA's implementing regulations generally require that recipients of Federal supply contracts that are set aside for small businesses, Service-Disabled Veteran-Owned small businesses, Women-Owned Small Businesses, or Participants in the SBA's 8(a) Business Development Program provide the product of a domestic small business manufacturer or processor if the recipient is other than the actual manufacturer or processor of the product. 15 U.S.C. 637(a)(17), 657s; 13

CFR 121.406(b). This requirement is commonly referred to as the Nonmanufacturer Rule. The Act authorizes SBA to waive the Nonmanufacturer Rule for any "class of products" for which there are no small business manufacturers or processors available to participate in the Federal market. In order to be considered available to participate in the Federal market for a class of products, a small business manufacturer must have submitted a proposal for a contract or received a contract from the Federal government within the last 24 months. *See* 13 CFR 121.1202(c). SBA defines "class of products" as an individual subdivision within a North American Industry Classification System (NAICS) Code as established by the Office of Management and Budget in the NAICS Manual. *See* 13 CFR 121.1202(d). In addition, SBA uses Product Service Codes (PSCs) to further identify particular products within the NAICS code to which a waiver would apply. SBA may then identify a specific item within a PSC and NAICS code to which a class waiver would apply.

On April 16, 2001, SBA granted a class waiver for aerospace ball and roller bearings, consisting of, but not limited to, annular ball bearings, cylindrical ball bearings, linear ball bearings, linear roller bearings, needle roller bearings, ball or roller bearing races, roller bearings, tapered roller bearings and thrust roller bearings, identified within NAICS code 332991 under PSC 3110. 66 FR 19381.

Subsequently, a small business manufacturer of roller bearings notified SBA that their firm had lost several aerospace ball and roller bearing contract bids based on the existence of the class waiver and brought to SBA's attention that several small business manufacturers of roller bearing had submitted proposals for bearings contracts or received bearings contracts from the Federal government within the previous 24 months.

On April 4, 2013, SBA published a notice in the **Federal Register** stating that SBA was considering a complete rescission of the NMR class waiver for aerospace ball and roller bearings. 78 FR 20371. The initial public comment period closed May 4, 2013. Subsequently, the public comment period was extended once and reopened once, and closed for the final time on June 25, 2013. Fourteen comments were received from ten submitters.

Some commenters opposed a total rescission of the class waiver. A small business distributor of aerospace ball and roller bearings expressed concern that a total rescission would have a

devastating impact on small value-added distributors. As such, the commenter suggested that SBA analyze data to determine which specific bearings, if any, are manufactured by small manufacturers. A small businesses manufacturer of bearings expressed similar concern over the impact of a complete rescission of this class waiver.

Several commenters supported the proposal for a total rescission of the class waiver. One commenter stated that the class waiver has resulted in severely limiting opportunities for small business manufacturers of these items and acted as a disincentive to a number of small business manufacturers to develop and sell products under this category. Another commenter supported the proposal on the basis that its participation in the federal arena was paramount to its continued viability.

The Defense Logistics Agency (DLA) suggested a partial rescission of the class waiver, based on the possible damage to the small business dealer base that might result from a complete rescission of the class waiver. DLA provided a list of bearings for which there was no known small business manufacturers in existence. Another commenter expressed support for DLA's recommendation of a partial rescission. The commenter noted that a partial rescission of the class waiver would strike the balance of meeting the Government's needs while stimulating the growth and development of small business manufacturers of aerospace ball and roller bearings who have the capabilities and resources to meet standard commercial item descriptions. The commenter further noted that a partial rescission of the class waiver would not only invigorate domestic small business bearing manufacturers to develop new procedures and abilities, but it would also encourage others who have been on the side lines because of this waiver to reenter the market and some to enter the market.

SBA considered all of the comments and data presented by all of the commenters. After conducting independent market analysis, analyzing the data submitted by DLA and small bearing manufacturers, and considering public comments, SBA has decided to partially rescind the Aerospace Ball and Roller Bearing Class Waiver and replace it with a waiver for 305 specifically identified aerospace ball and roller bearings, which can be viewed at: <http://www.sba.gov/sites/default/files/>

files/NMR_WAIVED_3110_BEARING_LIST.pdf.

Judith Roussel,

Director, Office of Government Contracting.

[FR Doc. 2013-24210 Filed 10-2-13; 8:45 am]

BILLING CODE 8025-01-P

OFFICE OF THE UNITED STATES TRADE REPRESENTATIVE

Request for Public Comments on the Caribbean Basin Economic Recovery Act and the Caribbean Basin Trade Partnership Act: Report to Congress

AGENCY: Office of the United States Trade Representative (USTR).

ACTION: Notice and request for public comment.

SUMMARY: The Trade Policy Staff Committee (TPSC) is seeking the views of interested parties on the operation of the Caribbean Basin Economic Recovery Act (CBERA), as amended by the Caribbean Basin Trade Partnership Act (CBTPA) (19 U.S.C. 2701 et seq.). Section 212(f) of the CBERA, as amended, requires the President to submit a report to Congress regarding the operation of the CBERA and CBTPA (together commonly referred to as the Caribbean Basin Initiative, or CBI) on or before December 31, 2001, and every two years thereafter. The TPSC invites written comments concerning the operation of the CBI, including comments on the performance of each CBERA and CBTPA beneficiary country under the criteria described in sections 212(b), 212(c), and 213(b)(5)(B) of CBERA, as amended. This information will be used in the preparation of the report to Congress on the operation of the program.

DATES: Public comments are due at USTR no later than 5 p.m., November 1, 2013.

ADDRESSES: USTR strongly prefers electronic submissions made at <http://www.regulations.gov>, docket number USTR-2013-0036 (see "Requirements for Submission" below). If you are unable to make a submission at www.regulations.gov, please contact Don Eiss, Trade Policy Staff Committee, at (202) 395-3475 to make other arrangements.

FOR FURTHER INFORMATION CONTACT: For procedural questions concerning written comments, contact Don Eiss, Office of the United States Trade Representative, at (202) 395-3475. All other questions should be directed to Fran Huegel, Office of the Western Hemisphere, Office of the United States Trade Representative, 600 17th Street NW.,

Room 523, Washington, DC 20508. The telephone number is (202) 395-9588.

SUPPLEMENTARY INFORMATION: Interested parties are invited to submit comments on any aspect of the program's operation, including the performance of CBERA and CBTPA beneficiary countries, as the case may be, under the criteria described in sections 212(b), 212(c), and 213(b)(5)(B) of the CBERA, as amended. Those criteria may be accessed at <http://www.gpo.gov/fdsys/pkg/USCODE-2011-title19/html/USCODE-2011-title19-chap15.htm> and are summarized below. Other issues to be examined in this report include: The CBI's effect on the volume and composition of trade and investment between the United States and the Caribbean Basin beneficiary countries; and its effect on advancing U.S. trade policy goals as set forth in the CBTPA. The following countries are both CBERA and CBTPA beneficiary countries: Barbados, Belize, Guyana, Haiti, Jamaica, Saint Lucia, and Trinidad and Tobago. Antigua and Barbuda, Aruba, The Bahamas, British Virgin Islands, Dominica, Grenada, Montserrat, Saint Kitts and Nevis, Saint Vincent and the Grenadines currently receive benefits only under CBERA. Panama ceased to be designated as a beneficiary country when the Panama-United States Trade Promotion Agreement entered into force on October 31, 2012.

Eligibility Criteria for CBI Beneficiary Countries

In determining whether to designate a country as a CBTPA beneficiary country, the President must take into account the criteria contained in sections 212(b) and (c) of CBERA, and other appropriate criteria, including, *inter alia*, the following:

(1) Whether the beneficiary country has demonstrated a commitment to undertake its obligations under the World Trade Organization (WTO) on or ahead of schedule and participate in negotiations toward the completion of the Free Trade Area of the Americas (FTAA) or another free trade agreement.

(2) The extent to which the country provides protection of intellectual property rights consistent with or greater than the protection afforded under the Agreement on Trade-Related Aspects of Intellectual Property Rights.

(3) The extent to which the country provides internationally recognized worker rights including—

- (I) The right of association;
- (II) The right to organize and bargain collectively;
- (III) A prohibition on the use of any form of forced or compulsory labor;

(IV) A minimum age for the employment of children; and

(V) Acceptable conditions of work with respect to minimum wages, hours of work, and occupational safety and health.

(4) Whether the country has implemented its commitments to eliminate the worst forms of child labor, as defined in Section 507(6) of the Trade Act of 1974, as amended.

(5) The extent to which the country has met U.S. counter-narcotics certification criteria under the Foreign Assistance Act of 1961.

(6) The extent to which the country has taken steps to become a party to and implement the Inter-American Convention Against Corruption.

(7) The extent to which the country applies transparent, nondiscriminatory and competitive procedures in government procurement, and contributes to efforts in international fora to develop and implement rules on transparency in government procurement.

Additionally, before a country can receive benefits under the CBTPA, the President must also determine that the country has satisfied the requirements of section 213(b)(4)(A)(ii) of CBERA (19 U.S.C. 2703(b)(4)(A)(ii)) relating to the implementation of procedures and requirements similar in all material aspects to the relevant procedures and requirements contained in chapter 5 of the North American Free Trade Agreement.

Requirements for Submissions. All comments must be submitted in English and must identify (on the first page of the submission) the subject matter of the comment as the "CBI Report to Congress." In order to be assured of consideration, comments should be submitted by November 1, 2013.

In order to ensure the timely receipt and consideration of comments, USTR strongly encourages commenters to make on-line submissions via <http://www.regulations.gov>. To submit comments via <http://www.regulations.gov>, enter docket: USTR-2013-0036. To find the docket, enter the docket number on the home page <http://www.regulations.gov> home page and click "go." The site will provide a search-results page listing all documents associated with this docket. Find a reference to this notice on the search-results page, and click on the link entitled "Comment Now!." (For further information on using the www.regulations.gov Web site, please consult the resources provided on the Web site by clicking on the "How to Use This Site".)

"The <http://www.regulations.gov> Web site offers the option of providing comments by filling in a "Type Comment" field or by attaching a document using the "Upload file(s)" field. We expect that most submissions will be provided in an attached document. If a document is attached, it is sufficient to type "See attached" in the "Type Comment" field.

Submissions in Microsoft Word (.doc) or Adobe Acrobat (.pdf) are preferred. If an application other than those two is used, please identify in your submission the specific application used. For any comments submitted electronically containing business confidential information, the file name of the business confidential version should begin with the characters "BC" and must be submitted separately from the public version. Any page containing business confidential information must be clearly marked "BUSINESS CONFIDENTIAL" on the top of that page. If you file comments containing business confidential information you must also submit a public version of the comments under a separate submission. The file name of the public version should begin with the character "P". The "BC" and "P" should be followed by the name of the person or entity submitting the comments. If you submit comments that contain no business confidential information, the file name should begin with the name of the person or entity submitting the comments. Electronic submissions should not attach separate cover letters; rather, information that might appear in a cover letter should be included in the comments you submit. Similarly, to the extent possible, please include any exhibits, annexes, or other attachments to a submission in the same file as the submission itself and not as separate files.

We strongly urge submitters to use electronic filing. If an on-line submission is impossible, alternative arrangements must be made with Mr. Eiss prior to delivery for the receipt of such submissions. Mr. Eiss may be contacted at (202) 395-3475. General information concerning the Office of the United States Trade Representative may be obtained by accessing its Internet Web site (<http://www.ustr.gov>).

John Melle,

Assistant United States Trade Representative for the Western Hemisphere.

[FR Doc. 2013-24166 Filed 10-2-13; 8:45 am]

BILLING CODE 3290-F3-P

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

Seventy-Sixth Meeting: RTCA Special Committee 147, Minimum Operational Performance Standards for Traffic Alert and Collision Avoidance Systems Airborne Equipment

AGENCY: Federal Aviation Administration (FAA), U.S. Department of Transportation (DOT).

ACTION: Meeting Notice of RTCA Special Committee 147, Minimum Operational Performance Standards for Traffic Alert and Collision Avoidance Systems Airborne Equipment.

SUMMARY: The FAA is issuing this notice to advise the public of the Seventy-Sixth meeting of RTCA Special Committee 147, Minimum Operational Performance Standards for Traffic Alert and Collision Avoidance Systems Airborne Equipment.

DATES: The meeting will be held October 22-24, 2013, from 9:00 a.m. to 5:00 p.m.

ADDRESSES: The meeting will be held at RTCA, Inc., 1150 18th Street NW., Suite 910, Washington, DC 20036.

FOR FURTHER INFORMATION CONTACT: The RTCA Secretariat, 1150 18th Street NW., Suite 910, Washington, DC 20036, or by telephone at (202) 833-9339, fax at (202) 833-9434, or Web site at <http://www.rtca.org>.

SUPPLEMENTARY INFORMATION: Pursuant to section 10(a)(2) of the Federal Advisory Committee Act (Pub. L. 92-463, 5 U.S.C., App.), notice is hereby given for a meeting of Special Committee 147. The agenda will include the following:

October 22

- Opening Plenary Session
 - Chairmen's Opening Remarks
 - Introductions
 - Approval of Minutes from 75th meeting of SC 147
 - Approval of Agenda
- Working Group Reports
- SC-147 Terms of Reference (ToRs)
 - Scope, Deliverables and Schedule
 - Coordination with other SCs
- EUROCAE Working Group (WG)-75 Status
 - Status of Current Activities
- SESAR Activities/Work
 - Status of Current Activities
- AVS Activities/Report
 - TCAS II TSO-C119d/AC 20-151 () updates
- FAA TCAS Program Office
 - Status of Current Activities
 - ACAS X Concept Review

- ACAS X ConOps Overview
- System Overview
- Threat Resolution Module

October 23

- Continuation of FAA TCAS Program Office
 - ACAS X Functional Architecture
 - Verification & Validation Activities Overview
 - System Validation
 - TSIM X
 - Certification Perspective
 - 2013 FAA Flight Test Quick-Look
 - Operational Performance
 - Program Handouts
- Working Group Realignment
 - Proposed Structure
 - WG Formulation/Chairs
 - Roles & Responsibilities
- Committee Process
 - Change Proposal (CP) process
 - Envisioned Products
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- MOPS Development Issues
 - Technical Approach
 - Technical Content

October 24

- Working Group Stand-ups
 - Scope/Organization of Work
 - High-level Schedule/Milestones
 - Technical Discussion
 - Planning
 - Initial Actions
 - Scheduling of teleconferences, etc.
 - Working Group Sign-up
- Other Business
- Action Items
- Time and Place of Next Meeting
- Plenary Adjourn

Attendance is open to the interested public but limited to space availability. With the approval of the chairman, members of the public may present oral statements at the meeting. Persons wishing to present statements or obtain information should contact the person listed in the **FOR FURTHER INFORMATION CONTACT** section. Members of the public may present a written statement to the committee at any time.

Issued in Washington, DC, on September 25, 2013.

Paige Williams,

Management Analyst, NextGen, Business Operations Group, Federal Aviation Administration.

[FR Doc. 2013-24148 Filed 10-2-13; 8:45 am]

BILLING CODE 4910-13-P

DEPARTMENT OF TRANSPORTATION**Federal Aviation Administration****Fourteenth Meeting: RTCA Special Committee 222, Inmarsat AMS(R)S**

AGENCY: Federal Aviation Administration (FAA), U.S. Department of Transportation (DOT).

ACTION: Meeting Notice of RTCA Special Committee 222, Inmarsat AMS(R)S.

SUMMARY: The FAA is issuing this notice to advise the public of the fourteenth meeting of the RTCA Special Committee 222, Inmarsat AMS(R)S

DATES: The meeting will be held November 19, 2013 from 9:00 a.m.–5:00 p.m.

ADDRESSES: The meeting will be held at RTCA Headquarters, 1150 18th Street NW., Suite 910, Washington, DC, 20036. A Webex and teleconference line will be provided. Please contact Hal Moses at hmoses@rtca.org if you are interested.

FOR FURTHER INFORMATION CONTACT: Jennifer Iversen may be contacted directly at email: jiversen@rtca.org or by The RTCA Secretariat, 1150 18th Street NW., Suite 910, Washington, DC, 20036, or by telephone at (202) 330-0662/(202) 833-9339, fax (202) 833-9434, or Web site at <http://www.rtca.org>.

SUPPLEMENTARY INFORMATION: Pursuant to section 10(a)(2) of the Federal Advisory Committee Act (Pub. L. 92-463, 5 U.S.C., App.), notice is hereby given for a meeting of Special Committee 222. The agenda will include the following:

November 19

- Greetings & Attendance.
- Review summary of June 2013 meeting (13th Plenary)
- Report on the status of the DO-343 MASPS approval process
- The primary focus of the meeting will be a final review of the draft material for the DO-262 MOPS for SwiftBroadband, with additional Iridium material presented as approved by the PMC. The outcome of the meeting is approval of the SwiftBroadband and Iridium material for release to the formal RTCA Final Review and Comment (FRAC) process.
- Other items as appropriate.
- Review action items from 12th and 13th Plenary.
- Schedule 15th Plenary.
- Adjourn.

Attendance is open to the interested public but limited to space availability. With the approval of the chairman, members of the public may present oral statements at the meeting. Persons

wishing to present statements or obtain information should contact the person listed in the **FOR FURTHER INFORMATION CONTACT** section. Members of the public may present a written statement to the committee at any time.

Issued in Washington, DC, on September 25, 2013.

Paige Williams,

Management Analyst, NextGen, Business Operations Group, Federal Aviation Administration.

[FR Doc. 2013-24147 Filed 10-2-13; 8:45 am]

BILLING CODE 4910-13-P

DEPARTMENT OF TRANSPORTATION**Federal Aviation Administration****[AC 187-1G]****Schedule of Charges Outside the United States**

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Notice of availability.

SUMMARY: The Federal Aviation Administration (FAA) is announcing the availability of Advisory Circular (AC) 187-1G which transmits an updated schedule of charges for services of FAA Flight Standards Aviation Safety Inspectors outside the United States. The advisory circular has been updated in accordance with the procedures listed in 14 CFR Part 187, Appendix A.

DATES: This AC is effective on October 1, 2013.

ADDRESSES: *How to obtain copies:* A copy of this publication may be downloaded from: http://www.faa.gov/documentLibrary/media/Advisory_Circular/pdf

FOR FURTHER INFORMATION CONTACT: Ms. Tish Thompkins-lmafidon, Flight Standards Service, AFS-50, Federal Aviation Administration, 800 Independence Avenue SW., Washington, DC 20591, telephone (202) 385-8097.

Issued in Washington, DC, on September 25, 2013.

Michael J. Zenkovich,

Deputy Director, Flight Standards Service.

[FR Doc. 2013-24224 Filed 9-30-13; 4:15 pm]

BILLING CODE 4910-13-P

DEPARTMENT OF TRANSPORTATION**Federal Railroad Administration****[Docket Number FRA–2013–0085]****Petition for Waiver of Compliance**

In accordance with Part 211 of Title 49 Code of Federal Regulations (CFR), this document provides the public notice that by a document dated June 12, 2013, the Commuter Rail Division of the Regional Transportation Authority (Metra) and its operating company, the Northeast Illinois Regional Commuter Railroad Corporation, jointly with its contract carriers, Union Pacific Railroad (UP) and BNSF Railway (BNSF), have petitioned the Federal Railroad Administration (FRA) for a waiver of compliance from certain provisions of the Federal railroad safety regulations contained at 49 CFR Part 236, Rules, Standards, and Instructions Governing the Installation, Inspection, Maintenance, and Repair of Signal and Train Control Systems, Devices, and Appliances. FRA assigned the petition Docket Number FRA–2013–0085.

Metra seeks a waiver from the requirements of 49 CFR 236.566, *Locomotive of each train operating in train stop, train control, or cab signal territory; equipped*. Specifically, Metra requests that the application of § 236.566 allow trains with failures of automatic train stop (ATS), automatic train control (ATC), or automatic cab signal (ACS) on passenger equipment at outlying facilities to proceed into ATS-, ATC-, or ACS-equipped territory and operate to their respective designated repair points under the same provisions allowed for in § 236.567, *Restrictions imposed when device fails and/or is cut out en route*. This will require § 236.829, *Terminal, initial*, to be defined in a manner that allows the initial terminal to be the designated “repair point” as defined in § 238.5, *Definitions*: “A location designated by a railroad where repairs of the type necessary occur on a regular basis. A repair point has, or should have, the facilities, tools, and personnel qualified to make the necessary repairs. A repair point need not be staffed continuously.”

This waiver petition applies to five Metra lines where ATS, ATC, or ACS is in effect. Those lines are Metra’s Rock Island Line (ACS), UP’s North and Northwest Lines (ATS), UP’s West Line (ATC), and BNSF’s Aurora Line (ACS). The Metra lines described in this waiver petition operate across three Metra districts. Each of these districts has a single, designated repair point, located near a downtown terminal (LaSalle Street, Ogilvie Transportation Center,

and Chicago Union Station). The outlying facilities (Joliet, Blue Island, Elburn, Harvard, McHenry, Crystal Lake, Barrington, Waukegan, Kenosha, and Aurora) are currently used for overnight storage in preparation of morning service. These outlying facilities are intended for minimal maintenance and are not designed to handle major repairs. As a result, any failures of train stop, train control, or cab signal must be corrected at the designated repair points, not the outlying facilities. Typically, when failures occur, the equipment must be moved in nonrevenue service to the designated repair point in order to be repaired. However, this only applies to those repairs that cannot be readily performed at outlying facilities. When possible, minor repairs are made at outlying facilities and this will continue to remain true if the waiver is granted.

A copy of the petition, as well as any written communications concerning the petition, is available for review online at www.regulations.gov and in person at the U.S. Department of Transportation’s (DOT) Docket Operations Facility, 1200 New Jersey Avenue SE., W12–140, Washington, DC 20590. The Docket Operations Facility is open from 9 a.m. to 5 p.m., Monday through Friday, except Federal Holidays.

Interested parties are invited to participate in these proceedings by submitting written views, data, or comments. FRA does not anticipate scheduling a public hearing in connection with these proceedings since the facts do not appear to warrant a hearing. If any interested party desires an opportunity for oral comment, they should notify FRA, in writing, before the end of the comment period and specify the basis for their request.

All communications concerning these proceedings should identify the appropriate docket number and may be submitted by any of the following methods:

- **Web site:** <http://www.regulations.gov>. Follow the online instructions for submitting comments.
- **Fax:** 202–493–2251.
- **Mail:** Docket Operations Facility, U.S. Department of Transportation, 1200 New Jersey Avenue SE., W12–140, Washington, DC 20590.
- **Hand Delivery:** 1200 New Jersey Avenue SE., Room W12–140, Washington, DC 20590, between 9 a.m. and 5 p.m., Monday through Friday, except Federal Holidays.

Communications received by November 18, 2013 will be considered by FRA before final action is taken. Comments received after that date will be considered as far as practicable.

Anyone is able to search the electronic form of any written communications and comments received into any of our dockets by the name of the individual submitting the comment (or signing the document, if submitted on behalf of an association, business, labor union, etc.). See <http://www.regulations.gov/#!privacyNotice> for the privacy notice of www.regulations.gov or interested parties may review DOT’s complete Privacy Act Statement in the **Federal Register** published on April 11, 2000 (65 FR 19477).

Robert C. Lauby,*Deputy Associate Administrator for Regulatory and Legislative Operations.*

[FR Doc. 2013–24135 Filed 10–2–13; 8:45 am]

BILLING CODE 4910–06–P**DEPARTMENT OF TRANSPORTATION****Maritime Administration****[Docket No. MARAD–2013 0111]****Requested Administrative Waiver of the Coastwise Trade Laws: Vessel SEA MISS; Invitation for Public Comments****AGENCY:** Maritime Administration, Department of Transportation.**ACTION:** Notice.

SUMMARY: As authorized by 46 U.S.C. 12121, the Secretary of Transportation, as represented by the Maritime Administration (MARAD), is authorized to grant waivers of the U.S.-build requirement of the coastwise laws under certain circumstances. A request for such a waiver has been received by MARAD. The vessel, and a brief description of the proposed service, is listed below.

DATES: Submit comments on or before November 4, 2013.

ADDRESSES: Comments should refer to docket number MARAD–2013–0111. Written comments may be submitted by hand or by mail to the Docket Clerk, U.S. Department of Transportation, Docket Operations, M–30, West Building Ground Floor, Room W12–140, 1200 New Jersey Avenue SE., Washington, DC 20590. You may also send comments electronically via the Internet at <http://www.regulations.gov>. All comments will become part of this docket and will be available for inspection and copying at the above address between 10 a.m. and 5 p.m., E.T., Monday through Friday, except federal holidays. An electronic version of this document and all documents entered into this docket is available on the World Wide Web at <http://www.regulations.gov>.

FOR FURTHER INFORMATION CONTACT:

Linda Williams, U.S. Department of Transportation, Maritime Administration, 1200 New Jersey Avenue SE., Room W23-453, Washington, DC 20590. Telephone 202-366-0903, Email Linda.Williams@dot.gov.

SUPPLEMENTARY INFORMATION: As described by the applicant the intended service of the vessel SEA MISS is:

INTENDED COMMERCIAL USE OF VESSEL: Charter, kids sport fishing, sight seeing.

GEOGRAPHIC REGION: "California"

The complete application is given in DOT docket MARAD-2013-0111 at <http://www.regulations.gov>. Interested parties may comment on the effect this action may have on U.S. vessel builders or businesses in the U.S. that use U.S.-flag vessels. If MARAD determines, in accordance with 46 U.S.C. 12121 and MARAD's regulations at 46 CFR Part 388, that the issuance of the waiver will have an unduly adverse effect on a U.S.-vessel builder or a business that uses U.S.-flag vessels in that business, a waiver will not be granted. Comments should refer to the docket number of this notice and the vessel name in order for MARAD to properly consider the comments. Comments should also state the commenter's interest in the waiver application, and address the waiver criteria given in § 388.4 of MARAD's regulations at 46 CFR Part 388.

Privacy Act

Anyone is able to search the electronic form of all comments received into any of our dockets by the name of the individual submitting the comment (or signing the comment, if submitted on behalf of an association, business, labor union, etc.). You may review DOT's complete Privacy Act Statement in the **Federal Register** published on April 11, 2000 (Volume 65, Number 70; Pages 19477-78).

By Order of the Maritime Administrator.

Dated: September 24, 2013.

Julie P. Agarwal,

Secretary, Maritime Administration.

[FR Doc. 2013-23737 Filed 10-2-13; 8:45 am]

BILLING CODE 4910-81-P

ACTION: Notice and request for comments.

SUMMARY: The Department of the Treasury, as part of its continuing effort to reduce paperwork and respondent burden, invites the general public and other Federal agencies to take this opportunity to comment on proposed and/or continuing information collections, as required by the Paperwork Reduction Act of 1995, Public Law 104-13 (44 U.S.C. 3506(c)(2)(A)). Currently, the IRS is soliciting comments concerning Form 8834, Qualified Electric Vehicle Credit.

DATES: Written comments should be received on or before December 2, 2013 to be assured of consideration.

ADDRESSES: Direct all written comments to Yvette Lawrence, Internal Revenue Service, Room 6129, 1111 Constitution Avenue NW., Washington, DC 20224.

FOR FURTHER INFORMATION CONTACT: Requests for additional information or copies of the form and instructions should be directed to Kerry Dennis at Internal Revenue Service, room 6129, 1111 Constitution Avenue NW., Washington, DC 20224, or through the internet at Kerry.Dennis@irs.gov.

SUPPLEMENTARY INFORMATION:

Title: Qualified Electric Vehicle Credit. *OMB Number:* 1545-1374.

Form Number: Form 8834.

Abstract: Form 8834 is used to claim any qualified electric vehicle passive activity credit allowed for the current tax year. The IRS uses the information on the form to determine that the credit is allowable and has been properly computed.

Current Actions: There are changes being made to the form.

The changes to the form are a result of the expiration of the qualified plug-in electric vehicle credit for vehicles acquired after 2011 (IRC 30(f)). As a result of the expiration, Form 8834 is only used to claim any qualified electric vehicle passive activity credit allowed for the current tax year. Changes to the form will decrease burden by 16,495 hours (31,517 to 15,022 hours). The department has increased its estimate of the annual number of responses by 2,636 (from 500 to 3,136). This will increase burden by 26,492 hours. The combined effect of these changes will have an overall hourly increase of burden to 9,997 (from 5,025 to 15,022 hours).

Type of Review: Revision of a currently approved collection.

Affected Public: Individuals or households and businesses or other for-profit organizations.

Estimated Number of Respondents: 3,136.

Estimated Time per Respondent: 4 hours, 47 minutes.

Estimated Total Annual Burden Hours: 15,022.

The following paragraph applies to all of the collections of information covered by this notice:

An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless the collection of information displays a valid OMB control number. Books or records relating to a collection of information must be retained as long as their contents may become material in the administration of any internal revenue law. Generally, tax returns and tax return information are confidential, as required by 26 U.S.C. 6103.

Request for Comments: Comments submitted in response to this notice will be summarized and/or included in the request for OMB approval. All comments will become a matter of public record. Comments are invited on: (a) Whether the collection of information is necessary for the proper performance of the functions of the agency, including whether the information shall have practical utility; (b) the accuracy of the agency's estimate of the burden of the collection of information; (c) ways to enhance the quality, utility, and clarity of the information to be collected; (d) ways to minimize the burden of the collection of information on respondents, including through the use of automated collection techniques or other forms of information technology; and (e) estimates of capital or start-up costs and costs of operation, maintenance, and purchase of services to provide information.

Approved: September 25, 2013.

Joseph Durbala,

IRS Reports Clearance Officer.

[FR Doc. 2013-24260 Filed 10-2-13; 8:45 am]

BILLING CODE 4830-01-P

DEPARTMENT OF THE TREASURY**Internal Revenue Service****Proposed Collection; Comment Request for Forms 1120-L and SCH M-3**

AGENCY: Internal Revenue Service (IRS), Treasury.

ACTION: Notice and request for comments.

SUMMARY: The Department of the Treasury, as part of its continuing effort to reduce paperwork and respondent burden, invites the general public and other Federal agencies to take this opportunity to comment on proposed

DEPARTMENT OF THE TREASURY**Internal Revenue Service****Proposed Collection; Comment Request for Form 8834**

AGENCY: Internal Revenue Service (IRS), Treasury.

and/or continuing information collections, as required by the Paperwork Reduction Act of 1995. Currently, the IRS is soliciting comments concerning Form 1120-L, U.S. Life Insurance Company Income Tax Return, and 1120-L SCH M-3, Net Income (Loss) Reconciliation for U.S. Life Insurance Companies With Total Assets of \$10 Million or More.

DATES: Written comments should be received on or before December 2, 2013 to be assured of consideration.

ADDRESSES: Direct all written comments to Yvette Lawrence, Internal Revenue Service, Room 6129, 1111 Constitution Avenue NW., Washington, DC 20224.

FOR FURTHER INFORMATION CONTACT: Requests for additional information or copies of the form and instructions should be directed to Kerry Dennis, at Internal Revenue Service, Room 6129, 1111 Constitution Avenue NW., Washington, DC 20224, or through the internet at Kerry.Dennis@irs.gov.

SUPPLEMENTARY INFORMATION:

Title: U.S. Life Insurance Company Income Tax Return and Net Income (Loss) Reconciliation for U.S. Life Insurance Companies With Total Assets of \$10 Million or More.

OMB Number: 1545-0128.

Form Number: 1120-L and SCH M-3.

Abstract: Life insurance companies are required to file an annual return of income (Form 1120 L) to report the income, gains, losses, deductions, credits, and to figure the income tax liability of life insurance companies.

Schedule M-3 Part I, asks certain questions about the corporation's financial statements and reconciles financial statement net income (loss) for the corporation (or consolidated financial statement group, if applicable), to net income (loss) of the corporation for U.S. taxable income purposes.

Schedule M-3, Parts II and III, reconcile financial statement net income (loss) for the U.S. corporation (or consolidated tax group, if applicable), as reported on Schedule M-3, Part I, to taxable income on Form 1120-L. For life insurance companies that prepare an annual statement, financial statement net income (loss) is to be reported on the statutory basis on Schedule M-3, Part I.

The data is used to insure that the companies have correctly reported taxable income and paid the correct tax.

Current Actions: There are no changes being made to the forms at this time.

Type of Review: Extension of a currently approved collection.

Affected Public: Business or other for-profit organizations.

Estimated Number of Respondents: 4,440.

Estimated Time per Respondent: 280 hours, 43 minutes.

Estimated Total Annual Burden

Hours: 644,738.

The following paragraph applies to all of the collections of information covered by this notice:

An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless the collection of information

displays a valid OMB control number. Books or records relating to a collection of information must be retained as long as their contents may become material in the administration of any internal revenue law. Generally, tax returns and tax return information are confidential, as required by 26 U.S.C. 6103.

Request for Comments: Comments submitted in response to this notice will be summarized and/or included in the request for OMB approval. All comments will become a matter of public record. Comments are invited on: (a) Whether the collection of information is necessary for the proper performance of the functions of the agency, including whether the information shall have practical utility; (b) the accuracy of the agency's estimate of the burden of the collection of information; (c) ways to enhance the quality, utility, and clarity of the information to be collected; (d) ways to minimize the burden of the collection of information on respondents, including through the use of automated collection techniques or other forms of information technology; and (e) estimates of capital or start-up costs and costs of operation, maintenance, and purchase of services to provide information.

Approved: September 18, 2013.

R. Joseph Durbala,

IRS Reports Clearance Officer.

[FR Doc. 2013-24257 Filed 10-2-13; 8:45 am]

BILLING CODE 4830-01-P



FEDERAL REGISTER

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October 3, 2013

Part II

Department of the Interior

Fish and Wildlife Service

50 CFR Part 17

Endangered and Threatened Wildlife and Plants; Determination of
Endangered Status for the Taylor's Checkerspot Butterfly and Threatened
Status for the Streaked Horned Lark; Final Rule

DEPARTMENT OF THE INTERIOR**Fish and Wildlife Service****50 CFR Part 17**

[Docket No. FWS-R1-ES-2012-0080;
4500030113]

RIN 1018-AY18

Endangered and Threatened Wildlife and Plants; Determination of Endangered Status for the Taylor's Checkerspot Butterfly and Threatened Status for the Streaked Horned Lark

AGENCY: Fish and Wildlife Service, Interior.

ACTION: Final rule.

SUMMARY: We, the U.S. Fish and Wildlife Service (Service), determine endangered status for the Taylor's checkerspot butterfly (*Euphydryas editha taylori*) and threatened status for the streaked horned lark (*Eremophila alpestris strigata*) under the Endangered Species Act of 1973 (Act), as amended. This final rule adds these species to the List of Endangered and Threatened Wildlife and implements the Federal protections provided by the Act for

these species. This rule also establishes a special rule under section 4(d) of the Act to exempt certain activities from the take prohibitions of the Act and our regulations in order to provide for the conservation of the streaked horned lark.

DATES: This rule is effective November 4, 2013.

ADDRESSES: This final rule is available on the Internet at <http://www.regulations.gov> and <http://www.fws.gov/wafwo/TCBSHL.html>. Comments and materials received, as well as supporting documentation used in the preparation of this rule, will be available for public inspection, by appointment, during normal business hours at: U.S. Fish and Wildlife Service, Washington Fish and Wildlife Office, 510 Desmond Drive SE., Suite 102, Lacey, WA 98503-1263; 360-753-9440 (telephone); 360-753-9008 (facsimile).

FOR FURTHER INFORMATION CONTACT: Ken Berg, Manager, U.S. Fish and Wildlife Service, Washington Fish and Wildlife Office, 510 Desmond Drive, Suite 102, Lacey, WA 98503-1263; by telephone 360-753-9440; or by facsimile 360-753-9405. Persons who use a

telecommunications device for the deaf (TDD) may call the Federal Information Relay Service (FIRS) at 800-877-8339.

SUPPLEMENTARY INFORMATION:**Executive Summary***Why We Need To Publish a Rule*

On October 11, 2012 (77 FR 61938), we published a proposed rule to list the Taylor's checkerspot butterfly (*Euphydryas editha taylori*) as an endangered species, and the streaked horned lark (*Eremophila alpestris strigata*) as a threatened species. In this final rule, we are finalizing our proposed determinations for these species under the Act. The Act requires that a final rule be published in order to add species to the List of Endangered and Threatened Wildlife to provide protections under the Act. Elsewhere in today's **Federal Register**, we are finalizing designation of critical habitat for these species under the Act. The final critical habitat designations and supporting documents are published under Docket No. FWS-R1-ES-2013-0009. The table below summarizes our determination for each of these species:

TABLE 1—SUMMARY OF THE STATUS AND RANGE OF THE TAYLOR'S CHECKERSPOT BUTTERFLY AND THE STREAKED HORNED LARK

Species	Present range	Status
Taylor's checkerspot butterfly— <i>Euphydryas editha taylori</i> .	British Columbia, Canada; Clallam, Pierce, and Thurston Counties, WA; and Benton County, OR.	Endangered.
Streaked horned lark— <i>Eremophila alpestris strigata</i> .	Grays Harbor, Mason, Pacific, Pierce, Thurston, Cowlitz, and Wahkiakum Counties, WA; Benton, Clackamas, Clatsop, Columbia, Lane, Linn, Marion, Multnomah, Polk, Washington, and Yamhill Counties, OR.	Threatened.

This rule:

- Lists the Taylor's checkerspot butterfly as an endangered species under the Act because it is currently in danger of extinction throughout the species' range.
- Lists the streaked horned lark as a threatened species under the Act because it is likely to become endangered within the foreseeable future throughout the species' range due to continued threats.
- Establishes a special rule under section 4(d) of the Act to exempt certain airport maintenance activities and operations, agricultural activities, and noxious weed control activities from the take prohibitions of the Act and our regulations in order to provide for the conservation of the streaked horned lark.

The Basis for Our Action

Under the Act, we can determine that a species is an endangered or threatened

species based on any of five factors: (A) The present or threatened destruction, modification, or curtailment of its habitat or range; (B) overutilization for commercial, recreational, scientific, or educational purposes; (C) disease or predation; (D) the inadequacy of existing regulatory mechanisms; or (E) other natural or manmade factors affecting its continued existence.

We have determined that these species are impacted by one or more of the following factors to the extent that the species meets the definition of an endangered or threatened species under the Act:

- Habitat loss through conversion and degradation of habitat, particularly from agricultural and urban development, successional changes to grassland habitat, military training, and the spread of invasive plants;
- Predation (streaked horned lark);

- Inadequate existing regulatory mechanisms that allow significant threats such as habitat loss;
- Other natural or manmade factors, including low genetic diversity, small or isolated populations, low reproductive success, and declining population sizes;
- Aircraft strikes and training at airports (streaked horned lark); and
- Pesticide use (potential threat for the Taylor's checkerspot butterfly).

Peer Review and Public Comment

We sought comments from independent specialists to ensure that our determination is based on scientifically sound data, assumptions, and analyses. We invited these peer reviewers to comment on our listing proposal. We also considered all comments and information we received during the comment periods and the public hearing.

Background

It is our intent to discuss only those topics directly relevant to the listing determinations for the Taylor's checkerspot butterfly and the streaked horned lark in this final rule. A summary of topics relevant to this final rule is provided below. Additional information on both species may be found in the proposed rule, which was published October 11, 2012 (77 FR 61938).

Previous Federal Action

Candidate History

We first identified the Taylor's checkerspot butterfly and the streaked horned lark as candidates for listing in our 2001 candidate notice of review (CNOR) (66 FR 54808; October 30, 2001). Each candidate species is assigned a listing priority number (LPN) that is based on the immediacy and magnitude of threats and taxonomic status. In 2001, both of these species were assigned an LPN of 6, which reflects threats of a high magnitude that are not considered imminent.

In 2004, based on new information, we determined that the Taylor's checkerspot butterfly faced imminent threats of a high magnitude, and we assigned it an LPN of 3 (69 FR 24876; May 4, 2004). In 2006, the streaked horned lark was also assigned an LPN of 3, based on a review indicating that the continued loss of suitable lark habitat, risks to the wintering populations, and plans for development, hazing, and military training activities were imminent threats to the species (71 FR 53756; September 12, 2006). The candidate status, with an LPN of 3 for each species, for the Taylor's checkerspot butterfly and the streaked horned lark was most recently reaffirmed in the November 21, 2012, CNOR (77 FR 69994). The U.S. Fish and Wildlife Service (Service) completed action plans for the Taylor's checkerspot butterfly and the streaked horned lark and set conservation targets and identified actions to achieve those targets over the next 5 years. These plans can be found on the Service's Web site at: http://ecos.fws.gov/docs/action_plans/doc3089.pdf (Taylor's checkerspot butterfly) and http://www.fws.gov/wafwo/pdf/STHL_Action%20Plan_Sept2009.pdf (streaked horned lark).

On October 11, 2012, we published a proposed rule in the **Federal Register** to list the Taylor's checkerspot butterfly as endangered and the streaked horned lark as threatened, and to designate critical habitat for these two species (77 FR 61938). This proposed rule also

contained a proposed special rule under section 4(d) of the Act for the streaked horned lark. The 60-day comment period on that proposed rule closed on December 10, 2012. On April 3, 2013, we published a document making available the draft economic analysis of the proposed critical habitat designations for the Taylor's checkerspot butterfly and the streaked horned lark, and an amended required determinations section of the proposed designations (78 FR 20074). We additionally announced three public information workshops and a public hearing, held in April 2013, on the proposed rule to list the species and the associated critical habitat designations. The public comment period was reopened for 30 days, ending on May 3, 2013. The final rule designating critical habitat for these two species is published elsewhere in today's **Federal Register**.

Species Information—Taylor's Checkerspot Butterfly

Taylor's checkerspot butterfly is a medium-sized, colorfully marked butterfly with a checkerboard pattern on the upper (dorsal) side of the wings (Pyle 2002, p. 310). Their wings are orange with black and yellowish (or white) spot bands, giving them a checkered appearance (Pyle 1981, p. 607; Pyle 2002, p. 310). The Taylor's checkerspot butterfly was historically known to occur in British Columbia, Washington, and Oregon, and its current distribution represents a reduction from over 80 locations rangewide to 14.

Taxonomy and Species Description

Taylor's checkerspot butterfly is a subspecies of Edith's checkerspot butterfly (*Euphydryas editha*). The Taylor's checkerspot butterfly was originally described by W.H. Edwards (1888) from specimens collected from Beacon Hill Park in Victoria, British Columbia (BC). *Euphydryas editha taylori* is recognized as a valid subspecies by the Integrated Taxonomic Information System (ITIS 2012a). It is one of several rare and threatened subspecies of Edith's checkerspot butterfly, including the Bay checkerspot (*E. e. bayensis*) from the San Francisco Bay area and the Quino checkerspot (*E. e. quino*) from the San Diego, California, region; both are federally listed under the Act. For further information, see the proposed rule published on October 11, 2012 (77 FR 61938).

Distribution

Historically, the Taylor's checkerspot butterfly was likely distributed throughout grassland habitat found on

prairies, shallow-soil balds (a bald is a small opening on slopes in a treeless area, dominated by herbaceous vegetation), grassland bluffs, and grassland openings within a forested matrix in south Vancouver Island, northern Olympic Peninsula, the south Puget Sound, and the Willamette Valley. The historical range and abundance of the subspecies are not precisely known because extensive searches for the Taylor's checkerspot butterfly did not occur until recently. Northwest prairies were formerly more common, larger, and interconnected, and would likely have supported a greater distribution and abundance of the Taylor's checkerspot butterflies than prairie habitat does today. According to Dr. Robert Pyle (2012, *in litt.*):

"*Euphydryas editha taylori* was previously more widely distributed and much denser in occurrence than is presently the case on the Puget Prairies. The checkerspot was abundant on the Mima Mounds Natural Area Preserve (NAP) and surrounding prairies in 1970. In the mid-eighties, Taylor's checkerspot butterfly flew by the thousands on Rock Prairie, a private farm property west of Tenino. All of these sites have since been rendered unsuitable for *E. e. taylori* through management changes, and Taylor's checkerspot butterfly has dropped out of them; meanwhile, many other colonies have disappeared in their vicinity through outright development or conversion of the habitat. The same is true for bluff-top colonies I knew in the early '70s at Dungeness. The ongoing loss and alteration of habitat in the western Washington grasslands has without question led to the shrinkage of Taylor's checkerspot occurrences from a regional constellation to a few small clusters."

Before the recent declines observed over roughly the last 10 or 15 years, the Taylor's checkerspot butterfly was known from an estimated 80 locations: 24 in British Columbia, 43 in Washington, and 13 in Oregon (Hinchliff 1996, p. 115; Shepard 2000, pp. 25–26; Vaughan and Black 2002, p. 6; Stinson 2005, pp. 93–96, 123–124). These sites included coastal and inland prairies on southern Vancouver Island and surrounding islands in the Straits of Georgia, British Columbia and the San Juan Island archipelago (Hinchliff 1996, p. 115; Pyle 2002, p. 311), as well as open prairies on post-glacial gravelly outwash and shallow-soil balds in Washington's Puget Trough (Potter 2010, p. 1), the north Olympic Peninsula (Holtrop 2010, p. 1), and grassland habitat within a forested matrix in Oregon's Willamette Valley (Benton County 2010, Appendix N, p. 5).

The 1949 field season summary for North American lepidoptera (Hopfinger 1949, p. 89) states that an abundant

distribution of the Taylor's checkerspot butterfly was known from the south Puget Sound prairies: "*Euphydryas editha (taylori)*, as usual, appeared by the thousands on Tenino Prairie." By 1989, Pyle (p. 170) had reported that there were fewer than 15 populations remaining rangewide. Surveys in 2001 and 2002 of the three historical locations on Hornby Island, British Columbia, failed to detect any the Taylor's checkerspot butterflies; the last observation of the Taylor's checkerspot butterfly from this location was 1995 (Committee on the Status of Endangered Wildlife in Canada (COSEWIC) 2011, p. 15). By fall 2002, only six populations were known to occur rangewide, four from the south Puget Sound region in Washington, one from San Juan County, Washington, and one from the Willamette Valley of Oregon (USFWS 2002a).

Current Range and Distribution

Nearly all localities for the Taylor's checkerspot butterflies in British Columbia have been lost; the only location currently known from British Columbia was discovered in 2005 (COSEWIC 2011, p. iv). In Oregon, although many surveys have been conducted at a variety of historical and potential locations within the Willamette Valley, many of those have failed to detect the species; the number of locations occupied by Taylor's checkerspot butterflies in Oregon has declined from 13 to 2 (Ross 2011, *in litt.*, p. 1). In Washington State, more than 43 historical locales were documented for the Taylor's checkerspot butterfly. In 2012, there were 11 documented locations for the Taylor's checkerspot butterflies with only 1 of the localities harboring more than 1,000 individuals, and the majority of known sites have daily counts of fewer than 100 individual butterflies.

Due to the limited distribution and few populations of the Taylor's checkerspot butterfly, surveys for this subspecies are quite thorough, generally consisting of a minimum of 3 days of visits during the flight period, and occasionally numbering up to 10 or 12 days of counts. Multiple days of counts during the annual flight period greatly increase the reliability of abundance data for butterflies; thus, we believe the data on numbers of the Taylor's checkerspot butterflies to be highly reliable.

Canada—After years of surveys (2001 through 2004) at historical population sites in British Columbia that failed to detect the Taylor's checkerspot butterflies (COSEWIC 2011, pp. 15–16), a population was discovered on

Denman Island in 2005. Denman Island is located approximately 106 miles (170 km) north of Victoria, British Columbia, along the eastern shores of Vancouver Island in the Straits of Georgia. The Taylor's checkerspot butterfly records from British Columbia date from 1888 through 2011, when the last survey was conducted. Surveys are regularly conducted on Vancouver Island and other historical locations (Page *et al.* 2009, p. iv). In 2008, a single Taylor's checkerspot butterfly was detected on Vancouver Island in the Courtney-Comox area, where they had not been observed since 1931 (COSEWIC 2011, pp. 15–16). Additional surveys were conducted at this location, and only the single butterfly was observed. It is likely that this single adult had dispersed from the Denman Island population located approximately 0.3 mi (0.5 km) away. As of 2012, the only currently known occurrence of the Taylor's checkerspot butterfly in Canada is on Denman Island (Page *et al.* 2009, p. 2; COSEWIC 2011, p. iv).

Washington—In Washington, surveys have been conducted annually for Taylor's checkerspot butterflies in currently and historically occupied sites. Surveys on south Puget Sound prairies have been conducted from 1997 through 2011, by the Washington Department of Fish and Wildlife (WDFW), Washington Department of Natural Resources (WDNR), Center for Natural Lands Management (previously The Nature Conservancy of Washington), and personnel from the Wildlife Branch of Joint Base Lewis-McChord (JBLM; formerly known as Fort Lewis Army Base and McChord Air Force Base, respectively). In 1994, a report from Char and Boersma (1995) indicated the presence of Taylor's checkerspot butterflies on the 13th Division Prairie on JBLM; no additional locations have been reported since 1999, when a handful of Taylor's checkerspot butterflies were observed by WDFW (Hays *et al.* 2000, p. 13). Surveys have been conducted annually on the 13th Division Prairie since 2000; however, no Taylor's checkerspot butterflies have been detected during the spring flight period (Ressa 2003, pp. 7, 14; Gilbert 2004, p. 5; Linders 2012c, *in litt.*). Taylor's checkerspot butterflies are believed to be extirpated from the 13th Division Prairie at JBLM (Linders 2012c, *in litt.*).

Four other sites in Thurston County (Glacial Heritage, Scatter Creek north and south units, and Rocky Prairie NAP) had Taylor's checkerspot butterflies present in 1997. No Taylor's checkerspot butterflies were observed during surveys conducted in 1998 and

1999 at these locations (Hays *et al.* 2000, p. 13; Stinson 2005, p. 95). Subsequent annual surveys at Glacial Heritage and Scatter Creek, south unit, have not detected Taylor's checkerspot butterflies until reintroduction through translocation to these sites resulted in occupation (Linders and Olson 2011, slide number 17; Bidwell 2012, pers. comm.). We did not count these sites as occupied in 2012, but after 3 years of positive survey data, we tentatively consider them occupied.

Four historical locales for Taylor's checkerspot butterflies were permanently lost in the south Puget Sound region to development (Dupont, JBLM Training Area 7S, Spanaway, and Lakewood in Pierce County) or conversion to agriculture (Rock Prairie in Thurston County) (Stinson 2005, pp. 93–96). In addition, several older Washington specimens are labeled with general or imprecise locality names on their collection labels (e.g., Olympia 1893; Tenino 1929; Shelton 1971; Dungeness 1999) (Stinson 2005, pp. 94–95). Some of these site names may refer to unknown or currently occupied locales, but due to the imprecise nature of their collection data, the actual location of these collection sites has not been determined.

Surveys of 15 prairies within the south Puget Sound landscape in 2001 and 2002 located Taylor's checkerspot butterflies on only 4 sites in Thurston and Pierce Counties (Stinson 2005, pp. 93–96). Three of the four sites were found in the Bald Hill landscape in southeast Thurston County. Taylor's checkerspot butterflies were documented at the Bald Hills through 2007, but there have been no detections since, despite regular and thorough surveying from 2001 through 2011 (Potter 2011, p. 3). This number has declined substantially in recent years as habitat has become increasingly shaded and modified by encroaching trees, nonnative grasses, and the invasive, nonnative shrub Scot's broom (*Cytisus scoparius*). Potter (2010, p. 1) reported multiple site visits to conduct redundant surveys in formerly occupied bald habitat during the 2008–2010 flight period with no Taylor's checkerspot butterflies observed. The subspecies is presumed to be extirpated from this location.

The 91st Division Prairie is located on JBLM and encompasses approximately 7,600 acres (ac) (3,075 hectares (ha)) of native grassland. Taylor's checkerspot butterflies are documented at two locations within 91st Division Prairie, Range 50–51, and Range 72–76. The only extant, naturally occurring population of the Taylor's checkerspot

butterfly within the south Puget Sound is located here, and has served as the source population for the collection of eggs and adult butterflies for captive propagation for reintroduction efforts. This is the largest population of the Taylor's checkerspot butterfly, and it occurs in several small, discrete patches of habitat. Maximum daily counts from surveys conducted at this site between 2005–2012 ranged from 70 to 2,070 (Randolph, unpub. data, p. 79; Wolford 2006; Olson and Linders 2010; Linders 2011b; Linders 2012d, p. 27).

In the course of conducting surveys for another rare grassland-associated butterfly found in Washington, the island marble (*Euchloe ausonides insulanus*), over 150 potential grassland locations where historical locales for Taylor's checkerspot butterflies exist (Pyle 1989, p. 170) were surveyed for the Taylor's checkerspot butterfly in the north Puget Sound region during spring of 2005 through the spring of 2011 (Miskelly 2005; Potter *et al.* 2011). Although the flight periods and habitat of both butterflies overlap, no Taylor's checkerspot butterflies were found during these surveys.

Several historical sites with potentially suitable habitat were surveyed on the north Olympic Peninsula (Clallam County) during spring 2003. The Taylor's checkerspot butterfly was found to occupy five locations in this geographic area in 2003. At one historical site near the mouth of the Dungeness River, only a few individuals were detected. However, no Taylor's checkerspot butterflies were detected at this location during surveys from 2005 through 2009 (McMillan 2007, pers. comm.; Potter 2012, pers. comm.). The other four populations were found on grassy openings on shallow-soiled bald habitat west of the Elwha River. Two of these sites were estimated to support at least 50 to 100 adult Taylor's checkerspot butterflies (Dan Kelly Ridge and Eden Valley), and just a few individuals were found at the two other bald sites (Striped Peak and Highway 112) (Hays 2011, p. 1). Subsequent surveys at the latter two sites, Striped Peak and Highway 112, from 2004–2011, have failed to relocate or detect any Taylor's checkerspot butterflies.

In 2006, a population was discovered near the town of Sequim. Taylor's checkerspot butterflies have since been detected annually at this location from 2006–2011 (Hays 2009, pers. comm.; Hays 2011, p. 29). At this site, Taylor's checkerspot butterflies inhabit approximately 5 ac (2 ha) of estuarine, deflation plain (or back beach), a road with restricted use, and farm-edge

habitat. In 2010, a maximum count of 568 Taylor's checkerspot butterflies was recorded on a single day (April 3, 2010); normally peak daily counts from this location range from 50 to 240 individuals (Hays 2011, p. 29).

Since 2007, three new Taylor's checkerspot butterfly populations have been found in Clallam County on Olympic National Forest lands. All three sites are located in the Dungeness River watershed: Bear Mountain, Three O'Clock Ridge, and Upper Dungeness (Holtrop 2009, p. 2). The U.S. Forest Service (Forest Service) and WDFW are currently monitoring butterfly numbers at these sites annually. As of 2012, a total of six occupied sites are known from Clallam County: Sequim, Eden Valley, Dan Kelly Ridge, Bear Mountain, Three O'Clock Ridge, and Upper Dungeness.

Oregon—All of the 13 historical locales within the Willamette Valley of western Oregon have been surveyed regularly by local lepidopterists (McCorkle 2008, pers. comm.; Ross 2005; Stinson 2005, p. 124; Benton County 2010, p. 13; Potter 2012, pers. comm.). Taylor's checkerspot butterflies were formerly reported to exist in large numbers ("swarms on the meadows beside Oak Creek") on the upland prairies of the Willamette Valley in Lane, Benton, and Polk Counties (Dornfeld 1980, p. 73). Now only remnant populations exist in Oregon. In 1999, Taylor's checkerspot butterflies were discovered along the Bonneville Power Administration (BPA) right-of-way corridor in an area known as Fitton Green-Cardwell Hill in Benton County. In 2004, surveys for the Taylor's checkerspot butterfly were expanded in the Willamette Valley, where a second population was discovered on grassland openings within the Beazell Memorial Forest in Benton County. These two locations for the Taylor's checkerspot butterfly are currently the only occupied patches known from Oregon.

Summary—Based on historical and current data, the distribution and abundance of Taylor's checkerspot butterflies have declined significantly rangewide, with the majority of local extirpations occurring from approximately the mid-1990s in Canada (COSEWIC 2011, p. 15), 1999–2004 in south Puget Sound, and around 2007 at the Bald Hills location in Washington. Several new locations harboring Taylor's checkerspot butterflies have been rediscovered on historical sites on WDNR lands (USFWS 2004, pp. 3–4; USFWS 2007, p. 5) and have also been found at new locations on natural and manipulated balds within the Dungeness River watershed on the north

Olympic Peninsula in Washington. Currently 14 individual locations are considered occupied by the Taylor's checkerspot butterfly rangewide: Denman Island (British Columbia, Canada); Eden Valley, Dan Kelly Ridge, Sequim, Bear Mountain, Three O'Clock Ridge, and Upper Dungeness (north Olympic Peninsula, Washington); Range 72–76, Range 50–51, Pacemaker Training Area 14 (JBLM, Washington); Scatter Creek, and Glacial Heritage (south Puget Sound, Washington); and Beazell Memorial Forest, and Fitton Green-Cardwell Hill (Oregon).

Habitat

Taylor's checkerspot butterfly occupies open grassland habitat found on prairies, shallow-soil balds (Chappell 2006, p. 1), grassland bluffs, and grassland openings within a forested matrix in south Vancouver Island, British Columbia; the north Olympic Peninsula and the south Puget Sound, Washington; and the Willamette Valley, Oregon. The recently discovered population on Denman Island in Canada, discovered in May 2005, occupies an area that had been clear-cut harvested, and is now dominated by, and maintained as, grass and forb vegetation (for details, see 77 FR 61938; October 11, 2012). In British Columbia, Canada, Taylor's checkerspot butterflies were historically known to occupy coastal grassland habitat on Vancouver Island and nearby islands, not forests that were converted to early successional conditions by clear-cutting. In Washington, Taylor's checkerspot butterflies inhabit glacial outwash prairies in the south Puget Sound region. Northwest prairies were formerly more common, larger, and interconnected, and would likely have supported a greater distribution and abundance of Taylor's checkerspot butterflies than prairie habitat does today (Pyle 2012, *in litt.*). On the northeast Olympic Peninsula they use shallow-soil balds and grasses within a forested landscape, as well as roadsides, former clear-cut areas within a forested matrix, and a coastal stabilized dune site near the Strait of Juan de Fuca (Stinson 2005, pp. 93–96). The two Oregon sites are on grassland hills in the Willamette Valley within a forested matrix (Vaughan and Black 2002, p. 7; Ross 2008, p. 1; Benton County 2010, Appendix N, p. 5).

Biology

Taylor's checkerspot butterflies produce one brood per year. They overwinter (diapause) in the fourth or fifth larval instar (developmental) phase and have a flight period as adults of 10

to 14 days, usually in May, although depending on local site and climatic conditions, the flight period begins in late April and extends into early July, as in Oregon, where the flight season has been documented as lasting up to 45 days (Ross 2008, p. 2). All nontropical checkerspot butterflies, including the Taylor's checkerspot butterfly, have the capability to reenter diapause prior to metamorphosis during years that weather is extremely inhospitable or when the larval food resources are restricted (Ehrlich and Hanski 2004, p. 22). It is important to note that while Taylor's checkerspot butterflies are obvious while on the wing during the flight period, they are present and relatively sedentary throughout the rest of the year while in their larval form; we consider them a resident subspecies year-round and especially vulnerable to many forms of disturbance while in the life-history stages prior to metamorphosis.

Female Taylor's checkerspot butterflies and their larvae utilize plants that contain defensive chemicals known as iridoid glycosides, which have been recognized to influence the selection of oviposition sites by adult nymphalid butterflies (butterflies in the family Nymphalidae) (Murphy *et al.* 2004, p. 22; Page *et al.* 2009, p. 2), and function as a feeding stimulant for some checkerspot larvae (Kuussaari *et al.* 2004, p. 147). As maturing larvae feed, they accumulate these defensive chemical compounds from their larval host plants into their bodies. According to the work of Bowers (1981, pp. 373–374), this accumulation appears to deter predation. These larval host plants include members of the Broomrape family (Orobanchaceae), such as *Castilleja* (paintbrushes) and *Orthocarpus*, which is now known as *Triphysaria* (owl's clover), and native and nonnative *Plantago* species, which are members of the Plantain family (Plantaginaceae) (Pyle 2002, p. 311; Vaughan and Black 2002, p. 8). The recent rediscovery in 2005 of Taylor's checkerspot butterflies in Canada led to the observation that additional food plants (*Veronica serpyllifolia* (thymeleaf speedwell) and *V. beccabunga* ssp. *americana* (American speedwell)) were being utilized by Taylor's checkerspot butterfly larvae (Heron 2008, pers. comm.; Page *et al.* 2009, p. 2). Taylor's checkerspot butterfly larvae had previously been confirmed feeding on *Plantago lanceolata* (narrow-leaf plantain) and *P. maritima* (sea plantain) in British Columbia (Guppy and Shepard 2001, p. 311), narrow-leaf plantain and *Castilleja hispida* (harsh

paintbrush) in Washington (Char and Boersma 1995, p. 29; Pyle 2002, p. 311; Severns and Grosboll 2011, p. 4), and exclusively on narrow-leaf plantain in Oregon (Dornfeld 1980, p. 73; Ross 2008, pers. comm.; Severns and Warren 2008, p. 476). In 2012, the Taylor's checkerspot butterfly was documented preferentially ovipositing on the threatened *Castilleja levisecta* (golden paintbrush) in studies conducted in Washington, and in 2013, *Castilleja levisecta* was subsequently observed being utilized as a larval host plant in both Washington and Oregon (Kaye 2013; Aubrey 2013, *in litt.*), as originally hypothesized by Dr. Robert Pyle (Pyle 2002, p. 311; Pyle 2007, pers. comm.).

Species Information—Streaked Horned Lark

Streaked horned lark is endemic to the Pacific Northwest (historically found in British Columbia, Washington, and Oregon; Altman 2011, p. 196) and is a subspecies of the wide-ranging horned lark (*Eremophila alpestris*). Horned larks are small, ground-dwelling birds, approximately 6–8 inches (in) (16–20 centimeters (cm)) in length (Beason 1995, p. 2). Adults are pale brown, but shades of brown vary geographically among the subspecies. The male's face has a yellow wash in most subspecies. Adults have a black bib, black whisker marks, black “horns” (feather tufts that can be raised or lowered), and black tail feathers with white margins (Beason 1995, p. 2). Juveniles lack the black face pattern and are varying shades of gray, from almost white to almost black with a silver-speckled back (Beason 1995, p. 2). The streaked horned lark has a dark brown back, yellowish underparts, a walnut brown nape, and yellow eyebrow stripe and throat (Beason 1995, p. 4). This subspecies is conspicuously more yellow beneath and darker on the back than almost all other subspecies of horned lark. The combination of small size, dark brown back, and yellow underparts distinguishes this subspecies from all adjacent forms.

Taxonomy and Species Description

The horned lark is a bird found throughout the northern hemisphere (Beason 1995, p. 1); it is the only true lark (Family Alaudidae, Order Passeriformes) native to North America (Beason 1995, p. 1). There are 42 subspecies of horned lark worldwide (Clements *et al.* 2011, entire). Twenty-one subspecies of horned larks are found in North America; 15 subspecies occur in western North America (Beason 1995, p. 4). Subspecies of horned larks are based primarily on differences in

color, body size, and wing length. Molecular analysis has further borne out these morphological distinctions (Drovetski *et al.* 2005, p. 875). Western populations of horned larks are generally paler and smaller than eastern and northern populations (Beason 1995, p. 3). The streaked horned lark was first described as *Otocorys alpestris strigata* by Henshaw (1884, pp. 261–264, 267–268); the type locality was Fort Steilacoom, Washington (Henshaw 1884, p. 267). There are four other breeding subspecies of horned larks in Washington and Oregon: pallid horned lark (*E. a. alpina*), dusky horned lark (*E. a. merrilli*), Warner horned lark (*E. a. lamprochroma*), and Arctic horned lark (*E. a. articola*) (Marshall *et al.* 2003, p. 426; Wahl *et al.* 2005, p. 268). None of these other subspecies breed within the range of the streaked horned lark, but all four subspecies frequently overwinter in mixed species flocks in the Willamette Valley (Marshall *et al.* 2003, pp. 425–427).

Drovetski *et al.* (2005, p. 877) evaluated the genetic distinctiveness, conservation status, and level of genetic diversity of the streaked horned lark using the complete mitochondrial ND2 gene. Streaked horned larks were closely related to the California samples and only distantly related to the three closest localities (alpine Washington, eastern Washington, and Oregon). There was no evidence of immigration into the streaked horned lark's range from any of the sampled localities. Analyses indicate that the streaked horned lark population is well-differentiated and isolated from all other sampled localities, including coastal California, and has “remarkably low genetic diversity” (Drovetski *et al.* 2005, p. 875).

Streaked horned lark is differentiated and isolated from all other sampled localities, and although it was “. . . historically a part of a larger Pacific Coast lineage of horned larks, it has been evolving independently for some time and can be considered a distinct evolutionary unit” (Drovetski *et al.* 2005, p. 880). Thus, genetic analyses support the subspecies designation for the streaked horned lark (Drovetski *et al.* 2005, p. 880), which has been considered a relatively well-defined subspecies based on physical (phenotypic) characteristics (Beason 1995, p. 4). The streaked horned lark is recognized as a valid subspecies by the Integrated Taxonomic Information System (ITIS 2012c). For more information on taxonomy, see the proposed rule published on October 11, 2012 (77 FR 61938).

Distribution

Historical Range and Distribution

Streaked horned lark's breeding range historically extended from southern British Columbia, Canada, south through the Puget lowlands and outer coast of Washington, along the lower Columbia River, through the Willamette Valley, the Oregon coast and into the Umpqua and Rogue River Valleys of southwestern Oregon.

British Columbia—Streaked horned lark was never considered common in British Columbia, but local breeding populations were known on Vancouver Island, in the Fraser River Valley, and near Vancouver International Airport (Campbell *et al.* 1997, p. 120; COSEWIC 2003, p. 5). The population declined throughout the 20th century (COSEWIC 2003, pp. 13–14); breeding has not been confirmed since 1978, and the streaked horned lark is considered to be extirpated in British Columbia (COSEWIC 2003, p. 15). A single streaked horned lark was sighted on Vancouver Island in 2002 (COSEWIC 2003, p. 16).

Washington—The first report of the streaked horned lark in the San Juan Islands, Washington, was in 1948 from Cattle Point (Goodge 1950, p. 28). There are breeding season records of streaked horned larks from San Juan and Lopez Islands in the 1950s and early 1960s (Retfalvi 1963, p. 13; Lewis and Sharpe 1987, pp. 148, 204), but the last record dates from 1962, when seven individuals were seen in July on San Juan Island at Cattle Point (Retfalvi 1963, p. 13). The WDFW conducted surveys in 1999, in the San Juan Islands (Rogers 1999, pp. 3–4). Suitable nesting habitat was visually searched and a tape recording of streaked horned lark calls was used to elicit responses and increase the chance of detections (Rogers 1999, p. 4). In 2000, MacLaren and Cummins (in Stinson 2005, p. 63) surveyed several sites recommended by Rogers (1999), including Cattle Point and Lime Kiln Point on San Juan Island. No larks were detected in the San Juan Islands during either survey effort (Rogers 1999, p. 4; Stinson 2005, p. 63).

There are a few historical records of streaked horned larks on the outer coast of Washington near Lake Quinalt, the Quinalt River and the Humptulips River in the 1890s (Jewett *et al.* 1953, p. 438; Rogers 2000, p. 26). More recent records reported larks at Leadbetter Point and Graveyard Spit in Pacific County in the 1960s and 1970s (Rogers 2000, p. 26). Surveys conducted between 1999 and 2004 found larks at Leadbetter Point, Graveyard Spit,

Damon Point and Midway Beach on the Outer Coast (Stinson 2005, p. 63).

There are scattered records of streaked horned larks in the northern Puget Trough, including sightings in Skagit and Whatcom Counties in the mid-20th century (Altman 2011, p. 201). The last recorded sighting of a streaked horned lark in the northern Puget Trough was at the Bellingham Airport in 1962 (Stinson 2005, p. 52).

Over a century ago, the streaked horned lark was described as a common summer resident in the prairies of the Puget Sound region in Washington (Bowles 1898, p. 53; Altman 2011, p. 201). Larks were considered common in the early 1950s “in the prairie country south of Tacoma” and had been observed on the tide flats south of Seattle (Jewett *et al.* 1953, p. 438). By the mid-1990s, only a few scattered breeding populations existed on the south Puget Sound on remnant prairies and near airports (Altman 2011, p. 201).

There are sporadic records of streaked horned larks along the Columbia River. Sightings on islands near Portland, Oregon, date back to the early 1900s (Rogers 2000, p. 27). A number of old reports of streaked horned larks from the Columbia River east of the Cascade Mountains have been re-examined, and have been recognized as the subspecies *Eremophila alpestris merrilli* (Rogers 2000, p. 27; Stinson 2005, p. 51). On the lower Columbia River, it is probable that streaked horned larks breed only as far east as Clark County, Washington, and Multnomah County, Oregon (Rogers 2000, p. 27; Stinson 2005, p. 51).

Oregon—Streaked horned lark's historical range extends south through the Willamette Valley of Oregon, where it was considered abundant and a common summer resident over a hundred years ago (Johnson 1880, p. 636; Anthony 1886, p. 166). In the 1940s, the streaked horned lark was described as a common permanent resident in the southern Willamette Valley (Gullion 1951, p. 141). By the 1990s, the streaked horned lark was called uncommon in the Willamette Valley, nesting locally in small numbers in large open fields (Gilligan *et al.* 1994, p. 205; Altman 1999, p. 18). In the early 2000s, a population of more than 75 breeding pairs was found at the Corvallis Municipal Airport, making this the largest population of streaked horned larks known (Moore 2008, p. 15).

Streaked horned lark, while occasionally present, was never reported to be more than uncommon on the Oregon coast. The streaked horned lark was described as an uncommon and local summer resident all along the

coast on sand spits (Gilligan *et al.* 1994, p. 205); a few nonbreeding season records exist for the coastal counties of Clatsop, Tillamook, Coos, and Curry (Gabrielson and Jewett 1940, p. 403). Small numbers of streaked horned larks were known to breed at the South Jetty of the Columbia River in Clatsop County, but the site was abandoned in the 1980s (Gilligan *et al.* 1994, p. 205). There are no recent occurrence records from the Oregon coast.

In the early 1900s, the streaked horned lark was considered a common permanent resident of the Umpqua and Rogue River Valleys (Gabrielson and Jewett 1940, p. 402). The last confirmed breeding record in the Rogue Valley was in 1976 (Marshall *et al.* 2003, p. 425). There are no recent reports of streaked horned larks in the Umpqua Valley (Gilligan *et al.* 1994, p. 205; Marshall *et al.* 2003, p. 425).

Current Range and Distribution

Breeding Range—Streaked horned lark has been extirpated as a breeding subspecies throughout much of its range, including all of its former range in British Columbia, the San Juan Islands, the northern Puget Trough, the Washington coast north of Grays Harbor, the Oregon coast, and the Rogue and Umpqua Valleys in southwestern Oregon (Pearson & Altman 2005, pp. 4–5).

The current range of the streaked horned lark can be divided into three regions: (1) The south Puget Sound in Washington; (2) the Washington coast and lower Columbia River islands (including dredge spoil deposition sites near the Columbia River in Portland, Oregon); and (3) the Willamette Valley in Oregon.

In the south Puget Sound, the streaked horned lark is found in Mason, Pierce, and Thurston Counties, Washington (Rogers 2000, p. 37; Pearson and Altman 2005, p. 23; Pearson *et al.* 2005a, p. 2; Anderson 2009, p. 4). Recent studies have found that streaked horned larks currently breed on six sites in the south Puget Sound. Four of these sites (13th Division Prairie, Gray Army Airfield, McChord Field, and 91st Division Prairie) are on JBLM. Small populations of larks also breed at the Olympia Regional Airport and the Port of Shelton's Sanderson Field (airport) (Pearson and Altman 2005, p. 23; Pearson *et al.* 2008, p. 3).

On the Washington coast, there are four known breeding sites: (1) Damon Point; (2) Midway Beach; (3) Graveyard Spit; and (4) Leadbetter Point in Grays Harbor and Pacific Counties. On the lower Columbia River, streaked horned larks breed on several of the sandy

islands downstream of Portland, Oregon. Recent surveys have documented breeding streaked horned larks on Rice, Miller Sands Spit, Pillar Rock, Welch, Tenasillahe, Whites/Browns, Wallace, Crims, and Sandy Islands in Wahkiakum and Cowlitz Counties in Washington, and Columbia and Clatsop Counties in Oregon (Pearson and Altman 2005, p. 23; Anderson 2009, p. 4; Lassen 2011, *in litt.*). The Columbia River forms the border between Washington and Oregon; some of the islands occur wholly in Oregon or Washington, and some are bisected by the State line. Larks also breed in Portland (Multnomah County, Oregon) at suitable sites near the Columbia River. These include an open field at the Rivergate Industrial Complex and the Southwest Quad at Portland International Airport; both sites are owned by the Port of Portland, and were created with dredged materials (Moore 2011, pp. 9–12).

In the Willamette Valley, streaked horned larks breed in Benton, Clackamas, Lane, Linn, Marion, Polk, Washington, and Yamhill Counties. Larks are most abundant in the southern part of the Willamette Valley. The largest known population of larks is resident at Corvallis Municipal Airport in Benton County (Moore 2008, p. 15); other resident populations occur at the Baskett Slough, William L. Finley, and Ankeny units of the Service's Willamette Valley National Wildlife Refuge Complex (Moore 2008, pp. 8–9) and on Oregon Department of Fish and Wildlife's (ODFW's) E.E. Wilson Wildlife Area (ODFW 2008, p. 18). Breeding populations also occur at municipal airports in the valley (including McMinnville, Salem, and Eugene) (Moore 2008, pp. 14–17). Much of the Willamette Valley is private agricultural land, and has not been surveyed for streaked horned larks, except along public road margins. There are numerous other locations on private and municipal lands on which streaked horned larks have been observed in the Willamette Valley, particularly in the southern valley (Linn, Polk, and Benton Counties) (eBird 2013, ebird.org). In 2008, a large population of streaked horned larks colonized a wetland and prairie restoration site on M-DAC Farms, a privately owned parcel in Linn County; as the vegetation at the site matured in the following 2 years, the site became less suitable for larks, and the population declined (Moore and Kotaich 2010, pp. 11–13). This is likely a common pattern, as breeding streaked horned larks opportunistically shift sites

as habitat becomes available among private agricultural lands in the Willamette Valley (Moore 2008, pp. 9–11).

Wintering Range—Pearson *et al.* (2005b, p. 2) found that the majority of streaked horned larks winter in the Willamette Valley (72 percent) and on the islands in the lower Columbia River (20 percent); the rest winter on the Washington coast (8 percent) or in the south Puget Sound (1 percent). In the winter, most streaked horned larks that breed in the south Puget Sound migrate south to the Willamette Valley or west to the Washington coast; streaked horned larks that breed on the Washington coast either remain on the coast or migrate south to the Willamette Valley; birds that breed on the lower Columbia River islands remain on the islands or migrate to the Washington coast; and birds that breed in the Willamette Valley remain there over the winter (Pearson *et al.* 2005b, pp. 5–6). Streaked horned larks spend the winter in large groups of mixed subspecies of horned larks in the Willamette Valley, and in smaller flocks along the lower Columbia River and Washington Coast (Pearson *et al.* 2005b, p. 7; Pearson and Altman 2005, p. 7). During the winter of 2008, a mixed flock of over 300 horned larks was detected at the Corvallis Municipal Airport (Moore 2011a, pers. comm.).

Population Estimates and Current Status

Data from the North American Breeding Bird Survey (BBS) indicate that most grassland-associated birds, including the horned lark, have declined across their ranges in the past three decades (Sauer *et al.* 2012, pp. 7–9). The BBS can provide population trend data only for those species with sufficient sample sizes for analyses. There is insufficient data in the BBS for a rangewide analysis of the streaked horned lark population trend (Altman 2011, p. 214); however, see below for additional analysis of the BBS data for the Willamette Valley. An analysis of recent data from a variety of sources concludes that the streaked horned lark has been extirpated from the Georgia Depression (British Columbia, Canada), the Oregon coast, and the Rogue and Umpqua Valleys (Altman 2011, p. 213); this analysis estimates the current rangewide population of streaked horned larks to be about 1,170–1,610 individuals (Altman 2011, p. 213).

In the south Puget Sound, approximately 150–170 streaked horned larks breed at 6 sites (Altman 2011, p. 213). Recent studies have found that larks have very low nest success in Washington (Pearson *et al.* 2008, p. 8);

comparisons with other ground-nesting birds in the same prairie habitats in the south Puget Sound showed that streaked horned larks had significantly lower values in all measures of reproductive success (Anderson 2010, p. 16). Estimates of population growth rate (λ , lambda) that include vital rates from nesting areas in the south Puget Sound, Washington coast, and Whites Island in the lower Columbia River indicate streaked horned larks have abnormally low vital rates, which are significantly lower than the vital rates of the arctic horned lark (Camfield *et al.* 2010, p. 276). One study estimated that the population of streaked horned larks in Washington was declining by 40 percent per year ($\lambda = 0.61 \pm 0.10$ SD), apparently due to a combination of low survival and fecundity rates (Pearson *et al.*, 2008, p. 12). More recent analyses of territory mapping at 4 sites in the south Puget Sound found that the total number of breeding streaked horned lark territories decreased from 77 territories in 2004, to 42 territories in 2007, a decline of over 45 percent in 3 years (Camfield *et al.* 2011, p. 8). Pearson *et al.* (2008, p. 14) concluded that there is a high probability of south Puget Sound population loss in the future given the low estimates of fecundity and adult survival along with high emigration out of the Puget Sound.

On the Washington coast and Columbia River islands, there are about 120–140 breeding larks (Altman 2011, p. 213). Data from the Washington coast and Whites Islands were included in the population growth rate study discussed above; populations at these sites appear to be declining by 40 percent per year (Pearson *et al.* 2008, p. 12). Conversely, nest success appears to be very high at the Portland industrial sites (Rivergate and the Southwest Quad). In 2010, nearly all nests successfully fledged young (Moore 2011, p. 13); only 1 of 10 monitored nests lost young to predation (Moore 2011, pp. 11–12).

There are about 900–1,300 breeding streaked horned larks in the Willamette Valley (Altman 2011, p. 213). The largest known population of streaked horned larks breeds at the Corvallis Municipal Airport; depending on the management conducted at the airport and the surrounding grass fields each year, the population has been as high as 100 breeding pairs (Moore and Kotaich 2010, pp. 13–15). In 2007, a large (580-ac (235-ha)) wetland and native prairie restoration project was initiated at M-DAC Farms on a former rye grass field in Linn County (Cascade Pacific RC&D 2012, p. 1). Large, semipermanent wetlands were created at the site, and the prairie portions were burned and

treated with herbicides (Moore and Kotaich 2010, pp. 11–13). These conditions created excellent quality ephemeral habitat for streaked horned larks, and the site was used by about 75 breeding pairs in 2008 (Moore and Kotaich 2010, p. 12), making M–DAC the second-largest known breeding population of streaked horned larks that year. M–DAC had high use again in 2009, but as vegetation at the site matured, the number of breeding larks has declined, likely shifting to other agricultural habitats (Moore and Kotaich 2010, p. 13).

We do not have population trend data in Oregon that is comparable to the study in Washington by Pearson *et al.* (2008, entire); however, research on breeding streaked horned larks indicates that nest success in the southern Willamette Valley is higher than in Washington (Moore 2011b, pers. comm.). The best information on trends in the Willamette Valley comes from surveys by the Oregon Department of Fish and Wildlife (ODFW); the agency conducted surveys for grassland-associated birds, including the streaked horned lark, in 1996 and again in 2008 (Altman 1999, p. 2; Myers and Kreager 2010, p. 2). Point count surveys were conducted at 544 stations in the Willamette Valley (Myers and Kreager 2010, p. 2); over the 12-year period between the surveys, measures of relative abundance of streaked horned larks increased slightly from 1996 to 2008, according to this report. Both detections at point count stations and within regions showed moderate increases (3 percent and 6 percent, respectively) (Myers and Kreager 2010, p. 11). Population numbers decreased slightly in the northern Willamette Valley and increased slightly in the middle and southern portions of the valley (Myers and Kreager 2010, p. 11).

Data from the BBS may provide additional insight into the trend of the streaked horned lark population in the Willamette Valley. Although the BBS does not track bird counts by subspecies, the streaked horned lark is the only subspecies of horned lark that breeds in the Oregon portion of the Northern Pacific Rainforest Bird Conservation Region (BCR); therefore it is reasonable to assume that counts of horned larks from the breeding season in the Willamette Valley are actually counts of the streaked horned lark. The BBS data regularly detect horned larks on several routes in the Willamette Valley, and counts from these routes show that horned larks in this BCR have been declining since 1960s, with an estimated annual trend of –4.6 percent (95 percent confidence intervals –6.9,

–2.4) (Sauer *et al.* 2012, p. 4). The U.S. Geological Survey (USGS), which manages the BBS data, recommends caution when analyzing these data due to the small sample size, high variance, and potential for observer bias in the raw BBS data.

The BBS data from the Willamette Valley indicate that horned larks (as mentioned above, the BBS tracks only the full species) have been declining for decades, which is coincident with the restrictions on grass seed field burning imposed by the Oregon Department of Agriculture (Oregon Department of Environmental Quality and Oregon Department of Agriculture 2011, p. 1). Prior to 1990, about 250,000 ac (101,170 ha) of grass seed fields in the Willamette Valley were burned each year. Public health and safety issues led the Oregon legislature to order gradual reductions in field burning beginning in 1991. By 2009, field burning was essentially banned in the Willamette Valley (Oregon Department of Environmental Quality and Oregon Department of Agriculture 2011, p. 1). We believe that some of the observed declines lark detections in the BBS data are attributable to the reduction of highly suitable burned habitats due to the field burning ban. Since the ban is now fully in effect, the decline in BBS observations of streaked horned larks is not expected to continue at the previously noted rate.

We do not have conclusive data on population trends throughout the streaked horned lark's range, but the rapidly declining population on the south Puget Sound suggests that the range of the streaked horned lark may still be contracting.

Range Contraction

Streaked horned lark has experienced a substantial contraction of its range; it has been extirpated from all formerly documented locations at the northern end of its range (British Columbia, and the San Juan Islands and northern Puget Trough of Washington), the Oregon coast, and the southern edge of its range (Rogue and Umpqua Valleys of Oregon). The streaked horned lark's current range appears to have been reduced to less than half the size of its historical range in the last 100 years. The pattern of range contractions for other Pacific Northwest species (e.g., western meadowlark (*Sturnella neglecta*)) shows a loss of populations in the northern part of the range, with healthier populations persisting in the southern part of the range (Altman 2011, p. 214). The streaked horned lark is an exception to this pattern—its range has contracted from both the north and the

south simultaneously (Altman 2011, p. 215).

Habitat

Historically, nesting habitat was found on grasslands, estuaries, and sandy beaches in British Columbia; in dune habitats along the coast of Washington; in western Washington and western Oregon prairies; and on the sandy beaches and spits along the Columbia and Willamette Rivers. Today, the streaked horned lark nests in a broad range of habitats, including native prairies, coastal dunes, fallow and active agricultural fields, wetland mudflats, sparsely vegetated edges of grass fields, recently planted Christmas tree farms with extensive bare ground, fields denuded by overwintering Canada geese, gravel roads or gravel shoulders of lightly traveled roads, airports, and dredge deposition sites in the lower Columbia River (Altman 1999, p. 18; Pearson and Altman 2005, p. 5; Pearson and Hopey 2005, p. 15; Moore 2008, pp. 9–10, 12–14, 16). Wintering streaked horned larks use habitats that are very similar to breeding habitats (Pearson *et al.* 2005b, p. 8).

Habitat used by larks is generally flat with substantial areas of bare ground and sparse low-stature vegetation primarily comprised of grasses and forbs (Pearson and Hopey 2005, p. 27). Suitable habitat is generally 16–17 percent bare ground, and may be even more open at sites selected for nesting (Altman 1999, p. 18; Pearson and Hopey 2005, p. 27). Vegetation height is generally less than 13 in (33 cm) (Altman 1999, p. 18; Pearson and Hopey 2005, p. 27). Larks eat a wide variety of seeds and insects (Beason 1995, p. 6), and appear to select habitats based on the structure of the vegetation rather than the presence of any specific food plants (Moore 2008, p. 19). A key attribute of habitat used by larks is open landscape context. Our data indicate that sites used by larks are generally found in open (i.e., flat, treeless) landscapes of 300 ac (120 ha) or more (Converse *et al.* 2010, p. 21). Some patches with the appropriate characteristics (i.e., bare ground, low stature vegetation) may be smaller in size if the adjacent areas provide the required open landscape context; this situation is common in agricultural habitats and on sites next to water. For example, many of the sites used by streaked horned larks on the islands in the Columbia River are small (less than 100 ac (40 ha)), but are adjacent to open water, which provides the open landscape context needed. Streaked horned lark populations are found at many airports within the subspecies'

range, because airport maintenance requirements provide the desired open landscape context and short vegetation structure.

Although streaked horned larks use a wide variety of habitats, populations are vulnerable because the habitats used are often ephemeral or subject to frequent human disturbance. Ephemeral habitats include bare ground in agricultural fields and wetland mudflats; habitats subject to frequent human disturbance include mowed fields at airports, managed road margins, agricultural crop fields, and disposal sites for dredge material (Altman 1999, p. 19). It is important to note the key role of anthropogenically maintained landscapes in the process of creating and maintaining habitat for the streaked horned lark; without large-scale, manmade disturbance (e.g., burning, mowing, cropping, and deposition of dredge spoils), available habitat would decrease rapidly, but these same activities can threaten individuals when they are at sensitive life-history stages.

Biology

Horned larks forage on the ground in low vegetation or on bare ground (Beason 1995, p. 6); adults feed mainly on grass and forb seeds, but feed insects to their young (Beason 1995, p. 6). In the Puget lowlands in Washington, streaked horned larks have been observed selectively foraging on the spore capsules of *Polytrichum juniperinum* (juniper haircap moss) during the time before grasses and forbs have set seed and insects become plentiful (Martin 2013, in litt.; Wolf 2013, in litt.). A study of winter diet selection found that streaked horned larks in the Willamette Valley eat seeds of introduced weedy grasses and forbs, focusing on the seed source that is most abundant (Moore 2008b, p. 9). In this Willamette Valley study, a variety of grasses (*Digitaria sanguinalis* (large crabgrass), *Panicum capillare* (witchgrass), and *Sporobolus* sp. (dropseed)), unidentified grasses (Poaceae), and forbs (*Chenopodium album* (common lambsquarters), *Amaranthus retroflexus* (redroot pigweed), *Trifolium arvense* (rabbitfoot clover) and *Kickxia* sp. (cancerweed)) were common in the winter diet of the streaked horned lark (Moore 2008b, p. 16).

Streaked horned larks have a strong affinity for recently burned habitats. An experimental study at JBLM found that larks had a highly significant preference for burned versus unburned fields, and in the breeding season following a fire, lark abundance was significantly higher on the burned plots (Pearson *et al.* 2005a, p. 14). The decline of the

streaked horned lark population in the Willamette Valley is correlated with the reduction in agricultural field burning. Prior to the mid-1980s, as much as 250,000 ac (101,000 ha) of grass seed fields were burned each year in the Willamette Valley; in the 1990s, the State imposed progressive reductions in field burning, until in 2012, virtually no burning was allowed (Oregon Department of Environmental Quality and Oregon Department of Agriculture 2011, p. 1).

Horned larks form pairs in the spring (Beason 1995, p. 11). Altman (1999, p. 11) used a small sample (n=3) of streaked horned lark territories in the Willamette Valley to give a mean territory size of 1.9 ac (0.77 ha) with a range of 1.5 to 2.5 ac (0.61 to 1.0 ha). Horned larks create nests in shallow depressions in the ground and line them with soft vegetation (Beason 1995, p. 12). Nest sites are selected from suitable locations within male mating territories, which are typically sparsely vegetated, are rockier, and have more annual grasses than nearby areas (Pearson and Hopey 2005, p. 19). Female horned larks construct the nest without help from the male (Beason 1995, p. 12). Streaked horned larks establish their nests in areas of extensive bare ground, and nests are almost always placed on the north side of a clump of vegetation or another object such as root balls or soil clumps (Pearson and Hopey 2005 p. 23; Moore and Kotaich 2010, p. 18). Studies from Washington sites (the open coast, Puget lowlands, and Columbia River islands) have found strong natal fidelity to nesting sites—that is, streaked horned larks return each year to the place they were born (Pearson *et al.* 2008, p. 11).

The nesting season for streaked horned larks begins in mid-April and ends in late August (Pearson and Hopey 2004, p. 11; Moore 2011, p. 32; Wolf 2011, p. 5). Clutches range from 1 to 5 eggs, with a mean of 3 eggs (Pearson and Hopey 2004, p. 12). After the first nesting attempt in April, streaked horned larks will often re-nest in late June or early July (Pearson and Hopey 2004, p. 11). Young streaked horned larks leave the nest by the end of the first week after hatching, and are cared for by the parents until they are about 4 weeks old, when they become independent (Beason 1995, p. 15).

Nest success studies (i.e., the proportion of nests that result in at least one fledged chick) in streaked horned larks report highly variable results. Nest success on the Puget lowlands of Washington is low, with only 28 percent of nests successfully fledging young (Pearson and Hopey 2004, p. 14; Pearson and Hopey 2005, p. 16).

According to reports from sites in the Willamette Valley, Oregon, nest success has varied from 23 to 60 percent depending on the site (Altman 1999, p. 1; Moore and Kotaich 2010, p. 23). At one site in Portland, Oregon, Moore (2011, p. 11) found 100 percent nest success.

Summary of Comments and Recommendations

In the proposed rule published on October 11, 2012 (77 FR 61938), we requested that all interested parties submit written comments on the proposal by December 10, 2012. We also contacted appropriate Federal and State agencies, scientific experts and organizations, and other interested parties and invited them to comment on the proposal. Newspaper notices inviting general public comment were published in the Olympian in Washington and in the Statesman Journal in Oregon during the reopening of the public comment period following our **Federal Register** publication that made available the draft economic analysis for the proposed critical habitat designations (April 3, 2013; 78 FR 20074). As also announced in that April 3, 2013, document, we held a public hearing in Olympia, Washington, on April 18, 2013, and held public informational workshops in Lacey, Washington, on April 16, 2013 (two workshops), and in Salem, Oregon, on April 17, 2013.

During the two comment periods for the proposed rule, we received nearly 100 comment letters addressing either the proposed listing or the proposed critical habitat (or both) for the Taylor's checkerspot butterfly and the streaked horned lark. During the April 18, 2013, public hearing, 34 individuals or organizations made comments on the proposed rule. All substantive information provided during comment periods has either been incorporated directly into this final determination or is addressed below.

Peer Review

In accordance with our peer review policy published on July 1, 1994 (59 FR 34270), we solicited expert opinion from four knowledgeable individuals with scientific expertise that included familiarity with the Taylor's checkerspot butterfly and its habitats, biological needs, and threats, and from three knowledgeable individuals with scientific expertise that included familiarity with the streaked horned lark and its habitats, biological needs, and threats. We received responses from two of the peer reviewers on the proposed listing of the Taylor's checkerspot

butterfly. Both peer reviewers felt that the proposed rule was a thorough description of the status of the Taylor's checkerspot butterfly and commented that they considered the proposed rule well researched and well written, and one commenter stated that the rule comprehensively represented the current scientific knowledge for the taxon. Both peer reviewers had several substantive comments on the proposed listing of the Taylor's checkerspot butterfly, which we address below. We received responses from three of the peer reviewers on the proposed listing of the streaked horned lark. Two of the peer reviewers felt that the proposed rule was a thorough description of the status of the streaked horned lark, and stated that we had used the best available science in reaching our conclusions; one peer reviewer felt that we had failed to use available information on the trend in population numbers of the streaked horned lark in the Willamette Valley (available from the Breeding Bird Survey database), and provided that data for our consideration. Two peer reviewers had several substantive comments on the proposed listing of the streaked horned lark, which we address below. Our requests for peer review are limited to a request for review of the merits of the scientific information in our documents; if peer reviewers have volunteered their personal opinions on matters not directly relevant to the science of our status assessment, we do not respond to those comments here.

Comments From Peer Reviewers

Taylor's Checkerspot Butterfly

(1) *Comment:* One peer reviewer stated that the taxonomy section of the proposed rule was incomplete with regard to its description of the full species *Euphydryas editha* (Edith's checkerspot butterfly). He states the taxonomy of the full species *E. editha* is more complicated than we summarized. However, the peer reviewer added that despite the incomplete taxonomic treatment for the full species *E. editha*, the taxonomic treatment of *E. editha taylori* in the proposed rule is consistent with the most recent literature.

Our response: For the purpose of a listing document, we provide a non-technical physical and biological description of the species, and a taxonomic description of the entity we intend to list, which is subspecies *Euphydryas editha taylori* in this case. We typically do not describe the full species from which the subspecies was derived.

(2) *Comment:* One peer reviewer stated that, because of the discontinuous distribution of *E. editha taylori*, further taxonomic evaluation utilizing molecular genetics techniques would better determine the amount of genetic divergence within and between known populations.

Our response: The Service agrees that having a complete genetic evaluation is beneficial when determining differences within and between broadly distributed species. We are currently collaborating with U.S. Forest Service geneticists and their Genetics Laboratory (Placerville, California), and other conservation partners on collecting tissues and using established genetic markers to analyze the genetic structure of the Taylor's checkerspot butterfly and its closely related subspecies. The objective is to determine the genetic identity of the Taylor's checkerspot butterfly. At this time, the Taylor's checkerspot butterfly is a declining taxon found only on a few declining habitat patches throughout the subspecies' range, and the statute directs us to make our listing determination based upon the best scientific data available at the time of our evaluation.

(3) *Comment:* One peer reviewer mentioned that during mild winters the adult flight season for the Taylor's checkerspot butterfly can begin as early as March 31 (as in 2005, although this was an early season outlier). For example, the peer reviewer states that he personally observed an adult on March 31, and that adults were still in flight in late April in Oregon that year (2005).

Our response: We agree and consider the adult flight period for the subspecies to be variable from year to year, primarily dependent upon the local annual weather patterns during the late winter, and early spring of the specific flight year. We discuss in this final rule an example of adult Taylor's checkerspot butterflies in flight as late as the first week of July at the Olympic Peninsula sites, which are located at higher elevation than any other location within the subspecies' range.

(4) *Comment:* One peer reviewer commented that the Taylor's checkerspot butterfly most likely exhibited and persisted as a metapopulation composed of large and small populations that interacted within a larger landscape context, with frequent extinction and colonization events.

Our response: We agree with the concept of a metapopulation structure for Taylor's checkerspot butterfly. Small populations known only from small habitat patches may become extirpated;

however, in a metapopulation structure, other closely situated populations may expand at the same time others are failing. By allowing recolonization of habitat patches where extirpation has taken place, metapopulation structure supports the presence of the (sub)species on a larger landscape, while they are still found in distinct separate patches of habitat. Without metapopulation structure, the Taylor's checkerspot butterfly will likely become extirpated at several of the locations where it is currently found.

(5) *Comment:* One peer reviewer supports our ideas about active management to maintain early seral conditions in occupied habitats and about the maintenance of dispersal corridors between areas having the most dense populations of the Taylor's checkerspot butterfly. The peer reviewer cautions that management treatments to remove encroaching tree, shrubs, and nonnative grasses still does not guarantee the persistence of the subspecies on areas designated as critical habitat. He states that populations of *E. editha* are well known to appear and disappear over large areas without any obvious explanation.

Our response: We agree with the importance of active management, and that without regular management activities to sustain ecosystem processes, we would quickly lose small populations where we are working to enhance and maintain Taylor's checkerspot butterfly habitat. As noted in this rule, the lack of active management, or the ecosystem processes to maintain early seral conditions, is a threat to the subspecies through the loss of habitat, which is quickly rendered unsuitable and becomes unavailable for the butterfly's use, leading to extirpation.

(6) *Comment:* One peer reviewer took issue with our use of the word "collection" of butterflies for scientific studies. He suggests there is no evidence that collection of specimens has contributed to the decline of the Taylor's checkerspot butterfly.

Our response: We agree that we inappropriately used this term when we meant to discuss "capture" as it is directly related to "mark, release, and recapture" studies. We have made this change in this final rule, and replaced any mention of the term "collection" with "capture," except where we are discussing a collection of specimens.

(7) *Comment:* One peer reviewer expressed concern about the violations of section 9 of the Act that prohibit, "Unauthorized collecting, handling, possessing, selling, delivering, carrying or transporting of the species, including

export and import across state lines and international boundaries, except for properly documented antique specimens of these taxa at least 100 years old, as defined by section 10(h)(1) of the Act.” Given the need for genetic and molecular phylogenetic studies of *E. editha taylora*, he disagreed with the idea of restricting the movement of specimens that are less than 100 years old. He questions how specimens that have been legally collected as vouchers and preserved for the purpose of future genetic, molecular, and morphological studies would become illegal if the species were to be listed as endangered. He strongly encourages the Service to allow the act of possessing and transporting specimens legally obtained prior to the listing of the species in 2013, in order to facilitate and contribute to the scientific study of the subspecies.

Our response: The proposed rule overstated the prohibitions in section 9 of the Act. After listing takes effect, mere possession of a specimen, provided the specimen was not collected in violation of the Act, is not prohibited, and interstate transportation of such a specimen for the purpose of genetic testing is not prohibited as long as it does not occur in the course of a commercial activity. This description of the prohibitions has been corrected in this final rule.

(8) **Comment:** One peer reviewer suggested that we include additional information in our section on the nectar foods used in Oregon by the Taylor’s checkerspot butterfly. However, the peer reviewer incorrectly stated we should better describe the use of *Fraxinus* (Oregon ash), as the primary nectar source available to the Taylor’s checkerspot butterfly in Oregon. We believe the reviewer mistakenly used the term *Fraxinus*, when meaning to describe *Fragaria virginiana* (wild strawberry). Another commenter pointed out that Taylor’s checkerspot butterflies have been observed using dandelion (*Taraxacum officinale*) as a nectar source, which he believes is an indicator of more general habitat requirements of this subspecies.

Our response: We did correctly discuss the use of *Fragaria virginiana*, not *Fraxinus*, as it is the most widespread of nectar resources in Oregon, and *Fragaria virginiana* is readily used by the Taylor’s checkerspot butterfly at all locations in Oregon. We have added *Plectritis congesta*, *Amelanchier alnifolia*, and *Calochortus tolmiei* as nectar resources at sites where each are found, with *C. tolmiei* found only in Oregon. Not all nectar sources potentially used by the Taylor’s

checkerspot butterfly are equal.

Although some adult butterflies may be observed using what appears to be a general nectar source (e.g., dandelion), it may not be the optimal resource, only what is available. Individual butterflies may be relegated to using a less-than-optimal nectar source because that source now dominates a particular site. It is unknown whether the Taylor’s checkerspot butterfly could survive solely on dandelion as a nectar source. Additionally, nectar sources are only one determinant in characterizing the overall habitat requirements for this subspecies.

(9) **Comment:** One peer reviewer commented that the Service should consider the increased disease pressure on populations of the Taylor’s checkerspot butterfly during overwintering due to the predicted increase in winter precipitation. The reviewer stated that increased precipitation as a general rule may have deleterious impacts to lepidopteran (butterfly) larvae. The commenter also stated that there appears to be no information available on the incidence of disease and its impacts to phenology among *E. e. taylora* larvae.

Our response: We agree with both of these comments. We did not consider increased pressure, or an increase in the incidence of disease due to the predicted increase in winter precipitation, in our threats analysis. We observed examples of the impacts of late winter inundation or frost events in occupied Taylor’s checkerspot butterfly habitat as having a direct mortality effect to some populations, and how anecdotally, the population counts during those years (2009, 2010) at those population centers were lower.

(10) **Comment:** One peer reviewer commented on how larvae of *Euphydryas* spp. are known to be able to respond to adverse environmental conditions by delaying development when host plants are limited or of poor quality, as the larvae may re-enter diapause for an additional 12 months. The reviewer stated that this is an adaptation to surviving in unreliable environments and will serve to mitigate against “phenological mismatch” of the larvae and host plants.

Our response: We agree that during poor weather years, populations of the Taylor’s checkerspot butterfly appear lower compared to other years, and we presume that *E. e. taylora* larvae have likely re-entered diapause. We have addressed re-entering diapause in the section of this final rule discussing the biology of the subspecies.

Streaked Horned Lark

(11) **Comment:** One peer reviewer and several other commenters disagreed with our assessment of the status of the streaked horned lark as threatened rather than endangered. In our proposed rule, we stated that there was insufficient data in the Breeding Bird Survey (BBS) data to estimate a rangewide trend for the streaked horned lark. The peer reviewer referenced the trend analysis that is available via the BBS Web site for the Northern Pacific Rainforest Bird Conservation Region (BCR) for the horned lark; although data are not available at the subspecies level, he makes the assumption that as the streaked horned lark is the only breeding subspecies of the horned lark in western Oregon, and that horned lark counts from that BCR can be reasonably interpreted as counts of the streaked horned lark. From his analysis of the BBS data, he concludes that the Willamette Valley population of the streaked horned lark is declining at a rate of about 5 percent per year.

In addition, the peer reviewer conducted his own analysis of five individual BBS routes in the Willamette Valley. He found that two routes had increasing trends (Scio and Salem), and three had declining trends (Adair, Dayton, and McMinnville). He states that larks were first detected on BBS routes in the Willamette Valley in 1971, and their numbers began declining in 1989. He used a 5-year moving average to show a “smoothed out” presentation of the data. He particularly focused on the Adair BBS route, which had the most significant declining trend; in three 5-year periods in the Adair BBS route data, the route had high numbers of larks in the 1970s, lower numbers in the late 1980s through early 1990s, and then substantially lower numbers in the 2000s. The peer reviewer concluded that the streaked horned lark population in the Willamette Valley has been declining steadily since the early 1990s.

The peer reviewer asserted that our failure to examine the BBS data is highly relevant because one of the key factors used in the determination of threatened rather than endangered status was the perceived stability of lark populations in the Willamette Valley, based on the repeated ODFW roadside surveys in 1996 and 2008, and studies of lark populations at “protected” sites (William L. Finley National Wildlife Refuge and Corvallis Municipal Airport).

Our response: In order to evaluate this new analysis of the Breeding Bird Survey data, we requested assistance from scientists at the USGS Patuxent

Wildlife Research Center, which manages the BBS data. USGS agreed with the assertion that the BBS analysis includes all subspecies of horned larks in the Northern Pacific Rainforest BCR, and consequently, with no other horned larks breeding in the area, that the trends for this BCR are equivalent to the trends for the streaked horned lark. However, in general, USGS indicated that the peer reviewer failed to acknowledge the high level of uncertainty of his conclusions given the small sample sizes, high variance, and potential for observer bias in the raw BBS data. USGS noted that the peer reviewer correctly described the patterns of population change shown in the BBS data, but USGS urges caution in the interpretation of trends with small sample sizes such as that available for the Northern Pacific Rainforest BCR. The BBS Web site guidelines for credibility indicate that this should be noted as a deficiency. USGS also pointed out that there is an indication of observer bias in the Adair route data, which the peer reviewer used as the strongest indicator of declining population. USGS notes that there is indeed a decline in numbers, but that the most dramatic declines occurred during the transition between the second and third observer on the route; when observer #3 took over after a gap of 14 years (1992–2006), markedly fewer streaked horned larks were observed. Given this information, it is difficult to ascertain how much of the observed decline is real, and how much of the apparent decline may be biased by a change in observers. Therefore, although the peer reviewer has provided us with an analysis that raises some questions about the population trend of the streaked horned lark in the Willamette Valley, we do not feel these data are sufficiently reliable to alter our conclusion regarding the status of the subspecies.

We also note that the peer reviewer's analysis of the steady decline in streaked horned lark detections since the early 1990s correlates with the beginning of the field burning restrictions implemented by the Oregon Department of Agriculture, which we noted earlier in this document. Prior to 1990, about 250,000 ac (101,170 ha) of grass seed fields in the Willamette Valley were burned each year. Public health and safety issues (triggered by a catastrophic traffic accident on Interstate 5 caused by smoke from field burning that obscured the road, resulting in 7 deaths and 38 injuries) resulted in a decision by the Oregon legislature to order gradual reductions

in field burning beginning in 1991. By 2009, field burning was essentially banned in the Willamette Valley, with the exception of a limited area in the northeastern portion of the valley, where the practice is allowed only for specific types of perennial grasses, or fields on highly erodible steep lands (Oregon Department of Environmental Quality and Oregon Department of Agriculture 2011, p. 1). Another peer reviewer commented on the affinity of larks for burned areas, as evidenced by use of recently burned habitats at JBLM. We will pursue this issue in recovery planning for the streaked horned lark. We believe that some of the observed declines lark detections in the BBS data are attributable to the reduction of highly suitable burned habitats due to the field burning ban. As the ban is now fully in effect, the rate of decline as noted in BBS observations of streaked horned larks is not expected to continue at the previously noted rate.

In summary, the peer reviewer presented new information about the declining population of streaked horned larks in the Willamette Valley, and we appreciate the reviewer's efforts to present us with an alternative analysis of the available data. This information provides a more complete picture of the status of the subspecies, but based upon our evaluation, with assistance from scientists at USGS who are expert in analysis of BBS data, we believe the streaked horned lark still meets the definition of threatened rather than endangered. The Act defines a threatened species as one which is likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range. An endangered species is defined as any species which is in danger of extinction throughout all or a significant portion of its range. Given that streaked horned larks still occur in many locations across a large area of the Willamette Valley, and that some of these sites harbor large populations, we agree that the streaked horned lark has declined and may be continuing to decline, but listing as threatened remains appropriate, as the best available scientific and commercial data do not indicate that extinction of the species is imminent.

(12) *Comment:* One peer reviewer suggested that it would be useful to discuss the potential reasons that the Washington population of streaked horned larks appears to be declining and the Oregon population appears more stable. The peer reviewer noticed that three of the areas proposed as critical habitat in Oregon are on National Wildlife Refuges where they

benefit from active management, and asked if there might also be some other sites in Oregon that are being managed for other species in a way that benefits streaked horned larks.

Our response: We have augmented the discussion of the population trends in Oregon and Washington in the text of this final rule. As to the issue of why there are more streaked horned larks, or if the population trend is different in Oregon versus Washington, we do not have any additional information at this time to answer those questions. It may be that there is simply more open land in the Willamette Valley in Oregon, and the valley's large agricultural industry provides the frequent disturbance regime that creates the habitat structure needed by larks. We will evaluate these issues during the recovery planning process for the streaked horned lark.

(13) *Comment:* One peer reviewer and one other commenter believed our approach to listing the streaked horned lark would not result in sufficient protections to achieve recovery. In particular, the peer reviewer believed that the combination of threatened status, our promulgation of a special rule for agricultural activities and wildlife hazard management at airports, and a somewhat limited critical habitat designation would result in inadequate protection for the streaked horned lark. The commenter stated that he believes we put too much effort put into alleviating potential conflicts with land managers rather than focusing on measures to ensure conservation of the streaked horned lark, and that this approach will be inadequate to move the species on a trajectory away from the need for listing.

Our response: Our determination that the streaked horned lark is threatened rests on our application of the scientific data to the Act's definition of a threatened species, and not on our expectations about the best means to conserve the species. Regarding the reviewer's comment with respect to the proposed 4(d) special rule and proposed critical habitat, we believe it is important to recognize that listing, critical habitat designation, and section 4(d) of the Act are part of the suite of tools that the Service has available to conserve listed species, but do not in and of themselves conserve the species. Once a species is listed as either endangered or threatened, the Act provides many tools to advance the conservation of listed species; available tools include recovery planning under section 4 of the Act, interagency cooperation and consultation under section 7, grants to the states under section 6, and safe harbor agreements

and habitat conservation plans under section 10. The streaked horned lark is an unusual case in that nearly all of its existing habitats have been created by industrial land uses (e.g., agriculture, airport maintenance, dredge spoil disposal), in which creation of lark habitat is not the intended purpose. Long experience in working with commercial and industrial partners have shown us that a more collaborative approach, rather than a strictly regulatory one, will be more effective in recovering streaked horned larks on private lands. We expect that the conservation program for the streaked horned lark will take advantage of all of the creativity and flexibility offered by the Act.

(14) *Comment:* One peer reviewer and several other commenters stated that the proposed 4(d) rule for streaked horned lark is too broad, particularly the portion that exempts take associated with routine agricultural activities on non-federal lands in the Willamette Valley. The commenters felt that this exemption is inappropriate and does not contribute to conservation of the species. The commenters suggested that we should eliminate the special rule, and instead use other regulatory mechanisms (e.g., candidate conservation agreements with assurances, habitat conservation plans, and safe harbor agreements) to ensure the creation of habitat for larks on agricultural lands.

Our response: The purpose of the 4(d) special rule is to recognize the larger conservation value of maintaining existing farmland habitats that support streaked horned larks, even though some farming activities may adversely affect the species. Activities likely to occur in those landscapes, should ongoing agricultural activities cease, such as suburban development or transition to orchards and nursery stock, would permanently remove habitat essential to the streaked horned lark. We believe that exempting take as the result of agricultural activities described in the special rule is necessary and advisable to provide for the conservation of streaked horned larks by helping to ensure the maintenance of those beneficial land uses that provide habitat used by the subspecies.

In the 40 years since the passage of the Act, the Service has learned that relying on regulation alone is not an effective means for engaging private landowners in endangered species conservation. On the agricultural lands in the Willamette Valley, habitat for streaked horned larks would not exist but for the activities of private landowners. We believe that, in certain

instances, easing the general take prohibitions on non-federal agricultural lands may encourage continued land uses that provide an overall benefit to the species. We also believe that such a special rule will promote the conservation efforts and private lands partnerships critical for species recovery (Bean and Wilcove 1997, pp. 1–2). We believe that it is appropriate to use the flexibility offered by the Act to recognize the important contributions made by the agricultural community to the creation of suitable habitat for streaked horned larks, and to encourage them to continue to do so, rather than to see them switch to other crops or land uses to avoid the real or perceived burden of the regulations associated with listed species. We acknowledge that the agricultural activities covered in the 4(d) rule are broad. We modeled this special rule on the similar special rules promulgated for the California tiger salamander (*Ambystoma californiense*) (69 FR 47212; August 4, 2004) and California red-legged frog (*Rana aurora draytonii*) (71 FR 19244; April 13, 2006), two species which also depend on the availability of agricultural lands for habitat in large portions of their ranges. As we stated in the proposed rule, we believe that in the long term, it is a benefit to the streaked horned lark to maintain those aspects of the Willamette Valley's agricultural landscape that can aid in the recovery of the species. We believe the special rule will further conservation of the species by discouraging conversions of the agricultural landscape into crops or other land uses unsuitable for the streaked horned lark; our objective is to allow landowners to continue managing the landscape in ways that meet the needs of their operations while simultaneously providing suitable habitat for the streaked horned lark. It is important to note, however, that the 4(d) special rule is just one tool we will use to maintain habitat for larks on agricultural lands in the Willamette Valley. We hope to engage the agricultural community in education and outreach efforts; we will also use a variety of other incentive programs to engage private landowners who are willing to do more to conserve streaked horned larks on their lands.

(15) *Comment:* One peer reviewer asked us to modify the proposed 4(d) special rule to include timing restrictions on covered activities to minimize disturbances to nesting streaked horned larks.

Our response: Our purpose in promulgating a special rule to exempt take associated with activities that inadvertently create habitat for the

streaked horned lark is to allow landowners to continue those activities without additional regulation. We believe that imposing a timing restriction would likely reduce the utility of the special rule for land managers, and could have the unintended side effect of causing landowners to discontinue their habitat creation activities. Accordingly, we have not modified the special rule to include timing restrictions; however, we intend to offer education and assistance to landowners to help them protect and increase the populations of larks on their lands, if they are amenable.

Comments From States

Comments we received from States regarding the proposal to list the Taylor's checkerspot butterfly and the streaked horned lark are addressed below. We received comments from Washington Department of Fish and Wildlife (WDFW), Washington Department of Natural Resources (WDNR), and Washington State Department of Transportation (WSDOT) related to biological information, threats, critical habitat exclusions, the inadequacy of regulatory mechanisms, and recommendations for the management of habitat.

The agencies provided a number of recommended technical corrections or edits to the proposed listing of the Taylor's checkerspot butterfly and the streaked horned lark. We have evaluated and incorporated this information into this final rule when and where appropriate to clarify this final listing rule. In instances where the Service may have disagreed with an interpretation of the technical information that was provided, we have responded to the State directly.

(16) *Comment:* WDFW encouraged the Service to assist the State with alternative methods of achieving the conservation and recovery of the species, including programmatic safe harbor agreements, habitat conservation plans, conservation banks, or other incentive-based partnerships.

Our response: The Service appreciates our strong conservation partnership with the State of Washington, and will give full consideration to these ideas as we develop the recovery plans for the Taylor's checkerspot butterfly and the streaked horned lark. Such conservation measures are outside of the scope of the present rulemaking, however, which is restricted to the question of whether the species meet the definition of an endangered or threatened species, and should be listed under the authority of the Act.

(17) *Comment:* WDFW was concerned that allowing any timeframe for mowing in Taylor's checkerspot butterfly habitat could crush butterfly larvae as well as their host plants.

Our response: It is our understanding that when larvae are in diapause they are usually deep in the vegetation, or within the soil itself. At the time larvae are in diapause, most of the host plant (except narrow-leaf plantain) and nectar food resources are dormant. It is possible to do considerable management on prairies without harm to the target conservation species. Our recommendation for habitat management in occupied Taylor's checkerspot butterfly habitat is to mow high during diapause to avoid harm to larvae and to avoid destruction to larval host plants, including *Plantago*. For more information on recommended best prairie management practices, please contact the Washington Fish and Wildlife Office of the U.S. Fish and Wildlife Service for a copy of the Prairie Landowner Guide for Western Washington (see **ADDRESSES**).

(18) *Comment:* WDNR recommended that we consider promulgating a 4(d) special rule to exempt take of the Taylor's checkerspot butterfly associated with habitat restoration and maintenance activities.

Our response: Under section 4(d) of the Act, a special rule may be promulgated only for threatened species. Our review of the best scientific and commercial data available indicates that the Taylor's checkerspot butterfly is in danger of extinction throughout its range, and we are listing the Taylor's checkerspot butterfly as endangered; therefore, a 4(d) special rule is not an available option for this subspecies. There are many other tools provided by the Act that we can use to work with landowners interested in habitat restoration for the Taylor's checkerspot butterfly, including safe harbor agreements, section 7 consultation, and habitat conservation plans. We will work with WDNR and other partners to assess the full array of conservation tools available and determine those that may be most appropriate for the particular circumstance under consideration.

(19) *Comment:* WDNR expressed concern that the safe use of pesticides to control nonnative, invasive insects, such as gypsy moths, may be impacted by the listing of and designation of critical habitat for the Taylor's checkerspot butterfly.

Our response: We do not see the use of pesticides use in general to be an adverse impact to Taylor's checkerspot butterflies unless the subspecies is

directly exposed to the pesticides. The Service does not anticipate the need for pesticide spraying on habitat occupied by Taylor's checkerspot butterflies.

However, if pesticide were to be sprayed in areas where pesticide drift would expose Taylor's checkerspot butterflies to the pesticide(s), then we would be concerned with their application in these situations. The Service acknowledges the use of pesticides as harmful to the Taylor's checkerspot butterfly at all life stages. We specifically discourage the use of insecticides such as *Bacillus thuringiensis* var. *kurstaki* (BtK) in forested areas adjacent to Taylor's checkerspot butterfly habitat. This insecticide, which is used for harmful defoliators like gypsy moth and spruce budworm, has been implicated in the loss of three populations of the Taylor's checkerspot butterfly in Pierce County, Washington, during the early 1990s, when it was applied adjacent to Taylor's checkerspot butterfly habitat.

(20) *Comment:* WSDOT requested that we expand the coverage offered by the special rule for the streaked horned lark to include roadside management activities that are similar to those proposed for airports and agricultural operations. They specifically requested coverage for vegetation management of roadside rights-of-way, including mechanical mowing, weed control, and woody vegetation control; the commenter stated that these vegetation management activities are consistent with the activities covered on airports and agricultural lands, and would provide suitable streaked horned lark habitat along highways and roadside rights-of-way.

Our response: We are currently unaware of any substantial lark use along road right-of-ways with the exception of those bordering agricultural areas. Roadside management activities present a variety of site-specific issues, which are better addressed at the individual site level. For actions with a Federal nexus, we believe review and coverage of incidental take under section 7 is more appropriate. For activities along State highways that could cause take of streaked horned larks, other programs would be appropriate to provide incidental take coverage, such as a habitat conservation plan (HCP) under section 10 of the Act. While encouraging the utilization of conservation programs such as development of HCPs, the final rule includes a provision for coverage of incidental take under the 4(d) special rule during activities aimed at the control of noxious weeds (See: *Noxious Weed Control on Non-Federal Lands*).

Comments From Federal Agencies

(21) *Comment:* The Natural Resources Conservation Service asked how the special rule would affect farmers who are already implementing conservation practices on their lands. In addition, the Oregon Farm Bureau asked for more specific information on the agricultural activities covered in the special rule, and requested that we make the rule more consistent with Oregon farming practices as described by the Oregon State Legislature. These commenters asked for definitions of the terms used in the draft special rule, including: (1) "routine" as it applies to seasonal farming and ranching activities, (2) "normally acceptable and established levels of livestock grazing," and (3) the scope of the term "irrigation."

Our response: The special rule for routine agricultural practices is intended to promote land uses that are compatible with the conservation of streaked horned larks on private lands with no Federal agency involvement. If a landowner wishes to participate in any of the wildlife conservation incentive programs, such as those offered by the Natural Resources Conservation Service, then those activities would need to be reviewed in interagency consultation under section 7 of the Act between the Service and the Federal action agency involved in the conservation program if the action may affect streaked horned larks. If a private landowner wishes to implement conservation actions for streaked horned larks without Federal agency involvement, and if those activities have a net benefit to the streaked horned lark, then incidental take associated with the action may be authorized through a safe harbor agreement.

The special rule to exempt common agricultural activities is intended to promote land use practices that are compatible with the creation of suitable habitat for streaked horned larks. We recognize that farming is a dynamic process, which requires the ability to adapt to changing environmental and economic conditions. We have revised the language in the special rule to conform to farming standards established by the Oregon State Legislature in the Oregon Revised Statutes dealing with agricultural practices (ORS section 30.930). We have clarified the language in the special rule, and revised the list of covered activities. Activities covered include, but are not limited to: Planting, harvesting, rotation, mowing, tilling, discing, burning, and herbicide application to crops; normal transportation activities, and repair and

maintenance of unimproved farm roads and graveled margins of rural roads; livestock grazing according to normally acceptable and established levels; hazing of geese or predators; and maintenance of irrigation and drainage systems. These activities are those that are routinely implemented on farm lands in the Willamette Valley, and inadvertently provide conservation benefits to the streaked horned lark. The agricultural activities listed in this document are merely examples of practices that we consider to be routine to managing an active farming operation. Our intention is not to limit activities that may be necessary to the operation of a farm, but to clarify that “take” of the listed species is not prohibited when engaging in the identified activities. For further discussion, see the Special Rule section below.

Comments From the Public

(22) *Comment:* Several commenters provided minor technical corrections or edits to the proposal, and in some cases additional or updated information regarding the Taylor’s checkerspot butterfly and the streaked horned lark.

Our response: We have evaluated and incorporated this information into this final rule when and where appropriate to clarify the final rule. In instances where the Service may have disagreed with an interpretation of the technical information that was provided, we have responded under separate comments.

(23) *Comment:* One commenter disagreed with our description of the flight period for the Taylor’s checkerspot butterfly. We state that the flight period extends into early July and the commenter believes it should only be into June.

Our response: The flight period for the Taylor’s checkerspot butterfly varies widely over its occupied range. On occupied sites located on the north Olympic Peninsula the observed adult flight period for the Taylor’s checkerspot butterfly extends into July (Saverns and Grossball 2011, p. 71).

(24) *Comment:* One commenter stated that just because habitat is suitable for the species of concern does not mean that the entire prairie was historically occupied. Another commenter asked whether we should even try to reverse the loss of historical prairie habitat available for the Taylor’s checkerspot butterfly and the streaked horned lark given that the ecosystem is now changed and implementing restoration efforts would potentially impact other species that now occupy these habitats.

Our response: The proportion of prairie habitat lost (greater than 90

percent) and the fragmentation of what remains has created the necessity for the conservation of lands that can presently support the recovery of the Taylor’s checkerspot butterfly and the streaked horned lark. The goal of the Service is to conserve suitable habitat in a landscape context that will lead to the recovery of the listed species. As discussed in our response to Comment 13, the Act provides a suite of various conservation tools to achieve this goal. It is not a reasonable assumption to consider the entire prairie landscape at any given prairie would be completely occupied by the Taylor’s checkerspot butterfly or by the streaked horned lark. In the case of the Taylor’s checkerspot butterfly, because of their sedentary nature and their ability to form metapopulation structure on large landscapes, we would be inclined to believe that, even on large landscapes, available habitat would be used disproportionately, leading to a patchy distribution of the subspecies. We employ a comprehensive approach to recovery planning, and do consider the needs of other species beyond the subject listed species in the process of crafting recovery strategies.

(25) *Comment:* One commenter suggested the Service should provide blanket, enduring authorization for incidental take for the streaked horned lark on non-federal land, such as through a safe harbor agreement between the Service and State field offices, with zero baseline and no requirements for participation.

Our response: The 4(d) special rule addresses those categories of activities for which the Service believes a broad exemption from the take prohibitions under the Act is necessary and advisable for the conservation of the streaked horned lark. Any other incidental take authorizations will be addressed through future permitting processes under section 10 of the Act. As noted in earlier responses, we encourage our conservation partners to take advantage of the full suite of conservation tools available to aid in the recovery of listed species.

(26) *Comment:* One commenter argued that the observed contraction of the streaked horned lark’s range justifies listing as endangered. Another commenter suggested the streaked horned lark should not be listed because we should consider the full range of potential habitat for the subspecies.

Our response: Consideration of the current and historical range of a species is only one aspect that is considered in the analysis to determine if a species should be listed as an endangered or a threatened species; the imminence and

magnitude of threats acting on the species are more important to the assessment of a species’ status. We acknowledge that the streaked horned lark’s range has contracted substantially over the last century. However, although we consider the loss of historical range to be informative to our determination, we base our conclusion on whether a species is presently in danger of extinction or likely to become so within the foreseeable future on the status of the species at the time of our determination. We have good information that the streaked horned lark population is declining in Washington, but the population in Oregon is relatively large, has abundant habitat, and appears to be either relatively stable or declining far more slowly than the population in Washington, indicating that listing as threatened is most appropriate. Many species occupy only a portion of their historical ranges, but the Act does not require that species be restored to their entire historical ranges to be considered secure or recovered; delisting requires only that the species no longer meets the definition of an endangered or a threatened species under the Act.

(27) *Comment:* One commenter stated that the streaked horned lark meets the International Union for the Conservation of Nature (IUCN) standard for endangered (fewer than 2,500 mature individuals, and either a decline of at least 20 percent within 5 years or continuing decline, and no subpopulation estimated to contain more than 250 mature individuals). The commenter pointed out that the population in Washington is clearly declining and the largest known subpopulation at the Corvallis Municipal Airport consists of fewer than 250 individuals.

Our response: The Service does not use a one-size-fits-all standard for determination of endangered or threatened status, and the IUCN standard of endangered does not pertain to the definition provided under the Act. The Act directs us to consider the range of threats a species faces, and to make a determination of status based on the total impact of those threats. Based upon our evaluation of the threats to the streaked horned lark, we have determined it is a threatened species as defined by the Act.

(28) *Comment:* One commenter stated that the streaked horned lark does not deserve special protections in Oregon, and listing as threatened is not warranted, citing our statements about the apparent stability of the population in the Willamette Valley. The commenter believes we failed to

demonstrate that the streaked horned lark is declining or that such declines are likely to occur.

Our response: Our analysis of the best scientific and commercial data available indicates that the streaked horned lark is declining throughout its range. The decline is most apparent in the Puget lowlands of Washington, but the population in Oregon is also declining, though at a less pronounced rate. In this final rule, we have clarified the information regarding the status of the streaked horned lark in the Willamette Valley, and why we believe the subspecies warrants listing as a threatened species under the Act across its range.

(29) *Comment:* One commenter stated that we should have been clearer regarding the limits of the recent surveys for streaked horned larks in the Willamette Valley. The commenter suggested that most of the suitable habitat on private lands in the Willamette Valley has been surveyed only from public rights-of-way, and that few, if any, large blocks of private farmland have been adequately surveyed for larks.

Our response: We acknowledge in this final rule that most surveys for streaked horned larks on private lands in the Willamette Valley have been conducted from roadsides. The sites that have been well surveyed are those in public ownership or private lands with conservation easements. We have clearly stated that we do not have a complete picture of the streaked horned lark's distribution or habitat use. However, the Act requires us to use the best scientific and commercial data available, and we have used the best available data to support our determination that the streaked horned lark meets the definition of a threatened species under the Act.

(30) *Comment:* One commenter suggested that the Service needs to evaluate recreation and its associated effects (attraction of potential predators) as a threat to the streaked horned lark.

Our response: As discussed in the proposed rule, recreational activities can pose both direct and indirect threats to streaked horned larks. Activities such as horseback riding, boating, biking, dog walking, ATV use, and model airplane flying can result in the loss of nests through crushing of chicks or eggs and nest abandonment associated with disturbance of adults. Indirect effects of recreational activities include increased risk of nest failure when incubating or when brooding adults are flushed from nests and human activities (such as leaving trash and food on site) attract corvids to nesting areas. Corvids have

been routinely documented depredating nests of streaked horned larks and are considered significant nest predators. The Service is working with resource staff at JBLM to reduce recreational impacts to the streaked horned lark at several prairies on base by limiting civilian access during the nesting season and by posting signs restricting public access at several prairies and nesting areas along the Washington Coast. Because enforcement of seasonal closures and monitoring of recreational activities at sites that are not posted (e.g., boating and camping on the Columbia River islands, ATV use on port properties, and dispersed recreational activities in open areas) is difficult and often ineffective, recreational activities are a potential threat to the streaked horned lark.

(31) *Comment:* One commenter stated that we failed to show that Oregon's regulatory mechanisms are inadequate to protect the streaked horned lark. The commenter believes that the threat of loss of suitable habitats is not likely to be realized because Goals 3 and 5 of Oregon's Statewide Planning Program protect agricultural lands and open spaces, and these mechanisms will be sufficient to provide adequate habitat for streaked horned larks on agricultural lands in the Willamette Valley.

Our response: Oregon has a strong Statewide program for land use planning, which established 19 goals to protect various aspects of Oregon's environment. Goal 3 addresses preservation of agricultural lands; Goal 5 directs local governments to adopt programs to protect natural resources and conserve scenic, historic, and open space resources. Most of the goals are accompanied by guidelines, which are suggestions about how a goal may be applied; however, these guidelines are purely voluntary and not mandatory. Goal 3 has been effective in preserving agriculture in the Willamette Valley, but the guidelines merely direct counties to preserve farmland and open space, but do not specifically call for the maintenance of existing agricultural crops. Transition from grass seed fields to other agricultural types, such as nursery stock or wheat, would be consistent with Goal 3, and yet would result in habitat loss for the streaked horned lark. Similarly, Goal 5 promotes the protection and conservation of open space and wildlife habitats, but does not specifically require the maintenance of existing land use types that support the streaked horned lark. We conclude that Oregon's Statewide planning goals and guidelines contribute to protecting habitats for larks in the Willamette Valley, but are not sufficient to protect

or maintain habitat on agricultural lands for the long-term sustainability of streaked horned lark populations.

(32) *Comment:* One commenter stated that our analysis of Factor E (other natural and manmade factors affecting the subspecies' existence), particularly the status of the small population of streaked horned larks on the Puget prairies, supports an endangered listing.

Our response: As we acknowledge in this final rule, populations of the streaked horned lark in the State of Washington are small and declining at a faster rate than those in Oregon. However, we evaluated the status of the streaked horned lark at the scale of the subspecies as a whole, and as we stated in our analysis, the population of the streaked horned lark in the Willamette Valley is larger, has more habitat available, and appears to be more secure than the small population in Washington. Thus, although the status of the subspecies is not stable and secure, we do not consider the subspecies in its entirety to be in danger of extinction at this time, as we anticipate the persistence of the streaked horned lark in some portions of its range, at least for the foreseeable future. Threats acting upon the subspecies across its range are, however, such that if they were to continue unabated, we anticipate the streaked horned lark would become in danger of extinction within the foreseeable future. Given that the subspecies is not presently in danger of extinction (endangered), but is likely to become so with the foreseeable future, we conclude that consideration of all of these factors together with the data that show a declining population on the Puget prairies warrants a threatened determination for the streaked horned lark. In addition, as described in this final rule, we considered whether the Washington population of the streaked horned lark may constitute a separate distinct population segment (DPS) or a significant portion of the range. We concluded that the Washington population does not constitute a valid DPS under our DPS policy, and furthermore that the Washington population does not represent a significant portion of the range of the subspecies. Based on these analyses, we conclude that threatened status is most appropriate for the streaked horned lark.

(33) *Comment:* One commenter stated that the economic and social factors driving conversion of Willamette Valley farmland to vineyards are likely to continue in the foreseeable future, and may accelerate as large California wineries are reportedly investing in Willamette Valley farmlands as a hedge

against global climate change. As a result, the likelihood of a changing agricultural landscape should be recognized in the listing and critical habitat designation for the streaked horned lark.

Our response: The Service does not consider the acquisition of lands by the viticulture industry to be a threat to streaked horned lark breeding and nesting habitat. We contacted Dr. William Boggess at Oregon State University's Oregon Wine Research Institute who described the ideal lands for viticulture as being 300–800 feet (90–240 m) in elevation, on a slope with a southern or western aspect. These optimal viticulture soils are shallow and nutrient poor, above the flood plain or on eroded rocky soils. These ideal conditions for grapes are not similar in characteristic to habitats preferred by the streaked horned lark. As such, we do not consider viticulture a current or future threat to the streaked horned lark.

(34) *Comment:* One commenter stated that the streaked horned lark faces continued threats to habitats and populations, including conversion of prairie and grassland, continued dumping of dredged spoils, military operations, airport development, and off-road vehicle recreation.

Our response: As we discussed in the text of this final rule, many of these activities have the potential to both benefit and pose a threat to the streaked horned lark. Many of the issues the commenter cites as threats to the streaked horned lark's habitat may actually be essential to the continued creation of habitat for the bird, depending on how they are conducted; the natural processes that formerly created habitat for the streaked horned lark no longer operate, and so these industrial activities create almost the only usable habitats available to the bird. Without the presence of dredge spoil islands, military reserves, agriculture, and airports, there would be virtually no habitat left for the streaked horned lark. The challenge will be to work with landowners to ensure these activities are implemented in ways that benefit the subspecies as well as work for the landowner as we work to recover the streaked horned lark. See also our response to Comment 13.

(35) *Comment:* Several commenters asked that the Service fully consider the effect of the 20-year old Washington State Growth Management Act (GMA) with respect to both direction and growth into urban areas while protecting rural areas. Commenters believed the GMA protects threatened species and habitat through comprehensive regulations and

planning that are integrated with the other mandates of the law. One commenter suggested that listings under the Act compel counties to identify critical areas and conserve habitat for listed species in order to receive monetary incentives, and work against existing local and State requirements such as the GMA.

Our response: The Service fully considered the effect of the Washington State GMA in reviewing the potential inadequacy of existing regulatory mechanisms. The GMA provides landscape-scale planning and conservation policies and tools, while the Act focuses on protection for species and the ecosystems upon which they depend. Each authority plays an important role in achieving our shared goals for prairie habitat and species conservation; however, in this case, implementation to date of the GMA alone has not provided enough certainty of future conservation for the species to fully address the threats identified in the proposed rule, and this final rule, to list the Taylor's checkerspot butterfly and the streaked horned lark under the Act. The application of the GMA is not uniform across the State and as such does not supply protection adequate to preclude the listing of the Taylor's checkerspot butterfly or the streaked horned lark. The Service works with not only counties, but a broad range of entities, using a wide variety of incentive-based programs to balance the conservation needs of listed species with the objectives of entities that voluntarily choose to work with us. We work with these partners to meet the conservation needs for federally listed species while striving to be consistent with existing State or local requirements, such as Washington State's GMA.

(36) *Comment:* One commenter said that streaked horned larks are insufficiently protected by existing regulatory mechanisms, and the proposed 4(d) special rule substantially weakens protections for the streaked horned lark.

Our response: In our analysis of Factor D (the inadequacy of existing regulatory mechanisms), we found that existing regulatory mechanisms are not sufficient to protect the streaked horned lark. However, we believe that promulgation of a special rule under section 4(d) of the Act is necessary and advisable to provide for conservation of the subspecies because its habitat is inadvertently created by airport managers and agricultural landowners. One of our goals for recovering listed species on private lands is to find ways to help landowners view these species

on their lands as an asset rather than a legal or economic liability. This is especially important when dealing with an early-successional dependent (sub)species such as the streaked horned lark that exhibits a temporary or intermittent presence on those lands, and when those lands require discretionary management treatments by the landowner to maintain their suitability or attractiveness for the streaked horned lark. The continued availability of these habitats on private lands is essential to the persistence of the streaked horned lark. With the special rule, we are seeking to encourage private landowners to be willing to accommodate or attract streaked horned larks, and to discourage any landowner's desire to avoid having streaked horned larks on their property, and managing the property for the benefit of the streaked horned lark.

(37) *Comment:* One commenter expressed concern that some activities covered under the proposed special rule for airports and agricultural lands could be carried to the point that they eliminate streaked horned larks on a site, for example, intensive mowing or hazing by falcons.

Our response: Our purpose in developing the special rule for airports and agricultural lands is to encourage the continuation of practices that inadvertently create habitat for the streaked horned lark. We acknowledge that some of those activities may take larks, which is why a special rule is needed, but the availability of the 4(d) special rule should eliminate the incentive to remove larks from airports or agricultural lands to avoid violation of the Act. However, the concern that land managers could inadvertently eliminate streaked horned larks from a site is valid, and we will work with land managers to identify opportunities to conserve larks on sites and for activities that are covered by the special rule.

(38) *Comment:* One commenter recommended that the proposed special rule for the streaked horned lark be expanded to cover the actions of non-federal entities engaged in dredging operations that deposit materials that create upland lark habitat on the lower Columbia River.

Our Response: Under the 4(d) special rule, take of the streaked horned lark caused by routine agricultural activities, wildlife hazard management programs at civilian airports, and noxious weed control activities is exempt from the prohibitions of section 9 of the Act. The purpose of exempting these activities is to encourage activities by non-Federal entities that inadvertently create lark habitat. Dredge disposal clearly has the

potential to create habitat for larks, but any action that involves dredging in the Columbia River would have a Federal nexus because it requires authorization from the U.S. Army Corps of Engineers (Corps). Under section 7(a)(2) of the Act, it is the responsibility of all Federal agencies to insure that any action authorized, funded, or carried out by the agency is not likely to jeopardize the continued existence of any endangered or threatened species or result in the destruction or adverse modification of designated critical habitat. Since the Corps will be required to consult with the Service under section 7 of the Act for dredging operations that may affect the streaked horned lark, those activities and any associated take of streaked horned larks will be appropriately addressed in section 7 consultation between the Corps and the Service.

(39) *Comment:* Some commenters asked for a special rule under section 4(d) of the Act for restoration actions, including landfill closure and maintenance. The commenters stated that without a 4(d) special rule allowing active habitat management, agencies and land stewards would not be able to maintain needed habitat conditions at sites that could support streaked horned larks. The commenters requested coverage in a special rule for activities including, but not limited to: Seeding and planting, haying, mowing, tilling, disking, harrowing, and herbicide application; prescribed burning; hydrologic management; livestock grazing; routine management and maintenance of infrastructure, such as gates, fences, water control structures, property boundary markers, and property surveys; monitoring of vegetation and animals; and applied or other research, such as vocal attraction experiments, vegetation manipulations, predator surveys, and other work.

Our response: The purpose of the 4(d) special rule for agriculture, airports, and noxious weed control is to allow take of streaked horned larks for activities that inadvertently create habitat for the birds. Our logic in developing this special rule is that, without the exemption from take offered by the 4(d) special rule, these landowners might decide not to take actions that create or maintain important habitat for streaked horned larks, in order to avoid the potential violation of the Act. The restoration and habitat creation activities discussed in the comment above would be implemented specifically to enhance habitat for streaked horned larks or other prairie species. We believe it is appropriate to work with these agencies and land stewards using other programs offered

by the Act (section 7 consultation, safe harbor agreements, and section 10(a)(1)(B) habitat conservation plans) to maximize the conservation efforts in these programs, and to offer exemptions from incidental take through options other than a special rule.

(40) *Comment:* One commenter requested a special rule under section 4(d) of the Act for park management activities at M. James Gleason Memorial Boat Ramp and Broughton Beach in Portland; the special rule would include coverage for any take of streaked horned larks resulting from repair and maintenance of existing infrastructure, and facility improvements that are underway now. The commenter also asked for a special rule that allows take associated with recreational use of the site by the public, including events such as the Polar Bear Plunge, fishing from boats and from shore, picnicking, hiking, dog walking, bird watching, and other customary passive recreation.

Our response: As we stated earlier, we have used the option to promulgate a special rule under section 4(d) of the Act specifically for activities that inadvertently create habitat for streaked horned larks (i.e., wildlife hazard management at airports, activities on agricultural lands in the Willamette Valley, and noxious weed control on non-federal lands). The activities listed in the comment do not create habitat for the streaked horned lark or otherwise benefit the species, and are more appropriately covered under other programs of the Act that result in exemptions from incidental take of a listed species, including consultation pursuant to section 7 or permitting pursuant to section 10, if take of larks as a result of these activities is anticipated.

(41) *Comment:* One commenter asked us to include an offer of landowner assistance and education in the special rule.

Our response: These activities (landowner assistance and education) do not cause take, and so are not included in the special rule exempting certain activities from the prohibitions on taking; we have therefore not amended the special rule to include them. We acknowledge, however, that outreach to landowners will be an important component of streaked horned lark conservation and recovery, and we will offer landowner assistance and education to airport managers and agricultural landowners through the various conservation tools and incentive programs offered by the Act.

(42) *Comment:* Numerous commenters asked us to add to the activities covered under the 4(d) special

rule for airports on non-federal lands, or to allow more flexibility in the activities covered. Commenters essentially asked for coverage for all routine activities at airports, and specifically asked for the 4(d) special rule to cover the following activities: Low-level military training operations; pest and invasive species control; stockpiling and staging areas for construction projects; vehicle access routes; management and operations of storm water conveyance, treatment facilities, and flow-control facilities, including grass seeding, irrigation, mowing, soil augmentation, and drainage control; spill and other environmental emergency response and associated remediation, including equipment deployment, product recovery, and soil removal; anti-icing and de-icing of aircraft and pavements, including chemical and physical methods; application of herbicides, pesticides, insecticides and other chemical treatment methods; noxious weed control; airport rescue and fire-fighting activities; control and removal of foreign object debris; airfield taxiway and services; road maintenance, including pavement repair and replacement, and paint or rubber removal; management of all marking, signs, and lighting; maintenance of meteorological instruments; management of obstructions to aircraft operations; and protection and maintenance of navigational aids.

Our response: Airports provide important habitat for streaked horned larks throughout their range. We developed the 4(d) special rule specifically to cover routine actions that inadvertently create suitable conditions for larks at airports. The purpose of the special rule is to encourage the continuation of the practices that have created suitable habitats for the species. The activities in the list above may be essential for safe airport operations, but do not generally create habitat for the streaked horned lark. We understand that airports must perform many of these activities, and some of them may affect larks; however, the Act provides other appropriate mechanisms for addressing those activities, and exempting any associated take. For activities at airports with a Federal nexus (e.g., drainage projects requiring a permit from the Corps under section 404 of the Clean Water Act (33 U.S.C. 1251 *et seq.*)), section 7 consultation can provide the needed coverage for incidental take. For activities without a Federal nexus that may result in incidental take of the streaked horned lark, we will work with the airports to

cover the activities under section 10 of the Act.

We also note here that we have amended the 4(d) special rule to include noxious weed control on non-Federal lands. We added this activity to the 4(d) special rule in response to public comments requesting an exemption from take prohibitions for actions that restore habitats used by the streaked horned lark, but this component of the 4(d) special rule may also be applicable to some activities at non-Federal airports. The specific weed control activities covered in the 4(d) special rule are: mowing, herbicide and fungicide application, fumigation and burning. See the 4(d) special rule at the end of this document for a complete description of the take exemptions for noxious weed control.

(43) *Comment:* One commenter stated that the proposed 4(d) special rule for the streaked horned lark is unlawful because it does not provide for the conservation of the species. The commenter stated that the Service's authority to promulgate a 4(d) special rule is constrained by the requirement that the measures in the special rule be "necessary and advisable" to provide for the survival and recovery of the species. The commenter also argued that, for more than 30 years, it has been the policy and practice of the Service to extend the full protections against take in section 9 to threatened species. Any departure from this long-standing position must have a valid conservation purpose.

Our response: We developed the 4(d) special rule for the streaked horned lark consistent with the Act's requirements that any special rule be necessary and advisable to provide for the conservation of a species. The rationale for promulgating the special rule is that, throughout most of its range, streaked horned lark habitat has been inadvertently created and maintained by industrial land uses. The purpose of the 4(d) special rule is to encourage landowners to continue to manage lands in a way that creates or maintains habitat for the streaked horned lark, rather than switch to other land uses or practices that will not support the subspecies. The 4(d) special rule for the streaked horned lark is consistent with the Service's long-standing practice to use all the flexibility offered by the Act under section 4(d) for threatened species.

(44) *Comment:* One commenter stated that the 4(d) special rule appears to be geared more toward airport safety than streaked horned lark conservation; the commenter said, "At its core, the [4(d)]

rule has nothing to do with streaked horned lark conservation."

Our response: We disagree. The reality is that airports' wildlife hazard management programs (which are implemented to create a safe conditions for aviation) inadvertently create suitable habitat for streaked horned larks. The safe operation of aircraft requires the same wide-open landscape context needed by streaked horned larks; the wildlife hazard management practices at airports create the specific habitat characteristics (low-stature vegetation) desired by larks, as well as a reduced level of predatory species. We believe that development of a 4(d) special rule to allow the practices that create or maintain suitable habitat for larks is necessary and advisable to provide for streaked horned lark conservation.

(45) *Comment:* One commenter stated that, in the special rule, the Service acknowledges that some management actions taken at airports are generally beneficial to larks, but noted that this implies that some activities are not beneficial, and should not be covered in the rule. For example, the Service fails to explain how "management, repair, and maintenance of roads and runways" benefits larks, or how hazing hazardous wildlife benefits larks.

Our response: Certain activities covered in the 4(d) special rule are likely neutral with respect to impacts to streaked horned larks, and these include maintenance and repair of roads and runways. We included these activities in the list of covered activities in the special rule so that airport managers would not be confused about their ability to implement routine maintenance activities and which activities are exempted from the take prohibitions of the Act. Other activities, such as habitat management and hazing of hazardous wildlife, clearly benefit the streaked horned lark. Hazing is often directed at larger, more hazardous wildlife, such as hawks and geese; hazing these species away from airfields benefits the streaked horned lark by reducing the abundance of predators (such as hawks) that would otherwise prey on eggs and nestlings.

(46) *Comment:* One commenter believes the 4(d) special rule for the streaked horned lark is not an appropriate application of that section of the Act. The commenter stated that the Act requires section 4(d) to be used to issue regulations to conserve threatened species; the commenter further points out that the Act defines conservation as all activities associated with scientific resource management, including research, census, law

enforcement, habitat acquisitions and maintenance, propagation, live trapping, and transplantation. The commenter does not believe that the special rule fits within the rubric of scientific resource management activities.

Our response: When Congress enacted the Endangered Species Act in 1973, it provided no prohibitions on take of threatened species. However, section 4(d) of the Act applies to threatened species and was included in the Act to set prohibitions for these species that are necessary and advisable to provide for their conservation. Such regulations are intended to encourage activities that will promote conservation of species and prohibit take as a result of those actions that are not conducive to species conservation. Our promulgation of a special rule for the streaked horned lark is consistent with this aspect of the Act, and is necessary to conserve the streaked horned lark given the unique situation of its dependence on actively managed, industrial landscapes.

(47) *Comment:* One commenter stated that the 4(d) special rule for activities at airports would not benefit the streaked horned lark, because even control and management of vegetation at airports can harm larks if the activities occur during the breeding season.

Our response: We agree that some of these activities can harm larks, and will result in take, which is why a special rule to exempt take as the result of certain activities is appropriate. These activities (i.e., control and management of vegetation) clearly benefit the streaked horned lark by creating the appropriate habitat conditions for breeding. The best evidence of this fact is that, with their existing management practices, airports currently support larks. Maintenance of these conditions, which must be done during the bird's breeding season to ensure aircraft safety, will entail some take of the species; thus the 4(d) special rule allows take in the act of creating and maintaining suitable habitat for the streaked horned lark.

(48) *Comment:* One commenter asked us to amend the 4(d) special rule to include a re-evaluation of the special rule after 5 years to ensure that it is not contributing to the decline of the streaked horned lark.

Our response: All of our rulemakings are subject to revision, if necessary and appropriate. In the recovery program for the streaked horned lark, we will track the population trend, and if the data suggest that the special rule is not benefitting the species, we would re-evaluate it at that time. In addition, as required by section 4(c)(2) of the Act, we conduct a review of the status of listed species every 5 years. The reviews

assess each endangered and threatened species to determine whether its status has changed since the time of its listing or its last status review and whether it should be classified differently or delisted.

(49) *Comment:* One commenter stated that the proposed listing of the streaked horned lark could potentially have adverse impacts on aviation safety, and therefore should be subjected to a formal safety risk assessment in accordance with established FAA policies and procedures, notably those outlined in FAA Order 5200.11, FAA Airports (ARP) Safety Management System. They further stated a risk assessment should consider both the direct hazard posed to aircraft operations at and near airports by the streaked horned lark and the induced hazards associated with larger predatory wildlife species that the streaked horned lark may attract to the vicinity of the airport, as well as airfield maintenance activities that could be limited due to a listing.

Our response: FAA policies, including FAA Order 5200.11, do not apply to our administration of the Act. FAA Order 5200.11, by its own terms, applies only to airports and FAA personnel. We have no authority under the Act to choose not to list a bird species that otherwise warrants listing on the grounds that the species poses a threat to aviation safety. In any event, streaked horned larks are already present on many of the airports within the range of the species and have been there for some time. The subspecies occurs on airports largely because management to control hazardous wildlife has incidentally created and maintains suitable habitat for the streaked horned lark. FAA regulations require airports to take immediate action to alleviate wildlife hazards whenever they are detected (14 CFR 139.337). This requirement to maintain airfields free of wildlife hazards will limit the potential for populations of all birds, including streaked horned larks, to increase to levels that pose a risk to aviation. The 4(d) special rule for wildlife hazard management at airports will ensure that airports are not in violation of the Act when implementing appropriate safety measures. The FAA Order referenced went into effect on June 1, 2011, and provides guidance for airports to complete safety risk management plans or approaches by certain timelines. The Service is willing to assist the FAA and individual airports in determining what, if any, adjustments need to be made to the safety risk assessments as a result of the listing of the subspecies.

(50) *Comment:* One commenter stated that larks do not harm airplanes when they are struck.

Our response: The commenter's assumption is not supported by the facts. A recent report verified that an F-15C military aircraft at Portland International Airport struck a streaked horned lark and the plane sustained damage to an engine (Dove *et al.* 2013, p. 1). The bird also died, of course.

(51) *Comment:* One commenter argued that the special rule for airports and agriculture would not advance the conservation of the streaked horned lark, but is designed to allow airports and agricultural landowners to continue to operate without obtaining a permit for take under section 10. The commenter stated that the provisions in the special rule should be used for section 10 permits, and that the Service should work with airports throughout the range of the streaked horned lark to create a regional habitat conservation plan for airports, and work with farmers to develop safe harbor agreements.

Our response: We developed the 4(d) special rule for the streaked horned lark consistent with the Act's requirements that any special rule be necessary and advisable to provide for the conservation of a species. We believe that the special rule appropriately uses the flexibility of section 4(d) of the Act to allow take of a threatened species. The foundation of the special rule is that, throughout most of the subspecies' range, streaked horned lark habitat is inadvertently created by industrial or agricultural land uses. The purpose of the 4(d) special rule is to encourage landowners to continue to manage lands in ways that create habitat for the streaked horned lark, rather than switch to other land uses practices that will not support the subspecies. The safety issue at airports is unique, and airport managers likely have little room to maneuver in terms of the management they do; negotiating a section 10 permit with a regional habitat conservation plan is unlikely to result in greater conservation of larks at airports than can be achieved through the special rule. In regard to the recommendation to develop safe harbor agreements with farmers, those agreements are entirely voluntary, and are likely to benefit fewer streaked horned larks than the 4(d) special rule that would apply to all agricultural activities automatically. Furthermore, the 4(d) special rule does not preempt the Service from working with landowners interested in pursuing safe harbor agreements addressing activities either directly or indirectly associated with agricultural pursuits, especially any activities intended to

attract streaked horned larks to their properties.

(52) *Comment:* One commenter said that National Environmental Policy Act (NEPA; 42 U.S.C. 4321 *et seq.*) review is required to evaluate alternatives to the 4(d) special rule for the streaked horned lark.

Our response: The courts have ruled that NEPA does not apply to listing decisions under section 4(a) of the Act, nor to 4(d) special rules issued concurrent with listing. See *Pacific Legal Foundation v. Andrus*, 657 F.2d 829 (6th Cir. 1981); and *Center for Biological Diversity v. U.S. Fish and Wildlife Service*, No. 04-4324, 2005 WL 2000928, at *12 (N.D. Cal. Aug. 19, 2005).

(53) *Comment:* One commenter stated that the Service must consult under section 7 of the Act on the effects of the 4(d) special rule on the streaked horned lark to ensure that the special rule will not jeopardize the continued existence of the subspecies. The commenter pointed out that the National Marine Fisheries Service has conducted formal section 7 consultations on the issuance of 4(d) special rules for listed fish.

Our response: The Service believes that section 7 does not apply to the promulgation of 4(d) special rules. The Service's determination that a 4(d) special rule is necessary and advisable to provide for conservation of the species necessarily subsumes a determination that the rule will not jeopardize the species or adversely modify its critical habitat. Hence, applying the section 7 consultation procedures to such rulemaking would be a redundant exercise in paperwork. See *Cf. Pacific Legal Foundation v. Andrus*, 657 F.2d 829 (6th Cir. 1981) (NEPA inapplicable to listing decision under section 4 of the Act, because listing action furthered purposes of NEPA); *Douglas County v. Babbitt*, 48 F.3d 1495 (9th Cir. 1995) (NEPA inapplicable to designation of critical habitat under section 4 of the Act, because designation furthers goals of NEPA). Moreover, even if section 7 did apply to the promulgation of a 4(d) special rule, in this case the subspecies is not yet listed, so the only relevant provision would be section 7(a)(4), which requires an action agency to confer on any action that is likely to jeopardize, or destroy or adversely modify the proposed critical habitat of, a species proposed for listing. The Service has determined that this 4(d) special rule is not likely to jeopardize the streaked horned lark, nor is it likely to destroy or adversely modify its proposed critical habitat, so a

conference under section 7(a)(4) of the Act is not required.

(54) *Comment:* One commenter noted dredge material placement sites are human-made or managed features and not “naturally occurring habitat,” and these sites are specifically created and managed for the placement of dredge materials. The commenter further raised concern about the presence of streak horned larks limiting full access to dredge material sites. Another commenter said that placement of dredge materials should not be considered a threat given the long-term benefit of creation and maintenance of dredge islands.

Our response: Streaked horned larks commonly use human-made or managed areas that provide the right conditions and are not limited to “naturally occurring habitats.” Upland dredge spoil deposit sites, agricultural fields, gravel roads/shoulders, undeveloped industrial sites, and areas where vegetation is sparse or maintained (such as at airports) provide suitable conditions and the landscape context that larks need. The presence of a listed species on these sites does not preclude entities such as airports from doing business or continuing operations. One option may be for potentially affected entities to work with the Service on the development of a habitat conservation plan under section 10 of the Act. A habitat conservation plan authorizes incidental take and provides landowners long-term assurances from activities that could affect the species or suitable habitat.

In the absence of trend data, we cannot know whether unmanaged dredge spoils deposition has had a net positive or negative effect on streaked horned lark population numbers. While creation and maintenance of these dredge islands is critical to the perpetuation of the subspecies, streaked horned lark population numbers are in decline, and nest failure due to unregulated dredge deposition is a threat to the subspecies.

(55) *Comment:* The Port of Olympia asserted that the listing overstates the threats posed by potential airport development to the streaked horned lark. An interlocal agreement with WDFW required the airport to set aside areas to be preserved as lark habitat, and also includes measures to minimize development, retain open space, and avoid mowing in lark nesting areas and during lark breeding seasons. The airport does not anticipate development in lark nesting areas over the next 20 years.

Our response: We recognize and appreciate the cooperative effort on the

part of the Port of Olympia to craft the interlocal agreement with WDFW. The interlocal agreement provides a framework for how development impacts will be addressed and offset, but it does not address the pace and extent of future development at the Olympia Airport and does not necessarily provide protection from development in the foreseeable future.

(56) *Comment:* One commenter said that we should acknowledge the threats to streaked horned larks and their habitats from government programs, such as the Conservation Reserve Enhancement Program, that encourage tree planting in open areas.

Our response: We do not currently have information to suggest that government tree planting programs pose a threat to the streaked horned lark. However, the purpose of section 7 of the Act is to ensure that Federal agencies do not fund, authorize, or carry out activities that could jeopardize the continued existence of listed species or destroy or adversely modify their designated critical habitat. After this rule is effective (see **DATES**), we will work with the Farm Service Agency (the Federal agency that implements the Conservation Reserve Enhancement Program) to ensure that their actions do not jeopardize the continued existence of the streaked horned lark.

(57) *Comment:* One commenter stated that Corvallis Municipal Airport has been declared as “shovel-ready” for commercial development, and that the analysis of listing factors should include an assessment of the extent to which the proposed commercial development at Corvallis Airport will impinge upon critical habitat for the streaked horned lark.

Our response: As we discuss in the final critical habitat designation for the streaked horned lark, published elsewhere in the **Federal Register** today, we have excluded non-Federal airport lands from the designation. However, we agree that future development at the Corvallis Airport could affect the population of streaked horned larks that breed at the site. We have added a brief discussion of the issue under Factor A, below.

(58) *Comment:* Several commenters asked us to amend the special rule to include take of streaked horned larks resulting from aircraft strikes.

Our response: The fundamental purpose of wildlife hazard mitigation programs at airports is the minimization of wildlife-aircraft strikes. Streaked horned larks are paradoxically attracted to the habitat that has been created and maintained at airports as a result of those management activities to deter

other more dangerous wildlife; some aircraft strikes of larks are probably unavoidable. This take of larks from routine aviation activities at airports is appropriately exempted under the 4(d) special rule, and we have therefore modified this final rule accordingly.

(59) *Comment:* One commenter requested that, under the proposed 4(d) special rule for the streaked horned lark, we consider covering comparable municipal government activities. In particular, consideration should be given to the continuing operation and maintenance, and to (if necessary due to fire or other unforeseen events) the reconstruction and restoration of, public facilities such as stormwater facilities, water supply sites (wellheads and springs), and active recreation parks (including athletic fields utilized by cities but owned by school districts). Such operation and maintenance should encompass sporting events, planting and mowing, fence and security maintenance, herbicide and fertilizer application, and similar activities.

Our response: We are not aware of any streaked horned larks nesting on lands owned and managed by the Cities of Olympia, Lacey, or Tumwater, or on school properties, stormwater facilities, water supply sites, or active recreational parks. These types of areas do not provide suitable habitat (size, landscape context, and vegetation do not meet habitat definition) for this subspecies. The 4(d) special rule for streaked horned lark exempts take under section 9 of the Act associated with routine maintenance conducted at airports, farming on agricultural lands, and noxious weed control activities to provide for the conservation of the streaked horned lark.

Summary of Changes From Proposed Rule

We fully considered comments from the public and the peer reviewers on the proposed rule to develop this final listing of the Taylor's checkerspot butterfly and the streaked horned lark. This final rule incorporates changes to our proposed listing based on the comments that we received that are discussed above. We received additional distribution and trend data for the streaked horned lark, but this information did not alter the conclusion of our analysis. We made some technical corrections and reevaluated threats to both subspecies from vehicular mortality. Although our analysis of these potential threats is different from that in our proposed rule, none of the information changed our determination that the Taylor's checkerspot butterfly meets the

definition of an endangered species and the streaked horned lark meets the definition of a threatened species under the Act.

We revised the 4(d) special rule for the streaked horned lark based on public comments and information we received. The Service has determined that exempting specified agricultural operations in the Willamette Valley of Oregon, rather than rangewide, as proposed, from the prohibition of take under section 9 of the Act encourages landowners to continue managing the remaining landscape in ways that meet the needs of their operation while simultaneously providing for the conservation of the streaked horned lark. The application of the 4(d) special rule exempting specific agricultural operations applies only to the Willamette Valley in Oregon because there is no record of the streaked horned lark utilizing agricultural lands in Washington State, despite thorough surveys by WDFW.

We revised the 4(d) special rule in response to comments from the public, which helped us refine the covered farming activities. We have clarified the definition of “normal farming practices” and “normal transportation activities” to be consistent with relevant Oregon State laws. We also amended the list of covered activities to address specific agricultural practices in the Willamette Valley that may affect the streaked horned lark. Based on feedback from agricultural interests, we deleted several activities from the 4(d) special rule (i.e., routine management and maintenance of stock ponds and berms to maintain livestock water supplies; routine maintenance or construction of fences for grazing management; placement of mineral supplements; and irrigation of agricultural crops, fields, and livestock pastures) and added others (i.e., hazing of geese and predators; and maintenance of irrigation and drainage systems).

In response to comments from the FAA and airport operators, we revised the 4(d) special rule for airports on non-Federal lands by referencing applicable FAA regulations and circulars addressing safety, and by including a take exemption for streaked horned lark airstrikes at airports, which are an occasional unavoidable result of continuing aviation operations.

We also amended the 4(d) special rule to include some management of noxious weeds on non-Federal lands, as these actions facilitate the preservation of streaked horned lark habitat on the landscape.

In addition, we found some typographical errors in the Proposed Regulation Promulgation section of our

proposed rule (October 11, 2012; 77 FR 61938), specifically in the proposed amendments to 50 CFR 17.11(h), the List of Endangered and Threatened Wildlife (see 77 FR 62006). In the table at § 17.11(h), the historic range for the streaked horned lark was correctly identified as British Columbia, Canada, and the States of Washington and Oregon, although based on the presentation of that information, it may have appeared as if all of the historic range for the streaked horned lark was within the United States. For the Taylor's checkerspot butterfly, British Columbia, Canada, was mistakenly omitted from the subspecies' historic range, which additionally includes the States of Washington and Oregon. For both the Taylor's checkerspot butterfly and the streaked horned lark, the “vertebrate population where endangered or threatened” was mistakenly identified as only within the State of Washington in the United States. As described in the text of the proposed rule, it was our determination and intent to list each subspecies throughout its entire range. All of these errors have been corrected in the Regulation Promulgation section of this final rule.

Summary of Factors Affecting the Species

Section 4 of the Act and its implementing regulations (50 CFR 424) set forth the procedures for adding species to the Federal Lists of Endangered and Threatened Wildlife and Plants. A species may be determined to be an endangered or threatened species due to one or more of the five factors described in section 4(a)(1) of the Act: (A) The present or threatened destruction, modification, or curtailment of its habitat or range; (B) overutilization for commercial, recreational, scientific, or educational purposes; (C) disease or predation; (D) the inadequacy of existing regulatory mechanisms; or (E) other natural or manmade factors affecting its continued existence. Listing actions may be warranted based on any of the above threat factors, singly or in combination. Each of these factors is discussed below.

In considering what factors might constitute threats, we must look beyond the mere exposure of the species to the factor to determine whether the species responds to the factor in a way that causes actual impacts to the species. If there is exposure to a factor, but no response, or only a positive response, that factor is not a threat. If there is exposure and the species responds negatively, the factor may be a threat and we then attempt to determine how

significant a threat it is. If the threat is significant, it may drive or contribute to the risk of extinction of the species such that the species warrants listing as an endangered or threatened species as those terms are defined by the Act. This does not necessarily require empirical proof of a threat. The combination of exposure and some corroborating evidence of how the species is likely impacted could suffice. The mere identification of factors that could impact a species negatively is not sufficient to compel a finding that listing is appropriate; we require evidence that these factors are operative threats that act on the species to the point that the species meets the definition of an endangered or threatened species under the Act.

We considered and evaluated the best available scientific and commercial information in evaluating the factors affecting each of the species under consideration in this rule.

Factor A. The Present or Threatened Destruction, Modification, or Curtailment of Its Habitat or Range

Under this factor, the primary long-term threats to the Taylor's checkerspot butterfly and the streaked horned lark are the loss, conversion, and degradation of habitat, particularly as a consequence of agricultural and urban development, successional changes to grassland habitat, and the spread of invasive plants.

The prairies of south Puget Sound and western Oregon are part of one of the rarest ecosystems in the United States (Noss *et al.* 1995, p. I–2; Dunn and Ewing 1997, p. v). Dramatic changes have occurred on the landscape over the last 150 years, including a 90 to 95 percent reduction in the spatial distribution of the prairie ecosystem. In the south Puget Sound region, where most of western Washington's prairies historically occurred, less than 10 percent of the original prairie persists, and only 3 percent remains dominated by native vegetation (Crawford and Hall 1997, pp. 13–14). In the remaining prairies, many of the native bunchgrass communities have been replaced by nonnative pasture grasses (Rogers 2000, p. 41), which larks avoid using for territories and nest sites (Pearson and Hopey 2005, p. 27). In the Willamette Valley, Oregon, native grassland has been reduced from the most common vegetation type to scattered parcels intermingled with rural residential development and farmland; it is estimated that less than 1 percent of the native grassland and savanna remains in Oregon (Altman *et al.* 2001, p. 261).

Development

Native prairies and grasslands have been severely reduced throughout the range of the Taylor's checkerspot butterfly and the streaked horned lark as a result of human activity due to conversion of habitat to residential and commercial development and agriculture. Prairie habitat continues to be lost, particularly to residential development (Stinson 2005, p. 70) by removal of native vegetation and the excavation and grading of surfaces and conversion to non-habitat (buildings, pavement, other infrastructure). Residential development is associated with increased infrastructure such as new road construction, which is one of the primary causes of landscape fragmentation (Watts *et al.* 2007, p. 736). Activities that accompany low-density development are correlated with decreased levels of biodiversity, mortality to wildlife, and facilitated introduction of nonnative, invasive species (Trombulak and Frissell 2000, entire; Watts *et al.* 2007, p. 736). In the south Puget Sound lowlands, the glacial outwash soils and gravels underlying the prairies are deep and valuable for use in construction and road building, which leads to their degradation and destruction.

Since the 1850s, much of the Willamette Valley of Oregon has been altered by development (agricultural and urban). About 96 percent of the Willamette Valley is privately owned, and it is both the fastest growing area in Oregon and the most densely populated. The Willamette Valley provides about half of the State's agricultural sales, and 16 of the top 17 private sector employers (manufacturing, high technology, forest products, agriculture, and services) are located there. The population projected for 2050 is approximately 4 million, or nearly double the current population (Oregon Department of Fish and Wildlife 2006, p. 237). The increase in population will result in increased building construction and road development, further impacting the remaining prairies and oak woodlands.

Taylor's Checkerspot Butterfly—The habitat of the Taylor's checkerspot butterfly is highly fragmented across the region due to agricultural and low-density residential development. Fragmentation due to residential and associated road development has led to a reduction of native larval host plants and adult nectar plants as introduced invasive plant species, primarily Mediterranean grasses and shrubs such as Scot's broom, increasingly dominate the landscape and outcompete native

plant species (see discussion below, under "Loss of Ecological Disturbance Processes, Invasive Species, and Succession"). Construction directly destroys habitat, as does conversion, and may kill any sessile (immobile) or slow-moving organism in the construction footprint (Trombulak and Frissell 2000, p. 19). Unlike many other species of butterflies, the Taylor's checkerspot butterflies spend approximately 50 weeks of their life cycle as sedentary eggs, larvae, or pupae with only a brief window of time (approximately 1–2 weeks) as mobile, winged adults (Stinson 2005, p. 78). As a result, commercial and residential development, construction of related infrastructure including roads, and conversion of habitat to incompatible uses such as gravel mining directly affect the Taylor's checkerspot butterfly eggs, larvae, and pupae by killing individuals and destroying habitat.

When in flight, butterflies become subject to mortality from collision with vehicles on roads associated with residential development, which is commonly known to affect animals of all sizes, but especially insects (Trombulak and Frissell 2000, p. 20). Since the short flight season of Taylor's checkerspot butterflies directly corresponds with their reproductive period, death of gravid (egg-carrying) females could lead to population declines; however, it is unlikely that failure of the entire population would occur based on this alone. These sorts of traffic-collision related deaths may disproportionately affect Taylor's checkerspot butterflies in comparison to other butterflies, as many other kinds of butterflies are in flight for periods much longer than just their reproductive window. Additionally, because female Taylor's checkerspot butterflies oviposit in clusters (lay many eggs in one place), vehicle traffic can adversely affect the subspecies by crushing whole clutches of eggs or large numbers of larvae, which cluster together in the early instar periods.

Four historical locales for Taylor's checkerspot butterflies in the south Puget Sound region were lost to development or conversion. Dupont, Spanaway, and Lakewood were all converted to urban areas, and JBLM Training Area 7S became a gravel pit (Stinson 2005, pp. 93–96).

In summary, the threat of development and conversion of the prairie ecosystem to other uses has a significant impact on Taylor's checkerspot butterflies due to the effect of development on the habitat features that are required (short-statured vegetation communities with specific

larval and adult food resources) by the subspecies to complete its life stages and become a reproductive adult butterfly.

Streaked Horned Lark—Horned larks need expansive areas of flat, open ground to establish breeding territories. The large, flat, treeless areas that airports necessarily require and maintain have become attractive alternative breeding sites for streaked horned larks as native prairies and scoured river banks in the Pacific Northwest have declined. Five of the six streaked horned lark nesting sites remaining in the Puget lowlands are located on or adjacent to airports and military airfields (Rogers 2000, p. 37; Pearson and Hopey 2005, p. 15). At least four breeding sites are found at airports in the Willamette Valley, including the largest known population at Corvallis Municipal Airport (Moore 2008, pp. 14–17). Stinson (2005, p. 70) concluded that if large areas of grass had not been maintained at airports, the streaked horned lark might have been extirpated from the south Puget Sound area.

Although routine mowing to meet flight path regulations helps to maintain grassland habitat in suitable condition for nesting streaked horned larks, the timing of mowing is critical to determining whether this activity is harmful or beneficial to larks. Mowing during the active breeding season (mid-April to late July) can destroy nests or flush adults, which may result in nest failure (Pearson and Hopey 2005, p. 17; Stinson 2005, p. 72). Some of the airports in the range of the streaked horned lark have adjusted the frequency and timing of mowing in recent years to minimize impacts to streaked horned larks (Pearson and Altman 2005, p. 10). In 2011, McChord Air Field at JBLM agreed to a mowing regime that would provide protections to the streaked horned lark during their nesting period. Unfortunately, in years with wet spring weather when grass grows extremely rapidly, this strategy cannot always be implemented, as mowing must occur to maintain safe conditions for aviation. WDFW coordinates mowing schedules at the Olympia Airport to reduce impacts to streaked horned larks.

In 2008, the Port of Olympia prepared an interlocal agreement with the WDFW that outlines management recommendations and mitigation for impacts to State-listed species from development at the airport. In December 2010, a white paper and supplemental planning memorandum was developed as part of the Airport Master Plan Update (Port of Olympia 2010, pp. 7–12). This document, which is outlined in Appendix 2 of the Master Plan

Update, outlines management recommendations for the protection of critical areas and priority species, including the streaked horned lark. The recommendations include minimizing development, retaining open or bare ground, and avoiding mowing during the nesting season (March 15 through August 15) in known or potential lark nesting areas. Although the Port does not anticipate any development to occur in streaked horned lark nesting areas within the next 20 years, the agreement is not a regulatory document that would preclude future development, which is a primary source of revenue for the Port.

Airport expansions could result in further losses of some populations. At the Olympia Airport, hangars were built in 2005, on habitat used by streaked horned larks for foraging, resulting in a loss of grass and forb-dominated habitat, which could result in a smaller local population due to reduced habitat availability for breeding and wintering larks (Pearson and Altman 2005, p. 12). Based on discussions with staff at Sanderson Field in Shelton, future development plans do not include impacts to streaked horned lark habitat at this time. The majority of the proposed development at Sanderson Field will occur in areas already impacted (between existing buildings). The West Ramp at Gray Army Air Field on JBLM was expanded in 2005, into areas previously used by breeding streaked horned larks, resulting in a loss of available breeding habitat (Stinson 2005, p. 72).

At Portland International Airport, streaked horned larks nest in an area called the Southwest Quad; this is an area that was filled with dredged material between 1987 and 2005, to create a site for future airport development. The Port of Portland, which owns the airport, may propose to develop the Southwest Quad to accommodate future expansion, though there is no current plan in place (Green 2012, *in litt.*). The future development of the Southwest Quad would result in the loss of at least 33 ac (13 ha) of habitat and three breeding territories (Moore 2011, p. 12). Land at the Corvallis Airport Industrial Park is included in the Benton-Corvallis Enterprise Zone (City of Corvallis Public Works Department 2011, p. 6); the site is intended for development of new industries and could result in loss of breeding and wintering habitat for streaked horned larks. The date and extent of the habitat loss is uncertain however, as no leases have been granted for the site at this time.

The 13th Division Prairie at JBLM is used for helicopter operations

(paratrooper practices, touch-and-go landings, and load drop and retrievals) and troop training activities. Foot traffic and training maneuvers that are conducted during streaked horned lark breeding season likely are a contributing factor to nest failure and low nest success at 13th Division Prairie. Recently, a streaked horned lark nest was destroyed at 13th Division Prairie by a porta-potty service vehicle (Linders 2012b, *in litt.*). Artillery training, off-road use of vehicles, and troop maneuvers at the 91st Division Prairie are also conducted in areas used by streaked horned larks during the nesting season. Because access into this training area is limited and streaked horned lark surveys are only conducted opportunistically, we do not know if or how many lark nests are lost due to military activities at 91st Division Prairie.

Industrial development has also reduced habitat available to breeding and wintering streaked horned larks. The Rivergate Industrial Park, owned by the Port of Portland, is a large industrial site in north Portland near the Columbia River; the site is developed on a dredge spoil field, and still has some large areas of open space between the industrial buildings (Moore 2010a, pp. 12–13). Rivergate has been an important breeding site for streaked horned larks, and a wintering site for large mixed flocks of up to five horned lark subspecies (including the streaked horned lark). In 1990, the field used by streaked horned larks at Rivergate measured more than 260 ha (650 acres) of open sandy habitat (Dillon 2012, pers. comm.). In the years since, new industrial buildings have been constructed on the site; now only one patch of 32 ha (79 acres) of open dredge spoil field remains (Moore 2011, p. 9) and the breeding population has dropped from 20 pairs to 5 pairs in this time (Moore 2011, p. 10).

For the reasons described here, we find that encroaching development and conversion to incompatible uses of occupied and potentially suitable areas contributes to the ongoing reduction of nesting and overwintering habitat for the streaked horned lark and, as such, is a threat to the subspecies.

Loss of Ecological Disturbance Processes, Invasive Species, and Succession

The suppression and loss of natural and anthropogenic disturbance regimes, such as fire and flooding, across vast portions of the landscape has resulted in altered vegetation structure in the prairies and meadows and has facilitated invasion by nonnative grasses

and woody vegetation, rendering habitat unusable for Taylor's checkerspot butterflies and streaked horned larks. The basic ecological processes that maintain prairies, meadows, and scoured river banks have disappeared from, or have been altered on, all but a few protected and managed sites. Roadside verges and margins can have both positive and negative impacts to the Taylor's checkerspot butterfly. Periodic disturbance of road margins, verges, and road cuts may contribute to habitat creation due to construction and vehicle use, both of which result in frequent disturbance and create conditions conducive to colonization by the important larval host plant, the narrow-leaf plantain. Creation of habitat features suitable to the Taylor's checkerspot butterfly occurs only when the site is allowed to rest after it is disturbed. This sequence of events allows the host plant to be available to the butterfly, and the butterfly to be able to safely use the created habitat without being crushed. However, frequently disturbed areas also present a threat and may adversely affect the Taylor's checkerspot butterfly if the timing of vehicle use coincides with larval feeding and basking. In the latter case, the created habitat may act as a mortality sink, which attracts the butterfly to habitat that latter becomes a threat to the subspecies if vehicle use crushes food plants or the larvae themselves.

Historically, the prairies and meadows of the south Puget Sound region of Washington and western Oregon are thought to have been actively maintained by the native peoples of the region, who lived there for at least 10,000 years before the arrival of Euro-American settlers (Boyd 1986, entire; Christy and Alverson 2011, p. 93). Frequent burning reduced the encroachment and spread of shrubs and trees (Boyd 1986, entire; Chappell and Kagan 2001, p. 42; Storm and Shebitz 2006, p. 264), favoring open grasslands with a rich variety of native plants and animals. Following Euro-American settlement of the region in the mid-19th century, fire was actively suppressed on grasslands, allowing encroachment by woody vegetation into the remaining prairie habitat and oak woodlands (Franklin and Dyrness 1973, p. 122; Boyd 1986, entire; Kruckeberg 1991, p. 287; Agee 1993, p. 360; Altman *et al.* 2001, p. 262).

Fires on the prairie create a mosaic of vegetation conditions, which serve to maintain native prairie forbs like *Camassia quamash* (common camas), *Achillea millefolium* (yarrow), and *Lomatium* spp. (desert parsley or biscuit

root), which are adult nectar foods for the Taylor's checkerspot butterfly. Stands of native perennial grasses (*Festuca idahoensis* ssp. *roemerii* (Roemer's fescue)) are also well adapted to regular fires and produce habitat favorable to the Taylor's checkerspot butterfly. In some prairie patches, fires will reset succession back to bare ground, creating early successional vegetation conditions suitable for both Taylor's checkerspot butterflies and streaked horned larks (Pearson and Altman 2005, p. 13). The historical fire return frequency on prairies has been estimated to be 3 to 5 years (Foster 2005, p. 8).

The result of fire suppression has been the invasion of the prairies and oak woodlands by native and nonnative plant species (Dunn and Ewing 1997, p. v; Tveten and Fonda 1999, p. 146), notably woody plants such as the native Douglas-fir (*Pseudotsuga menziesii*) and the nonnative Scot's broom, and nonnative grasses such as *Arrhenatherum elatius* (tall oatgrass) in Washington and *Brachypodium sylvaticum* (false brome) in the Willamette Valley of Oregon. This increase in woody vegetation and nonnative plant species has resulted in less available prairie habitat overall, and habitat that is avoided by Taylor's checkerspot butterflies and streaked horned larks (Tveten and Fonda 1999, p. 155; Pearson and Hopey 2005, pp. 2, 27; Olson 2011a, pp. 12, 16). Most butterflies avoid densely forested areas, as they are unable to generate enough heat from their own metabolism to provide them with the heat and energy they need to fly in shaded conditions. Streaked horned larks prefer areas that afford long sight lines and have low vegetation; both of which are impeded by the presence of trees.

On tallgrass prairies in midwestern North America, fire suppression has led to degradation and the loss of native grasslands (Curtis 1959, pp. 296, 298; Panzer 2002, p. 1297). On northwestern prairies, fire suppression has allowed Douglas-fir to encroach on and outcompete native prairie vegetation for light, water, and nutrients (Stinson 2005, p. 7). On JBLM alone, over 16,000 acres (6,477 ha) of prairie has converted to Douglas-fir forest since the mid-19th century (Foster and Shaff 2003, p. 284). Where controlled burns or direct tree removal are not used as a management tool, this encroachment will continue to cause the loss of open grassland habitats for the Taylor's checkerspot butterfly.

Restoration in some of the south Puget Sound grasslands in Washington has resulted in temporary control of Scot's broom and other invasive, nonnative

plants through the careful and judicious use of herbicides, mowing, grazing, and prescribed fire. Prescribed fire has been used as a management tool to maintain native prairie composition and structure and is generally acknowledged to improve the health and composition of grassland habitat by providing a short-term nitrogen addition, which results in a fertilizer effect to vegetation, thus aiding grasses and forbs as they resprout.

Unintentional fires ignited by military training burns patches of prairie grasses and forbs on JBLM on an annual basis. These light ground fires create a mosaic of conditions within the grassland, maintaining a low vegetative structure of native and nonnative plant composition, and patches of bare soil. Because of the topography of the landscape, fires create a patchy mosaic of areas that burn completely, some areas that do not burn, and areas where consumption of the vegetation is mixed in its effects to the habitat. One of the benefits to fire in grasslands is that it tends to kill regenerating conifers, and reduces the cover of nonnative shrubs such as Scot's broom, although Scot's broom seed stored in the soil can be stimulated by fire (Agee 1993, p. 367). Fire also improves conditions for many native bulb-forming plants, such as *Camassia* sp. (camas) (Agee and Dunwiddie 1984, p. 367). On sites where regular fires occur, such as on JBLM, there is a high complement of native plants and fewer invasive species. These types of fires promote the maintenance of the native, short-statured vegetation communities (Severns and Warren 2008, p. 476) favored by the Taylor's checkerspot butterflies for larval and nectar food resources. Fire management to maintain or restore native vegetation is essential to maintaining suitable habitat for the Taylor's checkerspot butterfly, but the timing of the management activity is important, as improperly timed prescribed fire can destroy larvae, eggs, or adult butterflies.

Management practices such as intentional burning and mowing require expertise in timing and technique to achieve desired results. If applied at the wrong season, frequency, or scale, fire and mowing can be detrimental to the restoration of native prairie species. For example, during a prescribed fire event that was implemented in an adjacent training area on JBLM in late summer 2011, fire occurred in an area containing Taylor's checkerspot butterfly habitat that was under a protection agreement. This burn was inconsistent with the prescribed burn plan and eliminated a large area of Taylor's checkerspot

butterfly larval host and nectaring plants on the 91st Division Prairie. Repeated and high intensity burning can result in a lack of vegetation or encourage regrowth to nonnative grasses. Where such burning has occurred over a period of more than 50 years on the artillery ranges of the JBLM, prairies are covered by nonnative forbs and grasses instead of native perennial bunchgrasses (Tveten and Fonda 1999, pp. 154–155).

Taylor's Checkerspot Butterfly—On JBLM, the 91st Division Prairie is frequently ignited through routine training exercises involving ordnance, which prevents invasive shrubs and nonnative grasses and native Douglas-fir from encroaching onto the prairie, and sustains high-quality habitat (larval host and adult nectar food plants) for Taylor's checkerspot butterflies and the generally high-quality condition of the prairie. Vegetation at this site remains in an early successional stage that is dominated by native grasses and forbs, such as *Balsamorhiza hirtella* (deltoid balsamroot), which is an important Taylor's checkerspot butterfly nectar plant. Fires on grassland (prairie) habitat generally have low fuel content and produce regular, short-duration fires (Agee 1993, p. 354; Chappell and Kagan 2001, p. 43), which restricts the establishment of invasive plants and encroaching trees and helps to maintain native grasses and forbs. Swales and overall topographic heterogeneity prevent the entire grassland landscape from being consumed by fire, as grassland fires tend to be patchy in their distribution, creating a mosaic of conditions. On a patch of this large prairie, nonnative grasses have invaded many sites occupied by Taylor's checkerspot butterflies (Severns and Warren 2008, p. 476). Several hundred acres (more than 40 ha) of tall oatgrass is currently encroaching upon the largest Taylor's checkerspot butterfly population in Washington (JBLM's 91st Division Prairie).

Bald habitat at the Forest Service and WDNr sites where Taylor's checkerspot butterflies are found were created due to the shallow soil conditions or they may have been formerly forested. On bald habitat that was formerly forested, these areas appear to have been colonized by the Taylor's checkerspot butterfly shortly after they were cleared. At the time the trees were harvested from each of these balds they were reforested with conifers to comply with the Washington State forest practices rules. The establishment and growth of the conifers, and the establishment and expansion of *Acer macrophyllum* (bigleaf maple), *Holodiscus discolor*

(oceanspray), and other shrubs has resulted in shaded habitat that has replaced habitat occupied by the Taylor's checkerspot butterfly. Sites that currently have Taylor's checkerspot butterflies present will quickly become unsuitable if trees and shrubs are not removed and if the site is not managed specifically for the long-term conservation of the Taylor's checkerspot butterfly or the maintenance of bald habitat. This is the case for several balds recently occupied by the Taylor's checkerspot butterfly but no longer supporting the subspecies, including Bald Hills NAP in Thurston County of south Puget Sound, and Highway 112 and Striped Peak in Clallam County, on the north Olympic Peninsula.

A large portion of the existing, occupied Taylor's checkerspot butterfly habitat on Denman Island in British Columbia, Canada, resulted from timber harvest. After the area was logged, Taylor's checkerspot butterflies colonized the disturbed area from nearby suitable habitat. Currently, *Alnus rubra* (red alder), bigleaf maple, and Douglas-fir trees are expanding onto the site, which will directly threaten the Taylor's checkerspot butterfly habitat there (COSEWIC 2011, p. 18). As the forest becomes reestablished on the property, it will produce shade and the trees will outcompete the host plants for the Taylor's checkerspot butterfly for space, water, light, and nutrients. The population of Taylor's checkerspot butterfly is expected to decline significantly within the next 10 years at this sole Canada site if the current habitat on Denman Island is not managed for the subspecies (COSEWIC 2011, p. 31).

We conclude that the loss of ecological disturbance processes; the occurrence of invasive, nonnative species; and the natural succession of vegetation communities separately and collectively continue to be a threat to Taylor's checkerspot butterflies. Changes to the structure and composition of the native prairie plant communities contributes to the loss of function of the prairie ecosystem and threatens the Taylor's checkerspot butterfly's capability to successfully complete its life stage requirements and quickly leads to extirpation of the subspecies from specific prairie patches.

Streaked Horned Lark—Prior to the construction of dams on the Columbia River, annual flooding and scouring likely created nesting and wintering habitat for streaked horned larks on sandy islands and beaches along the river's edge (Stinson 2005, p. 67). Once the dams were in place, *Salix* spp. (willows), *Populus trichocarpa* (black

cottonwood), and other vegetation established broadly on the sandbars and banks (Rogers 2000, pp. 41–42), resulting in unsuitable habitat for larks. Loss of these habitats may have been partially ameliorated by the formation of dredge spoil islands that have been established as part of the Corps' shipping channel maintenance (Stinson 2005, p. 67).

The streaked horned lark currently uses sand islands in the lower Columbia River for both breeding and wintering habitat; these islands are a mosaic of Federal, State, and private lands, but there are no management or conservation plans in place to protect larks or these important habitats. The Corps has a dredging program to maintain the navigation channel in the Columbia River. In 2002, the Corps established a deeper navigation channel in the river, a regular maintenance dredging program, and a plan for disposition of dredge material on the islands in the lower Columbia River (USFWS 2002b, pp. 1–14). In this plan, the Corps addressed the disposition of dredge material in the lower Columbia River, which has the potential to both benefit and harm streaked horned larks, depending on the location and timing of deposition. Recent studies by Anderson (2010a, p. 29) on the islands in the lower Columbia River have shown that fresh dredge material stabilizes and develops sparse vegetation suitable for larks nesting approximately 3 years after deposition, and can be expected to remain suitable for approximately 2 years before vegetation becomes too dense (although larks were found to use habitats that did not precisely fit this model, and more analysis is underway). Deposition of dredge material at the wrong time, however (e.g., during the nesting season), can destroy nests and young or degrade suitable habitat. Thus, deposition of dredge material can be both a tool for habitat creation and a threat for the streaked horned lark.

Destruction of occupied lark habitat through the deposition of dredge materials has been documented several times on the lower Columbia River islands (Stinson 2005, p. 67; Pearson and Altman 2005, p. 11; Pearson *et al.* 2008, p. 14). In 2006, dredge spoils were deposited on Whites Island while larks were actively nesting. All nests at this site were apparently destroyed (Pearson 2012a, pers. comm.). This site had at least 21 nests and 13 territories during the 2005 nesting season (Pearson *et al.* 2008, p. 21). In a similar situation on Rice Island, singing males were observed on Rice Island in June 2000, but dredge spoil was placed on the site in July 2000, which destroyed nesting

habitat during the breeding season (MacLaren 2000, p. 3). In 2004 on Miller Sands Spit, the Corps deposited dredge material on lark breeding habitat, which likely resulted in nest failure (Pearson and Altman 2005, p. 10). The Corps recently began working with the Center for Natural Lands Management to coordinate dredge spoil depositions with timing of lark breeding season (Anderson 2011, *in litt.*).

Dredge spoil deposition also creates habitat for Caspian terns (*Sterna caspia*), a native bird species that nests in very large numbers in the lower Columbia River; these large terns have been shown to eat substantial numbers of salmon smolts, and the reduction of predation by terns on young salmon has been the focus of an interagency effort for the past decade (Lyons *et al.* 2011, p. 2). One aspect of the effort to reduce the numbers of terns in the lower Columbia River has been a program to discourage tern nesting on Rice Island by planting vegetation and placing barrier fencing on open, sandy habitats; these measures have also reduced habitat available to larks on the island and are ongoing (Stinson 2005, p. 73; Roby *et al.* 2011, p. 14).

There is ample evidence that larks respond positively to habitat management that simulates natural processes. From 2001 through 2004, JBLM used nonbreeding season mowing and controlled burns to control Scot's broom (Pearson and Hopey 2005, p. 30). The September 2004 burns resulted in increased lark abundance and a dramatic vegetative response on 13th Division Prairie; relative to the control sites, late summer fire in 2006 resulted in increased use of the burned areas by larks immediately after the fires, and in the breeding season following the fires (Pearson and Hopey 2005, p. 30).

Throughout the year, the streaked horned lark uses areas of bare ground or sparse vegetative cover in grasslands. These grasslands may be native prairies in the Puget lowlands, perennial or annual grass seed fields in the Willamette Valley, or the margins of airport runways throughout the range of the species. All of these habitats receive management to maintain desired structure: prairies require frequent burning or mowing to prevent succession to woodlands; agricultural fields are mowed at harvest or burned to reduce weed infestations; airports mow to maintain low-stature grasses around airfields to minimize attracting hazardous wildlife. Burning and mowing are beneficial to larks in that they maintain the habitat structure required by the bird, but these activities can also harm larks if the activities

occur during the breeding season when nests and young are present (Pearson and Hopey 2005, p. 29). In the nesting seasons from 2002 to 2004, monitoring at the Puget lowlands sites (Gray Army Airfield, McChord Field, and Olympia Airport) documented nest failure of 8 percent of nests caused by mowing over the nests, young, and adults (Pearson and Hopey 2005, p. 18). Habitat management to maintain low-stature vegetation is essential to maintaining suitable habitat for the streaked horned lark, but the timing of the management is important, as improperly timed actions can destroy nests and young.

We conclude that the loss of natural disturbance that historically created habitat for the streaked horned lark continues to be a threat to the subspecies due to encroachment of plant species (e.g., trees and beach grasses) that reduce available habitat. The Service has developed timing recommendations for other forms of manmade disturbance including burning, mowing, and dredge spoil deposition. Where a Federal nexus exists, the Service has partnered with other agencies to implement avoidance strategies for occupied streaked horned lark nesting areas. When the recommended timing restrictions are observed, we consider the benefit of habitat creation through burning, mowing, and dredge spoil deposit outweighs the negative impact of these activities, such that, if implemented appropriately, we do not consider such manmade disturbance to pose a threat to the subspecies.

Military Training and Associated Activities

Populations of Taylor's checkerspot butterflies and streaked horned larks occurring on JBLM are exposed to differing levels of training activities on the base. The Department of Defense's (DOD's) proposed actions under the "Grow the Army" (GTA) initiative include stationing 5,700 new soldiers, new combat service support units, a combat aviation brigade of 120 helicopters, facility demolition and construction to support the increased troop levels, additional aviation, maneuvers, and live fire training (75 FR 55313; September 10, 2010). The increased training activities will affect nearly all training areas at JBLM, resulting in an increased risk of accidental fires, and habitat destruction and degradation through vehicle travel, dismounted infantry training, bivouac activities, and digging. While training areas on the base have degraded habitat for these subspecies, with implementation of conservation

measures, these areas still provide habitat for the Taylor's checkerspot butterfly and the streaked horned lark.

Taylor's Checkerspot Butterfly—Military training on JBLM has resulted in direct mortality of Taylor's checkerspot butterflies and destruction of Taylor's checkerspot butterfly habitat. Vehicle use and soldier foot traffic can crush larvae and damage larval host plants. These actions disrupt intact prairie plant communities by disturbing vegetation and exposing soils, directly introducing invasive plant seeds carried in on tires or boots, and accelerating the rate of establishment of invasive grasses or other nonnative plants that are light-seeded and easily blown onto a site from adjacent areas, like *Cirsium* spp. (thistles), *Senecio* spp. (groundsel), and *Chrysanthemum leucanthemum* (oxeye daisy). For example, in January 2009, an exercise occurred that did not follow the documented training plan, which would have restricted vehicles to established roads in order to protect sensitive habitat. Instead vehicles moved haphazardly across an area known to be occupied by Taylor's checkerspot butterflies and streaked horned larks. Approximately 67 ac (27 ha) of prairie were repeatedly traversed by eight-wheeled, armored personnel carriers known as Strykers. DOD staff later estimated that up to 37.5 ac (15 ha) were highly disturbed (Gruhn 2009, pers. comm.), with much of this acreage scraped to bare soil (Linders 2009b, entire). This impact would have directly affected overwintering larvae by crushing larvae and destroying the larvae plants used by Taylor's checkerspot butterflies.

Taylor's checkerspot butterfly counts were the lowest ever recorded at this site during the following spring (Linders 2009a, entire; Randolph 2009, p. 4; Thomas 2009, pers. obs). Prior to the Taylor's checkerspot butterfly flight season in May 2009, the three brigades of Strykers were dispatched away from JBLM and the prairies were not used for Stryker training during the spring of 2009 or 2010, which corresponds to the Taylor's checkerspot butterfly flight period. This training break allowed Range 74–76 of the 91st Division Prairie to regenerate or recover the vegetative qualities associated with the Taylor's checkerspot butterfly and the streaked horned lark habitat. JBLM has subsequently coordinated with the Service to establish specific conservation measures regarding vehicle use within this training area. Military training also occurs on a specific portion of the 91st Division Prairie known as Range 50, where Taylor's checkerspot butterfly larvae have been

translocated during the springs of 2009, 2010, and 2011, and at the proposed Taylor's checkerspot butterfly translocation site at 13th Division Prairie.

Under the GTA initiative, more troops and vehicles will be stationed at JBLM; this is likely to result in increased pressure on Taylor's checkerspot butterfly habitat and larvae, particularly if the Army continues training on 91st Division Prairie. It is likely that a higher number of troops will equate to a higher number of individuals recreating on JBLM in places like Marion and Johnson prairies (this is further discussed under "Recreation," below).

We conclude that the threat of military training continues to have significant, habitat-altering impacts on the Taylor's checkerspot butterfly. All training areas on JBLM that are currently occupied by Taylor's checkerspot butterflies experience regular training, including mounted vehicle training and infantry training, with foot soldiers directly impacting the area where the subspecies is found. We consider military training under present conditions a threat to the short-term and long-term conservation of the Taylor's checkerspot butterfly.

Streaked Horned Lark—Military training, including bombardment with explosive ordnance and hot downdraft from aircraft, has been documented to cause nest failure and abandonment for streaked horned larks at Gray Army Airfield and McChord Field at JBLM (Stinson 2005, pp. 71–72). These activities harass and may kill some streaked horned larks, but the frequent disturbance also helps to maintain sparse vegetation and open ground needed for streaked horned lark nesting.

In the odd-numbered years since 2005, McChord Field has hosted a military training event known as the Air Mobility Rodeo. This international military training exercise is held at the end of July. This event includes aircraft, vehicles, and tents staged on or near lark nesting areas, although the majority of these activities take place on concrete hardstand areas (Geil 2010, *in litt.*). In even-numbered years, McChord Field hosts a public air show known as Air Expo, which is scheduled in mid-July. At the Air Expo, aerial events incorporate simulated bombing and fire-bombing, including explosives and pyrotechnics launched from an area adjacent to the most densely populated streaked horned lark nesting site at this location; these disturbances likely have adverse effects to fledglings of late nests (Stinson 2005, p. 72). Surveys in 2004 detected 31 pairs of streaked horned larks at McChord Field (Anderson 2011,

p. 14). In 2006, the number of lark pairs at McChord Field had dropped by more than half to 14 pairs, and the number of lark pairs has remained low, with just 11 pairs detected in 2011 (Anderson 2011, p. 14). The Rodeo and Air Expo events are scheduled to take advantage of the good weather that typically occurs in the summer on the south Puget Sound; this timeframe also coincides with streaked horned lark nesting season, and the disturbance may continue to cause nest failure and abandonment (Pearson *et al.* 2005a, p. 18). During the airshows, tents, vehicles, and concession stands are set up in the grassy areas along the runways used by streaked horned larks for nesting, and thousands of visitors a day line the runways to view the shows. As military training has been documented to cause nest failure and abandonment, which can lower reproductive success and may adversely affect fledglings, we conclude that these activities are a threat to the streaked horned lark.

JBLM has committed to restrictions both seasonally and operationally on military training areas, in order to avoid and minimize potential affects to the Taylor's checkerspot butterfly and the streaked horned lark. These restrictions include identified nontraining areas, seasonally restricted areas during breeding, and the adjustment of mowing schedules to protect these subspecies. These conservation management practices are outlined in an operational plan that the Service has assisted the DOD in developing for JBLM (Thomas 2012, pers. comm.). While the Service fully supports the implementation of these impact minimization efforts and will continue to collaborate with DOD to address all aspects of training impacts on the subspecies, not all adverse impacts of training on the subspecies are fully addressed. Military training as presently conducted continues to be a threat to the subspecies at this time.

Restoration Activities

Management for invasive species and encroachment of conifers requires control through equipment, herbicides, and other activities. While restoration has conservation value for the Taylor's checkerspot butterfly and the streaked horned lark, management activities to implement restoration may also have inadvertent direct impacts to the subspecies that are the target of habitat restoration.

Taylor's Checkerspot Butterfly—On occupied sites, Taylor's checkerspot butterflies are present throughout the year in some life cycle form. Restoration activities (application of herbicides, use of restoration equipment, and fire) can

result in trampling, crushing, and destruction of Taylor's checkerspot butterfly larvae and larval host plants. Mowing to reduce the cover and competition from woody species, if done at the wrong time of year, can crush larval host plants and nectar plants used by adult butterflies on a site or even crush and kill larvae. Mowing activities should be timed to coincide with the diapause period for the subspecies, and mowing should be relatively high above the soil level to avoid any larvae that may not have burrowed into the soil.

We conclude that restoration actions to improve Taylors' checkerspot butterfly habitat or increase the number of checkerspots on specific prairie patches may have short-term adverse impacts to the subspecies and could potentially pose a threat to this resident subspecies because it is present in some life form stage on relatively small habitat patches throughout the entire year. However, any short-term threat posed by restoration actions is outweighed by the positive contributions to the subspecies and its habitat from these actions, such that as currently implemented, we do not consider restoration actions to rise to the level of posing a threat to the subspecies.

Streaked Horned Lark—The introduction of *Ammophila arenaria* (Eurasian beachgrass) and *A. breviligulata* (American beachgrass), currently found in high and increasing densities in most of coastal Washington and Oregon, has dramatically altered the structure of dunes on the outer coast (Wiedemann and Pickart 1996, p. 289). The tall leaf canopy of beachgrass creates areas of dense vegetation, which is unsuitable habitat for streaked horned lark nesting (MacLaren 2000, p. 5). Streaked horned larks require sparse, low-stature vegetation with at least 16–17 percent bare ground; areas invaded by beachgrass are too dense for streaked horned larks. The area suitable for streaked horned lark breeding on the Washington coast has decreased as a result of the spread of beachgrasses (Stinson 2005, p. 65; USFWS 2011a, p. 4–2). In a 10-year period (from 1977 to 1987) at Leadbetter Point on the Willapa National Wildlife Refuge, spreading beachgrass reduced the available nesting habitat for streaked horned larks by narrowing the distance from vegetation to water by 112 feet (34 meters) (WDFW 1995, p. 19). Since 1985, encroaching beachgrasses have spread to cover over two-thirds of Damon Point at Grays Harbor, another lark breeding site on the Washington coast (WDFW 1995, p. 19). At Damon Point, Scot's broom is also

encroaching on lark habitat, reducing the area available for nesting (Pearson 2011, *in litt.*). On the Oregon coast, the disappearance of the streaked horned lark has been attributed to the invasion of exotic beachgrasses and the resultant dune stabilization (Gilligan *et al.* 1994, p. 205).

Some efforts have been successful in reducing the cover of encroaching beachgrasses. The Service's Willapa National Wildlife Refuge has restored habitat on Leadbetter Point. In 2007, the area of open habitat measured 84 ac (34 ha); after mechanical and chemical treatment to clear beachgrass (mostly American beachgrass) and spreading oyster shell across 45 ac (18 ha), 121 ac (50 ha) of sparsely vegetated, open habitat suitable for lark nesting was created (Pearson *et al.* 2009, p. 23). The main target of the Leadbetter Point restoration project was the federally listed western snowy plover (*Charadrius alexandrinus nivosus*), but the restoration actions also benefited the streaked horned lark. Before the restoration project, this area had just 2 streaked horned lark territories (Pearson *et al.* 2005a, p. 7); after the project, an estimated 8 to 10 territories were located in and adjacent to the restoration area (Pearson 2012b, pers. comm.).

Disease Impacts to Habitat

Taylor's Checkerspot Butterfly—Until recently disease was not known to be a factor affecting the habitat of the Taylor's checkerspot butterfly. We now have evidence of a plant pathogen (*Pyrenopeziza plantaginis*) known to affect the leaf tissue of the narrow-leaf plantain, the primary larval food for the Taylor's checkerspot butterfly at several locations, and the exclusive larval food plant at all sites known from Oregon. At some locations on the north Olympic Peninsula, Taylor's checkerspot butterflies select harsh paintbrush as the primary larval food plant and select narrow-leaf plantain as the secondary larval host. *Pyrenopeziza plantaginis* is active in late winter through early spring, and contributes to the mortality of leaf tissue at a time when post-diapause larvae are feeding on narrow-leaf plantain. Narrow-leaf plantain is an exotic but widely distributed, invasive, European weed in North America (Wolff and Schaal 1992, pp. 326, 330). Although the pathogen is common in Europe, it has only recently been reported in North America (Severns 2011, *in litt.*; Stone *et al.* 2011, p. 1). Severns and Warren (2008, p. 476) identified the pathogen on leaves of narrow-leaf plantain from remnant prairies in Benton County, Oregon,

where Taylor's checkerspot butterflies are known to occur and where they feed exclusively on narrow-leaf plantain. Similar instances of leaf mortality were previously attributed to frost damage on prairies of south Puget Sound, Washington. Recently, *P. plantaginis* has been identified on narrow-leaf plantain at Scatter Creek Wildlife Area in Thurston County, and at the 91st Division Prairie on JBLM, in Pierce County; both sites are in Washington.

Uncertainty exists regarding how *Pyrenopeziza plantaginis* affects Taylor's checkerspot butterfly larvae. The pathogen has been identified locally in Washington at sites where Taylor's checkerspot butterfly larvae feed on narrow-leaf plantain. The pathogen kills leaf tissue in late winter and early spring, coinciding with the time post-diapause larvae are feeding (Severns 2011, *in litt.*), which would lead to declining food resource to support Taylor's checkerspot butterfly larvae. If the food resource is killed by this pathogen, it may affect the ability of Taylor's checkerspot butterfly larvae to survive through the critical larval feeding period prior to emergence as an adult butterfly.

Pyrenopeziza plantaginis may be a threat to the larval foods utilized by the Taylor's checkerspot butterfly and, subsequently, may indirectly affect the Taylor's checkerspot butterfly. At this time, we have evidence of the presence of this pathogen at Scatter Creek Wildlife Area in Washington, where the pathogen appears common and its effect to *Plantago* is severe (Severns 2011, *in litt.*) This threat may affect populations if the pathogen were to become widespread on sites occupied by the Taylor's checkerspot butterfly; however, because we are uncertain of its potential as a population-level threat, we conclude that disease is not a threat to the Taylor's checkerspot butterfly habitat at this time, and we have no evidence to suggest that it is likely to become a threat within the near future.

Streaked Horned Lark—Disease is not known to be a threat to the habitats of the streaked horned lark.

Transient Agricultural Habitat

Taylor's Checkerspot Butterfly—The Taylor's checkerspot butterfly is not affected by transient agricultural habitat.

Streaked Horned Lark—Roughly half of all the agricultural land in the Willamette Valley is devoted to grass seed production fields (Oregon Seed Council 2012, p. 1). Grasslands—both rare native prairies and grass seed fields—are important habitats for streaked horned larks in the Willamette Valley; open areas within the grasslands

are used for both breeding and wintering habitat (Altman 1999, p. 18; Moore and Kotaich 2010, p. 11; Myers and Kreaiger 2010, p. 9). About 420,000 ac (170,000 ha) in the Willamette Valley are currently planted in grass seed production fields. Demand for grass seed is declining in the current economic climate (Oregon Department of Agriculture 2011, p. 1); this decreased demand for grass seed has resulted in farmers switching to other agricultural commodities, such as wheat or nurseries and greenhouses (U.S. Department of Agriculture—National Agricultural Statistical Service Oregon Field Office 2009, p. 3; Oregon Department of Agriculture 2011, p. 1). The continued decline of the grass seed industry in the Willamette Valley will likely result in conversion from grass seed fields to other agricultural types; this will result in fewer acres of suitable breeding and wintering habitat for streaked horned larks.

Another potential threat related to agricultural lands is the streaked horned lark's use of ephemeral habitats. In the breeding season, streaked horned larks will move into open habitats as they become available, and as the vegetation grows taller over the course of the season, larks will abandon the site to look for other open habitats later in the season (Beason 1995, p. 6). This ability to shift locations in response to habitat changes is a natural feature of the streaked horned lark's life-history strategies, as breeding in recently disturbed habitats is part of their evolutionary history. In the Willamette Valley, some habitats in agricultural fields are consistently available (e.g., on the margins of gravel roads), while other patches of suitable habitat shift from place to place as fields are burned, mowed, or harvested. Other suitable sites appear when portions of grass fields perform poorly, inadvertently creating optimal habitat for larks. The shifting nature of suitable habitat is not in itself a threat; the potential threat is in the overall reduction of compatible agriculture, which would reduce the area within which streaked horned lark habitat could occur.

Summary of Factor A

Taylor's Checkerspot Butterfly—Taylor's checkerspot butterflies face threats from loss of habitat due to conversion of native grasslands to agriculture, and permanent loss when prairies are developed for residential or commercial purposes. This decline is exemplified by the reduction of populations for the subspecies rangewide, including a reduction from over 40 populations to fewer than 10

populations in Washington, from 13 populations to 2 populations in Oregon, and from 24 populations to 1 population known from Canada. Taylor's checkerspot butterflies also face threats from changes in vegetation structure and composition of native grassland-dominated plant communities. Changes to vegetation structure and composition can occur through conversion to agriculture, through natural succession processes, and through invasion by nonnative species (Agee 1993, p. 345; Chappell and Kagan 2001, p. 42). In addition to the loss of grasslands from development, conversion to agriculture, and other uses, as well as plant succession, these plant communities are faced with degradation due to invasion of the grassland habitat that remains by native conifers and nonnative pasture grasses, shrubs, and forbs. As grasslands have been converted, the availability of Taylor's checkerspot butterfly larval host plants and adult nectar plants has declined. We consider the negative impacts to the Taylor's checkerspot butterfly from the loss and degradation of its native grassland habitats to pose a threat to the subspecies.

We conclude that disease, specifically *Pyrenopeziza plantaginis*, may pose a potential threat to the larval food plant of the Taylor's checkerspot butterfly, and therefore a potential indirect threat to the subspecies. However, we have no information to suggest that it is currently a threat to the Taylor's checkerspot butterfly. Any threat of disease to the larval food plant for this subspecies has the potential to become a threat in the future due to the small number of remaining populations of the Taylor's checkerspot butterfly. However, based on our review of the best available information, we have no data at this point to suggest that it is likely to become a widespread threat in the future.

The current threats to Taylor's checkerspot butterflies are similar to those identified at the time the subspecies was determined to be a candidate for listing in 2001. Since then, the threat from invasive species and their impacts on native vegetation have increased. Other threats, particularly the threat to develop Taylor's checkerspot butterfly habitat, have increased on Denman Island, Canada; in south Puget Sound, Washington; and in the Willamette Valley, Oregon (IAE 2010, p. 1). Moreover, prior to entering two wars in 2003, military training (DOD, Army, JBLM) on occupied Taylor's checkerspot butterfly habitat was lower in intensity and duration. The only remaining high-quality native habitat occupied by the Taylor's checkerspot butterfly within

the south Puget Sound region is found on the 91st Division Prairie of JBLM, a site of highly active training that can inadvertently result in the destruction of larval host plants and crushed larvae.

Based on negative impacts to the Taylor's checkerspot butterfly from current projected development and impacts to habitat, the loss of historically occupied locations, military training, recreation, the limited distribution of the subspecies, existing and future habitat fragmentation, habitat disturbance (including fire), and land use changes associated with agriculture and long-term fire suppression, we conclude that there are current and ongoing threats to the Taylor's checkerspot butterfly and its habitat that are expected to continue into the future. At all locations presently occupied by the Taylor's checkerspot butterfly, the combined threats to the subspecies through the degradation or destruction of its habitat are severe, pervasive, and ongoing, including: (1) Conversion of habitat to agriculture, or permanent loss of habitat to development; (2) military training that has destroyed habitat and led to mortality by crushing eggs and larvae; (3) invasion of habitat by native and nonnative woody vegetation; (4) loss of natural disturbance processes that otherwise would maintain early seral conditions; (5) a restricted and disjunct range of the subspecies (see Factor E discussion, below); and (6) small populations throughout the subspecies' range (see Factor E discussion, below). The continued decline and degradation of Taylor's checkerspot butterfly habitat has resulted in isolated populations occupying small habitat patches within degraded prairies, which may lead to further population declines or to complete loss and may decrease the geographic distribution of the Taylor's checkerspot butterfly. We conclude that the current and ongoing threats to the Taylor's checkerspot butterfly and its habitat represent significant effects to the subspecies and its habitat and will continue into the future.

Streaked Horned Lark—The streaked horned lark population decline in Washington indicates that the observed range contraction for this subspecies may be continuing, and the subspecies may disappear from that region in the near future. There are many other ongoing threats to streaked horned lark's habitat throughout its range, including: (1) Conversion to agriculture and industry; (2) loss of natural disturbance processes, such as fire and flooding; (3) encroachment of woody vegetation; (4) invasion of coastal areas by nonnative

beachgrasses; and (5) incompatible management practices. The continued loss and degradation of streaked horned lark habitat may result in smaller, more isolated habitats available to the subspecies, which could further depress the rangewide population or reduce the geographic distribution of the streaked horned lark. We conclude that the current and ongoing threats to streaked horned lark habitat are resulting in a significant impact to the subspecies and its habitat and will continue into the future.

Factor B. Overutilization for Commercial, Recreational, Scientific, or Educational Purposes

Overutilization of species results when the number of individuals removed from the system exceeds the ability of the population of the species to sustain its numbers or reduces populations of the species to a level such that it is vulnerable to other influences (threats) upon its survival. This overutilization can result from removal of individuals from the wild for commercial, recreational, scientific, or educational purposes.

Taylor's Checkerspot Butterfly—Populations of Taylor's checkerspot butterflies have declined dramatically during the past decade. We know of no overutilization of the Taylor's checkerspot butterfly for commercial, recreational, or educational purposes. However, scientific studies may have inadvertently negatively affected Taylor's checkerspot butterfly populations at the 13th Division Prairie on JBLM (Vaughan and Black 2002). Over 7,000 individuals were observed as recently as 1997, but only 10 adults were observed during surveys in 2000, and no Taylor's checkerspot butterflies have been observed since (Stinson 2005, p. 94; Linders 2012c, *in litt.*). Mark-recapture studies were conducted at this site for several years during this timeframe, and the study methods involved capturing all adults and moving them to a single release location. This action likely influenced the population demographics, but because no simultaneous population monitoring was conducted, it is impossible to know whether there was an effect. According to McGarahan (1997), mark, release, and recapture studies of the Bay Edith's checkerspot (*Euphydryas editha bayensis*) were considered a contributing factor in the extirpation of this population from Stanford's Jasper Ridge Preserve. There are no current Taylor's checkerspot butterfly "mark, release and recapture studies" in progress. Capture of butterflies for study is a potential threat

at this time, and the trampling, or crushing of eggs, larvae, and pupae associated with scientific studies continue to be a potential threat to the subspecies, although likely a minor one.

Streaked Horned Lark—

Overutilization for commercial, recreational, scientific, or educational purposes is not known to be a threat to the streaked horned lark.

Summary of Factor B

In summary, although there is some evidence of historical mortality from overutilization for the Taylor's checkerspot butterfly and there may have been recent mortality from scientific studies of the Taylor's checkerspot butterfly, we have no reason to believe that current levels of utilization, or the potential impacts from scientific studies of the subspecies, have caused or will cause the Taylor's checkerspot butterfly to be vulnerable to other threats. Based on the best scientific and commercial data available, we have no information to suggest that overutilization for commercial, educational, recreational, or scientific purposes is now a threat or will become a threat to the Taylor's checkerspot butterfly in the future.

In addition, there is no evidence that commercial, recreational, scientific, or educational use is now a threat or will become a threat to the streaked horned lark in the future.

Factor C. Disease or Predation

Disease

Most healthy ecosystems include organisms such as viruses, bacteria, fungi, and parasites that cause disease. Healthy wildlife and ecosystems have evolved defenses to fend off most diseases before they have devastating impacts. An ecosystem with high levels of biodiversity (diversity of species and genetic diversity within species) is more resilient to the impacts of disease because there are greater possibilities that some species and individuals within a species have evolved resistance, or if an entire species is lost, that there will likely be another species to fill the empty niche.

Where ecosystems are not healthy, due to a loss of biodiversity and threats such as habitat loss, climate change, pollutants, or invasive species, wildlife and ecosystems are more vulnerable to emerging diseases. Diseases caused by or carried by invasive species are particularly severe threats, as native wildlife may have no natural immunity to them (National Wildlife Federation 2012).

Our review of the best available scientific and commercial data found no

evidence to indicate that disease is a threat to the Taylor's checkerspot butterfly or the streaked horned lark. We conclude that disease is not a threat to the Taylor's checkerspot butterfly or the streaked horned lark now, nor do we anticipate it to become a threat in the future.

Predation

Predation is a process of major importance in influencing the distribution, abundance, and diversity of species in ecological communities. Generally, predation leads to changes in both the population size of the predator and that of the prey. In unfavorable environments, prey species are stressed or living at low population densities such that predation is likely to have negative effects on all prey species, thus lowering species richness. In addition, when a nonnative predator is introduced to the ecosystem, negative effects on the prey population may be higher than those from co-evolved native predators. The effect of predation may be magnified when populations are small, and the disproportionate effect of predation on declining populations has been shown to drive rare species even further towards extinction (Woodworth 1999, pp. 74–75).

Predation has an impact on populations of the Taylor's checkerspot butterfly and the streaked horned lark. The degree of threat to the Taylor's checkerspot butterfly from predation is not as pronounced as with the streaked horned lark due to the concentration of defensive plant compounds within the larvae and adults that make them distasteful to predators.

Taylor's Checkerspot Butterfly—Generally, butterflies exhibit some protective mechanisms to avoid predation, and this is true for the Taylor's checkerspot butterfly. Larvae of the Taylor's checkerspot butterfly sequester iridoid glycosides (plant defensive chemicals) during consumption of their larval host plants, narrow-leaf plantain and paintbrush species. These compounds are distasteful to predators (COSEWIC 2011, p. 36), and generalist predators such as insects and spiders avoid checkerspot larvae (Kuussaari *et al.* 2004, p. 140). Taylor's checkerspot butterfly larvae also tend to be brightly colored, which makes them highly visible and signals the presence of noxious compounds to predators, including birds and some invertebrate predators that avoid Taylor's checkerspot butterfly larvae (Kuussaari *et al.* 2004, p. 139). However, birds are known to attack and consume adult butterflies. Bowers *et al.* (1985, p. 101) found avian predation to be a

significant factor in mortality of adult variable checkerspot butterflies (*Euphydryas chalcedona*); they also found sex bias in selection of prey as the avian predator ate more female variable butterflies (less bright red) than male variable checkerspot butterflies, adding support to the idea that brightly colored insects are avoided (Bowers 1985 p. 100). This is likely a naturally occurring predation event, and we conclude that at this time it is currently not a threat, nor do we expect it to become a threat to the Taylor's checkerspot butterfly in the future.

Streaked Horned Lark—Predation on adult streaked horned larks has not been identified as a threat, but it is the most frequently documented source of mortality for eggs and young larks. In most studies of streaked horned lark nesting ecology, predation has been the primary documented source of nest failure (Altman 1999, p. 18; Pearson and Hopey 2004, p. 15; Pearson and Hopey 2005, p. 16; Pearson and Hopey 2008, p. 1; Moore and Kotaich 2010, p. 32). Sixty-nine percent of nest failures were caused by predation at four south Puget Sound study sites (Gray Army Airfield, 13th Division Prairie, Olympia Airport, and McChord Field) in 2002–2004 (Pearson and Hopey 2005, p. 18). Anderson (2006, p. 19) suggests that the primary predators of streaked horned lark eggs and young were avian, most likely American crows (*Corvus brachyrhynchos*), although garter snakes (*Thamnophis* spp.) and western meadowlarks have also been documented preying on eggs and young in the region (Pearson and Hopey 2005, p. 16; Pearson and Hopey 2008, p. 4). On the Washington coast and lower Columbia River islands, 46 percent of nest failures were caused by predation at three study sites (Midway Beach, Damon Point, and Puget Island) in 2004 (Pearson and Hopey 2005, p. 18). A study of five sites in the Willamette Valley (Corvallis Airport, M–DAC Farms, and William L. Finley, Baskett Slough, and Ankeny National Wildlife Refuge) determined that 23 to 58 percent of all streaked horned lark nests were lost to predation (Moore and Kotaich 2010, p. 32).

Video cameras were used to identify predators in this Willamette Valley study; documented predators include: Red-tailed hawk (*Buteo jamaicensis*), northern harrier (*Circus cyaneus*), American kestrel (*Falco sparverius*), great-horned owl (*Bubo virginianus*), and rats and mice (Family Cricetidae) (Moore and Kotaich 2010, p. 36). Streaked horned larks are ground-nesting birds and are vulnerable to a many other potential predators,

including domestic cats and dogs, coyotes (*Canis latrans*), raccoons (*Procyon lotor*), striped skunks (*Mephitis mephitis*), red foxes (*Vulpes vulpes*), long-tailed weasels (*Mustela frenata*), opossums (*Didelphis virginiana*), meadow voles (*Microtus pennsylvanicus*), deer mice (*Peromyscus maniculatus*), and shrews (*Sorex* spp.) (Pearson and Hopey 2005, p. 17; Stinson 2005, p. 59).

Predation is a natural part of the streaked horned lark's life history, and in stable populations, the effect of predation would not be considered a threat to the subspecies. However, in the case of the streaked horned lark, the effect of predation may be magnified when populations are small, and the disproportionate effect of predation on declining populations has been shown to drive rare species even further towards extinction (Woodworth 1999, pp. 74–75). It is also possible that predation rates are higher now than in the past, due to the proximity of human developments and their associated predator attractions near lark habitats. We consider the effect of predation on streaked horned lark populations, particularly in the south Puget Sound, to be a threat to the species.

The one area where predation does not appear to be a threat to nesting streaked horned larks is in Portland at Rivergate Industrial Complex and the Southwest Quad at Portland International Airport. In 2009 and 2010, nesting success was very high, and only a single predation event was documented at these sites (Moore 2011, p. 11). The reason for the unusually low predation pressure may be that the two industrial sites have few predators because both sites are isolated from other nearby natural habitats.

Predation may have contributed to the extirpation of streaked horned larks on the San Juan Islands. Streaked horned larks were last documented on the islands in 1962 (Lewis and Sharpe 1987, p. 204). The introduction of several exotic animal species, including feral ferrets (*Mustela putorius*) and red foxes, to the island roughly coincides with the disappearance of streaked horned lark. These introduced predators may have significantly affected ground nesting birds and played a role in the eventual extirpation of streaked horned larks (Rogers 2000, p. 42).

Summary of Factor C

Disease—Based on our review of the best scientific and commercial data available, we conclude that disease is not a threat to the Taylor's checkerspot butterfly or streaked horned lark now,

nor do we expect it to become a threat in the future.

Predation—We found only one study with evidence to indicate that predation from avian predators may be a threat to the Taylor's checkerspot butterfly. While predation does occur on the Taylor's checkerspot butterfly, it does not appear to be occurring beyond expected natural levels; therefore, we do not consider it to be a threat to the Taylor's checkerspot butterfly now, nor do we expect it to become a threat in the future.

Because the populations of streaked horned larks are declining and small, we find that effect of the threat of predation is likely magnified and resulting in a significant impact on the subspecies. Therefore, based on our review of the best scientific and commercial data available, we conclude that predation is a threat to the streaked horned lark now and will continue to be a threat into the future.

Factor D. The Inadequacy of Existing Regulatory Mechanisms

Under this factor, we examine whether existing regulatory mechanisms are inadequate to address the threats to the species discussed under the other factors. Section 4(b)(1)(A) of the Act requires the Service to take into account "those efforts, if any, being made by any State or foreign nation, or any political subdivision of a State or foreign nation, to protect such species. . . ." In relation to Factor D under the Act, we interpret this language to require the Service to consider relevant Federal, State, and tribal laws, regulations, and other such mechanisms that may minimize any of the threats we describe in threat analyses under the other four factors, or otherwise enhance conservation of the species. We give strongest weight to statutes and their implementing regulations and to management direction that stems from those laws and regulations. An example would be State governmental actions enforced under a State statute or constitution, or Federal action under statute.

The following section includes a discussion of Federal, State, or local laws, regulations, or treaties that apply to the Taylor's checkerspot butterfly or streaked horned lark. It includes legislation for Federal land management agencies and State and Federal regulatory authorities affecting land use or other relevant management.

Canadian Laws and Regulations

In British Columbia, the Taylor's checkerspot butterfly and streaked horned lark are on the Conservation

Data Centre's Red List. The Red List includes ecological communities, indigenous species, and indigenous subspecies that are extirpated, endangered, or threatened in British Columbia; placing taxa on the Red List flags them as being at risk and requiring investigation, but does not confer any protection (British Columbia Ministry of Environment 2012, p. 1).

In 2003, the Taylor's checkerspot butterfly, and in 2005, the streaked horned lark, were determined to be endangered under the Canadian Species at Risk Act (SARA) (Environment Canada 2007, p. iii). SARA makes it an offense to kill, harm, harass, capture, or take an individual of a listed species that is endangered or threatened; possess, collect, buy, sell, or trade an individual of a listed species that is extirpated, endangered, or threatened, or its part or derivative; and damage or destroy the residence of one or more individuals of a listed endangered or threatened species or of a listed extirpated species if a recovery strategy has recommended its reintroduction.

For many of the species listed under SARA, the prohibitions on harm to individuals and destruction of residences are limited to Federal lands, but this limitation is inapplicable to migratory birds protected under the Migratory Birds Convention Act, including streaked horned lark (Statutes of Canada (S.C.) ch. 29, sec. 34). Hence, SARA protects streaked horned larks, where present, from harm and destruction of their residences, not only on Federal lands, but also on provincial and private lands, where most of the remaining habitat for the species occurs. Moreover, SARA mandates development and implementation of a recovery strategy and action plans (S.C. ch. 29, secs. 37, 47). Invertebrate species assessed by the Committee on the Status of Endangered Wildlife in Canada (COSEWIC) as endangered will be protected by the British Columbia Wildlife Act and Wildlife Amendment Act, once these regulations are finalized (COSEWIC 2011, p. 44).

The horned lark (all subspecies) is also protected under Canada's Federal Migratory Birds Convention Act, 1994 (MBCA) (S.C. ch. 22), which is their domestic legislation similar to the United States' Migratory Bird Treaty Act of 1918 (MBTA; 16 U.S.C. 703 *et seq.*). The MBCA and its implementing regulations prohibit the hunting of migratory nongame birds and the possession or sale of "migratory birds, their nests, or eggs" (S.C. ch. 22, secs. 5, 12).

Although British Columbia has no stand-alone endangered species act, the

provincial Wildlife Act protects virtually all vertebrate animals from direct harm, except as allowed by regulation (e.g., hunting or trapping). Legal designation as endangered or threatened under the Wildlife Act increases the penalties for harming a species, and also enables the protection of habitat in a Critical Wildlife Management Area (British Columbia Wildlife Act 1996, accessed online). The streaked horned lark is not listed under Canada's provincial Wildlife Act as an endangered or threatened species.

To date, there is no finalized recovery strategy for the Taylor's checkerspot butterfly in Canada (COSEWIC 2011, p. 44). A majority (97 percent) of the known populations observed in Canada occur on private land on Denman Island, which is not protected from development by individual landowners; approximately 1,173 ac (475 ha) of this private land has been officially transferred to the government and will become a Provincial Park or Ecological Reserve (COSEWIC 2011, p. 45). A final recovery strategy for the streaked horned lark was released in 2007 (COSEWIC 2011, p. 40); the streaked horned lark is essentially extirpated in Canada, and the recovery goal for this subspecies is to reestablish a breeding population of at least 10 breeding pairs at a minimum of 3 sites within its historical breeding range in Canada (Environment Canada 2007, p. iv). Based on our evaluation, we have determined that SARA provides protections for both the Taylor's checkerspot butterfly and streaked horned lark given their limited occurrences in British Columbia, and, additionally, the streaked horned lark is afforded protections under the MBCA.

U.S. Federal Laws and Regulations

There are no Federal laws in the United States that specifically protect the Taylor's checkerspot butterfly. The Migratory Bird Treaty Act (MBTA) (16 U.S.C. 703 *et seq.*) is the only Federal law in the United States currently providing specific protection for the streaked horned lark due to its status as a migratory bird. The MBTA prohibits the following actions, unless permitted by Federal regulation:

to "pursue, hunt, take, capture, kill, attempt to take, capture, or kill, possess, offer for sale, sell, offer to barter, barter, offer to purchase, purchase, deliver for shipment, ship, export, import, cause to be shipped, exported, or imported, deliver for transportation, transport or cause to be transported, carry or cause to be carried, or receive for shipment, transportation, carriage, or export, any migratory bird, any part, nest, or egg of any such bird, or any product, whether or not manufactured."

There are no provisions in the MBTA that prevent habitat destruction unless direct mortality or destruction of active nests occurs (for example, as was described in Factor A, above, for dredge spoil disposal in the breeding season), nor does the MBTA require any planning to recover declining species or provide funding to protect individuals or their habitats. Therefore, we conclude that the MBTA does not address threats to the streaked horned lark from further population declines associated with habitat loss or inappropriate management.

The Sikes Act (16 U.S.C. 670) authorizes the Secretary of Defense to develop cooperative plans with the Secretaries of Agriculture and the Interior for natural resources on public lands. The Sikes Act Improvement Act of 1997 requires Department of Defense installations to prepare integrated natural resources management plans (INRMPs) that provide for the conservation and rehabilitation of natural resources on military lands consistent with the use of military installations to ensure the readiness of the Armed Forces. INRMPs incorporate, to the maximum extent practicable, ecosystem management principles and provide the landscape necessary to sustain military land uses. While INRMPs are not technically regulatory mechanisms because their implementation is subject to funding availability, they can be an added conservation tool in promoting the recovery of endangered and threatened species on military lands.

On JBLM in Washington, several policies and an INRMP are in place to provide conservation measures to grassland associated species that occupy training lands on the military base. JBLM in partnership with local agencies and nongovernmental organizations has provided funding to conserve these species through the acquisition of new conservation properties and management actions intended to improve the amount and distribution of habitat for these species. JBLM has also provided funding to reintroduce declining species (e.g., the Taylor's checkerspot butterfly) into suitable habitat on and off military lands. In June 2011, representatives from DOD (Washington, DC, office) met with all conservation partners to assess the success of this program and make decisions as to future funding needs. Support from the Garrison Commander of JBLM and all partners resulted in an increase in funding for habitat management and acquisition projects for these species on JBLM.

The Service has worked closely with the DOD to develop protection areas within the primary habitat for the Taylor's checkerspot butterfly on JBLM. These include areas where no vehicles are permitted on occupied habitat, where vehicles will remain on roads only, and where foot traffic is allowed.

JBLM policies include Army Regulation 420–5, which covers the INRMP, and AR–200–1. This is an agreement between each troop and DOD management that actions taken by each soldier will comply with restrictions placed on specific training areas, or range lands. Within the INRMP, the wildlife branch of the DOD developed updated endangered species management plans (ESMPs) that provide site-specific management and protection actions that are taken on military lands for the conservation of the Taylor's checkerspot butterfly and streaked horned lark. The ESMPs provide assurances of available funding, and an implementation schedule that determines when certain activities will occur and who will accomplish these actions. ESMPs require regular updates to account for dispersal of animals, or for activities to enhance habitat for animals that may have been translocated to a new habitat patch. INRMPs also have a monitoring component that would require modifications, or adaptive management, to planning actions when the result of that specific action may differ from the intent of the planned action. Based on the military's efforts, we conclude that although military actions may continue to harm individuals of the species, through the Sikes Act, the JBLM's INRMP includes provisions that will promote protection and conservation practices to support the Taylor's checkerspot butterfly and streaked horned lark, and prevent further population declines associated with habitat loss or inappropriate management on JBLM properties. However, even with the above mitigating efforts implemented by the military, we conclude that the regulatory mechanisms in place at JBLM are not sufficient to ameliorate the threats to the Taylor's checkerspot butterfly rangewide.

The National Park Service Organic Act of 1916, as amended (16 U.S.C. 1 *et seq.*), states that the National Park Service (NPS) “shall promote and regulate the use of the Federal areas known as national parks, monuments, and reservations . . . to conserve the scenery and the national and historic objects and the wild life therein and to provide for the enjoyment of the same in such manner and by such means as will leave them unimpaired for the

enjoyment of future generations.” The NPS management policies indicate that the Park Service will meet its obligations under the National Park Service Organic Act and the Endangered Species Act to both proactively conserve listed species and prevent detrimental effects on these species. This includes working with the Service and undertaking active management programs to inventory, monitor, restore, and maintain listed species habitats, among other actions.

The National Forest Management Act (16 U.S.C. 1600 *et seq.*) has required the U.S. Department of Agriculture's (USDA) Forest Service to incorporate standards and guidelines into land and resource management plans, including provisions to support and manage plant and animal communities for diversity and for the long-term, rangewide viability of native species (see 16 U.S.C. 1604(g)(3)(B)). The regulations at 36 CFR 219 provide a framework to guide the collaborative and science-based development, amendment, and revision of land management plans. This framework is designed to promote healthy, resilient, diverse, and productive national forests and grasslands with a range of social, economic, and ecological benefits now and for future generations. In the face of changing environmental conditions and stressors, such as a changing climate, the regulations require plans to include plan components to: (1) Maintain and restore ecosystem and watershed health and resilience (ecological integrity); (2) protect key resources on the unit, including water, air, and soil; and (3) address water quality and riparian area protection and restoration.

The regulations at 36 CFR 219 contain a strong implementation approach to provide for the diversity of plant and animal communities and the persistence of native species in the plan area. This approach requires that plans use a complementary ecosystem and species-specific approach to maintaining the diversity of plant and animal communities and the persistence of native species in the plan area. The intent is to provide the ecological conditions (habitat) necessary to keep common native species common, contribute to the recovery of endangered and threatened species, conserve proposed and candidate species, and maintain viable populations of each species of conservation concern within the plan area. The regulations require that plans provide the ecological conditions necessary to contribute to the recovery of endangered and threatened species, and to conserve candidate and proposed species. In addition, the

requirements for restoration and ecological sustainability are intended to reduce the risk that species will become listed as endangered or threatened in the future.

On USDA Forest Service lands, management for listed and candidate species, as well as species of concern, follow Forest Service Sensitive Species policy (Kerwin and Huff 2007, p. 6). For the Forest Service, these policies require the agency to maintain viable populations of all native and desired nonnative wildlife, fish, and plant species in habitats distributed throughout their geographic range on National Forest System lands. Management “must not result in a loss of species viability or create significant trends toward Federal listing” for any identified Sensitive Species (Kerwin and Huff 2007, p. 6).

The Olympic National Forest is in the process of developing site management plans for each location where the Taylor’s checkerspot butterfly is known to occur. This planning document will call for restoration actions to removed encroaching conifers and shrubs, nonnative plant removal and control, road management, and possibly planting or seeding of larval host plants (Holtrop 2010, p. 7). Because this planning process is not finished, however, we do not rely on it in our assessment of the adequacy of Forest Service regulatory mechanisms. While a Federal candidate species, and following implementation of this final rule (see **DATES**), as a federally listed species, the Taylor’s checkerspot butterfly receives support from the Forest Service Interagency Special Status and Sensitive Species Program (Huff, 2011, pers. comm.). Based on our review, we conclude that the Taylor’s checkerspot butterfly and streaked horned lark are protected from further population declines associated with habitat loss or incompatible management on Forest Service lands.

The National Wildlife Refuge System Improvement Act of 1997 (16 U.S.C. 668dd *et seq.*) establishes the protection of biodiversity as the primary purpose of the National Wildlife Refuge (NWR) system. This has led to various management actions to benefit the federally listed species including development of a comprehensive conservation plans (CCP) on NWRs. CCPs typically set goals and list needed actions to protect and enhance populations of key wildlife species on refuge lands. The Taylor’s checkerspot butterfly is not known to occur on any NWR. However, streaked horned larks occur on the Willapa NWR on the Washington coast and in the Willamette Valley Complex on the William L.

Finley, Ankeny, and Baskett Slough NWRs. The CCPs for the Willapa NWR and all the units in the Willamette Valley Complex contain habitat conservation measures to address threats such as habitat degradation and benefit streaked horned larks; measures include surveys, habitat enhancement, and removal of invasive plants (USFWS 2011a, p. 2–34; USFWS 2011b, pp. 2–47–2–48). The joint CCP for the Lewis and Clark and Julia Butler Hansen NWRs in the lower Columbia River states that streaked horned larks do not occur on the refuges, although they do occur on suitable habitats near the refuge parcels (USFWS 2010, p. 4–37). The joint CCP identifies actions to benefit streaked horned larks on off-refuge lands (but that are within the refuge acquisition boundary), including working with the Corps to manage the dredge spoil deposition program to benefit larks (USFWS 2010, pp. 2–29–2–30).

CCPs detail program planning levels that are sometimes substantially above current budget allocations, and as such, are primarily used for strategic planning and priority setting; inclusion of a project in a CCP does not guarantee that the project will be implemented. The CCPs at the Willapa and Willamette Valley NWRs specifically provide for the conservation of the streaked horned lark, and implementation of the conservation measures in the refuge CCPs could benefit as many as 10 nesting pairs of larks at Willapa NWR (USFWS 2011a, pp. 4–44–4–45) and likely more than 50 pairs at the three Willamette Valley NWRs (Moore 2009, pp. 5–9). These actions may improve the status of streaked horned larks on the refuges. Therefore based on our review, we conclude that streaked horned lark is protected from further population declines associated with habitat loss or incompatible management on NWR lands.

State Laws and Regulations

Although there is no State endangered species act in Washington, the Washington Fish and Wildlife Commission has authority to list species (Revised Code of Washington (RCW) 77.12.020). State-listed species are protected from direct take, but their habitat is not protected (RCW 77.15.120). The Taylor’s checkerspot butterfly and streaked horned lark are listed by the WDFW and are listed as critically imperiled (S1) by the Washington Natural Heritage Program. State listings generally consider only the status of the species within the State’s borders, and do not depend upon the same considerations as a potential

Federal listing. Unoccupied or unsurveyed habitat is not protected unless by County prairie ordinances or other similar rules or laws.

The Taylor’s checkerspot butterfly and streaked horned lark are Priority Species under WDFW’s Priority Habitats and Species Program (WDFW 2008, pp. 19, 80, 120). As Priority Species, the Taylor’s checkerspot butterfly and streaked horned lark may benefit from some protection of their habitats under environmental reviews of applications for county or municipal development permits (Stinson 2005, pp. 46, 70). For the Taylor’s checkerspot butterfly, WDFW has developed a recommended approach to protect the species on private property. Their approach is non-regulatory and encourages landowners to engage in cooperative efforts to protect and conserve Taylor’s checkerspot butterfly habitat. However, State regulatory mechanisms appear to be insufficient to protect these species in areas where permits are not required or requested. We therefore conclude that Washington State regulatory mechanisms are inadequate to protect the Taylor’s checkerspot butterfly and streaked horned lark and do not protect these species from further population declines associated with habitat loss or inappropriate management.

Under the Washington State Forest Practices Act (RCW 76.09, accessed online 2012), WDNR must approve certain activities related to growing, harvesting, or processing timber on all local government-owned, State-owned, and privately owned forest lands. WDNR’s mission is to protect public resources while maintaining a viable timber industry. The primary goal of the forest practices rules is to achieve protection of water quality, fish and wildlife habitat, and capital improvements while ensuring that harvested areas are reforested. Presently, the Washington State forest practices rules do not specifically protect Taylor’s checkerspot butterflies or streaked horned larks; only the Taylor’s checkerspot butterfly actually occurs within areas where forest practices rules might apply. Landowners have the option to develop a management plan for the species if it resides on their property, or if landowners choose to not develop a management plan for the species with WDFW, their forest practices application will be conditioned to protect this public resource. If this approach does not provide the required protections for the Taylor’s checkerspot butterfly, then WDFW and WDNR may request the Forest Practice Board to initiate rulemaking, and possibly, an emergency

rule would be developed (Whipple 2008, pers. comm.).

The WDNR also manages approximately 66,000 ac (26,710 ha) of lands as Natural Area Preserves (NAP). NAPs provide the highest level of protection for excellent examples of unique or typical land features in Washington State. Based on their proactive management, these NAPs provide protection for the Taylor's checkerspot butterfly on WDNR lands.

Oregon has a State Endangered Species Act (ESA), which was last updated in 1998. The streaked horned lark is not State-listed, and the State does not protect invertebrates like the Taylor's checkerspot butterfly under the State ESA (Oregon ESA 2004, p. 3). The list of endangered and threatened species tracked by the Oregon Department of Fish and Wildlife does not include insects, and does not classify the streaked horned lark with any conservation status. When an Oregon "native wildlife" species is federally listed as endangered or threatened, it is not automatically included as a State-listed species. The Oregon Fish and Wildlife Commission may review the available information and make a finding regarding State listing; when a species is State-listed in Oregon, it receives some protection and management, primarily on State-owned or managed lands (OAR 635–100–0100 to OAR 635–100–0180; ORS 496.171 to ORS 496.192).

The Oregon Forest Practices Act (ORS 527.610 to 527.992 and OAR Chapter 629, Divisions 600 to 665) lists protection measures specific to private and State-owned forested lands in Oregon. These measures include specific rules for resource protection, including endangered and threatened species; riparian areas along lakes, streams, springs, and seeps; and wetlands. Compliance with the forest practice rules does not substitute for or ensure compliance with the Federal Endangered Species Act of 1973, as amended (Act). Landowners and operators are advised that Federal law prohibits a person from taking certain endangered or threatened species that are protected under the Act (OAR 629–605–0105). Neither the Taylor's checkerspot butterfly nor the streaked horned lark are forest-dependent species; therefore neither species is likely to be directly affected by the Oregon Forest Practices Act.

Local Laws and Regulations

The Washington State Growth Management Act of 1990 (GMA) requires all jurisdictions in the State to designate and protect critical areas. The

State defines five broad categories of critical areas, including: (1) Wetlands; (2) areas with a critical recharging effect on aquifers used for potable water; (3) fish and wildlife habitat conservation areas; (4) frequently flooded areas; and (5) geologically hazardous areas.

Quercus garryana (Oregon white oak) habitat and prairie both predominantly fall into the category of fish and wildlife habitat conservation areas, although due to the coarse nature of prairie soils and the presence of wet prairie habitat across the landscape, critical area protections for crucial aquifer recharge areas and wetlands may also address prairie habitat protection.

Within counties, the County Areas Ordinance (CAO) applies to all unincorporated areas, but incorporated cities are required to independently address critical areas within their urban growth area. The incorporated cities within the range of the Taylor's checkerspot butterfly and streaked horned lark are: (1) Shelton (Mason County); and (2) Olympia, Lacey, Tumwater, Tenino, and Yelm (Thurston County), all in the State of Washington.

In 2009, the Thurston County Board of Commissioners adopted Interim Ordinance No. 14260, which strengthened protections for prairie and Oregon white oak habitat in consideration of the best available science. The County worked with the Service and WDFW to include an up-to-date definition of prairie habitat and to delineate soils where prairie habitat is likely to occur. In July 2010, the ordinance was renewed and amended, including revisions to the prairie soils list and changes to administrative language. Since July 2010, the interim prairie ordinance has been renewed on a 6-month basis and is currently in place. Several prairie species, including the Taylor's checkerspot butterfly and streaked horned lark, were also included as important species subject to critical areas regulation (Thurston County 2012, p. 1).

County staff use the known presence or historical locations of the Taylor's checkerspot or streaked horned lark to determine whether these species may be present at a site and impacted by the land use activity. After a field review, if one of these species is found on the site, the County requires a habitat management plan (HMP) to be developed, typically by a consultant for the landowner, in accordance with WDFW's management recommendations. This HMP specifies how site development should occur, and assists developers in achieving compliance with CAO requirements to minimize impact to the prairie habitat

and species. The HMPs typically include onsite restoration and enhancement activities. Mitigation for prairie impacts may also be required, on-site or off (Thurston County 2012, p. 2).

In Clallam, Pierce, and Mason Counties, specific critical area ordinances have not been identified for the Taylor's checkerspot butterfly or streaked horned lark. However, prairie habitats and species garner some protection under Fish (or Aquatic) and Wildlife Habitat Conservation Areas (Mason County 2009, p. 64; Clallam County 2012, Part Three, entire; Pierce County 2012, pp. 18E.40–1–3). All developments within these areas are required to: Preserve and protect habitat adequate to support viable populations of native wildlife (Clallam County 2012, Part Three, entire); achieve "no net loss" of species and habitat where, if altered, the action may reduce the likelihood that these species survive and reproduce over the long term (Pierce County 2012, p. 18E.40–1); and support viable populations and protect habitat for Federal or State listed fish or wildlife (Mason County 2009, p. 63). While these regulations are likely adequate for the management of species with stable populations and large ranges, the loss of individual animals can have a cumulative impact deleterious to species facing a wide range of other threats and that already have decreased numbers of individuals or populations, such as the Taylor's checkerspot butterfly or streaked horned lark.

County-level CAOs do not apply to incorporated cities within county boundaries; thus, the incorporated cities of Olympia, Lacey, Tumwater, Yelm, and Tenino that overlap the range of the Taylor's checkerspot butterfly and streaked horned lark do not provide the same specificity of protection for these taxa as the Thurston County CAO. Below, we address the relevant city ordinances that overlap these species' ranges. We conclude below with a summary of whether we deem these existing city ordinances inadequate for the conservation of the Taylor's checkerspot and streaked horned lark.

The City of Olympia—The City of Olympia's municipal code states that "The Department [City] may restrict the uses and activities of a development proposal which lie within one thousand feet of important habitat or species location," defined by Washington State's Priority Habitat and Species (PHS) Management Recommendations of 1991, as amended" (Olympia Municipal Code (OMC) 18.32.315 B). When development is proposed within

1,000 feet of habitat of a species designated as important by Washington State, the Olympia CAO requires the preparation of a formal "Important Habitats and Species Management Plan," unless waived by the WDFW (OMC 18.32.320).

The City of Lacey—The City of Lacey CAO includes in its definition of critical area any area identified as habitat for a Federal or State endangered, threatened, or sensitive species or State-listed priority habitat and calls these "habitat conservation areas" (HCAs) (Lacey Municipal Code (LMC) 14.33.060). These areas are defined through individual contract with qualified professional biologists on a site-by-site basis as development is proposed. The code further states that "No development shall be allowed within a habitat conservation area or buffer [for a habitat conservation area] with which state or federally endangered, threatened, or sensitive species have a primary association" (LMC 14.33.117).

The City of Tumwater—The City of Tumwater CAO outlines protections for "habitat critical areas" and for "habitats and species of local importance." Tumwater's habitat critical areas are established on a case-by-case basis by a "qualified professional" as development is proposed, and the habitat critical areas are required to be consistent with the "recommendations issued by the Washington State Department of Fish and Wildlife" (Tumwater Municipal Code (TMC) 16.32.60). Species of local importance are defined as locally significant species that are not State-listed as endangered, threatened, or sensitive, but live in Tumwater and are of special importance to the citizens of Tumwater for cultural or historical reasons, or if the city is a critically significant portion of its range (TMC 16.32.055 A). Tumwater is considered a "critically significant portion of a species' range if the species' population would be divided into nonviable populations if it is eliminated from Tumwater" (TMC 16.32.055 A2). Species of local importance are further defined as State monitor or candidate species where Tumwater is a significant portion of its range such that a significant reduction or elimination of the species from Tumwater would result in changing the status of the species to that of State endangered, threatened, or sensitive (TMC 16.32.055 A3).

The City of Yelm—The municipal code of Yelm states that it will, "regulate all uses, activities, and developments within, adjacent to, or likely to affect one or more critical areas, consistent with the best available science" (Yelm Municipal Code/(YMC)

14.08.010 E4f) and mandates that "all actions and developments shall be designed and constructed to avoid, minimize, and restore all adverse impacts." Further, it states that "no activity or use shall be allowed that results in a net loss of the functions or values of critical areas" (YMC 14.08.010 G) and "no development shall be allowed within a habitat conservation area or buffer which state or federally endangered, threatened, or sensitive species have a primary association, except that which is provided for by a management plan established by WDFW or applicable state or federal agency" (YMC 14.08.010 D1a). The City of Yelm municipal code states that by "limiting development and alteration of critical areas" it will "maintain healthy, functioning ecosystems through the protection of unique, fragile, and valuable elements of the environment, and . . . conserve the biodiversity of plant and animal species" (17.08.010 A4b).

The City of Tenino—The City of Tenino municipal code gives development regulations for critical areas and natural resource lands that include fish and wildlife habitat areas (Tenino Municipal Code (TMC) 18D.10.030 A) and further "protects unique, fragile, and valuable elements of the environment, including critical fish and wildlife habitat" (TMC 18D.10.030 D). The City of Tenino references the DNR critical areas fish and wildlife habitat areas, stream typing map and the WDFW PHS program and PHS maps as sources to identify fish and wildlife habitat (TMC 18D.10.140 E1, 2). The City also defines critical fish and wildlife species habitat areas as those areas known to support or have, "a primary association with State or Federally listed endangered, threatened, or sensitive species of fish or wildlife (specified in 50 CFR 17.11, 50 CFR 17.12, WAC 232–12–011) and which, if altered, may reduce the likelihood that the species will survive and reproduce over the long term" (TMC 18D.40.020A, B).

The City of Shelton—The CAO for the city of Shelton (Mason County) specifies compliance with the PHS through designation of habitat conservation areas (HCAs) (Shelton Municipal Code (SMC) 21.64.300 B1), indicating that where HCAs are designated, development will be curtailed (SMC 21.64.010 B), except at the discretion of the director (city), who may allow single-family development at such sites without a critical areas assessment report if development is not believed to directly disturb the components of the HCA (SMC 21.64.360 B).

Summary of Local Laws and Regulations

Each city's CAO has been crafted to preserve the maximum amount of biodiversity while at the same time encouraging high-density development within their respective urban growth areas. Each city requires that potential fish and wildlife habitat be surveyed by qualified professional habitat biologists as development is proposed. A habitat conservation area (HCA) is determined according to the WDFW priority habitat and species list. If an HCA is identified at a site, the development of the parcel is then subject to the CAO regulations. Mitigation required by each city's CAO prioritizes reconsideration of the proposed development action in order to avoid the impact to the HCA.

For the Taylor's checkerspot butterfly and streaked horned lark, only known or historical locations are considered prior to applying the CAOs. There are currently no WDFW priority habitat and species recommendations for these species, and no surveys are completed for these species in suitable habitats that may be affected by development or site disturbance.

Connectivity of populations, abundance of resources (prey species or food plants), and undisturbed habitat are three primary factors affecting plant and animal populations. The piecemeal pattern that development unavoidably exhibits is difficult to reconcile with the needs of the Taylor's checkerspot butterfly and streaked horned lark within a given urban growth area. Further, previously common species may become uncommon due to disruption by development, and the fragmentary protection of small pockets of habitat is unlikely to prevent extirpation of some species without intensive species management, which is beyond the scope of these individual CAOs. The Taylor's checkerspot butterfly and streaked horned lark have been affected by habitat loss through development and conversion. Protective measures undertaken during development of lands may provide benefits for these species; however, based on our review of the Washington County, State, and city regulatory mechanisms, we conclude that these measures are currently inadequate to protect the Taylor's checkerspot butterfly and streaked horned lark from further population declines associated with habitat loss, inappropriate management, and loss of connectivity. Because neither the Taylor's checkerspot nor the streaked horned lark has a widespread distribution, we are unable to invoke the WDFW priority

habitat and species recommendations as land is developed and habitat lost in areas not currently occupied by either subspecies, and therefore we conclude these regulatory mechanisms are inadequate for the purpose of conserving these subspecies.

In Oregon, the Land Conservation and Development Commission in 1974 adopted "Goal 5," a broad Statewide planning goal that covers more than a dozen resources, including wildlife habitats and natural areas. Goal 5 and related Oregon administrative rules (Chapter 660, Divisions 16 and 23) describe how cities and counties are to plan and zone land to conserve resources listed in the goal.

Goal 5 and its rules establish a five-step planning process for Oregon's cities and counties: (1) Inventory local occurrences of resources listed in Goal 5 and decide which ones are important; (2) identify potential land uses on or near each resource site and any conflicts that might result; (3) analyze economic, social, environmental, and energy consequences of such conflicts; (4) decide whether the resource should be fully or partially protected, and justify the decision; and (5) adopt measures such as zoning to put that policy into effect. This five-step Goal 5 process was established by rules adopted in 1982, and revised in 1996. The revisions tailored the process to the individual resources covered by Goal 5.

Local governments identify conflicting uses that exist, or could occur, with regard to significant Goal 5 resource sites. A local government may determine that one or more significant Goal 5 resource sites are conflicting uses with another significant resource site. Local governments analyze the consequences that could result from decisions to allow, limit, or prohibit a conflicting use. The local government determines the level of protection for each significant site. Local governments determine whether to allow, limit, or prohibit identified conflicting uses for significant resource sites. A local government may decide that the conflicting use should be allowed fully, notwithstanding the possible impacts on the resource site.

In summary, Goal 5 is a required planning process that allows local governments to make decisions about land use regulations and whether to protect the individual resources based upon potential conflicts involving economic, social, environmental, and energy consequences. It does not require minimum levels of protections for natural resources, but does require weighing the various impacts to resources from land use. Based on our

review of Oregon State regulatory mechanisms, we conclude that they are inadequate to protect the Taylor's checkerspot butterfly or streaked horned lark from further population declines associated with habitat loss or inappropriate management, because the program recommends, but does not require, that local governments make planning decisions that result in protection of sensitive resources.

Summary of Factor D

In summary, the existing regulatory mechanisms described above are not sufficient to significantly reduce or remove the existing threats to the Taylor's checkerspot butterfly and streaked horned lark. The Canadian recovery strategy is a positive forward step for streaked horned lark, although, as the species is thought to be extirpated from Canada, it is unlikely to result in a change in the streaked horned lark's downward trend across its range. Lack of essential habitat protection under State laws leaves these species at continued risk of habitat loss and degradation in Washington and Oregon. National Wildlife Refuges provide important protections for streaked horned lark habitat in Washington and Oregon.

On JBLM, regulations and recently developed "training range standard operating procedures" applying to the Taylor's checkerspot butterfly and streaked horned lark are covered by the current INRMP and ESMP. We find that the military training, as it currently occurs, causes direct mortality of individuals and impacts habitat for the Taylor's checkerspot butterfly and streaked horned lark in all areas where training and the subspecies overlap. We must therefore conclude that military training, despite the policies and regulations in place on JBLM, will continue to result in mortality events and loss and destruction of occupied Taylor's checkerspot butterfly habitat patches; thus our conclusion is that existing regulatory mechanisms are inadequate on JBLM lands.

The Washington CAOs and Oregon's planning process Goal 5 generally provide conservation measures to minimize habitat removal and direct effects to the Taylor's checkerspot butterfly and streaked horned lark. However, habitat removal and degradation, direct loss of individuals, increased fragmentation, decreased connectivity, and the lack of consistent regulatory mechanisms to address the threats associated with these effects are not prohibited under these State processes, and adverse effects to these species continue to occur.

Based upon our review of the best commercial and scientific data available, we conclude that the existing regulatory mechanisms are inadequate to reduce the threats to the Taylor's checkerspot butterfly and streaked horned lark now or in the future.

Factor E. Other Natural or Manmade Factors Affecting Its Continued Existence

Low Genetic Diversity, Small or Isolated Populations, and Low Reproductive Success

Most species' populations fluctuate naturally, responding to various factors such as weather events, disease, and predation. Purvis (2000, p. 3), however, suggested that these factors have less impact on a species with a wide and continuous distribution. Populations that are small, fragmented, or isolated by habitat loss or modification of naturally patchy habitat, and other human-related factors, are more vulnerable to extirpation by natural, randomly occurring events, to cumulative effects, and to genetic effects that plague small populations, collectively known as small population effects. These effects can include genetic drift (loss of recessive alleles), founder effects (over time, an increasing percentage of the population inheriting a narrow range of traits), and genetic bottlenecks leading to increasingly lower genetic diversity, with consequent negative effects on evolutionary potential.

Taylor's Checkerspot Butterfly—Although the genetic diversity and population structure of the Taylor's checkerspot butterfly is unknown, a loss of genetic diversity may have occurred as a result of geographic isolation and fragmentation of habitat patches across the distribution of the existing populations. Dispersal of individuals directly affects the genetic composition of populations and possibly the abundance of individuals in a population (Hellmann *et al.* 2004, p. 59). For other subspecies of Edith's checkerspot and their closely related European relative *Melitaea*, small populations led to a high rate of inbreeding (Boggs and Nieminen 2004, p. 98). The Service is currently partnering with WDFW to explore questions of genetic relatedness in the subpopulations of Taylor's checkerspot butterflies. Due to its small population size and fragmented distribution, we conclude that these negative factors associated with small population size, as well as the potential historical loss of genetic diversity, may contribute to further population declines for the

Taylor's checkerspot butterfly. Therefore, we consider small population size and the potential loss of genetic diversity to be a threat to the Taylor's checkerspot butterfly.

Streaked Horned Lark—Genetic analysis has shown that streaked horned larks have suffered a loss of genetic diversity due to a population bottleneck (Drovetski *et al.* 2005, p. 881), the effect of which may be exacerbated by continued small total population size. In general, decreased genetic diversity has been linked to increased chances of inbreeding depression, reduced disease resistance, and reduced adaptability to environmental change, leading to reduced reproductive success (Keller and Waller 2002, p. 235).

Recent studies in Washington have found that streaked horned larks have lower fecundity and nest success than other northwestern horned lark subspecies (Camfield *et al.* 2010, p. 277). In a study on the south Puget Sound, all measures of reproductive success were lower for streaked horned larks than for other ground-nesting birds at the same prairie sites (Anderson 2010, p. 15). Streaked horned lark's egg hatching rate at these sites is extremely low (i.e., 44 percent at 13th Division Prairie) (Anderson 2010, p. 18). Comparisons with savannah sparrows (*Passerculus sandwichensis*), a bird with similar habitat requirements that nests on the same prairies, found that streaked horned lark fecundity was 70 percent lower (Anderson 2010, p. 18). If streaked horned lark's very low reproductive success was caused by poor habitat quality, other ground-nesting birds at the study sites would be expected to show similarly low nest success rates; that other bird species have much higher nest success in the same habitat suggests that inbreeding depression may be playing a role in the decline of streaked horned larks in the south Puget Sound (Anderson 2010, p. 27). Other factors consistent with hypothesized inbreeding depression in the south Puget Sound population include two cases of observed mother-son pairings (Pearson and Stinson 2011, p. 1), and no observations of immigration from other sites into the Puget lowland breeding sites (Pearson *et al.* 2008, p. 15).

Estimates of population growth rate (λ) that include vital rates from all of the nesting areas in Washington (south Puget Sound, Washington Coast, and one lower Columbia River island) indicate that streaked horned larks in Washington are declining by 40 percent per year, apparently due to a combination of low survival and fecundity rates (Pearson *et al.* 2008, pp.

10, 13; Camfield *et al.* 2011, p. 7). Territory mapping at 4 sites on the south Puget Sound found that the total number of breeding streaked horned lark territories decreased from 77 territories in 2004 to 42 territories in 2007—a decline of over 45 percent in 3 years (Camfield *et al.* 2011, p. 8). The combination of low genetic variability, small and rapidly declining nesting populations, high breeding site fidelity, and no observed migration into the Puget lowlands populations suggests that the south Puget Sound population could become extirpated in the near future (Pearson *et al.* 2008, pp. 1, 14, 15).

In 2011, a project was initiated to increase genetic diversity in the south Puget Sound streaked horned lark population. Twelve eggs (four three-egg clutches) were collected from streaked horned lark nests in the southern Willamette Valley and were placed in nests at the 13th Division Prairie site at JBLM (Wolf 2011, p. 9). At least five young successfully fledged at the receiving site; if even one of these birds returns and successfully breeds in future years, it will likely increase genetic diversity in the receiving population, resulting in improved fitness and reduced extinction risk for the south Puget Sound larks (Wolf 2011, p. 9). In 2012, one fledgling that originated from an Oregon translocated clutch in 2011 survived its first winter, and returned to 13th Division Prairie; it did not breed successfully, but the return indicates that the project is likely to meet its objective to increase the genetic diversity of the streaked horned larks that breed in the south Puget Sound (Wolf 2012, p. 9). Based on our consideration of these factors, we conclude that the loss of genetic diversity, the current number of small and isolated populations (particularly in Washington State), and the subspecies' low reproductive success are likely to combine to result in continued population declines for the streaked horned lark, and thus pose a threat to the subspecies.

Climate Change

Our analyses under the Act include consideration of ongoing and projected changes in climate. The terms “climate” and “climate change” are defined by the Intergovernmental Panel on Climate Change (IPCC). The term “climate” refers to the mean and variability of different types of weather conditions over time, with 30 years being a typical period for such measurements, although shorter or longer periods also may be used (IPCC 2007a, p. 78). The term “climate change” thus refers to a change

in the mean or variability of one or more measures of climate (e.g., temperature or precipitation) that persists for an extended period, typically decades or longer, whether the change is due to natural variability, human activity, or both (IPCC 2007a, p. 78).

Scientific measurements spanning several decades demonstrate that changes in climate are occurring, and that the rate of change has been faster since the 1950s. Examples include warming of the global climate system, and substantial increases in precipitation in some regions of the world and decreases in other regions. (For these and other examples, see IPCC 2007a, p. 30; and IPCC 2007d, pp. 35–54, 82–85). Results of scientific analyses presented by the IPCC show that most of the observed increase in global average temperature since the mid-20th century cannot be explained by natural variability in climate, and is “very likely” (defined by the IPCC as 90 percent or higher probability) due to the observed increase in greenhouse gas (GHG) concentrations in the atmosphere as a result of human activities, particularly carbon dioxide emissions from use of fossil fuels (IPCC 2007a, pp. 5–6 and figures SPM.3 and SPM.4; IPCC 2007d, pp. 21–35). Further confirmation of the role of GHGs comes from analyses by Huber and Knutti (2011, p. 4), who concluded it is extremely likely that approximately 75 percent of global warming since 1950 has been caused by human activities.

Scientists use a variety of climate models, which include consideration of natural processes and variability, as well as various scenarios of potential levels and timing of GHG emissions, to evaluate the causes of changes already observed and to project future changes in temperature and other climate conditions (e.g., IPCC 2007c, entire; Ganguly *et al.* 2009, pp. 11555, 15558; Prinn *et al.* 2011, pp. 527, 529). All combinations of models and emissions scenarios yield very similar projections of increases in the most common measure of climate change, average global surface temperature (commonly known as global warming), until about 2030. Although projections of the extent and rate of warming differ after about 2030, the overall trajectory of all the projections is one of increased global warming through the end of this century, even for the projections based on scenarios that assume that GHG emissions will stabilize or decline. Thus, there is strong scientific support for projections that warming will continue through the 21st century, and that the scope and rate of change will be influenced substantially by the extent of

GHG emissions (IPCC 2007a, pp. 44–45; IPCC 2007c, pp. 760–764 and 797–811; Ganguly *et al.* 2009, pp. 15555–15558; Prinn *et al.* 2011, pp. 527, 529). (See IPCC 2007b, p. 8, for a summary of other global projections of climate-related changes, such as frequency of heat waves and changes in precipitation. Also see IPCC 2011(entire) for a summary of observations and projections of extreme climate events.)

Various changes in climate may have direct or indirect effects on species. These effects may be positive, neutral, or negative, and they may change over time, depending on the species and other relevant considerations, such as interactions of climate with other variables (e.g., habitat fragmentation) (IPCC 2007e, pp. 214–246). Identifying likely effects often involves aspects of climate change vulnerability analysis. Vulnerability refers to the degree to which a species (or system) is susceptible to, and unable to cope with, adverse effects of climate change, including climate variability and extremes. Vulnerability is a function of the type, scope, and rate of climate change and variation to which a species is exposed, its sensitivity, and its adaptive capacity (IPCC 2007a, p. 89; see also Glick *et al.* 2011, pp. 19–22). There is no single method for conducting such analyses that applies to all situations (Glick *et al.* 2011, p. 3). We use our expert judgment and appropriate analytical approaches to weigh relevant information, including uncertainty, in our consideration of various aspects of climate change.

As is the case with all stressors that we assess, even if we conclude that a species is currently affected or is likely to be affected in a negative way by one or more climate-related impacts, it does not necessarily follow that the species meets the definition of an “endangered species” or a “threatened species” under the Act. If a species is listed as endangered or threatened, knowledge regarding the vulnerability of the species to, and known or anticipated impacts from, climate-associated changes in environmental conditions can be used to help devise appropriate strategies for its recovery.

Global climate projections are informative, and, in some cases, the only or the best scientific information available for us to use. However, projected changes in climate and related impacts can vary substantially across and within different regions of the world (e.g., IPCC 2007a, pp. 8–12). Therefore, we use “downscaled” projections when they are available and have been developed through appropriate scientific procedures,

because such projections provide higher resolution information that is more relevant to spatial scales used for analyses of a given species (see Glick *et al.* 2011, pp. 58–61, for a discussion of downscaling). With regard to our analysis for the Taylor’s checkerspot butterfly and streaked horned lark, downscaled projections are available.

The ranges of the Taylor’s checkerspot butterfly and streaked horned lark extend from the southern edge of the Georgia Basin, Canada, down through the Puget Sound trough in Washington State, and south to the Willamette Valley, Oregon. Downscaled climate change projections for this ecoregion predict consistently increasing annual mean temperatures from 2012 to 2095, using the IPCC’s medium (A1B) emissions scenario (IPCC 2000, p. 245). Using the General Circulation Model (GCM) that most accurately predicts precipitation for the Pacific Northwest, the Third Generation Coupled Global Climate Model (CGCM3.1) under the medium emissions scenario (A1B), annual mean temperature is predicted to increase approximately 1.8 °Fahrenheit (°F) (1 °Celsius (°C)) by the year 2020, 3.6 °F (2 °C) by 2050, and 5.4 °F (3 °C) by 2090 (Climatewizardcustom 2012). This analysis was restricted to the ecoregion encompassing the overlapping range of the species of interest and is well supported by analyses focused only on the Pacific Northwest by Mote and Salathé in their 2010 publication, *Future Climate in the Pacific Northwest* (Mote and Salathé 2010, entire). Employing the same GCM and medium emissions scenario, downscaled model runs for precipitation in the ecoregion project a small (less than 5 percent) increase in mean annual precipitation over approximately the next 80 years. Most months are projected to show an increase in mean annual precipitation. May through August are projected to show a decrease in mean annual precipitation, which corresponds with the reproductive season for both species of interest in this final rule (Climatewizardcustom 2012).

The potential impacts of a changing global climate to the Taylor’s checkerspot butterfly and streaked horned lark are presently unclear. Projections localized to the Georgia Basin—Puget Sound Trough—Willamette Valley Ecoregion suggest that temperatures are likely to increase approximately 5 °F (2.8 °C) at the north end of the region by the year 2080, based on an average of greenhouse gas emission scenarios B1, A1B, and A2 and all Global Circulation Models employed by Climatewizard (range = 2.6 °F to 7.6 °F; 1.4 °C to 4.2 °C). Similarly, the mid

region projection predicts an increase an average of 4.5 °F (range = 2.1 °F to 7.1 °F) (average of 2.5 °C with a range of 1.2 °C to 3.9 °C) and the southern end to increase by 4.5 °F (range = 2.2 °F to 7.1 °F) (average of 2.5 °C with a range of 1.2 °C to 3.9 °C). Worldwide, the IPCC states it is very likely that extreme high temperatures, heat waves, and heavy precipitation events will increase in frequency (IPCC 2007c, p. 783).

Taylor’s Checkerspot Butterfly—Because the Taylor’s checkerspot butterfly occupies a relatively small area of specialized habitat, it may be vulnerable to climatic changes that could decrease suitable habitat or alter food plant seasonal growth patterns (phenology). However, while it appears reasonable to assume that the Taylor’s checkerspot butterfly may be affected, as detailed below, we lack sufficient certainty to know specifically how climate change will affect the Taylor’s checkerspot butterfly.

The relationship between climate change and survival for the *Euphydryas editha* complex is driven more by the indirect effects of the interaction between seasonal growth patterns of host plants and the life cycle of the checkerspot butterfly than by the direct effects of temperature and precipitation (Guppy and Fischer 2001, p. 11; Parmesan 2007, p. 1868; Singer and Parmesan 2010, p. 3170).

Predicting seasonal growth patterns of butterfly host plants is complicated, because these patterns are likely more sensitive to moisture than temperature (Cushman *et al.* 1992, pp. 197–198; Bale *et al.* 2002, p. 11), which is predicted to be highly variable and uncertain in the Pacific Northwest (Mote and Salathé 2010, p. 31). Climate models for the Georgia Basin—Puget Sound Trough—Willamette Valley Ecoregion consistently predict a deviation from the historical monthly average precipitation, with the months of January through April projected to show an increase in precipitation across the region, while June through September are predicted to be much drier than the historical average (Climatewizard 2012).

During the active season of pre-diapause larvae (early spring), the Taylor’s checkerspot butterfly feeds primarily on plants of the family Scrophulariaceae (snapdragon family, including species of *Castilleja* and *Triphysaria*) and Plantaginaceae (plantain family) (Stinson 2005, p. 88). Available information suggests that if climate change disrupts seasonal growth patterns of food plants, it is conceivable that an adult Taylor’s checkerspot butterfly may be able to use alternative food plants that occur within its range

(Singer and Wee 2005, pp. 353–355; Singer *et al.* 1992, pp. 17–18). The larval stage of the Taylor's checkerspot butterfly is more limited in terms of potential host plant species. Nevertheless, we have no information indicating that any of these changes (e.g., in availability of food plants) is likely to occur in the near future.

It is likely that the overlap of seasonal growth patterns between these primary larval host plants and the Taylor's checkerspot butterfly will display some level of stochasticity due to climatic shifts in precipitation and increased frequency of extreme weather events. For the Edith's checkerspot (*Euphydryas editha*), Parmesan (2007, p. 1869) reported that a lifecycle mismatch can cause a shortening of the time window available for larval feeding, causing the death of those individuals unable to complete their larval development within the shortened period, citing a study by Singer (1972, p. 75). In that study, Singer documented routine mortality of greater than 98 percent in the field due to phenological mismatches between larval development and senescence of their annual host plant *Plantago erecta* (California plantain). When mismatches such as these form the 'starting point,' insects may be highly vulnerable to small changes in synchrony with their hosts (Parmesan 2007, p. 1869).

Predicting future population dynamics and distributions is complex for animals such as butterflies that have two very different physiological stages (larva and adult) (for example, see Bale *et al.* 2002, p. 5). Moreover, forecasting the responses of butterflies and other insects to elevated temperatures or variable precipitation is largely based on field and laboratory studies (Hellmann 2002, pp. 927–929). However, the relationship between these changing environmental conditions and the Taylor's checkerspot butterfly has not been explicitly studied, though the extirpation of populations in British Columbia is attributed to drought conditions and the encroachment of woody vegetation into formerly suitable habitat (Guppy 2012, *in litt.*). One of the two primary host plants for the Taylor's checkerspot butterfly is ubiquitous across the entire range of the subspecies and extends well beyond areas where Taylor's checkerspot butterfly populations persist. This suggests that there is potential for range shifting, if the Taylor's checkerspot butterfly had the capacity to disperse across the landscape.

Uncertainty about climate change impacts does not mean that impacts may or may not occur; it means that the

risks of a given impact are difficult to quantify (Schneider and Kuntz-Duriseti 2002, p. 54; Congressional Budget Office 2005, entire; Halsnaes *et al.* 2007, p. 129). The interplay between host plant distribution, larval and adult butterfly dispersal, and female choice of where to lay eggs will ultimately determine the population response to climate change (Singer and Parmesan 2010, p. 3164). However, determining the long-term responses to climate change from even well-studied butterflies in the genus *Euphydryas* is difficult, given their ability to switch to alternative larval food plants in some instances (Singer and Thomas 1996, pp. S33–34; Hellmann 2002, p. 933; Singer *et al.* 1992, pp. 17–18). Attempts to analyze the interplay between climate and host plant growth patterns using predictive models or general State-wide assessments and to relate these to the Taylor's checkerspot butterfly are equally complicated (Murphy and Weiss 1992, p. 8). Despite the potential for future climate change in Western Washington, as discussed above, we have not identified, nor are we aware of any data on, an appropriate scale to evaluate habitat or population trends for the Taylor's checkerspot butterfly or to make predictions about future trends and whether the subspecies will be significantly impacted. Based on these considerations, at this time, we do not consider the effects of climate change to be a threat to the subspecies.

Streaked Horned Lark—Sea level on the Pacific Coast of Washington and Oregon is predicted to rise according to expected values generated by an ensemble mean of models of relative sea-level rise (Tebaldi 2012, p. 4). At Toke Point, Willapa Bay, Washington, near occupied nesting habitat for streaked horned lark, sea level is predicted to rise 3.9 in (9.9 cm) by 2030, and 9.8 in (0.25 cm) by 2050 (Tebaldi 2012, p. 4). Streaked horned larks are attracted to breeding sites where there are long sight lines and sparse vegetation, making sandy islands and shorelines ideal habitats for nesting. Sea-level rise is not currently projected to reach the height of streaked horned lark nesting habitat on the beaches. If these projections underestimate sea-level rise and nesting habitat is infringed upon by rising waters, streaked horned larks will likely respond by moving to up shore or to other breeding habitats.

The indirect effects of climate change are primarily associated with changes in habitat, such as succession from a sparsely vegetated condition to a shrubby or forested state, which would make habitat unsuitable for nesting.

These negative impacts may be offset by other, potentially positive effects and continued management of occupied habitats. On the ocean beaches, an increase in the frequency of winter storm surges may improve upshore nesting habitat for larks by disturbing or killing encroaching vegetation. Many islands used for nesting in the Columbia River are likely to continue receiving dredge spoil deposits, perpetuating the conditions of early primary succession that streaked horned larks seek for nesting. Primary management on most of the currently occupied breeding sites on the mainland of Washington and Oregon is for agricultural, industrial, or military uses. Such management attracts streaked horned larks through the reduction of standing vegetation; thus conversion to unsuitable habitat due to shifts in climate is less likely in these areas. As a result, we have not identified nor are we aware of any data on an appropriate scale to evaluate habitat or populations trends for the streaked horned lark or to make predictions about future trends and whether the subspecies will be significantly impacted. Habitat changes to streaked horned lark habitat due to the effects of climate change may provide some benefit to the subspecies and as such is not currently considered a threat.

Stochastic Weather Events

Stochasticity of extreme weather events may impact the ability of endangered and threatened species to survive. Vulnerability to weather events can be described as being composed of three elements: exposure, sensitivity, and adaptive capacity.

The small, isolated nature of the remaining populations of the Taylor's checkerspot butterfly and streaked horned lark increases the subspecies' vulnerability to stochastic (random) natural events. When species are limited to small, isolated habitats, they are more likely to become extinct due to a local event that negatively affects the population. While a population's small, isolated nature does not represent an independent threat to the species, it does substantially increase the risk of extirpation from the effects of all other threats, including those addressed in this analysis, and those that could occur in the future from unknown sources.

Taylor's Checkerspot Butterfly—Environmental threats exacerbated by small population size and weather can be a factor in the Taylor's checkerspot butterfly's breeding success. Poor weather conditions, such as cool temperatures and rainy weather, reduce the number of days in the flight period for several early spring flying butterflies,

including the Taylor's checkerspot butterfly. A shorter flight season reduces the number of opportunities for oviposition (egg laying) for female butterflies, thus affecting the emergence of adult butterflies in the future. Peterson (2010, *in litt*) provided climate and butterfly abundance data that indicated cold winter temperature may affect the timing of butterfly emergence and the size of populations in years when winters are severe. Late emergence of adults may directly impact the mortality of larval stages if larvae are unable to complete their life cycle before their host plants senesce, or the larvae may return to diapause.

Butterflies, including the Taylor's checkerspot butterfly, may experience increased mortality or reduced fecundity if the timing of plant development does not match the timing of larval or adult butterfly development (Peterson 1997, p. 167), and large fluctuations in population sizes have been observed based on local weather patterns (Hellmann *et al.* 2004, p. 45). During 2010 and 2011, the emergence of Taylor's checkerspot butterfly adults was approximately 3 weeks later than "normal" due to wet and cool spring weather. In addition, it has been reported that both drought and deluge may interrupt the insect-plant interaction, resulting in decreased populations (Hellmann *et al.* 2004, p. 45). The effects of drought have been shown to deleteriously affect populations of Edith checkerspot butterflies in California (Hellmann *et al.* 2004, p. 45). Based on our review, we conclude that stochastic weather events are a potential threat to the Taylor's checkerspot butterfly due to the vulnerability of isolated, small populations.

Streaked Horned Lark—There are estimated to be fewer than 1,600 streaked horned larks range-wide (Altman 2011, p. 213). During the breeding season, small populations of larks are distributed across the range; in the winter, however, streaked horned larks concentrate mainly on the lower Columbia River sites and in the Willamette Valley. Such concentration exposes the wintering populations to potentially disastrous stochastic events, such as ice storms or flooding, that could kill individuals or destroy limited habitat; a severe weather event could wipe out a substantial percentage of the entire subspecies (Pearson and Altman 2005, p. 13). It is also possible that, as extreme weather events become more frequent, streaked horned larks may be less able to adapt to loss of nests given the relatively long period between nesting attempts. We have not

documented the occurrence of these threats to date, but the small and declining population of streaked horned larks is certainly at risk of random environmental events that could have catastrophic consequences. Based on our review, we conclude that the effects of stochastic weather events are a potential threat to the streaked horned lark.

Aircraft Strikes and Activities at Civilian Airports

Taylor's Checkerspot Butterfly—The Taylor's checkerspot butterfly is not known to be impacted by aircraft strikes and aircraft activities at airports. Habitat management activities at these sites are covered under Factor A.

Streaked Horned Larks—Streaked horned larks are attracted to the flat, open habitats around airports throughout their range. Horned lark strikes are frequently reported at military and civilian airports throughout the country, but because of the bird's small size, few strikes result in significant damage to aircraft (Dolbeer *et al.* 2011, p. 48; Air Force Safety Center 2012, p. 2). A recent report, however, used mtDNA analysis to document that a streaked horned lark was struck by an F-15C military aircraft at Portland International Airport in October 2012, and caused damage to the aircraft's #1 engine (Dove *et al.* 2013, p. 2). Most of the specific information available for threats to streaked horned larks at airports comes from the monitoring program at the Department of Defense's JBLM on the south Puget Sound; similar threats to streaked horned larks may exist at other airports, but without focused monitoring, the threats to the birds have not been documented. Information provided from monitoring at McChord Field is used here as a surrogate for civilian airport information, where information on bird strikes may not have been fully reported. McChord Field has had seven confirmed streaked horned lark strikes from 2002 through 2010; the streaked horned larks were killed in the strikes, but the strikes resulted in only minimal cost or damage to the aircraft (Elliott 2011, pers. comm.). Aircraft strikes have been documented as a source of adult mortality for streaked horned larks at McChord Field. Surveys in 2010 at McChord Field detected up to 26 individuals at the site (Linders 2011a, p. 3); loss of even 1 adult (and possibly more, since some strikes may not be noticeable given the small mass of a horned lark) per year could remove up to 4 percent of the population each year. Recent modeling has shown that adult survival has the greatest influence on

population growth rates for streaked horned larks (Pearson *et al.* 2008, p. 13; Camfield *et al.* 2011, p. 10), so consistent loss of adult streaked horned larks to aircraft strikes could negatively impact this population.

The annual Olympic Air Show takes place in June at the Olympia Regional Airport; the events at the air show include low-level aerobatic flying (Olympic Flight Museum 2012, p. 1). The events do not occur on lark habitat, but parking and staging for the event may occur on the streaked horned lark's breeding grounds (Tirhi 2012b, *in litt.*). As the air show occurs during the streaked horned lark's breeding season, the level of human activity at the site could cause nest abandonment, exposure of young to predators, or actual nest destruction.

The Corvallis Municipal Airport is the site of the largest known streaked horned lark population. The airport hosts training exercises for police departments on the airport grounds (Moore and Kotaich 2010, p. 25); intensive training sessions have destroyed nests, and the disturbance may also cause streaked horned larks to delay breeding activity (Moore and Kotaich 2010, p. 25).

Both military and civilian airports routinely implement a variety of approaches to minimize the presence of hazardous wildlife on or adjacent to airfields and to prevent wildlife strikes by aircraft. McChord Field uses falcons to scare geese and gulls off the airfield, and also uses two dogs for this purpose; the falcons and dogs are part of McChord Field's integrated bird/wildlife aircraft strike hazard program and are designed to minimize aircraft and crew exposure to potentially hazardous bird and wildlife strikes (Geil 2010, *in litt.*). The falcons and dogs cause streaked horned larks to become alert and fly (Pearson and Altman 2005, p. 12), which imposes an energetic cost to adults and could expose nests to predation. Portland International Airport uses a variety of hazing and habitat management tools to minimize wildlife hazards. Raptors and waterfowl pose the greatest danger to aircraft operations, but the airport's wildlife hazard management plan aims to reduce the potential for any bird strikes (Port of Portland 2009, pp. 5–6). Streaked horned larks are not known to nest near the runways at Portland International Airport, but foraging individuals from the nearby Southwest Quad could be harassed by the hazing program, which could impose resulting energetic costs.

Given the small size of streaked horned lark populations, we conclude that disturbance associated with

training and other activities at airports are threats to the subspecies that may have significant population impacts. Although aircraft strikes can remove individual birds from streaked horned lark populations at airports, there is currently only limited information on one airport (McChord Field) to suggest aircraft strikes may be a potential population level threat at some sites. However, the overall impact of the loss of individual birds from aircraft strikes to the status of populations on other (non-military) airports is believed to be low, as indicated by the continued presence of populations under the current habitat conditions maintained at these airports.

Pesticides and Herbicides

Taylor's Checkerspot Butterfly—In the south Puget Sound region, currently occupied Taylor's checkerspot butterfly sites are found in a matrix of rural agricultural lands and low-density development. In this context, herbicide and insecticide use may have direct effects on nontarget plants (butterfly larval and nectar hosts) and arthropods such as butterflies (Stark *et al.* 2012, p. 23).

The application of the pesticide *Bacillus thuringiensis* var. *kurstaki* (Btk) for control of the Asian gypsy moth (*Lymantria dispar*) likely contributed to the extirpation of three historical locales for Taylor's checkerspot butterflies in Pierce County, Washington, in 1992 (Vaughan and Black 2002, p. 13). Spraying of Btk is known to have adverse effects to nontarget lepidopteran species (butterflies and moths) (Severns 2002, p. 169). Severns (2002) sampled butterfly diversity, richness, and abundance (density) for 2 years following a Btk application at Schwarz Park in Lane County, Oregon. Diversity, richness, and density were found to be significantly reduced for 2 years following spraying of Btk (Severns 2002, p. 168). Species like Taylor's checkerspot butterflies, which have a single brood per year, are active in the spring and their larvae are active during the spray application period. Most lepidopterans are more susceptible to Btk than the target species (Asian gypsy moth) (Haas and Scriber 1998). For nontarget lepidoptera, the early instar stages of larvae are the most susceptible stage (Wagner and Miller 1995, p. 21).

The application of pesticides is usually restricted to a short period of the year. However, if the target species is active at the same time as larvae and adult Taylor's checkerspot butterflies, the effect could be significant. Spraying of Btk still occurs in Pierce County for gypsy moths during the time of year

when Taylor's checkerspot larvae are active, and the threat of pesticide drift onto the prairies of Pierce County cannot be discounted. At this time, however, we have no evidence that Btk has been sprayed in any locations where Taylor's checkerspot butterflies are known to occur.

Organophosphate-based insecticides are used in a number of agricultural applications including black fly and mosquito control; spraying of vegetable, nut, and fruit crops; and treatment of seed, although they are now banned from residential use. One of these insecticides, Naled (Dibrom), has been determined to have broad impacts on a wide array of butterfly families (Bargar 2011, p. 888) and direct effects to the larvae and adults of a closely related species of a federally listed threatened butterfly, the Bay checkerspot (*Euphydryas editha bayensis*) (EPA 2010, p. 23), if exposed. The extent to which these insecticides are used in the Taylor's checkerspot butterfly's range is currently unknown, and current data were not available from the USDA.

In conclusion, we recognize that the use of pesticides would kill all life stages of the Taylor's checkerspot butterfly if pesticides were sprayed such that habitat occupied by the subspecies was impacted (for example, if pesticide were to drift from application in adjacent forested areas). As noted earlier, the application of pesticide was implicated in the extirpation of three historical locales for Taylor's checkerspot butterflies in Pierce County, Washington, in 1992 (Vaughan and Black 2002, p. 13). Although we are not aware of any present overlap of exposure to pesticide use and the distribution of the butterfly, based on the high degree of mortality that would result as a consequence of pesticide exposure and past suspected extirpations of entire populations of the subspecies as a likely result of pesticide use, we conclude that pesticide use is a potential threat to the Taylor's checkerspot butterfly.

Streaked Horned Lark—The streaked horned lark is not known to be impacted by pesticides or herbicides directly, but may be impacted by the equipment used to dispense them. These impacts are covered under Factor A.

Recreation

Taylor's Checkerspot Butterfly—Recreational foot traffic may be a threat to the Taylor's checkerspot butterfly, as trampling will crush larvae if they are present underfoot. The incidence of trampling is limited to the few locations where Taylor's checkerspot butterflies and recreation overlap. For example,

foot traffic is relatively common at Scatter Creek Wildlife Area in Washington, where plants and butterfly habitat have been trampled by horses during specialized dog competitions in which dogs are followed by observers on horseback (Stinson 2005, p. 6), and by foot traffic using the trail system to access the meadows of Beazell Memorial Forest (Park) in Oregon. Recreation by JBLM personnel and local individuals occurs on and near the 13th Division Prairie. Trampling by humans and horses, as well as people walking dogs on the 13th Division Prairie, is likely to crush some larvae, as well as the larval and nectar prairie plant communities that are restored and managed for in this area.

Larvae have been crushed on Dan Kelly Ridge, on the north Olympic Peninsula by vehicles that access the site to maintain a cell tower on the ridge. Also, recreational off-road vehicle (ORV) traffic on Dan Kelly Ridge, and on Eden Valley, has damaged larval host plants. The ORV damage on Dan Kelly Ridge occurs despite efforts by WDNR to block access into the upper portions of the road system through gating of the main road. Based on our review, we conclude that ground-disturbing recreational activities are a threat to the Taylor's checkerspot butterfly and where the population is depressed may constitute a serious threat to the long-term conservation of the subspecies.

Streaked Horned Lark—There are documented occurrences of adverse effects to larks from recreation. Recreation at coastal sites is a common threat to rare species; activities such as dog walking, beachcombing, ORV use, and horseback riding in coastal habitats may indirectly increase predation, nest abandonment, and nest failure for streaked horned larks (Pearson and Hopey 2005, pp. 19, 26, 29). One nest (of 16 monitored) at Midway Beach on the Washington coast was crushed by a horse in 2004 (Pearson and Hopey 2005, pp. 18–19). Open sandy beaches (e.g., dredge spoil sites on the lower Columbia islands) make good camping areas for kayakers and boaters, and nests could be lost due to accidental crushing. During western snowy plover surveys conducted between 2006 and 2010 at coastal sites in Washington, human-caused nest failures were reported in 4 of the 5 years (Pearson *et al.* annual reports, 2007, p. 16; 2008, p. 17; 2009, p. 18; 2010, p. 16). Because streaked horned larks nest in the same areas as snowy plovers along the Washington Coast, it is highly likely that human-caused nest failures also occur due to recreational activities at these sites. Good communication between

researchers and landowners has resulted in some positive actions to reduce the adverse effects of recreation. In 2002, JBLM restricted recreational activity at the 13th Division Prairie to protect lark nesting; JBLM prohibited model airplane flying, dog walking, and vehicle traffic in the area used by streaked horned larks (Pearson and Hopey 2005, p. 29).

Although restrictions to recreational use were placed on the 13th Division Prairie by JBLM, it is a difficult area to patrol and enforce restrictions of this type. This area, adjacent to where streaked horned larks nest, is scheduled for a release of captive-bred and translocated Taylor's checkerspot butterfly larvae during March 2012. Based on our review, we conclude that activities associated with recreation are threats to the streaked horned lark.

Nest Parasitism

Taylor's Checkerspot Butterfly—The Taylor's checkerspot butterfly is not known to be impacted by nest parasitism.

Streaked Horned Lark—Nest parasitism by brown-headed cowbirds (*Molothrus ater*) is a potential, though little documented, threat to streaked horned larks. Cowbirds are common in grasslands and urban areas throughout North America; female cowbirds lay their eggs in the nests of other songbirds (Lowther 1993, p. 1). Upon hatching, young cowbirds compete for food with the young of the host species, and may result in lower reproductive success for the host pair (Lowther 1993, p. 11). In a study in Kansas, brown-headed cowbird parasitism of horned lark nests reduced the larks' nest success by half in those nests that were parasitized (from 1.4 young larks fledged per nest in non-parasitized nests to 0.7 young larks produced per nest with cowbird parasitism (Hill 1976, pp. 560–561)). Cowbirds are native to the open grasslands of central North America, but apparently only expanded into Oregon and Washington in the 1950s, as a result of human clearing of forested habitats (Lowther 1993, p. 2). Brown-headed cowbirds have been noted at all streaked horned lark study areas, and fledgling cowbirds have been observed begging for food from adult streaked horned larks on the Columbia River island sites (Pearson and Hopey 2005, p. 17). Extensive nest monitoring of streaked horned lark nests in the Willamette Valley has not identified cowbird brood parasitism as a threat in this area (Moore 2009, entire; Moore and Kotaich 2010, entire). Streaked horned larks have had just 50 years of exposure to brown-headed cowbirds, and as such, have not

coevolved with this nest parasite. We, therefore, conclude that the effect of cowbird brood parasitism is not currently a threat; however, it may become a threat in the future if it further depresses nest success of the declining streaked horned lark population on the south Puget Sound.

Vehicle Mortality

Taylor's Checkerspot Butterfly—See discussion under Factor A, Development.

Streaked Horned Lark—There is some evidence that streaked horned larks are killed by cars on rural roads (Moore 2010b, p. 6). In the Willamette Valley, larks often breed on the margins of gravel roads, and, as they flush in response to passing cars, they may be killed. The magnitude of this threat is unknown, but we have no data to suggest that mortality from vehicle strikes is resulting in population-level impacts to the subspecies. We do not consider vehicle mortality to currently be a threat to the streaked horned lark.

Summary of Factor E

Based upon our review of the best commercial and scientific data available, the loss, degradation, and fragmentation of prairies has resulted in smaller population sizes, loss of genetic diversity, reduced gene flow among populations, destruction of population structure, and increased susceptibility to local population extirpation for the Taylor's checkerspot butterfly and the streaked horned lark from a series of threats including pesticide use, crushing and trampling from recreational activities, and aircraft strikes and collisions, as summarized for each subspecies below.

Taylor's Checkerspot Butterfly—The degradation of habitat from recreational trampling and crushing produced by humans, dogs, and horses has killed larvae at several sites occupied by Taylor's checkerspot butterflies. In addition, the use of the insecticide BtK is suspected to be responsible for the extirpation of three historical populations in Pierce County, Washington, in 1992 (Stinson 2005). We have also determined that the loss of genetic diversity through inbreeding depression due to habitat fragmentation and the isolation of the subspecies is likely an ongoing active threat. We consider the negative impacts from recreation and pesticide use to pose potential threat to the Taylor's checkerspot butterfly, particularly given its inherent vulnerability due to small population sizes and isolation of small populations.

Streaked Horned Lark—Genetic analysis has shown that streaked horned larks have suffered a loss of genetic diversity due to a bottleneck in population size (Drovetski *et al.* 2005, p. 881), the effect of which may be exacerbated by continued small total population size. The loss of genetic diversity in small populations has been linked to increased chances of inbreeding depression, reduced disease resistance, and reduced adaptability to environmental change, leading to reduced reproductive success. These effects may be apparent in the small breeding population in the south Puget Sound, which exhibits low reproductive success.

Habitat changes to streaked horned lark habitat from climate change may provide some benefit to the subspecies, and as such climate change is not currently considered a threat; however, stochastic weather events may pose a threat to wintering flocks in the Willamette Valley. Death of individual larks caused by aircraft strikes is a threat to the small populations at airports, as the loss of even a single breeding individual can have an adverse effect on the population. Recreation activities can cause the degradation of streaked horned lark habitat and direct mortality to nests and young.

We consider the impacts from the loss of genetic diversity, low reproductive success, stochastic weather events, aircraft strikes, and recreation to pose a threat to the streaked horned lark in combination with the other threat factors identified here, particularly given the inherent vulnerability of streaked horned lark due to small population sizes and isolation of small populations.

Determination

Section 4 of the Act (16 U.S.C. 1533), and its implementing regulations at 50 CFR part 424, set forth the procedures for adding species to the Federal Lists of Endangered and Threatened Wildlife and Plants. Under section 4(a)(1) of the Act, we may list a species based on: (A) The present or threatened destruction, modification, or curtailment of its habitat or range; (B) overutilization for commercial, recreational, scientific, or educational purposes; (C) disease or predation; (D) the inadequacy of existing regulatory mechanisms; or (E) other natural or manmade factors affecting its continued existence. Listing actions may be warranted based on any of the above threat factors, singly or in combination.

Taylor's Checkerspot Butterfly

We have carefully assessed the best scientific and commercial information available regarding the past, present, and future threats to the Taylor's checkerspot butterfly. The Taylor's checkerspot butterfly has been lost from most locations in the Canadian portion of its range with just one known population remaining. In Washington, the subspecies was once known from seven Puget Sound counties, and is now known to occur naturally in just two counties, Clallam and Pierce. In Oregon, the range of the Taylor's checkerspot butterfly has been reduced to two small relict grasslands in the foothills of the coast range near Corvallis, in Benton County, Oregon. The distribution of the Taylor's checkerspot butterfly has been reduced from more than 80 populations to the 14 occupied locations with small populations that are known rangewide today. Some of the populations that have been extirpated have disappeared in the past decade, and many declined from robust population sizes of more than 5,000 individual butterflies to zero within a 3-year interval and have not returned. Most remaining populations of Taylor's checkerspot butterflies are very small; 5 of the 14 known populations are estimated to have fewer than 100 individuals. Only 1 population consistently has been estimated to have more than 1,000 individual butterflies, and this population has been severely impacted due to habitat degradation associated with military training.

We have carefully assessed the best scientific and commercial data available regarding the past, present, and future threats to the Taylor's checkerspot butterfly. We find that the threat of development and adverse impacts to habitat from conversion to other uses (agriculture); the loss of historically occupied locations resulting in the present isolation and limited distribution of the subspecies; the impacts of military training and recreation; existing and likely future habitat fragmentation, habitat disturbance, and land use changes associated with agriculture; long-term fire suppression; and the threats associated with the present and threatened destruction, modification, and curtailment of Taylor's checkerspot butterfly habitat are significant. These threats are currently ongoing and will continue into the foreseeable future for Taylor's checkerspot butterflies.

We find that disease may be a threat, but is not currently at a significant level to affect the Taylor's checkerspot butterfly. The threat of disease to the larval host plant of the subspecies may

become substantial in the foreseeable future due to the prevalence of small population sizes for the Taylor's checkerspot butterfly. Predation is not a threat to Taylor's checkerspot butterflies at this time. We conclude that existing regulatory mechanisms do not address and reduce the threats to the Taylor's checkerspot butterfly. In contrast, the voluntary protections that have been exercised for private landowners in lieu of rulemaking under Washington State's forest practices regulations have provided protection to the subspecies on private lands adjacent to DNR lands on the north Olympic Peninsula, although this is a small proportion of existing occupied habitat for the subspecies.

The observed habitat fragmentation and the isolation of small populations of the Taylor's checkerspot butterfly suggest that the loss of genetic diversity through inbreeding depression may be a threat. All known locations where the Taylor's checkerspot butterfly is found in Oregon and Washington are sufficiently distant from each other such that exchange of genetic material from a dispersing individual moving from population to population would be unlikely. The threat of extreme weather events (drought and deluge, and overcast, cold springs) affect host plant phenology and adult butterfly emergence, which influences whether the larvae complete their annual life cycle, thus affecting the size of annual populations. The effects of weather events are particularly a threat when they affect one of the few small populations that remain. There is a potential threat of continuing pesticide application, which is suspected to be responsible for the extirpation of some populations of the Taylor's checkerspot butterfly in Pierce County. Recreational activities (off-road vehicles, trampling and crushing from hikers and horses) have been shown to be a threat at several of the sites occupied by Taylor's checkerspot butterflies.

In summary, the combination of several threats that have significant impacts on populations and the ongoing nature of these threats to the few remaining small populations of the Taylor's checkerspot butterfly leads us to conclude that the subspecies is currently in danger of extinction throughout its range. The threats to the survival of the Taylor's checkerspot butterfly occur throughout the subspecies' range and are not restricted to any particular significant portion of that range. Accordingly, our assessment and determination will apply to the subspecies throughout its entire range. The Act defines an endangered species

as any species that is "in danger of extinction throughout all or a significant portion of its range" and a threatened species as any species "that is likely to become endangered throughout all or a significant portion of its range within the foreseeable future." Because we find that the Taylor's checkerspot butterfly is presently in danger of extinction throughout its entire range, based on the immediacy, severity, and scope of the threats described above, and the fact that the range and population size of the species has already been drastically reduced, a determination of threatened species status for the Taylor's checkerspot butterfly is not appropriate. Therefore, on the basis of the best available scientific and commercial information, we determine that the Taylor's checkerspot butterfly meets the definition of an endangered species in accordance with sections 3(6) and 4(a)(1) of the Act.

Significant Portion of the Range

Having determined that the Taylor's checkerspot butterfly meets the definition of an endangered species throughout its entire range, we need not further evaluate any significant portion of the range for this subspecies.

Streaked Horned Lark

We have carefully assessed the best scientific and commercial information available regarding the past, present, and future threats to the streaked horned lark. The subspecies has disappeared from all formerly documented locations in the northern portions of its range (British Columbia, the San Juan Islands, and the northern Puget trough), the Oregon coast, and the southern edge of its range (Rogue and Umpqua Valleys). The streaked horned lark's range may be continuing to contract, and the number of streaked horned larks in Washington and on the Columbia River islands is declining. This decline taken together with evidence of inbreeding depression on the south Puget Sound indicates that the streaked horned lark's range may contract further in the future.

We have carefully assessed the best scientific and commercial data available regarding the past, present, and future threats to streaked horned lark. We find that the threat of development and adverse impacts to habitat from conversion to other uses (residential or commercial development, agriculture), loss and degradation of habitat due to fire suppression and subsequent invasion of habitat by undesirable native and nonnative plants, dredge spoil deposition timing and placement on Columbia River islands, improperly

timed burning and mowing regimes, military training (use of explosive ordnance, aircraft downdraft, accidental fires, vehicle travel, dismounted training, bivouac activities, digging, Air Mobility Rodeo, Air Expo), and conversion of large grass seed production fields to incompatible agricultural commodities are significant and are expected to continue into the foreseeable future. Many military training impacts are expected to increase under the DOD's Grow the Army initiative, although we expect that JBLM's final ESMPs will provide an overall conservation benefit to the subspecies.

We find that there are likely to be significant, ongoing threats to the subspecies due to predation, which is the most frequently documented source of mortality for eggs and young, and the primary source of nest failure. This is especially a concern in the south Puget Sound area, although streaked horned larks in other areas are also susceptible. In addition, we conclude that significant, ongoing threats to the streaked horned lark may occur due to small population effects (for this subspecies, this includes loss of genetic diversity, low survival, and reduced fecundity and nest success). This is of particular concern in the south Puget Sound area, where such threats in combination with a lack of immigration into that area and high breeding site fidelity could lead to local population extirpations. Other significant, ongoing threats to the streaked horned lark include existing regulatory mechanisms, which are not adequate to address or reduce threats to streaked horned lark; other activities associated with airports (development and aircraft strikes); and recreation (including but not limited to pedestrians, model airplane flying, dog walking, beachcombing, vehicle or ORV use, camping, and horseback riding in areas occupied by streaked horned lark). These threats are expected to continue into the foreseeable future. Potential threats include stochastic weather events, nest parasitism by brown-headed cowbirds, and vehicle mortality, but magnitude and severity of these threats are unknown at this time.

Streaked horned larks face a combination of several high-magnitude threats; the threats are immediate, occur throughout the subspecies' range, and are not restricted to any particular significant portion of the range. Therefore, we assessed the status of streaked horned lark throughout its entire range, and our assessment and determination apply to the subspecies throughout its entire range. For the reasons provided in this rule, we are

listing streaked horned lark as threatened throughout its range. The Act defines an endangered species as any species that is "in danger of extinction throughout all or a significant portion of its range" and a threatened species as any species "that is likely to become endangered throughout all or a significant portion of its range within the foreseeable future." We find that streaked horned lark is likely to become an endangered species throughout all or a significant portion of its range within the foreseeable future, based on the immediacy, severity, and scope of the threats described above. We do not have information to suggest that the present threats are of such great magnitude that streaked horned lark is in immediate danger of extinction, but we conclude that it is likely to become so in the foreseeable future. Therefore, on the basis of the best available scientific and commercial information, we determine that streaked horned lark meets the definition of threatened species in accordance with sections 3(20) and 4(a)(1) of the Act.

Distinct Vertebrate Population Segment

After finding that streaked horned lark is a threatened species throughout its range, we next consider whether there may be a distinct vertebrate population segment (DPS) that meets the definition of endangered, in accordance with the Service's Policy Regarding the Recognition of Distinct Vertebrate Population Segments under the Endangered Species Act (61 FR 4722; February 7, 1996). The policy identifies three elements that are to be considered regarding the status of a possible DPS. These elements include:

- (1) The discreteness of the population segment in relation to the remainder of the species to which it belongs;
- (2) The significance of the population segment to the species to which it belongs; and
- (3) The population segment's conservation status in relation to the Act's standards for listing (i.e., does the population segment, when treated as if it were a species, meet the Act's definition of endangered or threatened?) (61 FR 4722; February 7, 1996).

The first two elements are used to determine if a population segment constitutes a valid DPS. If it does, then the third element is used to consider whether such DPS warrants listing. In this section, we will consider the first two criteria (discreteness and significance) to determine if any unit of the streaked horned lark's overall population is a valid DPS (i.e., a valid listable entity). Our policy further recognizes that it may be appropriate to

assign different classifications (i.e., endangered or threatened) to different DPSs of the same vertebrate taxon (61 FR 4722; February 7, 1996).

Discreteness

Under the DPS policy, a population segment of a vertebrate species may be considered discrete if it satisfies either one of the following two conditions:

- (1) It is markedly separated from other populations of the same taxon as a consequence of physical, physiological, ecological, or behavioral factors. Quantitative measures of genetic or morphological discontinuity (separation based on genetic or morphological characters) may provide evidence of this separation;

- (2) It is delimited by international governmental boundaries within which differences in control of exploitation, management of habitat, conservation status, or regulatory mechanisms exist that are significant in light of section 4(a)(1)(D) of the Act.

In our evaluation of discreteness under the DPS policy, we primarily considered the information indicating the separation of streaked horned larks during the breeding season into three regions (the south Puget Sound, Washington Coast and Columbia River, and the Willamette Valley). Observation of banded streaked horned larks has shown that the birds show strong site philopatry in the breeding season (i.e., individuals tend to return to the same location to breed each year) (Pearson *et al.* 2008, p. 12), but birds from all regions mix in the winter (Pearson *et al.* 2005, pp. 2–6). In the winter most of streaked horned larks that breed in the south Puget Sound migrate south to the Willamette Valley or west to the Washington coast; streaked horned larks that breed on the Washington coast either remain on the coast or migrate south to the Willamette Valley; birds that breed on the lower Columbia River islands remain on the islands or migrate to the Washington coast; and birds that breed in the Willamette Valley remain there over the winter (Pearson *et al.* 2005b; pp. 5–6). Streaked horned larks spend the winter in large mixed subspecies flocks of horned larks in the Willamette Valley, and in smaller flocks along the lower Columbia River and Washington Coast (Pearson *et al.* 2005b, p. 7; Pearson and Altman 2005, p. 7).

Possible evidence of inbreeding depression (Anderson 2010, p. 27; Pearson and Stinson 2011, p. 1) may suggest that there is a discrete population of streaked horned larks that breed in Washington. Estimates of population growth rate with data from nesting areas in Washington (south

Puget Sound, Washington Coast, and one lower Columbia River island) indicate that the number of streaked horned larks in Washington is declining each year, apparently due to a combination of low survival and fecundity rates (Pearson *et al.* 2008, pp. 10, 13; Camfield *et al.* 2011, p. 7); this trend is not apparent in Oregon (Myers and Kreager 2010, p. 11). The combination of low genetic variability, small and rapidly declining nesting populations, high breeding site fidelity, and no observed migration into the south Puget Sound suggests that streaked horned lark in the south Puget Sound could become extirpated in the near future (Pearson *et al.* 2008, pp. 1, 14, 15). Efforts to reduce this apparent isolation and concomitant genetic consequences have been implemented within the last year.

A project was initiated in 2011 to counteract the apparent decline in the south Puget Sound breeding birds. This genetic rescue effort is aimed at increasing genetic diversity in streaked horned larks breeding in Washington, which could result in increased nest success and an increase in the population. Twelve eggs (four three-egg clutches) were collected from streaked horned lark nests in the southern Willamette Valley and were placed in nests at the 13th Division Prairie site at Joint Base Lewis-McChord (Wolf 2011, p. 9). At least five young successfully fledged at the receiving site; if even one of these birds returns to breed in future years, it will likely increase genetic diversity in the receiving population, resulting in improved fitness and reduced extinction risk for the south Puget Sound streaked horned larks (Wolf 2011, p. 9). This genetic rescue project will likely be continued for the next several years.

With the evidence of extensive mixing that occurs in the winter, and the genetic rescue project to bolster genetic diversity in Washington, which has resulted in genetic mixing between Oregon and Washington populations, there does not appear to be marked separation among streaked horned larks from the three regions. In addition, the evidence of deleterious genetic consequences to the birds breeding in Washington suggests that any possible isolation of this population is not the result of adaptation or natural differentiation of this population, but rather is symptomatic of drastic population declines and loss of connectivity between potentially interbreeding subpopulations. Because we find the potential "regional populations" are not markedly separate,

we do not consider them to be discrete under the DPS policy.

Evaluation of Discreteness

Our analysis of the apparent level of isolation and evidence of inbreeding depression does not lead to a finding that any subunit of streaked horned larks that nest in Washington, in the south Puget Sound, on the Washington coast, or on the Columbia River islands are discrete; therefore these populations cannot be considered to be a potential DPS. This does not mean that the three breeding regions of streaked horned lark are unimportant and do not have significant conservation value. It simply means that, per our policy, the best available data at this time do not support a marked separation between the breeding streaked horned larks in the three regions, based on information available to us, such that this population would meet the discreteness criterion of our DPS policy.

Significance

Under our DPS Policy, a population must be discrete *and* significant to qualify as a DPS. Since we have determined that no populations of streaked horned larks are discrete, we will not consider whether that population segment is significant.

Conclusion of DPS Analysis for Streaked Horned Lark

On the basis of the best available information, we have determined that there are no discrete populations of the streaked horned lark. As no population segments met the discreteness element, and, therefore, no populations qualify as a DPS under the Service's DPS policy, we will not proceed with an evaluation of the status of the population segment under the Act.

Significant Portion of the Range

In determining whether a species is endangered or threatened in a significant portion of its range, we first identify any portions of the range of the species that warrant further consideration. The range of a species can theoretically be divided into portions an infinite number of ways. However, there is no purpose to analyzing portions of the range that are not reasonably likely to be both (1) significant and (2) endangered or threatened. To identify only those portions that warrant further consideration, we determine whether there is substantial information indicating that: (1) The portions may be significant, and (2) the species may be in danger of extinction there or likely to become so within the foreseeable future.

In practice, a key part of this analysis is whether the threats are geographically concentrated in some way. If the threats to the species are essentially uniform throughout its range, no portion is likely to warrant further consideration. Moreover, if any concentration of threats applies only to portions of the species' range that are not significant, such portions will not warrant further consideration.

If we identify portions that warrant further consideration, we then determine whether the species is endangered or threatened in these portions of its range. Depending on the biology of the species, its range, and the threats it faces, the Service may address either the significance question or the status question first. Thus, if the Service considers significance first and determines that a portion of the range is not significant, the Service need not determine whether the species is endangered or threatened there. Likewise, if the Service considers status first and determines that the species is not endangered or threatened in a portion of its range, the Service need not determine if that portion is significant. However, if the Service determines that both a portion of the range of a species is significant and the species is endangered or threatened there, the Service will specify that portion of the range as endangered or threatened under section 4(c)(1) of the Act.

As described above, we have determined that streaked horned lark is likely to become endangered within the foreseeable future throughout all of its range; therefore the subspecies meets the definition of a threatened species under the Act. In the course of this rangewide determination, we considered whether some portion of the full range of the subspecies may face threats or potential threats acting individually or collectively on streaked horned lark to such degree that the subspecies as a whole should be considered endangered. We detail our consideration of that question here.

Although the threats to streaked horned larks in Washington and Oregon are apparently similar in nature (including loss of habitat to development, poor habitat quality due to lack of adequate management to maintain low-stature vegetation, predation, and human disturbance during the breeding season), for reasons unknown, the population trend for streaked horned larks in Washington appears to be markedly different than the trend for the subspecies in Oregon.

Streaked horned larks in Washington occur on the south Puget Sound, on the Washington coast, and on islands and

dredge disposal sites in the lower Columbia River (including two sites in Portland, Oregon). The total estimated population of streaked horned larks in these areas is 270–310 birds (Altman 2011, p. 213). Demographic modeling using data from these sites uniformly shows precipitous population declines. Pearson *et al.* (2008, pp. 3, 12) examined population vital rates (reproductive rates, juvenile survival, and adult survival) at seven sites (four in the south Puget Sound, two on the Washington Coast, and one Columbia River island) over 4 years (2002–2005) and concluded that the Washington population is declining by 40 percent per year. Schapaugh (2009, pp. 9, 15, 18) used both deterministic and stochastic models to analyze the data collected by Pearson *et al.* (2008, p. 3), and projected that, in all cases, streaked horned larks in Washington would likely become extirpated within 25 years.

Camfield *et al.* (2011, p. 4) analyzed the data from the same three local populations considered by Pearson *et al.* (2008) and Schapaugh (2009), described above (the data were collected from about 137 nests over 4 years (2002–2005)). Camfield *et al.* (2011, p. 8) concluded that these populations have reached a point where they are declining towards extinction, and are not sustainable without immigration. The declining trend is probably most pronounced in the south Puget Sound population, where studies have identified apparent inbreeding depression, which is likely a result of the small population size, high site fidelity, and complete absence of breeding season immigration (i.e., no observed immigration of breeding birds from any other sites) (Pearson *et al.* 2008, pp. 14–15).

The population of streaked horned larks in the Willamette Valley of Oregon appears to be more stable. The population in the Willamette Valley is estimated at 900–1,300 birds (Altman 2011, p. 213); no population modeling has been done using data from Oregon, but the apparent trend of the subspecies in the Willamette Valley is stable, based on the Oregon Department of Fish and Wildlife's 1996 and 2008 surveys for streaked horned larks at sites throughout the Willamette Valley (Myers and Kreager 2010, p. 11). Population monitoring at various sites in the Willamette Valley show that several large populations are fairly stable or increasing. Surveys conducted at Baskett Slough NWR from 2006 to 2009 showed a population increase from 18 pairs in 2006, to 35 pairs in 2009 (Moore 2008, p. 8; Moore 2012, *in litt.*). Surveys at William L. Finley NWR

found the population increasing from 15 pairs in 2006, to 40 pairs in 2010 (Moore 2008, p. 9; Moore 2012, *in litt.*). Streaked horned lark population at Corvallis Municipal Airport, the site of the largest known population of the subspecies, measured 75 pairs in 2006, 102 pairs in 2007, 80 pairs in 2008, and 85 pairs in 2011 (Moore 2008, p. 16; Moore 2012, *in litt.*).

Although streaked horned larks in the Willamette Valley face many of the same threats as populations in Washington, the data suggest that streaked horned larks in the Willamette Valley are declining at a slower pace and have abundant potential habitat on the agricultural lands in the valley. The best available information does not suggest that they are likely to experience significant declines in the foreseeable future, to the degree that this population would be considered in danger of extinction at the present time. The threats in the Willamette Valley are relatively small population size, and likely loss of habitat to future development and incompatible management practices, which leads us to conclude that the subspecies is threatened in the Willamette Valley.

The best available data therefore suggest that, under current conditions, streaked horned larks in Washington (south Puget Sound, Washington coast, Columbia River islands) will likely continue to decline towards extinction within this century. Having already determined that streaked horned lark is threatened throughout its range, we considered whether threats may be so concentrated in some portion of its range that, if that portion were lost, the entire subspecies would be in danger of extinction. In applying this test, we determined that even with the potential loss of the Washington populations, the relatively larger, population in the Willamette Valley of Oregon would likely persist; therefore the subspecies as a whole is not presently in danger of extinction, and therefore does not meet the definition of an endangered species under the Act.

Continued decline of the Washington populations considered in conjunction with the larger populations in the Willamette Valley leads us to the conclusion that, on balance, the subspecies is appropriately defined as a threatened species throughout its range under the Act.

Available Conservation Measures

Conservation measures provided to species listed as endangered or threatened species under the Act include recognition, recovery actions, requirements for Federal protection, and

prohibitions against certain practices. Recognition through listing results in public awareness and conservation by Federal, State, Tribal, and local agencies; private organizations; and individuals. The Act encourages cooperation with the States and requires that recovery actions be carried out for all listed species. The protection required by Federal agencies and the prohibitions against certain activities are discussed, in part, below.

The primary purpose of the Act is the conservation of endangered and threatened species and the ecosystems upon which they depend. The ultimate goal of such conservation efforts is the recovery of these listed species, so that they no longer need the protective measures of the Act. Subsection 4(f) of the Act requires the Service to develop and implement recovery plans for the conservation of endangered and threatened species. The recovery planning process involves the identification of actions that are necessary to halt or reverse the species' decline by addressing the threats to its survival and recovery. The goal of this process is to restore listed species to a point where they are secure, self-sustaining, and functioning components of their ecosystems.

Recovery planning includes the development of a recovery outline shortly after a species is listed and preparation of a draft and final recovery plan. The recovery outline guides the immediate implementation of urgent recovery actions and describes the process to be used to develop a recovery plan. Revisions of the plan may be done to address continuing or new threats to the species, as new substantive information becomes available. The recovery plan identifies site-specific management actions that set a trigger for review of the five factors that control whether a species remains endangered or may be downlisted or delisted, and methods for monitoring recovery progress. Recovery plans also establish a framework for agencies to coordinate their recovery efforts and provide estimates of the cost of implementing recovery tasks. Recovery teams (comprised of species experts, Federal and State agencies, nongovernment organizations, and stakeholders) are often established to develop recovery plans. When completed, the recovery outline, draft recovery plan, and the final recovery plan will be available on our Web site (<http://www.fws.gov/endangered>), or from our Washington Fish and Wildlife Office (see **FOR FURTHER INFORMATION CONTACT**).

Implementation of recovery actions generally requires the participation of a

broad range of partners, including other Federal agencies, States, Tribal, nongovernmental organizations, businesses, and private landowners. Examples of recovery actions include habitat restoration (e.g., restoration of native vegetation), research, captive propagation and reintroduction, and outreach and education. The recovery of many listed species cannot be accomplished solely on Federal lands because their range may occur primarily or solely on non-Federal lands. To achieve recovery of these species requires cooperative conservation efforts on private, State, and Tribal lands.

Upon listing, funding for recovery actions will be available from a variety of sources, including Federal budgets, State programs, and cost share grants for non-Federal landowners, the academic community, and nongovernmental organizations. In addition, pursuant to section 6 of the Act, the States of Washington and Oregon will be eligible for Federal funds to implement management actions that promote the protection or recovery of the Taylor's checkerspot butterfly and streaked horned lark. Information on our grant programs that are available to aid species recovery can be found at: <http://www.fws.gov/grants>.

Section 7(a) of the Act requires Federal agencies to evaluate their actions with respect to any species that is proposed or listed as endangered or threatened and with respect to its critical habitat, if any is designated. Regulations implementing this interagency cooperation provision of the Act are codified at 50 CFR part 402. Section 7(a)(4) of the Act requires Federal agencies to confer with the Service on any action that is likely to jeopardize the continued existence of a species proposed for listing or result in destruction or adverse modification of proposed critical habitat. If a species is listed subsequently, section 7(a)(2) of the Act requires Federal agencies to ensure that activities they authorize, fund, or carry out are not likely to jeopardize the continued existence of the species or destroy or adversely modify its critical habitat. If a Federal action may affect a listed species or its critical habitat, the responsible Federal agency must enter into formal consultation with the Service.

Federal agency actions within the species' habitat that may require conference or consultation or both as described in the preceding paragraph include actions to manage or restore critical habitat, actions that require collecting or handling the species for the purpose of captive propagation and translocation to new habitat, actions

that may negatively affect the species through removal and conversion or degradation of habitat. Examples of activities authorized, funded, or carried out by Federal agencies that may affect listed species or their habitat include, but are not limited to:

(1) Military training activities and air operations conducted in or adjacent to occupied or suitable habitat on DOD lands;

(2) Activities with a Federal nexus that include vegetation management such as burning, mechanical treatment, and/or application of herbicides/pesticides on Federal, State, private, or Tribal lands;

(3) Ground-disturbing activities regulated, funded, or conducted by Federal agencies in or adjacent to occupied and/or suitable habitat; and

(4) Import, export, or trade of the species.

The Act and its implementing regulations set forth a series of general prohibitions and exceptions that apply to all endangered wildlife. The prohibitions of section 9(a)(2) of the Act, codified at 50 CFR 17.21 for endangered wildlife, in part, make it illegal for any person subject to the jurisdiction of the United States to take (includes harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect; or to attempt any of these), import, export, ship in interstate commerce in the course of commercial activity, or sell or offer for sale in interstate or foreign commerce any listed species. Under the Lacey Act (18 U.S.C. 42–43; 16 U.S.C. 3371–3378), it is also illegal to possess, sell, deliver, carry, transport, or ship any such wildlife that has been taken illegally. Certain exceptions apply to agents of the Service and State conservation agencies.

We may issue permits to carry out otherwise prohibited activities involving endangered and threatened wildlife species under certain circumstances. Regulations governing permits are codified at 50 CFR 17.22 for endangered wildlife, and at 17.32 for threatened wildlife. With regard to endangered wildlife, a permit must be issued for the following purposes: for scientific purposes, to enhance the propagation or survival of the species, and for incidental take in connection with otherwise lawful activities.

It is our policy, as published in the **Federal Register** on July 1, 1994 (59 FR 34272), to identify to the maximum extent practicable at the time a species is listed, those activities that will or will not constitute a violation of section 9 of the Act. The intent of this policy is to increase public awareness of the effect of a listing on proposed and ongoing activities within the range of the listed

species. The following activities could potentially result in a violation of section 9 of the Act; this list is not comprehensive:

(1) Unauthorized collecting; sale or offer for sale in interstate or foreign commerce; and delivery, receipt, or transport in interstate or foreign commerce in the course of a commercial activity of the species.

(2) Introduction of nonnative species that compete with or prey upon the Taylor's checkerspot butterfly or the streaked horned lark, such as the introduction of competing, nonnative plants or animals to the States of Washington and Oregon;

(3) The unauthorized release of biological control agents that attack any life stage of these subspecies, for example, Btk release in the range of Taylor's checkerspot butterflies;

(4) Unauthorized modification of the soil profiles or the vegetation components on sites known to be occupied by Taylor's checkerspot butterflies and streaked horned larks; and

(5) Deposition of dredge materials on occupied streaked horned lark breeding habitats, intentional harassment of the subspecies at airports as part of a wildlife hazard reduction program, and mowing or burning of the subspecies' occupied habitats during the breeding season.

Questions regarding whether specific activities would constitute a violation of section 9 of the Act should be directed to the Washington Fish and Wildlife Office (see **FOR FURTHER INFORMATION CONTACT**). Requests for copies of the regulations concerning listed animals and general inquiries regarding prohibitions and permits may be addressed to the U.S. Fish and Wildlife Service, Ecological Services, Eastside Federal Complex, 911 NE. 11th Avenue, Portland, OR 97232–4181 (telephone 503–231–6158; facsimile 503–231–6243).

Listing the Taylor's checkerspot butterfly as endangered and the streaked horned lark as threatened under the Act does not automatically invoke the endangered species acts of the State of Oregon (OAR 629–605–0105). In Washington, although there is no endangered species act *per se*, there is a prohibition against take of any species listed by the State regulatory agency (WDFW); however, there is no restriction to loss or modification of habitat. Further, the States may enter into agreements with Federal agencies to administer and manage any area required for the conservation, management, enhancement, or protection of endangered species. Funds

for these activities could be made available under section 6 of the Act (Cooperation with the States) or through competitive application to receive funding through our Recovery Program under section 4 of the Act. Thus, the Federal protection afforded to these subspecies by listing them as endangered or threatened species is reinforced and supplemented by protection under State law.

Special Rule

Under section 4(d) of the Act, the Secretary may publish a special rule that modifies the standard protections for threatened species in the Service's regulations at 50 CFR 17.31, which implement section 9 of the Act, with special measures that are determined to be necessary and advisable to provide for the conservation of the species. As a means to promote conservation efforts by encouraging activities that inadvertently create needed habitat for streaked horned lark, we are issuing a special rule for this species under section 4(d) of the Act. In the case of a special rule, the general regulations (50 CFR 17.31 and 17.71) applying most prohibitions under section 9 of the Act to threatened species do not apply to that species, and the special rule contains the prohibitions necessary and appropriate to conserve that species. Under the special rule, take of streaked horned lark caused by certain common practices by agricultural operations; by wildlife hazard management at airports on State, county, private, or tribal lands; and by noxious weed control conducted on non-federal lands would be exempt from section 9 of the Act. Activities on Federal lands or with any Federal agency involvement will still need to be addressed through consultation under section 7 of the Act.

Wildlife Hazard Management at Airports. Some management actions taken at airports are generally beneficial to streaked horned larks. Streaked horned larks have been documented to breed successfully and to maintain populations at airports in the south Puget Sound and Willamette Valley. Airports routinely implement programs to minimize the presence of hazardous wildlife on airfields, and these activities unintentionally create suitable habitat for streaked horned larks. The special rule for airport management acknowledges the benefits to larks from these activities; covered actions include vegetation management to maintain desired grass height on or adjacent to airports through mowing, discing, herbicide use, or burning; hazing of hazardous wildlife (geese, and other large birds and mammals); routine

management, repair, and maintenance of roads and runways; and modification and management of forage, water, and shelter to be less attractive to these hazardous wildlife, as described under the Regulation Promulgation section, below. Many of the activities that benefit the streaked horned lark on non-Federal airports are a result of practices to maintain safe conditions for aviation; we recommend that airport operators follow the guidance provided in Federal Aviation Administration advisory circular 150/5200–33C Hazardous Wildlife Attractants on or Near Airports (FAA 2007, entire), and all other applicable related guidance. We also exempt take associated with accidental aircraft strikes, as these strikes are an unavoidable consequence of creation of habitat for larks on airfields.

The listing of the streaked horned lark imposes a requirement on airport managers where the subspecies occurs to consider the effects of their management activities on this subspecies. It is likely that airport managers would take actions to deter the subspecies from areas where it currently occurs in order to avoid the burden of the resulting take restrictions that would accrue from the presence of a listed species. However, this special rule, which exempts the non-Federal airport activities listed above, and which may otherwise result in take under section 9 of the Act, eliminates the incentive for airports to reduce or eliminate populations of streaked horned larks from the airfields.

Agricultural Practices. The largest area of potential habitat for streaked horned larks is the agricultural land base in the Willamette Valley, Oregon. The wide open landscape context and low vegetation structure in agricultural fields, especially in grass seed fields, attract larks, probably because those working landscapes resemble the natural habitats formerly used by the subspecies when the natural disturbances associated with floods and fires maintained a mosaic of suitable habitats for the subspecies. Habitat characteristics of agricultural lands used by streaked horned larks include: (1) Bare or sparsely vegetated areas within or adjacent to grass seed fields, pastures, or fallow fields; (2) recently planted (0–3 years) Christmas tree farms with extensive bare ground; and (3) wetland mudflats or “drown outs” (i.e., washed out and poorly performing areas within grass seed or row crop fields). Currently, there are approximately 420,000 acres (169,968 ha) of grass seed fields in the Willamette Valley, and an additional approximately 500,000 acres (202,343 ha) of other agriculture. In any year,

some portion of these roughly 1 million acres (404,685 ha) will have suitable streaked horned lark habitat, but the geographic location of those areas may not be consistent from year to year, nor can we predict their occurrence.

While some agricultural activities may harm or kill individual streaked horned larks, maintenance of extensive agricultural lands in the Willamette Valley is crucial to maintaining the population of streaked horned larks in the valley. Section 9 of the Act provides general prohibitions on activities that would result in take of a threatened species; however, the Service recognizes that routine agricultural activities, even those with the potential to inadvertently take individual streaked horned larks, are necessary components of agricultural operations and create habitat that may provide for the long-term conservation needs of the subspecies. The Service recognizes that in the long term, it is a benefit to streaked horned larks to maintain those aspects of the Willamette Valley's agricultural landscape that can aid in the recovery of the subspecies. We believe this special rule will further conservation of the subspecies by discouraging conversions of the agricultural landscape into habitats unsuitable for the streaked horned lark and encouraging landowners to continue managing the remaining landscape in ways that meet the needs of their operation and provide suitable habitat for the streaked horned lark.

In addition, we believe that, in certain instances, easing the general take prohibitions on non-federal agricultural lands may encourage continued responsible land uses that provide an overall benefit to the subspecies. We also believe that such a special rule will promote the conservation efforts and private lands partnerships critical for species recovery (Bean and Wilcove 1997, pp. 1–2). However, in easing the take prohibitions under section 9, the measures developed in the special rule must also contain prohibitions necessary and appropriate to conserve the species. As discussed elsewhere in this rule, streaked horned larks face many threats. Foremost among these is the scarcity of large, open spaces with very early seral stage vegetation. In the Willamette Valley, large expanses of burned prairie or the scour plains of the Willamette and Columbia Rivers may have provided suitable habitat for streaked horned larks in the past. With the loss of these natural habitats during the last century, alternative breeding and wintering sites, including active agricultural lands, have become critical for the continued survival and recovery

of the streaked horned lark. The unique challenge for conservation of the streaked horned lark on agricultural lands will be to find a way to work with private landowners to voluntarily create habitat for the subspecies rather than allow the habitats on their lands to become unsuitable through inaction. Section 9 of the Act prohibits a range of actions that would take a listed species, including actions that destroy habitats essential to individuals of the species. However, section 9 of the Act does not prohibit *inaction*; thus, a landowner's failure to disturb habitat on a regular basis to maintain the vegetation structure needed by streaked horned larks would not be a violation of section 9 of the Act. If recovery of the streaked horned lark requires the availability of agricultural lands in the Willamette Valley, and we believe it does, then we need to give landowners reasons and incentives to manage their lands in ways that allow larks to thrive on those lands.

While it appears that streaked horned larks may be benefiting from agricultural practices in the Willamette Valley, much remains to be learned about the effects of agricultural activities on the streaked horned lark. We have concluded that developing a conservation partnership with the agricultural community will allow us to answer important questions about the impact of various agricultural practices, and will provide valuable information to assist in the recovery of the subspecies. We further believe that, where consistent with the discretion provided by the Act, implementing policies that promote such partnerships is an essential component for the recovery of listed species, particularly where species occur on private lands. Conservation partnerships can provide positive incentives to private landowners to voluntarily conserve natural resources, and can remove or reduce disincentives to conservation (Knight 1999, p. 224; Brook et al. 2003, p. 1644; Soric et al. 2011, p. 594). The Service will work closely with the farming community in the Willamette Valley to develop ways to monitor impacts on streaked horned larks from routine agricultural activities. We conclude that this commitment is necessary and appropriate, and will provide further insights into land stewardship practices that foster the continued use of the Willamette Valley farm land in ways beneficial to both streaked horned larks and the agricultural community.

In response to public comments received on the proposed rule, we have revised the 4(d) special rule for the

streaked horned lark. We have determined that exempting specified agricultural operations in the Willamette Valley of Oregon, rather than rangewide, as originally proposed, from the take prohibitions under section 9 of the Act, is the appropriate scope for the 4(d) special rule for agricultural activities. We are limiting the application of the 4(d) special rule for agricultural activities to the Willamette Valley in Oregon because we have no information to suggest that the streaked horned lark uses agricultural lands in Washington State.

We have also revised the list of agricultural activities that are exempt from the take prohibitions under section 9 of the Act based on feedback from agricultural interests. We are aligning the definition of "normal farming practices" and "normal transportation activities" to be consistent with relevant Oregon state laws (ORS § 30.930 and § 30.931, respectively). We have also amended the list of covered activities to address specific agricultural practices in the Willamette Valley that may affect the streaked horned lark. Based on feedback from agricultural interests, we deleted several activities from the 4(d) special rule (i.e., routine management and maintenance of stock ponds and berms to maintain livestock water supplies; routine maintenance or construction of fences for grazing management; placement of mineral supplements; and irrigation of agricultural crops, fields, and livestock pastures) and added others (i.e., hazing of geese and predators; and maintenance of irrigation and drainage systems). Please see the Summary of Changes from the Proposed Rule section of this document for a complete list of changes to the 4(d) special rule between the proposed and final rule stages.

We believe that a 4(d) rule for agricultural lands in the Willamette Valley is necessary and advisable to provide for the conservation of streaked horned lark. We therefore exempt take of streaked horned larks resulting from normal farming activities, which are specified below in the Regulation Promulgation section, under section 9 of the Act.

Noxious Weed Control on Non-Federal Lands. Based on public comments, we are adding noxious weed control activities on non-federal lands to the list of activities in the 4(d) special rule that are exempt from take under section 9 of the Act.

Streaked horned larks nest, forage, and winter on extensive areas of bare ground with low-statured vegetation. These areas include native prairies, coastal dunes, fallow and active

agricultural fields, wetland mudflats, sparsely vegetated edges of grass fields, recently planted Christmas tree farms with extensive bare ground, moderately to heavily grazed pastures, gravel roads or gravel shoulders of lightly traveled roads, airports, and dredge deposition sites in the lower Columbia River. As mentioned under Factor A, the suppression and loss of ecological disturbance regimes, such as fire and flooding, across vast portions of the landscape have resulted in altered vegetation structure in these habitat types. This has facilitated invasion by nonnative grasses and woody vegetation, including noxious weeds, rendering habitat unsuitable for streaked horned larks.

Habitat management to maintain low-statured vegetation is essential to maintaining suitable nesting, wintering, and foraging habitat for streaked horned larks. Although streaked horned larks are known to eat the seeds of weedy forbs and grasses, and while improperly timed actions can destroy nests and young, removal of noxious weeds wherever they may occur will help to maintain the low-statured vegetation required by nesting and wintering larks. Targeted plants include those on County, State, and Federal noxious weed lists (see State and Federal lists via links at <http://plants.usda.gov/java/noxiousDriver>; Washington State counties each have a noxious weed control Web site, and selected Oregon State counties maintain noxious weed lists). By their nature, noxious weeds grow aggressively and multiply quickly, negatively affecting all types of habitats, including those used by larks. Some species of noxious weeds spread across long distances through wind, water, and animals, as well as via humans and vehicles, thereby affecting habitats far away from the source plants.

Section 9 of the Act provides general prohibitions on activities that would result in take of a threatened species; however, the Service recognizes that removal of noxious weeds, even those with the potential to inadvertently take individual streaked horned larks, is necessary and may in part provide for the long-term conservation needs of the streaked horned lark. The Service recognizes that in the long term, it is a benefit to streaked horned lark to remove noxious weeds wherever they may occur. We believe this special rule will further the conservation of the species by helping to prevent spread of those noxious weeds that may render habitat unsuitable for the streaked horned lark, and by encouraging landowners to manage their lands in ways that meet their property

management needs as well as helping to prevent degradation or loss of suitable habitat for the streaked horned lark. We therefore exempt take of the streaked horned lark under section 9 of the Act resulting from routine removal or other management of noxious weeds, as described under the Regulation Promulgation section, below.

Provisions of the Special Rule

We determine that issuance of this special rule is necessary and advisable to provide for the conservation of the streaked horned lark. We believe the actions and activities discussed above, while they may cause some level of harm to or disturbance of the streaked horned lark, create and improve habitat for the subspecies, and are important elements in the subspecies' conservation and recovery efforts. Exempted activities include existing routine airport practices as outlined above by non-Federal entities on existing airports, agricultural activities, and control of noxious weeds on non-Federal lands.

Required Determinations

National Environmental Policy Act

We have determined that environmental assessments and environmental impact statements, as defined under the authority of the National Environmental Policy Act (NEPA; 42 U.S.C. 4321 *et seq.*), need not be prepared in connection with listing a species as an endangered or threatened species under the Endangered Species Act. We published a notice outlining our reasons for this determination in the **Federal Register** on October 25, 1983 (48 FR 49244).

References Cited

A complete list of all references cited in this rule is available on the Internet at <http://www.regulations.gov> at Docket No. FWS-R1-ES-2012-0080 or upon request from the Field Supervisor, Washington Fish and Wildlife Office (see **ADDRESSES**).

Authors

The primary authors of this document are staff of the Washington and Oregon Fish and Wildlife Offices.

List of Subjects in 50 CFR Part 17

Endangered and threatened species, Exports, Imports, Reporting and recordkeeping requirements, Transportation.

Regulation Promulgation

Accordingly, we amend part 17, subchapter B of chapter I, title 50 of the Code of Federal Regulations, as follows:

PART 17—[AMENDED]

- 1. The authority citation for part 17 continues to read as follows:

Authority: 16 U.S.C. 1361–1407; 1531–1544; 4201–4245, unless otherwise noted.

- 2. Amend § 17.11(h), the List of Endangered and Threatened Wildlife, as follows:

■ a. By adding an entry for “Lark, streaked horned” in alphabetical order under BIRDS; and

■ b. By adding an entry for “Butterfly, Taylor’s checkerspot” in alphabetical order under INSECTS.

The additions read as follows:

§ 17.11 Endangered and threatened wildlife.

* * * * *

(h) * * *

Species		Historic range	Vertebrate population where endangered or threatened	Status	When listed	Critical habitat	Special rules
Common name	Scientific name						
* BIRDS	*	*	*	*	*		*
* Lark, streaked horned.	<i>Eremophila alpestris strigata</i> .	U.S.A. (WA, OR), Canada (BC).	Entire	T	824	17.95(b)	17.41(a)
* INSECTS	*	*	*	*	*		*
* Butterfly, Taylor’s checkerspot.	<i>Euphydryas editha taylori</i> .	U.S.A. (WA, OR), Canada (BC).	NA	E	824	17.95(i)	NA
* 	*	*	*	*	*		*

- 3. Amend § 17.41 by adding paragraph (a) to read as follows:

§ 17.41 Special rules—birds.

(a) Streaked horned lark (*Eremophila alpestris strigata*). (1) *Which populations of the streaked horned lark are covered by this special rule?* The components of this special rule that apply to airport management and noxious weed control cover the rangewide distribution of this bird; the agricultural component applies only to the Willamette Valley in Oregon.

(2) *What activities are prohibited?* Except as noted in paragraphs (a)(3), (4), and (5) of this section, all prohibitions of § 17.31 apply to the streaked horned lark.

(3) *What activities are allowed on airports on non-Federal lands?* (i) Incidental take of the streaked horned lark will not be a violation of section 9 of the Act, if the incidental take results from routine management activities associated with airport operations to minimize hazardous wildlife, consistent with regulations at 14 CFR 139.337.

(ii) Hazardous wildlife is defined by the Federal Aviation Administration as species of wildlife, including feral animals and domesticated animals not under control, that are associated with aircraft strike problems, are capable of causing structural damage to airport facilities, or act as attractants to other wildlife that pose a strike hazard. Routine management activities include, but are not limited to, the following:

(A) Routine management, repair, and maintenance of roads and runways

(does not include upgrades or construction of new roads or runways);

(B) Control and management of vegetation (grass, weeds, shrubs, and trees) through mowing, discing, herbicide application, or burning;

(C) Hazing of hazardous wildlife; and

(D) Habitat modification and management of sources of forage, water, and shelter to reduce the attractiveness of the area around the airport for hazardous wildlife.

(iii) Incidental take of larks caused by accidental aircraft strikes at airports on non-Federal lands is also exempted from the prohibitions of section 9 of the Act.

(4) *What agricultural activities are allowed on non-Federal land in the Willamette Valley in Oregon?* Incidental take of streaked horned lark will not be a violation of section 9 of the Act, if the incidental take results from accepted agricultural (farming) practices implemented on farms consistent with State laws on non-Federal lands.

(i) For the purposes of this special rule, farm means any facility, including land, buildings, watercourses and appurtenances, used in the commercial production of crops, nursery stock, livestock, poultry, livestock products,

poultry products, vermiculture products, or the propagation and raising of nursery stock.

(ii) For the purposes of this special rule, an agricultural (farming) practice means a mode of operation on a farm that:

(A) Is or may be used on a farm of a similar nature;

(B) Is a generally accepted, reasonable, and prudent method for the operation of the farm to obtain a profit in money;

(C) Is or may become a generally accepted, reasonable, and prudent method in conjunction with farm use;

(D) Complies with applicable State laws; and

(E) Is done in a reasonable and prudent manner.

(iii) Accepted agricultural (farming) practices include, but are not limited to, the following activities:

(A) Planting, harvesting, rotation, mowing, tilling, discing, burning, and herbicide application to crops;

(B) Normal transportation activities, and repair and maintenance of unimproved farm roads (this exemption does not include improvement or construction of new roads) and graveled margins of rural roads;

(C) Livestock grazing according to normally acceptable and established levels;

(D) Hazing of geese or predators; and

(E) Maintenance of irrigation and drainage systems.

(5) *What noxious weed control activities are allowed on non-Federal lands?* Incidental take of streaked horned lark will not be a violation of section 9 of the Act, if the incidental take results from routine removal or other management of noxious weeds. Routine removal or other management of noxious weeds are limited to the following, and must be conducted in such a way that impacts to non-target plants are avoided to the maximum extent practicable:

(i) Mowing;

(ii) Herbicide and fungicide application;

(iii) Fumigation; and

(iv) Burning.

* * * * *

Dated: September 17, 2013.

Rowan W. Gould,

Acting Director, U.S. Fish and Wildlife Service.

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Part III

Department of the Interior

Fish and Wildlife Service

50 CFR Part 17

Endangered and Threatened Wildlife and Plants; Designation of Critical Habitat for Taylor's Checkerspot Butterfly and Streaked Horned Lark; Final Rule

DEPARTMENT OF THE INTERIOR**Fish and Wildlife Service****50 CFR Part 17**

[Docket No. FWS-R1-ES2013-0009;
4500030114]

RIN 1081-AZ36

Endangered and Threatened Wildlife and Plants; Designation of Critical Habitat for Taylor's Checkerspot Butterfly and Streaked Horned Lark

AGENCY: Fish and Wildlife Service, Interior.

ACTION: Final rule.

SUMMARY: We, the U.S. Fish and Wildlife Service, designate critical habitat for the Taylor's checkerspot butterfly (*Euphydryas editha taylori*) and streaked horned lark (*Eremophila alpestris strigata*) under the Endangered Species Act of 1973, as amended (Act). In total, approximately 1,941 acres (786 hectares) in Island, Clallam, and Thurston Counties in Washington, and in Benton County in Oregon, fall within the boundaries of the critical habitat designation for Taylor's checkerspot butterfly. Approximately 4,629 acres (1,873 hectares) in Grays Harbor, Pacific, and Wahkiakum Counties in Washington, and in Clatsop, Columbia, Marion, Polk, and Benton Counties in Oregon, fall within the boundaries of the critical habitat designation for streaked horned lark. The effect of this regulation is to designate critical habitat for the Taylor's checkerspot butterfly and streaked horned lark under the Act for the conservation of the species.

DATES: This rule is effective on November 4, 2013.

ADDRESSES: This final rule is available on the Internet at <http://www.regulations.gov> and at the Washington Fish and Wildlife Office. Comments and materials we received, as well as supporting documentation used in preparing this final rule, are available for public inspection, by appointment, during normal business hours, at: U.S. Fish and Wildlife Service, Washington Fish and Wildlife Office, 510 Desmond Drive SE., Suite 102, Lacey, WA 98503-1263. The office can be reached by telephone at 360-753-9440 or by facsimile at 360-753-9008.

The coordinates or plot points or both from which the maps are generated are included in the administrative record for this critical habitat designation and are available at <http://www.regulations.gov> at Docket No. FWS-R1-ES-2013-0009 and at <http://www.fws.gov/wafwo/TCBShL.html>, or,

by appointment, at the Washington Fish and Wildlife Office (see **FOR FURTHER INFORMATION CONTACT**). Any additional tools or supporting information that we developed for this critical habitat designation will also be available at the Fish and Wildlife Service Web site and field office set out above, and may also be included at <http://www.regulations.gov>.

FOR FURTHER INFORMATION CONTACT: Ken Berg, Manager, U.S. Fish and Wildlife Service, Washington Fish and Wildlife Office, 510 Desmond Drive, Suite 102, Lacey, WA 98503-1263; by telephone 360-753-9440; or by facsimile 360-753-9405. Persons who use a telecommunications device for the deaf (TDD) may call the Federal Information Relay Service (FIRS) at 800-877-8339.

SUPPLEMENTARY INFORMATION:**Executive Summary**

Why We Need to Publish a Rule. Under the Endangered Species Act (Act), any species that is determined to be an endangered or threatened species requires critical habitat to be designated, to the maximum extent prudent and determinable. Elsewhere in today's issue of the **Federal Register**, we list the Taylor's checkerspot butterfly as an endangered species and the streaked horned lark as a threatened species. Designations and revisions of critical habitat can only be completed by issuing a rule.

Section 4(b)(2) of the Act states that the Secretary shall designate critical habitat on the basis of the best available scientific data after taking into consideration the economic impact, national security impact, and any other relevant impact of specifying any particular area as critical habitat. Additionally, the Act sets forth the requirement to finalize rules within 1 year of proposal.

This rule designates critical habitat for the Taylor's checkerspot butterfly and streaked horned lark. On October 11, 2012, we published in the **Federal Register** (77 FR 61937) a proposed rule to list the Taylor's checkerspot butterfly and streaked horned lark and to designate critical habitat for these subspecies. The critical habitat areas we are designating in this final rule constitute our current best assessment of the areas that meet the definition of critical habitat for the Taylor's checkerspot butterfly and streaked horned lark. We are designating as critical habitat:

- Approximately 1,941 acres (ac) (786 hectares (ha)) in three units for the Taylor's checkerspot butterfly in Island, Clallam, and Thurston Counties in

Washington; and in Benton County in Oregon.

- Approximately 4,629 ac (1,873 ha) in two units for the streaked horned lark in Grays Harbor, Pierce, Pacific, and Wahkiakum Counties in Washington; and in Clatsop, Columbia, Marion, Polk, and Benton Counties in Oregon.

We have prepared an economic analysis of the designation of critical habitat. We have prepared an analysis of the probable economic impacts of the critical habitat designations and related factors. We announced the availability of the draft economic analysis (DEA) in the **Federal Register** on April 3, 2012 (78 FR 20074), allowing the public to provide comments on our analysis. We have incorporated the comments and have completed the final economic analysis (FEA) concurrently with this final determination.

Peer review and public comment. We sought comments from independent specialists to ensure that our designation is based on scientifically sound data and analyses. We obtained opinions from two knowledgeable individuals with scientific expertise to review our technical assumptions and analysis, and to determine whether or not we had used the best available information. These peer reviewers concurred with our methods and conclusions, and provided additional information, clarifications, and suggestions to improve this final rule. Information we received from peer review is incorporated in this final designation. We also considered all comments and information we received from the public during the comment period.

Previous Federal Actions

All previous Federal actions are described in the listing determination for the Taylor's checkerspot butterfly and streaked horned lark, which is published elsewhere in today's **Federal Register**.

Background

For information related to the listing of the species, see the final rule listing Taylor's checkerspot butterfly as an endangered species and the streaked horned lark as a threatened species, which is published elsewhere in today's **Federal Register**.

Summary of Comments and Recommendations

We requested written comments from the public on the proposed designation of critical habitat for the Taylor's checkerspot butterfly and streaked horned lark during two comment periods. The first comment period,

associated with the publication of the proposed rule (77 FR 61937; October 11, 2012), opened on October 11, 2012, and closed on December 10, 2012. We then made available the draft economic analysis (DEA) of the proposed critical habitat designation and reopened the comment period on the proposed rule for an additional 30 days from April 3, 2013, to May 3, 2013 (78 FR 20074; April 3, 2013). We also contacted appropriate Federal, State, tribal, county, and local agencies; scientific organizations; and other interested parties and invited them to comment on the proposed rule and the draft economic analysis. We held three public information workshops and a public hearing in April 2013, on the proposed rule to list the subspecies and the associated critical habitat designations.

During the two public comment periods, we received close to 100 comment letters and emails from individuals and organizations, as well as speaker testimony at the public hearing held on April 18, 2013. These comments addressed the proposed critical habitat or proposed listing (or both) for Taylor's checkerspot butterfly and streaked horned lark. We received comment letters from two peer reviewers for Taylor's checkerspot butterfly and three peer reviewers for streaked horned lark, and also received comment letters from three State agencies, one Native American tribe, and seven Federal agencies, including the Department of the Army and Department of the Air Force. We coordinated the proposed critical habitat with the federally recognized Shoalwater Bay Tribe on a government-to-government basis in accordance with the President's memorandum of April 29, 1994, "Government-to-Government Relations with Native American Tribal Governments" (59 FR 22951); Executive Order 13175; and the relevant provision of the Departmental Manual of the Department of the Interior (512 DM 2).

We contacted the only tribe potentially affected by the proposed designation (the Shoalwater Bay Tribe) and coordinated with them to discuss their ongoing or future management strategies for the Taylor's checkerspot butterfly and streaked horned lark.

All substantive information provided during comment periods has either been incorporated directly into this final designation or is addressed below. Comments we received are grouped into general issues specifically relating to the proposed critical habitat designation for the Taylor's checkerspot butterfly and streaked horned lark, and are addressed in the following summary and

incorporated into the final rule as appropriate.

Comments From Peer Reviewers

In accordance with our peer review policy published on July 1, 1994 (59 FR 34270), we solicited expert opinion from four knowledgeable individuals with scientific expertise that included familiarity with the Taylor's checkerspot butterfly and its habitats, biological needs, and threats, and from three knowledgeable individuals with scientific expertise that included familiarity with the streaked horned lark and its habitats, biological needs, and threats. We received responses from two of the peer reviewers for the Taylor's checkerspot butterfly. Both peer reviewers felt that the proposed rule was a thorough description of the status of Taylor's checkerspot butterfly. Both reviewers commented that they considered the proposed rule well researched and well written, and one commenter found the rule comprehensively represented the current scientific knowledge for the taxon. The two peer reviewers made no substantive comments relevant to the critical habitat designation for the Taylor's checkerspot butterfly.

We received responses from three of the peer reviewers for the streaked horned lark. Two of the peer reviewers felt that the proposed rule was a thorough description of the status of the streaked horned lark, and that our assessment of the primary constituent elements of critical habitat was correct. Two peer reviewers made several substantive comments relevant to the proposed critical habitat designation for the streaked horned lark, which we respond to below and also in the *Comments from the Public* section in cases where we received a similar comment from the public. Our requests for peer review are limited to a request for review of the merits of the scientific information in our documents; if peer reviewers have volunteered their personal opinions on matters not directly relevant to the science of our designation, we do not respond to those comments here.

Streaked Horned Lark

(1) *Comment:* One peer reviewer stated that the proposed designation of critical habitat was lacking formal agreements for lark conservation with land owners and managers of sites proposed for critical habitat, or at sites the peer reviewer believes should have been proposed as critical habitat.

Our Response: Our requests for peer review are limited to a request for review of the scientific information in

our documents. In this case the peer reviewer has offered his opinion on a non-scientific issue; however, management agreements are not a requirement for critical habitat designation. We will seek agreements with land owners and managers on lands designated as critical habitat and on other lands that are important to conservation of the streaked horned lark as we initiate a recovery program for the bird, but such agreements are not relevant to the designation of critical habitat unless we are considering whether to exclude an area from the designation pursuant to section 4(b)(2) of the Act. We did consider the additional sites the peer reviewer suggested should have been proposed as critical habitat; however, we concluded that the areas suggested did not meet our definition of critical habitat for the streaked horned lark.

(2) *Comment:* One peer reviewer commented on our lack of discussion of wintering habitat requirements for the streaked horned lark. The peer reviewer suggested that if wintering habitats are the same as habitats used for breeding, we should state that explicitly. The peer reviewer also commented on the fact that all of the proposed critical habitat sites were identified as either breeding habitats or breeding and wintering habitats, but there were no sites identified as solely wintering sites.

Our Response: Our current knowledge of habitat use by the streaked horned lark indicates that there are no sites that are used solely for wintering habitat. There are sites in Washington that have breeding populations in the spring and summer, but that are then abandoned by the streaked horned lark in the fall and winter. Other breeding sites on the Washington coast, in the Columbia River, and in the Willamette Valley are also used as wintering habitats. We have amended the description of critical habitat selection criteria to be clearer, as requested by the peer reviewer.

(3) *Comment:* Two peer reviewers and several commenters expressed concern about relying on airports for streaked horned lark recovery because although airports harbor populations of larks, the sites may act as "population sinks" due to the constant habitat disturbance, hazing, and threat of aircraft strikes.

Our Response: We share this concern. Streaked horned larks occur on airports because management to control hazardous wildlife and to maintain safe conditions for aviation has incidentally created suitable habitat for the subspecies; however, airports are not ideal locations for focusing recovery efforts for the streaked horned lark. First, the birds are at risk of mortality

from plane collisions, and have frequently been documented in bird strikes at airports (Cleary and Dolbeer 2005, p. 101). Secondly, Federal Aviation Administration (FAA) regulations require airports to take immediate action to alleviate wildlife hazards whenever they are detected (14 CFR 139.337). This requirement to maintain airfields free of wildlife hazards would severely limit the potential to increase streaked horned lark populations on airports. Streaked horned larks at airports are therefore subject to the combined threats of plane strikes and constant management to minimize bird populations; although airports currently support some relatively large populations of the subspecies, airports are clearly not ideal for conservation and recovery efforts aimed at further increasing abundance of the bird. Airports will continue to be important for the consistent habitats they provide for some populations of the streaked horned lark, and we will work with airports to maintain stable populations of the subspecies. Our main recovery efforts for the streaked horned lark, however, will need to focus on establishing new populations and managing for the subspecies at locations where population growth is an acceptable management goal for the site.

(4) *Comment:* One peer reviewer asked if industrial lands may be population sinks (*i.e.*, they provide attractive locations for breeding but do not contribute to population growth), given their frequent disturbance without regard to the effect on the streaked horned lark, and further inquired if we had considered the possible long-term effects of the activities exempted in the special rule. The peer reviewer suggested that perhaps we should not encourage maintenance of sink habitats.

Our Response: At this point, we do not know whether industrial lands function as sink habitats for breeding streaked horned larks; we will focus on gaining a better understanding of lark population dynamics in these habitats in the recovery program for the bird. We agree that this will be an important issue as we identify habitats that have the potential for contributing to the long-term conservation of the subspecies. We acknowledged this concern in response to another comment as well (see our response to Comment 3, above).

(5) *Comment:* One peer reviewer and one commenter stated the designation of Coffeepot Island as critical habitat for the streaked horned lark is inconsistent with the rationale for other habitats proposed for designation (*i.e.*, it is currently an unoccupied site), and

believed this provided it with special recognition not warranted relative to many other sites where the streaked horned lark has occurred in the past or could occur in the future, or even more importantly, many other sites not being proposed as critical habitat where the streaked horned lark currently does occur.

Our Response: We proposed critical habitat on a portion of Coffeepot Island based on indications that the U.S. Army Corps of Engineers (Corps) might add this area to their list of authorized dredge deposit sites (thus potentially creating suitable habitat for the streaked horned lark) and its proximity to other occupied deposit sites on the Columbia River. As such, we believed that even though it may be currently unoccupied, it could play an essential role in the conservation of the subspecies in the future. However, to date we have no indications that the Corps is actively pursuing inclusion of this island into their dredging and navigation channel maintenance program. Therefore, the site is unlikely to support streaked horned larks anytime within the foreseeable future. Based upon this information and input from peer reviewers, we have determined this unoccupied area is not essential to the conservation of the subspecies, and thus does not meet the definition of critical habitat. Coffeepot Island is not included in the final designation of critical habitat for the streaked horned lark.

(6) *Comment:* One peer reviewer and several commenters recommended that we designate critical habitat on sites that are not known to be currently occupied by streaked horned lark, but could be managed to provide suitable habitat. These sites include privately owned agricultural lands in the Willamette Valley, industrial and restoration sites in the Portland area, and islands and mainland sites along the lower Columbia River.

Our Response: Recovery of the streaked horned lark will likely require the restoration or creation of new habitat on some currently unoccupied sites. As described in the proposed rule, streaked horned larks require habitat with both a specific landscape context (flat and wide-open) and structure (low-stature vegetation with abundant bare ground). Given the appropriate landscape context, the structure is easy to create, which has fostered the hope of establishing new habitats for streaked horned larks at sites with conservation management as their main objective. There have recently been some attempts to create habitat for and to attract streaked horned larks to suitable but unoccupied habitats. An experimental

approach, initially implemented by Metro (the Portland, Oregon, area regional government body) and later joined by the Center for Natural Lands Management (CNLM), a nongovernmental organization, has attempted to create habitat and attract streaked horned larks to the St. Johns Landfill in North Portland, Oregon, and to two sites at Joint Base Lewis-McChord (JBLM) in Washington; the effort at St. Johns Landfill began in 2009, and at JBLM in 2012. These efforts have combined habitat creation and the use of conspecific attraction techniques (streaked horned lark decoys and audio playback of recorded calls). The concept holds great promise, but so far has not been successful in establishing a new population of streaked horned larks at any of the three experimental sites. As we embark on recovery efforts for the streaked horned lark, we intend to continue to refine this approach and to work to create new habitats in areas with the proper landscape context, but it is clear that we do not yet know which sites will succeed in attracting and supporting new populations of streaked horned larks. Designating critical habitat at this time on sites that do not yet support use by streaked horned larks would be premature, since we cannot be sure that streaked horned larks will colonize sites that have been recommended as potential critical habitat, and the designation of unoccupied areas requires a determination that such areas are essential to the conservation of the subspecies. We may revisit the issue of critical habitat designation when we have better information about how to attract streaked horned larks to currently unoccupied sites. In addition, we will look to the guidance provided by the recovery plan that will be developed for the streaked horned lark to make future determinations regarding those unoccupied areas, if any, that may be essential for the conservation of the subspecies.

Comments From States

Section 4(i) of the Act states, “the Secretary shall submit to the State agency a written justification for his failure to adopt regulations consistent with the agency’s comments or petition.” Comments we received from State agencies regarding the proposal to designate critical habitat for the Taylor’s checkerspot butterfly and streaked horned lark are addressed below. We received comments from the Washington Department of Fish and Wildlife (WDFW) and Washington Department of Natural Resources (WDNR) related to biological

information, threats, critical habitat exclusions, the inadequacy of regulatory mechanisms, and recommendations for the management of habitat. We did not receive any comments regarding critical habitat for the Taylor's checkerspot butterfly or streaked horned lark from agencies in the State of Oregon.

Both agencies (WDFW and WDNR) provided a number of recommended technical corrections or edits to the proposed critical habitat designation for the Taylor's checkerspot butterfly and streaked horned lark. We have evaluated and incorporated this information into this final rule where appropriate to clarify the final critical habitat designation. In instances where the Service may have disagreed with an interpretation of the technical information that was provided, we have responded in separate communication with the agency.

(7) *Comment:* WDFW noted that the critical habitat designation for Taylor's checkerspot butterfly in the Bald Hill area did not appear to include some historical Taylor's checkerspot butterfly locations with suitable habitat. WDFW believes both Fossil Rock and Bald Hill 1176 Spur A Bald should have been included in proposed critical habitat.

Our Response: We considered the WDFW's suggestion, but concluded the contiguous area proposed for designation as critical habitat in this area for Taylor's checkerspot butterfly would provide better management opportunities for the subspecies than would designating multiple, isolated patches. The focus of conservation work in the Bald Hill area has been in the vicinity of the State's Natural Area Preserve, and not on disjunct patches that are likely inaccessible to Taylor's checkerspot butterflies unless they were introduced (translocated) specifically into these isolated habitat patches.

(8) *Comment:* WDFW encouraged the Service to not only ensure that the conservation measures provided for in the integrated natural resources management plan (INRMP) for JBLM are sufficient to preclude the need to designate critical habitat for the Taylor's checkerspot butterfly and streaked horned lark, but also that implementation of the plan can be assured. WDFW also requested we consider excluding WDFW properties addressed by their draft wildlife area habitat conservation plan (HCP).

Our Response: Section 4(a)(3)(B)(i) of the Act specifically states that the Secretary shall not designate critical habitat on Department of Defense lands if the area is subject to an INRMP that provides a benefit to the species for which critical habitat is proposed. As

discussed under the section Exemptions in this final rule, the Secretary has determined, in writing as required by the Act, that JBLM's INRMP provides such a benefit for Taylor's checkerspot butterfly and streaked horned lark under the endangered species management plans (ESMPs) developed specifically for these subspecies under their INRMP; therefore JBLM lands are not included in this final designation of critical habitat. Our experience with JBLM is that, when they commit to conservation actions, they have the funding required to ensure that implementation of the action will occur.

When deciding whether to exclude an area from designation of critical habitat under section 4(b)(2) of the Act, the Service needs to assess not only the conservation measures outlined within management plans regardless of agency or organization, but also the level of assurance an agency can provide of actually funding and implementing the conservation measures identified within the plan. The same process would hold true when evaluating the WDFW wildlife area HCP. As described in the Exclusions section of this document, we have excluded the Wildlife Areas owned and managed by WDFW because of the management plans in place for these State Wildlife Areas (Scatter Creek and West Rocky Prairie Wildlife Areas). The exclusion of these Wildlife Areas was not based on WDFW's draft HCP because we have not received a complete draft HCP document to review, and furthermore, the HCP in question is not finalized. We would not be able to exclude the areas in question based on assurances for funding and implementation that may be provided through a future HCP process.

(9) *Comment:* WDFW was concerned that, with the new helicopter brigade stationed at JBLM, the airstrip on TA 14 on 13th Division Prairie is now used almost daily during streaked horned lark breeding season, with many low-elevation flights and "touch-and-go" exercises occurring in the highest density occupied habitat. This is also a concern for adult Taylor's checkerspot butterflies at this site. They were also concerned with impacts associated with off-road training conducted in the 13th Division Prairie.

Our Response: Activities conducted on JBLM, including air operations at 13th Division Prairie, the military airfields, and other areas, will be addressed in section 7 consultations after the subspecies are listed. The Service is currently coordinating with the Environmental and Natural Resource Division and staff from Range Control on training activities that

impact the Taylor's checkerspot butterfly and streaked horned lark, and we are in negotiations on ways to further reduce impacts to these two subspecies specifically at this location. JBLM is aware that they will need to implement timing restrictions and avoid conducting training activities in certain locations or during the most sensitive time of year to minimize or avoid take of the subspecies after they are listed. This will include the areas adjacent to the Pacemaker runway and other portions of the 13th Division Prairie where the Taylor's checkerspot butterfly and streaked horned lark occur.

(10) *Comment:* WDNR was concerned that the safe use of pesticides to control nonnative, invasive insects, such as gypsy moth, may be impacted by the listing and designation of critical habitat for Taylor's checkerspot butterfly.

Our Response: We do not see pesticide use in general to pose an adverse impact to Taylor's checkerspot butterflies unless individuals are directly exposed to the pesticides. The Service does not anticipate the need for pesticide spraying on habitat occupied by Taylor's checkerspot butterflies, as the subspecies does not occupy forested areas where such pesticides are generally applied. However, if pesticide were to be sprayed in areas where pesticide drift would expose Taylor's checkerspot butterflies to the pesticide(s), then we would be concerned with their application in these situations. The Service acknowledges the use of pesticides as harmful to Taylor's checkerspot butterfly at all life stages. We specifically discourage the use of insecticides such as *Bacillus thuringiensis* var. *kurstaki* (BtK) in forested areas adjacent to Taylor's checkerspot butterfly habitat. This insecticide, which is used for harmful defoliators like gypsy moth and spruce budworm, has been implicated in the loss of three populations of Taylor's checkerspot butterfly in Pierce County, Washington, during the early 1990s, when it was applied adjacent to Taylor's checkerspot butterfly habitat.

Comments From Federal Agencies

Department of Energy, Bonneville Power Administration

(11) *Comment:* The Service should remove those portions of the Bonneville Power Administration's (BPA) rights-of-way that are composed of access roads and transmission towers and their related infrastructure from the critical habitat proposal, as the roads and structures do not exhibit the biological

features required for recovery of Taylor's checkerspot butterfly.

Our Response: We agree that some portions of the BPA rights-of-way in areas formerly occupied by Taylor's checkerspot butterfly do not contain biological features that are important for the subspecies; therefore we have made minor changes to the critical habitat boundaries to remove those areas that do not meet our definition of critical habitat. Furthermore, as explicitly described in this rule, critical habitat does not include manmade structures (such as buildings, aqueducts, runways, roads, and other paved areas) and the land on which they are located existing within the legal boundaries on the effective date of this rule (see **DATES**). Therefore, access roads and transmission towers and their related infrastructure are not considered critical habitat. Powerline rights-of-way are excellent areas to manage and support butterflies as the structure and composition of vegetation for the Taylor's checkerspot butterfly is compatible with right-of-way management.

(12) *Comment:* BPA believes the geographic footprints of access roads and transmission structures do not contain the biological features essential for the conservation of Taylor's checkerspot butterfly, since they differ in character from the open meadow space more generally located within the rights-of-way that provide high-quality habitat for the butterfly. Therefore, they should not be designated as critical habitat.

Our Response: The critical habitat unit referred to by BPA (Unit 4–D) is currently occupied by Taylor's checkerspot butterfly and provides several of the physical or biological features essential to the conservation of the species. Open areas that provide flight corridors between patches of suitable habitat are important for Taylor's checkerspot butterflies. In addition to the relative quality of habitat, there needs to be an avenue for movement, including movement between areas that may not provide high-quality habitat features. Access roads and other areas cleared of woody vegetation can provide important flight corridors used by Taylor's checkerspot butterflies, although roads and other structures are not consistent with critical habitat and are specifically not included in critical habitat by text, as described in our response to Comment 11, above.

Department of Transportation, Federal Aviation Administration

(13) *Comment:* The Federal Aviation Administration (FAA) does not believe habitat on airports should be considered critical for the recovery of either the Taylor's checkerspot butterfly or streaked horned lark given that airport property encompasses only 2,948 ac (1,193 ha) out of 21,393 ac (8,657 ha) proposed for critical habitat designation, or approximately 14 percent of the total proposed acreage.

Our Response: The Act defines critical habitat as those specific areas within the geographical area occupied by the species, at the time it is listed, on which are found those physical or biological features essential to the conservation of the species, and which may require special management considerations or protection. The test for whether an area is essential to the conservation of the species is applied to areas that are not occupied by the species at the time of listing. All airport lands proposed for critical habitat designation for the streaked horned lark are currently occupied by the subspecies and provide the essential physical or biological features, which may require special management considerations or protection. Therefore, all airport lands proposed meet the Act's definition of critical habitat for the streaked horned lark. However, our analysis under section 4(b)(2) of the Act indicates that the benefits of including airport lands in critical habitat are outweighed by the benefits of excluding these areas. Therefore, all airport lands are excluded from this final designation of critical habitat for the streaked horned lark. Please see additional discussion under Exclusions.

We did not propose any critical habitat on airport lands for the Taylor's checkerspot butterfly.

Department of the Air Force

(14) *Comment:* The Department of the Air Force believes the designation of streaked horned lark critical habitat on military airfields is counter to Air Force instructions and could increase the risk to aircrews, aircraft, and the streaked horned lark; therefore, they requested that military airfields be excluded from critical habitat designation for the lark.

Our Response: The military airfields proposed for critical habitat designation for the streaked horned lark are currently occupied by the species. Ongoing airfield maintenance activities that are conducted at both the military and non-federal airports have created suitable habitat for the streaked horned lark that provides the essential physical

or biological features for the subspecies. It is our understanding that these maintenance activities would take place regardless of the presence of the streaked horned lark. We are aware that FAA regulations required for public safety are in direct conflict with increasing bird populations on airports, and as discussed in our 4(b)(2) exclusion analysis for civilian airports, we do not intend to focus on airfields as part of the recovery efforts for the streaked horned lark (see Exclusions). Section 4(a)(3)(B)(i) of the Act specifically states that the Secretary shall not designate critical habitat on Department of Defense lands if the area is subject to an INRMP that provides a benefit to the species for which critical habitat is proposed for designation. As discussed in the Exemptions section below, the Secretary has determined that the endangered species management plan for the streaked horned lark developed under JBLM's INRMP provides adequate protection for the subspecies on the military airfields. Therefore, the military airfields are not included in the final critical habitat designation.

(15) *Comment:* The Department of the Air Force and several other commenters were concerned that critical habitat designations at airports would restrict essential activities, including military training and hazardous wildlife control.

Our Response: As described above in our responses to Comments 13 and 14, we have excluded airports from the final critical habitat designation for the streaked horned lark under section 4(b)(2) of the Act and exempted all DOD lands at Joint Base Lewis-McChord (JBLM) under section 4(a)(3) of the Act, so the potential effects of critical habitat designation are moot. However, any activity by a Federal agency that may affect the streaked horned lark or any other listed species at an airport would be subject to consultation under section 7 of the Act. Under section 7(a)(2) of the Act, it is the duty of all Federal agencies to ensure that any actions they fund, authorize, or carry out are not likely to jeopardize the continued existence of a listed species. Review under section 7 may result in some changes to an agency's proposed action, consistent with their mandates, to advance the conservation of listed species.

Department of the Army, Joint Base Lewis-McChord

(16) *Comment:* The Department of the Army believes the northern portion of the Range 72–79 unit for Taylor's checkerspot butterfly on JBLM should be excluded due to the fact that this area is of lower quality than the remainder

of the proposed unit and is used extensively for off-road vehicle maneuvers.

Our Response: As described in the Exemptions section of this document, all JBLM lands have been removed from the final designation of critical habitat for both species under section 4(a)(3) of the Act.

(17) *Comment:* The Range 50 subunit extends beyond the current and previous areas occupied by Taylor's checkerspot butterfly.

Our Response: Range 50 is a site where introduced (translocated) Taylor's checkerspot butterflies have been placed since 2009. The translocation has taken hold, the population is increasing, and individual butterflies are dispersing to new food plants east and west of Range 50; therefore we consider this area to be currently occupied by the subspecies. Where the butterfly becomes established, it will be critical to provide areas of suitable habitat for dispersing individuals, and to allow for the establishment of meta-population structure that takes place on areas sufficiently large to allow for some local populations to "blink on" and "blink off" over time. This shift is typical and follows changes to habitat as the vegetation suitability (structure and composition) shifts between periods of restoration, or in the case of JBLM, inadvertent fires that periodically disturb the habitat, returning it to the early seral condition that provides suitable habitat for the Taylor's checkerspot butterfly.

(18) *Comment:* The Department of the Army requests that the Service exempt those portions of the proposed critical habitat designations for the Taylor's checkerspot butterfly and streaked horned lark on JBLM.

Our Response: Under section 4(a)(3) of the Act, we are required to not designate any lands or other geographical areas owned or controlled by the Department of Defense, or designated for its use, that are subject to a current INRMP, if the Secretary determines that such plan provides a benefit to the species for which critical habitat is proposed for designation. We have reviewed and approved the JBLM's endangered species management plans (ESMP) under their INRMP for the Taylor's checkerspot butterfly and streaked horned lark, and accordingly have exempted JBLM lands from our final critical habitat designations. Please see Exemptions for more information.

Natural Resources Conservation Service

(19) *Comment:* The Natural Resources Conservation Service (NRCS) believes

that continuation of the current level of grazing management by the Colvin Ranch has resulted in healthy native prairie populations and will continue to provide benefits to the native prairie populations, which exceed benefits provided by a critical habitat designation. Therefore, NRCS supports the request by the Colvin Ranch to exclude their property from critical habitat under section 4(b)(2) of the Act.

Our Response: We considered the potential exclusion of Colvin Ranch from the final designation of critical habitat. Our evaluation under section 4(b)(2) of the Act led us to the conclusion that this private land should be excluded from the final designation of critical habitat, as the benefits of exclusion outweigh the benefits of inclusion in critical habitat. Please see Exclusions for more information.

(20) *Comment:* NRCS and another commenter recommended that we withdraw the proposed designation of critical habitat for the streaked horned lark at M-DAC Farms in Oregon because the site no longer provides the primary constituent elements (PCEs) identified for critical habitat. M-DAC Farms is a privately owned property with a Wetlands Reserve Program easement, which is held by NRCS. NRCS expressed concern that M-DAC's designation as critical habitat could affect the agency's ability to accomplish the wetland restoration goals for which the conservation easement was originally purchased on the site.

Our Response: Prior to NRCS's purchase of a conservation easement at M-DAC, the site was a perennial rye grass farm. The goals for the site include restoration of 100 (40 ha) acres of seasonal wetland, over 100 (40 ha) acres of bottomland hardwood forest, and over 300 acres (120 ha) of wet prairie habitat. Though streaked horned larks used the site in large numbers when the ground was originally cleared to prepare for habitat restoration, we agree with the commenter that the vegetation at the site has since matured and no longer provides suitable habitat for the streaked horned lark, with the exception of limited areas along a road and perhaps in the seasonal mudflats adjacent to the wetlands. The site may continue to provide habitat for a few breeding pairs of streaked horned larks; however, the long-term goals for the site do not include increasing the area of suitable habitat for streaked horned larks. The site will not be a focus of active recovery for the streaked horned lark, and very little of the 601 acres (240 ha) will provide suitable habitat for the subspecies.

We have removed M-DAC Farms from the final designation of critical habitat based on information we received during the public comment period indicating that it does not meet the definition of critical habitat for the streaked horned lark. The site does not provide the requisite physical or biological features, and therefore does not meet our criteria for designation.

U.S. Forest Service, Olympic National Forest

(21) *Comment:* The U.S. Forest Service believes that areas within Olympic National Forest proposed for critical habitat designation should be excluded under section 4(b)(2) of the Act due to ongoing management for Taylor's checkerspot butterfly habitat.

Our Response: We have worked closely with the U.S. Forest Service, and Taylor's checkerspot butterfly has benefitted immensely from the conservation actions that have been implemented on the Olympic National Forest. We inadvertently indicated that we may exclude Olympic National Forest lands from the final designation of critical habitat. However, such an exclusion would run counter to the Congressional intent of the Act (stated in sections 2(c)(1) and 7(a)(1)) that Federal agencies have obligations to conserve endangered and threatened species and to carry out programs for the conservation of endangered and threatened species. In consideration of the explicit congressional direction that Federal agencies exercise their authorities to conserve listed species, we expect Federal agencies to contribute to conservation through the designation of critical habitat. Therefore, we have not excluded any Federal lands from critical habitat. Please see the section *Federal Lands* for more information.

Comments From Native American Tribes

(22) *Comment:* The Shoalwater Bay Tribe requested that habitat on their reservation be excluded from the final critical habitat designation for the streaked horned lark. The Tribe is currently working with the Service and the Corps to develop an ecological restoration plan for the Tribal tidelands. This restoration plan will focus on maintaining and protecting habitat for listed species (including the streaked horned lark and western snowy plover (*Charadrius nivosus nivosus*)) and coastal resources important to the Tribe.

Our Response: Based on our ongoing partnership with the Tribe and assurance that habitat will be protected at this site, we have excluded the Shoalwater Bay Indian Reservation from

the final critical habitat designation based on our discretionary 4(b)(2) exclusion analysis. Based on our evaluation, we found that the benefits of exclusion outweigh those of inclusion. See the Exclusions section of this document for details.

Comments From the Public

Several commenters provided minor technical corrections or edits to the proposed critical habitat designation for Taylor's checkerspot butterfly and streaked horned lark. We have evaluated and incorporated this information into this final rule where appropriate to clarify the final critical habitat designation. In instances where the Service may have disagreed with an interpretation of the technical information that was provided, we have responded under separate comments.

(23) *Comment:* One property owner in Subunit 1–D disputed the Service's authority to designate critical habitat on their lands for Taylor's checkerspot butterfly, arguing that the PCEs must be found on an area as a prerequisite to designation, and that the Act leaves no room for designation of land that may in the future contain the physical or biological features. The owner acknowledges that the property is currently unoccupied by the subspecies, but disagrees with the Service's conclusion that the available evidence indicates it was likely historically occupied by Taylor's checkerspot butterfly. The owner further claims that their property does not contain any of the specific physical or biological features that the Service has identified for Taylor's checkerspot butterfly at any stage of its development.

Our Response: The Act provides two definitions for critical habitat: one applies to areas occupied by the species at the time of listing, the other applies to areas not occupied by the species at the time of listing. In the first case, the Act specifies that critical habitat means, "the specific areas within the geographical area occupied by the species, at the time it is listed in accordance with the provisions of section 4 of this Act, on which are found those physical or biological features (I) essential to the conservation of the species and (II) which may require special management considerations or protection." This requirement that the physical or biological features be found does not apply in this particular situation, because the property in question is not presently occupied by Taylor's checkerspot butterfly. The lands in question were initially identified in the proposed rule as meeting our criteria for

critical habitat under the second part of the definition of critical habitat in the Act, which adds that critical habitat includes, "specific areas outside the geographical area occupied by the species at the time it is listed in accordance with the provisions of section 4 of this Act, upon a determination by the Secretary [of the Interior] that such areas are essential for the conservation of the species." We therefore re-evaluated the unoccupied private property in question. We evaluated its context in relation to other occupied areas supporting the Taylor's checkerspot butterfly, and other protected areas where habitat has been improved sufficiently to support translocated Taylor's checkerspot butterflies. Based upon our analysis, we have determined the unoccupied property in question is not essential to the conservation of Taylor's checkerspot butterfly; therefore it is not included in the final designation.

(24) *Comment:* One landowner stated that the designation of their property as critical habitat for Taylor's checkerspot butterfly is improper because the record does not contain evidence that shows specifically where the PCEs are located. To the contrary, they believe there is evidence that the property contains physical features that the proposed rule identifies as rendering habitat unusable for the butterfly. The commenter states that any designation of critical habitat by the Service must be limited to those areas that actually contain the physical or biological features essential to the conservation of the Taylor's checkerspot butterfly.

Our Response: The property in question was proposed as unoccupied but essential critical habitat for the Taylor's checkerspot butterfly. As noted in various responses above, the standards for designation of critical habitat differ depending on whether the area in question is occupied at the time of listing or not. If the area is occupied at the time of listing, the PCEs for the species must be found on that area (however, the Service is not required to detail all the specific locations where each PCE may exist on an area proposed for designation). If the area is not occupied at the time of listing, it may be designated as critical habitat upon a determination by the Secretary that such area is essential for the conservation of the species. The reference to the presence of the essential physical or biological features does not appear in the definition of unoccupied areas, thus the commenter is incorrect in stating that the designation of critical habitat must be limited to those areas that contain such features in cases such as

this where the area in question is not occupied by the species at the time of listing. In this case, we had proposed the lands in question as critical habitat believing they were essential to the conservation of the subspecies, based on similar habitats known to support Taylor's checkerspot butterfly found at other locations and from evidence of these habitat conditions being present on similar adjacent properties; the Service is particularly limited in specifying locations of the necessary habitat features on private property, where access is often not freely granted. Upon further examination, however, and in response to the information provided by the commenter, we determined that this property (located in subunit 1–D in the proposed rule, subunit 1–A Rocky Prairie in this document) is not essential to the conservation of the subspecies, and it is not included in the final designation.

(25) *Comment:* One commenter suggested we remove the gravel pit in TA 7S, subunit 1–A, currently in use on JBLM, from the critical habitat delineated for Taylor's checkerspot butterfly. They state the gravel pit does not currently provide suitable habitat and would take enormous effort to restore to quality habitat, while the remaining extent of TA 7S prairie is relatively intact and could more easily be restored to create suitable habitat.

Our Response: It is our understanding that, in the past, Taylor's checkerspot butterfly was observed utilizing the puddles in the gravel pit. We understand the gravel pit is marginal habitat at best, but as a formerly occupied site containing some of the PCEs for the subspecies (*Plantago* and topographic diversity) and its location adjacent to TA 7S, we considered that the area could potentially be restored to support Taylor's checkerspot butterfly (although critical habitat does not specifically require restoration).

However, since the area in question is on JBLM, it has been exempted from the final designation. Under section 4(a)(3) of the Act, we are required to not designate any lands or other geographical areas owned or controlled by the Department of Defense, or designated for its use, that are subject to a current INRMP, if the Secretary determines that such plan provides a benefit to the species for which critical habitat is proposed for designation. We have reviewed and approved the JBLM ESMP for Taylor's checkerspot butterfly under the INRMP and accordingly have exempted any proposed critical habitat areas on JBLM from our final critical habitat designations under section 4(3)(a) of the Act. Please see the

Exemptions section of this document for more information.

(26) *Comment:* One commenter asked the Service to consider excluding subunit 1–J Bald Hills, since they believe the Taylor's checkerspot butterfly is likely extirpated at the site and the landowner has committed to implementing a wildlife management plan at that site.

Our Response: We do not disagree that the Taylor's checkerspot butterfly may have been extirpated from this site. Subunit 1–J Bald Hill was identified in the proposed rule as meeting our criteria for critical habitat under the second part of the definition of critical habitat in the Act, which states that critical habitat includes, "specific areas outside the geographical area occupied by the species at the time it is listed in accordance with the provisions of section 4 of this Act, upon a determination by the Secretary [of the Interior] that such areas are essential for the conservation of the species." We were unable to consider these lands for exclusion under section 4(b)(2) of the Act because the Service had not received a management plan for this property; therefore, we were unable to assess the value of the conservation planning efforts being proposed or implemented on this private property. Without a management plan for evaluation, we have no potential basis for exclusion; therefore this property is included in the final designation of critical habitat.

(27) *Comment:* One commenter recommended the Army Aviation Support Facility #1 (AASF1) in Salem be excluded from critical habitat because of the national security importance of the installation.

Our Response: The AASF1, while it contributes to maintaining troop readiness for the National Guard, is not a Federal entity. This facility is a private/State holding with a military lease. The Secretary weighed the benefits of including versus excluding non-Federal airports from critical habitat for the streaked horned lark, and concluded that the benefits of exclusion outweighed the benefits of inclusion; thus all non-Federal airport lands are excluded from the final designation of critical habitat (see the Exclusions section of this document). AASF1, being a non-Federal entity, is already excluded from critical habitat based on this analysis; therefore we did not consider the potential national security implications of the designation.

(28) *Comment:* Several commenters suggested that the designation of critical habitat may act as a regulatory disincentive, and may discourage

private landowners and others from cooperative, voluntary conservation efforts. Some commenters suggested that the Service pursue alternative forms of conservation, such as safe harbor agreements or habitat conservation plans. WDNR and WDFW encouraged the Service to fully consider the advantages and disadvantages of designating critical habitat where cooperative, nonregulatory approaches are in place to conserve the species and its habitat.

Our Response: Section 4(a)(3)(A) of the Act requires us to designate critical habitat to the maximum extent prudent and determinable. The Act permits us to exclude areas that meet the definition of critical habitat only where we determine that the benefits of exclusion outweigh the benefits of designation. The regulatory consequence of critical habitat designation is the requirement that Federal agencies consult on actions that they may fund, authorize, or carry out to ensure that such actions do not result in the destruction or adverse modification of critical habitat. We recognize that in many cases there may not be a Federal nexus that invokes the protections afforded to designated critical habitat on non-Federal lands, and that other instruments such as safe harbor agreements or habitat conservation plans have the potential to provide conservation measures that effect positive results for the species and its habitat. The conservation and recovery of endangered and threatened species, and the ecosystems upon which they depend, is the ultimate objective of the Act, and the Service recognizes the vital importance of voluntary, nonregulatory conservation measures in achieving that objective. To that end, we fully support and encourage the development of voluntary conservation agreements such as safe harbor agreements or habitat conservation plans with non-Federal landowners. Furthermore, where cooperative agreements are in place for the conservation of the species and its habitat, the Secretary gives full consideration to the relative benefits of excluding those lands from the final critical habitat designation, provided such exclusion would not result in the extinction of the species, in accordance with section 4(b)(2) of the Act.

(29) *Comment:* One commenter suggested that the Service pursue conservation programs to provide economic incentives to private landowners to create or maintain suitable habitat for the streaked horned lark on agricultural lands, especially grass seed farms.

Our Response: We appreciate the suggestion, and we will consider this and other creative ideas for achieving the conservation of the subspecies as we develop the recovery plan for the streaked horned lark. Such conservation measures are outside of the scope of the present rulemaking, however, which is restricted to the identification of those areas that meet the definition of critical habitat for the streaked horned lark.

(30) *Comment:* One commenter stated the proposal fails to address private lands, which are likely to be key habitat for the persistence of the streaked horned lark. Positive incentives need to be proposed that will lead to recovery of the streaked horned lark.

Our Response: In our proposed rule, we recognize the importance that private agricultural lands will play in the conservation and recovery of streaked horned lark, particularly in the Willamette Valley of Oregon (April 3, 2013; 78 FR 20074). However, we additionally explain that we cannot designate critical habitat in the agricultural fields in the Willamette Valley, most of which are privately owned, because we are unable to determine which areas within the large agricultural matrix in the valley will meet the definition of critical habitat at any time. Critical habitat, once designated, is static on the landscape until such time as it may be revised through an additional rulemaking process. Agricultural habitats on private lands can provide appropriate habitat conditions for streaked horned lark, but these conditions (large, open landscape context; low-stature vegetation; bare ground) occur unpredictably and vary in location from year to year. Because of the unpredictable and ephemeral nature of streaked horned lark habitat on private agricultural lands, we have no basis for concluding that any specific areas are essential for conservation, because we have no way of knowing where or how long the appropriate conditions will persist. Therefore, we have not designated critical habitat for the streaked horned lark on private lands in the Willamette Valley.

As noted earlier, the consideration of recovery instruments such as incentive programs is outside of the scope of the present rulemaking, which is limited to the identification of those areas that meet the definition of critical habitat for the streaked horned lark.

(31) *Comment:* One commenter stated that the Service failed to designate critical habitat on private agricultural lands in the Willamette Valley, despite the fact that a majority of breeding and wintering streaked horned larks rely on those areas. The commenter disagreed

with the Service's position that it was unable to determine which areas within the large agricultural matrix in the valley will meet the definition of critical habitat at any time. The commenter pointed to the Service's designation of large areas of critical habitat for the northern spotted owl and marbled murrelet across millions of acres of forest even though only a portion of the habitat is suitable for either bird at any time. The commenter recommended that the Service take a similar approach for streaked horned larks on agricultural lands in the Willamette Valley, recognizing that only a portion of those lands will be suitable at any given time.

Our Response: The commenter's comparison to the critical habitat designations for the northern spotted owl (*Strix occidentalis caurina*) and marbled murrelet (*Brachyramphus marmoratus*) is not an apt one. The northern spotted owl and marbled murrelet rely primarily on Federal lands for their conservation, and their old-growth habitat takes decades to develop on those lands. In contrast, the habitat of the streaked horned lark can develop and disappear on farm lands in the space of a few weeks, and its appearance typically depends on human intervention, not natural processes. Designating large swaths of the Willamette Valley as critical habitat would not provide any useful information regarding the presence of the streaked horned lark or its habitat to landowners. We maintain that our concern about the ability to identify critical habitat for the streaked horned lark on private farm lands is valid, and the situation is not analogous to the critical habitat designations of other listed species found in old-growth forests.

(32) **Comment:** One commenter stated the primary constituent elements (PCEs) and characteristics for habitat suitability for the streaked horned lark are fairly specific, yet noted habitat will change over time, and perhaps be suitable for only a limited period of time due to vegetation growth. Therefore, they asked if critical habitat designations will be time-limited or adjusted periodically.

Our Response: Critical habitat is a designation that does not vary seasonally or over time, and is only subject to change through a rulemaking process to revise the designation. This relatively static nature of critical habitat is the very reason that we find we cannot identify critical habitat on the unpredictable and ephemeral habitats used by streaked horned larks in the agricultural areas of Oregon.

(33) **Comment:** One commenter recommended that documented

occupancy in any season during any life stage be the basis for determining critical habitat for the streaked horned lark. They believe the Service's definition of occupancy as occurrence only during the breeding season is too narrow. Occupancy should include documented presence of the subspecies outside of the breeding season as well. Uses of non-breeding areas are important to the subspecies' survival, such as areas used for foraging and overwintering, as these sites may also become breeding sites in the future.

Our Response: We do not know of any areas that are used only for wintering (most sites that are used during the winter are also used during the breeding season); however, we have modified our definition of occupancy to include usage by streaked horned larks during any season.

(34) **Comment:** One commenter stated the economic and social factors driving conversion of Willamette Valley farmland to vineyards are likely to continue in the foreseeable future, and may accelerate as large California wineries are reportedly investing in Willamette Valley farmlands as a hedge against global climate change. As a result, the likelihood of a changing agricultural landscape should be recognized in the listing and critical habitat designation for the streaked horned lark.

Our Response: The Service does not consider the acquisition of lands by the viticulture industry to be a significant factor in the reduction of breeding and nesting habitat for the streaked horned lark. We contacted Dr. William Boggess at Oregon State University's Oregon Wine Research Institute, and he described the ideal lands for viticulture as being 300 to 800 feet (ft) (91 to 244 meters (m)) in elevation, on a slope with a southern or western aspect. These optimal viticulture soils are shallow and nutrient poor, above the flood plain or on eroded rocky soils. These ideal conditions for grapes are not similar in characteristic to the primary constituent elements for streaked horned lark habitat. As such, we do not consider viticulture a factor affecting habitat loss for the streaked horned lark.

(35) **Comment:** One commenter stated that it is important to designate critical habitat on Willamette Valley agricultural lands to "ensure that habitat is not converted to uses that will never be suitable for streaked horned lark, such as row crops or urban development, but rather are maintained as agriculture that at least part of the time supports streaked horned lark."

Our Response: Critical habitat designation only has a regulatory effect

in instances where there is a Federal action (i.e., a Federal agency funds, authorizes, or carries out an action) that may affect designated critical habitat; this action is then reviewed through interagency consultation under section 7 of the Act between the Federal action agency and the Service. Designation of critical habitat on private lands will have no effect on a private landowner's ability to convert to another crop or to sell out completely if there is no Federal action involved. Contrary to the commenter's perception, critical habitat designation does not create a wildlife preserve or require any sort of response or management from a private landowner.

(36) **Comment:** We received multiple conflicting comments suggesting that connectivity both is and is not a necessary consideration when designating critical habitat for the streaked horned lark.

Our Response: We rely on the expertise of our Service staff biologists, as well as the peer review of our proposed rule by species experts who either support or refute our assertions. In this instance, both our staff biologists and our peer reviewers support the need for connectivity of critical habitat units to ensure the potential for genetic exchange and colonization by streaked horned larks.

(37) **Comment:** Several commenters expressed great concern about the implications to public safety from designating critical habitat for the streaked horned lark at airports, and requested that we exclude airports from the critical habitat designation due to safety concerns.

Our Response: Although we do not see a direct connection between the designation of critical habitat, which results in the requirement that Federal action agencies consult with us on activities that involve Federal funding, authorization, or implementation, and public safety, all airport lands have been excluded from our designation under section 4(b)(2) of the Act for other reasons. Please see additional discussion under Exclusions.

(38) **Comment:** Several commenters stated that critical habitat should not be designated for the streaked horned lark at airports, because airports are not suitable as sites for recovery of the subspecies.

Our Response: We concur with these commenters that airports should not be focal points for streaked horned lark recovery. In section 3 of the Act, "critical habitat" is defined, in part, as the specific areas within the geographical area occupied by the species at the time it is listed on which

are found those physical and biological features essential to the conservation of the species. "Conservation" is further defined in the Act as the use of all methods and procedures which are necessary to bring any endangered or threatened species to the point at which the measures provided pursuant to the Act are no longer necessary. These definitions clearly demonstrate that the purpose of critical habitat designation is to identify locations for recovery efforts for listed species. Airport managers have expressed great concern about the implied recovery purpose of critical habitat units; management to encourage increasing populations of birds at airports is untenable to airport managers. Airports unquestionably provide important habitat for streaked horned larks, and some of these sites have demonstrated the ability to sustain small, persistent populations of streaked horned larks; indeed, without airports there would be very few sites consistently managed to maintain the habitat conditions used by the streaked horned lark within the needed landscape context. Therefore, although airports clearly provide a benefit to the subspecies, and will likely continue to provide important habitat for small populations, recovery will require restoration and management of new sites that can sustain increasing populations of streaked horned larks in the long term, in more natural locations appropriate for conservation and that do not pose a heightened risk of mortality to the streaked horned lark from airstrikes. We have excluded civilian (non-Federal) airports from critical habitat designation for the reasons outlined in the Exclusions section of this document.

(39) *Comment:* One commenter expressed concern that our proposed designation of critical habitat for the streaked horned lark relied almost exclusively on public lands. This commenter believes that private lands in the Willamette Valley will hold the key to the streaked horned lark's survival.

Our Response: As we stated above, we do not yet know which unoccupied sites will be essential for the recovery of the streaked horned lark, and the unpredictable and highly variable occurrence of PCEs for streaked horned larks on private lands in the Willamette Valley precludes our ability to designate critical habitat in that area. The public lands included in the critical habitat designation (State Parks and the Willapa National Wildlife Refuge on the Washington coast; three units of the Willamette Valley National Wildlife Refuge Complex in Oregon (WVNWRC))

have a clear conservation mandate and are already working to conserve streaked horned lark populations on those sites. Many other sites will likely be needed to achieve recovery, but again, we do not yet know where those sites will be. As we begin to develop a recovery plan, and identify goals for population numbers and distribution of the streaked horned lark, we will identify areas to focus on for recovery. These areas will undoubtedly include many areas on private agricultural lands, for which we will seek partnerships with willing landowners to manage for streaked horned lark conservation. Finally, we note that the regulatory effect of critical habitat is limited to actions with a Federal nexus—activities that are funded, authorized, or carried out by a Federal agency. The conservation value of critical habitat is thus often the greatest on Federal lands, which always have a Federal nexus. The designation of critical habitat has no regulatory effect on private lands lacking a Federal connection. Critical habitat designation itself does not prevent development or alteration of the land, create a wildlife preserve, or require any sort of response or management from a private landowner.

(40) *Comment:* One commenter stated that Ankeny National Wildlife Refuge in the Willamette Valley is not an appropriate site for designation of critical habitat for the streaked horned lark. The commenter asserted that, "... Ankeny is not recognized among knowledgeable local birders as having any significant population" of streaked horned larks, and is unlikely to serve as an "anchor site" for the bird's recovery.

Our Response: Recent surveys have found up to five breeding pairs of streaked horned larks at Ankeny; therefore the site is occupied at the time of listing, and the refuge clearly provides the essential physical or biological features for the subspecies. Therefore, it meets the definition of critical habitat for the streaked horned lark. The WVNWRC included conservation measures in its comprehensive conservation plan for the streaked horned lark at each of the three refuge units, including Ankeny. We believe that Ankeny provides consistently available habitat for a small population of breeding streaked horned larks, and future management may increase the population. The WVNWRC is Federal land and has a clear conservation mandate, and so makes a good choice for critical habitat designation.

(41) *Comment:* One commenter questioned our proposed designation of critical habitat for the streaked horned

lark on the three units of the Willamette Valley National Wildlife Refuge Complex. These refuges were originally established as habitat for wintering dusky Canada geese (*Branta canadensis occidentalis*), and the commenter stated that the refuges cannot successfully manage for the two bird species at once.

Our Response: Research at the three refuge units has shown that streaked horned larks breed successfully in fields that have been heavily grazed by wintering geese (Moore 2009, p. 12). The WVNWRC has a long history of managing for wintering geese, and has recently updated its comprehensive conservation plan to integrate streaked horned lark conservation into the goals for the three refuge units. We believe that the WVNWRC provides excellent habitat for streaked horned larks, and adaptive management of the sites will likely increase the numbers of streaked horned larks breeding at each of the refuge units.

(42) *Comment:* Several commenters criticized the Service's failure to designate critical habitat on many sites that have had recent detections of streaked horned larks, primarily on privately owned agricultural lands in the Willamette Valley, and a few locations in the lower Columbia River. The commenters are concerned that the current critical habitat designation will not be adequate to recover the subspecies.

Our Response: Streaked horned larks evolved to use a shifting mosaic of very early successional habitats, for which the primary requirement was the appropriate landscape context (large, relatively flat, and wide open). The streaked horned lark is unusual among species in that it does not now occur on remnants of its native habitats; indeed, most of the streaked horned lark's naturally occurring habitats no longer exist because the natural processes that historically created those early successional habitats, such as flooding and wildfire, no longer operate on the landscape. With the exception of sites on the Washington coast, where natural disturbance processes still operate to create habitat, nearly all of the sites currently used by streaked horned larks have been inadvertently created by humans and are industrial in nature. These sites are agricultural landscapes, dredge spoil deposition sites, and airports. These "working landscapes" are managed with little or no consideration for streaked horned lark conservation, and lark use of these sites seems to be highly opportunistic. Although streaked horned larks currently occur on these sites, given their intensive industrial uses, these

locations may have limited potential to support increased populations of streaked horned larks in the future, and may be inappropriate sites on which to establish a recovery program for the subspecies. For the streaked horned lark, we do not have obvious core sites of pristine, natural habitats on which to focus recovery efforts. In essence, the streaked horned lark persists in the Pacific Northwest, even though its natural habitats are all but gone.

The sites that streaked horned larks currently use are highly fragmented and scattered. Developing a recovery program for the streaked horned lark will require identifying areas that have the essential landscape characteristics and which can be managed for conservation and recovery of the subspecies. Few of these areas have been determined thus far. In the Willamette Valley, large landscapes managed for native prairies will be needed, although it is very likely that some "working lands" in agricultural production will also be identified as interested landowners step up to implement practices to protect the streaked horned lark on their lands.

Critical habitat is defined in section 3 of the Act as: (1) The specific areas within the geographical area occupied by the species, at the time it is listed in accordance with the Act, on which are found those physical or biological features (a) Essential to the conservation of the species, and (b) Which may require special management considerations or protection; and (2) Specific areas outside the geographical area occupied by the species at the time it is listed, upon a determination that such areas are essential for the conservation of the species. We are not designating critical habitat on every small and fragmented location recently known to be occupied or potentially occupied by streaked horned larks, because we do not consider all of these sites to meet the definition of critical habitat for the streaked horned lark. That is, we do not consider all of these sites to provide physical or biological features essential to the conservation of the species, because not all of these sites have the potential to make a substantial contribution to the recovery of the species. In addition, section 3(5)(C) of the Act specifically mandates that, except in those circumstances determined by the Secretary of the Interior, critical habitat shall not include the entire geographical area which can be occupied by the listed species. We are not suggesting that the sites currently used by streaked horned larks are unimportant; rather, recovery is more likely to be successful and cost-

effective if we can focus our resources on larger, more permanent sites. Therefore, it is these larger, more permanent occupied sites that we consider to provide the physical or biological features that are truly essential to the conservation of the subspecies, and these are the areas that we are designating as critical habitat at this time. We do not contend that these sites will necessarily be sufficient to recover the subspecies, nor does the Act require that they do so. In the future, when we have better information on sites that will attract and support large, stable populations of streaked horned larks, and that can be managed for the long-term conservation of the subspecies, we may revisit this critical habitat designation, as appropriate.

(43) *Comment:* One commenter recommended re-drawing the boundaries of proposed streaked horned lark critical habitat at Portland International Airport to exclude paved runways, taxiways, and runway safety areas.

Our Response: All non-Federal airport lands are excluded under section 4(b)(2) of the Act from this final designation of critical habitat for the streaked horned lark; please see additional discussion under Exclusions. For the lands that we are designating as critical habitat, when determining critical habitat boundaries, we make every effort to avoid including developed areas such as lands covered by buildings, pavement (such as roads), and other structures because such lands lack the essential physical or biological features for streaked horned larks. Any such lands have been excluded by the text of this rule and are not included in critical habitat.

(44) *Comment:* One commenter stated the PCE requiring only a minimum of 16 percent open ground would not support occupation of the known nesting sites for streaked horned larks on dredge sand islands in the Columbia River and may only be relevant for other sites (such as the Puget Prairie or Willamette Valley).

Our Response: The PCE identifying 16 percent minimum open ground is a description of the habitat conditions, or physical or biological features, essential to the conservation of the streaked horned lark, not a management requirement. Based on research studies, streaked horned larks need areas with a minimum of 16 percent bare ground. Most of the currently occupied sites have much more bare ground than this, and many of the dredge deposit sites have more than 60 percent bare ground. The habitat description is based on research studies across the range of the subspecies. We do not expect land

owners to manage sites for streaked horned larks to criteria that represent the minimum observed in the field.

(45) *Comment:* One commenter suggested the limited number of territories and nesting pairs observed annually at Sanderson Field indicates this area provides only marginal habitat for the streaked horned lark and should not be designated as critical habitat.

Our Response: The fact that streaked horned larks have consistently nested at Sanderson Field is an indication that the airport does provide suitable habitat. There are many occupied sites in Washington and throughout the range of the subspecies where the number of nesting territories is low (fewer than 10), and this is not considered an indication of marginal habitat. The smaller size of Sanderson Field, compared to the Olympia Airport, and the rapidly declining population of streaked horned larks in Washington are contributing factors to the number of territories at the Shelton Airport and other locations. It should be noted that Sanderson Field is the northernmost location within the current range of the subspecies where the streaked horned lark nests. As such, this particular airport serves an important role in maintaining the distribution of the subspecies. However, as described in the Exclusions section of this document, airport lands have been excluded from critical habitat for the streaked horned lark.

(46) *Comment:* One commenter was concerned that the designation of critical habitat for the streaked horned lark at certain locations within the Columbia River would attract streaked horned larks to adjacent or nearby areas not proposed for designation and could limit operational and development activities of the Port of Kalama in these areas.

Our Response: Sandy Island is currently occupied habitat, and the streaked horned lark has already been documented at the Port of Kalama's upland dredge deposit site. The designation of critical habitat on Sandy Island, or other islands in the Columbia River, will not affect existing streaked horned lark movements or limit operational and development activities on port property. The fact that the streaked horned lark has been documented on the Port of Kalama is an indication that the upland dredge deposit site is currently suitable habitat. Under the listing (see the final rule to list the Taylor's checkerspot butterfly and streaked horned lark published elsewhere in today's **Federal Register**), the port will be subject to take prohibitions under section 9 of the Act for activities conducted by the port that

adversely impact streaked horned larks, regardless of whether critical habitat is designated on Sandy Island. We recommend that the Port of Kalama work with the Service on the development of a habitat conservation plan under section 10 of the Act for activities that affect the subspecies or suitable habitat, including upland disposal and use of dredge material.

Comments on Economic Analysis

Please note that the draft economic analysis (DEA) for the proposed designation addressed multiple species proposed for listing that occupy prairie habitats of Oregon and Washington, and included an analysis of the potential economic impacts stemming from the proposed critical habitat designation for Taylor's checkerspot butterfly, streaked horned lark, and four subspecies of the Mazama pocket gopher (*Thomomys mazama* ssp.). The proposed listing and critical habitat for the Mazama pocket gophers are addressed in separate rulemakings.

(47) *Comment:* Several commenters took issue with the characterization of the baseline in the DEA concerning airport operations. For example, one commenter asserted that critical habitat may engender incremental impacts even when the streaked horned lark is present. In addition, the comment notes that favorable habitat at airports, containing the PCEs, is the result of voluntary activities by airport managers, which could be discontinued (i.e., as a result of lost Federal funding), in which case the PCEs could disappear, the sites would become unoccupied, and any subsequent consultation would result solely from critical habitat.

Our Response: The U.S. Office of Management and Budget's (OMB) guidelines for best practices concerning the conduct of economic analysis of Federal regulations direct agencies to measure the costs of a regulatory action against a baseline, which it defines as the "best assessment of the way the world would look absent the proposed action." The baseline utilized in the DEA is the existing state of regulation, prior to the designation of critical habitat, which provides protection to the species under the Act, as well as under other Federal, State, and local laws and guidelines. To characterize the "world without critical habitat," the DEA also endeavors to forecast these conditions into the future over the time frame of the analysis, recognizing that such projections are subject to uncertainty. This baseline projection presumes that the species will be listed (as critical habitat would not be designated absent a listing) and

therefore recognizes that the streaked horned lark will be subject to a variety of Federal, State, and local protections throughout most of its ranges, due to its listed status under the Act and regardless of the designation of critical habitat.

We note that significant debate has occurred regarding whether assessing the impact of critical habitat designations using this baseline approach is appropriate, with several courts issuing divergent opinions. Courts in several parts of the country, including the U.S. Court of Appeals for the Ninth Circuit, which has jurisdiction in Washington, Oregon, and California, have ruled that the decision about whether to exclude areas from critical habitat should be based on the incremental impacts of the rule. The Ninth Circuit cases were appealed to the Supreme Court, which declined to hear them.

(48) *Comment:* Several commenters asserted that the DEA does not fully account for, or sufficiently acknowledge, potential impacts to airport development activities, revenues, and related opportunity costs.

Our Response: During the preparation of the DEA, its authors reached out to management officials at each of the seven airports affected by the proposed designations and collected available planning documents. Chapter 3 of the DEA discusses a variety of airport-related projects and maintenance activities that would result in section 7 consultation, and considers how these consultations might be affected by the presence of critical habitat. Based on the best available information and the incremental effects memorandum prepared by the Service, the DEA concludes that, for areas that are occupied by the subspecies, critical habitat designation will not result in incremental impacts beyond administrative costs incurred to consider adverse modification during consultation.

(49) *Comment:* The Port of Portland states that their economic assessment concerning this proposed designation was not included in the DEA, and notes certain other issues, including: a clarification concerning airport development activities that receive funding through the U.S. Department of Transportation (USDOT) FAA; a typographical error regarding unit labeling; and an assertion that the estimated number of consultations is inaccurate.

Our Response: The identified economic assessment was reviewed and utilized during the development of the DEA, and is cited in chapter 3 of the

report. In the final economic analysis (FEA), we added clarification concerning the USDOT FAA-funded source and fixed the unit numbering error. In addition, further detail concerning the number of consultations and analytic timeframe for the Port of Portland has been added to the FEA.

(50) *Comment:* One submission expressed concern that critical habitat designation will constrain dredging activities and alter placement sites related to the Port of Kalama.

Our Response: The DEA discusses potential effects of critical habitat designation on dredging activities, including those related to the Port of Kalama and Sandy Island. As noted in chapter 3 of the DEA, dredging activities occur on 8 of the 10 islands proposed for streaked horned lark critical habitat in the Columbia River. Deposition of dredge materials can create flat, open habitat that streaked horned larks prefer, but dredging activities that occur during the nesting season have the potential to increase individual mortality and cause nest failure. Based on the review of historical and projected conservation actions for the streaked horned lark concerning dredging activities, and given that these areas are considered occupied by the subspecies, the analysis concluded that critical habitat will not result in incremental economic impacts to dredging activities, beyond the administrative costs associated with consultation with the Service.

(51) *Comment:* Two commenters expressed concern that the listing and designation of critical habitat for the Taylor's checkerspot butterfly and Mazama pocket gophers (which will be addressed in separate rules) may constrain gravel mining activities in Pierce and Thurston Counties, Washington. One comment expressed specific concern about impacts to planned gravel extraction in Subunit 1—D Rocky Prairie.

Our Response: The proposed critical habitat acreage in these areas is considered to be occupied by at least one of the prairie species noted. As noted in the DEA and related incremental effects memorandum, should the six subspecies be formally listed under final rules, their presence within critical habitat will require implementation of certain conservation efforts to avoid jeopardy concerns. In occupied critical habitat, consultation would therefore consider not only the potential for jeopardy to the continued existence of the species, but also the potential for destruction or adverse modification of critical habitat. Because the ability of these subspecies to exist is very closely tied to the quality of their

habitats, significant alterations of their occupied habitat may result in jeopardy as well as adverse modification. Therefore, we anticipate that section 7 consultation analyses will likely result in no difference between recommendations to avoid jeopardy or adverse modification in occupied areas of habitat. The analysis concludes that incremental economic impacts of critical habitat designation will be limited to additional administrative costs of additionally considering critical habitat as part of section 7 consultation to the Service, other Federal agencies, and private third parties. Note, however, that additional detail concerning potential gravel mining activities in proposed critical habitat, along with related consultation requirements, has been added to the FEA.

In addition, the specifically identified subunit, Subunit 1–D Rocky Prairie, was proposed as unoccupied critical habitat for Taylor's checkerspot butterfly. This subunit has been removed from the final designation upon a determination that this area is not essential to the conservation of the species.

(52) *Comment:* One commenter stated that, in the DEA, economic costs are overstated and that many economic benefits have not been included in the analysis. Specifically, the comment asserted that there is no basis to determine that the designation of critical habitat for the streaked horned lark will have an additional economic impact beyond the listing itself, and notes that birdwatching and related livability amenities due to outdoor opportunities are important to Portland's social vitality.

Our Response: A primary conclusion of the economic analysis is that, in areas of proposed designation occupied by the species, limited incremental impacts will occur beyond those administrative costs associated with consultation. Further, in chapter 3, the DEA does provide a qualitative discussion of potential ancillary benefits (including recreational use) attributable to the conservation of these species.

(53) *Comment:* One commenter stated that the DEA dismisses the need to describe impacts in economic terms and instead focuses on biological benefits only, citing paragraph 4 in the Executive Summary of the DEA as an example.

Our Response: This comment misconstrues the language of this paragraph. The DEA endeavors to provide a full rendering of the designation's potential economic impacts, including defining a baseline and assessing incremental effects, both direct and indirect. In the context of weighing these costs against the

"benefits" of the designation, however, the benefits component focuses on the primary "biological" benefit related to species conservation, and puts less emphasis on ancillary, or secondary, benefits flowing from species conservation (e.g., improved environmental quality yielding human health or recreational use benefits).

(54) *Comment:* One commenter noted that, concerning potential ancillary benefits of the designation, airports are secure facilities with limited and controlled public access. Thus, none of the potential ancillary benefits cited in the DEA, such as recreational opportunities, is relevant to the airport environment.

Our Response: We agree that, given the security environment at airports, human use benefits are limited at airports. We note, however, that the direct biological benefit of species conservation may still be attributable to airport locations, and that certain ancillary benefits (improved environmental quality due to landscape management) may also still accrue. As previously mentioned, all non-Federal airport lands are excluded from this final designation of critical habitat for the streaked horned lark. Please see additional discussion under Exclusions.

(55) *Comment:* One commenter expressed concern that, even when care is taken in the review of projects and actions that are unlikely to harm the long-term viability of the Taylor's checkerspot butterfly, streaked horned lark, and *Mazama* pocket gopher, allowance of new development could leave the community subject to potential lawsuits.

Our Response: Chapter 2 of the DEA discusses the issue of indirect impacts potentially related to critical habitat, including the triggering of other State and local laws, time delays, regulatory uncertainty, and stigma. Within this context, the effect of third-party litigation can represent an indirect effect. We note, however, that forecasting the likelihood of third-party litigation and related project delays or other constraints is considered too speculative for the economic analysis. In addition, the DEA attributes most economic effects to the presence of the species and jeopardy concerns, as opposed to the designation of critical habitat.

Summary of Changes From Proposed Rule

We are designating a total of 1,941 ac (786 ha) of critical habitat for the Taylor's checkerspot butterfly and a total of 4,629 ac (1,873 ha) of critical habitat for the streaked horned lark. We

received a number of site-specific comments related to critical habitat for these two subspecies; completed our analysis of areas considered for exclusion under section 4(b)(2) of the Act or for exemption under section 4(a)(3) of the Act; reviewed the application of our criteria for identifying critical habitat across the range of these two subspecies to refine our designations; and completed the final economic analysis of the designation as proposed. We fully considered all comments from the public and peer reviewers on the proposed rule and the associated economic analysis to develop this final designation of critical habitat for the Taylor's checkerspot butterfly and streaked horned lark. This final rule incorporates changes to our proposed critical habitat based on the comments that we received and have responded to in this document, and considers completed final management plans to conserve the subspecies under consideration. Although we received additional distribution data for the streaked horned lark on agricultural lands in the Willamette Valley, this information did not necessitate the designation of additional critical habitat. Because of the fragmented and ephemeral nature of those areas on private lands, we determined they do not meet our definition of critical habitat for the streaked horned lark.

We have made some technical corrections to the document, and our final designation of critical habitat reflects the following changes from the proposed rule:

(1) We added one additional adult nectar resource to the list of plants in the primary constituent elements for Taylor's checkerspot butterfly: wild strawberry (*Fragaria virginiana*).

(2) Based on our analysis of the total area necessary for the conservation of Taylor's checkerspot butterfly in Washington and Oregon, we determined that approximately 447 ac (181 ha) of the unoccupied critical habitat that we proposed are not essential for the conservation of the subspecies based on comments and information received. This finding of "not essential" did not result in the removal of entire subunits for the Taylor's checkerspot butterfly, as it did for the streaked horned lark (see below), but did reduce the area of several subunits for the subspecies, both in Washington and Oregon.

Our analysis of the proposed critical habitat for the streaked horned lark determined that two of proposed critical habitat subunits (in their entirety) do not meet the definition of critical habitat; therefore these subunits were removed from the final designation. The

first of these two critical habitat subunits was identified as subunit 3–J in the proposed critical habitat rule and is commonly known as Coffeepot Island. This small island of approximately 25 ac (10 ha) in the Columbia River is not occupied by the streaked horned lark, and although it presently supports some of the physical or biological features utilized by the lark, without ongoing management it will not maintain these characteristics into the foreseeable future. (Please note, in this final rule, the critical habitat units have been renumbered sequentially and the designation of critical habitat subunit 3–J is now assigned to Whites/Brown Island (see Table 2)). As we find it unlikely that Coffeepot Island will provide suitable habitat for the streaked horned lark in the future, we determined that this subunit is not essential to the conservation of the subspecies, and does not meet our definition of critical habitat.

In the second case, we determined that the subunit identified as 4–G in the proposed critical habitat rule, M–DAC Farms in Oregon, does not meet our definition of critical habitat for the streaked horned lark. Although occupied at the time of listing, the PCEs at this site are in a state of steady decline due to a conservation agreement that focuses on restoring the landscape to wetland, a vegetative structure unsuitable to maintaining habitat for the streaked horned lark. This site is therefore unlikely to contribute to the recovery of the streaked horned lark, and as it lacks the PCEs for the streaked horned lark, it does not meet our definition of critical habitat for the subspecies. M–DAC Farms (601 ac (243 ha) was therefore removed from the final designation of critical habitat for the streaked horned lark.

(3) The Service approved the DOD's endangered species management plans (ESMPs) under the INRMP for military installation JBLM for the Taylor's checkerspot butterfly and streaked horned lark. The ESMPs are species-specific, and contain site-specific conservation actions that will be implemented as a component of the larger INRMP for the installation. The Secretary has exempted lands at JBLM from critical habitat under section 4(a)(3) of the Act, based on the approval of these ESMPs. Lands exempted include approximately 2,324 ac (940 ha) for the Taylor's checkerspot butterfly and 2,813 ac (1,138 ha) for the streaked horned lark on JBLM. The area exempted represents approximately 34 percent of the area proposed as critical habitat for Taylor's checkerspot butterfly and 23 percent of the area

proposed as critical habitat for the streaked horned lark. For Taylor's checkerspot butterfly, the exemption of military lands from critical habitat resulted in the removal of three critical habitat subunits within Unit 1 and sequential renumbering of the remaining subunits designated in this final rule (see Table 1). Training Area 7 South (TA7S), 91st Division Prairie, and 13th Division Prairie were numbered 1–A, 1–B, and 1–C in the proposed rule, respectively. For the streaked horned lark, the exemption of military lands combined with the exclusion under section 4(b)(2) of the Act for non-Federal airports (see below) resulted in the removal of Unit 1 in its entirety. Subunits in Unit 4 for the streaked horned lark were sequentially renumbered due to the exclusion of non-Federal airports in Oregon (see Table 2 and Exclusions section of this document).

(4) We carefully considered the benefits of inclusion and the benefits of exclusion of specific areas in proposed critical habitat under section 4(b)(2) of the Act, particularly in areas where management plans specific to the Taylor's checkerspot butterfly and streaked horned lark are in place, and where the maintenance and fostering of important conservation partnerships were a consideration. Based on the results of our analysis, we are excluding approximately 2,184 ac (885 ha) from our final critical habitat designation for Taylor's checkerspot butterfly and 4,114 ac (1,664 ha) for the streaked horned lark (see Exclusions, below). For Taylor's checkerspot butterfly, two entire subunits of proposed critical habitat in Oregon were excluded based on the Benton County Prairie Species HCP; these include Fort Hoskins Historic Park (proposed critical habitat subunit number 4–1) and Beazell Memorial Forest (proposed critical habitat subunit number 4–2). The area excluded represents approximately 32 percent of the area proposed as critical habitat for the Taylor's checkerspot butterfly and 32 percent of the area proposed as critical habitat for the streaked horned lark.

Exclusion from critical habitat should not be interpreted as a determination that these areas are unimportant, that they do not provide physical or biological features essential to the conservation of the species (for occupied areas), or are not otherwise essential for conservation (for unoccupied areas); exclusion merely reflects the Secretary's determination that the benefits of excluding those particular areas outweigh the benefits of including them in the designation.

Due to these changes in our final critical habitat designation, we have updated our subunit numbering, descriptions, and critical habitat maps, all of which can be found later in this document. This final designation of critical habitat represents a reduction of 4,934 ac (1,996 ha) from our proposed critical habitat for the Taylor's checkerspot butterfly and 7,530 ac (3,047 ha) for the streaked horned lark, for the reasons detailed above. Additional minor differences between proposed and final critical habitat for both subspecies on the order of roughly 20 ac (8 ha) beyond those detailed above are due to minor boundary adjustments and simple rounding error.

Critical Habitat

It is our intent to discuss below only those topics directly relevant to the designation of critical habitat for the Taylor's checkerspot butterfly and streaked horned lark in this section of the rule.

Background

Critical habitat is defined in section 3 of the Act as:

(1) The specific areas within the geographical area occupied by the species, at the time it is listed in accordance with the Act, on which are found those physical or biological features:

(a) essential to the conservation of the species; and

(b) which may require special management considerations or protection; and

(2) Specific areas outside the geographical area occupied by the species at the time it is listed, upon a determination that such areas are essential for the conservation of the species.

Conservation, as defined under section 3 of the Act, means to use and the use of all methods and procedures that are necessary to bring an endangered or threatened species to the point at which the measures provided pursuant to the Act are no longer necessary. Such methods and procedures include, but are not limited to, all activities associated with scientific resources management such as research, census, law enforcement, habitat acquisition and maintenance, propagation, live trapping, and transplantation, and, in the extraordinary case where population pressures within a given ecosystem cannot be otherwise relieved, may include regulated taking.

Critical habitat receives protection under section 7 of the Act through the requirement that Federal agencies

ensure, in consultation with the Service, that any action they authorize, fund, or carry out is not likely to result in the destruction or adverse modification of critical habitat. The designation of critical habitat does not affect land ownership or establish a refuge, wilderness, reserve, preserve, or other conservation area. Such designation does not allow the government or public to access private lands. Such designation does not require implementation of restoration, recovery, or enhancement measures by non-Federal landowners. Where a landowner requests Federal agency funding or authorization for an action that may affect a listed species or critical habitat, the consultation requirements of section 7(a)(2) of the Act would apply, but even in the event of a destruction or adverse modification finding, the obligation of the Federal action agency and the landowner is not to restore or recover the species, but to implement reasonable and prudent alternatives to avoid destruction or adverse modification of critical habitat.

Under the first prong of the Act's definition of critical habitat, areas within the geographical area occupied by the species at the time it was listed are included in a critical habitat designation if they contain physical or biological features (1) which are essential to the conservation of the species and (2) which may require special management considerations or protection. For these areas, critical habitat designations identify, to the extent known using the best scientific and commercial data available, those physical or biological features that are essential to the conservation of the species (such as space, food, cover, and protected habitat). In identifying those physical or biological features within an area, we focus on the principal biological or physical constituent elements (primary constituent elements such as roost sites, nesting grounds, seasonal wetlands, water quality, tide, soil type) that are essential to the conservation of the species. Primary constituent elements are those specific elements of the physical or biological features that provide for a species' life-history processes and are essential to the conservation of the species.

Under the second prong of the Act's definition of critical habitat, we can designate critical habitat in areas outside the geographical area occupied by the species at the time it is listed, upon a determination that such areas are essential for the conservation of the species. Our regulations direct us to designate critical habitat in areas outside the geographical area occupied

by a species only when a designation limited to its range would be inadequate to ensure the conservation of the species. Furthermore, except in certain circumstances determined by the Secretary, critical habitat is not to include the entire geographical area which can be occupied by the listed species.

Section 4 of the Act requires that we designate critical habitat on the basis of the best scientific and commercial data available. Further, our Policy on Information Standards Under the Endangered Species Act (published in the **Federal Register** on July 1, 1994 (59 FR 34271)), the Information Quality Act (section 515 of the Treasury and General Government Appropriations Act for Fiscal Year 2001 (Pub. L. 106-554; H.R. 5658)), and our associated Information Quality Guidelines provide criteria, establish procedures, and provide guidance to ensure that our decisions are based on the best scientific data available. They require our biologists, to the extent consistent with the Act and with the use of the best scientific data available, to use primary and original sources of information as the basis for recommendations to designate critical habitat.

Habitat is dynamic, and species may move from one area to another over time. We recognize that critical habitat designated at a particular point in time may not include all of the habitat areas that we may later determine are necessary for the recovery of the species. For these reasons, a critical habitat designation does not signal that habitat outside the designated area is unimportant or may not be needed for recovery of the species. Areas that are important to the conservation of the species, both inside and outside the critical habitat designation, will continue to be subject to: (1) Conservation actions implemented under section 7(a)(1) of the Act, (2) regulatory protections afforded by the requirement in section 7(a)(2) of the Act for Federal agencies to insure their actions are not likely to jeopardize the continued existence of any endangered or threatened species, and (3) section 9 of the Act's prohibitions on taking any individual of the species, including taking caused by actions that affect habitat. Federally funded or permitted projects affecting listed species outside their designated critical habitat areas may still result in jeopardy findings in some cases. These protections and conservation tools will continue to contribute to recovery of this listed species. Similarly, critical habitat designations made on the basis of the best available information at the time of

designation will not control the direction and substance of future recovery plans, habitat conservation plans (HCPs), or other species conservation planning efforts if new information available at the time of these planning efforts calls for a different outcome.

Physical or Biological Features

In accordance with section 3(5)(A)(i) and 4(b)(1)(A) of the Act and regulations at 50 CFR 424.12, in determining which areas within the geographical area occupied by the species at the time of listing to designate as critical habitat, we consider the physical or biological features essential to the conservation of the species and which may require special management considerations or protection. These include, but are not limited to:

- (1) Space for individual and population growth and for normal behavior;
- (2) Food, water, air, light, minerals, or other nutritional or physiological requirements;
- (3) Cover or shelter;
- (4) Sites for breeding, reproduction, or rearing (or development) of offspring; and
- (5) Habitats that are protected from disturbance or are representative of the historical, geographical, and ecological distributions of a species.

We derived the specific physical or biological features essential for the Taylor's checkerspot butterfly and streaked horned lark from studies of each subspecies' habitat, ecology, and life history as described in detail in the Critical Habitat section of the proposed rule to designate critical habitat published in the **Federal Register** on October 11, 2012 (77 FR 61937). Additional information can also be found in the final listing rule for the Taylor's checkerspot butterfly and streaked horned lark, which is published elsewhere in today's **Federal Register**. We have determined that the physical and or biological features described in the proposed rule (October 11, 2012; 77 FR 61937) are essential to the conservation of the Taylor's checkerspot butterfly and streaked horned lark, and have further determined that these features may require special management considerations or protection.

The designation of critical habitat is an authority restricted to the boundaries of the United States; critical habitat cannot be designated in a foreign country (50 CFR 424.12(h)). Both Taylor's checkerspot butterfly and streaked horned lark range into Canada or historically occurred there. In the

final listing rule, published elsewhere in the **Federal Register** today, we discuss the population in Canada for the purpose of evaluating the viability of the species and to inform our determination of those areas within the United States that are essential for the conservation of the subspecies. We do not have the authority to designate critical habitat in Canada.

Taylor's Checkerspot Butterfly

Primary Constituent Elements for the Taylor's Checkerspot Butterfly—Under the Act and its implementing regulations, we are required to identify the physical or biological features essential to the conservation of Taylor's checkerspot butterfly in areas occupied at the time of listing, focusing on the features' primary constituent elements. We consider primary constituent elements to be the elements of physical or biological features that provide for the subspecies' life-history processes and are essential to the conservation of the subspecies.

Based on our current knowledge of the physical or biological features and habitat characteristics required to sustain the subspecies' life-history processes, we determine that the primary constituent elements specific to the Taylor's checkerspot butterfly are:

(i) Patches of early seral, short-statured, perennial bunchgrass plant communities composed of native grass and forb species in a diverse topographic landscape ranging in size from less than 1 ac up to 100 ac (0.4 to 40 ha) with little or no overstory forest vegetation that have areas of bare soil for basking that contain:

(a) In Washington and Oregon, common bunchgrass species found on northwest grasslands include *Festuca roemerii* (Roemer's fescue), *Danthonia californica* (California oat grass), *Koeleria cristata* (prairie Junegrass), *Elymus glaucus* (blue wild rye), *Agrostis scabra* (rough bentgrass), and on cooler, high-elevation sites typical of coastal bluffs and balds, *Festuca rubra* (red fescue).

(b) On moist grasslands found near the coast and in the Willamette Valley, there may be *Bromus sitchensis* (Sitka brome) and *Deschampsia cespitosa* (tufted hairgrass) in the mix of prairie grasses. Less abundant forbs found on the grasslands include, but are not limited to, *Trifolium* spp. (true clovers), narrow-leaved plantain (*Plantago lanceolata*), harsh paintbrush (*Castilleja hispida*), Puget balsamroot (*Balsamorhiza deltoidea*), woolly sunshine (*Eriophyllum lanatum*), nine-leaved desert parsley (*Lomatium triternatum*), fine-leaved desert parsley

(*Lomatium utriculatum*), common camas (*Camassia quamash*), showy fleabane (*Erigeron speciosus*), Canada thistle (*Cirsium arvense*), common yarrow (*Achillea millefolium*), prairie lupine (*Lupinus lepidus*), and sickle-keeled lupine (*Lupinus albicaulis*).

(ii) Primary larval host plants (narrow-leaved plantain and harsh paintbrush) and at least one of the secondary annual larval host plants (blue-eyed Mary (*Collinsia parviflora*), sea blush (*Plectritis congesta*), or dwarf owl-clover (*Triphysaria pusilla*) or one of several species of speedwell (marsh speedwell (*Veronica scutella*), American speedwell (*V. beccabunga* var. *americana*), or thymeleaf speedwell (*V. serpyllifolia*)).

(iii) Adult nectar sources for feeding that include several species found as part of the native (and one nonnative) species mix on northwest grasslands, including, but not limited to: narrow-leaved plantain; harsh paintbrush; Puget balsam root; woolly sunshine; nine-leaved desert parsley; fine-leaved desert parsley or spring gold; common camas; showy fleabane; Canada thistle; common yarrow; prairie lupine; sickle-keeled lupine, and wild strawberry (*Fragaria virginiana*).

(iv) Aquatic features such as wetlands, springs, seeps, streams, ponds, lakes, and puddles that provide moisture during periods of drought, particularly late in the spring and early summer. These features can be permanent, seasonal, or ephemeral.

With this designation of critical habitat, we intend to identify the physical or biological features essential to the conservation of the subspecies, through the identification of the primary constituent elements essential to support the life-history processes of the subspecies. We are designating critical habitat within the geographical area occupied by the subspecies at the time of listing. In addition, we are designating some specific areas outside the geographical area occupied by the subspecies at the time of listing that were historically occupied, but are presently unoccupied, because we have determined that these areas are essential for the conservation of the subspecies.

Streaked Horned Lark

Primary Constituent Elements for the Streaked Horned Lark—Under the Act and its implementing regulations, we are required to identify the physical or biological features essential to the conservation of the streaked horned lark in areas occupied at the time of listing, focusing on the features' primary constituent elements. We consider primary constituent elements to be the

elements of physical or biological features that provide for the subspecies' life-history processes and are essential to the conservation of the subspecies.

Based on our current knowledge of the physical or biological features and habitat characteristics required to sustain the subspecies' life-history processes, we determine that the primary constituent elements specific to the streaked horned lark are areas having a minimum of 16 percent bare ground that have sparse, low-stature vegetation composed primarily of grasses and forbs less than 13 in (33 cm) in height found in:

(1) Large (300-ac (120-ha)), flat (0–5 percent slope) areas within a landscape context that provides visual access to open areas such as open water or fields, or

(2) Areas smaller than described in (1), but that provide visual access to open areas such as open water or fields.

With this designation of critical habitat, we intend to identify the physical or biological features essential to the conservation of the subspecies, through the identification of the primary constituent elements sufficient to support the life-history processes of the subspecies. All of the units designated as critical habitat are currently occupied by the streaked horned lark and contain the primary constituent elements to support the life-history needs of the subspecies.

Special Management Considerations or Protections—All areas we are designating as critical habitat will require some level of management to address the current and future threats to the Taylor's checkerspot butterfly and streaked horned lark and to maintain or restore the PCEs. A detailed discussion of activities influencing the Taylor's checkerspot butterfly and streaked horned lark and their habitats can be found in the final listing rule published elsewhere in today's **Federal Register**. Threats to the physical or biological features that are essential to the conservation of these subspecies and that may warrant special management considerations or protection include, but are not limited to: (1) Loss of habitat from conversion to other uses; (2) control of nonnative, invasive species; (3) development; (4) construction and maintenance of roads and utility corridors; and (5) habitat modifications brought on by succession of vegetation from the lack of disturbance, both small and large scale. These threats also have the potential to affect the PCEs if they are conducted within or adjacent to designated units.

Taylor's Checkerspot Butterfly

The physical or biological features essential to the conservation of the Taylor's checkerspot butterfly may require special management considerations or protection to improve the viability and distribution of habitat suitable for the subspecies. These include preventing the establishment of invasive, nonnative and native woody species, and hastening restoration by actively managing sites to establish native plant species and the structure of the plant community that is suitable for the Taylor's checkerspot butterfly. Restoration and maintenance of occupied Taylor's checkerspot butterfly sites will require active management to plan, restore, enhance, and manage habitat using an approach that resets the vegetation composition and structure to an early seral stage. Management actions that produce suitable conditions for Taylor's checkerspot butterflies and reset the ecological clock to early seral conditions favored by the butterfly include prescribed fires, mechanical harvesting of trees, activities such as hand planting or mechanical planting of grasses and forbs, and the judicious use of herbicides for nonnative, invasive species control.

These early-seral conditions favor the production and maintenance of plantain, paintbrush, and other larval host plants in a short-structure vegetation community that allows utilization of the plants by the Taylor's checkerspot butterfly. Areas where the Taylor's checkerspot butterfly occupies a site should have limited soil and vegetation disturbance at times when the larvae are active, which extends from late February when post-diapause larvae are active to late June when pre-diapause larvae are on site. Other activities that could cause trampling or impacts to the larvae and that should be minimized, reduced, or restricted during larval feeding include use of the site by off-road vehicles, military training using vehicles or impacts caused by large infantry (foot soldiers), or activities that transport or spread nonnative plants, and the risk of wildfire or prescribed fire. We reemphasize here the acknowledgement that Taylor's checkerspot butterfly, while most obvious during the flight period and when larvae are active, are year-round residents and may be vulnerable to most types of direct disturbance throughout the year.

Streaked Horned Lark

The physical or biological features essential to the conservation of the streaked horned lark may require

special management considerations or protection to ensure the provision of early seral conditions and landscape context of sufficient quantity and quality for long-term conservation and recovery of the subspecies. Activities such as mowing, burning, grazing, tilling, herbicide treatment, grading, beach nourishment, or placement of dredge material can be used to maintain or restore nesting and wintering habitats. Regular disturbance is necessary to create and maintain suitable habitat, but the timing of management is important. The management actions should be conducted outside of the breeding season to avoid the destruction of nests and young, or if habitat management must be done during the breeding season, it should be done in a way that minimizes destruction of nests or harassment of individuals. Nesting success is highest in locations with restricted public use or entry such as military facilities, airports, islands, wildlife refuges, or sites that are remote or difficult to access.

Criteria Used To Identify Critical Habitat

As required by section 4(b)(1)(A) of the Act, we use the best scientific and commercial data available to designate critical habitat. We review available information pertaining to the habitat requirements of the species, and begin by assessing the specific geographic areas occupied by the species at the time of listing. If such areas are not sufficient to provide for the conservation of the species, in accordance with the Act and its implementing regulation at 50 CFR 424.12(e), we then consider whether designating additional areas outside the geographic areas occupied at the time of listing may be essential to ensure the conservation of the species. We consider unoccupied areas for critical habitat when a designation limited to the present range of the species may be inadequate to ensure the conservation of the species. In this case, since we are listing simultaneously with the designation of critical habitat, all areas presently occupied by Taylor's checkerspot butterfly or streaked horned lark are presumed to constitute those areas occupied at the time of listing; those areas currently occupied by the subspecies are identified as such in each of the unit or subunit descriptions below. These descriptions similarly identify which of the units or subunits are believed to be unoccupied at the time of listing. Our determination of the areas occupied at the time of listing and our rationale for how we determined

specific unoccupied areas to be essential to the conservation of the subspecies are provided below.

We plotted the known locations of the Taylor's checkerspot butterfly and streaked horned lark where they occur in Washington and Oregon using 2011 National Agriculture Imagery Program (NAIP) digital imagery in ArcGIS, version 10 (Environmental Systems Research Institute, Inc.), a computer geographic information system program.

To determine if the currently occupied areas contain the primary constituent elements, we assessed the life-history components and the distribution of the subspecies through element occurrence records in State natural heritage databases and natural history information on each of the subspecies as they relate to habitat. We first considered whether the presently occupied areas were sufficient to conserve the subspecies. If not, to determine if any unoccupied sites met the criteria for critical habitat, we then considered: (1) The importance of the site to the overall status of the subspecies to prevent extinction and contribute to future recovery of the subspecies; (2) whether the area presently provides the essential physical or biological features, or could be managed and restored to contain the necessary physical or biological features to support the subspecies; and (3) whether individuals were likely to colonize the site. We also considered the potential for reintroduction of the subspecies, where anticipated to be necessary (for Taylor's checkerspot butterfly only).

As required by section 4(b)(2) of the Act, we used the best scientific data available to designate critical habitat. We reviewed available information pertaining to the habitat requirements of these subspecies. In accordance with the Act and its implementing regulation at 50 CFR 424.12(e), we considered whether designating additional areas—outside those currently occupied as well as those occupied at the time of listing—are necessary to ensure the conservation of the subspecies. We are designating critical habitat in areas within the geographical area occupied by the subspecies at the time of listing in 2013. For Taylor's checkerspot butterfly only, we also are designating specific areas outside the geographical area occupied by the subspecies at the time of listing that were historically occupied, but may be presently unoccupied, based on the Secretary's determination that these areas are essential for the conservation of the subspecies.

When we are determining which areas should be designated as critical habitat,

our primary source of information is generally the information developed during the listing process for the species. Additional information sources may include the recovery plan for the species, articles in peer-reviewed journals, conservation plans developed by States and counties, scientific status surveys and studies, biological assessments, other unpublished materials, or experts' opinions or personal knowledge. In this case we used existing occurrence data for each subspecies and identified the habitat and ecosystems upon which they depend. These sources of information included, but were not limited to:

(1) Data used to prepare the proposed and final rules to list the subspecies;

(2) Information from biological surveys;

(3) Peer-reviewed articles, various agency reports, and databases;

(4) Information from the U.S.

Department of Defense—Joint Base Lewis-McChord (JBLM) and other cooperators;

(5) Information from species experts;

(6) Data and information presented in academic research theses; and

(7) Regional Geographic Information System (GIS) data (such as species occurrence data, land use, topography, aerial imagery, soil data, and land ownership maps) for area calculations and mapping.

The critical habitat designation is defined by the maps, as modified by any accompanying regulatory text, presented at the end of this document in the Regulation Promulgation section. We include more detailed information on the boundaries of the critical habitat designation in the preamble of this document. We will make the coordinates or plot points or both on which each map is based available to the public on <http://www.regulations.gov> at Docket No. FWS-R1-ES-2013-0009, on our Web site at <http://www.fws.gov/wafwo/TCBSHL.html/>, and, by appointment, at the Service's Washington Fish and Wildlife Office (see **FOR FURTHER INFORMATION CONTACT**, above).

In all cases, when determining critical habitat boundaries, we made every effort to avoid including developed areas such as lands covered by buildings, pavement (such as roads), and other structures because such lands lack the essential physical or biological features for the Taylor's checkerspot butterfly and streaked horned lark. The scale of the maps we prepared under the parameters for publication within the Code of Federal Regulations may not reflect the exclusion of such developed lands. Any such lands inadvertently left

inside critical habitat boundaries shown on the maps of this rule have been excluded by text in the rule and are not designated as critical habitat. Therefore, a Federal action involving these lands would not trigger section 7 consultation with respect to critical habitat and the requirement of no adverse modification unless the specific action would affect the physical or biological features in the adjacent critical habitat.

Taylor's Checkerspot Butterfly

Occupied Areas—For the Taylor's checkerspot butterfly, we are designating critical habitat within the geographical area occupied by the subspecies at the time of listing, as well as in unoccupied areas that we have determined to be essential for the conservation of the subspecies (described below). These presently occupied areas provide the physical or biological features essential to the conservation of the subspecies, which may require special management considerations or protection. We determined occupancy in these areas based on recent survey information. All sites occupied by Taylor's checkerspot butterfly have survey data as recently as 2011, except for the U.S. Forest Service sites on the north Olympic Peninsula where data are as recent as 2010 (Potter 2011; Linders 2011; Ross 2011; Holtrop 2010; Severns and Grossboll 2011). In addition, there have been some recent experimental translocations of Taylor's checkerspot butterflies to sites where it had been extirpated within its historical range. If translocated populations have been documented as successfully reproducing, we considered those sites to be presently occupied by the subspecies. Areas designated as critical habitat for Taylor's checkerspot butterfly are representative of the known historical geographic distribution for the subspecies, outside of Canada.

We are designating three units of critical habitat based on sufficient elements of physical or biological features being present to support life-history processes for the Taylor's checkerspot butterfly. These 3 units are further divided into 11 subunits. Some subunits within the units contain all of the identified elements of physical and biological features and support multiple life-history processes; some subunits contain at least one or more elements of the physical and biological features necessary to support the Taylor's checkerspot butterfly's particular use of that habitat. Because we determined that the areas presently occupied by Taylor's checkerspot butterfly are not sufficient to provide for the

conservation of the subspecies, we have additionally identified some subunits that are presently unoccupied, but that the Secretary has determined to be essential to the conservation of the subspecies. Therefore, we are also designating these unoccupied areas as critical habitat for the Taylor's checkerspot butterfly, as explained below.

Unoccupied Areas—We are designating six subunits as critical habitat for the Taylor's checkerspot butterfly that are not presently occupied by the subspecies, but that the Secretary has determined essential for the conservation of the subspecies. There has been a rapid decline in the spatial distribution of prairies (grassland habitat) throughout the range of the Taylor's checkerspot butterfly; as a result, the present distribution of Taylor's checkerspot butterfly is disjunct and isolated throughout the subspecies' historical range. If the Taylor's checkerspot butterfly is to recover, there must be sufficient suitable habitat available for population expansion and growth that is potentially connected in such a way as to allow for dispersal, and these sites must receive routine and sustained management to maintain the early seral conditions essential to the conservation of the subspecies. We therefore evaluated areas outside the presently occupied patches to identify unoccupied habitat areas essential for the conservation of the subspecies. We are designating as critical habitat some areas adjacent to known occurrences of the Taylor's checkerspot butterfly but that may currently be unoccupied to provide for population expansion and growth, which is essential for the conservation of the subspecies.

We have identified these unoccupied areas as essential for the conservation of the Taylor's checkerspot butterfly because they are located strategically between, and in some cases, adjacent to, occupied areas from which the butterfly may disperse; these areas contain one or more of the PCEs for the Taylor's checkerspot butterfly (although the presence of one or more PCEs is not a statutory requirement for unoccupied critical habitat), and are all receiving or are slated to receive restoration treatments that will increase the amount of suitable habitat available.

Streaked Horned Lark

Occupied Areas—We are designating two units of critical habitat for the streaked horned lark based on sufficient elements of physical or biological features being present to support life-history processes during the breeding or

winter seasons. These 2 units are further divided into 16 subunits. All of the units designated as critical habitat are presently occupied by the streaked horned lark. Some subunits within the units contain all of the identified elements of physical or biological features and support multiple life-history processes; some subunits contain at least one or more elements of the physical or biological features necessary to support the streaked horned lark's particular use of that habitat.

Unoccupied Areas—There are no unoccupied subunits designated as critical habitat for the streaked horned lark.

Final Critical Habitat Designation

We are designating four units total as critical habitat for the Taylor's checkerspot butterfly and streaked horned lark. The critical habitat areas described below constitute our best

assessment at this time of areas that meet the definition of critical habitat for these subspecies. Those four units are:

(1) The South Sound Unit (Unit 1), which has critical habitat subunits for only the Taylor's checkerspot butterfly.

(2) The Strait of Juan de Fuca Unit (Unit 2), which has critical habitat subunits for only the Taylor's checkerspot butterfly.

(3) The Washington Coast and Columbia River Unit (Unit 3), which has critical habitat subunits for only the streaked horned lark.

(4) The Willamette Valley Unit (Unit 4), which has critical habitat subunits for both the Taylor's checkerspot butterfly and streaked horned lark.

Taylor's Checkerspot Butterfly—Units 1, 2, and 4

We are designating three units as critical habitat for the Taylor's checkerspot butterfly. The critical habitat areas we describe below

constitute our current best assessment of areas that meet the definition of critical habitat for the subspecies. The three units we designate as critical habitat are: Unit 1, South Sound—1,143 ac (462 ha) in Washington State (545 ac (220 ha) of County ownership, 420 ac (170 ha) of private ownership, and 178 ac (72 ha) of lands owned by a Port, local municipality, or nonprofit conservation organization); Unit 2, Strait of Juan de Fuca—779 ac (315 ha) in Washington State (160 ac (65 ha) of Federal ownership, 188 ac (76 ha) of State ownership, 201 ac (81) of private ownership, and 229 ac (93 ha) of land owned by a Port, local municipality, or nonprofit organization); and Unit 4—D, Willamette Valley—20 ac (8 ha) of privately owned lands in Oregon. The approximate area of each critical habitat unit and its relevant subunits, as well as land ownership within each unit, is shown in Table 1.

TABLE 1—CRITICAL HABITAT UNITS DESIGNATED FOR TAYLOR'S CHECKERSPOT BUTTERFLY. NOTE: AREA SIZES MAY NOT SUM DUE TO ROUNDING. AREA ESTIMATES REFLECT ALL LAND WITHIN CRITICAL HABITAT UNIT BOUNDARIES

Unit 1: South Sound		Federal	State	County	Private	Other *	Currently occupied
	Subunit Name	Ac(Ha)	Ac-(Ha)	Ac(Ha)	Ac(Ha)	Ac(Ha)	Y/N
1-A	Rocky Prairie	0	0	0	0	43 (17)	N
1-B	Tenalquot Prairie	0	0	0	0	135 (55)	N
1-C	Glacial Heritage	0	0	545 (220)	0	0	Y
1-D	Rock Prairie	0	0	0	244 (99)	0	N
1-E	Bald Hill	0	0	0	176 (71)	0	N
	<i>Unit 1 Totals</i>	0 (0)	0 (0)	545 (220)	420 (170)	178 (72)	.....
Unit 2: Strait of Juan De Fuca:							
2-A	Deception Pass State Park	0	149 (60)	0	0	0	N
2-B	Central Whidbey	0	39 (16)	0	0	190 (77)	N
2-C	Elwha	0	0	0	51 (20)	39 (16)	Y
2-D	Sequim	0	0	0	151 (61)	0	Y
2-E	Dungeness	160 (65)	0	0	0	0	Y
	<i>Unit 2 Totals</i>	160 (65)	188 (76)	0	201 (81)	229 (93)	.....
Unit 4: Willamette Valley:							
4-D	Fitton Green-Cardwell Hill	0	0	0	20 (8)	0 (0)	Y
	<i>Unit 4 Totals</i>	0	0	0	20 (8)	0 (0)	.....
	<i>Grand Total—all Units</i>	160 (65)	188 (76)	545 (220)	642 (259)	407 (166)	.....
	GRAND TOTAL ALL UNITS, ALL OWNERSHIP.	.....	.....	1,941 (786)	.....	.....	.....

* Other = Ports, local municipalities, and nonprofit conservation organizations.

We present brief descriptions of all units, and reasons why they meet the definition of critical habitat for the Taylor's checkerspot butterfly, below.

Unit 1: South Sound—Taylor's Checkerspot Butterfly

The South Sound Unit consists of 1,143 acres (462 ha) of land designated for the Taylor's checkerspot butterflies in five subunits. This unit is found

entirely in Thurston County, Washington.

Subunit Descriptions

1-A *Rocky Prairie*—(Thurston County, Washington). The Rocky Prairie critical habitat subunit is composed of two disjunct habitat patches comprising a total of 43 ac (17 ha). The first patch is a linear strip of prairie under private ownership. It is approximately 15 ac (6 ha) in size and bounded on the north by

residential homes, on the east by the Burlington Northern railroad line, the south by forest (approximately 443 ft (135 m) north of where the Burlington Northern rail line intersects Old Hwy 99), and on the west by the Washington Department of Natural Resources Rocky Prairie Natural Area Preserve (NAP). The second prairie patch of this subunit is 29 ac (12 ha) of property owned by a conservation organization known as

Wolf Haven International. It is located southeast of the Burlington Northern habitat patch. Wolf Haven is bounded on the north by Offut Lake Road, and bounded by a service road in all but the extreme northeastern corner of the property. The landscape on the east, west, and south boundaries of the prairie at Wolf Haven is delineated by mixed Garry oak and conifer forest (east), or conifer forest (west and south). Both habitat patches within this subunit are unoccupied at the time of listing.

This subunit is within a matrix of historically occupied patches from which Taylor's checkerspot butterfly has been completely extirpated. We have determined this subunit is essential for the conservation of the Taylor's checkerspot butterfly because it has the potential for restoration of the physical or biological features sufficient to enable the reintroduction of Taylor's checkerspot butterfly. In addition, although currently unoccupied, this area presently provides many of the essential features to support long-term conservation and recovery of the Taylor's checkerspot butterfly. The subunit is composed of grasslands and includes oak woodland margins, and some transitional, colonization (first growth) Douglas-fir forest within the greater prairie landscape. Several PCEs, including landscape heterogeneity and diverse and abundant larval and adult plants resources, are present.

1-B Tenalquot Prairie—(Thurston County, Washington). The Tenalquot Prairie subunit is a privately owned conservation area of approximately 135 ac (55 ha) in size and part of the larger, historically contiguous Tenalquot Prairie, the majority of which occurs on JBLM. The northern boundary of this subunit is a fenceline boundary, which separates South Weir prairie on JBLM from the adjacent private land. The western boundary of this subunit is a large pasture clearly delineated by a fence line, and it is bordered on the southeast by Military Road. This subunit is unoccupied at the time of listing.

We have determined this subunit is essential for the conservation of the Taylor's checkerspot butterfly because it would provide for the reintroduction and reestablishment of Taylor's checkerspot butterfly. Although currently unoccupied, this area presently provides many of the physical or biological features necessary to support the long-term conservation and recovery of Taylor's checkerspot butterfly and has the potential to serve as metapopulation center within a larger prairie landscape context (~2,000 ac (810 ha) in the south region of Thurston

County. The physical or biological features present at this site include landscape heterogeneity, bare ground for basking, and diverse and abundant larval and adult plant resources. This subunit is periodically managed using prescribed burning as well as with mechanical methods to remove Scot's broom (*Cytisus scoparius*) and to sustain early seral conditions.

1-C Glacial Heritage—(Thurston County, Washington). Glacial Heritage is a large, County-owned property managed with conservation, research, and education as its primary objectives. The property consists of more than 1,200 acres, with approximately 545 ac (220 ha) designated as critical habitat. The northwestern boundary is an abandoned railroad line, and to the direct north are rural residential properties; the eastern boundary of the preserve is the Black River, and the southern boundary is owned by two private landowners: one is a large industrial tree farm where conifer seedlings are grown, and the other is dominated by pasture grown for haying. The southern border is clearly defined by the land use change along the fenceline. This subunit is occupied at the time of listing, and provides the essential physical or biological features for the Taylor's checkerspot butterfly, including diverse topography, abundant and diverse larval and adult nectar plant resources, a water course, and areas of bare ground for basking due to ongoing, active management.

Threats to the physical or biological features that are essential to the conservation of this species and may warrant special management considerations or protections include, but are not limited to, the inadvertent short-term negative impacts of restoration activities, such as burning, mowing, and the use of herbicides; control of native and nonnative invasive woody species such as Scot's broom and Douglas fir (*Pseudotsuga menziesii*), as well as control of invasive Mediterranean grasses; habitat modifications brought on by succession of vegetation from the lack of disturbance, at a small and large scale; disease affecting larval host plants; and the effects of climate change. Special management considerations may be required to provide protection to larval and adult food resources by reducing human disturbance during the flight season, and when eggs and early instar larvae are present.

1-D Rock Prairie—(Thurston County, Washington). We are designating approximately 244 ac (99 ha) of critical habitat on the northern portion of Rock Prairie, a large, privately owned

property in south Thurston County. The subunit has diverse landscape features with mounded prairie, old field pasture, oak woodland, and conifer forest. The northern boundary is delineated by dense conifer forests, the southern border is State Highway 99 (referred to as old 99), the western boundary is clearly delineated by rural residential lots, and the eastern border is the urban growth boundary for the town of Tenino, Washington. This subunit is unoccupied at the time of listing.

This historically occupied subunit is essential for the conservation of the Taylor's checkerspot butterfly as it presently provides many of the features necessary to support long-term conservation and recovery of the Taylor's checkerspot butterfly. These include diverse topography with swales and terraces, abundant and diverse larval and adult food resources, and a location close to a water course formed by Scatter Creek.

1-E Bald Hill—(Thurston County, Washington). The Bald Hill subunit is a collection of balds (shallow-soil areas without typical conifer vegetation) and former clearcut areas that have not regenerated and now maintain features of open habitat that produce larval and adult food resources that can be utilized by the Taylor's checkerspot butterfly. All independent, isolated habitat patches are surrounded by conifer forests on all sides. Some patches are bordered by WDNR roads, and others are bordered by private roads used for fire control and to access the forested property. The Bald Hill subunit comprises a total of 176 ac (71 ha) (rounded up). The western habitat patch of this subunit is approximately 110 ac (45 ha), and the eastern patch is approximately 65 ac (26 ha); both are unoccupied at the time of listing.

The Taylor's checkerspot butterfly was recently extirpated from this historically occupied subunit. We have determined it is essential for the conservation of the Taylor's checkerspot butterfly because it has the potential to provide for the reintroduction and reestablishment of Taylor's checkerspot butterfly and to support recovery of the subspecies. This area presently contains many of the features to support long-term conservation and recovery of the Taylor's checkerspot butterfly, including a diverse topography of balds, steep slopes, canyons, oak glades, a rich diversity of larval and adult food resources, and patches of bare soil for basking and resting. This particular critical habitat subunit is unique in that it provides the only bald habitat for Taylor's checkerspot butterfly at low elevation within Thurston County.

Unit 2: Strait of Juan de Fuca—Taylor's Checkerspot Butterfly

The Strait of Juan de Fuca Unit is composed of 779 acres (315 ha) made up of balds, former clearcuts, coastal bluffs, coastal back dunes, and prairie in five subunits located in Clallam County and Island County, Washington.

Subunit descriptions

2-A Deception Pass State Park—(Island County, Washington). Deception Pass State Park is owned and managed by Washington State Parks. The subunit contains approximately 149 ac (60 ha) of designated critical habitat found along low-lying beaches (coastal dunes) and on balds along high, south-facing slopes within the park. These areas include the shoreline along Bowman Bay, Bowman Hill and Beach, Reservation Head, Pass Island, Goose Rock, and West Beach, all within the park. Deception Pass State Park is divided by Highway State 20, and bordered by the portion of Puget Sound that forms Deception Pass to the north, and to the south by private rural residential properties. This park was historically occupied by Taylor's checkerspot butterfly, but at this time the subunit is unoccupied.

We have determined this subunit is essential for the conservation of the subspecies because it has the potential for reintroduction and reestablishment of the Taylor's checkerspot butterfly to support recovery. In addition, although currently unoccupied, this area presently provides many of the features to support a reintroduced population of Taylor's checkerspot butterfly, including diverse topography with balds and beaches, abundant larval and adult food resources, areas of bare soil for basking of larvae and adults, and water sources made up of saltwater along the western shoreline and a freshwater wetland.

2-B Central Whidbey—(Island County, Washington). This subunit is located on Whidbey Island in Washington, and comprises a total of 229 ac (92 ha), and includes Ebey's Landing (~87 ac (35 ha)), the Naas-Admiralty Inlet Conservation Area (~8 ac (3 ha)), and the former Smith Prairie (~134 ac (54 ha)). The Central Whidbey subunit is made up of two distinct patches: one is located along the central-west coast on coastal bluffs of the island (Ebey), and the second (Smith Prairie) is located on relatively flat prairie located centrally-north on the island. The coastal area is bordered by Puget Sound to the west, and rural residential property and farmland to the east. The Smith Prairie is surrounded by rural residential properties on all sides;

Parker Road runs along the western border of the property, and Morse Road is found along the south boundary. This subunit was historically occupied but is currently unoccupied.

We have determined this subunit is essential for the conservation of the subspecies because it has the potential for reintroduction and reestablishment of Taylor's checkerspot butterfly to support recovery. In addition, although currently unoccupied, this area presently provides many of the features to support a reintroduced population of Taylor's checkerspot butterfly, including diverse topography with coastal bluffs and beaches, abundant larval and adult food resources, areas of bare soil, and water sources made up of a freshwater wetland, and saltwater along the western shoreline.

2-C Elwha—(Clallam County, Washington). The Elwha critical habitat subunit is composed of private lands in Clallam County made up of balds, and former clear cut areas within a landscape of conifer forests. The subunit polygons adjoin occupied patches owned and managed by the WDNR, one is owned and managed by a nongovernmental conservation organization, the Center for Natural Lands Management, and the other small parcel is owned by a private timber company. These two patches are found primarily on the south slope of Dan Kelly Ridge, and they are separated by essential habitat owned by WDNR that has been excluded due to an HCP providing for species-specific habitat management.

The habitat patches at both locations are bounded by conifer forests. The balds at each of these locations are presently occupied by the Taylor's checkerspot butterfly, which has been observed flying up and down the steep slopes and onto private lands. Both of these locations contain essential physical or biological features, including topographic heterogeneity, abundant and diverse larval and adult food resources, and bare soil for basking and resting. Puddles on the road provide a water source during the adult flight season.

Threats to the physical or biological features that are essential to the conservation of this species and may warrant special management considerations or protections include, but are not limited to, development; the inadvertent short-term negative impacts of restoration activities, such as control of native and nonnative, invasive, woody species such as Scot's broom, snowberry (*Symphoricarpos albus*), and Douglas fir; the use of herbicides; habitat modifications brought on by

succession of vegetation from lack of disturbance, at a small and large scale; disease affecting larval host plants; and the effects of climate change. The physical or biological features essential to the conservation of the species may require special management considerations or protection to sustain the open conditions that are needed to manage for and sustain the larval and adult food resources. Special management considerations may be required to provide protection to larval and adult food resources by reducing human disturbance during the flight season, and when eggs and early instar larvae are present.

2-D Sequim—(Clallam County, Washington). Sequim is a private property estate and farm of low-lying stabilized dune habitat of approximately 151 ac (61 ha). The subunit includes stabilized dunes and beach habitat adjacent to the Strait of Juan de Fuca; it is approximately 20 ft (6 m) above sea level. The landowner has been working cooperatively with the WDFW to manage their property for multiple uses, including the conservation of Taylor's checkerspot butterfly. The subunit is occupied at the time of listing.

The Sequim subunit contains several essential physical or biological features, including landscape heterogeneity with fore and back dune areas and terraces; rich and abundant larval and adult food resources; a marsh; and bare soil for basking and resting.

Threats to the physical or biological features that are essential to the conservation of this species and may warrant special management considerations or protections include, but are not limited to, development; the inadvertent short-term negative impacts of restoration activities; habitat modifications brought on by succession of vegetation from lack of disturbance, at a small and large scale; disease affecting larval host plants; and the effects of climate change. The physical or biological features essential to the conservation of the species may require special management considerations or protection to sustain the open conditions that are needed to manage for and sustain the larval and adult food resources. Special management considerations may be required to provide protection to larval and adult food resources by reducing human disturbance during the flight season, and when eggs and early instar larvae are present.

2-E Dungeness—(Clallam County, Washington). The Dungeness subunit is found entirely on U.S. Forest Service (USFS) land on the northeast Olympic Peninsula. This subunit comprises a

total of 160 ac (65 ha) and is composed of bald habitat, and former clearcuts that function similarly to balds. The three occupied areas within this subunit and are known as Bear Mountain (low elevation), 3 O'Clock Ridge (middle elevation) (which is composed of two habitat patches), and the upper Dungeness (highest elevation). These locations on USFS lands are the highest elevations known to be occupied by Taylor's checkerspot butterflies. The Bear Mountain location is entirely surrounded by conifer forests and originated as a small harvest unit that functions similar to a bald. 3 O'Clock ridge is bounded by the upper Dungeness Road on the northwest boundary, Cougar Creek to the northeast, Bungalow creek to the southwest, and conifer forests to the southeast of the occupied unit. Upper Dungeness is bounded by an unnamed creek to the northeast and Mueller Creek to the southwest, and by conifer forests to the southeast of the occupied unit. All habitat patches within this subunit are presently occupied by the Taylor's checkerspot butterfly.

The subunit contains several essential physical or biological features, including landscape heterogeneity, abundant larval and adult food resources, nearby streams, and plentiful areas of bare ground for basking and resting. Early restoration work conducted by USFS has included tree harvesting and removal, which has resulted in the expansion of larval and adult food resources in this habitat.

Threats to the physical or biological features that are essential to the conservation of this species and may warrant special management considerations or protections include, but are not limited to, the inadvertent short-term negative impacts of restoration activities and control of native and nonnative, woody species; the use of herbicides that may impact larval and adult nectar resources; habitat modification brought on by succession of vegetation from lack of disturbance, at a small and large scale; disease affecting larval host plants; and the effects of climate change. The physical or biological features essential to the conservation of the species may require special management considerations or protection to sustain the open conditions that are needed to manage for and sustain the larval and

adult food resources. Special management considerations may be required to provide protection to larval and adult food resources by reducing human disturbance during the flight season, and when eggs and early instar larvae are present.

Unit 4: Willamette Valley—Taylor's Checkerspot Butterfly

Unit 4, located in the Willamette Valley, is the only critical habitat unit that includes critical habitat for both the streaked horned lark and Taylor's checkerspot butterfly. Unit 4 includes four subunits in the State of Oregon; three for the streaked horned lark (4-A, 4-B, and 4-C; described below), and a single subunit (4-D) for the Taylor's checkerspot butterfly in Benton County.

Unit 4-D Fitton Green-Cardwell Hill— (Benton County, Oregon). Fitton Green-Cardwell Hill is located in the eastern foothills of the Coastal Range on the western edge of the Willamette Valley. The habitat is composed of multiple small natural openings of approximately 3 ac (1 ha) in size within a conifer-oak forest landscape. These habitat patches collectively comprise the 20 ac (8 ha) that constitute Subunit 4-D. The northern patch of this subunit is a BPA right-of-way that passes through a large occupied patch of county-owned habitat that provides conservation benefit to the Taylor's checkerspot butterfly through the Benton County Prairie Species HCP. This subunit is currently occupied by the Taylor's checkerspot butterfly.

This subunit contains several of the essential physical or biological features for the Taylor's checkerspot butterfly, including native perennial bunchgrass plant communities with abundant larval and adult food resources, landscape heterogeneity, and bare soil for basking and resting.

Threats to the physical or biological features that are essential to the conservation of this species and may warrant special management considerations or protections include, but are not limited to, the inadvertent short-term negative impacts of restoration activities such as control of native and nonnative, invasive, woody species and invasive Mediterranean grasses through mechanical means and with herbicide; habitat modification due to succession of vegetation in the absence of disturbance, at a small and large scale; impacts of disease on larval food plants; and climate change. The

physical or biological features essential to the conservation of Taylor's checkerspot butterfly may require special management considerations or protection to sustain short-statured vegetation structure and to reduce human disturbance during the flight season or when eggs and early instar larvae are present. The physical or biological features of this site may be particularly vulnerable to the effects of recreational use, such as trampling of vegetation.

Streaked Horned Lark—Units 3 and 4

We are designating as critical habitat areas that we have determined are occupied at the time of listing and contain sufficient elements of physical or biological features to support life-history processes essential to the conservation of the streaked horned lark. We are designating two units as critical habitat for the streaked horned lark. The critical habitat areas we describe below constitute our current best assessment of areas that meet the definition of critical habitat for the subspecies. The two units we designate as critical habitat are: Unit 3—Washington Coast and Columbia River (with 13 subunits), and Unit 4—Willamette Valley (with 3 subunits). The Washington Coast and Columbia River Unit (Unit 3) totals 2,900 ac (1,173 ha) and includes 564 ac (228 ha) of Federal ownership, 2,209 ac (894 ha) of State-owned lands, and 126 ac (51 ha) of private lands. The Willamette Valley Unit (Unit 4) totals 1,729 ac (700 ha) and is entirely composed of Federal lands. We are designating a total of 4,629 ac (1,873 ha) of critical habitat for the streaked horned lark rangewide.

The streaked horned lark has been documented nesting on all of the subunits within the last few years, and all subunits are therefore considered occupied at the time of listing. All of the subunits currently have one or more of the physical or biological features essential to the conservation of the streaked horned lark, and which may require special management considerations or protection.

The critical habitat areas described below constitute our best assessment of areas that meet the definition of critical habitat for the streaked horned lark. The approximate area and landownership of each critical habitat unit and associated subunit is shown in Table 2.

TABLE 2—Critical Habitat Units for Streaked Horned Lark. NOTE: AREA SIZES MAY NOT SUM DUE TO ROUNDING. AREA ESTIMATES REFLECT ALL LAND WITHIN CRITICAL HABITAT UNIT BOUNDARIES

Unit 3: Washington Coast and Columbia River Islands		Federal	State	Private	Tribal	Other*	Currently occupied
	Subunit name	Ac (Ha)	Ac (Ha)	Ac (Ha)	Ac (Ha)	Ac (Ha)	Y/N
3-A	Damon Point	0	456 (185)	24 (10)	0	0	Y
3-B	Midway Beach	0	611 (247)	0	0	0	Y
3-C	Shoalwater Spit	0	377 (152)	102 (41)	0	0	Y
3-D	Leadbetter Point	564 (228)	101 (41)	0	0	0	Y
3-E	Rice Island	0	224 (91)	0	0	0	Y
3-F	Miller Sands	0	123 (50)	0	0	0	Y
3-G	Pillar Rock/Jim Crow	0	44 (18)	0	0	0	Y
3-H	Welch Island	0	43 (18)	0	0	0	Y
3-I	Tenasillahe Island	0	23 (9)	0	0	0	Y
3-J	Whites/Brown	0	98 (39)	0	0	0	Y
3-K	Wallace Island	0	13 (5)	0	0	0	Y
3-L	Crims Island	0	60 (24)	0	0	0	Y
3-M	Sandy Island	0	37 (15)	0	0	0	Y
Unit 3 Totals		564 (228)	2,209 (894)	126 (51)	0	0	
Unit 4: Willamette Valley:							
4-A	Baskett Slough NWR	1,006 (407)	0	0	0	0	Y
4-B	Ankeny NWR	264 (107)	0	0	0	0	Y
4-C	William L Finley NWR	459 (186)	0	0	0	0	Y
Unit 4 Totals		1,729 (700)	0	0	0	0	Y
Grand Total—all Units		2,293 (928)	2,209 (894)	126 (51)	0	0	
GRAND TOTAL OF ALL UNITS, ALL OWNERSHIP.				4,629 (1,873)			

* Other = Ports, local municipalities, and nonprofit conservation organizations.

Unit 3: Washington Coast and Columbia River—Streaked Horned Lark

On the Washington coastal sites, the streaked horned lark occurs on sandy beaches and breeds in the sparsely vegetated, low dune habitats of the upper beach. We are designating four subunits (Subunits 3-A, 3-B, 3-C, and 3-D) and a total of 2,235 ac (904 ha) as critical habitat on the Washington coast. The coastal sites are owned and managed by Federal, State, and private entities. The physical or biological features essential to the conservation of the streaked horned lark may require special management considerations or protection to reduce human disturbance during the nesting season, and the continued encroachment of invasive, nonnative plants requires special management to restore or retain the open habitat preferred by the streaked horned lark. Subunits 3-A, 3-B, 3-C, and 3-D overlap areas that are designated as critical habitat for the western snowy plover. The snowy plover nesting areas are posted and monitored during the spring and summer to keep recreational beach users away from the nesting areas; these management actions also benefit the streaked horned lark.

In the lower Columbia River, we are designating nine island subunits (Subunits 3-E through 3-M) for a total

of 665 ac (269 ha). The island subunits are owned by the States of Oregon and Washington. On the Columbia River island sites, only a small portion of each island is designated as critical habitat for the streaked horned lark; most of the areas mapped are used by the Corps for dredge material deposition in its channel maintenance program. Within any deposition site, only a portion is likely to be used by the streaked horned lark in any year, as the area of habitat shifts within the deposition site over time as new materials are deposited and as older deposition sites become too heavily vegetated for use by streaked horned larks. All of the island subunits are small, but are adjacent to open water, which provides the open landscape context needed by streaked horned larks.

The main threats to the essential features in the critical habitat subunits designated on the Columbia River islands are invasive vegetation and direct impacts associated with deposition of dredge material onto streaked horned lark nests during the nesting season. In all subunits, the physical or biological features essential to the conservation of each subspecies may require special management considerations or protection to manage, protect, and maintain the PCEs supported by the subunits. For those

threats that are common to all subunits, special management considerations or protections may be required to address direct or indirect habitat loss due to the location and timing of dredge material placement to areas that have become unsuitable for streaked horned lark nesting and wintering habitat.

Subunit 3-A: Damon Point—(Grays Harbor County, Washington). This critical habitat subunit is about 481 ac (194 ha) in size; of this, 456 ac (185 ha) are owned by the State, and 24 ac (10 ha) are under private ownership. It extends from the Ocean Shores wastewater treatment plant on the western edge through the Oyhut wildlife management unit and Damon Point spit (also called Protection Island). The vast majority of this area (~95 percent) is managed by the State of Washington (WDFW, WDNr, and Washington State Parks). This subunit is currently occupied and provides the physical or biological features essential to the conservation of the subspecies. The site has both the open landscape context and sparse, low-growing vegetation that make up the physical or biological features essential to the conservation of the subspecies. Streaked horned larks currently nest and winter on Damon Point and have also been documented nesting along the beach just west of the treatment plant. The physical or

biological features essential to the conservation of the streaked horned lark may require special management considerations or protection to reduce human disturbance during the nesting season and encroachment by invasive, nonnative plants that render the habitat too dense for use by streaked horned larks.

Subunit 3-B: Midway Beach—(Pacific County, Washington). This subunit is about 611 ac (247 ha) in size. The northern edge of the subunit starts at Grayland Beach State Park and extends south to the Warrenton Cannery road. The landward extent is defined by the vegetation and ownership line in the mid-dune area. This site is owned by the State of Washington (Washington State Parks and Recreation Department). This subunit is currently occupied and provides the physical or biological features essential to the conservation of the subspecies. Both open landscape context and the sparse, low-growing vegetation that make up the physical or biological features essential to the conservation of the subspecies are present at the site, and Midway Beach is used by streaked horned larks for both nesting and wintering. The physical or biological features essential to the conservation of the streaked horned lark may require special management considerations or protection to reduce human disturbance during the nesting season and encroachment by invasive, nonnative plants that render the habitat too dense for use by streaked horned larks.

Subunit 3-C: Shoalwater/Graveyard Spit—(Pacific County, Washington). This subunit is about 479 ac (194 ha); of this, 377 ac (152 ha) are owned by the State, and 102 ac (41 ha) are under private ownership. The central portion of the subunit (182 ac; 74 ha) is within the Shoalwater Bay Indian Reservation and has been excluded under section 4(b)(2) (see Exclusions), dividing the subunit into northwest and southeast sections. Streaked horned larks have been documented off and on at this site during the breeding season since 2000. Although the site has been unoccupied for the past couple of years, singing male streaked horned larks were documented at this site during surveys in June 2012; therefore, we consider this site to be currently occupied. As with the other areas along the Washington coast, streaked horned larks use this site for both nesting and wintering. The subunit is a dynamic area and has a constantly changing sand spit that supports the essential features for nesting and wintering habitat. The physical or biological features essential to the conservation of the streaked

horned lark may require special management considerations or protection to reduce human disturbance during the nesting season and encroachment by invasive, nonnative plants that render the habitat too dense for use by streaked horned larks.

Subunit 3-D: Leadbetter Point—(Pacific County, Washington). This subunit contains about 665 ac (269 ha) at the northern tip of the Long Beach Peninsula. This subunit is on the Willapa National Wildlife Refuge and the Seashore Conservation Area (managed by Washington State). This site is occupied and provides the physical or biological features essential to the conservation of the subspecies. Most of the streaked horned larks at this site nest within the habitat restoration area and in ponded swales landward of the restoration area that go dry in the summer (Ritchie 2012, pers. comm.). The site has the open landscape context and sparse, low-growing vegetation that make up the physical or biological features essential to the conservation of the subspecies. The Willapa National Wildlife Refuge completed its comprehensive conservation plan in August 2011, and manages habitat at the tip of Leadbetter Spit for the western snowy plover, streaked horned lark, and other native coastal species. These management activities are compatible with streaked horned lark conservation. As with the other coastal sites, Leadbetter is used by streaked horned larks year-round. The physical or biological features essential to the conservation of the streaked horned lark may require special management considerations or protection to maintain the early seral vegetation required by the subspecies and to minimize nest destruction and disturbance during the breeding season.

Subunit 3-E: Rice Island—(Clatsop County, Oregon, and Wahkiakum County, Washington). This subunit is about 224 ac (91 ha) in size. The island is located at river mile (RM) 21, approximately 7 mi (11 km) upstream of the Astoria-Megler Bridge near the mouth of the Columbia River. Although the island is within the planning boundary of the Julia Butler Hansen National Wildlife Refuge, Rice Island is owned by the Oregon Department of State Lands. A very small portion of the subunit is in Wahkiakum County and on Washington State lands. The Corps uses this site for dredge material disposal as part of its maintenance of the Columbia River shipping channel. This subunit is occupied and provides the features essential to the conservation of the subspecies. Streaked horned larks currently nest and winter on Rice

Island. The physical or biological features essential to the conservation of the streaked horned lark may require special management considerations or protection to maintain the early seral vegetation required by the subspecies and to minimize nest destruction and disturbance during the breeding season.

Subunit 3-F: Miller Sands Spit—(Clatsop County, Oregon). Miller Sands Spit is across the shipping channel from Rice Island at RM 24. The subunit is a sand spit 2 mi (1.2 km) long and about 123 ac (50 ha) in size on the northern shore of the island. The subunit is currently occupied and provides the physical or biological features essential to the conservation of the subspecies for nesting and wintering habitat. The island is owned by the Oregon Department of State Lands, but is also within the planning unit boundary for the Julia Butler Hansen National Wildlife Refuge. The Corps uses this site for dredge material disposal as part of its maintenance of the Columbia River shipping channel. The physical or biological features essential to the conservation of the streaked horned lark may require special management considerations or protection to maintain the early seral vegetation required by the subspecies and to minimize nest destruction and disturbance during the breeding season.

Subunit 3-G: Pillar Rock/Jim Crow Sands—(Clatsop County, Oregon). This island is located at about RM 27 on the Columbia River. The subunit is about 44 ac (18 ha) in size. Pillar Rock is currently occupied and provides the physical or biological features essential to the conservation of the subspecies. Streaked horned larks nest and winter at the site. The island is owned by the Oregon Department of State Lands and is within the planning unit boundary for the Julia Butler Hansen National Wildlife Refuge. The Corps uses this site for dredge material disposal as part of its maintenance of the Columbia River shipping channel. The physical or biological features essential to the conservation of the streaked horned lark may require special management considerations or protection to maintain the early seral vegetation required by the subspecies and to minimize nest destruction and disturbance during the breeding season.

Subunit 3-H: Welch Island—(Clatsop County, Oregon). This island is at RM 34 and is owned by the Oregon Department of State Lands. The critical habitat subunit is about 43 ac (18 ha) on the northeastern shore of the island. This site is currently occupied and provides the physical or biological features essential to the conservation of

the subspecies. The Corps uses this site for dredge material disposal as part of its maintenance of the Columbia River shipping channel. The physical or biological features essential to the conservation of the streaked horned lark may require special management considerations or protection to maintain the early seral vegetation required by the subspecies and to minimize nest destruction and disturbance during the breeding season.

Subunit 3-I: Tenasillahe Island—(Columbia County, Oregon). This island is at RM 38; the subunit is on a small unnamed spit at the southern tip of Tenasillahe Island. The subunit is about 23 ac (9 ha) in size. This site is currently occupied and provides the physical or biological features essential to the conservation of the subspecies. The site is owned by the Oregon Department of State Lands. The Corps uses this site for dredge material disposal as part of its maintenance of the Columbia River shipping channel. The physical or biological features essential to the conservation of the streaked horned lark may require special management considerations or protection to maintain the early seral vegetation required by the subspecies and to minimize nest destruction and disturbance during the breeding season.

Subunit 3-J: Whites/Brown Island—(Wahkiakum County, Washington). Whites/Brown Island is connected to the southern end of Puget Island at RM 46 and is owned by WDFW. The subunit is a small spit at the southern end of Whites/Brown Island and is about 98 ac (39 ha) in size. The site is used by the Corps for dredge material disposal as part of its maintenance of the Columbia River shipping channel. This site is currently occupied and provides the physical or biological features essential to the conservation of the subspecies. Whites/Brown Island supports one of the largest populations of streaked horned larks in the lower Columbia River islands. The physical or biological features essential to the conservation of the streaked horned lark may require special management considerations or protection to maintain the early seral vegetation required by the subspecies and to minimize nest destruction and disturbance during the breeding season.

Subunit 3-K: Wallace Island—(Columbia County, Oregon). Wallace Island is located across the channel from Whites/Brown Island at RM 47. Streaked horned larks were detected at the site in 2012, which is about 13 ac (5 ha) in size; therefore we consider the subunit presently occupied. The area is owned by the Oregon Department of State Lands. This site is not a dredge

material disposal site. This subunit currently contains the physical or biological features essential to the conservation of the species, but may require special management to maintain the low vegetative structure required by streaked horned larks.

Subunit 3-L: Crims Island—(Columbia County, Oregon). This island is located upstream of Wallace Island at RM 57. The subunit is about 60 ac (24 ha) in size. The subunit is currently occupied and provides the physical or biological features essential to the conservation of the subspecies. The area is owned by the Oregon Department of State Lands, but is also within the planning unit boundary for the Julia Butler Hansen National Wildlife Refuge. Crims Island is an approved Corps dredge material disposal site. The physical or biological features essential to the conservation of the streaked horned lark may require special management considerations or protection to maintain the early seral vegetation required by the subspecies and to minimize nest destruction and disturbance during the breeding season.

Subunit 3-M: Sandy Island—(Columbia County, Oregon). This island, at RM 76, is the island farthest upstream that is known to be used by streaked horned lark for nesting. The subunit is about 37 ac (15 ha) in size on the southern end of Sandy Island and is owned by the Oregon Department of State Lands. This subunit is currently occupied and provides the physical or biological features essential to the conservation of the subspecies. The Corps uses this site for dredge material disposal as part of its maintenance of the Columbia River shipping channel. The physical or biological features essential to the conservation of the streaked horned lark may require special management considerations or protection to maintain the early seral vegetation required by the subspecies and to minimize nest destruction and disturbance during the breeding season.

Unit 4: Willamette Valley—Streaked Horned Lark

Unit 4 (Willamette Valley) includes critical habitat subunits for both the Taylor's checkerspot butterfly and streaked horned lark, all in the State of Oregon. We are designating three subunits for the streaked horned lark in the Willamette Valley, all on the Willamette Valley National Wildlife Refuge Complex. The total acreage is 1,729 ac (700 ha). All of the subunits are occupied at the time of listing and contain the physical or biological features essential to the conservation of the subspecies that may require special

management considerations or protection. These subunits are managed mainly to provide forage for wintering dusky Canada geese, and this management is compatible with maintaining the essential features for the streaked horned lark. The refuge complex has incorporated management for streaked horned lark into its recently completed comprehensive conservation plan, and streaked horned lark habitat conservation is being implemented in the refuge units.

Subunit 4-A: Baskett Slough National Wildlife Refuge—(Polk County, Oregon). There are two parts to this critical habitat subunit, the area of which totals 1,006 ac (407 ha). Subunit 4-A North is 181 ac (73 ha) and is in the North Morgan Reservoir area of the refuge. Subunit 4-A South is 825 ac (334 ha) and is the South Baskett Slough Agricultural area of the refuge; State Route 22 forms the southeast boundary of the south subunit. Both of the subunits are agricultural fields that are heavily grazed by dusky Canada geese in the winter. This subunit is currently occupied and contains the physical or biological features essential to the conservation of the subspecies. Baskett Slough National Wildlife Refuge has large areas of agricultural lands and restored native prairies, which provide the landscape context and vegetation structure required by streaked horned larks. The refuge manages primarily for wintering dusky Canada geese, which also provides suitable management for streaked horned larks. This subunit is consistently used by streaked horned larks in the breeding season. The physical or biological features essential to the conservation of the streaked horned lark may require special management considerations or protection to maintain the early seral vegetation required by the subspecies and to minimize nest destruction and disturbance during the breeding season.

Subunit 4-B: Ankeny National Wildlife Refuge—(Marion County, Oregon). This site is in the middle of the Ankeny Refuge, in the Field 6 Complex; the northeast boundary of the subunit is formed by the Sydney Ditch. The critical habitat subunit is 264 ac (107 ha). The site is composed of agricultural fields that are heavily grazed by dusky Canada geese in the winter. The subunit is currently occupied and has consistent use by streaked horned larks in the breeding season. This subunit contains all of the physical or biological features essential to the conservation of the subspecies. Ankeny National Wildlife Refuge has both agricultural lands and restored native prairies, which provide the landscape context and vegetation

structure required by streaked horned larks. The refuge manages primarily for wintering dusky Canada geese, which also provides suitable management for streaked horned larks. The physical or biological features essential to the conservation of the streaked horned lark may require special management considerations or protection to maintain the early seral vegetation required by the subspecies and to minimize nest destruction and disturbance during the breeding season.

Subunit 4-C: William L. Finley National Wildlife Refuge—(Benton County, Oregon). This critical habitat subunit is on Fields 11 and 12 in the South Finley Agricultural Lands area of the refuge; Bruce Road bisects the subunit, and McFarland Road forms the southern boundary of the site. The subunit is 459 ac (186 ha) in size. This subunit is currently occupied and contains the physical or biological features essential to the conservation of the subspecies. The site is composed of agricultural fields that are heavily grazed by dusky Canada geese in the winter, and it has consistent use by streaked horned larks in the breeding season; streaked horned larks also winter at the refuge. Finley National Wildlife Refuge has large areas of agricultural lands and restored native prairies, which provide the landscape context and vegetation structure required by streaked horned larks. The refuge manages primarily for wintering dusky Canada geese, which also provides suitable management for streaked horned larks. The physical or biological features essential to the conservation of the streaked horned lark may require special management considerations or protection to maintain the early seral vegetation required by the subspecies and to minimize nest destruction and disturbance during the breeding season.

Effects of Critical Habitat Designation

Section 7 Consultation

Section 7(a)(2) of the Act requires Federal agencies, including the Service, to ensure that any action they fund, authorize, or carry out is not likely to jeopardize the continued existence of any endangered species or threatened species or result in the destruction or adverse modification of designated critical habitat of such species. In addition, section 7(a)(4) of the Act requires Federal agencies to confer with the Service on any agency action which is likely to jeopardize the continued existence of any species proposed to be listed under the Act or result in the

destruction or adverse modification of proposed critical habitat.

Decisions by the 5th and 9th Circuit Courts of Appeals have invalidated our regulatory definition of “destruction or adverse modification” (50 CFR 402.02) (see *Gifford Pinchot Task Force v. U.S. Fish and Wildlife Service*, 378 F.3d 1059 (9th Cir. 2004) and *Sierra Club v. U.S. Fish and Wildlife Service et al.*, 245 F.3d 434, 442 (5th Cir. 2001)), and we do not rely on this regulatory definition when analyzing whether an action is likely to destroy or adversely modify critical habitat. Under the statutory provisions of the Act, we determine destruction or adverse modification on the basis of whether, with implementation of the proposed Federal action, the affected critical habitat would continue to serve its intended conservation role for the species.

If a Federal action may affect a listed species or its critical habitat, the responsible Federal agency (action agency) must enter into consultation with us. Examples of actions that are subject to the section 7 consultation process are actions on State, tribal, local, or private lands that require a Federal permit (such as a permit from the U.S. Army Corps of Engineers under section 404 of the Clean Water Act (33 U.S.C. 1251 *et seq.*) or a permit from the Service under section 10 of the Act) or that involve some other Federal action (such as funding from the Federal Highway Administration, Federal Aviation Administration, or the Federal Emergency Management Agency). Federal actions not affecting listed species or critical habitat, and actions on State, tribal, local, or private lands that are not federally funded or authorized, do not require section 7 consultation.

As a result of section 7 consultation, we document compliance with the requirements of section 7(a)(2) through our issuance of:

(1) A concurrence letter for Federal actions that may affect, but are not likely to adversely affect, listed species or critical habitat; or

(2) A biological opinion for Federal actions that may affect and are likely to adversely affect, listed species or critical habitat.

When we issue a biological opinion concluding that a project is likely to jeopardize the continued existence of a listed species and/or destroy or adversely modify critical habitat, we provide reasonable and prudent alternatives to the project, if any are identifiable, that would avoid the likelihood of jeopardy and/or destruction or adverse modification of critical habitat. We define “reasonable

and prudent alternatives” (at 50 CFR 402.02) as alternative actions identified during consultation that:

(1) Can be implemented in a manner consistent with the intended purpose of the action,

(2) Can be implemented consistent with the scope of the Federal agency’s legal authority and jurisdiction,

(3) Are economically and technologically feasible, and

(4) Would, in the Director’s opinion, avoid the likelihood of jeopardizing the continued existence of the listed species and/or avoid the likelihood of destroying or adversely modifying critical habitat.

Reasonable and prudent alternatives can vary from slight project modifications to extensive redesign or relocation of the project. Costs associated with implementing a reasonable and prudent alternative are similarly variable.

Regulations at 50 CFR 402.16 require Federal agencies to reinitiate consultation on previously reviewed actions in instances where we have listed a new species or subsequently designated critical habitat that may be affected and the Federal agency has retained discretionary involvement or control over the action (or the agency’s discretionary involvement or control is authorized by law). Consequently, Federal agencies sometimes may need to request reinitiation of consultation with us on actions for which formal consultation has been completed, if those actions with discretionary involvement or control may affect subsequently listed species or designated critical habitat.

Application of the “Adverse Modification” Standard

The key factor related to the adverse modification determination is whether, with implementation of the proposed Federal action, the affected critical habitat would continue to serve its intended conservation role for the species. Activities that may destroy or adversely modify critical habitat are those that alter the physical or biological features to an extent that appreciably reduces the conservation value of critical habitat for the Taylor’s checkerspot butterfly or the streaked horned lark. As discussed above, the role of critical habitat is to support life-history needs of the species and provide for the conservation of the species.

Section 4(b)(8) of the Act requires us to briefly evaluate and describe, in any proposed or final regulation that designates critical habitat, activities involving a Federal action that may destroy or adversely modify such

habitat, or that may be affected by such designation.

Activities that may affect critical habitat, when carried out, funded, or authorized by a Federal agency, should result in consultation for the Taylor's checkerspot butterfly or streaked horned lark. These activities include, but are not limited to:

(1) Actions that restore, alter, or degrade habitat features through development, agricultural activities, burning, mowing, herbicide use or other means in suitable habitat for the Taylor's checkerspot butterfly or the streaked horned lark.

(2) Actions that would alter the physical or biological features of critical habitat including modification of the composition and structure of vegetation in suitable habitat for the Taylor's checkerspot butterfly or the streaked horned lark. Such activities could include, but are not limited to, construction, grading or other development, mowing, conversion of habitat, or use of herbicides to remove vegetation (recreational use, off-road vehicles on Federal, State, private, or Tribal lands). These activities may affect the physical or biological features of critical habitat for the Taylor's checkerspot butterfly and streaked horned lark, by removing sources of food, shelter, nesting or oviposition sites, or otherwise impacting habitat essential for completion of life history.

(3) Actions that would reduce the open landscape context required by the streaked horned lark, such as construction of buildings or planting tall trees adjacent to a suitable site.

(4) Deposition of dredge materials on occupied streaked horned lark habitats during the breeding season.

(5) Installation of shoreline stabilization structures or modification of beaches and open shorelines where occupied by the streaked horned lark or where critical habitat occurs for the streaked horned lark.

Exemptions

Application of Section 4(a)(3) of the Act

The Sikes Act Improvement Act of 1997 (Sikes Act) (16 U.S.C. 670a) required each military installation that includes land and water suitable for the conservation and management of natural resources to complete an integrated natural resources management plan (INRMP) by November 17, 2001. An INRMP integrates implementation of the military mission of the installation with stewardship of the natural resources found on the base. Each INRMP includes:

(1) An assessment of the ecological needs on the installation, including the need to provide for the conservation of listed species;

(2) A statement of goals and priorities;

(3) A detailed description of management actions to be implemented to provide for these ecological needs; and

(4) A monitoring and adaptive management plan.

Among other things, each INRMP must, to the extent appropriate and applicable, provide for fish and wildlife management; fish and wildlife habitat enhancement or modification; wetland protection, enhancement, and restoration where necessary to support fish and wildlife; and enforcement of applicable natural resource laws.

The National Defense Authorization Act for Fiscal Year 2004 (Pub. L. 108–136) amended the Act to limit areas eligible for designation as critical habitat. Specifically, section 4(a)(3)(B)(i) of the Act (16 U.S.C. 1533(a)(3)(B)(i)) now provides: "The Secretary shall not designate as critical habitat any lands or other geographical areas owned or controlled by the Department of Defense, or designated for its use, that are subject to an integrated natural resources management plan prepared under section 101 of the Sikes Act (16 U.S.C. 670a), if the Secretary determines in writing that such plan provides a benefit to the species for which critical habitat is proposed for designation."

We consult with the military on the development and implementation of INRMPs for installations with listed species. We analyzed INRMPs developed by military installations located within the range of the critical habitat designation for the Taylor's checkerspot butterfly and streaked horned lark to determine if they meet the criteria for exemption from critical habitat under section 4(a)(3) of the Act. The following areas are Department of Defense lands with completed, Service-approved INRMPs within the critical habitat designation.

Approved INRMPs

U.S. Army Joint Base Lewis-McChord—JBLM, formerly known as Fort Lewis, is an 86,500-ac (35,000-ha) U.S. Army military reservation in western Washington, south of Tacoma and east of the Puget Sound. JBLM contains some of the largest remaining intact prairies in the south Puget Sound basin, with approximately 20,352 ac (8,236 ha) of prairies, one of the rarest ecosystems in the United States, which also supports both the Taylor's checkerspot butterfly and streaked horned lark. Since 2003, JBLM has

managed the prairies located on the base according to their Prairie Management Plan, which was collaboratively prepared by Robert Altman of the American Bird Conservancy (ABC), the Environmental and Natural Resources Division of JBLM's Wildlife Branch, and The Nature Conservancy (TNC) of Washington. The prairies found on JBLM are currently managed by JBLM's Fish and Wildlife Program and the primary mission for the JBLM prairies is to provide an open environment for military training. JBLM has a history of applying an ecosystem management strategy to their prairies to provide for multiple conservation goals, which have included promoting native biological diversity, maintaining and restoring unique plant communities, and providing habitat for several rare prairie species. There are 2,324 ac (941 ha) of lands within the boundary of JBLM that were identified in the proposed critical habitat designation for the Taylor's checkerspot butterfly; these lands included all of subunits 1–A, 1–B, 1–C, and 1–E in the proposed rule (77 FR 61937; October 11, 2012). JBLM has the largest naturally occurring population of the Taylor's checkerspot butterfly anywhere in its range. This significant Federal landholding provides the largest contiguous block of prairie in Washington as well.

JBLM has an INRMP in place that was approved in 2006, which JBLM is in the process of updating. In 2012, JBLM amended their existing INRMP with specific regard to the Taylor's checkerspot butterfly by completing an ESMP that includes guidelines for protecting, maintaining, and enhancing habitat essential to support the Taylor's checkerspot butterfly on JBLM. The Service has found, in writing, that the ESMP under the JBLM INRMP provides a conservation benefit to the Taylor's checkerspot butterfly.

JBLM's ESMPs identify management objectives for the conservation of Taylor's checkerspot butterfly and streaked horned lark. For the Taylor's checkerspot butterfly, the ESMP specifically includes nine proposed "priority habitat" focus areas on JBLM for management of the Taylor's checkerspot butterfly and its associated habitat. The management objective is to improve the populations of Taylor's checkerspot butterflies both on and off JBLM. JBLM's Fish and Wildlife Program proposes several management objectives to attain this goal: (1) They will coordinate with the Service and WDFW on increasing the number of populations and expand their distribution on and off the base; (2) the JBLM Fish and Wildlife Program will

monitor occupied Taylor's checkerspot butterfly populations to detect habitat degradation, weather, and climate factors that influence populations dynamics; and (3) they will evaluate the efficacy of their ESMP, and adapt their management if required. JBLM has also committed to restore and sustain priority habitat areas through a number of management efforts. This will be accomplished by controlling invasive, nonnative plant species and encroaching conifers, and as land is cleared they will replant with the larval host and adult nectar plants for Taylor's checkerspot butterfly. Restoration actions to enhance and maintain suitable habitat conditions includes ecological prescribed burning, mowing, application of herbicides where needed, girdling of encroaching conifers, manual removal, and biological control using integrated pest management. Another objective is to purchase lands off JBLM for the express purpose of managing the locations for Taylor's checkerspot butterfly habitat and translocation. To date, over 4,000 ac (1,620 ha) have been acquired using Area Compatible Use Buffer (ACUB) program funding.

There are 2,813 ac (1,138 ha) of lands within the boundary of JBLM that were

identified in the proposed critical habitat designation for the streaked horned lark; these lands included all of subunits 1-B, 1-C, 1-D, and 1-E in the proposed rule (77 FR 61937; October 11, 2012). The ESMP for the streaked horned lark identifies management objectives that are applied in specific locations on JBLM where this subspecies nests, including McChord Airfield, Gray Army Airfield, 13th Division Prairie (Training Area 14), and the eastern portion of the 91st Division Prairie. The management objectives that are applied for the protection of streaked horned larks include: (1) Scheduled mowing regimes to minimize impacts to streaked horned lark at the military airfields during the nesting season. The mowing restrictions are done in coordination with the FAA to meet airport safety requirements for vegetation management; (2) limiting off-road vehicle use in areas where streaked horned larks are nesting; (3) annual surveys for streaked horned larks in coordination with the CNLM and the WDFW at all of the known occupied sites. Protection buffers will be applied around the nesting areas at 13th Division Prairie and all training activities will be seasonally restricted in

these areas; and (4) evaluating the efficacy of their ESMP, and adapt their management if required. As described above, JBLM maintains and restores the prairie areas on base, including areas used by the streaked horned lark. The Service has found, in writing, that the ESMP under the JBLM INRMP provides a conservation benefit to the streaked horned lark.

Based on the above considerations, and in accordance with section 4(a)(3)(B)(i) of the Act, we have determined that the identified Department of Defense lands are subject to the JBLM INRMP and that conservation efforts identified in the ESMPs under the INRMP will provide a conservation benefit to the Taylor's checkerspot butterfly and streaked horned lark. Therefore, lands within this installation are exempt from critical habitat designation under section 4(a)(3) of the Act. We are not including approximately 2,324 ac (941 ha) of habitat for the Taylor's checkerspot butterfly and 2,813 ac (1,138 ha) for the streaked horned lark in this final critical habitat designation because of this exemption. The lands exempted under section 4(a)(3) are identified in Tables 3 and 4.

TABLE 3—AREAS EXEMPTED FROM THE DESIGNATION OF CRITICAL HABITAT FOR THE TAYLOR'S CHECKERSPOT BUTTERFLY UNDER SECTION 4(a)(3) OF THE ACT BY CRITICAL HABITAT UNIT

Unit	Specific area	Areas meeting the definition of critical habitat in acres (hectares)	Areas exempted in acres (hectares)
1	TA7S	78 (32)	78 (32)
1	91st Division Prairie	1,377 (557)	1,377 (557)
1	13th Division Prairie	647 (262)	647 (262)
1	Tenalquot Prairie	222 (90)	222 (90)
Total .....	.....	2,324 (941)	2,324 (941)

TABLE 4—AREAS EXEMPTED FROM THE DESIGNATION OF CRITICAL HABITAT FOR THE STREAKED HORNED LARK UNDER SECTION 4(a)(3) OF THE ACT BY CRITICAL HABITAT UNIT

Unit	Specific area	Areas meeting the definition of critical habitat in acres (hectares)	Areas exempted in acres (hectares)
1	McChord Airforce Base	759 (307)	759 (307)
1	Gray Army Airfield	347 (140)	347 (140)
1	91st Division Prairie	888 (359)	888 (359)
1	13th Division Prairie	819 (331)	819 (331)
Total .....	.....	2,813 (1,138)	2,813 (1,138)

Exclusions

Application of Section 4(b)(2) of the Act

Section 4(b)(2) of the Act states that the Secretary shall designate and make revisions to critical habitat on the basis of the best available scientific data after taking into consideration the economic

impact, national security impact, and any other relevant impact of specifying any particular area as critical habitat. The Secretary may exclude an area from critical habitat if s/he determines that the benefits of such exclusion outweigh the benefits of specifying such area as part of the critical habitat, unless s/he

determines, based on the best scientific data available, that the failure to designate such area as critical habitat will result in the extinction of the species. In making that determination, the statute on its face, as well as the legislative history, are clear that the Secretary has broad discretion regarding

which factor(s) to use and how much weight to give to any factor.

In considering whether to exclude a particular area from the designation, we identify the benefits of including the area in the designation, identify the benefits of excluding the area from the designation, and evaluate whether the benefits of exclusion outweigh the benefits of inclusion. If the analysis indicates that the benefits of exclusion outweigh the benefits of inclusion, the Secretary may exercise her discretion to exclude the area only if such exclusion would not result in the extinction of the species.

When identifying the benefits of inclusion for an area, we consider the additional regulatory benefits that area would receive from the protection from adverse modification or destruction as a result of actions with a Federal nexus; the educational benefits of mapping essential habitat for recovery of the listed species; and any benefits that may result from a designation due to State or Federal laws that may apply to critical habitat.

When identifying the benefits of exclusion, we consider, among other things, whether exclusion of a specific area is likely to result in conservation; the continuation, strengthening, or encouragement of partnerships; or implementation of a management plan that provides equal to or more

conservation than a critical habitat designation would provide.

In the case of the Taylor’s checkerspot butterfly and streaked horned lark, the benefits of critical habitat include public awareness of the presence of Taylor’s checkerspot butterflies and streaked horned larks and the importance of habitat protection, and, in cases where a Federal nexus exists, increased habitat protection for these species due to the protection from adverse modification or destruction of critical habitat.

When we evaluate the existence of a conservation or management plan when considering the benefits of exclusion, we consider a variety of factors, including but not limited to, whether the plan is finalized; how it provides for the conservation of the essential physical or biological features; whether there is a reasonable expectation that the conservation management strategies and actions contained in a management plan will be implemented into the future; whether the conservation strategies in the plan are likely to be effective; and whether the plan contains a monitoring program or adaptive management to ensure that the conservation measures are effective and can be adapted in the future in response to new information.

After identifying the benefits of inclusion and the benefits of exclusion, we carefully weigh the two sides to

evaluate whether the benefits of exclusion outweigh those of inclusion. If our analysis indicates that the benefits of exclusion outweigh the benefits of inclusion, we then determine whether exclusion would result in extinction. If exclusion of an area from critical habitat will result in extinction, we will not exclude it from the designation.

Based on the information provided by entities seeking exclusion, as well as any additional public comments received and information in our files, we evaluated whether certain lands in the proposed critical habitat were appropriate for exclusion from this final designation pursuant to section 4(b)(2) of the Act. We considered the areas discussed below for exclusion under section 4(b)(2) of the Act, and present our detailed analysis below. For those areas in which the Secretary has exercised her discretion to exclude, we conclude that:

(1) Their value for conservation will be preserved in the near future by existing protective actions; or

(2) The benefits of excluding the particular area outweigh the benefits of their inclusion, based on the “other relevant factor” provisions of section 4(b)(2) of the Act.

Taylor’s Checkerspot Butterfly

Table 5 shows the areas we are excluding from critical habitat for the Taylor’s checkerspot butterfly.

TABLE 5—AREAS EXCLUDED FROM THE DESIGNATION OF CRITICAL HABITAT FOR THE TAYLOR’S CHECKERSPOT BUTTERFLY UNDER SECTION 4(b)(2) OF THE ACT BY CRITICAL HABITAT UNIT

Unit	Specific area	Areas meeting the definition of critical habitat in acres (hectares)	Areas excluded in acres (hectares)
1	Rocky Prairie NAP	38 (16)	38 (16)
1	Mima Mounds NAP	406 (164)	406 (164)
1	Scatter Creek	731 (296)	731 (296)
1	Rock Prairie	621 (251)	378 (153)
1	Bald Hill	422 (171)	247 (100)
1	West Rocky Prairie	134 (54)	134 (54)
2	Elwha	235 (95)	143 (58)
4	Fort Hoskins	6 (3)	6 (3)
4	Beazell Memorial Forest	61 (25)	61 (25)
4	Fitton Green—Cardwell Hill	59 (24)	40 (16)
Total .....	.....	2,713 (1,098)	2,184 (885)

Streaked Horned Lark

Table 6 shows the areas we are excluding from critical habitat for the streaked horned lark.

TABLE 6—AREAS EXCLUDED FROM THE DESIGNATION OF CRITICAL HABITAT FOR THE STREAKED HORNED LARK UNDER SECTION 4(b)(2) OF THE ACT BY CRITICAL HABITAT UNIT

Unit	Specific area	Areas meeting the definition of critical habitat in acres (hectares)	Areas excluded in acres (hectares)
1	Sanderson Field	376 (152)	376 (152)
1	Olympia Airport	575 (233)	575 (233)
3	Shoalwater Spit	661 (267)	182 (74)
3	Portland International Airport	431 (174)	431 (174)
4	McMinnville Municipal Airport	600 (243)	600 (243)
4	Salem Municipal Airport	534 (216)	534 (216)
4	Corvallis Municipal Airport	1,103 (446)	1,103 (446)
4	Eugene Airport	313 (126)	313 (126)
Total .....	.....	4,593 (1,857)	4,114 (1,664)

Exclusions Based on Economic Impacts

Under section 4(b)(2) of the Act, we consider the economic impacts of specifying any particular area as critical habitat. In order to consider economic impacts, we prepared an economic analysis of the proposed critical habitat designation and related factors (April 3, 2013; 78 FR 20074). This economic analysis addressed a total of six prairie taxa proposed for listing under the Act. In addition to the Taylor's checkerspot butterfly and streaked horned lark, the economic analysis included four subspecies of the Mazama pocket gopher (*Thomomys mazama* ssp.). The Mazama pocket gophers are being addressed in separate rulemakings.

The intent of the final economic analysis (FEA) (IEc 2013) is to quantify the economic impacts of all potential conservation efforts for the six prairie taxa, including the Taylor's checkerspot butterfly and streaked horned lark; some of these costs will likely be incurred regardless of whether we designate critical habitat (we consider such costs to be "baseline" costs). The economic impact of the final critical habitat designation is analyzed by comparing scenarios both "with critical habitat" and "without critical habitat." The "without critical habitat" scenario represents the baseline for the analysis, considering protections already in place for the species (e.g., under the Federal listing and other Federal, State, and local regulations). The baseline, therefore, represents the costs incurred regardless of whether critical habitat is designated. The "with critical habitat" scenario describes the incremental impacts associated specifically with the designation of critical habitat for the species. The incremental conservation efforts and associated impacts are those not expected to occur absent the designation of critical habitat for the species. In other words, the incremental

costs are those attributable solely to the designation of critical habitat above and beyond the baseline costs; these are the costs we consider in the final designation of critical habitat.

The FEA also addresses how potential economic impacts are likely to be distributed, including an assessment of any local or regional impacts of habitat conservation and the potential effects of conservation activities on government agencies, private businesses, and individuals. The FEA measures lost economic efficiency associated with residential and commercial development and public projects and activities, such as economic impacts on water management and transportation projects, Federal lands, small entities, and the energy industry. Decision-makers can use this information to assess whether the effects of the designation might unduly burden a particular group or economic sector. The FEA considers those costs that may occur in the 20 years following the designation of critical habitat, which was determined to be the appropriate period for analysis because limited planning information was available for most activities to reasonably forecast activity levels for projects beyond a 20-year timeframe. The FEA quantifies the economic impacts of Taylor's checkerspot butterfly, streaked horned lark, and Mazama pocket gopher conservation efforts associated with the following categories of activity: military activities; recreation and habitat management; airports and agricultural activities; transportation; electricity distribution and forestry activities; and dredging and other activities, including private gravel mining operations and development.

As noted above, the FEA identifies and analyzes the potential economic impacts associated with critical habitat designations proposed for six prairie

taxa: Taylor's checkerspot butterfly and streaked horned lark, as well as four subspecies of Mazama pocket gopher (the Roy Prairie, Olympia, Tenino, and Yelm pocket gophers). The Mazama pocket gopher subspecies are addressed in separate rulemakings. All estimates in the FEA are for all six taxa; therefore, estimates for individual taxa are less than the totals estimated in the FEA and summarized here.

The total present value impact anticipated to result from the designation of all areas proposed as critical habitat for the Taylor's checkerspot butterfly, streaked horned lark, and the four subspecies of Mazama pocket gophers is \$800,000 over the next 20 years, assuming a 7 percent discount rate, or \$70,000 on an annualized basis. The greatest incremental impacts of critical habitat apply to airports and agricultural activities at \$600,000 over the next 20 years, followed by recreation and habitat management at \$100,000, military activities at \$55,000, transportation at \$34,000, and electricity distribution and forestry activities at \$9,300 (present values over 20 years assuming a 7 percent discount rate). For the most part, the incremental impacts of the critical habitat designation are limited to the additional administrative costs of consultations within occupied areas. In addition, some incremental project modifications may occur on unoccupied subunits for the Taylor's checkerspot butterfly on JBLM; these costs are expected to be relatively small. Of the total costs, the analysis estimates that approximately 51 percent will be incurred by the Service, 31 percent by Federal action agencies, and 18 percent by third parties. The impacts estimated in the FEA apply to the proposed critical habitat in its entirety, and do not reflect final exclusions or exemptions.

We have not excluded any areas from the final designation of critical habitat based on economic impacts. A copy of the FEA with supporting documents may be obtained by contacting the Service's Washington Fish and Wildlife Office (see **FOR FURTHER INFORMATION CONTACT**) or by downloading from <http://www.regulations.gov> at docket number FWS-R1-ES-2013-0009.

Exclusions Based on National Security Impacts

In preparing this final rule, we have exempted from the designation of critical habitat those DOD lands with completed INRMPS that have been determined to provide a benefit to the Taylor's checkerspot butterfly and streaked horned lark. We have subsequently determined that the remaining lands within the designation of critical habitat for the Taylor's checkerspot butterfly and streaked horned lark are not owned or managed by the Department of Defense; therefore we anticipate no impact on national security. Consequently, the Secretary is not exercising her discretion to exclude any areas from this final designation based on impacts on national security.

Exclusions Based on Other Relevant Impacts

Under section 4(b)(2) of the Act, we consider any other relevant impacts, in addition to economic impacts and impacts on national security. We consider a number of factors, including whether the landowners have developed any HCPs or other species specific management plans for the area that would benefit the Taylor's checkerspot butterfly or streaked horned lark, or whether there are conservation partnerships that would be encouraged by designation of, or exclusion from, critical habitat. In addition, we look at any tribal issues, and consider the government-to-government relationship of the United States with tribal entities. We also consider any social impacts that might occur because of the designation.

Land and Resource Management Plans, Conservation Plans, or Agreements Based on Conservation Partnerships

We consider a current land management or conservation plan (HCPs as well as other types) to provide adequate management or protection if it meets the following criteria:

(1) The plan is complete and provides the same or better level of protection from adverse modification or destruction than that provided through a consultation under section 7 of the Act;

(2) There is a reasonable expectation that the conservation management strategies and actions will be implemented for the foreseeable future, based on past practices, written guidance, or regulations; and

(3) The plan provides conservation strategies and measures consistent with currently accepted principles of conservation biology.

We find that the Rocky Prairie, Mima Mounds, and Bald Hill Natural Area Preserves (NAPs), as well as WDNR-owned parcels on Dan Kelly Ridge and in Eden Valley (all of which are covered under the WDNR State Trust Lands HCP); the WDFW Scatter Creek Wildlife Area Management Plan (which also covers the adjacent private land); the WDFW West Rocky Prairie Wildlife Area Management Plan; the Merrill and Ring Voluntary Habitat Conservation Plan; the NRCS Colvin Ranch Grassland Reserve Program Management Plan; and the Benton County Prairie Species HCP, all fulfill the above criteria. We are excluding these non-Federal lands covered by these plans because the plans adequately provide for the long-term conservation of the Taylor's checkerspot butterfly and the Secretary has determined that the benefits of excluding such areas outweigh the benefits of including them in critical habitat.

As a result of considering other relevant impacts, we have additionally excluded non-Federal airports from final critical habitat for the streaked horned lark, based upon the Secretary's determination that the benefit of excluding such areas outweighs the benefit of including them in critical habitat, as described below.

Washington Department of Natural Resources State Trust Lands HCP

The WDNR State Trust Lands HCP covers approximately 1.7 million (730,000 ha) of State lands in Washington. The permit associated with this HCP, issued January 30, 1997, was announced in the **Federal Register** on April 5, 1996 (61 FR 15297), has a term of 70 to 100 years, and covers activities primarily associated with commercial forest management, but also includes limited nontimber activities such as some recreational activities. The HCP covers all species, including the Taylor's checkerspot butterfly and other listed and unlisted species. We are excluding Washington State lands totaling approximately 823 ac (334 ha) that are covered and managed by the WDNR under their State Trust Lands HCP from Units 1 and 2 of this critical habitat designation under section 4(b)(2) of the Act.

The HCP addresses multiple species through a combination of strategies. The HCP includes a series of NAPs and Natural Resource Conservation Areas (NRCAs), including Rocky Prairie NAP, Mima Mounds NAP, and Bald Hill NAP. These preserves are managed consistent with the Natural Areas Preserve Act, forever protecting the highest quality examples of native ecosystems and rare plant and animal species, in addition to other natural features of State, regional or national significance. These preserves are used for education, scientific research, and to maintain Washington's native biological diversity. This network of preserves includes nearly 31,000 ac (12,550 ha) throughout the State, which range in size from 8 ac (3.2 ha) to 3,500 ac (1,416 ha). Management plans are developed for each NAP, which guide the actions necessary to protect each area's natural features, including research, monitoring, restoration, and other active management. In addition, there are approximately 132 ac (23 ha) in the Elwha drainage at Dan Kelly Ridge and Eden Valley that are also owned by WDNR and managed for Taylor's checkerspot butterfly under a separate plan. WDNR actively manages these three NAPs and the two additional sites (Dan Kelly and Eden Valley) to maintain high-quality prairie and bald habitats. All of these locations contain many of the essential physical or biological features to support the Taylor's checkerspot butterfly. Although these sites are not currently occupied by the Taylor's checkerspot butterfly, they have the potential to serve as the site of future translocations to re-establish the subspecies.

The NAP properties at Rocky Prairie, Mima Mounds, and Bald Hill, and the sites at Dan Kelly Ridge and Eden Valley (these last two are managed under a single plan), each have species-specific management plans that provide for the conservation of the Taylor's checkerspot butterfly, and these sites have been managed for the conservation of prairie species, including Taylor's checkerspot butterfly specifically. This ongoing practice of habitat management and conservation has fostered a diverse variety of larval and adult nectar resources for Taylor's checkerspot butterfly that complement the wide range of topographic variation within and between sites. The management planning for each of these areas has established a decades-long track record of activity focused on enhancing prairie composition and structure at each location: Rocky Prairie NAP Management Plan (WDNR 1989b), Mima Mounds NAP Management Plan (WDNR

1989a), Bald Hill NAP Management Plan (WDNR 1988), and WDNR Olympic Taylor's Checkerspot Butterfly Management Plan (Horton, 2010). The conservation measures applied at the three NAPs have more recently been refocused through the development of site-specific restoration plans for each location to benefit the Taylor's checkerspot butterfly and other rare prairie butterflies. These restoration plans (Wilderman and Davenport 2011a, 2011b, 2011c) provide for the needs of Taylor's checkerspot butterfly by protecting and managing all the WDNR NAPs in Thurston County, and implementing species-specific conservation measures designed to avoid and minimize impacts to the Taylor's checkerspot butterfly. The management guidelines were developed for areas that are currently occupied as well as areas that have suitable habitat but that are not known to be currently occupied by the Taylor's checkerspot butterfly. Because of the high success rate of recent Taylor's checkerspot butterfly translocations, the planning group that oversees the schedule for translocation would give weighted consideration to each of these high-quality prairie locations for future introductions of the Taylor's checkerspot butterfly.

Although both Dan Kelly Ridge and Eden Valley lack established, long-term, site-specific restoration plans, they are subject to an adaptive management restoration strategy implemented by WDFW rare species experts who are focused on the maintenance and expansion of appropriate habitat at and around the occupied areas. These restoration efforts at Dan Kelly Ridge and Eden Valley have been supported through a number of funding streams, including monies from the Service and DOD. Additionally, WDNR provides work crews to conduct tree and shrub removal which reflects an ongoing and increasing investment on the part of the land owner. Support provided in crew hours totaled \$5,000 in years past and has more than doubled that amount in 2013, indicating a significant investment in and commitment to the ongoing stewardship of these occupied properties.

Benefits of Inclusion—Rocky Prairie, Mima Mounds, and Bald Hill Natural Area Preserves, and the Dan Kelly Ridge and Eden Valley sites under the WDNR State Trust Lands HCP—The primary effect of designating any particular area as critical habitat is the requirement for Federal agencies to consult with us under section 7 of the Act to ensure actions they carry out, authorize, or fund do not adversely modify

designated critical habitat. Absent critical habitat designation in occupied areas, Federal agencies remain obligated under section 7 of the Act to consult with us on actions that may affect a federally listed species to ensure such actions do not jeopardize the species' continued existence. All three of the NAPs are currently unoccupied by the Taylor's checkerspot butterfly; therefore, a jeopardy analysis would not be triggered by a Federal agency action for Rocky Prairie, Mima Mounds, or Bald Hill NAPs. If the NAPs were designated as critical habitat, such an action would trigger consultation solely under the adverse modification standard of section 7. The WDNR-owned Dan Kelly Ridge and Eden Valley sites are both occupied and have been undergoing restoration through a federally-funded program (Wildlife and Sport Fish Restoration Program), thus any proposed actions for habitat restoration would trigger section 7 consultation for both the subspecies and the designated critical habitat. The benefits of inclusion in critical habitat at these sites would be minimized since they are occupied by Taylor's checkerspot butterfly, as any potential consultation under section 7 of the Act will evaluate the effects of the action on the conservation or functionality of the habitat for the subspecies regardless of whether critical habitat is designated for these lands. The analytical requirements to support a jeopardy determination on excluded land are similar, but not identical, to the requirements in an analysis for an adverse modification determination on included land. The additional benefit of consultation under the adverse modification standard at these occupied sites would therefore be reduced.

The inclusion of these areas as critical habitat could therefore provide some additional Federal regulatory benefits for the species consistent with the conservation standard based on the Ninth Circuit Court's decision in *Gifford Pinchot Task Force v. United States Fish and Wildlife Service*, 378 F.3d 1059 (9th Cir. 2004). As noted above, a potential benefit of inclusion would be the requirement of a Federal agency to ensure that their actions on these non-Federal lands would not likely result in the destruction or adverse modification of critical habitat. Any Federal nexus on these lands would likely result from actions to restore or maintain favorable habitat conditions, carried out under the HCP or granting of Federal funds for beneficial management of prairie-associated species, such as Taylor's checkerspot butterfly. The incremental benefit to the Taylor's checkerspot

butterfly from the small amount of resultant section 7 consultation required by this habitat management funding is likely minimal, especially considering that the action being consulted on is itself intended to benefit prairie-associated species.

The Service has coordinated with WDNR on conservation actions to be implemented for the Taylor's checkerspot butterfly at the three NAPs located in Thurston County, Washington, as well as the two sites at Dan Kelly Ridge and Eden Valley in Clallam County, Washington. An NAP is a land designation used by the State of Washington to protect the best examples of rare and vanishing flora, fauna, plant and animal communities, geological, and natural historical value, consistent with the Washington Natural Areas Preserves Act of 1972 (RCW 79.70). The two other sites (Dan Kelly Ridge and Eden Valley) are managed separately under their own plan, but are not designated as NAPs. Management of the NAPs in Thurston County is guided in large part by the South Puget Sound Prairie Landscape Working Group. The Service is a charter member of this partnership group, which was established in 1994, to promote and improve the management and planning of conservation actions on south Puget Sound prairies and associated habitats. The Working Group includes WDNR, JBLM, NRCS, WDFW, CNLM, the Washington Department of Transportation (WSDOT), as well as other Federal, State, county, city, nongovernmental, and private group entities, each with knowledge and expertise in prairie ecosystem management. The Working Group coordinates regularly, meeting twice-yearly to share information and discuss priorities, and making significant improvements on the ground in prairies and oak woodlands. At one of our south Puget Sound locations, volunteers implement restoration and recovery actions for prairie species every Tuesday throughout the year. This is a well-established group that is expected to continue its coordination efforts into the foreseeable future, regardless of the designation of critical habitat. Management of the Dan Kelly Ridge and Eden Valley sites receive oversight from the Taylor's Checkerspot Butterfly Working Group, a multi-agency working group that has been in existence since 2004. Participants in the working group include JBLM, NRCS, USFS, WDNR, WDFW, WSDOT, University of Washington researchers, CNLM, and other Federal, State, county, city, nongovernmental, private entities and

individuals, each with knowledge and expertise on the Taylor's checkerspot butterfly, its conservation, habitat, and restoration needs. Designation of these areas as critical habitat would therefore likely yield no additional benefit to the outputs of the working groups, their members, or their ease of coordination. The active, long-term restoration efforts already in place at these sites thus reduce the potential benefit of critical habitat.

Another potential benefit of including lands in a critical habitat designation is that it serves to educate landowners, State and local governments, and the public regarding the potential conservation value of an area. This helps focus and promote conservation efforts by identifying areas of high conservation value for the Taylor's checkerspot butterfly. The designation of critical habitat informs State agencies and local governments about areas that could be conserved under State laws or local ordinances. Any additional information about the needs of the Taylor's checkerspot butterfly or its habitat that reaches a wider audience can be of benefit to future conservation efforts. During the spring of 2013 alone, the Service hosted two prairie workshops, one public hearing, and two local Thurston County events attended by nearly 1,000 people to publicize and educate local community members of the subspecies' declining distribution, and the threat to the native flora and fauna found on western Washington prairies. An important conservation measure that is gained through these outreach networks is the ability to educate the public about the historical role and current importance of prairies to our local community and economy. Included among the outreach measures is the distribution of educational material, and encouraging landowners to conduct prairie restoration activities on their properties. At least two presentations resulting from research conducted at the Dan Kelly Ridge and Eden Valley sites have been given and additional work for these two sites is expected to be concluded in the near future that may further elevate public awareness in Clallam County about the conservation needs of the Taylor's checkerspot butterfly on the north Olympic Peninsula. Additional events are expected to occur in the future, and designation of the NAPs or the WDNR-owned Dan Kelly Ridge and Eden Valley sites as critical habitat is not expected to increase the number of such meetings or improve their outcomes; the additional educational value of critical habitat is therefore minimized.

The incremental benefit of inclusion is reduced because of the long-standing management planning and implementation efforts for each site, as discussed above. In addition, the NAP restoration plans provide greater protection to Taylor's checkerspot butterfly habitat than would the designation of critical habitat, since the planning effort is intended to actively improve the structure and composition of the habitat (critical habitat does not carry any requirement for habitat restoration or improvement). Although both Dan Kelly Ridge and Eden Valley lack established, long-term, site-specific restoration plans, they are subject to an adaptive management restoration strategy implemented by WDFW rare species experts focused on the maintenance and expansion of appropriate habitat at and around the occupied areas. These restoration efforts at Dan Kelly Ridge and Eden Valley have been supported through a number of funding streams, including monies from the Service. Therefore, designation of critical habitat on these areas would not provide any additional management focus that is not already occurring at these locations under Washington State management authority, through plans developed through our recovery program, or through the DOD ACUB funding authority, which has provided funding support for many of our local protected prairies, including the NAPs, Dan Kelly Ridge, and Eden Valley sites.

Benefits of Exclusion—Rocky Prairie, Mima Mounds, Bald Hill Natural Area Preserves, and the Dan Kelly Ridge and Eden Valley sites under the WDNR State Trust Lands HCP—The benefits of excluding these areas from critical habitat are relatively greater. A benefit of excluding lands within this HCP from critical habitat designation is that it would encourage the State and other parties to continue to work toward Taylor's checkerspot butterfly conservation. Since issuance of this HCP, a number of land transactions and land exchanges within the HCP area have occurred. These transactions have included creation of additional NRCAs and NAPs (land designations with high degree of protection), and have also included large land exchanges and purchases that have changed the footprint of the HCP. These land-based adjustments have facilitated better management on many important parcels and across larger landscapes than would otherwise have been possible. If lands within HCP plan areas are designated as critical habitat, it would likely have a negative effect on the willingness of various groups and funding sources to

accomplish these land-ownership adjustments because of a reluctance to acquire lands designated as critical habitat as well as a reduced willingness on the part of WDNR to accommodate the Service's goals. This HCP is located in key landscapes across the State, and the NAPs at Rocky Prairie, Mima Mounds, and Bald Hill, as well as the two sites at Dan Kelly Ridge and Eden Valley—which are covered by the HCP—contribute meaningfully to the recovery of the Taylor's checkerspot butterfly.

If lands within the WDNR HCP plan area are designated as critical habitat, it would also likely have a negative effect on our ability to establish new partnerships to develop HCPs, particularly large, regional HCPs that involve numerous participants or address landscape-level conservation of species and habitats. This HCP has served as a model for several completed and ongoing HCP efforts, including the Washington State Forest Practices HCP. By excluding these lands, we preserve our current private and local conservation partnerships and encourage additional conservation actions in the future because other parties see our exclusion as a sign that the Service will not impose duplicative regulatory burdens on landowners who have developed an HCP.

HCPs typically provide for greater conservation benefits to a covered species than section 7 consultations because HCPs ensure the long-term protection and management of a covered species and its habitat. In addition, funding for such management is ensured through the Implementation Agreement. Such assurances are typically not provided by section 7 consultations, which, in contrast to HCPs, often do not commit the project proponent to long-term, special management practices or protections. Thus, a section 7 consultation typically does not afford the lands it covers similar extensive benefits as an HCP. The development and implementation of HCPs provide other important conservation benefits, including the development of biological information to guide the conservation efforts and assist in species conservation, and the creation of innovative solutions to conserve species while meeting the needs of the applicant. In this case, substantial information has been developed from the research, monitoring, and surveys conducted by WDNR. Therefore, exclusion is a benefit because it maintains and fosters the development of biological information and innovative solutions.

Exclusion of these areas will additionally help us maintain an important and successful partnership with other Washington State conservation partners (via the South Puget Sound Prairie Landscape Working Group and the Taylor's Checkerspot Butterfly Working Group) who made a commitment more than a decade ago to include the Taylor's checkerspot butterfly in their management and restoration plans, as well as encouraging others to join in this and other conservation partnerships.

Benefits of Exclusion Outweigh Benefits of Inclusion—Rocky Prairie, Mima Mounds, Bald Hill Natural Area Preserves, and the Dan Kelly Ridge and Eden Valley sites under the WDNr State Trust Lands HCP—The Secretary has determined that the benefits of excluding the WDNr-managed Rocky Prairie, Mima Mounds, and Bald Hill NAPs found in Thurston County, and the Dan Kelly Ridge and Eden Valley sites in Clallam County, from the designation of critical habitat for Taylor's checkerspot butterfly outweigh the benefits of including these areas in critical habitat. Any Federal nexus on these lands would likely result from actions to restore or maintain favorable habitat conditions, undertaken under the HCP or granting of Federal funds for beneficial management of prairie-associated species, such as Taylor's checkerspot butterfly. If one were to occur, it would most likely be with the Service or DOD, and their actions will be geared toward the conservation benefits of restoring and enhancing habitat specifically for the Taylor's checkerspot butterfly, or other rare butterflies. This type of management would benefit Taylor's checkerspot butterfly if focused on the maintenance of open, short-statured vegetative conditions that Taylor's checkerspot butterfly typically occupies. The incremental benefit to the Taylor's checkerspot butterfly from the small amount of resultant section 7 consultation required by this habitat management funding is likely minimal, especially considering that the action being consulted on is itself intended to benefit prairie-associated species.

The South Puget Sound Prairie Landscape Working Group partnership, which contributes to management planning on the NAPs, and the Taylor's Checkerspot Butterfly Working Group, which provides guidance for the sites at Dan Kelly Ridge and Eden Valley, would not be additionally benefitted due to inclusion of these areas in critical habitat, as these working groups are well-established, cohesive, and productive groups that have yielded and

will continue to yield positive conservation outcomes for the Taylor's checkerspot butterfly on south Puget Sound prairies and the north Olympic Peninsula, including these sites, regardless of the designation of critical habitat. The conservation strategies of each NAP restoration plan and the ongoing adaptive habitat restoration strategies for are designed to protect and enhance habitat for the Taylor's checkerspot butterfly. These strategies include species-specific management actions to support Taylor's checkerspot butterflies, avoidance and minimization measures, and monitoring requirements to ensure proper implementation, which further minimizes the benefits of including these areas in a designation of critical habitat.

The WDNr State Trust Lands HCP provides for significant conservation and management within geographical areas that contain the physical or biological features essential to the conservation of Taylor's checkerspot butterfly, and helps achieve recovery of this subspecies through the conservation measures of the HCP. Exclusion of these lands from critical habitat will help foster the partnership we have developed with WDNr, through the development and continuing implementation of the HCP and the area management plans. It will also help us maintain and foster an important and successful partnership with our Washington State conservation partners in the South Puget Sound Prairie Landscape Working Group as well as with the species-specific Taylor's Checkerspot Butterfly Working Group, which shares significant overlap with the South Puget Sound Prairie Landscape Working Group and, by doing so, bridges between ecosystem management strategies and species-specific conservation actions. Both WDNr and the working groups have encouraged others to join in conservation partnerships as well, and exclusion of these lands will encourage the future development of such beneficial conservation partnerships. For these reasons, we have determined that the benefits of exclusion outweigh the benefits of inclusion in this case.

Exclusion Will Not Result in the Extinction of the Species—Rocky Prairie, Mima Mounds, Bald Hill Natural Area Preserves, and the Dan Kelly Ridge and Eden Valley sites under the WDNr State Trust Lands HCP—We have determined that exclusion of approximately 38 ac (16 ha) for the Rocky Prairie NAP (Unit 1—Rocky Prairie), 406 ac (164 ha) for the Mima Mounds NAP (Unit 1—Mima Mounds/Glacial Heritage), 247 ac (100 ha) for the

Bald Hill NAP (Unit 1—Bald Hills), 109 ac (44 ha) for the Dan Kelly Ridge site (Unit 2—Elwha), and 23 ac (9 ha) for the Eden Valley site (Unit 2—Elwha), all of which are covered under the WDNr State Trust Lands HCP, will not result in the extinction of Taylor's checkerspot butterfly. Actions covered by the HCP will not result in extinction of Taylor's checkerspot butterfly because: (1) the NAPs are not currently occupied by the subspecies, and; (2) and the occupied sites (Dan Kelly Ridge and Eden Valley) both have special dispensation from site designation as a source of merchantable timber, which allows for the removal of otherwise merchantable trees in favor of enhancing Taylor's checkerspot butterfly habitat. In all of these areas the State Trust Lands HCP provides for the future needs of the Taylor's checkerspot butterfly by restoring, maintaining, and creating habitat within these areas, and supporting management of Taylor's checkerspot butterfly habitat and that of other rare species through HCP compliance. Additionally, each of the areas operates under a specific management plan to guide long-term site management, and more recently developed restoration plans to direct the habitat enhancement activities at each location. For these reasons, we find that exclusion of these lands covered by the WDNr State Trust Lands HCP will not result in extinction of the Taylor's checkerspot butterfly. Based on the above discussion, the Secretary is exercising her discretion under section 4(b)(2) of the Act to exclude from this final critical habitat designation portions of the proposed critical habitat units or subunits that are within the WDNr State Trust Lands HCP-covered lands as identified above, totaling about 823 ac (334 ha).

Scatter Creek Wildlife Area and Adjacent Private Land, and the West Rocky Prairie Wildlife Area

We are excluding 767 ac (310 ha) of Washington State lands designated as Wildlife Areas, and 98 ac (40 ha) of private land inholding from this critical habitat designation under section 4(b)(2) of the Act. These Wildlife Areas are known as the Scatter Creek Wildlife Area (633 ac (256 ha)) (Unit 1—Scatter Creek) and West Rocky Prairie Wildlife Area (134 ac (54 ha)) (Unit 1—West Rocky Prairie), both owned and managed by WDFW. The private inholding is associated with the Scatter Creek Wildlife Area (Unit 1—Scatter Creek) and is managed by WDFW identically to the Wildlife Area itself. Wildlife Areas provide a variety of habitat for endangered and threatened species, including the Taylor's

checkerspot butterfly, and are managed for that purpose, among others. Each Wildlife Area operates under a Wildlife Area Management Plan specific to the unique management needs of that area. Species-specific management plans have been written for a subset of the Wildlife Areas, including Scatter Creek and West Rocky Prairie. WDFW's land acquisition strategy for Wildlife Areas requires their purchases provide the highest benefit to fish, wildlife, and the public. In addition, WDFW is currently developing an HCP for lands in Wildlife Areas with the help of the Service, which will incorporate a landscape-level approach to managing at-risk species, including Taylor's checkerspot butterfly.

WDFW developed a management plan for the Scatter Creek Wildlife Area and adjacent private land in 2010 that specifically details the habitat needs of Taylor's checkerspot butterfly and continues to refine habitat conservation measures through collaboration with local conservation partners from the Service, WDNR, the University of Washington, and CNLM (Hays 2010). WDFW also has a draft management plan to guide prairie management at the West Rocky Prairie Wildlife Area (WDFW 2011), which will be this area's guiding document until finalized. Prior to the management plan being developed, the site was managed for an array of species and recreational activities, including restoration actions designed to improve the prairie conditions for the Taylor's checkerspot butterfly, mardon skipper butterfly (*Polites mardon*), and Mazama pocket gopher. The Scatter Creek Wildlife Area and adjacent private lands are currently occupied by the Taylor's checkerspot butterfly; the West Rocky Prairie Wildlife Area is not known to be occupied by the subspecies.

Benefits of Inclusion—Scatter Creek Wildlife Area and Adjacent Private Land; West Rocky Prairie Wildlife Area—The primary effect of designating any particular area as critical habitat is the requirement for Federal agencies to consult with us under section 7 of the Act to ensure actions they carry out, authorize, or fund do not adversely modify designated critical habitat. Absent critical habitat designation in occupied areas, Federal agencies remain obligated under section 7 of the Act to consult with us on actions that may affect a federally listed species to ensure such actions do not jeopardize the species' continued existence.

The analysis of effects to critical habitat is a separate and different analysis from that of the effects to the species. Therefore, the difference in

outcomes of these two analyses represents the regulatory benefit of critical habitat. The regulatory standard is different, as the jeopardy analysis investigates the action's impact on the survival and recovery of the species, while the adverse modification analysis focuses on the action's effects on the designated habitat's contribution to conservation. This will, in many instances, lead to different results and different regulatory requirements. Thus, critical habitat designations have the potential to provide greater benefit to the recovery of a species than would listing alone.

The inclusion of these covered lands as critical habitat could provide some additional Federal regulatory benefits for the species consistent with the conservation standard based on the Ninth Circuit Court's decision in *Gifford Pinchot Task Force v. United States Fish and Wildlife Service*, 378 F.3d 1059 (9th Cir. 2004). As noted above, a potential benefit of inclusion would be the requirement of a Federal agency to ensure that their actions on these non-Federal lands would not likely result in the destruction or adverse modification of critical habitat. However, this additional analysis to determine whether a Federal action is likely to result in destruction or adverse modification of critical habitat is not likely to be significant because these covered lands are not under Federal ownership, making the application of section 7 less likely. As often as not, any actions required to restore or maintain favorable habitat conditions are not associated with a Federal action, and thus would not trigger any protections afforded by the designation of critical habitat. The granting of Federal funds for beneficial management of prairie-associated species such as Taylor's checkerspot butterfly would provide the only foreseeable Federal nexus for these non-Federal lands. WDFW has received funding specifically to improve habitat features such as vegetation composition, and structure to support rare and threatened butterflies, including the Taylor's checkerspot butterfly, mardon skipper butterfly, and valley silverspot butterfly (*Speyeria zerene bremnerii*). This funding will support activities through 2017. Funding is also provided to WDFW from the DOD ACUB program, which is a high priority program for DOD. Leadership at DOD has confirmed that the program will continue into the future (Jeff Foster, pers. comm. 2013). The small amount of resultant section 7 consultation required by this habitat management funding is not likely to provide much added

benefit to the species, as one of the primary threats to the Taylor's checkerspot butterfly is the loss and degradation of its habitat, therefore habitat considerations will already play into the jeopardy determination for the subspecies in the currently occupied area at Scatter Creek, and the additional consideration of adverse modification of critical habitat is unlikely to result in a different outcome. In addition, for both Scatter Creek and West Rocky Prairie, the action most likely to be consulted on is itself intended to benefit prairie-associated species, therefore the outcome of consultation is unlikely to provide a significant additional benefit to the species as a result of critical habitat designation.

The Service has coordinated with WDFW on conservation actions to be implemented for the Taylor's checkerspot butterfly at the Scatter Creek Wildlife Area and West Rocky Prairie Wildlife Area in south Thurston County, Washington. As with the NAPs in Thurston County, management of the prairie Wildlife Areas in Thurston County is guided in large part by the South Puget Sound Prairie Landscape Working Group, which was established in 1994, to promote and improve the management and planning of conservation actions on south Puget Sound prairies and associated habitats. This is a well-established group that is expected to continue its coordination efforts into the foreseeable future. Designation of these Wildlife Areas as critical habitat would yield no additional benefit to the outputs of the Working Group, its members, or their ease of coordination, as the active, long-term efforts of this group are expected to continue regardless of the designation of critical habitat. The incremental benefit from designating critical habitat for Taylor's checkerspot butterfly in these areas is further minimized because of the long-standing management planning efforts that have been implemented and planned for the two Wildlife Areas and the associated private land inholding, which is managed using the same management methods as the Wildlife Areas. These properties have implemented management for the conservation of prairie habitat and prairie associated species. Each Wildlife Area focuses their management to promote the production of larval host and adult nectar food resources for the Taylor's checkerspot butterfly, and these areas contain several of the essential physical or biological features to support the subspecies. Management planning for each of the Wildlife Areas has

established a track record of activity focused on enhancing prairie composition and structure. The conservation measures regularly implemented at the Wildlife Areas have recently been refocused through the development of site specific restoration plans for each location to benefit the Taylor's checkerspot butterfly and other rare prairie butterflies (Hays 2013). The restoration being implemented and the guidance from the management plan provides greater protection to Taylor's checkerspot butterfly habitat than the designation of critical habitat, since the planning effort is intended to actively improve the structure and composition of the habitat (the designation of critical habitat does not require any active management). Therefore, the existing management at this site will provide greater benefit than the regulatory designation of critical habitat, which only requires the avoidance of adverse modification and does not require the creation, improvement, or restoration of habitat.

Another potential benefit of including Wildlife Area lands in a critical habitat designation is that it serves to educate landowners, State and local governments, and the public regarding the potential conservation value of an area. This helps focus and promote conservation efforts by other parties by identifying areas of high conservation value for the Taylor's checkerspot butterfly. The designation of critical habitat informs State agencies and local governments about areas that could be conserved under State laws or local ordinances. Any additional information about the needs of the Taylor's checkerspot butterfly or its habitat that reaches a wider audience can be of benefit to future conservation efforts. During the spring of 2013 alone, the Service hosted two prairie workshops, one public hearing, and two local Thurston County events attended by nearly 1,000 people to publicize and educate local community members of the species' declining distribution, and the threat to the native flora and fauna found on western Washington prairies. An important conservation measure that is gained through these outreach networks is the ability to educate the public about the historical role and current importance of prairies to our local community and economy. Included among the outreach measures is the distribution of educational material, and encouraging landowners to conduct prairie restoration activities on their properties. Additional events are expected to occur in the future, and designation of the Wildlife Areas as

critical habitat is not expected to increase the number of such meetings or improve their outcomes. Therefore, the incremental benefit of critical habitat in terms of education value is negligible.

The incremental benefit of inclusion is minimized because of the long-standing management planning efforts for each Wildlife Area, and the associated private inholding, as discussed above. In addition, the restoration plans provide greater protection to Taylor's checkerspot butterfly habitat than the designation of critical habitat, since the planning effort is intended to actively improve the structure and composition of the habitat. Therefore, designation of critical habitat on these areas would not provide any additional management focus that is not already occurring at these locations under Washington State management authority, through plans developed through the Service's recovery program, or through the DOD ACUB funding authority which has provided funding support for many of our local protected prairies, including these Wildlife Areas.

Benefits of Exclusion—Scatter Creek Wildlife Area and Adjacent Private Land; West Rocky Prairie Wildlife Area—The benefits of excluding these two Wildlife Areas and the associated private inholding from designated critical habitat are substantial. We have worked to sustain a close partnership with WDFW through regular coordination and the development of the Wildlife Area management plans. The management plans contain provisions that will improve the conservation status of the Taylor's checkerspot butterfly. Measures contained in the management plans are consistent with recommendations from the Service for the conservation of the Taylor's checkerspot butterfly, and will afford benefits to the subspecies and its habitat.

Excluding these Wildlife Areas and associated private inholding from critical habitat designation will provide significant benefits in terms of sustaining and enhancing the excellent partnership between the Service, WDFW, and the private landowner, as well as other partners who participate in prairie management decision-making, with positive consequences for conservation. The willingness of WDFW and the private landowner to undertake conservation efforts for the benefit of the Taylor's checkerspot butterfly and to work with the Service to develop new management plans for the species will continue to reinforce those conservation efforts and our partnership, which will support the recovery process for

Taylor's checkerspot butterfly. We consider this voluntary partnership in conservation vital to our understanding of the status of Taylor's checkerspot butterfly on WDFW lands and throughout western Washington, and necessary for us to implement recovery actions such as habitat protection, restoration, and beneficial management actions for the subspecies. Furthermore, exclusion from critical habitat could have the benefit of encouraging other landowners to engage in similar conservation partnerships and efforts, with positive outcomes for the conservation of listed species.

The designation of critical habitat could have an unintended negative effect on our relationship with non-Federal landowners due to the perceived imposition of redundant government regulation. If lands within the area managed by WDFW for the benefit of the Taylor's checkerspot butterfly are designated as critical habitat, it could have a dampening effect on our continued ability to seek new partnerships with future participants including States, counties, local jurisdictions, conservation organizations, and private landowners, which together can implement various conservation actions (such as safe harbor agreements (SHAs), HCPs, and other conservation plans, particularly large, regional conservation plans that involve numerous participants or address landscape-level conservation of species and habitats) that we would be unable to accomplish otherwise. Our WDFW conservation partners made a commitment more than a decade ago to include the Taylor's checkerspot butterfly in their Wildlife Area implementation plan, and they have engaged with and encouraged others to join in conservation partnerships, such as the South Puget Sound Prairie Landscape Working Group. In addition, the private landowner serves as a model of voluntary conservation and may aid in fostering future voluntary conservation efforts by other private parties in other locations for the benefit of listed species; this is a significant benefit, since the majority of listed species occur on private lands. We consider the positive effect of excluding proven conservation partners from critical habitat to be a significant benefit of exclusion.

Benefits of Exclusion Outweigh Benefits of Inclusion—Scatter Creek Wildlife Area and Adjacent Private Land; West Rocky Prairie Wildlife Area—We have determined that the benefits of excluding these prairie Wildlife Areas (Scatter Creek and adjacent private land, and West Rocky

Prairie) from the designation of critical habitat for the Taylor's checkerspot butterfly outweigh the benefits of including these areas in critical habitat. The regulatory and informational benefits of inclusion will be minimal. As noted above, a potential benefit of inclusion would be the requirement of a Federal agency to ensure that their actions on these non-Federal lands would not likely result in the destruction or adverse modification of critical habitat. However, this additional analysis to determine whether a Federal action is likely to result in destruction or adverse modification of critical habitat is not likely to be significant because these covered lands are not under Federal ownership, making the application of section 7 less likely. Any additional benefits of inclusion on the section 7 process are therefore relatively unlikely because a Federal nexus on these lands would rarely occur. If a Federal nexus were to occur, it would most likely be with the Service or DOD, and the proposed actions would be geared toward the conservation benefits of restoring and enhancing habitat specifically for the Taylor's checkerspot butterfly, or other rare butterflies. This type of proactive management, if focused on the maintenance of open, short-statured vegetative conditions that the Taylor's checkerspot butterfly typically occupies, will outweigh any benefit from the regulatory designation of critical habitat, which only requires the avoidance of adverse modification and does not require the creation, improvement, or restoration of habitat.

The South Puget Sound Prairie Landscape Working Group partnership, which assists with guiding management on the Wildlife Areas, would not be additionally benefitted due to inclusion of the Wildlife Areas in critical habitat, as this is a well-established, cohesive, and productive group that has and will continue to yield positive conservation outcomes for Taylor's checkerspot butterfly on south Sound prairies, including these Wildlife Areas, regardless of critical habitat. The conservation strategies of each Wildlife Area management plan are crafted to protect and enhance habitat for the Taylor's checkerspot butterfly. These plans include species-specific management actions to support Taylor's checkerspot butterfly, avoidance and minimization measures, and monitoring requirements to ensure proper implementation, which further minimizes the benefits of including these areas in a designation of critical habitat.

A significant benefit of excluding these lands is that it will help us

maintain and foster an important and successful partnership with our Washington State conservation partners who made a decision to include the Taylor's checkerspot butterfly in their Wildlife Area implementation plan in 2007, when it was a State endangered species (and a Federal candidate species). They have encouraged others to join in conservation partnerships as well. Recognizing the important contributions of our conservation partners through exclusion from critical habitat helps to preserve these partnerships, and helps foster future partnerships for the benefit of listed species, the majority of which do not occur on Federal lands; we consider this to be a substantial benefit of exclusion. For these reasons, we have determined that the benefits of exclusion outweigh the benefits of inclusion in this case.

Exclusion Will Not Result in the Extinction of the Species—Scatter Creek Wildlife Area and Adjacent Private Land; West Rocky Prairie Wildlife Area—We have determined that exclusion of approximately 633 ac (256 ha) in the Scatter Creek Wildlife Area owned by WDFW, 98 ac (40 ha) of private land that is managed by WDFW in the same way as Scatter Creek Wildlife Area, and 134 ac (54 ha) of the West Rocky Prairie Wildlife Area, lands covered by management plans vetted by several conservation partners working in south Puget Sound, will not result in the extinction of Taylor's checkerspot butterfly. Actions covered by the Wildlife Area management plans will not result in extinction of Taylor's checkerspot butterfly because the plans provide for the needs of the species by protecting, restoring, and enhancing all the known occupied and potentially suitable Taylor's checkerspot butterfly habitat under the jurisdiction of the State; committing to the enhancement and recruitment of additional habitat through management on each Wildlife Area to support meta-population structure within the Wildlife Areas; and implementing species-specific conservation measures designed to avoid and minimize impacts to the Taylor's checkerspot butterfly. Further, for projects having a Federal nexus and potentially affecting the Taylor's checkerspot butterfly in occupied areas, the jeopardy standard of section 7 of the Act, coupled with protection provided by the voluntary Taylor's checkerspot butterfly conservation plans that are available to landowners if they so choose, would provide a level of assurance that this subspecies will not go extinct as a result of excluding these lands from the critical habitat

designation. Additionally, each of the Wildlife Areas has a specific management plan to guide long-term management to direct the habitat enhancement activities at each location. The subspecies is also protected from take under section 9 of the Act on all properties where the subspecies is found. Federal agencies would be required to minimize the effects of incidental take, and would be encouraged to avoid incidental take through the section 7 consultation process. For these reasons, we find that exclusion of these lands covered by these specific Wildlife Area management plans will not result in extinction of the Taylor's checkerspot butterfly. Based on the above discussion, the Secretary is exercising her discretion under section 4(b)(2) of the Act to exclude from this final critical habitat designation portions of the proposed critical habitat units or subunits that are owned or managed by WDFW, totaling about 865 ac (350 ha).

Merrill and Ring Company Voluntary Habitat Conservation Plan

Private lands totaling 10 ac (4 ha) in Unit 2 (Elwha) and covered under the Merrill and Ring Company voluntary habitat conservation plan are excluded from this critical habitat designation under section 4(b)(2) of the Act. Merrill and Ring Company is a private forest landowner whose property abuts occupied Taylor's checkerspot butterfly habitat. Merrill and Ring Company has collaboratively developed a voluntary habitat conservation plan for the Taylor's checkerspot butterfly (Schaaf and Davis 2010) in partnership with WDFW, which was approved and signed by WDFW and Merrill and Ring Company on February 10, 2010, and was recently extended from an expiration date of December 31, 2014, to December 31, 2020 (Schaaf and Carlson 2013). The portion of WDFW's Taylor's checkerspot butterfly management site on Merrill and Ring Company property is approximately 7 ac (3 ha) in size and is situated on the south side of the ridge which separates Eden Valley from Indian Creek Valley. Despite the small actual acreage of the management area for Taylor's checkerspot owned by Merrill and Ring, the voluntary habitat conservation plan covers 100 ac (40 ha) of their property and acknowledges the potential for Taylor's checkerspot butterfly habitat to change in extent and quality over time. The management plan commits to actions focused on protecting available habitat from various types of traffic and ground disturbance, and the corporation has no plan to implement any logging within the

occupied Taylor's checkerspot butterfly management area at any time. Merrill and Ring's voluntary habitat conservation plan defers all logging actions through 2020, and at that time, tree harvesting will only be implemented in the adjacent commercial forests, where a thinning operation may be considered. The voluntary habitat conservation plan provides assurances for the restriction of pesticides (which will not be applied aerially within 1 mile (1.6 kilometers) of the site) and herbicides (which will be applied through ground-based methods only and provides greater selectivity in the application process). Merrill and Ring Company has cooperated with WDFW to allow ongoing surveys of Taylor's checkerspot butterflies, which will serve as the foundation for the monitoring of populations and habitat conditions.

Benefits of Inclusion—Merrill and Ring Company Voluntary Habitat Conservation Plan—The primary effect of designating any particular area as critical habitat is the requirement for Federal agencies to consult with us under section 7 of the Act to ensure actions they carry out, authorize, or fund do not adversely modify designated critical habitat. Absent critical habitat designation in occupied areas, Federal agencies remain obligated under section 7 of the Act to consult with us on actions that may affect a federally listed species to ensure such actions do not jeopardize the species' continued existence.

The analysis of effects to critical habitat is a separate and different analysis from that of the effects to the species. Therefore, the difference in outcomes of these two analyses represents the regulatory benefit of critical habitat. The regulatory standard is different, as the jeopardy analysis investigates the action's impact on the survival and recovery of the species, while the adverse modification analysis focuses on the action's effects on the designated habitat's contribution to conservation. This will, in many instances, lead to different results and different regulatory requirements. Thus, critical habitat designations have the potential to provide greater benefit to the recovery of a species than would listing alone.

The inclusion of these private lands as critical habitat could provide some additional Federal regulatory benefits for the species consistent with the conservation standard addressed in the Ninth Circuit Court's decision in *Gifford Pinchot Task Force v. United States Fish and Wildlife Service*, 378 F.3d 1059 (9th Cir. 2004). As noted above, a potential

benefit of inclusion would be the requirement of a Federal agency to ensure that their actions on these non-Federal lands would not likely result in the destruction or adverse modification of critical habitat. However, this additional analysis to determine whether a Federal action is likely to result in destruction or adverse modification of critical habitat is not likely to be significant because these covered lands are not under Federal ownership, making the application of section 7 less likely. The granting of Federal funds for beneficial management of Taylor's checkerspot butterfly habitat would provide the only possibility for a Federal nexus covering these lands. Although this forest landowner may apply for a Forest Practices permit from the State of Washington to harvest timber, it is unlikely to trigger a section 7 consultation, as they would not require Federal funding or authorization for this operation. Merrill and Ring's proposed management actions that may be slated for this location are expected to involve tree removal, which would not likely expose Taylor's checkerspot butterfly to actions that would cause harm or take of the species. The action of removing trees has the potential to improve conditions that would be favorable to Taylor's checkerspot butterflies by reducing shade, increasing open areas, and stimulating the establishment and growth of host plant seeds stored in the soil (e.g., *Castilleja hispida*, *Plantago lanceolata*), thereby providing a benefit to the Taylor's checkerspot butterfly.

Another benefit of including lands in a critical habitat designation is that it serves to educate landowners, State and local governments, private landowners, and the public regarding the potential conservation value of an area. This helps focus and promote conservation efforts by all parties by identifying areas of high conservation value for the Taylor's checkerspot butterfly. The designation of critical habitat informs State agencies and local governments about areas that could be conserved under State laws or local ordinances. Any additional information about the needs of the Taylor's checkerspot butterfly or its habitat that reaches a wider audience can be of benefit to future conservation efforts and the designation of critical habitat increases our ability to educate private landowners and the public during outreach events concerning the historical role and current importance of grassland balds. We notified the general public about outreach events and hearings through a **Federal Register**

notice on April 3, 2013 (78 FR 20074). Our outreach measures included the distribution of educational material, and encouragement of landowners to conduct Taylor's checkerspot habitat restoration activities on their own properties. Additional events are expected to occur in the future, and designation of this property as critical habitat is not expected to increase the number of such meetings or improve their outcomes, therefore the potential educational value of critical habitat is minimized.

The incremental benefit from designating critical habitat for Taylor's checkerspot butterfly is further reduced due to the long-standing management planning efforts for the adjacent WDNR land and the recently acquired conservation property managed by CNLM. These properties have been managed for the conservation of bald-associated species and each property provides larval host plants and adult nectar resources for Taylor's checkerspot butterflies. For this reason, they contain many of the PCEs to support the butterfly. The management planning for each of these properties has established a track record of positive conservation actions focused on enhancing grassland bald composition and structure at each location. All of these lands have benefited from the conservation measures implemented by WDFW (Hays 2011 p. 53), the planning efforts for WDNR managed lands, and the voluntary habitat conservation plan for Merrill and Ring Company. These conservation plans provide greater protection to Taylor's checkerspot butterfly habitat than the designation of critical habitat since the planning effort is intended to improve the structure and composition of the habitat, and as often as not this work may not be associated with a Federal action.

The voluntary habitat conservation plan from Merrill and Ring provides for the needs of Taylor's checkerspot butterfly by protecting and managing the grassland balds and implements species-specific conservation measures designed to avoid and minimize impacts to Taylor's checkerspot butterfly.

The voluntary habitat conservation plan developed by Merrill and Ring Company specifies that no roads would be constructed within 400 feet (ft) (122 meters (m)) of currently occupied balds and access to the property is restricted by a gate. Merrill and Ring Company has committed to no timber harvest on the lands covered by the voluntary habitat conservation plan through the year 2020, at which time they may consider a thinning operation. There are plans to conduct a regeneration harvest of the

forested stands in 2033, and Merrill and Ring Company agrees to buffer their managed lands from Taylor's checkerspot butterfly habitat after consultation with WDFW and the Service.

Because of the recent success of Taylor's checkerspot butterfly translocations, the planning group who oversees the schedule for translocations would give priority consideration to this location for future introductions of Taylor's checkerspot butterfly onto high quality bald habitat. Therefore, designation of critical habitat would not provide any additional management planning effort that is not already occurring at these locations under WDFW management authority, voluntary conservation planning efforts, or restoration actions developed through our recovery program, or through DOD ACUB funding authority, which provided the funding support for CNLM to purchase the adjacent property located at Dan Kelly Ridge.

Benefits of Exclusion—Merrill and Ring Company Voluntary Habitat Conservation Plan—The benefits of excluding this private property from designated critical habitat are substantial. We have worked to sustain a close partnership with WDFW and the landowner through regular coordination and the development of the Merrill and Ring Company voluntary habitat conservation plan. The voluntary habitat conservation plan contains provisions that will improve the conservation status of the Taylor's checkerspot butterfly. Measures contained in the plan are consistent with recommendations from the Service for the conservation of the Taylor's checkerspot butterfly, and will afford benefits to the subspecies and its habitat.

Excluding this private property from critical habitat designation will provide significant benefit in terms of sustaining and enhancing the ongoing partnership between the Service, WDFW, and the private landowner, with positive consequences for conservation. The willingness of the private landowner to undertake conservation efforts for the benefit of the Taylor's checkerspot butterfly and to work with WDFW and the Service to develop and employ species conservation actions will continue to reinforce those conservation efforts and our partnership, which contribute toward achieving recovery of the Taylor's checkerspot butterfly. We consider this voluntary partnership in conservation vital to our understanding of the status of the Taylor's checkerspot butterfly on agricultural lands in western Washington, and necessary for

us to implement recovery actions such as habitat protection and restoration, and beneficial management actions for this subspecies.

The designation of critical habitat could have an unintended negative effect on our relationship with non-Federal landowners due to the perceived imposition of redundant government regulation. If these private lands, which have been managed under preexisting conservation plans for the benefit of Taylor's checkerspot butterfly, are designated as critical habitat, it could have a dampening effect on our continued ability to seek new partnerships with future participants including States, counties, local jurisdictions, conservation organizations, and private landowners, which together can implement various conservation actions (such as SHAs, HCPs, and other conservation plans, particularly large, regional conservation plans that involve numerous participants and address landscape-level conservation of species and habitats) that we would be unable to accomplish otherwise. This private landowner made a commitment to conserve Taylor's checkerspot butterflies and their habitat in their voluntary habitat conservation plan. This private landowner serves as a model of voluntary conservation and may aid in fostering future voluntary conservation efforts by other parties in other locations for the benefit of listed species. We consider the positive effect of excluding proven conservation partners from critical habitat to be a significant benefit of exclusion.

Benefits of Exclusion Outweigh Benefits of Inclusion—Merrill and Ring Company Voluntary Habitat Conservation Plan—In summary, we determine that the benefits of excluding the private land parcel owned and managed by Merrill and Ring Company, situated adjacent to lands conserved for Taylor's checkerspot managed by the WDNR and the CNLM, outweigh the benefits of including this property in critical habitat. As described above, the regulatory and informational benefits of inclusion will be minimal, as these lands are already being managed for the conservation of Taylor's checkerspot butterfly under a voluntary habitat conservation plan. Any additional benefits of inclusion in critical habitat based on the section 7 process are unlikely because a Federal nexus on these lands is not expected to occur.

In addition, the conservation strategies of Merrill and Ring Company voluntary habitat conservation plan for the Taylor's checkerspot butterfly are designed to protect, restore, and

enhance habitat for the subspecies. This plan includes species-specific management actions to support the Taylor's checkerspot butterfly, avoidance and minimization measures, and annual monitoring requirements to ensure proper implementation, which further minimizes the benefits that would be provided as a result of a critical habitat designation.

The benefit of excluding this private land parcel is that it will help us maintain an important and successful conservation partnership with private and non-governmental partners, as well as with our State conservation partners, WDFW, and WDNR, all of whom have made a commitment to manage for this subspecies and work cooperatively and collaboratively with the Service. We further believe that by recognizing the voluntary habitat conservation plan negotiated by WDFW and Merrill and Ring Company, this voluntary plan can serve as a model for other landowners in developing conservation partnerships for the benefit of endangered or threatened species, whether that partnership is with the Service, the State, or another entity. As the majority of listed species occur on private lands, we consider these partnerships with private landowners to be a significant benefit for conservation. For these reasons, we have determined that the benefits of exclusion outweigh the benefits of inclusion in this case.

Exclusion Will Not Result in the Extinction of the Species—Merrill and Ring Company Voluntary Habitat Conservation Plan—We have determined that exclusion of approximately 10 ac (4 ha) of private timber lands covered by a voluntary habitat conservation plan by Merrill and Ring Company will not result in the extinction of the Taylor's checkerspot butterfly. Although Taylor's checkerspot butterfly is known to occupy an adjacent property, it is not known to occur at present on the Merrill and Ring lands in question. Actions covered by the voluntary habitat conservation plan will not result in extinction of the Taylor's checkerspot butterfly because the voluntary habitat conservation plan provides for the needs of the butterfly primarily by avoiding any actions that may perpetuate take of the species or its habitat by deferring any actions in the vicinity of Taylor's checkerspot butterfly habitat for the next decade. Any action taken at that time would be in the form of forest thinning (e.g., tree removal on the margins of the bald habitat), which could contribute to the restoration and enhancement of the currently known occupied and potentially suitable Taylor's checkerspot

butterfly habitat under the jurisdiction of the State. There is little likelihood of this timber company project having a Federal nexus and therefore having an adverse effect to Taylor's checkerspot butterfly in occupied areas, which would trigger the jeopardy standard of section 7 of the Act. Additionally, the voluntary habitat conservation plan for Taylor's checkerspot butterfly entered into by the company would provide a level of assurance that this subspecies will not go extinct as a result of excluding these lands from the critical habitat designation. The subspecies is protected from take under section 9 of the Act on all properties where the subspecies is found. For these reasons, we find that exclusion of these private lands covered by the voluntary habitat conservation plan for the Taylor's checkerspot butterfly will not result in extinction of the Taylor's checkerspot butterfly. Based on the above discussion, the Secretary is exercising her discretion under section 4(b)(2) of the Act to exclude from this final critical habitat designation portions of the proposed critical habitat unit or subunit that are owned and managed by the private timber company, Merrill and Ring.

Colvin Ranch Grassland Reserve Program Management Plan

Private lands totaling 378 ac (153 ha) that are covered under an NRCS Grassland Reserve Program Management Plan are excluded from Unit 1—Rock Prairie in this critical habitat designation under section 4(b)(2) of the Act. The Service has coordinated directly with NRCS regarding conservation actions that are being implemented on the portion of Rock Prairie that lies south of Old Hwy 99 (hereafter known as Colvin Ranch). Colvin Ranch has been managed for approximately 10 years under a long-term Grassland Reserve Program Management Plan (GRP plan), and 530 ac (215 ha) of the property is conserved in perpetuity by a conservation easement held by NRCS, of which a portion (378 ac (153 ha)) is excluded from critical habitat. Under the GRP plan, the landowners manage their land using a livestock grazing guideline for western Washington prairies developed in partnership with NRCS. The GRP plan uses intensive livestock grazing as the primary tool to minimize the invasion of prairies by Douglas fir and other woody native and nonnative shrub species. Additionally, pasture grasses that are often in competition for resources with the native prairie species are consumed by the livestock, which makes room for native prairie species in

the process of restoring prairie composition, structure and function. All of these practices provide a positive conservation benefit for the Taylor's checkerspot butterfly and its habitat. The Service has been coordinating with the landowners regarding the potential use of Colvin Ranch for the reintroduction of the Taylor's checkerspot butterfly to Rock Prairie.

Benefits of Inclusion—Colvin Ranch Grassland Reserve Program Management Plan—The primary effect of designating any particular area as critical habitat is the requirement for Federal agencies to consult with us under section 7 of the Act to ensure actions they carry out, authorize, or fund do not adversely modify designated critical habitat. Absent critical habitat designation in occupied areas, Federal agencies remain obligated under section 7 of the Act to consult with us on actions that may affect a federally listed species to ensure such actions do not jeopardize the species' continued existence. Colvin Ranch is not currently occupied by the Taylor's checkerspot butterfly; therefore a Federal action would not trigger a jeopardy analysis, but would only trigger an analysis of adverse modification should critical habitat be designated. The benefits derived from including critical habitat for this property would most likely be derived from the potential Federal nexus resulting from the granting of Federal funds intended to manage the lands to benefit prairie associated species, such as the Taylor's checkerspot butterfly. However, we anticipate that section 7 consultation related to habitat management funding is not likely to provide much added benefit to the species, since the action being consulted on is itself intended to benefit prairie-associated species, including the Taylor's checkerspot butterfly.

Another benefit of including lands in a critical habitat designation is that it serves to educate landowners, State and local governments, and the public regarding the potential conservation value of an area. This helps focus and promote conservation efforts by other parties by identifying areas of high conservation value for Taylor's checkerspot butterfly. Designation of critical habitat informs State agencies and local governments about areas that could be conserved under State laws or local ordinances. Any additional information about the needs of the Taylor's checkerspot butterfly or its habitat that reaches a wider audience can be of benefit to future conservation efforts.

During the spring of 2013 alone, the Service hosted four prairie focused workshops and one public hearing specifically related to the proposed listing and designation of critical habitat. We also participated in two local prairie education events in Thurston County attended by nearly 1,000 people to publicize and educate local community members of the declining distributions and threats to the native flora and fauna found on the west-side prairies. One of these events was hosted and held at Colvin Ranch. An important conservation measure gained through these outreach networks is our ability to educate the public about the historical role and current importance of prairies to our local community and economy. Included among the outreach measures is the distribution of educational material and the benefit derived from encouraging landowners to conduct prairie restoration activities on their own properties. Additional events are expected to occur in the future, and designation of Colvin Ranch as critical habitat is not expected to increase the number of such meetings or improve their outcomes. As Colvin Ranch is already serving as a center of educational information regarding the conservation of prairie habitats and their associated species, including Taylor's checkerspot butterfly, any potential additional benefit stemming from the designation of critical habitat on this property is negligible.

The incremental benefit from designating critical habitat for the Taylor's checkerspot butterfly is further minimized due to the long-standing management planning efforts implemented on Colvin Ranch. The property owner has implemented management for the conservation of prairie habitat that provides larval host and adult nectar foods for the Taylor's checkerspot butterfly, and the land itself contains many of the essential physical or biological features to support the butterfly. The implementation of the GRP plan for Colvin Ranch has established a track record of activity focused on enhancing prairie plant composition and structure. The conservation measures applied at Colvin Ranch have more recently been refocused through the development of site-specific implementation plans for each location to benefit Taylor's checkerspot butterflies and other rare prairie butterflies. The implementation of Colvin Ranch GRP plan provides greater protection to Taylor's checkerspot butterfly habitat than the designation of critical habitat since the

management is intended to improve the habitat structure and composition of the several native prairie dominated paddocks on Colvin Ranch (critical habitat designation does not require active management). In many cases, this work is accomplished without Federal funding, which highlights the landowner's willingness to continue the partnership.

Colvin Ranch has been an active working ranch in Thurston County since 1865. Originally over 3,000 ac (1,214 ha) in size, it is now approximately 1,000 ac (405 ha) and located in southern Thurston County. Grazing systems have been modified dramatically during this time period. Colvin Ranch required an improvement to the infrastructure in order to accomplish the goal of improving native prairie composition on the ranch through intensive grazing, a practice of grazing greater numbers of cows on specific pastures (paddocks) for shorter time periods. Miles of fencing were erected to partition the fields into intensively managed paddocks, and in each paddock a water source was made available. The intensive management regime requires that livestock be moved often according to vegetation height or soil condition changes specified in the GRP management plan. The Colvin Ranch has been partitioned into 35 paddocks, with nearly 300 ac (120 ha) managed for the production of native prairie plant composition. Colvin Ranch is presently being managed for the benefit of the Taylor's checkerspot butterfly and its habitat; we have no information to suggest that the designation of critical habitat on this property would generate any added benefit to the already positive management efforts being implemented.

Benefits of Exclusion—Colvin Ranch Grassland Reserve Program

Management Plan—The benefits of excluding this private property from designated critical habitat are substantial. We have developed a close partnership with the landowner and NRCS through regular coordination and outreach activities, using Colvin Ranch as an example of land uses that are compatible with prairie conservation. The GRP plan provisions that will improve the conservation status of the Taylor's checkerspot butterfly include novel grazing practices which have resulted in the dramatic increase and maintenance of diverse larval and adult food resources for the subspecies. Measures contained in the GRP plan are consistent with recommendations from the Service for the conservation of the Taylor's checkerspot butterfly, and will afford benefits to the subspecies and its habitat.

Excluding this private property from critical habitat designation will provide a significant benefit in terms of sustaining and enhancing the excellent partnership between the Service, NRCS, and the private landowner, as well as other partners who participate in prairie management decision-making, with positive consequences for conservation. The willingness of the private landowner to undertake conservation efforts for the benefit of the Taylor's checkerspot butterfly and work with NRCS and the Service to develop and employ conservation actions, will continue to reinforce those conservation efforts and our partnership, which contribute toward achieving recovery of the Taylor's checkerspot butterfly. We consider this voluntary partnership in conservation vital to the development of our understanding of the status of Taylor's checkerspot butterfly on agricultural lands in western Washington, and necessary for us to implement recovery actions such as habitat protection, restoration, and beneficial management actions for this subspecies.

The designation of critical habitat could have an unintended negative effect on our relationship with non-Federal landowners due to the perceived imposition of government redundant regulation. Designation of critical habitat on private lands that are managed for the benefit of prairie species, including the Taylor's checkerspot butterfly, could have a dampening effect on our continued ability to seek new partnerships with future participants including States, counties, local jurisdictions, conservation organizations, and private landowners. Together, these parties can implement various cooperative conservation actions (such as SHAs, HCPs, and other conservation plans, particularly large, regional conservation plans that involve numerous participants and/or address landscape-level conservation of species and habitats) that we would be unable to accomplish otherwise. This private landowner made a commitment almost a decade ago to develop and implement this GRP management plan, which has restored much of Rock Prairie to habitat favorable to the reintroduction of the Taylor's checkerspot butterfly, and they have engaged with and encouraged other parties, both public and private, to join in conservation partnerships. Further, we have been coordinating with this landowner about the potential for using Rock Prairie as a reintroduction site for the Taylor's checkerspot butterfly. We believe Colvin

Ranch would be less likely to participate in the reintroduction of the Taylor's checkerspot butterfly to Rock Prairie or to encourage others to participate in similar grazing intensive ranching practices that restore Taylor's checkerspot butterfly habitat if critical habitat were to be designated on this property. This private landowner serves as a model of voluntary conservation and may aid in fostering future voluntary conservation efforts by other parties in other locations for the benefit of listed species. Most endangered or threatened species do not occur on Federal lands. As the recovery of these species will therefore depend on the willingness of non-Federal landowners to partner with us to engage in conservation efforts, we consider the positive effect of excluding proven conservation partners from critical habitat to be a significant benefit of exclusion.

Benefits of Exclusion Outweigh Benefits of Inclusion—Colvin Ranch Grassland Reserve Program Management Plan—In summary, we determine that the benefits of excluding the NRCS GRP managed prairies at Colvin Ranch from the designation of critical habitat for the Taylor's checkerspot butterfly outweigh the benefits of including these areas in critical habitat. The regulatory and informational benefits of inclusion will be minimal. Furthermore, any potential additional benefits of inclusion on the section 7 process are relatively unlikely because a Federal nexus on these lands would rarely occur. If one were to occur, it would most likely be with the Service or NRCS, and their actions will be geared toward the conservation benefits of restoring and enhancing habitat specifically for the Taylor's checkerspot butterfly, or other rare butterflies. This type of management is focused on the maintenance of open, short statured vegetative conditions that Taylor's checkerspot butterflies typically occupy. Since any action likely to be the subject of consultation under the adverse modification standard on this unoccupied area would be focused on providing positive habitat benefits for the Taylor's checkerspot butterfly, we find it unlikely that critical habitat would result in any significant additional benefit to the subspecies. Furthermore, the benefits of including this area in critical habitat are reduced since significant management actions are already underway to restore the prairie habitat in this area for the benefit of rare butterflies, including Taylor's checkerspot butterfly. In this instance, the GRP plan for Colvin Ranch contains

provisions for protecting and restoring prairie habitat for the Taylor's checkerspot butterfly on Rock Prairie that exceed the conservation benefits that would be afforded through section 7 consultation.

A significant benefit of excluding these lands is that it will help us maintain and foster an important and successful partnership with this private landowner partner and NRCS. They have consistently supported stewardship of prairie habitat beneficial to the conservation of the Taylor's checkerspot butterfly and have consistently encouraged others to join in conservation partnerships as well. The exclusion of Colvin Ranch will serve as a positive conservation model, and encourage other private landowners to partner with the Service for the purpose of conserving listed species. For these reasons, we have determined that the benefits of exclusion outweigh the benefits of inclusion in this case.

Exclusion Will Not Result in the Extinction of the Species—Colvin Ranch Grassland Reserve Program Management Plan—We have determined that exclusion of approximately 378 ac (153 ha) for the portion of Rock Prairie managed under the GRP management plan implemented at Colvin Ranch will not result in extinction of the Taylor's checkerspot butterfly. Presently, Rock Prairie is unoccupied by the Taylor's checkerspot butterfly, but it was previously known to fly in great abundance on Rock Prairie. Actions covered by the GRP management plan will not result in the extinction of the Taylor's checkerspot butterfly because: (i) The butterfly is not present on Colvin Ranch at this time; (ii) the management implemented on Colvin Ranch has continually improved the prairie habitat during the 9 years it has been practiced; and (iii) management of the prairie paddocks will continue and be modified over time as new information is gained through systematically monitoring the results of their intensive grazing system.

Benton County Prairie Species HCP, Oregon

Approximately 106 ac (43 ha) of lands owned by Benton County (Oregon) and proposed as critical habitat for the Taylor's checkerspot butterfly are covered under the Benton County Prairie Species HCP and are excluded from Unit 4 of this critical habitat designation under section 4(b)(2) of the Act. The Benton County Prairie Species HCP has a 50-year term and addresses lands owned or managed by Benton County and any private lands in the County that contain wet or upland

prairie habitat in Benton County. This HCP includes provisions for long-term planning, avoiding and minimizing impacts to habitat for the species that are covered under the HCP, and mitigating for habitat losses when it is unavoidable. The Benton County Prairie Species HCP covers a total of roughly 11,700 ac (4,734 ha) of lands and rights-of-way within Benton County with prairie habitat, of which Benton County owns approximately 1,182 ac (478 ha). On January 14, 2011, a section 10(a)(1)(B) permit was issued to the County under the Act. The seven species covered under this HCP exclusively occupy prairie and prairie-like habitats and include the Taylor's checkerspot butterfly, Fender's blue butterfly (*Icaricia icarioides fenderi*), Bradshaw's lomatium (*Lomatium bradshawii*), Kincaid's lupine (*Lupinus oregonus*), peacock larkspur (*Delphinium pavonaceum*), Nelson's checkermallow (*Sidalcea nelsoniana*), and Willamette daisy (*Erigeron decumbens*).

Covered activities include ground-disturbing construction activities associated with home building, farming, and forestry practices; management of public lands and lands owned or managed by conservation organizations; and activities providing essential public services in the County (e.g., transportation and water system management, and utilities construction and maintenance). Cooperators under the HCP include: the City of Corvallis, Oregon Department of Transportation, Oregon State University, Greenbelt Land Trust, Pioneer Telephone Cooperative, and NorthWest Natural Gas.

The overall biological goal of this HCP is to achieve sustainable populations of covered species, while maintaining local populations and fostering habitat connectivity. The County and cooperators will support sustainable population numbers through conservation measures designed to enhance existing populations of covered species, support their habitat, and increase the distribution and connectivity of their populations in Benton County.

The Benton County Prairie Species HCP has management goals and objectives for sites that currently support Taylor's checkerspot butterflies (Fitton Green and Beazell Memorial Forest), and Fort Hoskins, which has suitable habitat but has not had a documented occurrence of Taylor's checkerspot butterfly for several years. The Benton County Prairie Species HCP will undertake prairie habitat restoration and enhancement in the above locations.

Benefits of Inclusion—Benton County Prairie Species HCP—We find that there is minimal benefit from designating critical habitat for the Taylor's checkerspot butterfly within the area covered by the Benton County Prairie Species HCP because, as explained above, these covered lands are already managed for the conservation of the subspecies over the term of the HCP. The Benton County Prairie Species HCP includes a species-specific management plan for the Taylor's checkerspot butterfly; avoidance and minimization measures; and monitoring requirements to ensure proper implementation. The Benton County Prairie Species HCP provides for the needs of the Taylor's checkerspot butterfly by protecting and managing all current and former known habitat areas on County owned lands and implementing conservation measures designed to avoid and minimize impacts to individual Taylor's checkerspot butterflies. Management guidelines were developed for areas currently occupied by the subspecies as well as areas that have suitable habitat conditions but that are not known to be currently occupied. The conservation measures provided by the HCP will provide greater protection to Taylor's checkerspot butterfly habitat than the designation of critical habitat since they are intended to improve habitat conditions (critical habitat only requires the avoidance of adverse modification; it does not require actions to improve habitat). Therefore, the HCP contains provisions for protecting and maintaining Taylor's checkerspot butterfly habitat that exceed the conservation benefits that would be afforded through section 7 consultation.

The inclusion of these covered lands as critical habitat could provide some additional Federal regulatory benefits for the species consistent with the conservation standard based on the Ninth Circuit Court's decision in *Gifford Pinchot Task Force v. United States Fish and Wildlife Service*, 378 F.3d 1059 (9th Cir. 2004). Because one of the primary threats to Taylor's checkerspot butterfly is habitat loss and degradation, the consultation process under section 7 of the Act for projects in occupied areas (Beazell Forest and Fitton Green) with a Federal nexus will, in evaluating effects to Taylor's checkerspot butterfly under the jeopardy standard, evaluate the effects of the action on the conservation or functionality of the habitat for the subspecies regardless of whether critical habitat is designated on these lands. The analytical requirements to support a jeopardy determination on excluded land are similar, but not identical, to the

requirements in an analysis for an adverse modification determination on included land. In unoccupied areas (Fort Hoskins), a potential benefit of inclusion would be the requirement of a Federal agency to ensure that their actions on these non-Federal lands would not likely result in the destruction or adverse modification of critical habitat. The Bonneville Power Administration (BPA) does have a transmission line corridor right-of-way across the northern portion of Fitton Green that falls within the boundaries of County-owned lands covered under the Benton County Prairie Species HCP. BPA conducts limited activities within the right-of-way that are intended to maintain the integrity of the powerlines to deliver electrical power. Routine maintenance activities are mostly related to removing trees that may come in contact with the powerlines. Tree removal is likely to assist in maintaining the open, short-statured vegetation communities that Taylor's checkerspot butterflies require, and most often use. Section 7 consultation related to BPA right-of-way maintenance is not likely to provide much benefit in reducing impacts to critical habitat since the nature of routine maintenance activities that would be consulted on should be beneficial to the long-term maintenance of suitable habitat for the Taylor's checkerspot butterfly. In addition, as noted above, as this area is occupied by the subspecies, the effects of any Federal action will already be analyzed under the jeopardy standard in section 7 consultation, including effects to the conservation value of the habitat. In general, any Federal agency authorizing, funding, or carrying out an action on these HCP-covered lands would have to consider the conservation restrictions on these lands and incorporate measures necessary to ensure the conservation of these resources, thereby reducing any incremental benefit critical habitat may have.

Another benefit of including lands in a critical habitat designation is that it serves to educate landowners, State and local governments, and the public regarding the potential conservation value of an area. This helps focus and promote conservation efforts by other parties by identifying areas of high conservation value for the Taylor's checkerspot butterfly. Designation of critical habitat informs State agencies and local governments about areas that could be conserved under State laws or local ordinances. Any additional information about the needs of the Taylor's checkerspot butterfly or its habitat that reaches a wider audience

can be of benefit to future conservation efforts. However, the Benton County Prairie Species HCP has already gone through public review and included public meetings about the prairie conservation strategy. An important conservation measure that is implemented under the HCP is public outreach. Included among the outreach measures is the distribution of educational materials, holding prairie conservation workshops, and encouraging landowners to conduct prairie restoration activities on their own properties. Additional educational and informational benefits that might arise from critical habitat designation have already largely occurred through public meetings and review of the draft HCP and are going to continue to occur through implementation of the conservation measures of the final HCP. The potential educational value of critical habitat in this instance is therefore further reduced.

Benefits of Exclusion—Benton County Prairie Species HCP—Compared to the minimal benefits of inclusion of this area in critical habitat, the benefits of excluding from designated critical habitat the approximately 106 ac (43 ha) of lands currently managed under the HCP are considerable.

HCP conservation measures that provide a benefit to the Taylor's checkerspot butterfly and its habitat have been implemented since its approval in 2011. Excluding the lands managed under the Benton County Prairie Species HCP from critical habitat designation will sustain and enhance the working relationship between the Service and the County.

Excluding lands within HCPs from critical habitat designation can also facilitate our ability to seek new partnerships with future HCP participants including States, counties, local jurisdictions, non-governmental conservation organizations, and private landowners, which together can implement conservation actions that we would be unable to accomplish otherwise. If lands within the HCP plan areas are designated as critical habitat, it would likely have a negative effect on our ability to establish new partnerships to develop HCPs, particularly larger HCPs that involve numerous participants and address the necessary landscape-level conservation of species and habitats. By excluding these lands, we preserve and enhance our current partnerships and encourage additional conservation actions in the future for the Taylor's checkerspot butterfly and other listed species.

Benefits of Exclusion Outweigh the Benefits of Inclusion—Benton County

Prairie Species HCP—In summary, we determine that the benefits of excluding areas covered by the Benton County Prairie Species HCP from the designation of critical habitat for the Taylor's checkerspot butterfly outweigh the benefits of including this area in critical habitat. The regulatory and informational benefits of inclusion will be minimal. In areas occupied by the Taylor's checkerspot butterfly, any potential consultation under section 7 of the Act will evaluate the effects of the action on the conservation or functionality of the habitat for the species regardless of whether critical habitat is designated for these lands. The analytical requirements to support a jeopardy determination on excluded land are similar, but not identical, to the requirements in an analysis for an adverse modification determination on included land. The most likely Federal nexus would be with BPA, and their actions are generally limited to maintaining the right-of-way to be free of encroaching trees that may eventually come in contact with the powerlines. This type of right-of-way maintenance should also maintain the open, short statured vegetative conditions that the Taylor's checkerspot butterfly typically occupies, and so benefits the subspecies. The additional benefit of consultation under the adverse modification standard is therefore minimal.

In addition, the conservation strategies of the Benton County Prairie Species HCP are designed to protect and enhance habitat for the Taylor's checkerspot butterfly. The HCP includes a species-specific management plan for the Taylor's checkerspot butterfly, avoidance and minimization measures, and monitoring requirements to ensure proper implementation, which further minimizes the benefits that would be provided as a result of a critical habitat designation.

The benefit of excluding these lands is that it will help us maintain an important and successful conservation partnership with a county government that voluntarily included the Taylor's checkerspot butterfly in its HCP when it was a Federal candidate species, and exclusion of these areas may encourage others to join in conservation partnerships as well. For these reasons, we have determined that the benefits of exclusion outweigh the benefits of inclusion in this case.

Exclusion Will Not Result in Extinction of the Species—Benton County Prairie Species HCP—We have determined that exclusion of approximately 106 ac (43 ha) of lands covered under the Benton County

Prairie Species HCP will not result in extinction of the Taylor's checkerspot butterfly because the HCP provides for the needs of the butterfly by: protecting, restoring, and enhancing all the known occupied and potentially suitable Taylor's checkerspot butterfly habitat under the jurisdiction of the County; committing to the enhancement and recruitment of additional habitat over the term of the HCP; and, implementing species-specific conservation measures designed to avoid and minimize impacts to the Taylor's checkerspot butterfly. Further, for projects having a Federal nexus and affecting Taylor's checkerspot butterfly in occupied areas, the jeopardy standard of section 7 of the Act, coupled with protection provided by the Benton County Prairie Species HCP, would provide a level of assurance that this species will not go extinct as a result of excluding these lands from the critical habitat designation. The species is also protected from take under section 9 of the Act on all properties where the species is found. Federal agencies would be required to minimize the effects of incidental take, and would be encouraged to avoid incidental take through the section 7 consultation process. For these reasons, we find that exclusion of these lands covered by the Benton County Prairie Species HCP will not result in extinction of the Taylor's checkerspot butterfly. Based on the above discussion, the Secretary is exercising her discretion under section 4(b)(2) of the Act to exclude from this final critical habitat designation portions of the proposed critical habitat units or subunits that are within the Benton County Prairie Species HCP covered lands totaling about 106 ac (43 ha).

Non-Federal Airports

The streaked horned lark occurs on airports because management to control hazardous wildlife has incidentally created suitable habitat for the subspecies. Airports create the large, open landscape context preferred by streaked horned larks, and mowing and other management practices to maintain short-statured vegetation for aviation safety similarly inadvertently provides the type of vegetation utilized by the subspecies. However, airports are not ideal locations for focusing recovery efforts for the streaked horned lark. First, larks are at risk of mortality from aircraft collisions, and have been documented as a hazardous species at airports (Cleary and Dolbeer 2005, p. 101). Secondly, Federal Aviation Administration (FAA) regulations require airports to take immediate action to alleviate wildlife hazards

whenever they are detected (14 CFR 139.337). This requirement to maintain airfields free of wildlife hazards would severely limit the potential to increase streaked horned lark populations on airports. Given the combined threats of aircraft strikes and constant management to minimize bird populations, airports do not provide ideal conditions for the long-term conservation of the streaked horned lark.

We received comments from the FAA, airports, and airport operators associations expressing concern that designating critical habitat for the streaked horned lark on airports implies that airports are desired locations to provide for conservation and recovery of the streaked horned lark, which is in conflict with their requirements to provide safe conditions for aviation. Several commenters recommended that airports should be excluded from critical habitat in favor of sites with the potential for long-term conservation management. This is also consistent with comments received from one of the proposed rule's peer reviewers: "... bird conservation is not and should not be a desired component of airport management" (Altman 2013, p. 6). We agree. Although airports currently support some of the largest populations of streaked horned larks, we consider airports to provide transitory suitable habitat for the subspecies, and we have no intention of encouraging an increase in populations of streaked horned larks on airports as part of our long-term recovery strategy. Although the development of a recovery plan will come subsequent to the listing of the streaked horned lark, it is our intention that the conservation and recovery of the subspecies will rely on the restoration and maintenance of more suitable natural habitats or habitats with more compatible land uses for the streaked horned lark.

Benefits of Inclusion–Non-Federal Airports—We find there are minimal benefits to including non-Federal airport lands in critical habitat for the streaked horned lark. As discussed above, the designation of critical habitat invokes the provisions of section 7. Since the non-Federal airport lands in question are all occupied by the streaked horned lark, if a Federal nexus were to occur, section 7 consultation would be triggered by the presence of the listed subspecies and the Federal agency would consider the effects of its actions on the subspecies through a jeopardy analysis. Because one of the primary threats to the streaked horned lark is habitat loss and degradation, the consultation process under section 7 of

the Act for projects with a Federal nexus will, in evaluating effects to the streaked horned lark, evaluate the effects of the action on the conservation or functionality of the habitat for the subspecies regardless of whether critical habitat is designated for these lands. The analytical requirements to support a jeopardy determination on excluded lands are similar, but not identical, to the requirements in an analysis for an adverse modification determination on lands designated as critical habitat. However, the additional conservation value that could be attained through the adverse modification analysis for critical habitat under section 7 would likely not be significant, and would be triggered only in the event of a Federal action.

Another benefit of including lands in a critical habitat designation is that it serves to educate landowners, State and local governments, and the public regarding the potential conservation value of an area. This helps focus and promote conservation efforts by other parties by identifying areas of high conservation value for the streaked horned lark. The designation of critical habitat at airports would highlight the stable habitats that have been unintentionally created on non-Federal airport lands, and which are known to be used by streaked horned larks as breeding and wintering habitats. However, airport managers are already aware of the presence of the streaked horned lark, and some airports have already incorporated management for the streaked horned lark into their operating plans (for example, Olympia Regional Airport; see *Benefits of Exclusion–Non-Federal Airports*, below); this existing knowledge reduces the benefits of including these non-Federal airport lands in the critical habitat designation. Since airport managers are already aware of the presence of the streaked horned lark on their lands, and in some cases existing management already benefits the streaked horned lark and would not be altered by the designation of critical habitat, we believe the potential educational benefit of critical on non-Federal airports will be extremely limited.

The Service has no intention of promoting increased populations of streaked horned larks on airports as part of the long-term recovery and conservation strategy for the subspecies. Although non-Federal airports inadvertently provide suitable habitat for streaked horned larks, we consider airport habitats to be of relatively low conservation value over the long term. Our conservation strategy for the

streaked horned lark will focus on the restoration and management of natural habitats for the subspecies, free of the risks and disturbance associated with air traffic; the designation of critical habitat on airports would thus run counter to our overall conservation strategy for the streaked horned lark. Therefore, while we find some benefits of including non-Federal airport lands in the designation of critical habitat for the streaked horned lark, we find these benefits are reduced due to the known presence of streaked horned larks on their lands and existing management already benefitting the streaked horned lark. As described above, we believe the potential educational benefit of critical habitat on non-Federal airports will therefore be extremely limited. In addition, the benefits of including non-Federal airport lands are further reduced because all of these lands are presently occupied by the streaked horned lark, therefore should a project having a Federal nexus take place, section 7 consultation would occur under the jeopardy standard—including the consideration of potential effects to habitat for the streaked horned lark—regardless of the designation of critical habitat. Finally, the benefits to the streaked horned lark of designating non-Federal airport lands as critical habitat are relatively minimal because, for reasons described above, we do not intend to focus conservation and recovery efforts on these lands over the long term.

Benefits of Exclusion—Non-Federal Airports—Compared to the minimal benefits of including non-Federal airport lands in critical habitat, the benefits of excluding non-Federal airport lands from designated critical habitat are more substantial.

As mentioned above, managers of non-Federal airport lands occupied by streaked horned larks are generally aware of the presence of the subspecies, and in some cases airport managers have already developed management plans that provide benefits to the streaked horned lark. The exclusion of non-Federal airport lands from the designation of critical habitat would allow us to foster a positive conservation partnership with airport entities in the future, and encourage the development of beneficial management plans such as that developed for the Olympia Regional Airport in Washington. These conservation partnerships have the potential to produce tangible conservation results for the streaked horned lark as evidenced by the development of management plans that consider the needs of streaked horned larks and other

prairie-dependent species. For example, the Olympia Regional Airport Master Plan (Airport Master Plan) and Sensitive Species and Priority Habitats Inventory and Management Plan that the Olympia Regional Airport is implementing will provide long-term protection for the streaked horned lark, and serves as a model that the Service will use in the development of partnership agreements with other airports after the subspecies is listed. Fostering these positive conservation partnerships is a significant benefit of exclusion from critical habitat. Below we present specific details of the conservation partnership with the Olympia Regional Airport as a model that we will use in discussions with other non-Federal airports in partnering for the conservation of the streaked horned lark.

The conservation partnership developed between the Service, WDFW, and the Olympia Regional Airport over many years has resulted in positive actions to address and minimize impacts or potential conflicts to prairie-dependent species, including the streaked horned lark, from activities conducted on airport property. As evidence of the positive benefits that have accrued from this partnership, and that could be gained from the pursuit of other similar partnerships, the Port of Olympia has agreed to protect the streaked horned lark at the Olympia Regional Airport and to inventory, manage and maintain habitat for the streaked horned lark and other prairie-dependent species on the airport. The Airport Master Plan outlines State, county, and city regulations and ordinances related to critical areas, as well as FAA safety regulations and compliance responsibilities, and strategies for the protection of State-listed and sensitive species while meeting the needs of the airport as an Essential Public Facility (Port Of Olympia 2013, pp. 7–12). The June 2013 Update to the Airport Master Plan includes commitments to follow recommendations provided by WDFW for the protection of State-listed and sensitive species present on the airport, including: (1) Minimizing the amount of impervious surfaces; (2) maintaining and/or creating suitable habitat (sparsely vegetated areas with annual and native grasses, less than 10 percent woody shrubs, and high percent of bare ground); (3) avoiding activities such as mowing, special events, and off-road driving and recreational activities in or near the areas used by streaked horned larks during the nesting season (March 15 to August 15); (4) working

cooperatively with the State on annual streaked horned lark surveys; and (5) avoiding development or construction of permanent buildings within approximately 330 ft (100 m) of streaked horned lark nesting areas (Port of Olympia 2013, pp. 15–17). The sensitive species management plan that the Olympia Regional Airport is implementing will provide long-term protection for the streaked horned lark and can serve as an example that other airports could use or follow in the development of partnership agreements with the Service after the subspecies is listed. Designating critical habitat on airports could negatively impact our ability to pursue and develop such beneficial conservation partnerships with other airports and would not provide any additional conservation benefits to the subspecies; therefore we have determined that fostering these positive conservation partnerships is a significant benefit of exclusion from critical habitat.

An additional benefit of exclusion is signaling that we intend to direct the focus of recovery efforts for the streaked horned lark on other, more natural prairie or grassland habitats or habitats with more compatible uses with greater long-term conservation value, and avoiding the misperception that the Service wishes to concentrate on airports as sites essential for the recovery of the streaked horned lark. Section 3(5)(A) of the Act defines “critical habitat” as the specific areas within the geographical area occupied by the species at the time it is listed on which are found those physical or biological features essential to the conservation of the species. “Conservation” is further defined in section 3(3) of the Act as the use of all methods and procedures which are necessary to bring any endangered or threatened species to the point at which the measures provided pursuant to the Act are no longer necessary. These definitions clearly demonstrate that the purpose of critical habitat designation is to serve as locations of recovery efforts for listed species. However, as noted above, streaked horned larks face a risk of mortality from a strikes as a result of occupying airport lands. Although airports currently support some relatively large populations of the subspecies, airports are clearly not ideal for conservation and recovery efforts aimed at further increasing the abundance of streaked horned larks. Recovery efforts would be more effectively concentrated on areas capable of supporting long-term viable populations of streaked horned larks

with the potential for increases in population size. Although airports clearly provide an interim benefit to the subspecies (and will likely continue to provide habitat for small populations), recovery will require restoration and management of new sites that can sustain increasing populations of streaked horned larks in the long term, in locations that do not pose a heightened risk of mortality to streaked horned larks. The Service does not intend to focus on increasing populations of the streaked horned lark on airport lands as part of the subspecies' long-term recovery strategy. The exclusion of non-Federal airport lands would thus align with our long-term conservation strategy that we are likely to develop for the streaked horned lark, and more appropriately signal our intention to direct recovery efforts to the restoration and maintenance of more natural habitats for the subspecies; we consider this to be a significant benefit of exclusion as well.

Benefits of Exclusion outweigh the Benefits of Inclusion—Non-Federal Airports—The benefits of including non-Federal airport lands in the designation are small. Because one of the primary threats to the streaked horned lark is habitat loss and degradation, the consultation process under section 7 of the Act for projects with a Federal nexus will, in evaluating effects to the streaked horned lark, evaluate the effects of the action on the conservation or functionality of the habitat for the subspecies regardless of whether critical habitat is designated for these lands. The analytical requirements to support a jeopardy determination on excluded land are similar, but not identical, to the requirements in an analysis for an adverse modification determination on lands designated as critical habitat. Although not specifically intended to provide for the conservation of the streaked horned lark, management for aviation safety at airports already inadvertently results in actions that create and maintain streaked horned lark habitat, benefits that exceed the conservation benefits afforded through section 7 consultation. Since designation as critical habitat would not change these already positive management efforts, the benefits of including these lands in critical habitat are small, and are reduced by other considerations, as described below.

The educational benefit of critical habitat is minimal in this case; since all non-Federal airport lands in question are occupied by streaked horned larks, any potential educational benefit of critical habitat is reduced by the fact that airport managers are already aware

of the presence of the subspecies and its habitat needs. In fact, in some cases, airport managers have already incorporated conservation provisions for streaked horned larks and other prairie species into their management plans. Importantly, it is not the Service's intention to focus on airport lands as essential sites for recovery; although airports provide important interim habitat, they also carry an associated risk of mortality to the birds through airstrikes, and regulations requiring the minimization of wildlife hazards at airports are not compatible with efforts to increase populations of birds in these areas. The Service intends to focus long-term recovery efforts for the streaked horned lark on other, more natural areas of prairie or grassland habitat or habitat with more compatible land uses of higher conservation value. The designation of non-Federal airport lands as critical habitat would be at odds with our long-term recovery strategy that we are likely to develop for the streaked horned lark, thereby further reducing any benefit from including these lands in critical habitat.

On the other hand, the benefits of exclusion are relatively substantial. Excluding airports would allow the Service to develop conservation partnerships with airport managers, and potentially result in the implementation of management plans at airports designed to benefit the conservation of the streaked horned lark. As we have seen through the example set at the Olympia Regional Airport, airport management plans have the potential to provide for significant conservation and management of streaked horned larks, to help maintain populations of this subspecies in the interim pending restoration of more natural habitats with compatible uses to achieve recovery of this subspecies. Exclusion of these lands from critical habitat will help foster partnerships we have developed with airport entities such as the Port of Olympia, which has developed an impressive management plan for the benefit of the streaked horned lark and other prairie species. Furthermore, this partnership may aid in fostering future cooperative relationships with other airport entities in other locations for the benefit of streaked horned larks.

Another significant benefit of exclusion is signaling our intention to focus recovery efforts more appropriately on the restoration and management of other, more natural habitats with compatible uses for increasing populations of the streaked horned lark over the long term. Streaked horned larks are at risk of mortality from airstrikes at airports. Although airports

may serve as interim habitat for the streaked horned lark, the inclusion of airports in critical habitat would be contrary to our long-term conservation strategy for the subspecies. As we do not wish to create the impression that we consider airport lands as sites essential for the recovery and conservation of streaked horned larks, exclusion of these lands would benefit the subspecies by directing recovery efforts to other natural areas with greater long-term conservation value.

Based on our evaluation of the benefits of inclusion versus the benefits of exclusion, we determine that the benefits of excluding non-Federal airport lands from the designation of critical habitat for the streaked horned lark outweigh the benefits of including these areas in critical habitat. The Secretary is therefore exercising her discretion under section 4(b)(2) of the Act to exclude the following airports from critical habitat for the streaked horned lark:

(1) Sanderson Field in Unit 1—376 ac (152 ha).

(2) Olympia Airport in Unit 1— 575 ac (233 ha).

(3) Portland International Airport and Broughton Beach in Unit 3—431 ac (174 ha).

(4) McMinnville Municipal Airport in Unit 4—600 ac (243 ha).

(5) Salem Municipal Airport in Unit 4—534 ac (216 ha).

(6) Corvallis Municipal Airport in Unit 4—1,103 ac (446 ha).

(7) Eugene Airport in Unit 4—313 ac (126 ha).

A small portion of land proposed for critical habitat is adjacent to Portland International Airport at Broughton Beach on the Columbia River; this parcel is owned by Metro (the regional government). The concerns discussed above also apply to this portion of the Portland International Airport; therefore, we are also excluding Broughton Beach from critical habitat designation. The total acreage of the exclusions described above is approximately 3,932 ac (1,590 ha).

Occupied lands excluded under section 4(b)(2) of the Act are still considered essential to the conservation of the species. Such areas were proposed as critical habitat because they provide the essential physical or biological features to support the life history of the streaked horned lark. Exclusion should never be interpreted as meaning that such areas are unimportant to the conservation of the species. Exclusion is based upon a determination by the Secretary that the benefit of excluding these essential

areas outweighs the benefit of including them in critical habitat.

Exclusion Will Not Result in the Extinction of the Species—Non-Federal Airports—Exclusion will not result in extinction of the streaked horned lark because each of the airports proposed as critical habitat is occupied by the subspecies; therefore Federal agency actions that require section 7 consultation will be required to meet the jeopardy standard for any actions that may affect the streaked horned lark at those sites. This consultation requirement will safeguard the streaked horned lark from extinction, regardless of the area's designation as critical habitat.

Tribal Lands—Exclusions Under Section 4(b)(2) of the Act

In accordance with the President's memorandum of April 29, 1994, "Government-to-Government Relations with Native American Tribal Governments" (59 FR 22951); Executive Order 13175; and the relevant provision of the Departmental Manual of the Department of the Interior (512 DM 2), we coordinate with federally-recognized tribes on a government-to-government basis. Further, Secretarial Order 3206, "American Indian Tribal Rights, Federal-Tribal Trust Responsibilities, and the Endangered Species Act" (1997) states that (1) critical habitat shall not be designated in areas that may impact tribal trust resources, may impact tribally-owned fee lands, or are used to exercise tribal rights unless it is determined essential to conserve a listed species; and (2) in designating critical habitat, the Service shall evaluate and document the extent to which the conservation needs of the listed species can be achieved by limiting the designation to other lands.

We proposed 182 ac (74 ha) of critical habitat in an area currently occupied by the streaked horned lark and that provides one or more of the essential physical or biological features for the subspecies on lands reserved for the Shoalwater Bay Tribe (included in Unit 3—Shoalwater Spit); these lands are directly adjacent to other occupied streaked horned lark habitat along the Washington Coast. Because the streaked horned lark moves between coastal sites and sites on the Columbia River Islands, based on site condition and season, connectivity among and within these habitats is essential for long-term persistence and recovery of streaked horned larks. Beach and intertidal habitat on and adjacent to the Shoalwater Bay Indian Reservation were determined to be important to maintain nesting, foraging, and wintering habitat,

and to maintain connectivity between occupied breeding sites on the Washington Coast. The longstanding and distinctive relationship between Federal and tribal governments is defined by treaties, statutes, executive orders, judicial decisions, and agreements, which differentiate tribal governments from the other entities that deal with, or are affected by, the Federal government.

This relationship has given rise to a special Federal trust responsibility involving the legal responsibilities and obligations of the United States toward Native American tribes and the application of fiduciary standards of due care with respect to Indian lands, tribal trust resources, and the exercise of tribal rights. Accordingly, we are obligated to consult with tribes based on their unique relationship with the Federal government. In addition, we evaluate tribes' past and ongoing efforts for species conservation and the benefits of including or excluding tribal lands in the designation under section 4(b)(2) of the Act.

We contacted the Shoalwater Bay Tribe and discussed their ongoing and future management strategies for the streaked horned lark. During the revision of critical habitat for the Pacific Coast population of the western snowy plover, we received a letter from the Tribe describing ongoing tribal management, conservation efforts, and coordination with the Corps, WDFW, and the Service to protect habitat for snowy plover and other coastal species important to the Tribe, including the streaked horned lark. The Tribe coordinates closely with the Service, Corps, and WDFW on western snowy plover and streaked horned lark surveys in conjunction with their coastal restoration project. In April, 2013, the Shoalwater Bay Tribe submitted a comment letter stating that they wish to be excluded from critical habitat designation for the streaked horned lark (or any other species). The Tribe is working with their legal counsel and State and Federal agencies (Corps, WDFW, Service) in partnership on the development of an Ecological Restoration Plan for the coastal beaches and tidelands on the reservation.

We determined that approximately 182 ac (74 ha) of lands owned by, or under the jurisdiction of, the Tribe contained biological features essential to the conservation of the streaked horned lark, and therefore meet the definition of critical habitat under the Act. These tribal lands are located in the subunit identified as Shoalwater Spit of Unit 3 (the Washington Coast and Columbia River Islands). In making our final

decision with regard to the designation of critical habitat for the streaked horned lark on these tribal lands, we considered several factors, including Secretarial Order 3206, Executive Order 13175, the President's memorandum on "Government-to-Government Relations with Native American Tribal Governments" (59 FR 22951; April 29, 1994), conservation measures in place on these lands that may benefit the streaked horned lark, economic impacts to tribes, our relationship with the Tribe, and impacts to current and future partnerships with the Shoalwater Bay Tribe and other tribes we coordinate with on endangered and threatened species issues. Under section 4(b)(2) of the Act, the Secretary is exercising her discretion to exclude approximately 182 ac (74 ha) of land composed entirely of reservation lands. We further exclude from this final critical habitat designation lands that develop by accretion, which we anticipate may become reservation lands in the near future. As described in our analysis below, this conclusion was reached after considering the relevant impacts of specifying this area as critical habitat.

Shoalwater Bay Tribe

The Shoalwater Bay Tribe (Tribe) is a Federally-recognized Native American tribe with a relatively small (approximately one square mile) reservation in Pacific County, Washington. Lands within the Shoalwater Bay Indian Reservation boundary include upland forested terrestrial habitats, a small residential and commercial area, and coastal marine habitats. Critical habitat for the streaked horned lark was proposed in the portion of the reservation with coastal beaches. Through our ongoing coordination with the Tribe, we have established a partnership that has benefitted natural resource management on tribal lands. For our section 4(b)(2) balancing analysis we considered our partnership with the Tribe in our analysis of the benefits of including and excluding those lands under the sovereign control of the Tribe that met the definition of critical habitat.

Benefits of Inclusion—Shoalwater Bay Tribe—The principal benefit of any designated critical habitat is that Federal activities will require section 7 consultations to ensure that adequate protection is provided to avoid adverse modification or destruction of critical habitat. This would provide an additional benefit beyond that provided under the jeopardy standard. In evaluating project effects on critical habitat, the Service must be satisfied that the PCEs and, therefore, the

essential features of the critical habitat likely will not be altered or destroyed by proposed activities to the extent that the conservation of the affected species would be appreciably reduced. If critical habitat were designated in areas of unoccupied habitat or currently occupied areas subsequently become unoccupied, different outcomes or requirements are also likely because effects to unoccupied areas of critical habitat are not likely to trigger the need for a jeopardy analysis.

In *Sierra Club v. Fish and Wildlife Service*, 245 F.3d 434 (5th Cir. 2001), the Fifth Circuit Court of Appeals stated that the identification of habitat essential to the conservation of the species can provide informational benefits to the public, State and local governments, scientific organizations, and Federal agencies. The court also noted that critical habitat designation may focus and heighten public awareness of the plight of listed species and their habitats. Designation of critical habitat may contribute to conservation efforts by other parties by delineating areas of high conservation value for streaked horned lark. While we believe this educational outcome is important for streaked horned lark conservation, we believe it has already been achieved to some extent through the existing management, education, and public outreach efforts carried out by the Tribe. Designation of critical habitat on the aforementioned tribal lands would simply affirm the recognized conservation value of these lands, which is already widely accepted by conservationists, public agencies, and most of the public.

The principal benefit of including an area in a critical habitat designation is the requirement for Federal agencies to ensure that actions they fund, authorize, or carry out are not likely to result in the destruction or adverse modification of any designated critical habitat, the regulatory standard of section 7(a)(2) of the Act under which consultation is completed. Federal agencies must also consult with us on actions that may affect a listed species and refrain from undertaking actions that are likely to jeopardize the continued existence of such species. The analysis of effects of a proposed project on critical habitat is separate and different from that of the effects of a proposed project on the species itself. The jeopardy analysis evaluates the action's impact to survival and recovery of the species, while the destruction or adverse modification analysis evaluates the action's effects to the designated habitat's contribution to conservation. Therefore, the difference in outcomes of these two analyses

represents the regulatory benefit of critical habitat. This will, in many instances, lead to different results and different regulatory requirements. Thus, critical habitat designations may provide greater benefits to the recovery of a species than listing alone would do. However, for some species, and in some locations, the outcome of these analyses will be similar, because effects to habitat will often also result in effects to the species. The tribal lands considered for exclusion are occupied by the streaked horned lark and will be subject to the consultation requirements of the Act in the future. Although a jeopardy and adverse modification analysis must satisfy two different standards, because any modifications to proposed actions resulting from a section 7 consultation to minimize or avoid impacts to the streaked horned lark will be habitat-based, it is not possible to differentiate any measures implemented solely to minimize impacts to the critical habitat from those implemented to minimize impacts to the streaked horned lark. Therefore, in the case of the streaked horned lark, we believe the benefits of critical habitat designation are very similar to the benefits of listing, and in some respects would be indistinguishable from the benefits of listing.

Public education is often cited as another possible benefit of including lands in critical habitat as it may help focus conservation efforts on areas of high value for certain species. Partnership efforts with the Shoalwater Bay Tribe to conserve the streaked horned lark and other coastal species of concern have resulted in heightened awareness about the subspecies. However, we believe there is little, if any, educational benefit attributable to critical habitat beyond those achieved from listing of the streaked horned lark under the Act, and the Tribe's efforts. The Shoalwater Bay Tribe coordinates regularly with the WDFW on annual surveys for the streaked horned lark and has partnered with the Service (Willapa National Wildlife Refuge and Ecological Services) to control nonnative or invasive species and restore habitat for the streaked horned lark and other coastal species on the reservation. Service coordination includes attending meetings with tribal resource staff to discuss ongoing projects, management plans, and other issues that arise. We believe our continuing coordination with the Shoalwater Bay Tribe will further promote awareness of the subspecies and its conservation needs, and will facilitate refinements to the existing Fish and Wildlife Codes and

Title 23 of the Tribe's Environmental Ordinances that protect natural resources on the reservation.

We believe existing tribal regulations, including the 2001 Tribal Environmental Codes that protect the saltmarsh and sand spit as natural areas, will ensure that any land use actions, including those funded, authorized, or carried out by Federal agencies, are not likely to result in the destruction or adverse modification of all lands considered for exclusion. The Tribe coordinates with the Service on all actions that have the potential to affect habitat for listed species on the reservation, including the streaked horned lark. In 2003, the Service completed a Planning Aid Letter, and in 2006, we wrote a Fish and Wildlife Coordination Act Report for the Corps (Shoalwater Bay Tribe is the project sponsor) on the Shoalwater Coastal Erosion Project, which entails beach nourishment along the sand spit used by the streaked horned lark. We completed a section 7 consultation for this project in 2012, which covered effects to both the streaked horned lark and western snowy plover. Due to construction delays, the project was not completed and is still ongoing. We are currently completing formal conferencing for potential effects to the streaked horned lark and proposed critical habitat related to this project. The Service coordinated with the Tribe and the Corps on the project design and will provide technical input and recommendations on the planting plan and long-term vegetation management on the dune. The Tribe is actively working with the State and Federal agencies in implementation of the project to avoid impacts to the streaked horned lark and its nesting habitat. The project is designed to restore the barrier spit that has been actively eroding over the decades. The spit provides protection from coastal storms and high winter waves for the Shoalwater Bay Indian Reservation.

Surveys for both the western snowy plover and streaked horned lark have been conducted by WDFW and the Tribe on the reservation and adjacent lands since 2000. Surveys became more intensive in 2004 and later years (to present) when both the western snowy plover and streaked horned lark were documented nesting on tribal lands on Shoalwater spit. Although they may not nest there every year, male streaked horned larks were heard singing or have been seen on Shoalwater Spit during the nesting seasons of 2004, 2008, 2009, 2012, and 2013. The Tribe has played an active role in surveying for and protecting habitat for the streaked

horned lark. In emails and comments sent to the Service on August 31, 2011, and April 3, 2013, the Tribe confirmed that they will continue to use their existing regulatory structure to provide habitat protection for coastal species (including the streaked horned lark) and “keep trespassers off those areas considered most important to the species.” The Corps worked closely with the WDFW and the Service in the development and implementation of a species protection plan for the western snowy plover and streaked horned lark habitat as part of the erosion control project. The Tribe, WDFW, and Service are coordinating with the Corps on the development of an Ecological Restoration Plan for the Shoalwater Bay Tribe which will include a planting and long-term vegetation management plan for the dune and restoration of the adjacent tidelands.

Any potential impacts to the streaked horned lark from future proposed activities on tribal trust reservation lands will be addressed through a section 7 consultation using the jeopardy standard, and such activities would also be subject to the take prohibitions under section 9 of the Act. As a result, we believe the regulatory benefits of critical habitat designation on tribal trust reservation land would largely be redundant with the combined benefits of listing and existing tribal regulations.

The designation of critical habitat for the streaked horned lark may strengthen or reinforce some Federal laws, such as the National Environmental Policy Act (NEPA; 42 U.S.C. 4321 *et seq.*) or the Clean Water Act (33 U.S.C. 1251 *et seq.*). These laws analyze the potential for projects to significantly affect the environment. Critical habitat may signal the presence of sensitive habitat that could otherwise be missed in the review process for these other environmental law; however, the listing process and consultations (which includes conferencing on effects to critical habitat for the streaked horned lark off reservation lands) that have already occurred and/or are ongoing will provide this benefit. Therefore, in this case we view this benefit as redundant with the benefit the species will receive from listing under the Act.

In summary, we believe that designating critical habitat on the Shoalwater Bay Indian Reservation will provide only minimal additional benefits for the streaked horned lark. Projects on these lands with a Federal nexus (e.g., funded, authorized, or carried out by Federal agencies, such as the U.S. Army Corps of Engineers) will require section 7 consultation with the

Service (regardless of critical habitat designation) where the habitat is occupied or the species may otherwise be affected. Furthermore, a high level of protection is already provided on Shoalwater Bay Indian Reservation lands that meet the definition of critical habitat by existing conservation, regulations, and management. Ongoing coordination between the Service and the Tribe has already raised the level of awareness about the subspecies, and we believe our continued coordination with the Tribe will facilitate development of species-specific management actions for these lands to address the conservation of the streaked horned lark.

Benefits of Exclusion—Shoalwater Bay Tribe—Under Secretarial Order 3206, American Indian Tribal Rights, Federal-Tribal Trust Responsibilities, and the Act, we recognize that we must carry out our responsibilities under the Act in a manner that harmonizes the Federal trust responsibility to tribes and tribal sovereignty while striving to ensure that tribes do not bear a disproportionate burden for the conservation of listed species, so as to avoid or minimize the potential for conflict and confrontation. In accordance with the Presidential memoranda of April 29, 1994, and November 9, 2009, we believe that, to the maximum extent possible, tribes are the appropriate governmental entities to manage their lands and tribal trust resources, and that we are responsible for strengthening government-to-government relationships with tribes. Federal regulation through critical habitat designation will adversely affect the tribal working relationships we now have and which we are strengthening throughout the United States. Maintaining positive working relationships with tribes is key to implementing natural resource programs of mutual interest, including habitat conservation planning efforts. In light of the above-mentioned orders and for a variety of other reasons described in their comment letters and communications, critical habitat designation is typically viewed by tribes as an unwarranted and unwanted intrusion into tribal self-governance.

In the case of proposed critical habitat for the streaked horned lark (77 FR 61937; October 11, 2012), the Shoalwater Bay Tribe has requested to “remain excluded from any critical habitat designation.” In their comments sent to the Service on April 3, 2013, the Tribe stated that it is their goal to “not only protect existing habitat for native (coastal) species but to also increase and improve habitat” and to “develop strategies for addressing threatened

species and their habitat” on tribal lands. In their comments submitted during revisions of critical habitat for the western snowy plover, the Tribe “continues to demonstrate its desire to protect threatened and/or endangered species through its management and stewardship capabilities” without “externally defined designated critical habitat designations.” The Tribe stated that they wish to make “their own determinations regarding the Reservation and tribal trust resources” and we note that the Tribe has been able to provide for the streaked horned lark and steps are being taken to continue that effort in the most effective way possible. The Tribe has been working closely with the Willapa National Wildlife Refuge for several years on collection, propagation, and reintroduction of the native pink sand verbena (*Abronia umbellata*) and is propagating this species at their greenhouse on the reservation. This native plant has been extirpated in Washington and was recently rediscovered on the refuge. Efforts to reintroduce this species along coastal beaches that are currently occupied by the streaked horned lark (including the refuge and tribal lands) have been successful and are ongoing projects. The commitment by the Tribe to restore habitat for this native plant and efforts to control invasive species such as smooth cordgrass (*Spartina alterniflora*) supports their commitment to protect habitat for streaked horned lark and strengthens the ongoing partnership with the Service. In their comments to the Service on the proposed rule, the Tribe indicated they would use their existing regulations to protect streaked horned lark and its habitat. These communications clearly indicate that designation of tribal trust reservation lands as critical habitat for the streaked horned lark would impact future conservation partnership opportunities with the Tribe. Therefore, a critical habitat designation could potentially damage our relationship with the Shoalwater Bay Tribe.

We believe significant benefits would be realized by excluding lands managed by the Shoalwater Bay Indian Tribe from critical habitat. These benefits include:

- (1) Continuing and strengthening of our effective relationship with the tribe to promote conservation of the streaked horned lark and its habitat; and
- (2) Allowing continued meaningful collaboration and cooperation in working toward recovering this subspecies, including conservation actions that might not otherwise occur.

Because the Tribe is the entity that enforces protective regulations on tribal trust reservation land, and we have a working relationship with them, we believe exclusion of these lands will yield a significant partnership benefit. We will continue to work cooperatively with the Tribe on efforts to conserve the streaked horned lark. Therefore, excluding these lands from critical habitat provides the significant benefit of maintaining and strengthening our existing conservation partnerships and the potential of fostering new tribal partnerships.

Benefits of Exclusion Outweigh Benefits of Inclusion—Shoalwater Bay Indian Tribe—Based on the above considerations and consistent with the direction provided in section 4(b)(2) of the Act, the Service has determined that the benefits of excluding the above tribal lands outweigh the benefits of including them as critical habitat. This conclusion is based on the following factors. It is possible, although unlikely, that Federal actions will be proposed that would be likely to destroy or adversely modify the habitat proposed as critical within the area governed by the Tribe. If such a project were proposed, due to the specific way in which jeopardy and adverse modification are analyzed for the streaked horned lark, discussed in detail earlier in this document, it would likely also jeopardize the continued existence of the subspecies. Few additional benefits are provided by including these tribal lands in this critical habitat designation beyond what will be achieved through the implementation of the existing tribal management or conservation plans. In addition, we expect that the benefit of informing the public of the importance of this area to streaked horned lark conservation would be low.

We do not believe that inclusion of tribal lands will significantly improve habitat protections for the streaked horned lark beyond what is already provided for in the Tribe's own protective policies and practices, discussed below.

The Tribe is working closely with the Corps and the Federal and State resource agencies on the development of an Ecological Restoration Plan for the Shoalwater Bay Tribe and have provided information detailing how they are addressing the habitat needs of the streaked horned lark on their lands and they are fully aware of the conservation value of their lands for many coastal species of concern. There are several benefits to excluding tribal lands. The long-standing and distinctive relationship between the Federal and

tribal governments is defined by treaties, statutes, executive orders, judicial decisions, and agreements, which differentiate tribal governments from the other entities that deal with, or are affected by, the Federal government. This relationship has given rise to a special Federal trust responsibility involving the legal responsibilities and obligations of the United States toward Indian Tribes and the application of fiduciary standards of due care with respect to Indian lands, tribal trust resources, and the exercise of tribal rights. Under these authorities, Indian lands are recognized as unique and have been retained by Indian Tribes or have been set aside for tribal use. These lands are managed by Indian Tribes in accordance with tribal goals and objectives within the framework of applicable treaties and laws.

Tribal lands are currently being managed on a voluntary basis in cooperation with the Service and others to conserve the streaked horned lark and achieve important conservation goals. We believe the streaked horned lark benefits from the Tribe's voluntary management actions due to their long-standing and broad application to tribal management decisions. Tribal cooperation and support is required to continue cooperative scientific efforts, to promote the recovery of the streaked horned lark, and to implement proactive conservation actions. This need for the tribal cooperation is especially acute because, in some cases, populations exist only on areas of tribal management or only on tribal lands. Future conservation efforts in this area require the continued cooperation and support of the Tribe. Exclusion of tribal lands from the critical habitat designation will help us maintain and improve our partnership with the Tribe by formally recognizing their positive contributions to streaked horned lark recovery, and by streamlining or reducing unnecessary regulatory oversight.

Given the cooperative relationship between the Shoalwater Bay Tribe and the Service, and all of the conservation benefits taken together, we believe the additional regulatory and educational benefits of including the tribal lands as critical habitat are relatively small. The designation of critical habitat can serve to educate the public regarding the potential conservation value of an area, but this goal is already being accomplished through the identification of these areas in the tribal management planning, development of tribal Fish and Wildlife Codes, and through their outreach efforts.

Because of the ongoing relationship between the Service and the Shoalwater

Bay Tribe through a variety of forums, we find the benefits of these coordination efforts to be greater than the benefits of applying the Act's section 7 consultations for critical habitat to Federal activities on tribal lands. Based upon our consultations with the Tribes, we believe that designation of Indian lands as critical habitat would adversely impact our working relationship and the benefits resulting from this relationship.

In contrast, although the benefits of encouraging participation in tribal management plans, and, more broadly, helping to foster cooperative conservation are indirect, enthusiastic tribal participation and an atmosphere of cooperation are crucial to the long-term effectiveness of the endangered species program. Also, we have concluded that the Tribe's voluntary conservation efforts will provide tangible conservation benefits that will reduce the likelihood of extinction and increase the likelihood for streaked horned lark recovery. Therefore, we assign great weight to these benefits of exclusion. To the extent that there are regulatory benefits of including tribal lands in critical habitat, there would be associated costs that could be avoided by excluding the area from designation. As we expect the regulatory benefits to be low, we likewise give weight to avoidance of those associated costs, as well as the additional transaction costs related to section 7 compliance.

We reviewed and evaluated the benefits of inclusion and the benefits of exclusion of Shoalwater Bay Tribe tribal trust reservation lands as critical habitat for the streaked horned lark. We believe past, present, and future coordination with the Shoalwater Bay Tribe has provided and will continue to provide streaked horned lark habitat conservation needs on tribal lands, such that there would be no additional benefit from designation of critical habitat. Further, because any potential impacts to the streaked horned lark from future projects will be addressed through a section 7 consultation with us under the jeopardy standard, we believe critical habitat designation on the Shoalwater Bay Indian Reservation would largely be redundant with the combined benefits of listing and existing tribal regulations and management. Therefore, the benefits of designating critical habitat on tribal trust reservation lands are not significant.

On the other hand, the benefits of excluding the Shoalwater Bay Indian Reservation from critical habitat are significant. Exclusion of these lands from critical habitat will help preserve and strengthen the conservation

partnership we have developed with the Tribe and will foster future partnerships and development of management plans; whereas inclusion will negatively impact our relationships with the Tribe and other tribes. We are committed to working with the Shoalwater Bay Tribe to further the conservation of the streaked horned lark and other endangered and threatened species on the reservation. The Tribe will continue to use their existing regulatory structure to protect the streaked horned lark and its habitat. The Tribe continues to provide for indirect conservation of streaked horned lark habitat by implementing conservation measures for other coastal species (such as, the pink sand verbena) that have the same habitat requirements. Therefore, in consideration of the relevant impact to our partnership and our government-to-government relationship with the Shoalwater Bay Indian Tribe, and the ongoing conservation management practices of the Tribe and our current and future conservation partnerships with them, we determined the significant benefits of exclusion outweigh the benefits of inclusion in the critical habitat designation.

In summary, we find that excluding the Shoalwater Bay Tribe tribal trust reservation lands from this revised final critical habitat will preserve our partnership and may foster future habitat management and species conservation plans with the Tribe now and in the future. These partnership benefits are significant and outweigh the minimal additional regulatory benefits of including these lands in final critical habitat for the streaked horned lark.

Exclusion Will Not Result in Extinction of the Species—Shoalwater Bay Tribe—We determined that the exclusion of 182 ac (74 ha) of tribal trust reservation lands from the designation of streaked horned lark critical habitat will not result in extinction of the subspecies. The jeopardy standard of section 7 of the Act and routine implementation of conservation measures through the section 7 process due to streaked horned lark occupancy and protection provided by under Title 23 of the Tribal Environmental Ordinances and their Ecosystem Restoration Plan provide assurances that this subspecies will not go extinct as a result of excluding these lands from the critical habitat designation. Therefore, based on the above discussion the Secretary is exercising her discretion to exclude approximately 182 ac (74 ha) of tribal trust reservation lands managed by the Shoalwater Bay Tribe from this final critical habitat designation.

Required Determinations

Regulatory Planning and Review (Executive Orders 12866 and 13563)

Executive Order 12866 provides that the Office of Information and Regulatory Affairs (OIRA) will review all significant rules. The Office of Information and Regulatory Affairs has determined that this rule is not significant.

Executive Order 13563 reaffirms the principles of E.O. 12866 while calling for improvements in the nation's regulatory system to promote predictability, to reduce uncertainty, and to use the best, most innovative, and least burdensome tools for achieving regulatory ends. The executive order directs agencies to consider regulatory approaches that reduce burdens and maintain flexibility and freedom of choice for the public where these approaches are relevant, feasible, and consistent with regulatory objectives. E.O. 13563 emphasizes further that regulations must be based on the best available science and that the rulemaking process must allow for public participation and an open exchange of ideas. We have developed this rule in a manner consistent with these requirements.

Regulatory Flexibility Act (5 U.S.C. 601 et seq.)

Under the Regulatory Flexibility Act (RFA; 5 U.S.C. 601 *et seq.*), as amended by the Small Business Regulatory Enforcement Fairness Act (SBREFA) of 1996 (5 U.S.C. 801 *et seq.*), whenever an agency must publish a notice of rulemaking for any proposed or final rule, it must prepare and make available for public comment a regulatory flexibility analysis that describes the effects of the rule on small entities (small businesses, small organizations, and small government jurisdictions). However, no regulatory flexibility analysis is required if the head of an agency certifies the rule will not have a significant economic impact on a substantial number of small entities. The SBREFA amended the RFA to require Federal agencies to provide a certification statement of the factual basis for certifying that the rule will not have a significant economic impact on a substantial number of small entities. In this final rule, we are certifying that the critical habitat designation for Taylor's checkerspot butterfly and streaked horned lark will not have a significant economic impact on a substantial number of small entities. The following discussion explains our rationale.

According to the Small Business Administration, small entities include

small organizations, such as independent nonprofit organizations; small governmental jurisdictions, including school boards and city and town governments that serve fewer than 50,000 residents; as well as small businesses. Small businesses include manufacturing and mining concerns with fewer than 500 employees, wholesale trade entities with fewer than 100 employees, retail and service businesses with less than \$5 million in annual sales, general and heavy construction businesses with less than \$27.5 million in annual business, special trade contractors doing less than \$11.5 million in annual business, and agricultural businesses with annual sales less than \$750,000. To determine if potential economic impacts on these small entities are significant, we consider the types of activities that might trigger regulatory impacts under this rule, as well as the types of project modifications that may result. In general, the term "significant economic impact" is meant to apply to a typical small business firm's business operations.

To determine if the rule could significantly affect a substantial number of small entities, we consider the number of small entities affected within particular types of economic activities (e.g., airports, agriculture, recreation, and habitat management). We apply the "substantial number" test individually to each industry to determine if certification is appropriate. However, the SBREFA does not explicitly define "substantial number" or "significant economic impact." Consequently, to assess whether a "substantial number" of small entities is affected by this designation, this analysis considers the relative number of small entities likely to be impacted in an area. In some circumstances, especially with critical habitat designations of limited extent, we may aggregate across all industries and consider whether the total number of small entities affected is substantial. In estimating the number of small entities potentially affected, we also consider whether their activities have any Federal involvement.

Designation of critical habitat only affects activities authorized, funded, or carried out by Federal agencies. Some kinds of activities are unlikely to have any Federal involvement and so will not be affected by critical habitat designation. In areas where the species is present, Federal agencies already are required to consult with us under section 7 of the Act on activities they authorize, fund, or carry out that may affect Taylor's checkerspot butterfly and streaked horned lark. Federal agencies

also must consult with us if their activities may affect critical habitat. Designation of critical habitat, therefore, could result in an additional economic impact on small entities due to the requirement to reinitiate consultation for ongoing Federal activities (see *Application of the “Adverse Modification” Standard*).

In our final economic analysis (FEA) of the critical habitat designation, we evaluated the potential economic effects on small business entities resulting from conservation actions related to the listings of Taylor’s checkerspot butterfly, streaked horned lark, and four subspecies of Mazama pocket gopher and the designation of critical habitat. The analysis is based on the estimated impacts associated with the rulemaking as described in Appendix A of the FEA (IEc 2013, pp. A–1–A–11) and evaluates the potential for economic impacts related to: Military activities; recreation and habitat management; airport operations and agricultural activities; transportation, electricity distribution and forestry activities; and dredging, gravel mining, development, and other activities. The FEA determined that critical habitat designation will not result in impacts to small entities for the following activities (IEc 2013, p. A–4):

(1) Military activities. As the affected base, JBLM is a Federal entity and it is, by definition, not small, and thus no impacts to small entities are expected.

(2) Transportation. The impacts are limited to Washington State Department of Transportation. As State agencies are, by definition, not small, no impacts to small entities are expected related to transportation.

(3) Electricity Distribution and Forestry Activities. The only electricity distribution activity within the proposed critical habitat is carried out by the Bonneville Power Administration (BPA), which is a Federal entity and, therefore, is not considered small. As such, there are no anticipated impacts to small entities related to BPA’s electricity distribution activities. No incremental costs are anticipated for forestry activities and thus no impact to small entities related to forestry is anticipated.

(4) Dredging. Dredging is conducted by the U.S. Army Corps of Engineers, which is a Federal entity and is, by definition, not small, and thus no impacts to small entities are expected.

Estimated incremental impacts that may be borne by small entities are limited to the administrative costs of section 7 consultation related to airport operations and agriculture as well as by recreation and habitat restoration.

Potential impacts on these sectors are evaluated here:

Airport Operations and Agriculture. Chapter 3 of the FEA discuss the potential for the critical habitat designations to affect airports and agricultural activities. Overall, 214 consultations would be expected in relation to operations at 7 airports over the next 20 years. Information on whether airports are large or small entities was available for some airports and not for others. For the purposes of the analysis, we made the conservative assumption that all airports within the proposed critical habitat are small entities. These seven entities represent 3 percent of the total small Other Airport Operations (NAICS code 488119) entities within the proposed critical habitat. The cost per entity, per consultation, to participate in forecast consultation is approximately \$875 to \$8,750 in any given year. The full cost to a third party of a single consultation is \$875. If we assume that a single entity participates in multiple consultations in a single year, the administrative costs of such activity are likely to be less than 1 percent of annual revenues (IEc 2013, p. A–5).

We forecast two projects related to agriculture, one at Rock Prairie and one on M–DAC farms, which may involve small entities. Assuming that all agriculture and grazing impacts are borne by these two small entities, this amounts to less than one affected entity per year. The per entity impact, ranging from approximately \$875 to \$1,750, represents less than 2 percent of annual revenues (IEc 2013, p. A–5).

Recreation and Habitat Management. A diverse group of Federal and State agencies, county-level governments, and private nonprofit organizations may be subject to the administrative burden of consultations associated with recreation and habitat management. However, of these, the Federal, State, and county-level governments are not considered small entities. Therefore, there are three projects within the proposed critical habitat that may involve private nonprofit organizations that qualify as small entities—Wolf Haven International, Whidbey/Camano Land Trust, and the Pacific Rim Institute for Environmental Stewardship. Assuming that all recreation and habitat restoration impacts are borne by these small private entities, this amounts to less than one affected entity per year. The per entity impact, ranging from approximately \$875 to \$2,625 in any given year, represents less than 1 percent of annual revenues (IEc 2013, p. A–6).

Recreators at JBLM may incur unquantified losses in economic surplus in the form of reduced or restricted recreational use of JBLM lands proposed as critical habitat. However, because the recreators leasing JBLM lands are individuals, not entities, we do not address these impacts in this analysis.

In summary, we considered whether this designation will result in a significant economic effect on a substantial number of small entities (IEc 2013, p. A–7). Based on the above reasoning and currently available information, we conclude that this rule will not result in a significant economic impact on a substantial number of small entities. Therefore, we are certifying that the designation of critical habitat for the Taylor’s checkerspot butterfly and streaked horned lark will not have a significant economic impact on a substantial number of small entities, and a regulatory flexibility analysis is not required.

Energy Supply, Distribution, or Use—Executive Order 13211

Executive Order 13211 (Actions Concerning Regulations That Significantly Affect Energy Supply, Distribution, or Use) requires agencies to prepare Statements of Energy Effects when undertaking certain actions. OMB has provided guidance for implementing this Executive Order that outlines nine outcomes that may constitute “a significant adverse effect” when compared to not taking the regulatory action under consideration.

The economic analysis finds that none of these criteria is relevant to this analysis. Thus, based on information in the economic analysis, energy-related impacts associated with Taylor’s checkerspot butterfly and streaked horned lark conservation activities within critical habitat are not expected. As such, the designation of critical habitat is not expected to significantly affect energy supplies, distribution, or use. Therefore, this action is not a significant energy action, and no Statement of Energy Effects is required.

Unfunded Mandates Reform Act (2 U.S.C. 1501 et seq.)

In accordance with the Unfunded Mandates Reform Act (2 U.S.C. 1501 et seq.), we make the following findings:

(1) This rule will not produce a Federal mandate. In general, a Federal mandate is a provision in legislation, statute, or regulation that would impose an enforceable duty upon State, local, or tribal governments, or the private sector, and includes both “Federal intergovernmental mandates” and “Federal private sector mandates.”

These terms are defined in 2 U.S.C. 658(5)–(7). “Federal intergovernmental mandate” includes a regulation that “would impose an enforceable duty upon State, local, or tribal governments” with two exceptions. It excludes “a condition of Federal assistance.” It also excludes “a duty arising from participation in a voluntary Federal program,” unless the regulation “relates to a then-existing Federal program under which \$500,000,000 or more is provided annually to State, local, and tribal governments under entitlement authority,” if the provision would “increase the stringency of conditions of assistance” or “place caps upon, or otherwise decrease, the Federal Government’s responsibility to provide funding,” and the State, local, or tribal governments “lack authority” to adjust accordingly. At the time of enactment, these entitlement programs were: Medicaid; Aid to Families with Dependent Children work programs; Child Nutrition; Food Stamps; Social Services Block Grants; Vocational Rehabilitation State Grants; Foster Care, Adoption Assistance, and Independent Living; Family Support Welfare Services; and Child Support Enforcement. “Federal private sector mandate” includes a regulation that “would impose an enforceable duty upon the private sector, except (i) a condition of Federal assistance or (ii) a duty arising from participation in a voluntary Federal program.”

The designation of critical habitat does not impose a legally binding duty on non-Federal Government entities or private parties. Under the Act, the only regulatory effect is that Federal agencies must ensure that their actions do not destroy or adversely modify critical habitat under section 7. While non-Federal entities that receive Federal funding, assistance, or permits, or that otherwise require approval or authorization from a Federal agency for an action, may be indirectly impacted by the designation of critical habitat, the legally binding duty to avoid destruction or adverse modification of critical habitat rests squarely on the Federal agency. Furthermore, to the extent that non-Federal entities are indirectly impacted because they receive Federal assistance or participate in a voluntary Federal aid program, the Unfunded Mandates Reform Act would not apply, nor would critical habitat shift the costs of the large entitlement programs listed above onto State governments.

(2) We do not believe that this rule will significantly or uniquely affect small governments. The designation of critical habitat does not impose a legally

binding duty on non-Federal Government entities or private parties. Under the Act, the only regulatory effect is that Federal agencies must ensure that their actions do not destroy or adversely modify critical habitat under section 7. While non-Federal entities that receive Federal funding, assistance, or permits, or that otherwise require approval or authorization from a Federal agency for an action, may be indirectly impacted by the designation of critical habitat, the legally binding duty to avoid destruction or adverse modification of critical habitat rests squarely on the Federal agency. Therefore, this rule does not place an enforceable duty upon State, local, or Tribal governments, or on the private sector.

Consequently, we do not believe that the critical habitat designation will significantly or uniquely affect small government entities. As such, a Small Government Agency Plan is not required.

Takings—Executive Order 12630

In accordance with Executive Order 12630 (Government Actions and Interference with Constitutionally Protected Private Property Rights), we have analyzed the potential takings implications of designating critical habitat for Taylor’s checkerspot butterfly and streaked horned lark in separate takings implications assessments. As discussed above, the designation of critical habitat affects only Federal actions. Although private parties that receive Federal funding, assistance, or require approval or authorization from a Federal agency for an action may be indirectly impacted by the designation of critical habitat, the legally binding duty to avoid destruction or adverse modification of critical habitat rests squarely on the Federal agency. Critical habitat designation does not affect landowner actions that do not require Federal funding or permits, nor does it preclude development of habitat conservation programs or issuance of incidental take permits to permit actions that do require Federal funding or permits to go forward. The takings implications assessment concludes that this designation of critical habitat for Taylor’s checkerspot butterfly and streaked horned lark does not pose significant takings implications for lands within or affected by the designation.

Federalism—Executive Order 13132

In accordance with Executive Order 13132 (Federalism), this rule does not have significant Federalism effects. A federalism impact summary statement is

not required. In keeping with Department of the Interior and Department of Commerce policy, we requested information from, and coordinated development of, this critical habitat designation with appropriate State resource agencies in Washington and Oregon. We received comments from WDFW and solicited, but did not receive, comments from ODFW. We addressed the comments from WDFW in the Summary of Comments and Recommendations section of this rule, and we have incorporated informal comments and feedback from ODFW into this rule. The designation of critical habitat in areas currently occupied by Taylor’s checkerspot butterfly and streaked horned lark imposes no additional restrictions to those put in place by the subspecies’ listings and, therefore, has little incremental impact on State and local governments and their activities. The designation of critical habitat in areas currently unoccupied by Taylor’s checkerspot butterfly may impose nominal additional regulatory restrictions to those currently in place and, therefore, may have little incremental impact on State and local governments and their activities. The designation may have some benefit to these governments in that the areas that contain the physical or biological features essential to the conservation of the species are more clearly defined, and the elements of the features of the habitat necessary to the conservation of the species are specifically identified. This information does not alter where and what federally sponsored activities may occur. However, it may assist local governments in long-range planning (rather than having them wait for case-by-case section 7 consultations to occur).

Where State and local governments require approval or authorization from a Federal agency for actions that may affect critical habitat, consultation under section 7(a)(2) will be required. While non-Federal entities that receive Federal funding, assistance, or permits, or that otherwise require approval or authorization from a Federal agency for an action, may be indirectly impacted by the designation of critical habitat, the legally binding duty to avoid destruction or adverse modification of critical habitat rests squarely on the Federal agency.

Civil Justice Reform—Executive Order 12988

In accordance with Executive Order 12988 (Civil Justice Reform), the Office of the Solicitor has determined that the rule does not unduly burden the judicial

system and that it meets the applicable standards set forth in sections 3(a) and 3(b)(2) of the Order. We are designating critical habitat in accordance with the provisions of the Act. To assist the public in understanding the habitat needs of the species, the rule identifies the elements of physical or biological features essential to the conservation of Taylor's checkerspot butterfly and streaked horned lark. The designated areas of critical habitat are presented on maps, and the rule provides several options for the interested public to obtain more detailed location information, if desired.

Paperwork Reduction Act of 1995 (44 U.S.C. 3501 et seq.)

This rule does not contain any new collections of information that require approval by OMB under the Paperwork Reduction Act of 1995 (44 U.S.C. 3501 et seq.). This rule will not impose recordkeeping or reporting requirements on State or local governments, individuals, businesses, or organizations. An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB control number.

National Environmental Policy Act (42 U.S.C. 4321 et seq.)

It is our position that, outside the jurisdiction of the U.S. Court of Appeals for the Tenth Circuit, we do not need to prepare environmental analyses pursuant to the National Environmental Policy Act (NEPA; 42 U.S.C. 4321 et seq.) in connection with designating critical habitat under the Act. We published a notice outlining our reasons for this determination in the **Federal Register** on October 25, 1983 (48 FR 49244). This position was upheld by the U.S. Court of Appeals for the Ninth Circuit (*Douglas County v. Babbitt*, 48 F.3d 1495 (9th Cir. 1995), cert. denied 516 U.S. 1042 (1996)).

Government-to-Government Relationship With Tribes

In accordance with the President's memorandum of April 29, 1994 (Government-to-Government Relations with Native American Tribal Governments; 59 FR 22951), Executive Order 13175 (Consultation and Coordination With Indian Tribal Governments), and the Department of the Interior's manual at 512 DM 2, we readily acknowledge our responsibility to communicate meaningfully with recognized Federal Tribes on a government-to-government basis. In accordance with Secretarial Order 3206 of June 5, 1997 (American Indian Tribal

Rights, Federal-Tribal Trust Responsibilities, and the Endangered Species Act), we readily acknowledge our responsibilities to work directly with tribes in developing programs for healthy ecosystems, to acknowledge that tribal lands are not subject to the same controls as Federal public lands, to remain sensitive to Indian culture, and to make information available to tribes.

In the proposed rule to designate critical habitat published in the **Federal Register** on October 11, 2012 (77 FR 61938), we proposed to designate about 661 ac (267 ha) of critical habitat for the streaked horned lark in subunit 3—C Shoalwater/Graveyard Spit, of which about 182 ac (74 ha) was identified as within the Shoalwater Bay Indian Reservation. These lands are occupied by the streaked horned lark and meet our definition of critical habitat for the subspecies. We indicated that we were considering exclusion of the Shoalwater Bay tribal lands from the designation, due to the high degree of protection already provided by the Tribe. We coordinated with the Tribe to better understand their conservation management plans for this area, and specifically for the streaked horned lark. After further review and additional information provided by the Shoalwater Bay Tribe, the Secretary determined that the benefits of excluding these tribal lands outweigh the benefits of including them in critical habitat for the streaked horned lark, and further concluded that such exclusion will not result in the extinction of the subspecies. As a result, the Secretary is exercising her discretion to exclude the 182 ac (74 ac) of Shoalwater Bay Tribal lands from the final designation under section 4(b)(2) of the Act (for details, see the *Exclusions* section of this document, above).

References Cited

A complete list of all references cited is available on the Internet at <http://www.regulations.gov> and upon request from the Service's Washington Fish and Wildlife Office (see **FOR FURTHER INFORMATION CONTACT**).

Authors

The primary authors of this rulemaking are the staff members of the Washington and Oregon Fish and Wildlife Offices.

List of Subjects in 50 CFR Part 17

Endangered and threatened species, Exports, Imports, Reporting and recordkeeping requirements, Transportation.

Regulation Promulgation

Accordingly, we amend part 17, subchapter B of chapter I, title 50 of the Code of Federal Regulations, as set forth below:

PART 17—[AMENDED]

■ 1. The authority citation for part 17 continues to read as follows:

Authority: 16 U.S.C. 1361–1407; 1531–1544; 4201–4245, 100 Stat. 3500; unless otherwise noted.

■ 2. Amend § 17.95 by:

- (a) In paragraph (b), adding an entry for “Streaked horned lark (*Eremophila alpestris strigata*)” in the same order that this species appears in the table in § 17.11(h); and
- (b) In paragraph (i), by adding an entry for “Taylor's checkerspot butterfly (*Euphydryas editha taylori*)” in the same order that this species appears in the table in § 17.11(h).

The additions read as follows:

§ 17.95 Critical habitat—fish and wildlife.

* * * * *

(b) *Birds.*

* * * * *

Streaked horned lark (*Eremophila alpestris strigata*)

(1) Critical habitat units are depicted for Grays Harbor, Pacific, and Wahkiakum Counties in Washington, and Clatsop, Columbia, Marion, Polk, and Benton Counties in Oregon, on the maps below.

(2) Within these areas, the primary constituent elements of the physical or biological features essential to the conservation of the streaked horned lark consist of areas having a minimum of 16 percent bare ground that have sparse, low-stature vegetation composed primarily of grasses and forbs less than 13 inches (33 centimeters) in height found in:

(i) Large (300-acre (120-hectare)), flat (0–5 percent slope) areas within a landscape context that provides visual access to open areas such as open water or fields; or

(ii) Areas smaller than described in paragraph (2)(i) of this entry, but that provide visual access to open areas such as open water or fields.

(3) Critical habitat does not include manmade structures (such as buildings, aqueducts, runways, roads, and other paved areas) and the land on which they are located existing within the legal boundaries on November 4, 2013.

(4) *Critical habitat map units.* Data layers defining map units were created on 2010 aerial photography from U.S. Department of Agriculture, National Agriculture Imagery Program base maps

using ArcMap (Environmental Systems Research Institute, Inc.), a computer geographic information system (GIS) program. The maps in this entry, as modified by any accompanying regulatory text, establish the boundaries of the critical habitat designation. The coordinates or plot points or both on

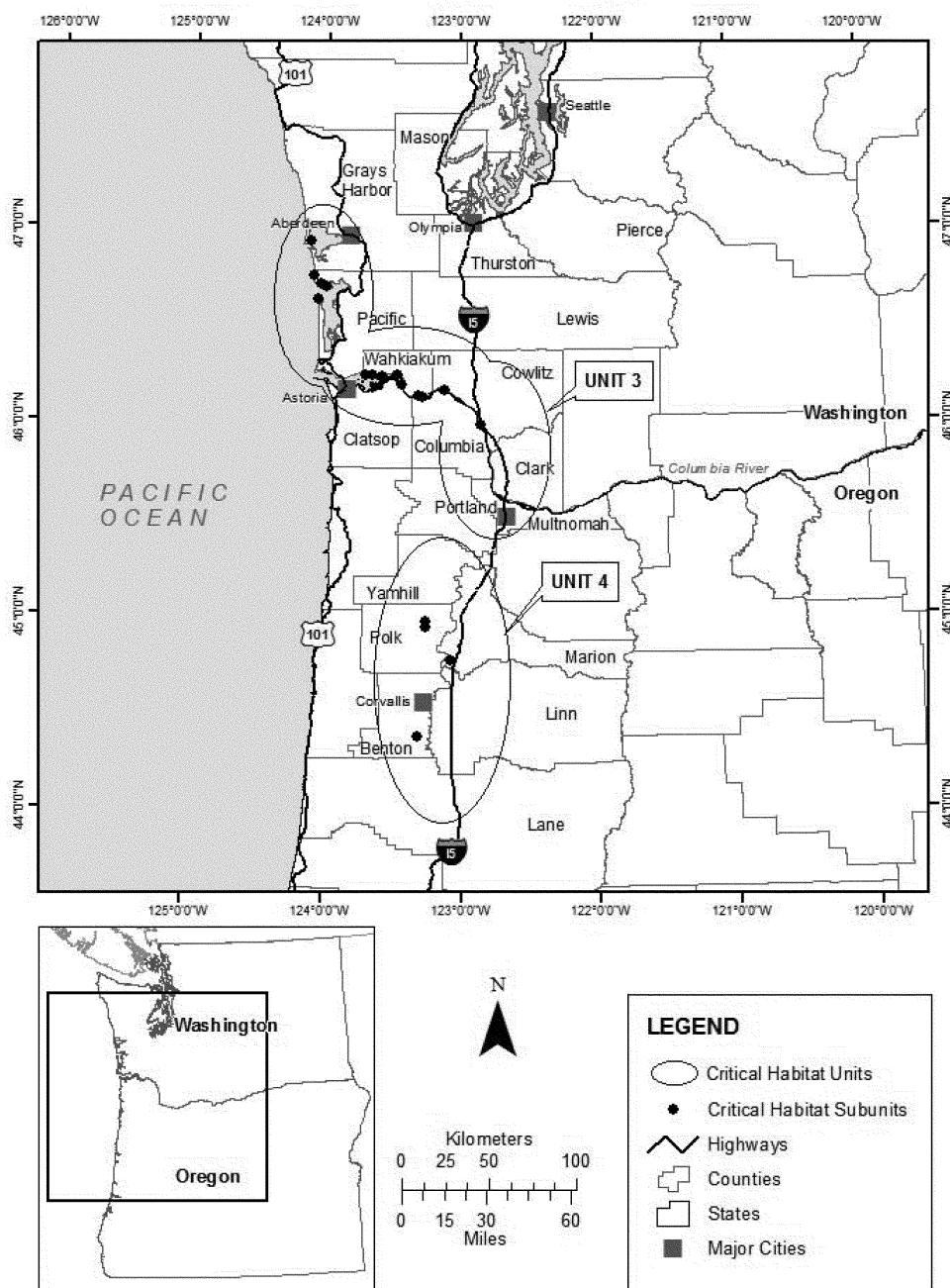
which each map is based are available to the public at the Service's Internet site (<http://www.fws.gov/wafwo>), at <http://www.regulations.gov> at Docket No. FWS-R1-ES-2013-0009, and by appointment at the Service's Washington Fish and Wildlife Office. You may obtain field office location

information by contacting one of the Service regional offices, the addresses of which are listed at 50 CFR 2.2.

(5) Index map of critical habitat units for the streaked horned lark follows:

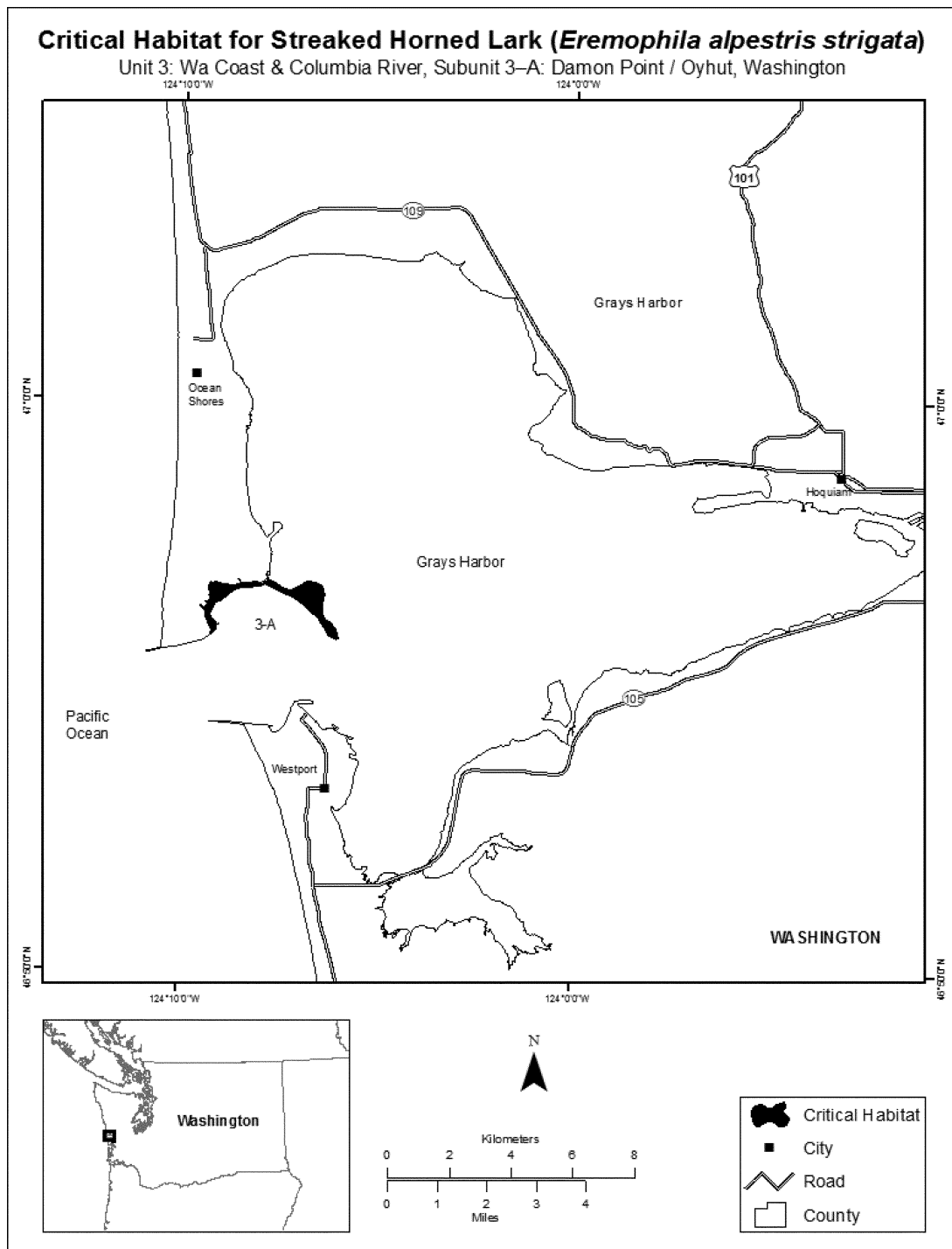
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Critical Habitat for Streaked Horned Lark in Washington and Oregon

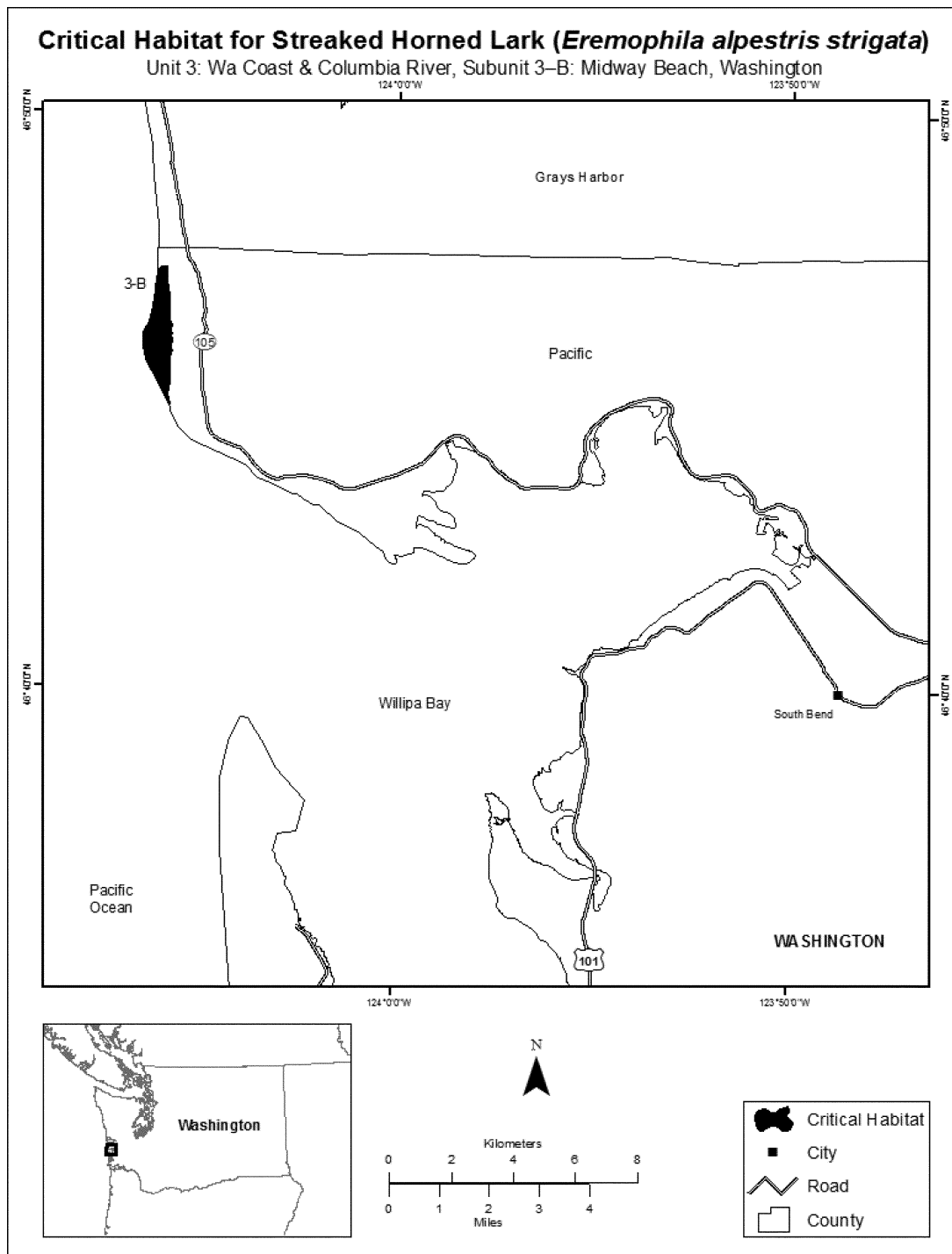


(6) Unit 3—Washington Coast and Columbia River Islands, Washington and Oregon.

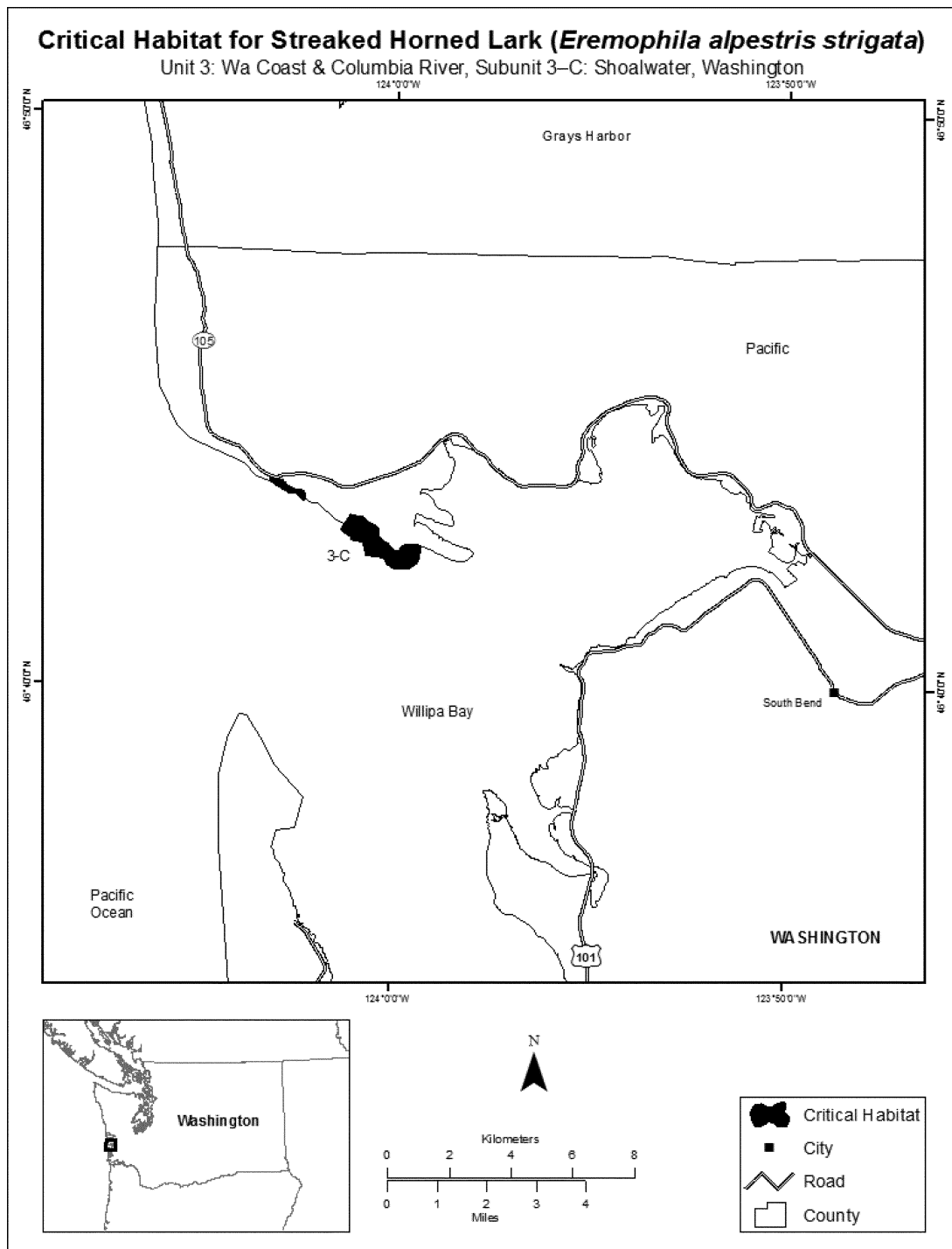
(i) Subunit 3-A: Damon Point/Oyhut, Washington. Map of Subunit 3-A follows:



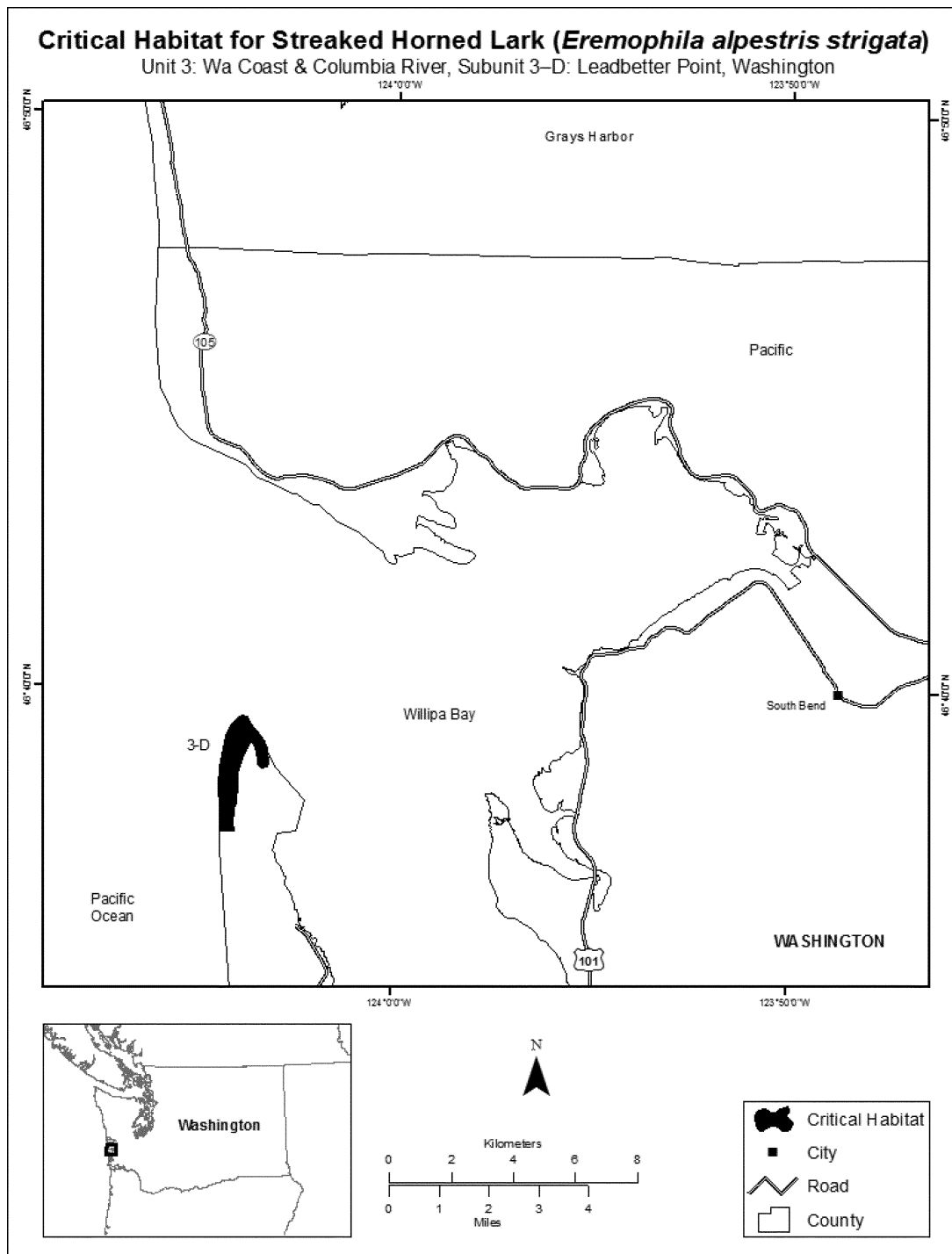
(ii) Subunit 3-B: Midway Beach, Washington. Map of Subunit 3-B follows:



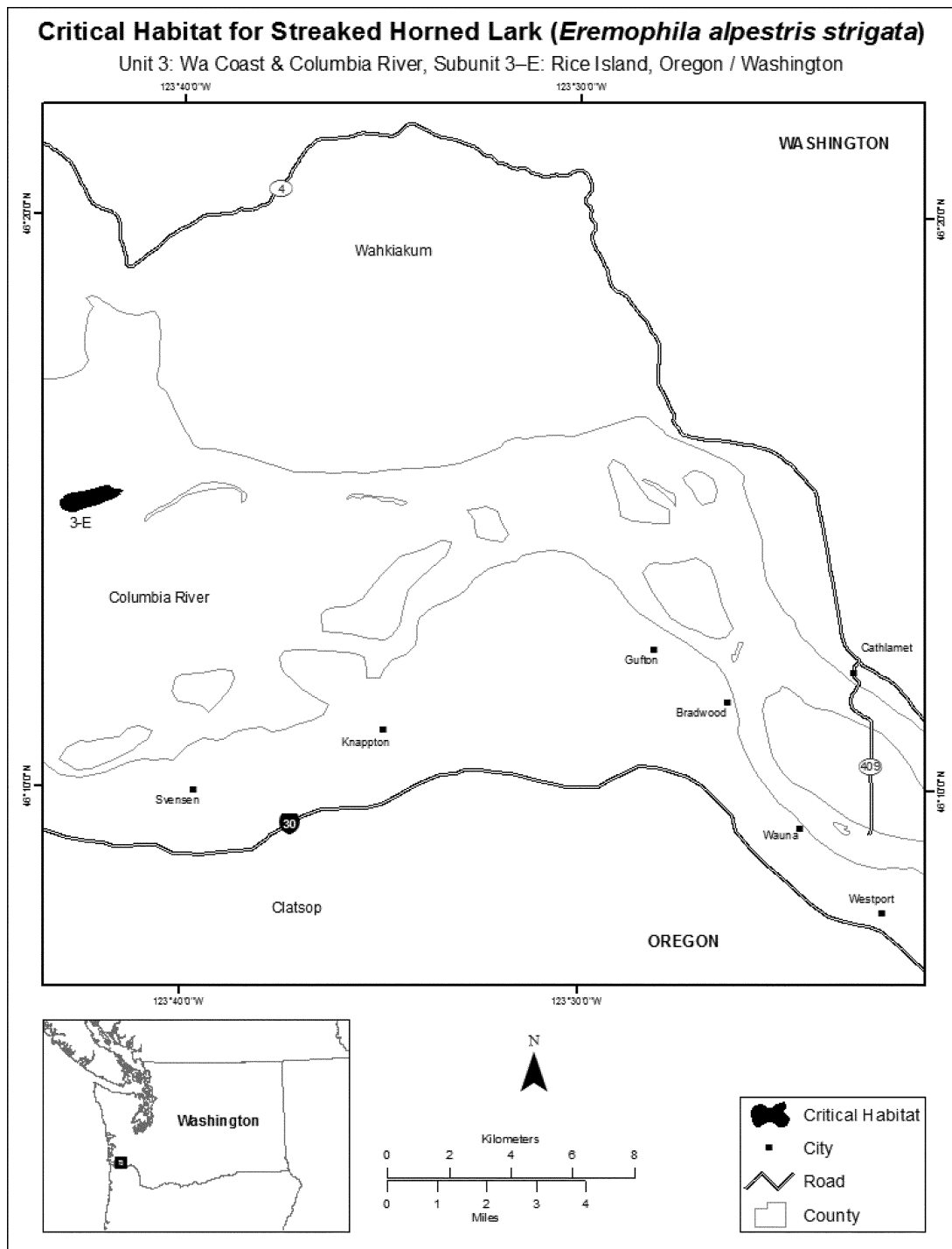
(iii) Subunit 3–C: Shoalwater, Washington. Map of Subunit 3–C follows:



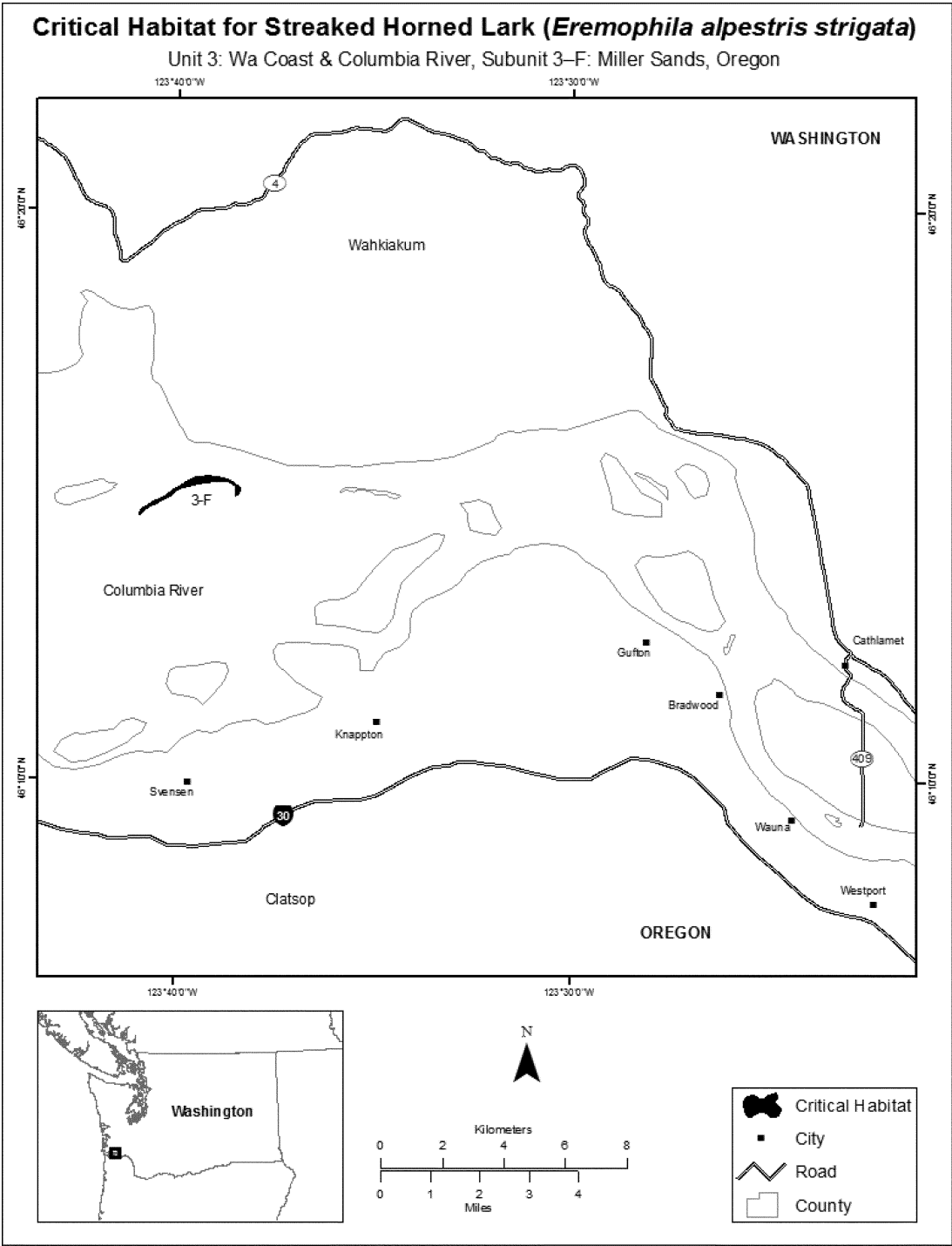
(iv) Subunit 3–D: Leadbetter Point, Washington. Map of Subunit 3–D follows:



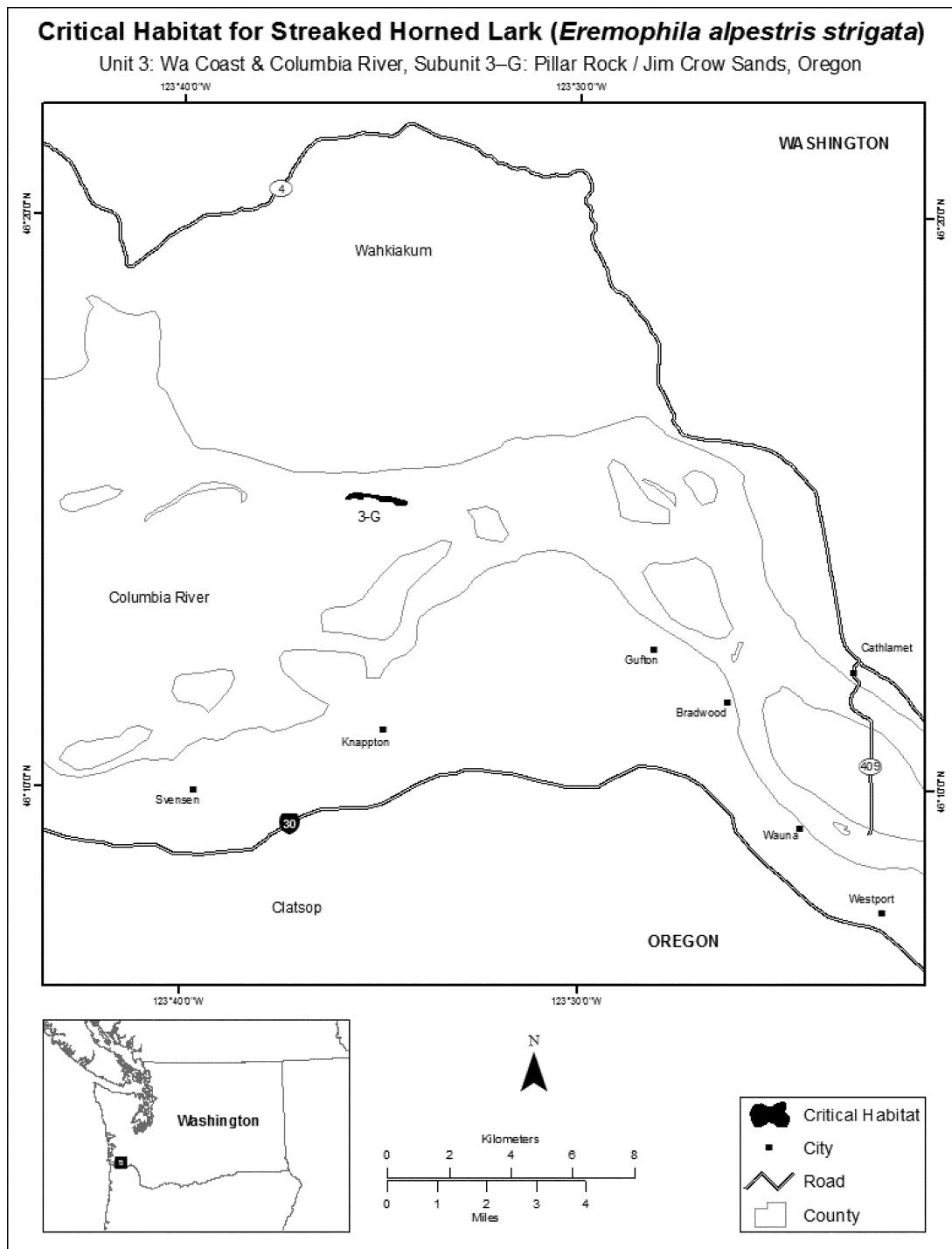
(v) Subunit 3-E: Rice Island, Oregon/
Washington. Map of Subunit 3-E
follows:



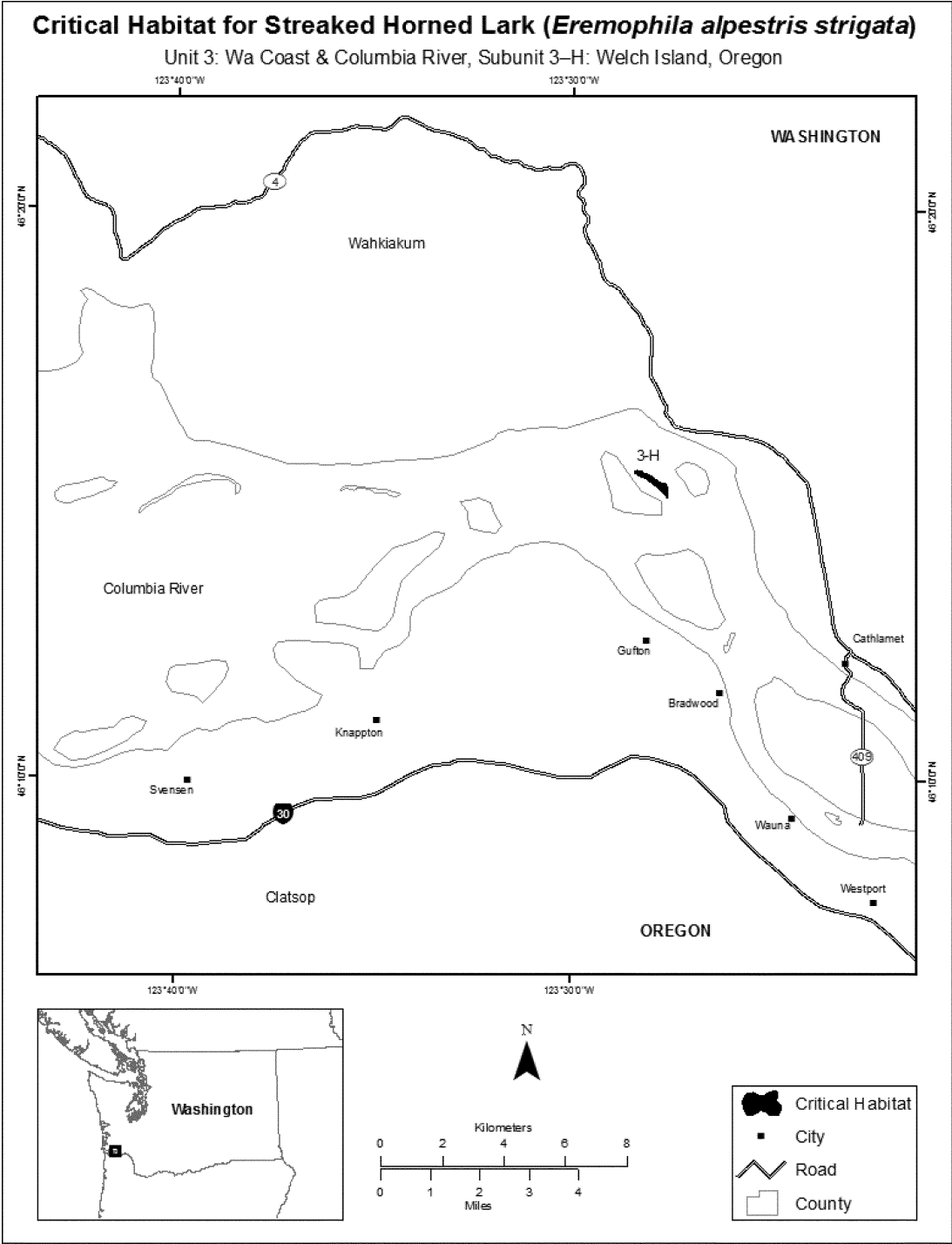
(vi) Subunit 3–F: Miller Sands, Oregon. Map of Subunit 3–F follows:



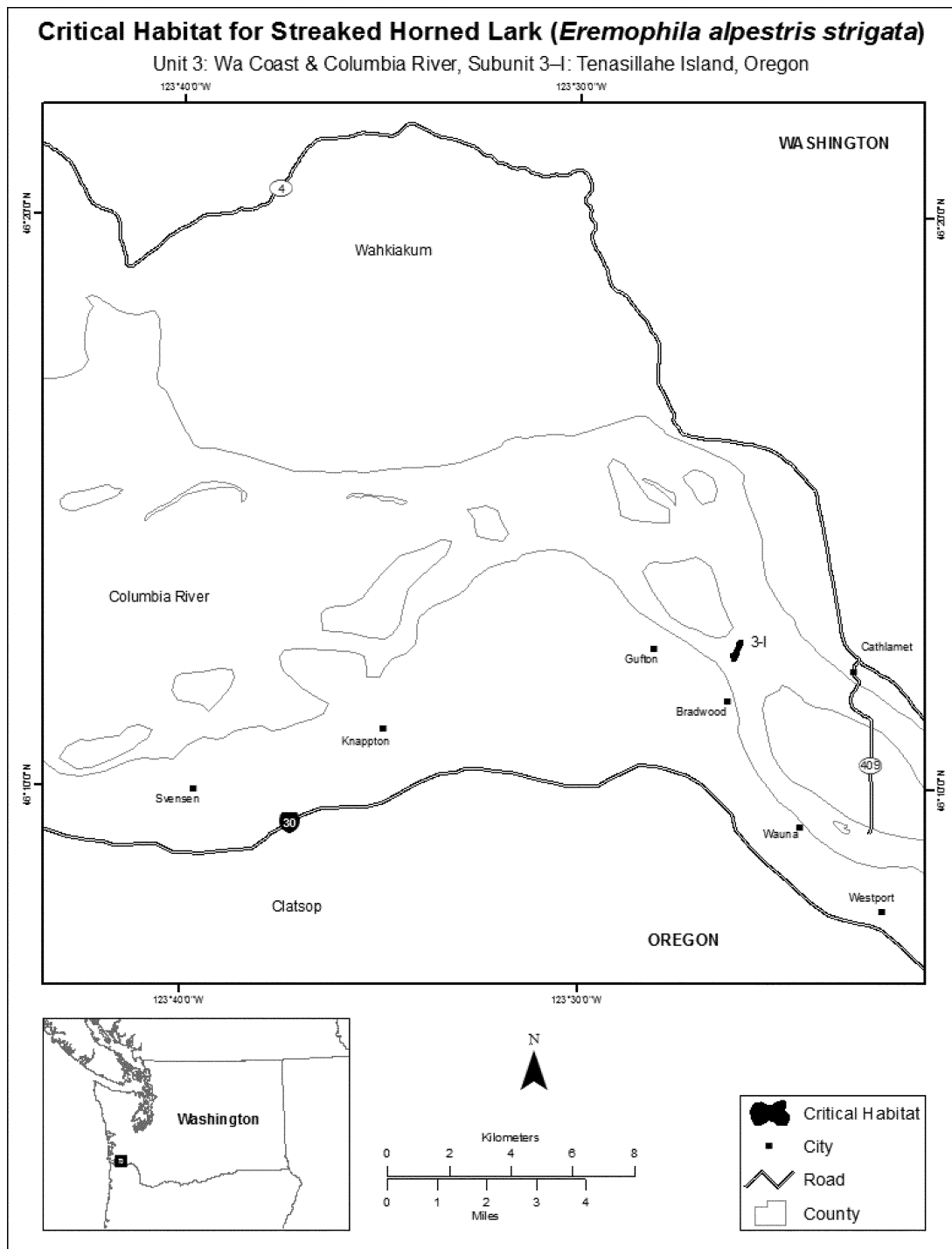
(vii) Subunit 3-G: Pillar Rock/Jim Crow Sands, Oregon. Map of Subunit 3-G follows:



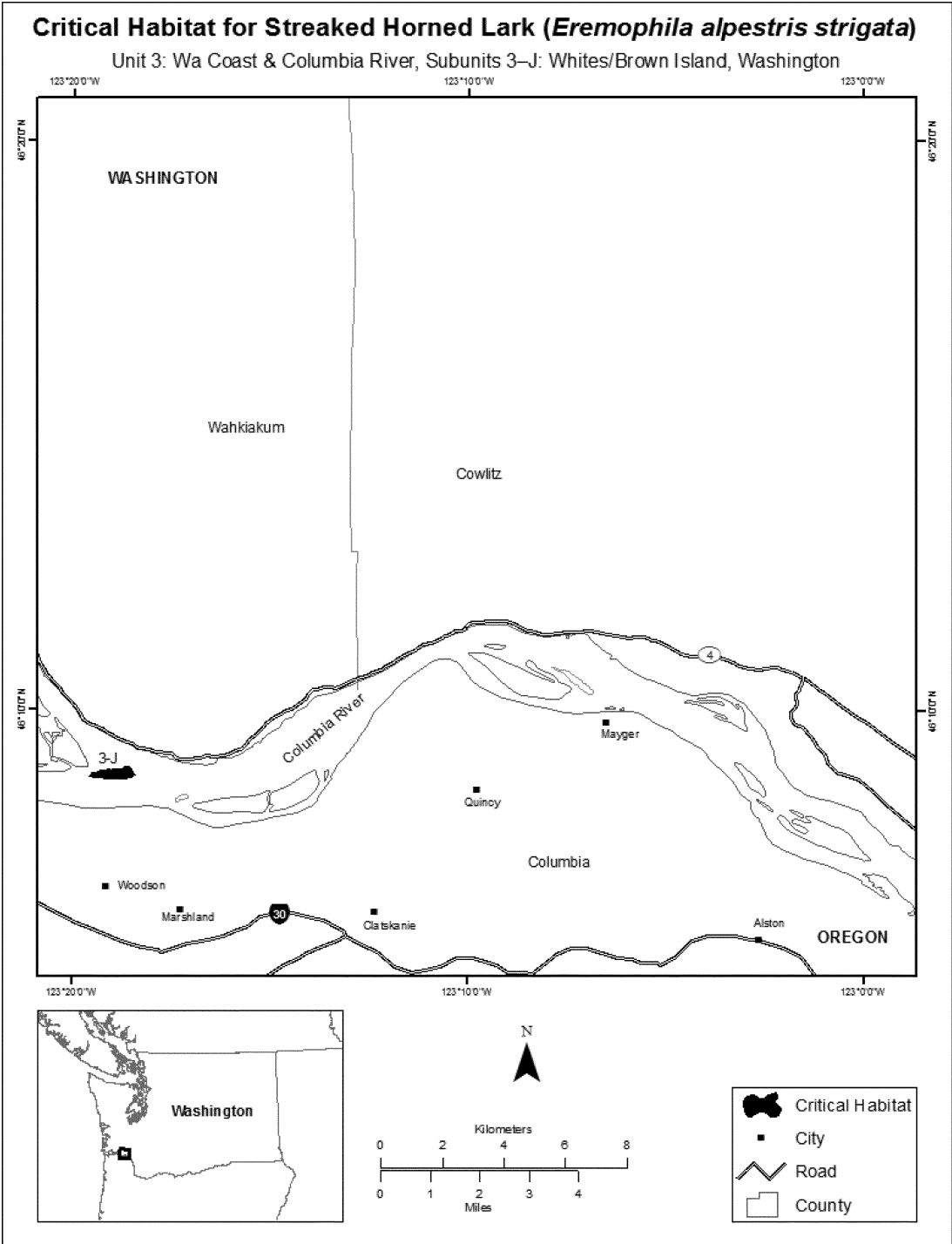
(viii) Subunit 3–H: Welch Island, Oregon. Map of Subunit 3–H follows:



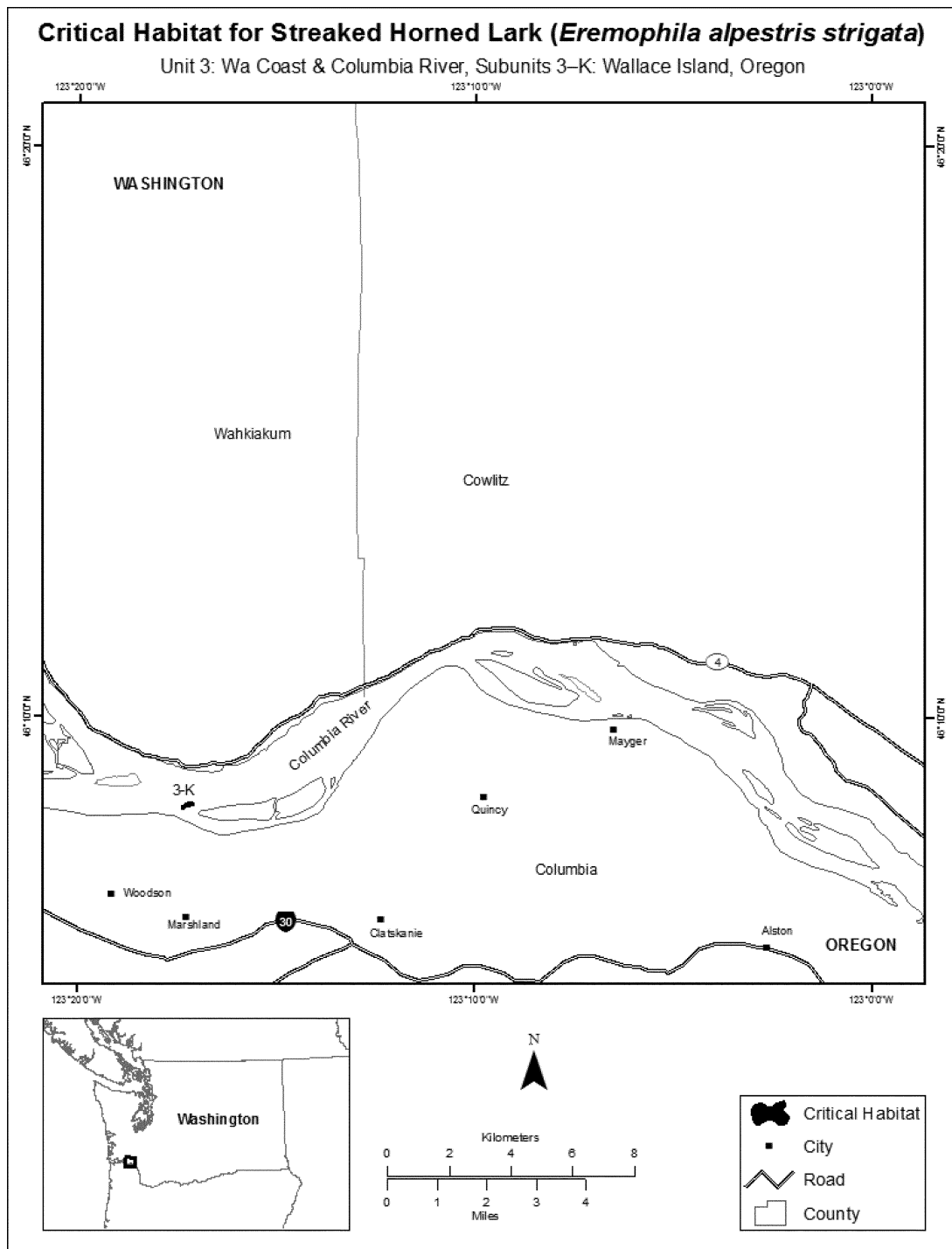
(ix) Subunit 3-I: Tenasillahe Island, Oregon. Map of Subunit 3-I follows:



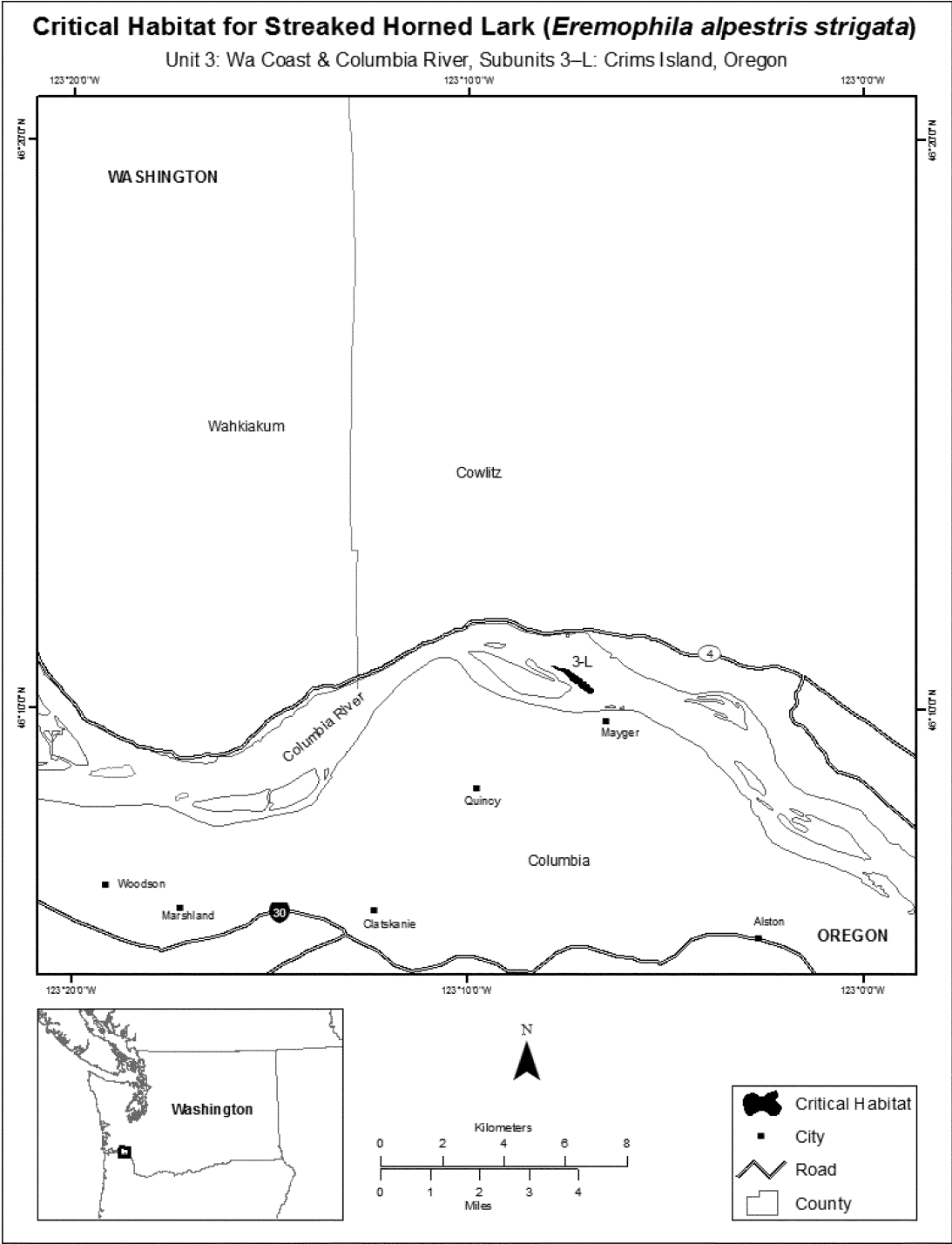
(x) Subunit 3-J: Whites/Brown Island, Washington. Map of Subunit 3-J follows:



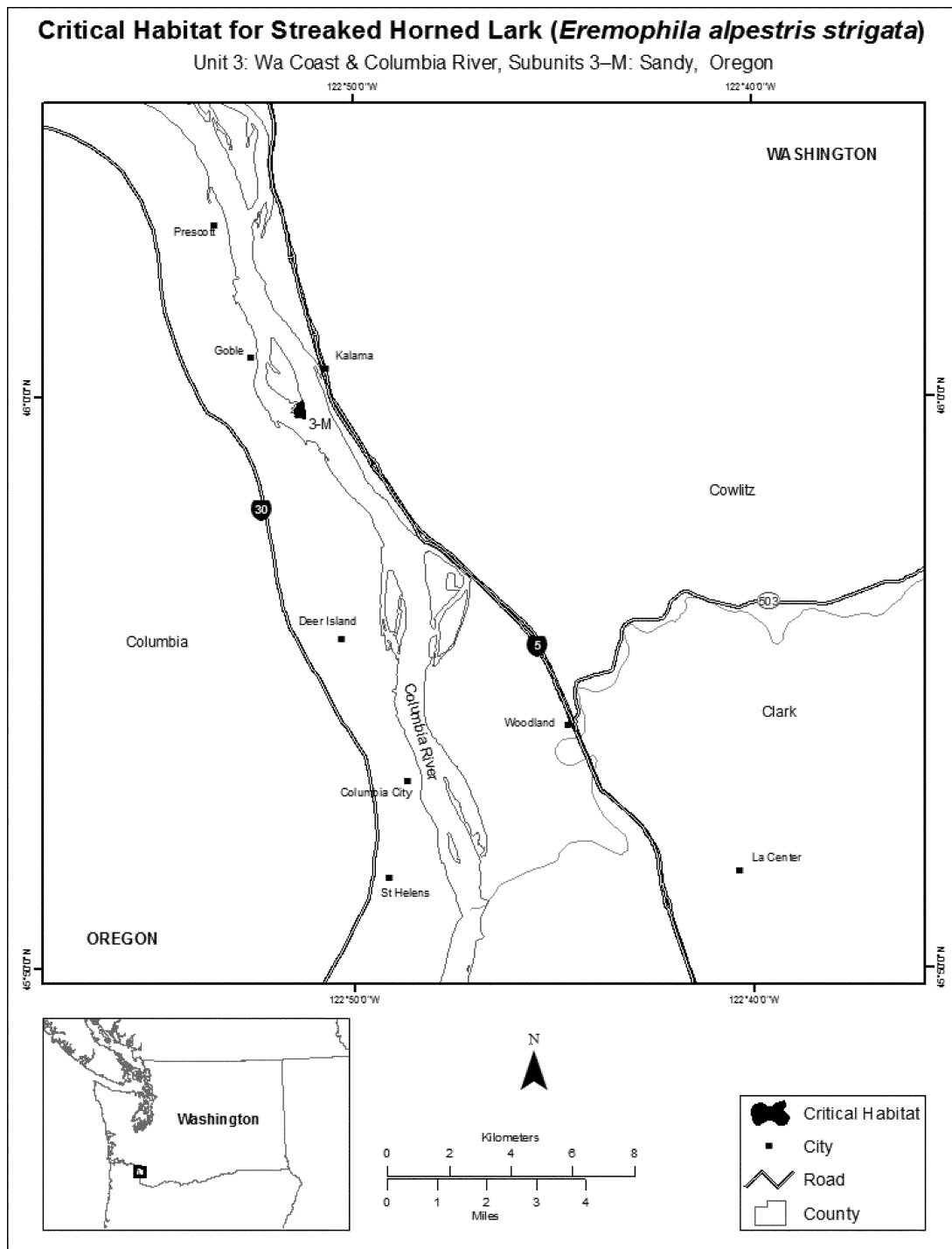
(xi) Subunit 3-K: Wallace Island, Oregon. Map of Subunit 3-K follows:



(xii) Subunit 3-L: Crims Island, Oregon. Map of Subunit 3-L follows:

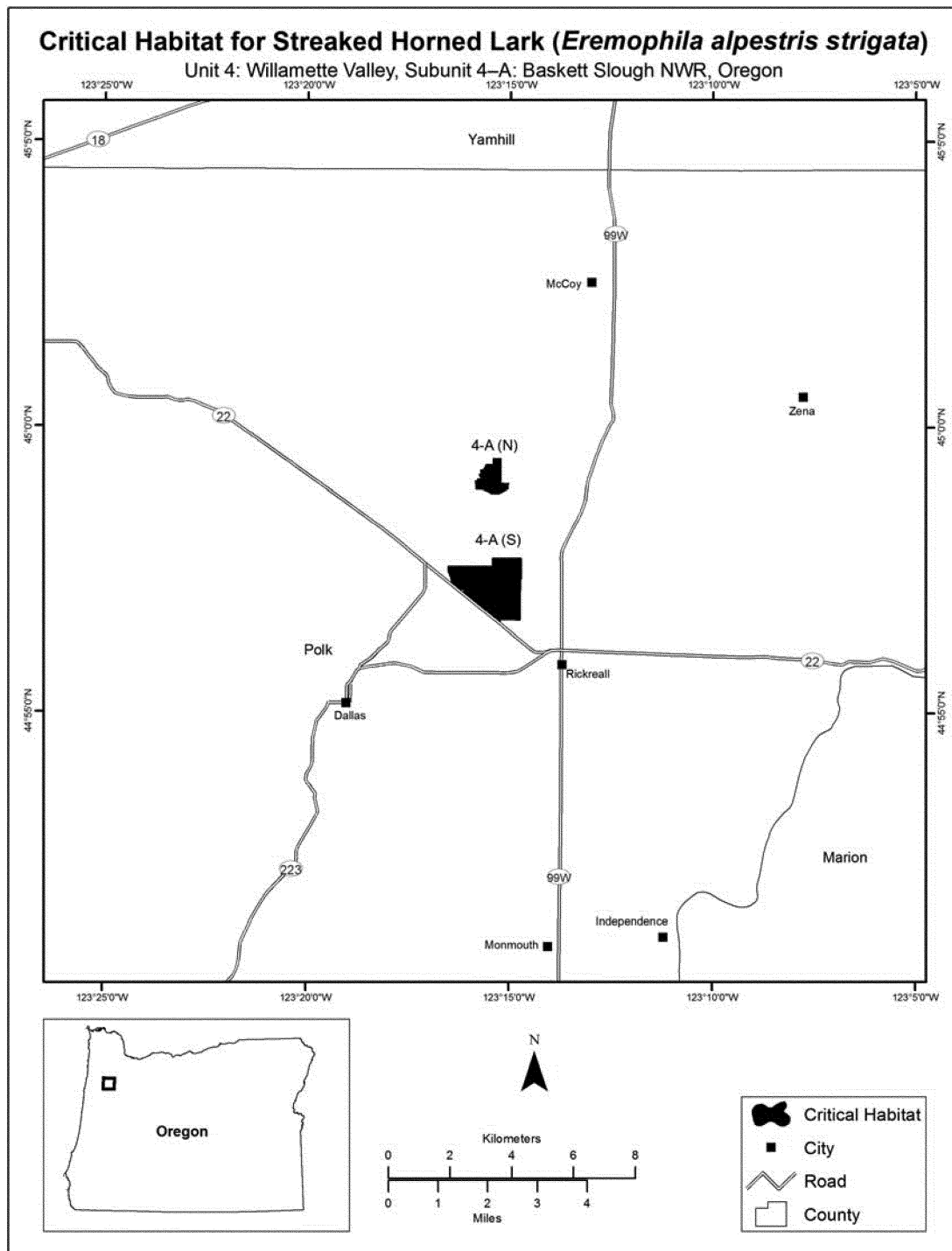


(xiii) Subunit 3–M: Sandy Island, Oregon. Map of Subunit 3–M follows:

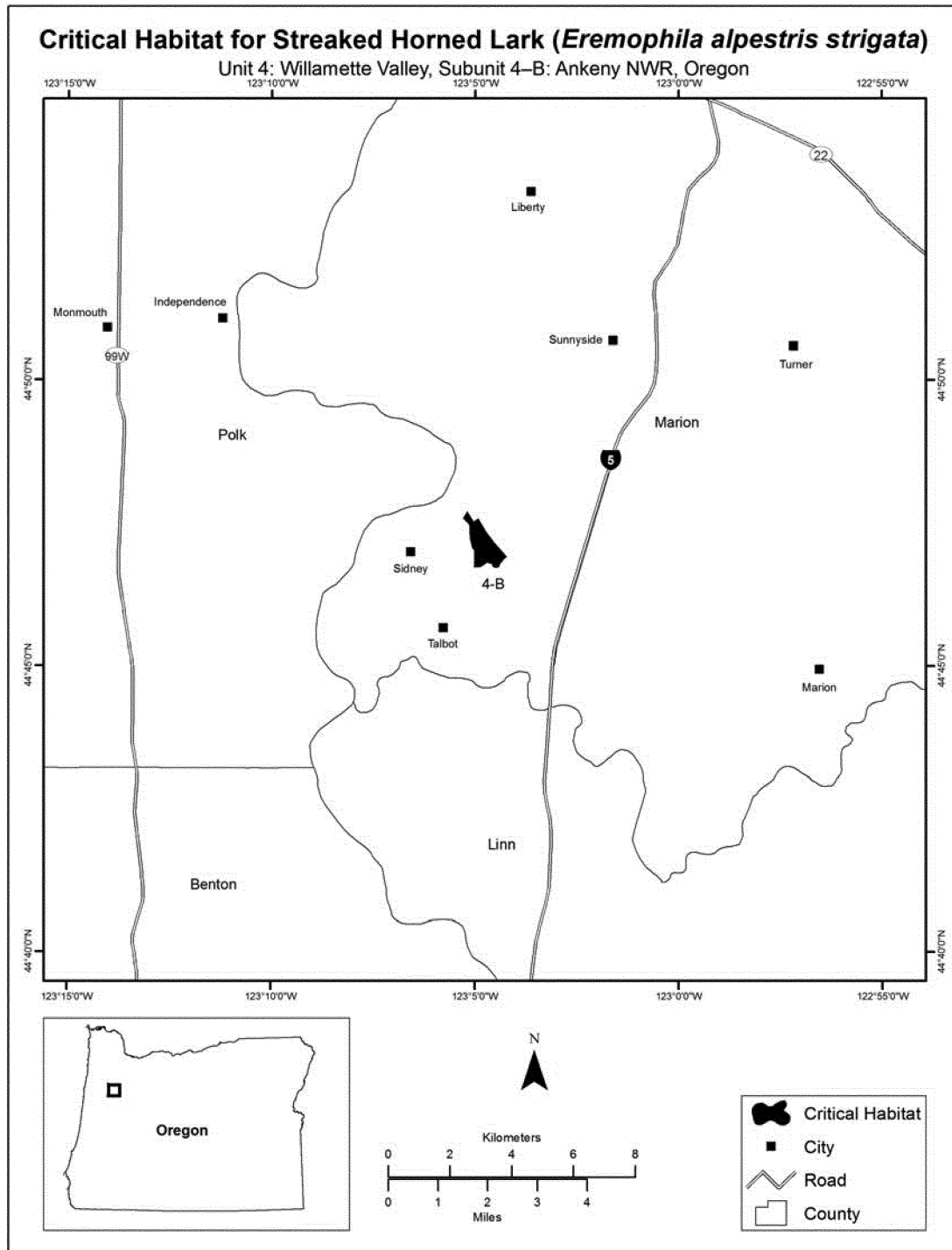


(7) Unit 4—Willamette Valley, Oregon.

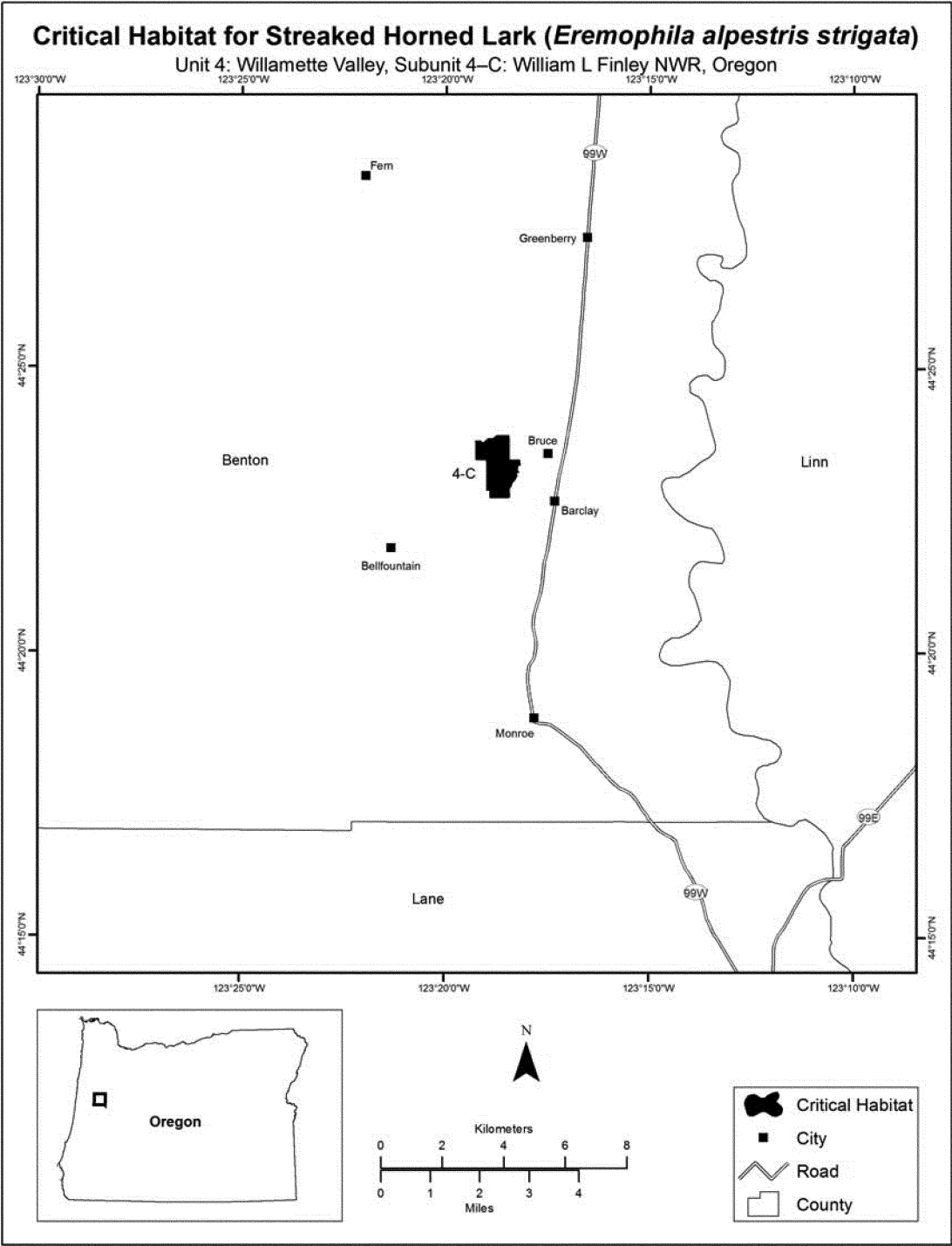
(i) Subunit 4—A: Baskett Slough NWR, Oregon. Map of Subunit 4—A follows:



(ii) Subunit 4-B: Ankeny NWR,
Oregon. Map of Subunit 4-B follows:



(iii) Subunit 4–C: William L. Finley
NWR, Oregon. Map of Subunit 4–C
follows:



* * * * *

(i) *Insects.*

* * * * *

Taylor’s Checkerspot Butterfly (*Euphydryas editha taylori*)

(1) Critical habitat units are depicted for Island, Clallam, and Thurston Counties in Washington, and in Benton County in Oregon, on the maps below.

(2) Within these areas, the primary constituent elements of the physical or biological features essential to the conservation of the Taylor’s checkerspot butterfly consist of four components:

(i) Patches of early seral, short-statured, perennial bunchgrass plant

communities composed of native grass and forb species in a diverse topographic landscape ranging in size from less than 1 ac up to 100 ac (0.4 to 40 ha) with little or no overstory forest vegetation that have areas of bare soil for basking that contain:

(A) In Washington and Oregon, common bunchgrass species found on northwest grasslands include *Festuca roemerii* (Roemer's fescue), *Danthonia californica* (California oat grass), *Koeleria cristata* (prairie Junegrass), *Elymus glaucus* (blue wild rye), *Agrostis scabra* (rough bentgrass), and on cooler, high-elevation sites typical of coastal bluffs and balds, *Festuca rubra* (red fescue).

(B) On moist grasslands found near the coast and in the Willamette Valley, there may be *Bromus sitchensis* (Sitka brome) and *Deschampsia cespitosa* (tufted hairgrass) in the mix of prairie grasses. Less abundant forbs found on the grasslands include, but are not limited to, *Trifolium* spp. (true clovers), narrow-leaved plantain (*Plantago lanceolata*), harsh paintbrush (*Castilleja hispida*), Puget balsamroot (*Balsamorhiza deltoidea*), woolly sunshine (*Eriophyllum lanatum*), nine-leaved desert parsley (*Lomatium triternatum*), fine-leaved desert parsley (*Lomatium utriculatum*), common camas (*Camassia quamash*), showy

fleabane (*Erigeron speciosus*), Canada thistle (*Cirsium arvense*), common yarrow (*Achillea millefolium*), prairie lupine (*Lupinus lepidus*), and sickle-keeled lupine (*Lupinus albicaulis*).

(ii) Primary larval host plants (narrow-leaved plantain and harsh paintbrush) and at least one of the secondary annual larval host plants (blue-eyed Mary (*Collinsia parviflora*), sea blush (*Plectritis congesta*), or dwarf owl-clover (*Triphysaria pusilla*) or one of several species of speedwell (marsh speedwell (*Veronica scutella*), American speedwell (*V. beccabunga* var. *americana*), or thymeleaf speedwell (*V. serpyllifolia*)).

(iii) Adult nectar sources for feeding that include several species found as part of the native (and one nonnative) species mix on northwest grasslands, including: narrow-leaved plantain; harsh paintbrush; Puget balsam root; woolly sunshine; nine-leaved desert parsley; fine-leaved desert parsley or spring gold; common camas; showy fleabane; Canada thistle; common yarrow; prairie lupine; sickle-keeled lupine; and wild strawberry (*Fragaria virginiana*).

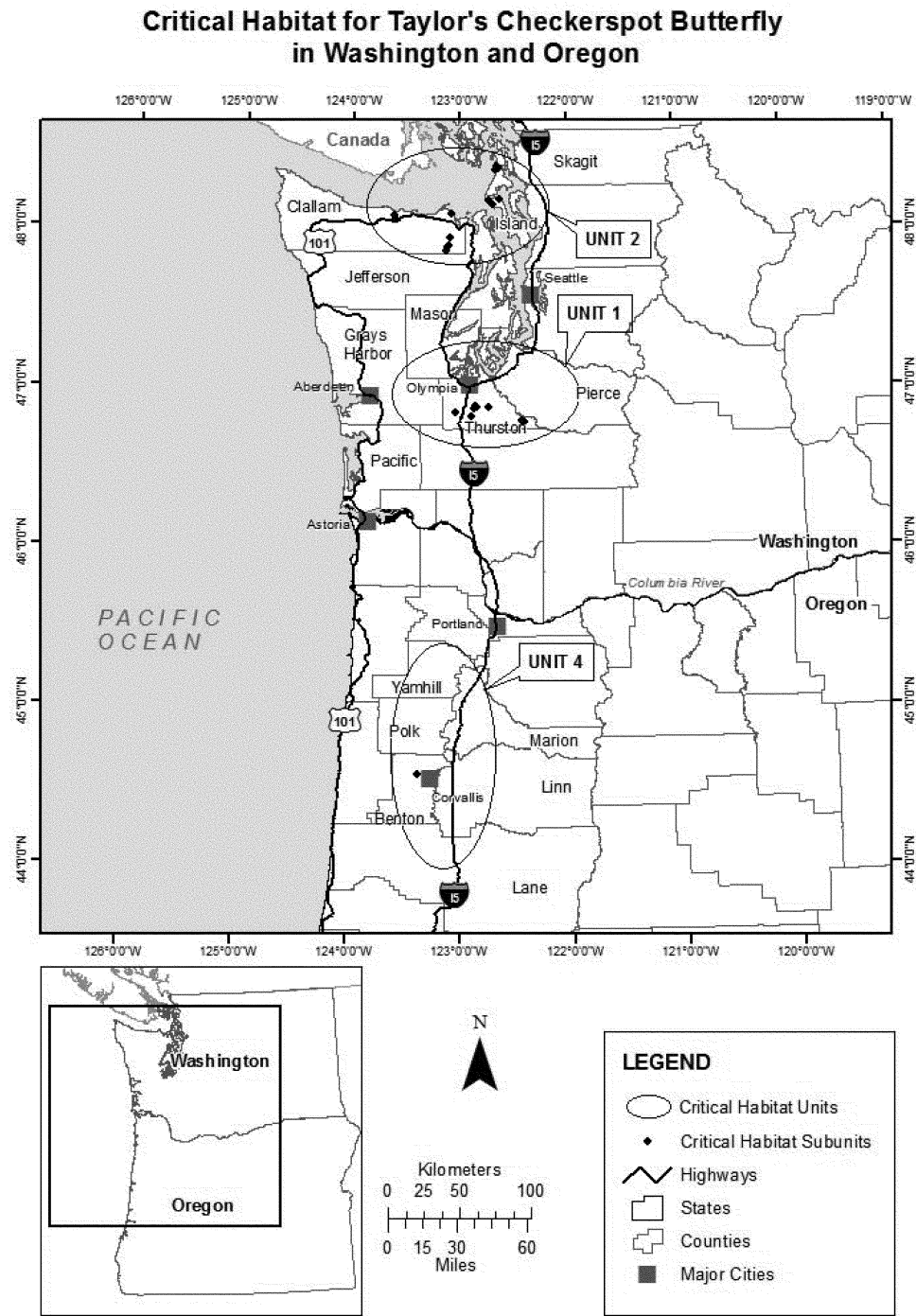
(iv) Aquatic features such as wetlands, springs, seeps, streams, ponds, lakes, and puddles that provide moisture during periods of drought, particularly late in the spring and early

summer. These features can be permanent, seasonal, or ephemeral.

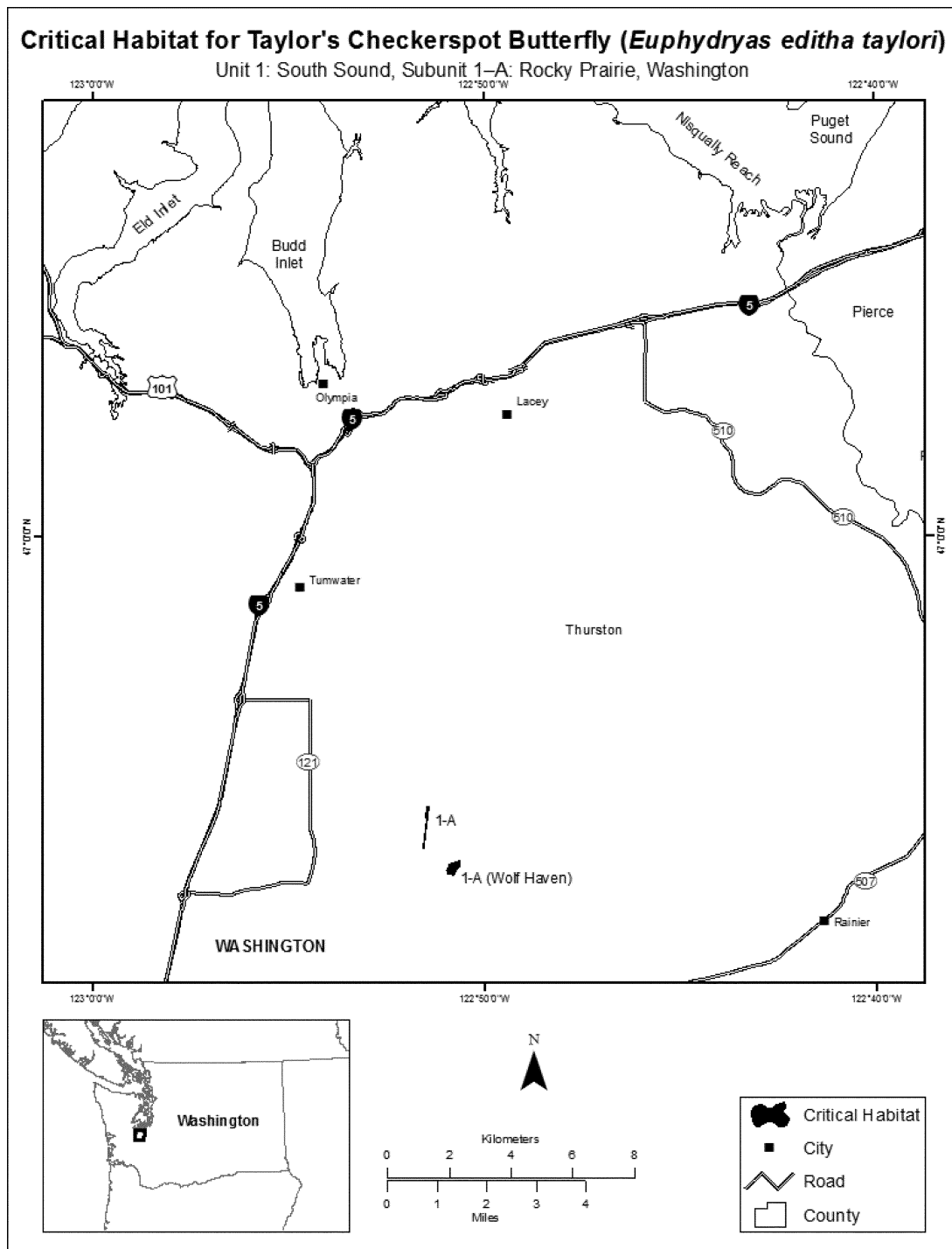
(3) Critical habitat does not include manmade structures (such as buildings, aqueducts, runways, roads, railroad tracks, and other paved areas) and the land on which they are located existing within the legal boundaries on November 4, 2013.

(4) *Critical habitat map units.* Data layers defining the map unit were created on 2010 aerial photography from U.S. Department of Agriculture, National Agriculture Imagery Program base maps using ArcMap (Environmental Systems Research Institute, Inc.), a computer geographic information system (GIS) program. The maps in this entry, as modified by any accompanying regulatory text, establish the boundaries of the critical habitat designation. The coordinates or plot points or both on which each map is based are available to the public at the Service's Internet site (<http://www.fws.gov/wafwo/>), at <http://www.regulations.gov> at Docket No. FWS-R1-ES-2013-0009), and by appointment at the Service's Washington Fish and Wildlife Office. You may obtain field office location information by contacting one of the Service regional offices, the addresses of which are listed at 50 CFR 2.2.

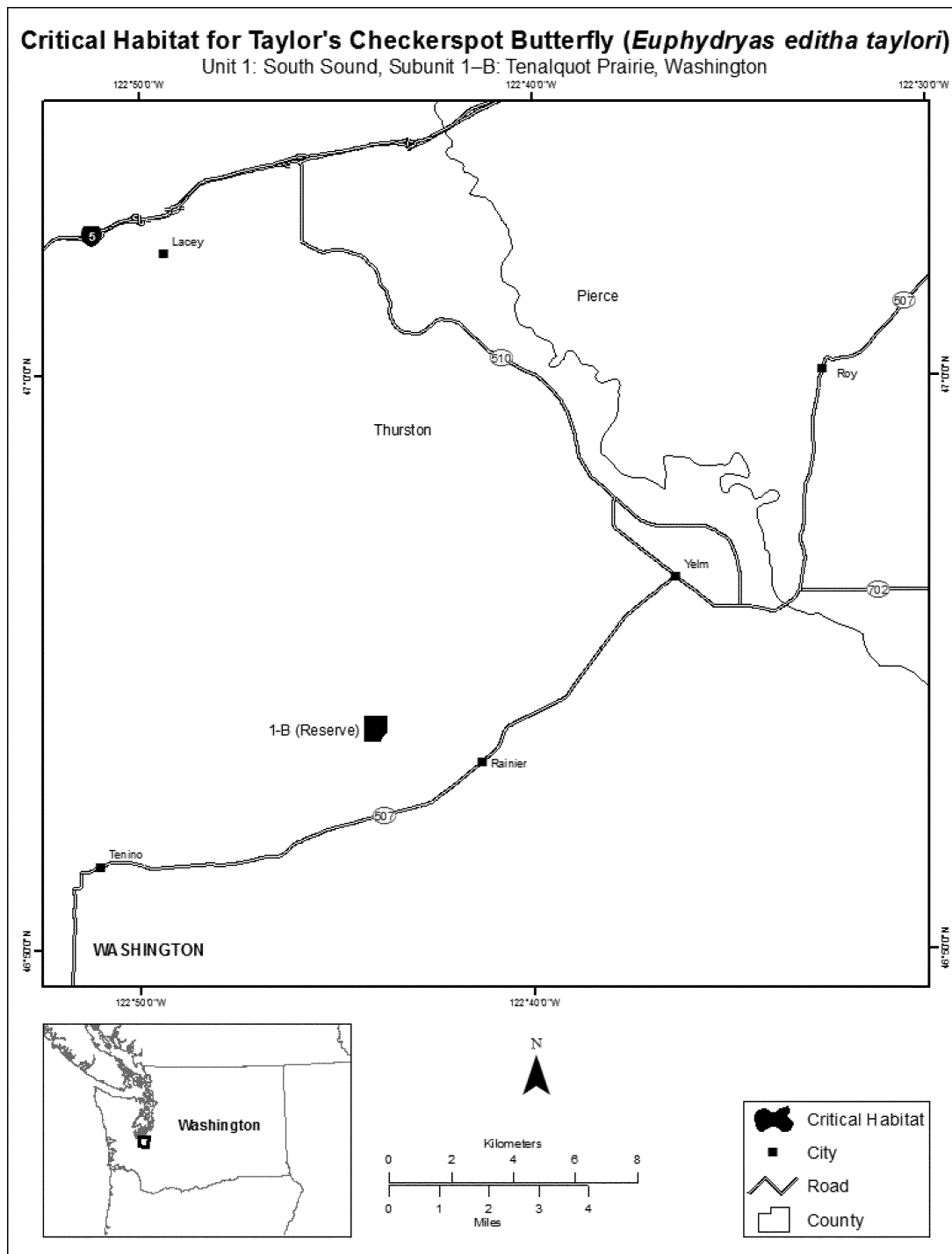
(5) Index map of critical habitat units for the Taylor's checkerspot butterfly follows:



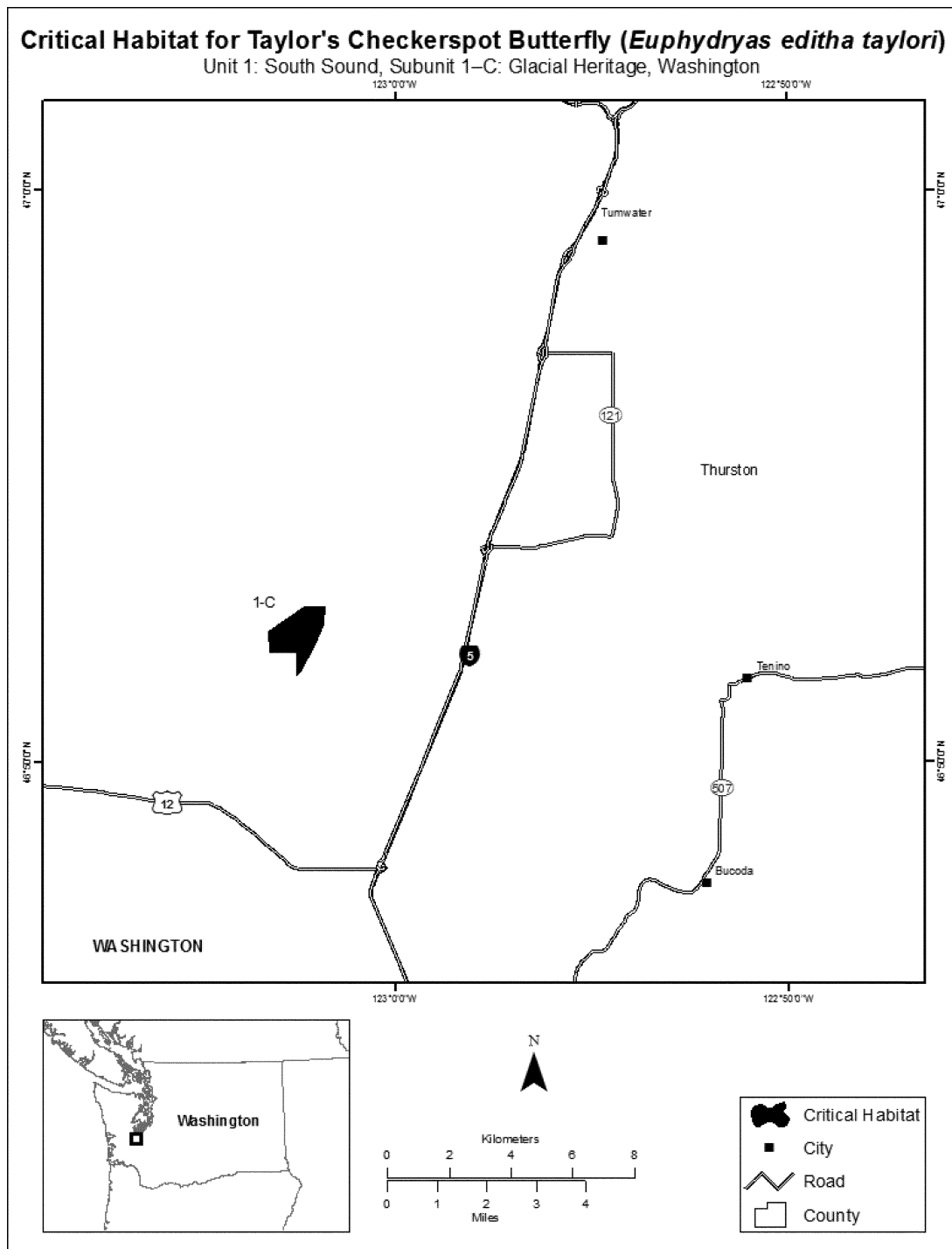
- (6) Unit 1: South Sound, Washington. (i) Subunit 1-A: Rocky Prairie, Washington. Map of Subunit 1-A follows:



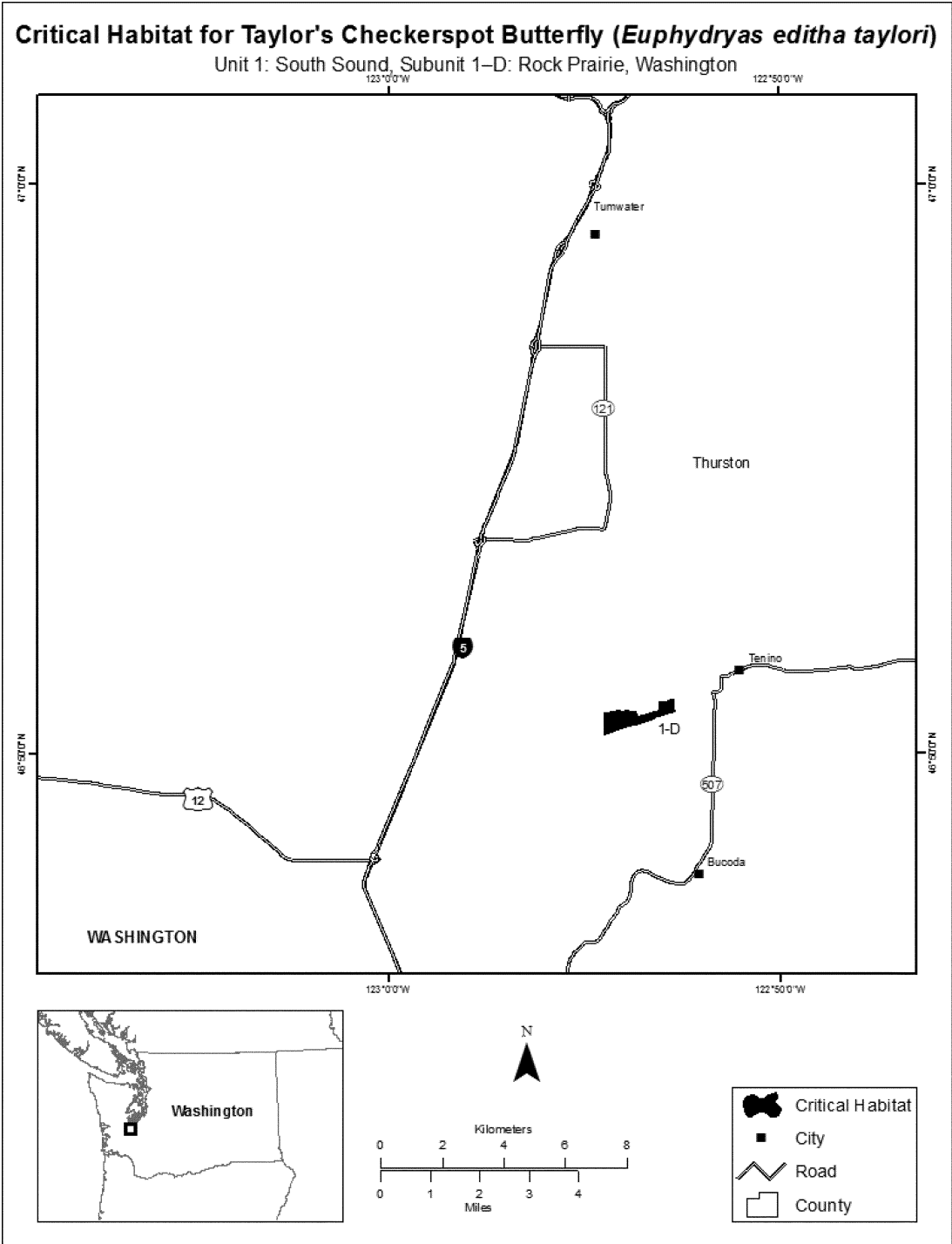
(ii) Subunit 1-B: Tenalquot Prairie, Washington. Map of Subunit 1-B follows:



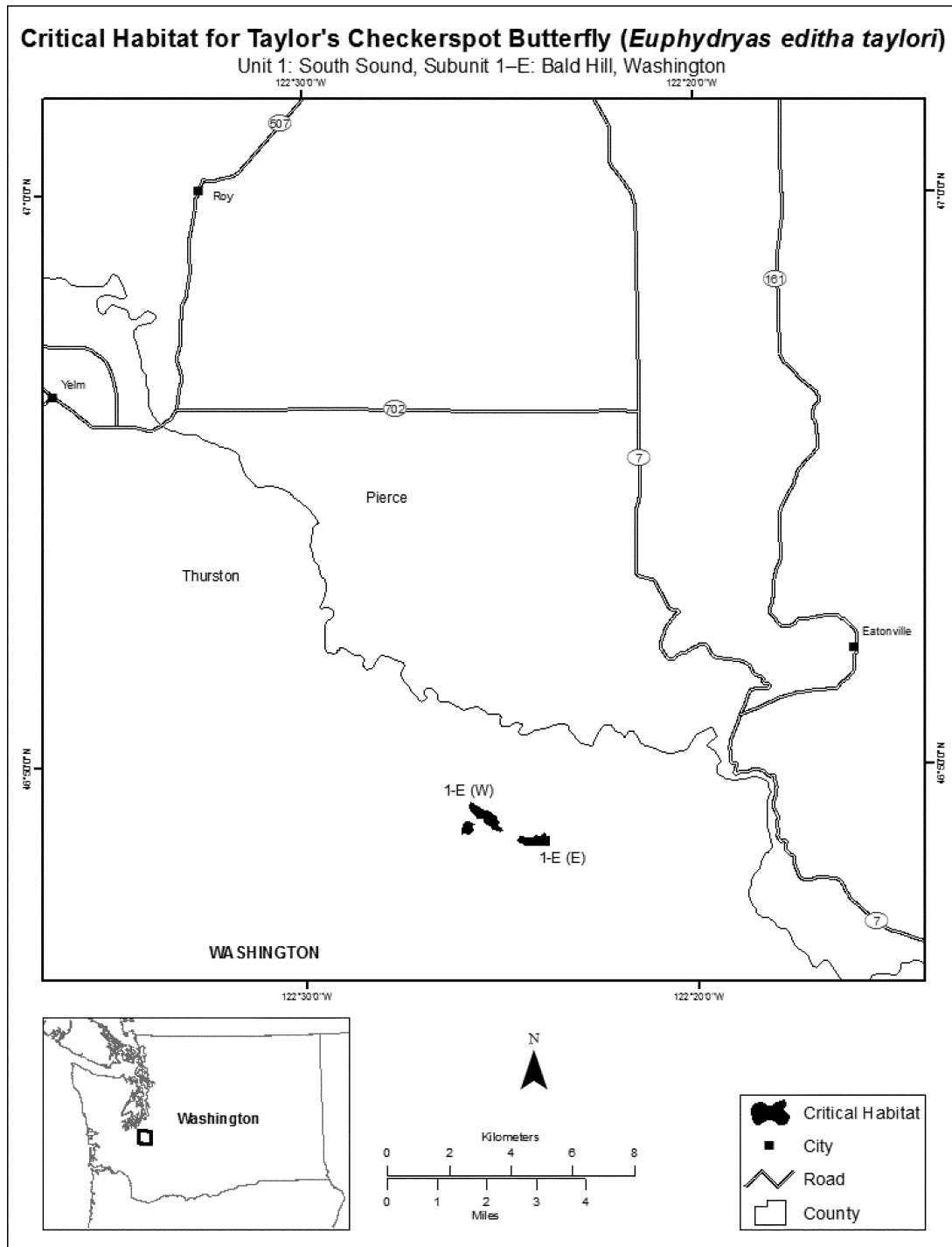
(iii) Subunit 1-C: Glacial Heritage, Washington. Map of Subunit 1-C follows:



(iv) Subunit 1–D: Rock Prairie, Washington. Map of Subunit 1–D follows:

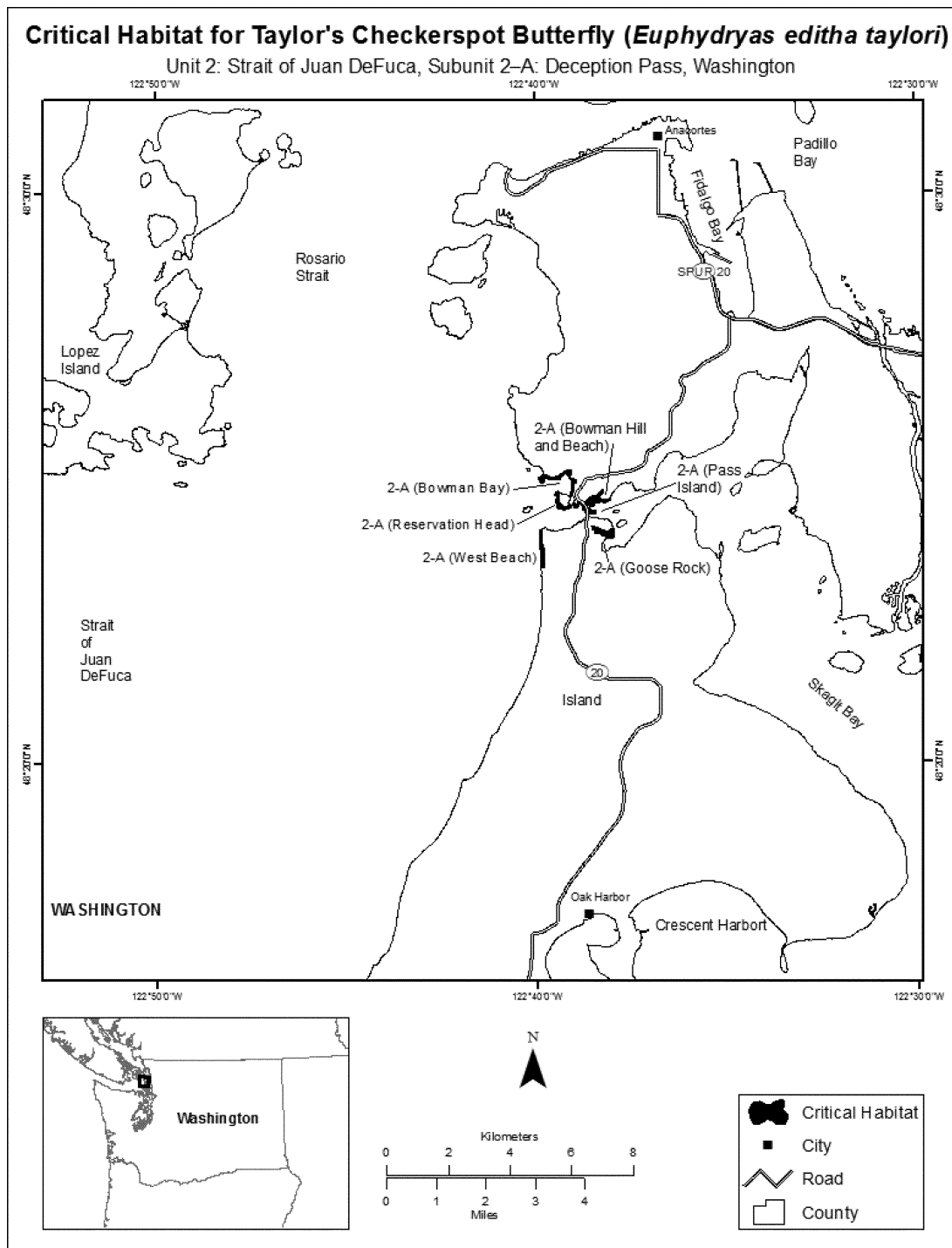


(v) Subunit 1-E: Bald Hill, Washington. Map of Subunit 1-E follows:

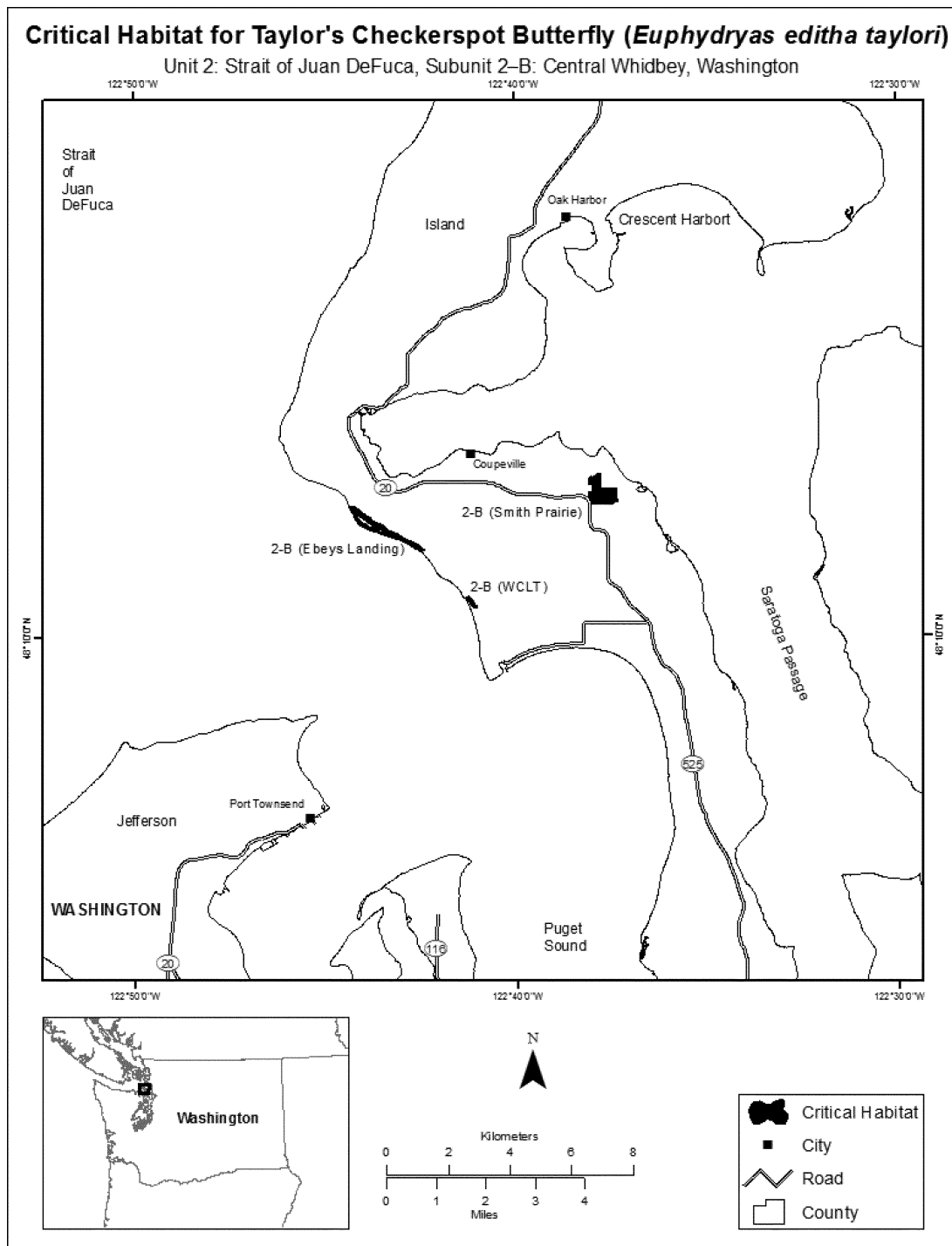


(7) Unit 2: Strait of Juan de Fuca, Washington.

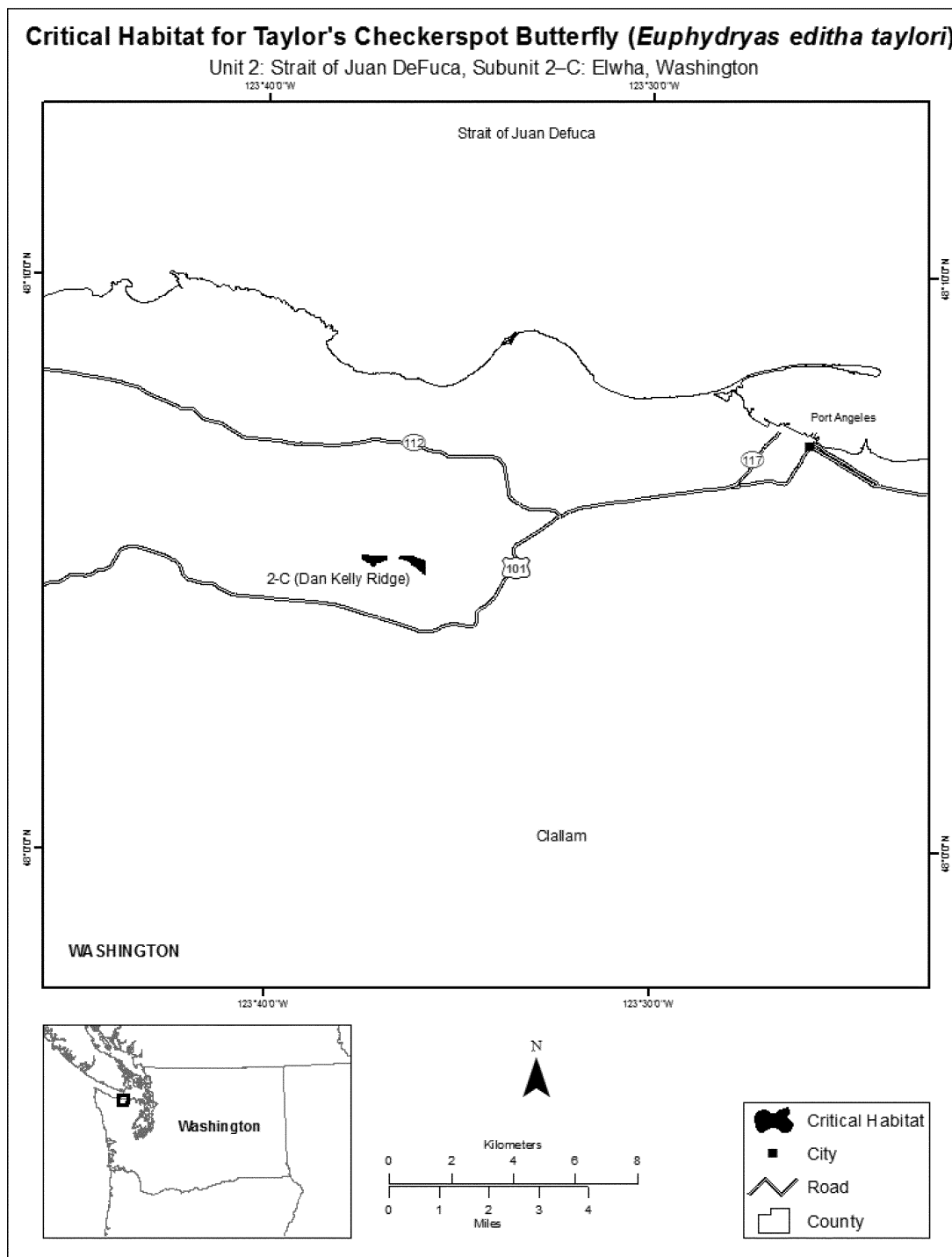
(i) Subunit 2-A: Deception Pass, Washington. Map of Subunit 2-A follows:



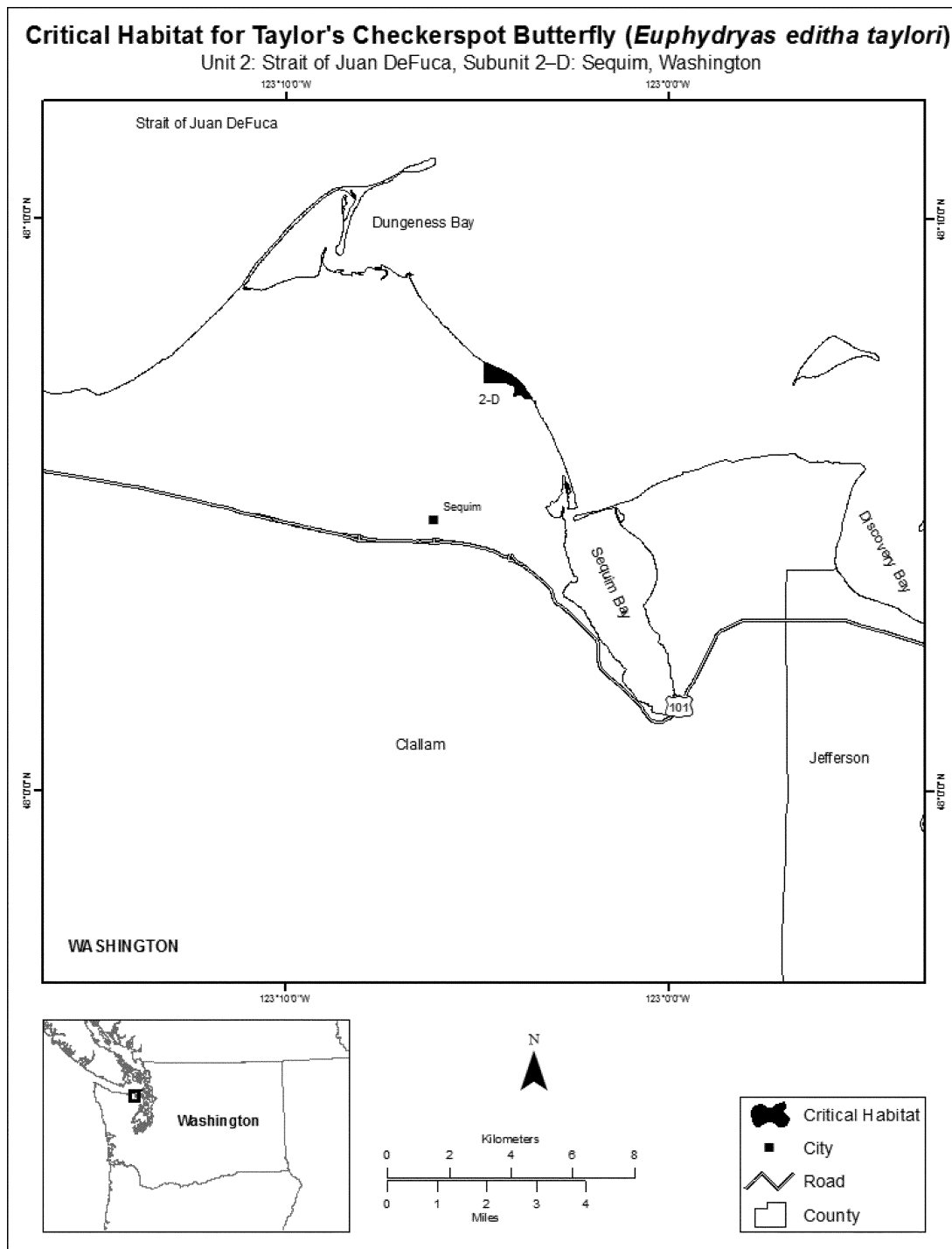
(ii) Subunit 2-B: Central Whidbey, Washington. Map of Subunit 2-B follows:



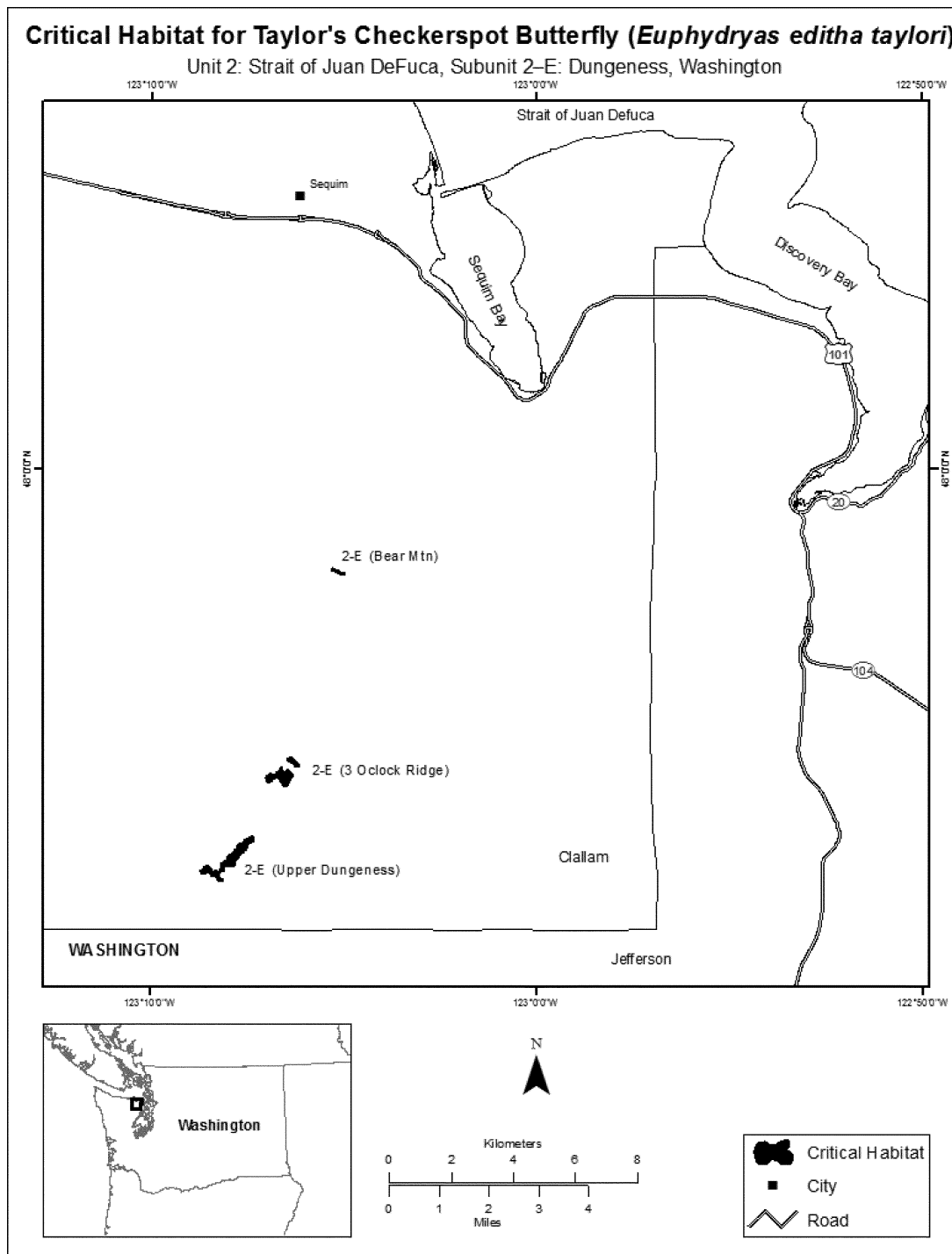
(iii) Subunit 2–C: Elwha, Washington.
Map of Subunit 2–C follows:



(iv) Subunit 2–D: Sequim, Washington. Map of Subunit 2–D follows:



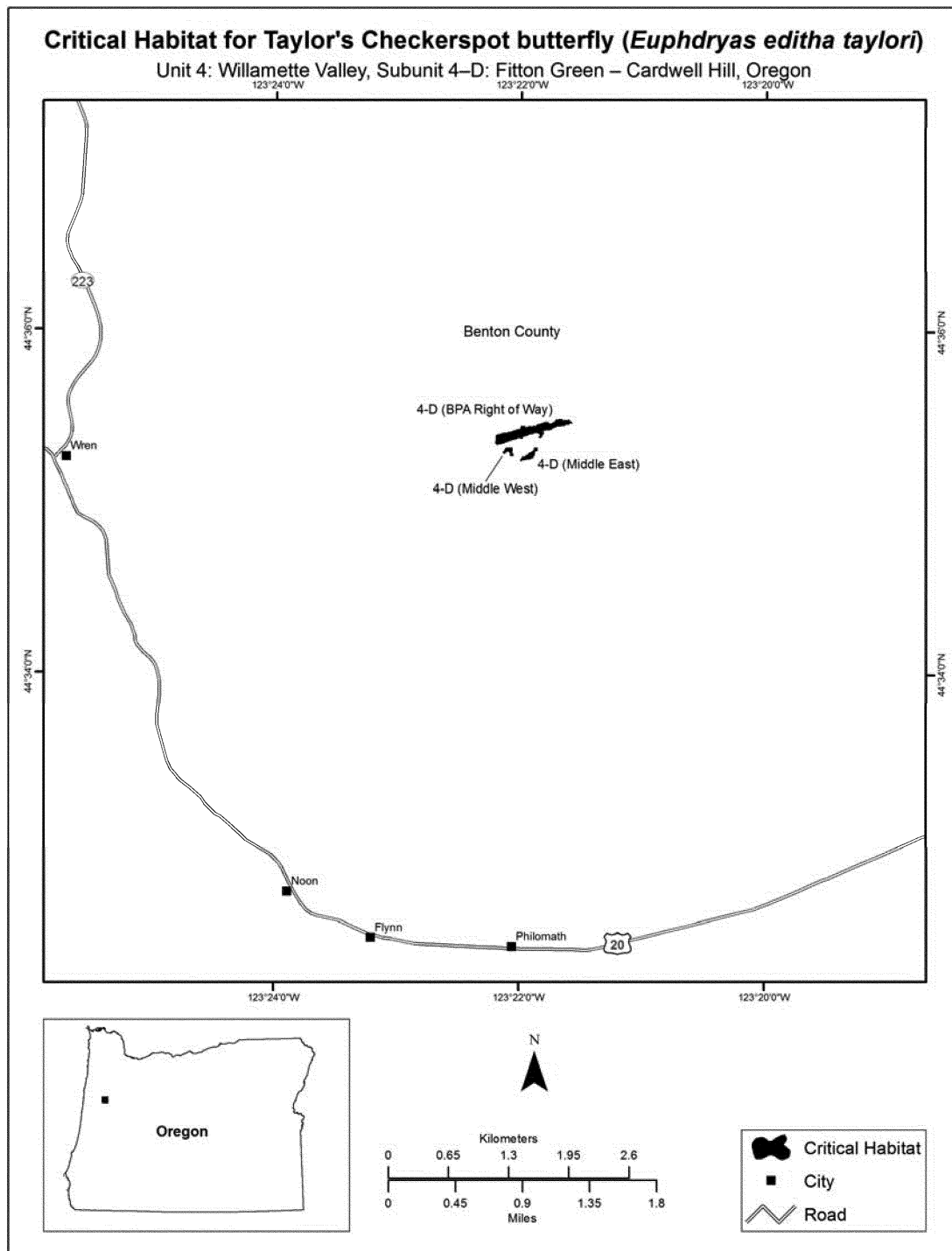
(v) Subunit 2-E: Dungeness, Washington. Map of Subunit 2-E follows:



(8) Unit 4: Willamette Valley, Oregon.

(i) Subunit 4-D: Fitton Green–
Cardwell Hill, Oregon.

(ii) Map of Subunit 4-D follows:



* * * * *

Dated: September 19, 2013.

Rachel Jacobson,*Principal Deputy Assistant Secretary for Fish
and Wildlife and Parks.*

[FR Doc. 2013–23552 Filed 10–2–13; 8:45 am]

BILLING CODE 4310–55–C



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October 3, 2013

Part IV

Department of Justice

Drug Enforcement Administration

Decision and Order: Clair L. Pettinger, M.D.; Notice

DEPARTMENT OF JUSTICE

Drug Enforcement Administration

[Docket No. 13–12]

Decision and Order: Clair L. Pettinger, M.D.

On June 5, 2013, Administrative Law Judge Christopher B. McNeil (hereinafter, ALJ) issued the attached Recommended Decision ¹ (hereinafter, cited as R.D.). Therein, the ALJ found that the Government had proved that the Respondent issued nine prescriptions for controlled substances “that were not for a legitimate medical need and were not issued in the ordinary course of a professional medical practice,” as well as a prescription for hydrocodone after his DEA registration had been suspended, and that this evidence establishes that “the Respondent’s continued [registration] is inconsistent with the public interest. R.D. at 57. The ALJ further found that the Government “has made a *prima facie* case in support of the proposed order revoking the Respondent’s registration” and that “Respondent . . . failed to affirmatively acknowledge specific acts of improper prescribing of controlled substances and failed to establish by credible and substantial evidence effected steps taken in remediation.” *Id.* at 58. Accordingly, the ALJ found that “the Government has established cause to revoke the Respondent’s DEA” registration, *id.*, and recommended that his registration be revoked and that any pending applications to renew or modify his registration be denied. *Id.* at 59.

Both parties filed exceptions to the Recommended Decision. Thereafter, the record was forwarded to me for Final Agency Action.

Having considered the record in its entirety, including each party’s exceptions, I have decided to adopt the ALJ’s findings of fact and conclusions of law, except as discussed below. While I reject some aspects of the ALJ’s discussion, I agree with the ALJ’s legal conclusions that Respondent violated federal law in prescribing to each of the undercover officers, and that the Government has established a *prima facie* case to revoke Respondent’s registration on the ground that he has committed acts which render his registration “inconsistent with the public interest.” 21 U.S.C. 824(a)(4). I further agree with the ALJ’s conclusion that Respondent has failed to produce sufficient evidence to rebut the

Government’s *prima facie* case, as notwithstanding the unrefuted evidence that he knowingly and intentionally diverted drugs by issuing unlawful prescriptions, he failed to acknowledge his misconduct. A discussion of each party’s exceptions follows.

Respondent’s Exceptions

Respondent first takes exception to the ALJ’s finding that he authorized a new prescription for 180 dosage units of Norco, a combination drug containing hydrocodone, a schedule III controlled substance, and acetaminophen, for his patient B.D., on December 21, 2012, ten days after he had been served with the Order to Show Cause and Immediate Suspension of Registration. Resp. Exceptions, at 1–4. In support of the allegation, the Government introduced several documents from the Safeway Pharmacy which filled the prescription. These included: (1) A copy of a prescription issued to B.D. by Respondent on October 22, 2012 for 180 dosage units of Norco, which authorized two refills; and (2) a printout from the pharmacy showing B.D.’s medical expenses between August 13 and December 21, 2012. GX 24, at 2, 4. Of note, the latter shows that the prescription, which was assigned the number 4362259, was filled on October 22, 2012, and refilled on November 12 and December 3, 2012. *Id.* at 4. Of further note, this document shows that on December 21, 2012, the pharmacy dispensed an additional 180 tablets of Norco to B.D., under a new prescription number and attributed the prescription to Respondent. *Id.*

The Government also introduced into evidence a copy of a prescription refill request form, which was dated December 20, 2012, and which was faxed by the pharmacy to Respondent and then faxed backed to the pharmacy. *Id.* at 3; Tr. 91. Under the heading “PRESCRIPTION REQUEST,” the form indicated that the prescription was for B.D. and was 180 tablets of Norco; the form also stated that the prescription was “First Filled” on “Oct 22, 2012,” and “Last Filled” on “Dec 3, 2012.” *Id.* In the space for the doctor’s signature, the form bore the following notation: “N Pettinger MD Can fill current refill No New Refill.” *Id.* On the upper right side of the form, were the words “MD and “OK x 1,” each of which was circled; in addition, an arrow was drawn from the latter to the words “No New Refill.” *Id.*

At the hearing, the Special Agent, who was the Case Agent, testified that upon serving the Order to Show Cause and Immediate Suspension of Registration on Respondent, he told Respondent “that he was unable to

dispense, prescribe or otherwise issue controlled substances from that point on” and that Respondent “stated to me that he understood that.” Tr. 87. The Case Agent further explained that while it was illegal for Respondent to authorize a new prescription after his registration was suspended, any refills that had been authorized prior to the suspension could be filled. *Id.* at 112.

In his testimony, the Case Agent explained that when the Refill Request fax was sent, “the patient had already refilled all the refills that were on the previous prescription”; the Agent also answered “no,” when asked if it would have been necessary to contact Respondent if there had been additional refills remaining on the prescription. *Id.* at 92. The Case Agent further testified that as far as he knew, pharmacists call a physician only to verify a new prescription and would not call to verify a refill. *Id.* at 112–13.

The Case Agent also testified (erroneously) that there was no information on the Refill Request form that showed that all of the previously authorized refills had been dispensed by the pharmacy. *Id.* at 115. Finally, the Case Agent testified that he could not state that Respondent had “knowingly” issued a new prescription in violation of the suspension order. *Id.* at 116.

Reviewing the Refill Request form, the ALJ concluded that the circled words “MD” and “No New Refill,” along with the arrow drawn to the words “No New Refill,” “indicat[e] that the pharmacist contacted [Respondent] and was told it was okay to dispense 180 generic Norco tablets, despite the fact that the pharmacy had already dispensed all of the medication authorized by the prescription written by [Respondent] on October 22, 2012.” R.D. at 9. The ALJ thus reasoned that “[w]hile this evidence does not establish that the pharmacist told [Respondent] that B.D. filled this prescription three times already, it does establish that [Respondent] knowingly authorized another 180 unit dispensation after being called by the pharmacist, a condition that would not have existed had there been a refill available under the original prescription.” *Id.* at 10.

Taking exception to this finding, Respondent asserts that “Exhibit 24 does not establish that Respondent was aware of the prior refills.” Resp. Exceptions, at 3. However, notwithstanding the testimony of the Case Agent and the ALJ’s finding, the Refill Request form actually did contain evidence that the previously authorized refills had been dispensed. Specifically, the form indicates that the prescription had last been filled on December 3, 2012

¹ All citations to the Recommended Decision are to the slip opinion as issued by the ALJ.

and been filled in the full amount of 180 tablets. RX 24, at 3. Moreover, the bottom of the form includes the notations: "Remaining Qty: 0" and "Rx Expires On: 04/23/2013." RX 24, at 3. These, of course, are references to the previous prescription which had been issued on October 22, 2012, and which, in accordance with DEA regulations, was good for six months. See 21 CFR 1306.22(a). Beyond this, as the ALJ pointed out, had there been any refills remaining on the original (October 22nd) prescription, the pharmacy would have had no reason to send the refill request form.

Respondent nonetheless asserts that his notation on the Refill Request Form used the word "refill" and not "prescription" and further states: "can fill current refill no new refill." Resp. Exceptions, at 4. He argues that "[t]his contemporaneous handwritten note can only be interpreted as documenting Respondent's belief that he was confirming the 'current' (i.e., existing) refill authorization and specifically declining to authorize a 'new refill' (current prescription), just as instructed by" the Case Agent. *Id.*

However, in his exceptions, Respondent entirely ignores that the Refill Request form also contains the circled notations of "MD" and "OK x 1," along with the arrow that was drawn towards the words "No New Refill." As noted above, based on these notations, the ALJ concluded that Respondent "knowingly authorized another 180 unit dispensation after being called by the pharmacist." R.D. at 10.

The ALJ's conclusion that Respondent was called by the pharmacist and approved an additional dispensation of Norco is a permissible inference from the evidence.² While this may not be the only permissible inference which can be drawn from the notation, it nonetheless constitutes probative evidence of the allegation. Significantly, when called to testify, Respondent invoked his Fifth Amendment privilege. However, as the Supreme Court has explained, "the Fifth Amendment does not forbid adverse inferences against parties to civil actions when they refuse to testify in response to probative evidence offered against them." *Baxter v. Palmigiano*, 425 U.S. 308, 318 (1976). As the Tenth Circuit has noted, "[t]his rule applies with equal force to administrative proceedings." *MacKay v. DEA*, 664 F.3d 808, 820 (10th Cir. 2011) (citing *Hoxie*

v. DEA, 419 F.3d 477, 483 (6th Cir. 2005)). See also *Keating v. Office of Thrift Supervision*, 45 F.3d 322, 326 (9th Cir. 1995). Because Respondent refused to testify in response to the evidence suggesting that he had spoken with a pharmacist and authorized an additional dispensing (notwithstanding his having written "No New Refill" on the Refill Request form), I draw an adverse inference and conclude that he did authorize the December 21, 2012 dispensing, at which time his registration had been suspended. And because there was no reason for the pharmacy to contact him regarding a refill request unless there were no refills remaining, I conclude that Respondent knowingly authorized the dispensing in violation of the Immediate Suspension Order.

Next, Respondent argues that the nine prescriptions which he issued to the undercover officers "cannot possibly be probative of whether [his] continued [r]egistration is inconsistent with the public interest." Resp. Exceptions, at 5. According to Respondent, "[i]n addressing the public interest question, the key word is obviously the word 'is[,] not 'was.'" *Id.*

Respondent thus maintains that because the undercover officers "never intended to consume the medication" and "were never at risk from this medication," his issuance of the prescriptions is not probative of the public interest. *Id.* He further asserts that because he issued the prescriptions "over a year before the hearing," his conduct in issuing them "cannot possibly be probative of whether [his] continued Registration [is] inconsistent with the public interest unless the Government shows either that this conduct "typif[ies] his conduct with actual patients who did consume the medications" or that his "prescribing practices did not improve to the point that he was in compliance with DEA requirements and the applicable standard of care." *Id.* Respondent thus concludes by arguing that "[t]his analysis goes to the heart of the public interest question under 21 U.S.C. § [] 823(f)(4) and 824," and that "[a]ll of these provisions require an assessment of [his] current conduct and compliance." *Id.* at 6.

As for his contention that "the key word is . . . 'is' [and] not 'was,'" Respondent ignores, that in section 824(a), Congress granted the Agency authority to suspend or revoke a registration "upon a finding that the registrant . . . has committed such acts as would render his registration under section 823 of this title inconsistent with the public interest." 21 U.S.C.

824(a)(4) (emphasis added). Thus, while a decision to continue or grant a new registration is prospective in nature, the Agency properly bases the public interest determination on instances of past misconduct, of which, here, there is no shortage.³ As the Seventh Circuit has explained, and as the Agency has noted in numerous cases, "past performance is the best predictor of future performance." *ALRA Labs, Inc., v. DEA*, 54 F.3d 450, 452 (7th Cir. 1995); see also, e.g., *Medicine Shoppe-Jonesborough*, 73 FR 364, 387 (2008), *pet. for rev. denied*, *Medicine Shoppe-Jonesborough v. DEA*, 300 Fed. Appx. 409 (6th Cir. 2008).

As for Respondent's contention that the nine unlawful prescriptions are not probative of the public interest determination, because the undercover agents "never intended to consume the medication" and thus were "never at risk," Resp. Exceptions at 5, the evidence clearly showed that Respondent intentionally and knowingly diverted controlled substances. Indeed, as catalogued by the ALJ, the Government's Expert testified to some twenty-two areas of concern regarding Respondent's prescribing practices. See R.D. at 30–32. These included his failure to resolve numerous red flags such as statements by the undercover officers that they were either diverting controlled substances or seeking them for recreational use; his falsification of medical records by indicating that he had performed an extensive physical exam when he had not; his failure to even examine the area of the body which was the source of an

³ Notwithstanding that section 823(f) authorizes the Attorney General to "deny an application for [a practitioner's] registration . . . if the Attorney General determines that the issuance of such registration . . . would be inconsistent with the public interest," here again, the provision explicitly recognizes the probative nature of an applicant's past conduct in making this determination as demonstrated by factor two, which directs the Attorney General to consider "[t]he applicant's experience in dispensing . . . controlled substances," and factor three, which directs the Attorney General to consider "[t]he applicant's conviction record under Federal or State laws relating to the manufacture, distribution, or dispensing of controlled substances." 21 U.S.C. 823(f)(2) & (3).

While the text of factor four, which directs the Attorney General to consider "[c]ompliance with applicable State, Federal or local laws relating to controlled substances" is not similarly limited to an applicant's past conduct, (nor limited to the specific applicant, see *David A. Ruben* 78 FR 38363, 38385 n.47 (2013)), the Agency has long considered an applicant's record of compliance with laws related to controlled substances under this factor. See *Albert Lepis, M.D.*, 51 FR 17555, 17555–56 (1986) (discussing physician's dispensings in violation of state law limiting quantity of controlled substances that could be prescribed under factor four (as well as factor two)); *Carriage Apothecary, Inc.*, 52 FR 27599, 27600 (1987).

² The Case Agent testified that the documents, which are identified as pages 2–4 of Government Exhibit 24, were obtained from the pharmacist at the Safeway Pharmacy and are "true and accurate cop[ies] of the documentation [he] obtained from the" pharmacy. Tr. 89.

undercover officer's purported pain; his—in the words of the Government's Expert—“[t]rolling for symptomology”; his suggesting to a patient that she claim to have pain radiating from her back into her leg to justify obtaining an MRI, as this was needed to justify his prescribing of oxycodone to her; and his typically rapid fire review with the patients of their medical history. *See id.* at 30–33. That each of the patients was an undercover agent does not make any of Respondent's acts of prescribing to them any less a violation of federal law. I thus reject Respondent's fatuous contention that his prescribing to the undercover officers is not probative of whether his registration is inconsistent with the public interest unless the Government can show that his conduct “can somehow be translated to typify his conduct with actual patients who did consume the medications.” *Resp. Exceptions*, at 5.

Respondent did allow that his prescriptions to the undercover agents would be probative of the public interest determination if the Government could show that his “prescribing practice did not improve to the point that he was in compliance with DEA requirements and the applicable community standard of care.” *Id.* Here again, Respondent is confused, but not because the Agency's precedent is unclear. Under Agency precedent, DEA can revoke based on proof of a single act of intentional or knowing diversion. *See Dewey C. MacKay*, 75 FR 49956, 49977 (2010); *see also Daniel Olefsky*, 57 FR 928, 928–29 (1992). Moreover, where, as here, the Government makes out a *prima facie* case by showing that a registrant has committed acts which render his registration inconsistent with the public interest and which support the revocation of his registration, the registrant bears the burden of producing evidence to show that he accepts responsibility for his misconduct and has taken sufficient remedial measures to assure the Administrator that he will not engage in future misconduct. *MacKay*, 75 FR at 49977. (collecting cases). Having established its *prima facie* case by showing that Respondent diverted controlled substances on multiple occasions, the Government was not required to show that his “prescribing practices [have] not improve[d] to the point that he [is] in compliance with DEA requirements and the applicable . . . standard of care.” *Resp. Exceptions*, at 5.

Next, Respondent argues that “[i]t is significant that the Government failed to introduce any evidence or testimony concerning Respondent's care of a single

current patient, even a ‘drug seeking’ one.” *Id.* at 6. He also asserts that “[t]he Government seized hundreds of medical charts” when it served the Immediate Suspension Order and yet “failed to introduce a single one of these charts, although presumably they were aware that Respondent had drug seeking patients in his practice.” *Id.*

Because of the extent and egregious nature of his misconduct, Respondent's registration was Immediately Suspended simultaneously with the commencement of this proceeding. Thus, Respondent is without authority to lawfully dispense controlled substances to any current patient. Respondent does not explain why his care of a single current patient would be probative of his ability to responsibly and lawfully dispense controlled substances.

As for the Government's failure “to introduce a single one of” the patient charts it seized, the Government was not required to provide any such evidence to prove its case. Having conducted the nine undercover visits, the Government could reasonably conclude, based on its review of the evidence obtained during those visits, that Respondent was engaged in the diversion of controlled substances and that it had sufficient evidence to bring this proceeding. *See T.J. McNichol*, 77 FR 57133, 57146 (2012) (rejecting ALJ's reasoning that the Government was required to review patients charts it had seized “to develop evidence that might enlighten the administrative record of [physician's] positive prescribing practices”; “[h]aving garnered evidence of what it believed to be unlawful prescriptions issued to . . . four undercover officers, the Government was entitled to go to hearing with that evidence”).

In a variation on a previous theme, Respondent further argues that his prescribing to the undercover officers “is useless in determining the public interest question” because “all” of the agents engaged in “diverting behavior” by “discussing extraneous matters” with him. *Resp. Exceptions*, at 7. Respondent asserts that this behavior is atypical of drug seeking patients and that “it tended to divert [his] attention from the symptoms he was asking about so that the recording would contain less evidence of a legitimate examination and history taking” and also diverted his “attention from his note taking which distorted the medical record itself.” *Id.*

However, as explained above, Respondent did not testify, and thus, there is no evidence to support his assertion that the putatively extraneous conversations diverted his attention

from his responsibilities in either questioning his patients regarding their conditions and medical history or his note taking. Moreover, as the ALJ found (*see* R.D. at 15), while the Agents may have initiated the extraneous conversations, such as when Agent Breeden noted that Respondent had gone to Nebraska and that “they play Penn State . . . this week,” Respondent perpetuated the conversation by noting “that Joe Paterno thing is so stupid,” that “these politically correct people just piss me off to no end” and continuing to discuss the Penn State/Jerry Sandusky scandal for several minutes thereafter.⁴ *See* GX 5, at 8–12. Furthermore, the extraneous conversation had long ended by the time Agent Breeden and Respondent proceeded to discuss what drugs the former (in his undercover capacity) was using and why he was using them, and during which the following exchange occurred:

Dr: So you use the norcos and?

Agent: Uh yes I use pretty much whatever I (unintelligible) whatever I have available.

Dr: Ok the opans are so damned expensive do you notice any high out of the opans at all they make you dopy for (unintelligible)?

Agent: (unintelligible) well compare to the old the old oxy's um . . . you know I got some friends who've used the um who don't like 'em um I personally I like 'em I mean I (unintelligible).

Dr: which ones?

Agent: the opanas . . . but they're harder to get for than the . . . roxicodones are . . . and they're way more expensive though.

Dr: yea.

Agent: the opanas are . . . ya know twice as much as the Roxicodone are.

Dr: and then you you get the norcos as well?

Agent: some sometimes mostly the Roxicodone and the opanas.

GX 5, at 27–28.

Moreover, a further review of the transcript and recording shows that Respondent was not distracted when he informed the Agent that “for pain medication I would charge you \$200 dollars . . . and then I charge you \$80 dollars a month for your prescriptions,”

⁴ Respondent asserts that the ALJ's Recommended Decision “recognized [that] all Agents engaged in this diverting behavior,” by trying to distract him during his evaluation of the patients. *Resp. Exceptions*, at 7. However, following a review of the recordings, I agree with the ALJ's finding:

That the conversations engaged in by these agents were [not] designed to divert [Respondent's] attention or keep him from performing a proper, adequate, physical examination. To the contrary, most of the extraneous dialogue recorded here was occasioned by Respondent himself. The record does, however, make clear that each of the undercover agents tried to act like drug-seeking patients. . . .

R.D. at 15.

but that he was “gonna do [the Agent] better than that because . . . I’m gonna give you the cannabis card” for which, “when I do the pain medication prescriptions with the cannabis then you know I charge \$180 for the cannabis recommendation,” but that “on the initial evaluation I charge people half on their prescriptions so instead of charging you \$80 bucks I charge you \$40.” GX 5, at 38. Nor was Respondent distracted by the Agent when the latter explained that he had \$200 on him and Respondent agreed that “for \$200 we’ll just go ahead and do your prescriptions for your norcos and your and stuff” and “do the [cannabis] card for you too.” *Id.*

Later, after a discussion of various cannabis related issues, Respondent and the Agent proceeded to discuss what prescriptions the latter wanted, with the following exchange occurring:

Dr: . . . what are we gonna do as far as prescriptions for what are you using you say you are using norcos?

Agent: ah mostly the uh opana or the uh roxies um and then if uh I’m not sure if it’d be the same prescription or not (unintelligible) the cough syrup too.

Dr: ok so basically you want to end up getting the oxycodone you want the IR’s the 30 IR’s?

Agent: Ah, yea.

Dr: ok and how many of those . . . are you taking?

Agent: what is it (unintelligible) for a month what is it 120?

Dr: Ok.

Id. at 41–42. Here again, Respondent was not distracted. Nor was he distracted when the Agent also asked for the cough syrup, and Respondent replied: “I’ll give you the promethazine.” *Id.* at 42.⁵

⁵ It is noted that Respondent did ask the Agent various questions regarding his medical history. However, he did not ask any questions about the Agent’s purported pain level and how it affected his ability to function. *See* Tr. 343 (testimony of Government’s Expert: “he’s a tile man, and nowhere in the information that I listened to or read was there any conversation about how his pain conditions [sic] was interfering with his ability to be a tile man. It seems to me it would be very hard to be a tile man if you had knee pain or back pain.”); *id.* at 344–45 (testimony of Government’s Expert: “nor did I get any impression from the transcript or the recording of the degree of pain that was being suffered on a scale of one to [ten], or even using such words as mild, moderate or severe. None of that language was employed”); *id.* at 325–26 (Expert’s testimony discussing scope of questioning by a physician in assessing a patient’s pain complaint).

Nor does Respondent explain why these distractions prevented him from examining the Agent’s knee, which was the purported area of the Agent’s pain. *See* Tr. 133 (Agent’s testimony that Respondent did not at any point look at his knee); *see id.* at 345–46 (testimony of Government’s Expert: Noting that upon review of Agent Breeden’s medical record, there was “a very nondetailed examination of the musculoskeletal system,

Finally, Respondent argues that the ALJ failed to give proper weight to his evidence of remediation. Resp. Exceptions, at 8–9. First, he argues that the ALJ failed to recognize that he expressed remorse when he admitted to the Case Agent “that he had been over prescribing in the past.” *Id.* at 8. Second, he argues that while the ALJ acknowledged “the testimony of two patients (of Respondent) who received appropriate examinations and treatment,” the ALJ “made no finding impugning the veracity of [the clinic employee who testified] about improvements in the practice with respect to controlled substance prescribing.” *Id.* at 8–9.

As for the testimony of Respondent’s patients that they received appropriate examinations and treatment and were helped by his treatment, neither patient testified that they possess medical expertise. Moreover, because under the CSA, “registration is limited to those who have authority to dispense controlled substances in the course of professional practice, and patients with legitimate medical conditions routinely seek treatment from licensed medical professionals, every registrant can undoubtedly point to an extensive body of legitimate prescribing over the course of [his] professional career.” *Jayam Krishna-Iyer*, 74 FR 459, 463 (2009). Thus, while Respondent may have treated these two legitimate patients appropriately, this says nothing about his management of persons who seek controlled substances to either abuse or divert them. *See MacKay v. DEA*, 664 F.3d at 819 (“Although Dr. MacKay may have engaged in the legitimate practice of pain medicine for many of his patients, the conduct found by the Deputy Administrator with respect to K.D. and M.R. is sufficient to support

although that was quite relevant to the pain complaint, the pain complaint being knee pain. One would customarily expect to see a highly detailed knee examination and an examination of the joints on either side of the knee, that being the ankle and the hip”).

I also reject Respondent’s contention that the Government’s Expert’s testimony should be “given very little weight” because she “had never qualified as an expert witness” by testifying in a medical board case on “the ‘treatment of non-cancer pain.’” Resp. Exceptions, at 8. There is, of course, a first time for everything, and the Expert testified that she has reviewed other cases for the state medical board which involved the long-term use of opiates in managing chronic, non-cancer pain. Tr. 320. In addition, the Expert testified that she has been a clinical professor of medicine at the U.C. Davis School of Medicine for nearly thirty years; she also testified that in her prior position, she had evaluated one to five patients each week to determine whether to initiate long term opioid therapy for non-cancer pain and had prescribed oxycodone for one to two patients a week. *Id.* at 322–23.

her determination that his continued registration is inconsistent with the public interest.”).

It is acknowledged that the Practice Manager at the urgent care clinic, where Respondent is now employed, testified regarding the new procedures he instituted to screen out non-complying patients. However, to rebut the Government’s *prima facie* case, Respondent was required to produce evidence not only as to his corrective measures, he was also required to acknowledge his misconduct in prescribing to the undercover officers. *Medicine Shoppe-Jonesborough*, 73 FR at 387 (quoting *Samuel S. Jackson*, 72 FR 23848, 23853 (2007)); *John H. Kennedy*, 71 FR 35705, 35709 (2006). As the Tenth Circuit has explained:

. . . The DEA may properly consider whether a physician admits fault in determining if the physician’s registration should be revoked. When faced with evidence that a doctor has a history of distributing controlled substances unlawfully, it is reasonable for the . . . Administrator to consider whether that doctor will change his or her behavior in the future. And that consideration is vital to whether continued registration is in the public interest. Without Dr. MacKay’s testimony, the Deputy Administrator had no evidence that Dr. McKay recognized the extent of his misconduct and was prepared to remedy his prescribing practices.

MacKay, 664 F.3d at 820 (citing *Hoxie v. DEA*, 419 F.3d 477, 483 (2005)).

Here, the only evidence regarding whether Respondent admits fault with respect to anything, was his admission during an interview (on the date the ISO was served) with the Case Agent “that some of his patients were not legitimate” and that “a number of them were receiving too many pills.” Tr. 104. Indeed, as noted above, at the hearing, Respondent invoked his Fifth Amendment privilege. Thus, Respondent has entirely failed to address the multiple acts of intentional diversion which he committed when he prescribed to the undercover officers. Respondent has therefore failed to produce sufficient evidence to rebut the conclusion that his continued registration would be consistent with the public interest. *See MacKay*, 664 F.3d at 820; *Medicine Shoppe-Jonesborough*, 73 FR at 387.

The Government’s Exceptions

While the Government apparently agrees with the ALJ’s ultimate conclusion of law and recommended order (*i.e.*, that Respondent’s registration is inconsistent with the public interest and should be revoked), it takes exception to two features of his recommended decision. First, it takes

exception to the ALJ's conclusion that even in a proceeding brought pursuant to section 824(a)(4), it must identify in the Show Cause Order each of the public interest factors it is relying on. Govt. Exceptions, at 1–4. Second, it takes exception to the ALJ's legal conclusion that factor two (the experience factor) should not be considered “[w]here evidence of the Respondent's experience, as expressed through his patients and employees, is silent with respect to the quantitative volume of the Respondent's experience,” R.D. at 56, thus impliedly suggesting that the Government has an obligation to put forward evidence as to the volume of a registrant's prescribing activities in order to rely on this factor. Gov. Exceptions, at 4–9. Both of the Government's exceptions are well taken.

As for his conclusion that the Government cannot rely on factor two because it did not cite the factor in either the Show Cause Order or its Pre-Hearing Statements, the ALJ cites no authority for this hyper-technical view of the Agency's notice obligation. Contrary to the ALJ's understanding, that the Government did not refer to factor two until its opening statement violated neither federal law nor the Due Process Clause.

Here, the Government set forth that it was proposing the revocation of Respondent's registration “pursuant to 21 U.S.C. 824(a)(4) . . . because [his] continued registration is inconsistent with the public interest, as that term is defined in 21 U.S.C. 823(f).” ALJ Ex. 1, at 1. In addition, the Government set forth specific factual allegations regarding each of the nine undercover visits which it alleged resulted in Respondent issuing prescriptions “outside the usual course of professional practice or for other than a legitimate medical purpose.” *Id.* at 2–3. The Government further alleged that Respondent violated 21 U.S.C. 841(a)(1), which makes it unlawful to intentionally or knowingly distribute a controlled substance except as authorized by the Controlled Substances Act, as well as 21 CFR 1306.04(a), which requires that a controlled substance prescription “be issued for a legitimate medical purpose by [a] practitioner acting in the usual course of his professional practice.”

“Pleadings in administrative proceedings are not judged by the standards applied to an indictment at common law.” *Aloha Airlines v. Civil Aeronautics Bd.*, 598 F.2d 250, 262 (D.C. Cir. 1979) (quoted in *CBS Wholesale Distributors*, 74 FR 36746, 36749 (2009)); accord *Citizens State Bank of Marshfield v. FDIC*, 751 F.2d 209, 213

(8th Cir. 1984). Thus, “the failure of the Government to disclose an allegation in the Order to Show Cause is not dispositive and an issue can be litigated if the Government otherwise timely notifies a [r]espondent of its intent to litigate the issue.” *CBS Wholesale*, 74 FR at 36570. And while the Agency has held that “the parameters of the hearing are determined by the prehearing statements,” consistent with numerous court decisions, it has also recognized that even where an allegation was not raised in either the Show Cause Order or pre-hearing statements, the parties may nonetheless litigate an issue by consent. *Pergament United Sales, Inc., v. NLRB*, 920 F.2d 130, 135–37 (2d Cir. 1990); see also *Duane v. Department of Defense*, 275 F.3d 988, 995 (10th Cir. 2002) (discussing *Facet Enterprises, Inc., v. NLRB*, 907 F.2d 963, 974 (10th Cir. 1990); “we held that defendant had constructive notice of an alternate theory of liability not described in the formal charge when the agency detailed that theory during its opening argument and at other points during the hearing and when the defendant's conduct revealed that it understood and attempted to defend against that theory”); *Grider Drug #1 & Grider Drug #2*, 77 FR 44070, 44077 (2012) n.23 (holding that notwithstanding that the Government did not provide adequate notice of its intent to litigate an allegation in either the Show Case Order or its pre-hearing statements, where respondents “did not object that the allegation was beyond the scope of the proceeding and that they were denied adequate notice of it” and “fully litigated the issue,” the allegation was litigated by consent) (citing *Citizens State Bank*, 751 F.2d at 213; *Kuhn v. Civil Aeronautics Bd.*, 183 F.2d 839, 841–42 (D.C. Cir. 1950); and *Yellow Freight System, Inc., v. Martin*, 954 F.2d 353, 358 (6th Cir. 1992)).

“The primary function of notice is to afford [a] respondent an opportunity to prepare a defense by investigating the basis of the complaint and fashioning an explanation that refutes the charge of unlawful behavior.” *Pergament United Sales*, 920 F.2d at 135 (citation omitted). The Government adequately fulfilled this function when it disclosed the legal authority for the Agency's proposed revocation of Respondent's registration, see ALJ Ex. 1, at 1 (citing 21 U.S.C. 824(a)(4), 823(f)); the factual allegations that Respondent had issued prescriptions for oxycodone to undercover agents on nine different occasions, see *id.* at 2–3; and the legal basis for its contention that the prescriptions were unlawful. See *id.* at

2 (alleging that Respondent “issued these prescriptions outside the usual course of professional practice or for other than a legitimate medical purpose, in violation of 21 U.S.C. 823(f)(4),⁶ 841(a)(1), and 21 CFR 1306.04(a)”).

That the Government did not specifically reference it was seeking an analysis of this evidence under factor two (as well as factor four) until its opening statement did not in any way prejudice Respondent.⁷ Respondent neither objected to the Government's argument, nor argued in its post-hearing brief that he was prejudiced by the Government's assertion that his various violations “are grounds for revocation of [his] registration based on” both factors two and factor four. Tr. 70. Indeed, in a section of his post-hearing brief entitled “undisputed matters,” Respondent noted that “[t]he Government, in its opening statement set forth its intention to prove, in its case and [sic] chief, that Respondent's DEA registration should be revoked based on the public interest factors set forth in 21 U.S.C. 823(f) factors 2 and 4 only.” Resp. Post-Hrng. Br. 4 (citing Tr. 69–70). Thus, even if the public interest factors created substantive rules of conduct, which they do not, this case stands four square with *Facet Enterprises*. See 907 F.2d at 972.

Even if Respondent had claimed prejudice, I would not find the argument persuasive. This is so because whether the Government's evidence regarding the prescriptions was considered under factor two (the experience factor), factor four (the compliance factor), or both factors together, Respondent knew “what conduct was being alleged and ha[d] a fair opportunity to present [his] defense.” *Duane v. Department of Defense*, 275 F.3d at 995 (quoting *Facet Enterprises*, 907 F.2d at 972). The allegations that Respondent violated the CSA's prescription requirement and

⁶ While the Government alleged that Respondent's prescriptions to the undercover agents violated section 823(f)(4), this provision cannot be violated because it does not create a substantive rule of conduct. Rather, it is simply a factor which Congress directed the Agency to consider in making the public interest determination under section 823(f). Cf. *Bio Diagnostic International*, 78 FR 39327, 39330 (2013) (quoting *Penick Corp., Inc. v. DEA*, 491 F.3d 483, 490 (D.C. Cir. 2007) (other citations omitted) (“the ‘enumerated factors represent components of the public interest rather than independent requirements for registration’”).

⁷ See Tr. 70 (“These violations of the Controlled Substances Act and DEA regulations are grounds for revocation of the Respondent's DEA registration based on the public interest pursuant to 21 U.S.C. 824(a)(4) as determined by 21 U.S.C. 823(f), Factor 2, the registrant's experience at dispensing controlled substances, and Factor 4, compliance with applicable state, federal or local laws relating to controlled substances.”).

unlawfully distributed controlled substances to the undercover agents, as well as the potential defenses to the allegations, are the same whether the conduct is considered under factor two or factor four. Accordingly, while I agree with the ALJ's conclusion that Respondent waived any objection to the Agency's consideration of the prescription evidence under factor two, I reject the ALJ's conclusion that the Government did not provide adequate notice of "its intention to rely on Factor Two in this hearing." R.D. at 46.

The Government also took exception to the ALJ's legal conclusion that factor two "should not be used to determine whether Respondent's continued registration is inconsistent with the public interest." Gov. Exceptions, at 4–9. In support of this conclusion, the ALJ offered the following reasoning:

In order to establish a basis for revoking a Certificate of Registration based on the provisions of 21 U.S.C. § 823(f)(2) (Factor Two), and assuming Factor Two applies to both applicants and registrants, the Government must present evidence establishing, by at least a preponderance, that the experience of the Respondent in dispensing controlled substances is of such character and quality that his continued registration is inconsistent with the public interest. This requires evidence of both the qualitative and quantitative volume of the Respondent's experience. Where evidence of the Respondent's experience, as expressed through his patients and employees, is silent with respect to the quantitative volume of the Respondent's experience, and requires speculation to support an adverse finding under Factor Two, this Factor should not be used to determine whether the Respondent's continued registration is inconsistent with the public interest.

R.D. at 56. I reject the ALJ's analysis as it entirely ignores relevant precedent and is illogical.

Earlier in his Recommended Decision, the ALJ explained that "in analyzing a registrant's experience under Factor Two [that] the Administrator should consider the context of a registrant's entire dispensing practices, notwithstanding that isolated acts against the public interest can outweigh substantial positive experience." R.D. at 43. As support for this reasoning, the ALJ cited four cases: The Eleventh Circuit's unpublished decision in *Jayam Krishna-Iyer*; as well as the Agency's decisions in *Jeffery J. Becker*, 77 FR 72387 (2012); *T.J. McNichol*, 77 FR 57133 (2012); and *Rene Casanova*, 77 FR 58150 (2012). Notably, the ALJ did not discuss either the Agency's decision on remand in *Krishna-Iyer*, 74 FR 459 (2009), or its decision in *Dewey C. MacKay*, 75 FR 49956 (2010). Nor did the ALJ discuss the Tenth Circuit's

decision in *MacKay*. See *MacKay v. DEA*, 664 F.3d 808 (10th Cir. 2011).

On remand in *Krishna-Iyer*, I discussed at length the role of so-called "positive experience" evidence in Agency proceedings where, as here, the Government has proved that a registrant has committed intentional diversion. Therein, in response to the court's instruction that I re-consider my findings under the experience factor, giving "particular attention to the entire corpus of [the physician's] record in dispensing controlled substances [notwithstanding that there was no such evidence in the record], not only the experience [with the] undercover officer[s]," I assumed, without deciding, that the physician's "prescribings of controlled substances to every other person she has treated constitute 'positive experience.'" 74 FR at 462–63. However, I explained that the physician's "prescribings to thousands of other patients do not . . . render her prescribings to the undercover officers any less unlawful, or any less acts which 'are inconsistent with the public interest.'" *Id.* at 463 (21 U.S.C. 823(f)).

Moreover, I then explained that under the CSA, only those persons who are authorized to dispense controlled substances under the laws of the State in which they practice are entitled to be registered. *Id.* Continuing, I explained that "[b]ecause under law, registration is limited to those who have authority to dispense controlled substances in the course of professional practice, and patients with legitimate medical conditions routinely seek treatment from licensed medical professionals, every registrant can undoubtedly point to an extensive body of legitimate prescribing over the course of her professional career." *Id.*

I then discussed several cases in which the practitioners had argued that the Agency should ignore their acts of intentional or reckless diversion because they had dispensed controlled substances to thousands of patients legitimately. *Id.* (discussing *Paul J. Caragine, Jr.*, 63 FR 51592, 51599–600 (1998); *Medicine Shoppe-Jonesborough*, 73 FR at 386 & n.56). For example, in *Caragine*, the Agency noted in its discussion of factor two that the physician had practiced medicine for 20 years and had "seen over 15,000 patients." 63 FR at 51599. While the Agency did not dispute this, it explained that what was "[a]t issue in this proceeding is Respondent's controlled substance prescribing to 18 patients." *Id.* After a lengthy discussion of the physician's prescribing practices with respect to the patients (some of which rejected the ALJ's findings of

improper prescribing), which was conducted under the auspices of factor two, *see id.* at 51599–600, the Agency explained "that even though the patients at issue are only a small portion of Respondent's patient populations, his prescribing of controlled substances to these individuals raises serious concerns regarding [his] ability to responsibly handle controlled substances in the future." *Id.* at 51600.⁸

More recently, in *Medicine Shoppe-Jonesborough*, I concluded that notwithstanding the pharmacy's argument that it had 17,000 patients, the evidence that it had diverted controlled substances to twelve patients established that its "experience in dispensing controlled substances warrants a finding that its continued registration is inconsistent with the public interest." 73 FR at 386. Noting that "[t]he fundamental question under the CSA is whether Respondent 'has committed such acts as would render [its] registration inconsistent with the public interest,'" I concluded that "[n]o amount of legitimate dispensings can render Respondent's flagrant violations [acts which are] 'consistent with the public interest.'" *Id.* n. 56.

In *Krishna-Iyer*, I also noted that DEA had revoked a practitioner's registration based on a physician's presentation, at the same time, of two fraudulent prescriptions to a pharmacy, noting that the physician had "'refuse[d] to accept responsibility for his actions and does not even acknowledge the criminality of his behavior.'" *Id.* at 463 (discussing and quoting *Alan H. Olefsky*, 57 FR 928, 928–29 (1992)). I therefore held that "evidence that a practitioner has treated thousands of patients does not negate a *prima facie* showing that the practitioner has committed acts inconsistent with the public interest." *Id.* And I further explained that "[w]hile such evidence may be of some weight in assessing whether a practitioner has credibly shown that she has reformed her practices, where a practitioner commits intentional acts of diversion and insists she did nothing wrong, such evidence is entitled to no weight." *Id.*

Thus, in *Krishna-Iyer*, I adhered to my previous conclusion that the "Respondent's dispensings to the undercover officers and her pre-signing of prescriptions and unlawful delegation of her prescribing authority

⁸ Moreover, in contrast to this case, the Agency acknowledged that the patients at issue all "had legitimate medical problems that warranted some form of treatment." 63 FR at 51601. It should also be noted there was no evidence that the physician had knowingly or intentionally diverted controlled substances and the physician put on evidence of his rehabilitation.

to her nurse, establish a *prima facie* case that her continued registration is ‘inconsistent with the public interest.’” *Id.* (quoting 21 U.S.C. 824(a)(4)). I also made clear that had Respondent not acknowledged her misconduct, I would have revoked her registration again.

Subsequently, in *MacKay*, I found that the evidence that the physician had intentionally diverted controlled substances to two patients and did so on multiple occasions was “sufficient to hold that the government had made a *prima facie* showing that [the physician] had committed acts which render his registration inconsistent with the public interest.” 75 FR at 49977. Citing the Eleventh Circuit’s unpublished decision in *Krishna-Iyer*, the physician argued that “[a] better assessment of [his] medical practice and habits can be ascertained from [his] numerous positive experiences in prescribing controlled substances, some of which were recounted by the patients themselves . . . at the hearing.” *Id.* (quoting Resp. Summation Br. at 3).

Based on my decision on remand in *Krishna-Iyer*, I rejected Respondent’s argument. *See id.* As I explained: “even assuming, without deciding, that Respondent’s prescribing practices to all of his other patients (including those whose medical records were reviewed by the Government’s expert) fully complied with the CSA and Utah law, these prescribing do not refute the evidence showing that he intentionally diverted to [the two patients] in violation of both the CSA and Utah law.” *Id.* I therefore rejected the physician’s “arguments and conclude[d] that the Government ha[d] established a *prima facie* case that his continued registration is ‘inconsistent with the public interest.’” *Id.* (citing 21 U.S.C. 823(f)).⁹

On review of the Agency’s decision, the Tenth Circuit held “that substantial evidence supports the [Agency’s] findings under factors two and four” that the physician had “knowingly diverted controlled substances in violation of state and federal law.” *MacKay v. DEA*, 664 F.3d at 818. Addressing the physician’s contention that the Agency had failed to consider his “positive experience” evidence, the Tenth Circuit explained:

None of the evidence presented by Dr. MacKay undermines the evidence relating to [the two patients]. Although numerous

patients and colleagues of Dr. MacKay related their positive experiences with him, none had any personal knowledge regarding his treatment of [them]. Notably, Dr. MacKay’s medical expert . . . failed to specifically discuss and justify Dr. MacKay’s treatment of [the two patients]. As a result, none of Dr. MacKay’s evidence contradicts the testimony and evidence presented by the DEA relating to the knowing diversion of drugs to these two patients.

Nor did the Deputy Administrator misweigh the five statutory factors for determining the propriety of revocation, *see* 21 U.S.C. § 823(f). In light of Dr. MacKay’s misconduct relating to factors two and four, the government made a *prima facie* showing that Dr. MacKay’s continued registration is inconsistent with the public interest. *See MacKay*, 75 FR at 49,977. Although Dr. MacKay may have engaged in the legitimate practice of pain medicine for many of his patients, the conduct found by the Deputy Administrator with respect to [the two patients] is sufficient to support her determination that his continued registration is inconsistent with the public interest.

Id. at 819. The Tenth Circuit thus denied the physician’s petition for review.

As noted above, in his discussion of the experience factor, the ALJ entirely failed to discuss the Agency’s decision on remand in *Krishna-Iyer*, as well both the Agency’s and Tenth Circuit’s decision in *MacKay*. However, as these precedents make clear, allegations that a practitioner has violated the prescription requirement (21 CFR 1306.04(a)) are properly considered—for obvious reason—under the experience factor. Moreover, while the respondent-practitioner in a proceeding brought under sections 823(f) and 824(a)(4) may put on evidence as to his experience as a compliant registrant, the Government has no obligation to put forward such evidence.

Thus, as the Tenth Circuit’s decision in *MacKay* demonstrates, where the Government proves that a registrant has violated the prescription requirement, its evidence is still sufficient to make out a *prima facie* case under 21 U.S.C. 824(a)(4) even where the registrant has produced evidence of his experience as a compliant registrant. That being the case, it is absolutely clear that, where, as here, the Government has proved that a registrant has violated the prescription requirement, the Government is entitled to a finding that the evidence with respect to the registrant’s experience in dispensing controlled substances establishes that he “has committed such acts as would render his registration . . . inconsistent with the public interest.” 21 U.S.C. 824(a)(4); *MacKay*, 664 F.3d at 819.

This is so, even where there is no evidence “with respect to [the

practitioner’s] overall practice history,” and “we do not know the number of patients he has served.” R.D. at 45.¹⁰ Indeed, notwithstanding various cases which have discussed the volume of a practitioner’s dispensing activity as a relevant consideration under the experience factor, no case has ever placed the burden of producing evidence as to the volume of a practitioner’s legitimate dispensings on the Agency. This is for good reason, as one of the fundamental principles of the law of evidence is that the burden of production on an issue is typically allocated to the party which is “most likely to have access to the proof.” Christopher B. Mueller & Laird C. Kirkpatrick, 1 *Federal Evidence* § 3:3, at 432 (3d ed. 2007).¹¹

I therefore reject the ALJ’s conclusion of law that “[w]here evidence of the Respondent’s experience, as expressed through his patients and employees, is silent with respect to the quantitative volume of the Respondent’s experience, . . . this Factor should not be used to determine whether the Respondent’s continued registration is inconsistent with the public interest.” R.D. at 56. Consistent with Agency precedent which has long considered violations of the CSA’s prescription requirement under factor two (as well as factor four), I hold that the evidence relevant to factor two establishes that Respondent violated 21 CFR 1306.04(a) when he dispensed controlled substances to the various undercover officers, and that this establishes a *prima facie* case that he has committed acts which “render his registration inconsistent with the public interest.” 21 U.S.C. 824(a)(4). *See also Carriage Apothecary*, 52 FR 27599, 27600 (1987) (holding that evidence that pharmacy failed to maintain proper records and could not account for significant quantities of controlled substances was relevant under both factors two and four); *Eugene H. Tapia*, 52 FR 30458, 30459 (1987) (considering evidence that physician did not perform physical exams and issued medically unnecessary prescriptions under factor two; no evidence regarding quantity of physician’s legitimate dispensings); *Thomas Parker Elliott*, 52 FR 36312, 36313 (1987) (adopting ALJ’s conclusion

¹⁰ The ALJ further explained that “we do not know . . . the value of [the Respondent’s] service to the community, or other similar demographic factors relevant to the issue.” R.D. 45. Contrary to the ALJ’s understanding, there is no need to know any of this, because the Agency has held that so-called “community impact” evidence is irrelevant to the public interest determination. *See Linda Sue Cheek*, 76 FR 66972, 66972–73 (2011); *Gregory D. Owens*, 74 FR 36571, 36575 (2009).

¹¹ Nor is the Agency required to calculate a ratio of a practitioner’s lawful to unlawful dispensings.

⁹ The physician also put on the testimony of three fellow physicians and introduced affidavits from sixteen other physicians. 75 FR at 49977. I placed no weight on this evidence because none of the physicians had personal knowledge of the physician’s prescribing with respect to the two patients. *Id.* at n.37.

that physician's "experience in the handling [of] controlled substances clearly warrants finding that his continued registration is inconsistent with the public interest," based on physician's having "prescribed enormous quantities of highly addictive drugs to [ten] individuals" without adequate medical justification; *Fairbanks T. Chua*, 51 FR 41676, 41676-77 (1986) (revoking registration under section 824(a)(4) and citing factor two, based, in part, on findings that physician wrote prescriptions which lacked a legitimate medical purpose; physician's "improper prescribing habits clearly constitute grounds for the revocation of his . . . [r]egistration and the denial of any pending applications for renewal").

* * * * *

In his discussion of factor two, the ALJ also explained that:

[o]n its face, Factor Two does not appear to be directly related to registrants like Dr. Pettinger. By its express terms, Factor Two applies to applicants, and calls for an inquiry into the applicant's "experience in dispensing, or conducting research with respect to controlled substances." Thus, it is not clear that the inquiry into Dr. Pettinger's experience in dispensing controlled substances is warranted, given the limited scope of this factor.

R.D. at 42. The ALJ nonetheless "assum[ed] [that] Factor Two does indeed pertain to both registrants and applicants." *Id.* at 42; *see also* R.D. 56 ("assuming Factor Two applies to both applicants and registrants").

Contrary to the ALJ's understanding, there was no need to assume that Factor Two applies to registrants. As demonstrated by the several hundred agency decisions which have considered all five of the public interest factors in revocation proceedings brought against practitioners, it does.¹² *See, e.g., Thomas H. McCarthy*, 54 FR 20936, 20938 (1989) (revoking registration and holding that "[a]n applicant's 'experience in dispensing' (which includes prescribing and administering), made applicable to registrants by 21 U.S.C. 824(a)(4), is a statutory factor which 'shall' be considered as set out in 21 U.S.C. 823(f)(2)").

In section 824(a)(4), Congress provided the Agency with authority to suspend or revoke a registration "upon a finding that the registrant . . . has

committed such acts as would render his registration under section 823 of this title inconsistent with the public interest as determined under such section." 21 U.S.C. 824(a)(4) (emphasis added). In section 823, Congress set for the registration requirements for each category of registrant under the CSA, including practitioners. *See* 21 U.S.C. 823(f). With respect to practitioners, the Agency has long and consistently held that all five of the factors set forth in section 823(f) are to be considered in making the public interest determination. *See, e.g., McCarthy*, 54 FR at 20938.

To be sure, factors two and three refer to "[t]he applicant's experience" and "[t]he applicant's conviction record," rather than "the registrant's." *Id.* As for why they do, the answer is obvious: The purpose of section 823 is to set forth the registration requirements, *i.e.*, the criteria for determining whether the granting of an application for registration is consistent with the public interest. Given that the initial determination of whether "issuance of [a] registration . . . would be inconsistent with the public interest," *id.*, is made before an applicant is ever registered, it would make little sense to refer to "[t]he registrant's experience." Indeed, none of the factors applicable to any of the seven categories of registrant set forth in section 823 refers to "the registrant."

Implicit in the ALJ's reasoning is the notion that only those public interest factors which do not explicitly reference "the applicant" should be considered in a proceeding brought under section 824(a)(4). Not only does the ALJ's proposed construction place undue reliance on literalism while ignoring both the statute's context and Congress's purposes in enacting section 824(a)(4), it adoption would lead to strange results.

For example, in the case of a list I chemical distributor, four of the five factors used in making the public interest determination refer to the "the applicant." *See* 21 U.S.C. 823(h)(1)-(4). Accordingly, were I to adopt the ALJ's interpretation, in a revocation proceeding, these four factors would be rendered null and the only factor to be considered would be "such other factors as are relevant to and consistent with the public health and safety." *Id.* § 823(h)(5) (emphasis added). This begs the question of how the Agency would determine whether the factors asserted to be within this factor were truly "other" without having considered the other four factors.

Moreover, under the ALJ's interpretation, the factors to be considered in a revocation proceeding

brought against a practitioner would vary from case to case, depending upon whether the practitioner had filed any pending applications. Thus, where the practitioner has not filed a renewal application (or an application to modify his registration), only factors one, four, and five could be considered in determining whether the acts he committed render his registration inconsistent with the public interest. However, upon the practitioner's filing of a renewal application (or application to modify), he would once again be an applicant and the Agency would then have authority (and be required) to consider all five factors in determining whether he had committed acts which "render his registration . . . inconsistent with the public interest." 21 U.S.C. 824(a)(4). This is simply a prescription for inconsistent decisionmaking.

Notably, the Agency has never interpreted the CSA in the manner suggested by the ALJ. Thus, while some of the earlier decisions in cases brought under section 824(a)(4) did not explicitly cite factor two (or the other factors for that matter), the Agency has long considered factor two in revocation proceedings brought under section 824(a)(4). *See Tapia*, 52 FR at 30459; *Elliott*, 52 FR at 36312; *Chua*, 51 FR at 41676-77. And in *McCarthy*, the Agency made explicit what was previously implicit (but was nonetheless the Agency's practice), when it held that "[a]n applicant's 'experience in dispensing' . . . [is] made applicable to registrants by 21 U.S.C. 824(a)(4), [and] is a statutory factor which 'shall' be considered" in a revocation proceeding. 54 FR at 20938.

The Agency's interpretation is fully supported by the legislative history of the Drug Enforcement Amendments to the Comprehensive Crime Control Act of 1984. *See* Public Law 98-473, § 512, 98 Stat. 2068, 2073 (1984). As the House Report explained, the "[i]mproper diversion of controlled substances by practitioners is one of the most serious aspects of the drug abuse problem. However, effective Federal action against practitioners has been severely inhibited by the limited authority in current law to deny or revoke practitioner registrations." H.R. Rep. No. 98-1030, at 266 (1984), *reprinted in* 1984 U.S.C.C.A.N. 3182, 3448. Continuing, the House Report explained that:

because of a variety of legal, organizational, and resource problems, many States are unable to take effective or prompt action against violating registrants. Since State revocation of a practitioner's license or registration is a primary basis on which

¹² In addition to the cases involving practitioners, there are numerous published decisions of revocation proceedings brought against other categories of registrants (such as list I chemical distributors) in which the Agency considered all of the public interest factors applicable to the particular category of registrant.

Federal registration may be revoked or denied, problems at the State regulatory level have had a severe adverse impact on Federal anti-diversion efforts. The criteria of prior felony drug conviction for denial or revocation of registration has proven too limited in certain cases as well, for many violations involving controlled substances which are prescription drugs are not punishable as felonies under State law. Moreover, delays in obtaining conviction allow practitioners to continue to dispense drugs with a high abuse potential even where there is strong evidence that they have significantly abused their authority to dispense controlled substances.

Clearly, the overly limited bases in current law for denial or revocation of a practitioner's registration do not operate in the public interest.

Id.

Congress thus amended section 823(f) "to expand the authority of the Attorney General to deny a practitioner's registration application" based upon a finding "that registration would be 'inconsistent with the public interest,'" by considering the five factors, which the House Report then set forth. *Id.* And Congress also amended section 824(a) "to add to the current bases for denial, revocation[] or suspension of registration a finding that registration would be inconsistent with the public interest on the grounds specified in 21 U.S.C. § 823, which will include consideration of the new factors added by section 509, as discussed supra." *Id.* at 3449 (emphasis added). Notably, nowhere did the report suggest that the Agency should consider only those factors that do not use the words "the applicant."

Accordingly, consistent with the Agency's longstanding interpretation,¹³

¹³ At the close of the hearing, the ALJ explained that while he had "seen court and DEA construction that assumes that factor 2 applies to registrants as well as applicants," he was "in a learning curve here." Tr. 500. The ALJ then explained that "I don't see how factor 2 applies here at all," even though "I have seen cases that tell me that I should be construing factor 2 as though it's written for both the applicant and the registration [sic]." *Id.* at 500–01. The ALJ thus asked the parties to address "what your take is on that." *Id.* The Government complied, yet even after the Government provided applicable precedent, see Gov't's Post-Hearing Br. 22–23 (citing *Thomas H. McCarthy*, 54 FR 20936, 20938 (1989)), the ALJ was apparently still unconvinced. See R.D. at 42.

As stated above, there are several hundred Agency decisions which have applied factor two (as well as factor three) in section 824(a)(4) proceedings brought against practitioners. Moreover, having seen court decisions, none of which questioned the Agency's longstanding construction of the statute, there was no reason to require the parties to brief the issue or to ruminate as to whether factor two even applies. It does. See *Iran Air v. Kugelman*, 996 F.2d 1253, 1260 (D.C. Cir. 1993) (quoting Joseph Zwerdling, *Reflections on the Role of an Administrative Law Judge*, 25 Admin. L. Rev. 9, 12–13 (1973) (an ALJ "'is governed, as is the case of any trial court, by the applicable and controlling

in future cases brought against practitioners under section 824(a)(4), the ALJ should rest assured that factor two (as well as factor three) applies in making the public interest determination. So too, in any proceeding brought under section 824(a)(4), the ALJ shall, in making the public interest determination, consider all of the public interest factors set forth in the relevant provision of section 823. To the extent the evidence submitted by either party is relevant under a particular factor, the ALJ shall make the appropriate findings.

However, the ALJ's failure to make findings under factor two does not alter the outcome of this matter. Because I agree with the ALJ's conclusions of law that there is substantial evidence that Respondent issued nine prescriptions to the undercover agents in violation of 21 CFR 1306.04(a), because he lacked a legitimate medical purpose and acted outside of the usual course of professional practice, and this conduct is also properly considered under factor four (compliance with applicable laws related to controlled substances), I adopt the ALJ's conclusion of law that "Respondent's continued [registration] is inconsistent with the public interest" and "warrant[s] the revocation of" his registration and the "the denial of any pending application." R.D. 57. And for reasons explained earlier, I also adopt the ALJ's legal conclusion that Respondent authorized a prescription for hydrocodone after his registration had been suspended, and this conduct is also inconsistent with the public interest.¹⁴ *Id.* Finally, because Respondent has entirely failed to address the multiple acts of intentional diversion which he committed when he prescribed controlled substances to the undercover officers, I agree with the ALJ's conclusion of law that "Respondent has failed to affirmatively acknowledge specific acts of improper prescribing," *id.* at 58, and that he has not put forward sufficient evidence to show why he can be entrusted with a registration. See *MacKay*, 664 F.3d at 820. Accordingly, I will adopt the ALJ's recommendation that I revoke Respondent's registration and deny any

precedents. These precedents include . . . the agency's policies as laid down in its published decisions . . . Once the agency has ruled on a given matter . . . it is not open to reargument by the administrative law judge''').

¹⁴ While I also adopt this conclusion, Respondent's violations in prescribing controlled substances to the undercover agents provides more than sufficient evidence to support the revocation of his registration.

pending applications to renew or modify his registration.¹⁵

Order

Pursuant to the authority vested in me by 21 U.S.C. 823(f) and 824(a)(4), as well as 28 CFR 0.100(b), I order that DEA Certificate of Registration Number AP6572716, issued to Clair L. Pettinger, M.D., be, and it hereby is, revoked. I further order that any pending application of Clair L. Pettinger, M.D., to renew or modify the aforesaid Certificate of Registration, be, and it hereby is, denied. This Order is effective immediately.

Dated: September 18, 2013.

Michele M. Leonhart,
Administrator.

Paul Soeffing, Esq., for the Government
Alan Kaplan, Esq., for the Respondent

Recommended Rulings, Findings of Fact, Conclusions of Law, and Decision of the Administrative Law Judge

Nature of the Case

Administrative Law Judge Christopher B. McNeil. Respondent Clair L. Pettinger, M.D., is registered with the Drug Enforcement Administration as an individual practitioner authorized to prescribe Schedule II–V controlled substances under DEA Certificate of Registration Number AP6572716, with an office at 4707 Greenleaf Court, Suite A, Modesto, California, 95356. His DEA Certificate of Registration expires by its own terms on March 31, 2015.¹⁶ He also is licensed to practice medicine as a physician and surgeon in the State of California under license number G29874, which will expire by its own terms on March 31, 2015.¹⁷ He has been licensed to practice medicine in the State of California since July 1, 1975 and has, heretofore, never been the subject of disciplinary actions by the DEA or by the State of California.¹⁸

On December 11, 2012, the DEA served Dr. Pettinger with an Order to Show Cause and Immediate Suspension of his DEA Registration dated December 10, 2012, whereby his DEA Certificate was suspended pursuant to 21 U.S.C. 824(d).¹⁹ The Government alleged Dr. Pettinger distributed controlled

¹⁵ For the same reasons that I ordered that Respondent's registration be immediately suspended, I conclude that the public interest necessitates that this Order be effective immediately. 21 CFR 1316.67.

¹⁶ Per stipulation of the parties, see Order of February 5, 2013, ALJ Exhibit 13, at 1.

¹⁷ Tr. at 481.

¹⁸ Per stipulation of the parties, see Order of February 5, 2013, ALJ Exhibit 13, at 1.

¹⁹ *Id.*

substances to five undercover law enforcement officers outside the usual course of professional practice or for other than a legitimate medical purpose, in violation of 21 U.S.C. 823(f)(4) and 841(a)(1), and 21 CFR 1306.04(a). Further, the Government alleged that Dr. Pettinger prescribed a high volume of controlled substances, particularly oxycodone through September 2012.²⁰ Based on this set of conditions, the Administrator suspended Dr. Pettinger's Certificate effective immediately and provided Dr. Pettinger with the opportunity to show cause why this immediate suspension should end and why the Administrator should not permanently revoke Dr. Pettinger's DEA Certificate.

While this matter was pending before me, the Government alleged further that after the Immediate Suspension Order was issued and a served upon Dr. Pettinger, Dr. Pettinger issued a new prescription dispensing hydrocodone to a patient on December 21, 2012.²¹

Statement of the Issue

The general issue to be adjudicated by the Administrator, with the assistance of this recommended decision, is whether the record as a whole establishes, by substantial evidence, that Dr. Pettinger's continued DEA registration is inconsistent with the public interest, as that term is used in Sections 303 and 304 of the Controlled Substances Act, Title 21, United States Code, Sections 823 and 824. Under this Act, the DEA may revoke the Certificate of Registration of a Registrant upon sufficient evidence establishing that the Registrant's continued registration is inconsistent with the public interest. Continued registration is inconsistent with the public interest if (among other bases) a Registrant who is otherwise authorized to prescribe controlled substances does so outside the usual course of his or her professional practice, or does so for other than a legitimate medical purpose. The specific issue is thus whether by at least a preponderance of the evidence the Government has established that Dr. Pettinger prescribed controlled substances to any of the five undercover agents outside the usual course of his professional practice or for other than a legitimate medical purpose.

Summary of the Evidence

The evidence in this record consists of recorded proceedings conducted during a brief hearing held in Arlington, Virginia on February 5, 2013 and a two-day hearing in Sacramento, California held on April 2–3, 2013, along with the documents admitted into evidence during those hearings. Included in the admitted exhibits are five audio recordings and six audio-visual recordings. By agreement of the parties, I listened to and, where appropriate, viewed the recordings after the evidentiary hearing was concluded. The contents of those recordings thus are part of the evidence now before me.

The Government's case is based in part on the testimony of five investigators who presented to Dr. Pettinger under assumed identities. Dr. Pettinger, who goes by Nate Pettinger, M.D., maintained a medical office under the name of Medical Cannabis of Northern California, or MCNC, at 2222 Watt Avenue Suite B1, Sacramento, California.²² Each of the five government investigators worked for federal agencies, including the DEA, the United States Department of Health and Human Services, and the FBI.

DEA Special Agent Robert Kittrell testified regarding the overall scope of this investigation. Each of the participating undercover agents testified regarding what they heard and saw during their interactions with Dr. Pettinger, describing the discussion and examinations that preceded Dr. Pettinger's issuance of a total of nine prescriptions for controlled substances. The Government then presented testimony from an expert medical witness regarding the nature of the examinations that led to Dr. Pettinger prescribing controlled substances to these undercover agents. The Government also called Dr. Pettinger as a witness, but after being sworn in and acknowledging his identity, Dr. Pettinger refused to answer further questions and invoked his Fifth Amendment right to avoid self-incrimination.

Although he did not testify on his own behalf, Dr. Pettinger presented testimony from an employee and two patients, with the intention of demonstrating that it would be improper to make generalizations adverse to Dr. Pettinger's regular practice based on the undercover activity. Without directly admitting to any violation of DEA diversion control regulations, Dr. Pettinger argues that the visits with the undercover agents are not

indicative of his ordinary practice, urging that the Government's evidence does not establish that he has in any way endangered the public. Further, Dr. Pettinger urges that I find that he has taken remedial steps appropriate under the circumstances, such that further action by the DEA is not warranted.

After carefully considering the testimony elicited at the hearing, examining the admitted exhibits, evaluating the arguments of counsel, and weighing the record as a whole, I have set forth my recommended findings of fact, conclusions of law, and analysis below. Because I find that a preponderance of the evidence establishes that the Respondent's continued registration would be inconsistent with the public interest, I recommend the Administrator revoke Dr. Pettinger's DEA Certificate and deny any pending application for the same.

Testimony From DEA Special Agent Kittrell

Robert Kittrell is a DEA Special Agent with the Tactical Diversion Squad in the Sacramento District Office.²³ Agent Kittrell has been a criminal investigator with the DEA since 1991. He attended a 14-week training academy at Quantico, Virginia, studying subjects that included a review of drug laws, tactical training, training in the use of firearms, training in investigations, training in the use of undercover agents, and training in financial investigations.²⁴ He has furthered his studies through continuing education, including recent attendance at an 80-hour course in the investigation of controlled substance diversions involving pharmacies and doctors.²⁵

Agent Kittrell described two kinds of controlled substance diversion: One involving drug gangs that send people to doctors' offices with the intent to get prescriptions for controlled substances; and the other involving what Agent Kittrell described as "rogue doctors" who "will prescribe controlled substances to people without medical necessity."²⁶ He said that characteristics of such rogue doctors include prescribing the controlled substances that patients ask for, with little or no medical evaluation. He explained that these doctors "will not ask for a lot of medical records" and are "just getting the patients in, writing them the script and getting them out."²⁷

²⁰ At the hearing, the Government did not present evidence to support allegations in the Order to Show Cause that referred to Dr. Pettinger's prescription history. Order to Show Cause and Immediate Suspension of Registration, at paragraphs 4(a) through 4(e), pages 3–4. These allegations therefore are not currently before me.

²¹ Government Prehearing Statement at 4.

²² Government Exhibit 25 at 1.

²³ Transcript at 75.

²⁴ *Id.* at 75–6.

²⁵ *Id.* at 76.

²⁶ *Id.* at 76–7.

²⁷ *Id.* at 77.

Agent Kittrell said that he served as the Case Agent—the agent in charge of the DEA’s investigation of Dr. Pettinger. He explained that an undercover investigator for the Department of Health and Human Services, Rob Breeden, approached him after Agent Breeden was able to obtain controlled substances without medical necessity.²⁸ In response, the team supervised by Agent Kittrell began investigating Dr. Pettinger.

According to Agent Kittrell, agents in these cases are trained to approach the Certificate holder equipped with recording devices. The agents will sometimes simply ask for pills and may speak vaguely about medical problems. “They’ll try to avoid answering questions. They won’t provide any medical records or, if they do, they’ll be falsified. . . . They won’t complain of any immediate pain. They won’t complain of any pain at all sometimes. They’ll basically give every indication they can that the drugs are going to be diverted or that they’re going to be abused or that there’s no medical need for it.”²⁹

On cross examination, Agent Kittrell elaborated on this approach, stating that undercover agents can be “vague” about whether they have any actual pain.³⁰ When asked whether the agents were instructed to attempt to divert the doctor’s attention during these examinations, Agent Kittrell stated that “[w]e leave a lot of those things up to the undercovers themselves in each individual case because a lot of it has to do with what’s going on at the time. You know, is it possible for an undercover agent to try to be friendly with the doctor when it happens? Absolutely. Does that include extraneous conversations? Absolutely.”³¹ He agreed with the premise that during their preparation for undercover assignments, agents are “instructed to not act like a legitimate patient,” but instead are to act the way a drug-seeking patient would act.³²

Supporting the actions of the undercover agents were medical records and patient questionnaires prepared by the undercover officers and identified as Exhibits 25, 26, and 27.³³ According to Agent Kittrell, Agent Breeden completed Exhibit 25, which encompasses the patient questionnaire for a fictional patient named Danny

Daly, when he visited Dr. Pettinger.³⁴ Similarly, FBI Special Agent Neeki Bianchi completed the patient questionnaire for a fictional patient named Nichole Hancock, shown as Exhibit 26.³⁵ DEA Special Agent Bob Ghazanfari completed the patient questionnaire for a fictional patient named Reza Soltani, shown as Exhibit 27.³⁶ Each of these records was submitted to Dr. Pettinger by the undercover agents, and was then recovered after Agent Kittrell obtained a search warrant to seize evidence from the doctor’s office and residence.³⁷ According to Agent Kittrell, similar false medical files compiled for use by the other two undercover agents had been delivered to Dr. Pettinger in the course of the agents’ visits, but were not located during subsequent searches of Dr. Pettinger’s office or home.³⁸ They were, however, provided by Dr. Pettinger after Agent Kittrell requested them.³⁹

Upon execution of the search and arrest warrants Agent Kittrell participated in questioning Dr. Pettinger. According to Agent Kittrell, Dr. Pettinger said that when presented with a pain management patient, “he does a complete physical workup and that includes blood pressure, heart rate, respiration, height, weight, and a complete physical exam.”⁴⁰ Dr. Pettinger told Agent Kittrell that in these cases he would request the patient’s medical records, including any MRIs or x-rays, to evaluate the basis for the prescription being requested by the patient.⁴¹ Dr. Pettinger told Agent Kittrell he would perform a complete physical exam again on follow-up visits.⁴² According to Agent Kittrell, Dr. Pettinger stated “that he knew that he had a soft heart and that he was probably prescribing too much. He stated that about 20 percent of his patients were pill seekers and that 50 percent were probably receiving too many meds. He stated to me that he had received a lot of complaints from pharmacies, but if he was guilty of anything, he was guilty of not calling the pharmacies back, but he had been taking steps to correct that and trying to work with pharmacies so that they would accept his prescriptions.”⁴³

According to Agent Kittrell, during this questioning Dr. Pettinger stated that if a patient came to him for pain medication and did not have any medical records, “he would only prescribe Norcos [hydrocodone] to begin with, which is a Schedule III narcotic.”⁴⁴ Further, he told Agent Kittrell that he was “taking steps to try to wean out or weed out problem patients . . . [and] if a patient came to him and stated that they were selling the pills, that he wouldn’t write a prescription.”⁴⁵ Agent Kittrell stated that, in addition to these efforts, Dr. Pettinger told him he was trying to identify patients who were “double dipping,” in that they were obtaining controlled substances from more than one doctor at the same time.⁴⁶ According to Agent Kittrell, Dr. Pettinger reported that he was “really clamping down” on patients who appeared to be misusing medication and that as of July 2011 he had stopped accepting new patients.⁴⁷ Asked on cross examination whether that is exactly what the DEA expects doctors to do, Agent Kittrell agreed that if there is abuse of prescription medication, double-dipping, or the use of fraudulent medical records, a doctor should discharge the patient.⁴⁸ When asked whether this constitutes “remediation” by the doctor, Agent Kittrell stated, “Yes, it’s like that,”—but clarified that this was “kind of like shutting the barn door after the cow got out[.]”⁴⁹

On cross examination Agent Kittrell agreed with the proposition that one way to verify whether Dr. Pettinger had engaged in remediation and reduced his prescribing would be to obtain patient activity reports from the California Substance Utilization Review and Evaluation (CURES) tracking system.⁵⁰ Agent Kittrell said he obtained “some” reports on Dr. Pettinger’s patients from the CURES system, but he acknowledged that these reports were “not part of the evidence packages here.”⁵¹

Agent Kittrell stated that he served an order of immediate suspension on Dr. Pettinger, telling him that “he was unable to dispense, prescribe, or otherwise issue controlled substances from that point on.” In response, Dr. Pettinger “stated that he understood that.”⁵² Despite acknowledging this bar

²⁸ *Id.* at 77–8.

²⁹ *Id.* at 78–79.

³⁰ *Id.* at 95.

³¹ *Id.*

³² *Id.* at 96.

³³ *Id.* at 80.

³⁴ *Id.* at 81.

³⁵ *Id.*

³⁶ *Id.* at 82.

³⁷ *Id.*

³⁸ *Id.*

³⁹ *Id.* at 103, and Respondent’s Exhibits C and D.

⁴⁰ *Tr.* at 85–6.

⁴¹ *Id.* at 86.

⁴² *Id.*

⁴³ *Id.*

⁴⁴ *Id.* at 86.

⁴⁵ *Id.* at 87.

⁴⁶ *Id.* at 104.

⁴⁷ *Id.* at 105.

⁴⁸ *Id.* at 106–7.

⁴⁹ *Id.* at 108.

⁵⁰ *Id.* at 109.

⁵¹ *Id.* at 110–1.

⁵² *Id.* at 87.

to further prescribing, Dr. Pettinger did not stop writing prescriptions, according to Agent Kittrell.

According to Agent Kittrell, the order of immediate suspension was delivered to Dr. Pettinger on December 11, 2012.⁵³ Exhibit 24 is a photocopy of a prescription for patient B.D., directing dispensation of 180 units of Norco 10/325 (indicating 10 mg of hydrocodone and 325 mg of acetaminophen). This prescription predates the December 11, 2012 order, and it allows for two refills. Also in Exhibit 24 is a photocopy of records from Safeway Pharmacy #2242, located in Sacramento, California. The Medical Expenses record (page 4 of Exhibit 24) reflects that the prescription was first filled on October 22, 2012, and then again on November 12, 2012, and on December 3, 2012. Thus, by December 3, 2012, all of the authorized dispensations under this prescription had been filled. According to Agent Kittrell, at this point if a pharmacy were to dispense any additional narcotics, the patient would need to produce a new prescription.⁵⁴

According to Agent Kittrell, despite being prohibited from prescribing controlled substances as of December 11, 2012, Dr. Pettinger authorized B.D. to receive an additional 180 units of Norco on December 21, 2012. Agent Kittrell identified a faxed Prescription Refill Request, shown at page 3 of Exhibit 24, and stated that this was a prescription issued by Dr. Pettinger after the effective date of the suspension order he received on December 11, 2012.⁵⁵ Agent Kittrell stated that while doing routine follow-up work regarding Dr. Pettinger, he contacted the pharmacist responsible for dispensing the Norco equivalent to B.D. He testified that the pharmacist told B.D. that there were no remaining refills on the initial prescription, so the pharmacist sent a fax to Dr. Pettinger's office. In response, the pharmacist received what has been marked as page 3 of Exhibit 24, through which Dr. Pettinger authorized the pharmacy to dispense 180 units of Norco to this patient.⁵⁶ To support his contention that this dispensation was the result of a new prescription and not simply the refilling of the earlier one, Agent Kittrell stated that a pharmacist would have no obligation to contact the prescribing source if the prescription had valid refills that had not yet been dispensed. Given that the pharmacist here did see the need to contact Dr. Pettinger, it follows that the earlier

prescription could no longer serve as a basis for dispensing another 180 units of Norco—and that the faxed sheet constitutes a new prescription.⁵⁷

Agent Kittrell added that, about four days after he spoke with the Safeway pharmacist, he got a call from Dr. Pettinger, who asked if he could authorize a new prescription for a patient to whom he had previously prescribed narcotics. Agent Kittrell said he told Dr. Pettinger no, that only prescriptions that were written prior to December 11, 2012 could be filled or refilled, but that Dr. Pettinger could not authorize any new prescriptions.⁵⁸

On cross examination, Agent Kittrell agreed with the premise that there is nothing in Exhibit 24 that establishes that Dr. Pettinger knew D.B. had already filled and refilled the earlier prescription to its limit.⁵⁹ There is handwriting on page three of Exhibit 24 that uses the word “refill,” which Agent Kittrell agreed appears to have been written by Dr. Pettinger.⁶⁰ This page, captioned “Prescription Refill Request,” appears to have been faxed from Dr. Pettinger's office on December 21, 2012 (as it bears that designation on the bottom of the page). At the signature block, we see “N Pettinger MD—Can fill current refill No New Refill.” Above that, with an arrow pointing to the “No New Refill” language, there are two circles, one with “MD” and the other with “OK x 1”, indicating that the pharmacist contacted Dr. Pettinger and was told it was okay to dispense 180 generic Norco tablets, despite the fact that the pharmacy had already dispensed all of the medication authorized by the prescription written by Dr. Pettinger on October 22, 2012.⁶¹ Despite the fact that the pharmacists would not have contacted Dr. Pettinger if refills remained on this prescription as of December 21, 2012, and despite the fact that the December 21, 2012 fax shows the pharmacist did contact Dr. Pettinger and was told it was okay to issue another 180 units of generic Norco, when Agent Kittrell was asked “You can't state sitting here today that Dr. Pettinger knowingly issued a new prescription on December 21, 2012, in violation of the suspension order?” he responded “Knowingly? No.”⁶² While this evidence does not establish that the pharmacist told Dr. Pettinger that B.D. filled this prescription three times already, it does establish that Dr.

Pettinger knowingly authorized another 180 unit dispensation after being called by the pharmacist, a condition that would not have existed had there been a refill available under the original prescription.

Agent Kittrell also agreed with the proposition that persons who lie to doctors in order to get prescription medications are committing crimes and that in such cases the doctors are, to a certain degree, victims of those crimes.⁶³ He agreed also that the five undercover agents who presented to Dr. Pettinger were engaged in acts that would be crimes if committed by private citizens.⁶⁴ Consistent with this theory, but after the close of the hearing and after the time set for offering evidence had passed, counsel for the Respondent submitted a copy of a letter sent to GreenLeaf Urgent Care dated April 2, 2013, from the U.S. Department of Justice. The letter is addressed to Dr. Pettinger and contains information provided pursuant to the Department's Victim Notification System. The letter states that Dr. Pettinger had been identified as a victim during an investigation involving twelve defendants, all of whom were named in the letter. The letter itself is silent with respect to the nature of the charges against these defendants, and does not indicate why or how Dr. Pettinger is regarded as a victim. The nexus between the letter and this administrative hearing is uncertain, but Respondent's counsel in his cover letter states that “[w]e believe that the individuals listed in the letter received or obtained controlled substances in Dr. Pettinger's name by means of criminal conduct for which they are now being prosecuted and which may also be relevant to the current DEA proceeding.” While not properly before me, this letter will be maintained as a proffer, identified in the record as ALJ Exhibit 22.

Evidence From the Undercover Operatives

Robb Breeden works as a Special Agent for the United States Department of Health and Human Services in its Office of the Inspector General, out of the Sacramento, California field office.⁶⁵ He has worked there since 2007, and his training includes attendance at a fifteen week training course at the Federal Law Enforcement Training Center in Glencoe, Georgia, which included 120 hours of specialized tactical training and 120 hours of undercover training

⁵³ *Id.* at 80.

⁵⁴ *Id.* at 92.

⁵⁵ *Id.* at 89.

⁵⁶ *Id.* at 91.

⁵⁷ *Id.* at 92.

⁵⁸ *Id.* at 93.

⁵⁹ *Id.* at 115.

⁶⁰ *Id.* at 116.

⁶¹ Government Exhibit 24 at 3.

⁶² *Tr.* at 116.

⁶³ *Id.* at 118.

⁶⁴ *Id.*

⁶⁵ *Id.* at 122.

that included the identification of pills and drug diversion.⁶⁶

According to Agent Breeden, after receiving an initial complaint regarding Dr. Pettinger, he made the first of four visits to the doctor's office using the fictitious name of Daniel Joseph Daly on November 10, 2011, using an audio recorder. The recording from that visit appears in the record as Government Exhibit 5, and is accompanied by a transcript of the conversations recorded during that visit.⁶⁷

Acting as Mr. Daly, Agent Breeden appeared for an appointment at Dr. Pettinger's medical office on Watt Avenue in Sacramento.⁶⁸ He stated that upon his arrival at the office, he found the office was locked and that Dr. Pettinger was not present.⁶⁹ He stated that he then called Dr. Pettinger's cell phone and reached the doctor, who told him he would be at the office in a moment. Upon Dr. Pettinger's arrival, Agent Breeden greeted him while holding in one hand a small, travel-sized bottle of scotch whiskey.⁷⁰ Agent Breeden accompanied Dr. Pettinger into the doctor's office, where Agent Breeden gave the doctor some medical records, some paperwork, and an MRI report.⁷¹ According to Agent Breeden, Dr. Pettinger noticed the bottle of scotch, commenting that it was easier to buy alcohol than cannabis.⁷²

Agent Breeden identified Government Exhibit 25 as a copy of the patient questionnaire form filled out at Dr. Pettinger's request. The first five pages of this form appear to be designed for a patient to provide identifying data and a medical history. As Agent Breeden noted in his testimony, the first page of Government Exhibit 25 (captioned "The California Compassionate Use Act of 1996, Eligibility Questionnaire") includes a statement requiring the applicant to state whether he or she is a "law enforcement officer, undercover officer or investigator for the Federal Government, State of California, county, city, or any other organization therein here today with the intent of

investigating Medical Cannabis of Northern California or Nate Pettinger, M.D."

Pages 6 through 9 of Government Exhibit 25 are labeled "For Physician's Use Only," and consist of a single-page form apparently filled out by Dr. Pettinger on each of the four visits referred to by Agent Breeden: November 10, 2011, December 6, 2011, January 13, 2012, and May 9, 2012. Page 10 of this exhibit is a copy of a Physician Statement and Recommendation dated November 10, 2011 on which is also a copy of a California Driver License issued to Daniel Joseph Daly, identifying Mr. Daly as "a patient whose possession and/or cultivation of medical cannabis is permissible" under California law, signed by Dr. Pettinger and Agent Breeden as Daniel Daly. Accompanying this Physician's Statement is a form captioned "Consent to Assume Risk for Medical Marijuana," dated November 10, 2011, and signed by both Agent Breeden as Daniel Daly and Dr. Pettinger.

Also included in Government Exhibit 25 are photocopies of four prescriptions, whose dates match the dates of Agent Breeden's four office visits. In each instance, the prescriptions are signed by Dr. Pettinger under his office letterhead, and are for Oxycodone 30 mg IR [Instant Release]. In the prescription issued on the initial visit (November 10, 2011), Dr. Pettinger prescribed 120 units of this controlled substance. He prescribed 200 units in the prescription dated December 6, 2011, and 220 units for those dated January 13, 2012 and May 9, 2012.

After Agent Breeden completed the requested paperwork, he met with Dr. Pettinger in the doctor's office. He described the office as lacking things he would normally associate with a doctor's office: there was no examination table, no eye chart, no scale—only a cuff for taking blood pressure and a stethoscope.⁷³ Subsequent records, notably the video recordings at Exhibits 15, 17, 20 and 22, established further that the office that served for these examinations consisted of the doctor's office desk and two upholstered office chairs.

Agent Breeden explained that during this initial visit, he and Dr. Pettinger spoke for quite a while about the use of cannabis.⁷⁴ He said at one point in the meeting, Dr. Pettinger did conduct a very brief physical examination, one that lasted "a couple of minutes" and consisted of Dr. Pettinger asking "a dozen or two health history questions

very quickly" and then feeling along his spine, and took a reading of his blood pressure.⁷⁵ Although Agent Breeden complained of knee pain on his patient questionnaire,⁷⁶ Agent Breeden expressly denied that Dr. Pettinger ever actually saw either of his knees—as he never removed his pants during this office visit.⁷⁷ He said the only other physical contact with Dr. Pettinger came in the form of frisking the agent: "he patted me down. I think in my report at the time I thought he was patting me down for a weapon. He didn't focus on the knee. It was basically like a frisk like a law enforcement officer would do."⁷⁸

The recording of this office visit confirms the substance of Agent Breeden's testimony: Dr. Pettinger spent a substantial percentage of this visit discussing how cannabis can be used medicinally. Although Agent Breeden told Dr. Pettinger he was experiencing knee pain, this subject did not come up in the conversation until 59 minutes had passed, and even then the topic was only briefly addressed by Dr. Pettinger. There is no evidence suggesting that Dr. Pettinger palpated the knee, checked for range of motion, or in any other way examined either of Agent Breeden's knees during this visit. Agent Breeden testified that at no time did Dr. Pettinger actually look at his knees.⁷⁹

Further, although the initial prescription written by Dr. Pettinger based on this visit including both oxycodone and cough syrup with promethazine and codeine, there is nothing in this record indicating the patient was experiencing a cough or needed cough syrup. In addition, the "For Physician's Use Only" notes for the initial visit reflect clear respiration and full range of motion in the musculoskeletal system, indicating no medical basis for prescribing either pain medication or a cough suppressant.⁸⁰ The record does show that in the medical records he presented to Dr. Pettinger, Mr. Daly reportedly had told a Dr. Fazeri that he was experiencing esophageal problems, as a basis for obtaining cough syrup.⁸¹ There is, however, no evidence indicating there were any complaints of cough presented during this initial meeting with Dr. Pettinger.

Further, the record shows Agent Breeden mentioned having been treated for a possible plantar wart, which Dr.

⁶⁶ *Id.* at 123.

⁶⁷ *Id.* at 123–4.

⁶⁸ *Id.* at 124.

⁶⁹ *Id.* at 126.

⁷⁰ *Id.* and Government Exhibit 5, transcript at 1 ("let me get rid of my lunch here").

⁷¹ *Tr.* at 126.

⁷² *Id.* and Government Exhibit 5, transcript at 2 (Agent Breeden: "But I can't buy marijuana. It's stupid." Dr. Pettinger: "Right. Well, I mean, that that's [unintelligible] you know, take the scotch and you can do that, but you can't end up getting marijuana. It seems crazy, doesn't it? The thing about it is you can't even kill a baby with marijuana unless you stuff their mouth so full they can't breathe; I mean you can't get enough into 'em to kill 'em.")

⁷³ *Tr.* at 127.

⁷⁴ *Id.*

⁷⁵ *Id.* at 127–8.

⁷⁶ Government Exhibit 25 at 3.

⁷⁷ *Tr.* at 162–3.

⁷⁸ *Id.* at 163.

⁷⁹ *Id.* at 133.

⁸⁰ Government Exhibit 25 at 6.

⁸¹ *Tr.* at 155.

Pettinger agreed could result in back or knee problems.⁸² There is, however, no evidence in the Daly records or in the patient interview by Dr. Pettinger establishing the patient actually had back problems—whether caused by plantar warts or by any other condition.

Agent Breeden was asked about the use of an MRI report in support of his request for pain medication. He said the MRI report is genuine and was based on an MRI he had taken at the Open Advantage MRI company, although instead of having his own name on the original report he altered it so that it appeared to refer to the fictitious Dan Daly.⁸³ He said he did not actually have anything wrong with his knees, but that the results indicated he had a medial meniscus tear—something he was not aware of, but later learned that “if you take anybody over the age of 30 almost all of them are going to have a torn meniscus.”⁸⁴ He testified that during the initial visit he presented this altered report to Dr. Pettinger, who received it and noted its receipt in the physician’s note page (Government Exhibit 25, page 6).⁸⁵ Agent Breeden stated that at the start of each of the three subsequent visits to Dr. Pettinger’s office, he was asked to produce the MRI, suggesting that the office had lost or misplaced the report.⁸⁶ Notwithstanding the fact that the MRI was not found in these records, Dr. Pettinger proceeded to prescribe oxycodone to Agent Breeden after each office visit.

During cross examination, Agent Breeden was asked whether he had deliberately attempted to divert attention during the initial office visit with Dr. Pettinger, out of a concern that “the record was starting to show that Dr. Pettinger was genuinely trying to give you medical treatment[.]”⁸⁷ That does not, however, appear to be the case. In my review of the record and after listening to all of the audio recordings and watching all of the video recordings, I found the more persistent pattern was that Dr. Pettinger paused for significant periods of time during all of his patient visits, that he tended to speak slowly, quietly, and with deliberation; that the pauses were sometimes prompted by his need to write down observations or other notes in the patient medical files; and that the patients (not just Agent Breeden, but all of the undercover investigators) filled in these gaps by chatting with the doctor,

typically discussing extraneous matters to which Dr. Pettinger had earlier referred. Examples of these include Dr. Pettinger’s repeated references to notable football coaches Sandusky and Paterno; his description of using tinctures as a way of ingesting concentrated forms of cannabis; and the negative and hostile feelings he was experiencing after finding that someone had stolen the catalytic converter off of his car.

I cannot conclude that the conversations engaged in by these agents were designed to divert Dr. Pettinger’s attention or keep him from performing a proper, adequate physical examination. To the contrary, most of the extraneous dialogue recorded here was occasioned by Dr. Pettinger himself. The record does, however, make it clear that each of the undercover agents tried to act like drug-seeking patients—a point Agent Breeden acknowledged in cross examination.⁸⁸

The record reflects that Agent Breeden’s second visit to Dr. Pettinger’s Watt Avenue office on December 6, 2011 was substantially the same as the first visit.⁸⁹ Notable in this context is the absence of evidence demonstrating that Dr. Pettinger performed any kind of physical examination of Agent Breeden’s knee prior to Dr. Pettinger writing a prescription for oxycodone, and that most of the examination was spent discussing the medicinal use of cannabis. Agent Breeden stated that Dr. Pettinger asked no questions about his pain level, made no attempt to palpate Agent Breeden’s knee, “did a quick palpation of my abdomen,” measured his blood pressure, and then ended the exam.⁹⁰ Also notable was that at this meeting, after discussing the versatility of cannabis for medicinal purposes, Dr. Pettinger issued a prescription for Marinol as a means for justifying the presence of the active ingredients in cannabis in Agent Breeden’s bloodstream, should he ever have to submit to urinalysis or other drug screening after consuming products containing cannabis.⁹¹

HHS Special Agent David Kvach accompanied Agent Breeden on his second visit to Dr. Pettinger’s office. Agent Kvach has been a Special Agent for HHS since 2006. He has been trained at the Federal Law Enforcement Center and completed the Inspector General’s investigative training course.⁹² In 2008 he also completed the internal special

agent course provided by HHS; he completed electronics and technical surveillance training in 2009; he completed advanced undercover and survival techniques training in 2010; he completed undercover school in 2012; and he completed training in the narcotics, vice, and street crimes supervisor course in 2013.

In many respects, his initial visit to Dr. Pettinger’s office resembled that of Agent Breeden. Using audio recording equipment and under the assumed name of Alex Gonza, Agent Kvach presented as a patient seeking medication for back pain.⁹³ Agent Kvach identified Respondent’s Exhibit C, pages 3 through 7, as forms he filled out at this first visit.⁹⁴ The recording revealed a meeting that lasted more than an hour, although here again, as was the case with the initial meeting between Agent Breeden and Dr. Pettinger, most of the time was spent discussing medicinal uses of cannabis.⁹⁵ Agent Kvach described meeting with Dr. Pettinger after filling out some parts of these forms, and stated parts of the forms he left blank had later been filled in, although he could not say by whom.⁹⁶ In both Agents Breeden’s and Kvach’s reports, they noted that although they left unanswered those questions regarding cannabis use, the forms now show someone (presumably Dr. Pettinger) filled in answers to these questions, presumably based on what was discussed during these initial visits—although I find this was not always the case, and find substantial evidence that Dr. Pettinger included complaints and diagnoses (including insomnia and back pain) that were never raised by the undercover agents or that were flatly denied by the agents.

Agent Kvach confirmed Agent Breeden’s description of Dr. Pettinger’s office, noting the absence of an examination table and the very limited amount of examination equipment, which included a blood pressure cuff and a stethoscope, and little else.⁹⁷ Unlike Agent Breeden, Agent Kvach brought no medical records with him for this first visit.⁹⁸ Agent Kvach noted that Dr. Pettinger wrote on the patient history form that the patient “will be bringing MRI,” but that never actually happened.⁹⁹ He explained further, on cross examination, that while Dr. Pettinger did not seek any x-rays, he did

⁸² *Id.*

⁸³ *Id.* at 164.

⁸⁴ *Id.* at 166.

⁸⁵ *Tr.* at 133.

⁸⁶ *Id.*

⁸⁷ *Id.* at 156.

⁸⁸ *Id.* at 157.

⁸⁹ *Id.* at 134–6 and Government Exhibit 7.

⁹⁰ *Id.* at 138.

⁹¹ *Id.* at 137.

⁹² *Id.* at 178.

⁹³ *Id.* at 181.

⁹⁴ *Id.* at 182.

⁹⁵ Government Exhibit 9, audio recording and transcript.

⁹⁶ *Tr.* at 183–4.

⁹⁷ *Id.* at 185.

⁹⁸ *Id.* at 187.

⁹⁹ *Id.*

ask Agent Kvach to obtain an MRI report: “He informed me that even if the MRI read out normal, he needed my MRI.”¹⁰⁰

Agent Kvach described Dr. Pettinger’s examination as “a cursory check” that included taking his blood pressure and putting a stethoscope under the agent’s jacket, possibly to listen to his heart and lungs.¹⁰¹ After this examination, Dr. Pettinger recommended medical marijuana and issued Agent Kvach a prescription for 120 units of oxycodone 30 mg IR, dated December 6, 2011.¹⁰²

Agent Breeden returned for a third visit to Dr. Pettinger’s office on January 13, 2012, the substance of which was recorded by audio recording and is transcribed at Government Exhibit 11. I would note that the first 38 minutes of this recording have not been transcribed. From my review of the audio recording, I understand that this part of the recording was not transcribed because it represents the time Agent Breeden was in Dr. Pettinger’s waiting room, waiting for his appointment with Dr. Pettinger. The discussion recorded on the audio disc but not transcribed appears to be between Agent Breeden and Sean Ledford, the receptionist working in Dr. Pettinger’s office. As Agent Breeden correctly stated, all interactions between himself and Dr. Pettinger have been transcribed.¹⁰³ Having listened to the discussion between Agent Breeden and Mr. Ledford, I note only that while the exchanges between Agent Breeden and Mr. Ledford have not been included in the written transcript, their absence is not legally significant.

During this third visit, Agent Breeden introduced Dr. Pettinger to DEA Special Agent Daniel Patrick Moriarty, who was using the fictional name of Jason Kelly.¹⁰⁴ Agent Moriarty has worked as a DEA Special Agent since 2004. He completed basic and advanced training at Quantico, Virginia, on subjects including firearms and enforcing narcotics laws.¹⁰⁵ He testified about the one visit he made to Dr. Pettinger’s office on January 13, 2012, and identified the video recording and transcript of that visit.¹⁰⁶

Agent Moriarty testified that he presented to Dr. Pettinger as a patient seeking medication for pain relating to “knee issues.”¹⁰⁷ Agent Moriarty said he presented the same MRI report that

Agent Breeden had presented at his initial visit with Dr. Pettinger (save for the fact that when Agent Moriarty presented it, the document had been altered using Photoshop to show the name of Jason Kelly instead of Dan Daly).¹⁰⁸ Agent Moriarty identified pages 2 through 6 of Respondent’s Exhibit D as the questionnaire he filled out at his visit to Dr. Pettinger’s office.¹⁰⁹ As was the case with Agents Breeden and Kvach, Agent Moriarty described filling out parts of these forms, and later finding answers that he himself did not provide—including a claim of insomnia, which he stated he did not make either when filling out the form or during the patient interview that followed.¹¹⁰

Agent Moriarty described his initial visit with Dr. Pettinger in terms similar to those presented by Agents Breeden and Kvach. He said Dr. Pettinger’s exam included taking his blood pressure and pulse, and that he then “walked around his desk to where I was seated and kind of I guess pushed my shoulders or touched my shoulders. He had a reflex tool and tapped each knee. That’s kind of it. I think he looked in my ears.”¹¹¹ He said the entire exam was performed while he was seated in the office chair next to the doctor’s desk, and that the doctor never required the agent to remove his jeans in the course of this exam.¹¹² Based on this examination, Agent Moriarty was able to obtain a prescription for 180 units of oxycodone 30 mg IR.¹¹³

Agent Kvach returned to Dr. Pettinger’s office on January 24, 2012, for a second visit, this time accompanied by FBI Special Agent Neeki Bianchi.¹¹⁴ Agent Bianchi has been a Special Agent with the FBI for nine years.¹¹⁵ She stated that during this service, she trained for four months in Quantico, Virginia, and has subsequently been trained in counterterrorism, healthcare fraud, and undercover operations.¹¹⁶ She said she made one undercover visit to Dr. Pettinger’s office using the name Nicole Hancock, and identified Government Exhibit 17 as a video recording and transcript of that visit.¹¹⁷

According to Agent Bianchi, she and HHS Special Agent Kvach represented to be boyfriend and girlfriend for this

visit and met jointly with Dr. Pettinger, with Agent Kvach returning in his role as Alex Gonza.¹¹⁸ Both Agent Bianchi and Agent Kvach recorded this meeting, although for approximately ten minutes Agent Kvach absented himself from the office visit so that he could use the men’s restroom and smoke a cigarette. Regrettably, both of those events are part of the video recording offered by the Government as Exhibit 15, although they lend no substance to this report. On the other hand, the recording created by Agent Bianchi (found at Government Exhibit 17) captured without interruption the entire office visit she and Agent Kvach had with Dr. Pettinger on January 24, 2012.

In her testimony, Agent Bianchi summarized her meeting with Dr. Pettinger. She recalled telling Dr. Pettinger she used cannabis recreationally, but that she was meeting with him in order to get a prescription for pain medication.¹¹⁹ During the joint interview, Agent Kvach in his role as Alex Gonza told Dr. Pettinger that Ms. Hancock had been using his oxycodone, and Agent Bianchi did not dispute this, but instead stated she was there to obtain an oxycodone prescription for her own use.¹²⁰ When Dr. Pettinger asked whether she was experiencing pain, she said no; and she gave the same answer when he asked whether she was having difficulty sleeping.¹²¹ When he asked why she needed pain medication, Agent Bianchi responded by saying the medication makes her talkative and happy.¹²² In response, Dr. Pettinger told Agent Bianchi that in order to obtain a prescription for oxycodone, she would need to arrange to have an MRI taken and have the results filed with his office.¹²³ When Agent Bianchi asked Dr. Pettinger how to go about getting an MRI, specifically asking him what kind of pain she needed to report in order to justify getting an MRI that would serve this purpose, Dr. Pettinger told her to report pain in her back that radiates down to her leg.¹²⁴ Before ending this office visit, Dr. Pettinger checked Agent Bianchi’s blood pressure and “ran his hand from [her] lower back to [her] upper back[.]”¹²⁵ At that point, Dr. Pettinger wrote a prescription authorizing an MRI, recommended her for medical marijuana, and issued a

¹⁰⁰ *Id.* at 201.

¹⁰¹ *Id.* at 185–6.

¹⁰² *Id.* and Government Exhibit 8.

¹⁰³ *Id.* at 141.

¹⁰⁴ *Id.* at 146, 241.

¹⁰⁵ *Id.* at 241.

¹⁰⁶ *Id.* at 242 and Government Exhibit 13.

¹⁰⁷ *Tr.* at 247.

¹⁰⁸ *Id.* at 248, 276.

¹⁰⁹ *Id.* at 269.

¹¹⁰ *Id.* at 270.

¹¹¹ *Id.* at 271.

¹¹² *Id.* at 272.

¹¹³ *Id.* at 273 and Government Exhibit 12.

¹¹⁴ *Tr.* at 189.

¹¹⁵ *Id.* at 221.

¹¹⁶ *Id.*

¹¹⁷ *Id.* at 222, 224.

¹¹⁸ *Id.* at 224.

¹¹⁹ *Id.* at 225 and Government Exhibit 17.

¹²⁰ *Tr.* at 225.

¹²¹ *Id.* at 226–7 and Government Exhibit 17.

¹²² *Tr.* at 226 and Government Exhibit 17.

¹²³ *Tr.* at 226.

¹²⁴ *Id.*

¹²⁵ *Id.*

prescription for 90 units of oxycodone 30 mg IR.¹²⁶

As was the case when Agents Breeden and Kvach first met with Dr. Pettinger, Agent Bianchi testified that although she left many of the questions unanswered in the initial patient questionnaire, Dr. Pettinger appears to have filled in answers that had been left blank—in any event, the agent stated she herself did not answer these questions, and assumed the answers were written in by Dr. Pettinger. She expressly denied any complaint of insomnia or back pain, although these ailments were listed as medical complaints in her patient questionnaire.¹²⁷

DEA Special Agent Babak Ghazanfari testified about his visit to Dr. Pettinger's office. Agent Ghazanfari has worked for the DEA for approximately five years, and is currently assigned to the Tactical Diversion Squad in the Sacramento District Office.¹²⁸ His training includes completion of approximately nineteen weeks of training at the Justice Training Center in Quantico, Virginia on all aspects of drug enforcement, including surveillance techniques, defensive tactics, and arrest procedures.¹²⁹

Agent Ghazanfari said he went to Dr. Pettinger's Modesto, California office on March 20, 2012, and identified Government Exhibit 20 as the audiovisual recording of that visit. Using the fictional name of Reza Babak Soltani, Agent Ghazanfari completed the patient questionnaire shown in Government Exhibit 27, and met with Dr. Pettinger shortly thereafter.¹³⁰ Agent Ghazanfari testified that although Dr. Pettinger's physician notes indicate a complaint of left knee pain, the agent never made any such complaint to Dr. Pettinger—a point that is confirmed by the recording made during this office visit. To the contrary, when Dr. Pettinger asked “so the knee is what's bothering you?” Agent Ghazanfari responded “well, used to, used to” and when the doctor followed that with “so the weather gets to you a little bit with it?” the agent responded “nah, it's not really bothering me all that much.”¹³¹

The record establishes that Nikki, who was Dr. Pettinger's assistant at the Modesto office, took Agent Ghazanfari's blood pressure,¹³² and Dr. Pettinger himself used an otoscope to examine the

agent's ears, and used a stethoscope to examine heart and lung sounds.¹³³ According to Agent Ghazanfari, Dr. Pettinger conducted “a patdown, touched certain parts of my body, rubbed my neck, kind of felt around me, tapped on my knees a little bit, and then he put his stethoscope up to my heart or the area of my heart and began to tell me that I had some irregular heart beat or something to that effect,” all while the agent remained seated.¹³⁴ Dr. Pettinger also had the MRI Agent Breeden referred to, this time altered to reflect that it referred to Reza Soltani.¹³⁵ When Dr. Pettinger inquired about the medication Agent Ghazanfari was currently taking, he responded by saying he was taking Percocets, Norcos, and oxy's, and that “oxy's are the ones that do it for me,” but that he was obtaining them from the street, not through any valid prescriptions.¹³⁶ At the conclusion of this meeting, Dr. Pettinger presented the agent with a prescription for 150 units of oxycodone 30 mg IR.¹³⁷

Agent Breeden made one final visit to Dr. Pettinger's office, on May 9, 2012.¹³⁸ During this visit, much of the time the doctor spent with Agent Breeden was dedicated to discussing problems Dr. Pettinger was having with pharmacists, who were starting to reject his prescriptions.¹³⁹ Dr. Pettinger made the point that he “wrote more prescriptions [for oxycodone] than 50 doctors combined,” and was irritated by questions presented to him by pharmacists, some of which arose because his first name is Clair, which leads on occasion to uncertainty about whether the prescribing doctor is male or female, resulting in a lot of unnecessary questions.¹⁴⁰

Agent Breeden described Dr. Pettinger performing a medical exam that was similar to previous exams, in that it was short and involved only a blood pressure check and stethoscope monitoring of the chest area.¹⁴¹ At one point in this meeting, Agent Breeden told Dr. Pettinger that he had used some of the prior oxycodone prescription to “pay back” a third person, at which point Dr. Pettinger told him that he would not continue to issue prescriptions for oxycodone if the

patient was selling or giving pills away.¹⁴² When Agent Breeden assured Dr. Pettinger he would no longer give away or sell his pills, Dr. Pettinger wrote a prescription for 220 units of oxycodone 30 mg IR.¹⁴³

When asked on cross-examination whether he ever felt in danger while in Dr. Pettinger's presence, Agent Breeden said he did indeed feel in danger, noting first that the doctor told him he possessed a .357 handgun and hollow point bullets, and then noting the doctor's agitation when describing how he would use the weapon.¹⁴⁴

Testimony From the Government's Expert Medical Witness

The Government's expert witness was Barbara Neyhart, M.D. Dr. Neyhart has been a physician for 35 years, and currently works at the University of California—Davis Medical Center.¹⁴⁵ After completing medical school at Rush Medical College in Chicago, Dr. Neyhart completed residencies in internal medicine and family medicine, and has been a clinical professor at the School of Medicine at the University of California—Davis since 1984.¹⁴⁶ She also maintained a family medical practice in both office and clinical settings.¹⁴⁷ Through this course of practice, Dr. Neyhart has often encountered drug-seeking patients as well as patients with legitimate chronic pain symptoms.¹⁴⁸ She has experience treating persons with chronic pain and with prescribing medication for persons with chronic pain.¹⁴⁹ She has provided medical testimony as an expert for the Licensing Division of the State of California for more than ten years, and was a general medical consultant for the Division prior to her service as an expert.¹⁵⁰ In order to prepare for this hearing, Dr. Neyhart read the exhibits presented to her, and reviewed the recordings that are part of our record, spending approximately 16 hours doing so.¹⁵¹

After presenting her curriculum vitae (Government Exhibit 28), the Government offered Dr. Neyhart as an expert medical witness in the standard of care for patients with pain complaints who are being treated by general

¹²⁶ *Id.* at 227 and Government Exhibit 16 at 1–2, Government Exhibit 26 at 8–9.

¹²⁷ *Tr.* at 230 and Government Exhibit 17.

¹²⁸ *Tr.* at 279.

¹²⁹ *Id.*

¹³⁰ *Id.* at 284.

¹³¹ Government Exhibit 20, audio-video recording and transcript at 7.

¹³² *Tr.* at 286.

¹³³ Government Exhibit 20, audio-video recording and transcript at 17.

¹³⁴ *Tr.* at 288.

¹³⁵ *Tr.* at 285.

¹³⁶ *Id.* at 292 and Government Exhibit 20, audio-video recording and transcript at 12.

¹³⁷ *Tr.* at 289 and Government Exhibit 19.

¹³⁸ *Tr.* at 147.

¹³⁹ *Id.* at 149 and Government Exhibit 22.

¹⁴⁰ *Id.*

¹⁴¹ *Id.*

¹⁴² *Id.*

¹⁴³ *Tr.* at 150 and Government Exhibit 21.

¹⁴⁴ *Tr.* at 153.

¹⁴⁵ *Id.* at 312.

¹⁴⁶ *Id.* at 314.

¹⁴⁷ *Id.*

¹⁴⁸ *Id.* at 314–5.

¹⁴⁹ *Id.* at 315.

¹⁵⁰ *Id.* at 316.

¹⁵¹ *Id.* at 451–2.

practitioners.¹⁵² During voir dire of the witness, Respondent's counsel established that Dr. Neyhart believes she is "no less [an expert in pain management medicine] than [Dr. Pettinger]." ¹⁵³ She stated that while she has not testified in medical board cases that focus on the long-term use of opiates for the management of chronic non-cancer pain, she has reviewed such cases.¹⁵⁴ The record shows that Dr. Neyhart currently staffs the Breast Health Clinic, serving women who have recently been diagnosed with a newly manifested breast mass, a position that does not call upon her to decide whether or not to embark on long-term opioid therapy.¹⁵⁵ That being said, however, she stated in the last five years she has been called upon to decide whether to embark on long-term opioid therapy for non-cancer pain between one and five times a week, until she took her most recent position eighteen months ago.¹⁵⁶

Dr. Neyhart said within the subset of cases where she was called upon to make such determinations, she has prescribed oxycodone possibly one or two times weekly.¹⁵⁷ As such, Dr. Neyhart established she had significant clinical experience treating persons with chronic pain, including experience using oxycodone in those treatment plans. Based on the answers provided during this part of the examination, the Respondent made no objection to my finding Dr. Neyhart to be an expert, asking only that the limitations presented during voir dire be taken into account when weighing any opinions rendered by the witness.¹⁵⁸ As a result, I granted the Government's motion to have Dr. Neyhart regarded as a medical expert, under the scope presented by the Government.¹⁵⁹

Dr. Neyhart began by describing in general terms what the standard of care calls for when a patient presents with a complaint of pain. In these cases, the physician must take a complete medical history with respect to the pain complaint, including "when did it start; was there a trauma that caused this to start; what is the degree of pain that is currently being suffered."¹⁶⁰ She noted that doctors will sometimes use a numeric scale of one to ten when questioning about the degree of pain at

issue.¹⁶¹ Beyond these metrics, Dr. Neyhart said the history must also include information about the character of the pain (sharp or dull); the frequency of the pain (constant, periodic, or intermittent); the degree of interference with day-to-day activities and with the ability to seek gainful employment and engage in intimate and non-intimate relationships; and whether there is a psychological impact occasioned by the pain. She said the doctor also needs to inquire about the different modalities of relief sought to date: what have other doctors said and done, what surgeries have been proposed, and what physical therapy has been undertaken?¹⁶² Equally important, according to Dr. Neyhart, is the history of medications used thus far: what medications were used, were the medications effective, were there side effects of note?¹⁶³

Dr. Neyhart examined the patient questionnaires presented in the exhibits. She noted that generally, the patient questionnaires she encounters do not call for the prospective patient to disclose whether he or she is a law enforcement officer, and she saw no reason to inquire about the birth order of the patient. Nevertheless, Dr. Neyhart did not describe these forms as deficient.¹⁶⁴ She acknowledged that the forms are designed for use in cases involving medicinal cannabis use under the California Compassionate Use Act, and stated she has testified in cannabis cases and found these forms to be similar to those she has seen in those cases, but that such forms would be considered nonstandard in the course of a family practice.¹⁶⁵

Dr. Neyhart next examined the Physician Notes form found in these patient records, describing the form itself as "a fairly standard document on which a physician would record elements of the history that were not recorded in the questionnaire and also the objective physical exam findings."¹⁶⁶ Each of these lines has a specific significance, according to Dr. Neyhart. She explained the role each plays in the examination, noting the significance of objective findings—findings not dependent on the stated history, but on objectively determined data. These include vital sign measurements—blood pressure, pulse rate, respiration rate, and weight.¹⁶⁷ They also include physical examination

of the head, eyes, ears, nose and throat; the respiratory system including the lungs; the cardiovascular system including the heart and peripheral pulses; the abdomen, the musculoskeletal system, and the integumentary system (skin surfaces).¹⁶⁸

According to Dr. Neyhart, the objective exam calls for the use of objective measurements: blood pressure would be taken by a standard blood pressure cuff; pulse counts would be taken by counting the pulse bounds; and weight would be taken by a scale.¹⁶⁹ She said that a cursory exam could be taken in as little as five minutes, while a more thorough exam could take as long as half an hour.¹⁷⁰

Next on the form is "Impression," which affords the physician an opportunity to take the history and physical exam information and render a diagnosis or, more commonly, a range of diagnoses.¹⁷¹ Thus, an impression is not a recapitulation of the chief complaint—instead, it is the result of the physician digesting both the subjective history and objective facts, resulting in a diagnosis.¹⁷² Later, Dr. Neyhart explained that "[t]he 'chief complaint' is really and truly what the patient says. It's not what is determined after an extensive history is taken. Most of the time actually the chief complaint is determined by a medical assistant, not by a highly trained clinical professional such as a physician."¹⁷³

The Recommendation line provides a place for the physician to describe the plan for this patient: "so, for a complaint of pain . . . there are many ways to relieve pain. They can involve physical therapy. It can involve application of ice, the change in the activity that is causing the pain. There are many different things. But it can also involve the prescribing of therapeutics and there is a range of therapeutics that can be prescribed."¹⁷⁴

Addressing next the records she reviewed, Dr. Neyhart said she read the patient records and listened to and watched the recordings obtained by the undercover agents in preparation for her testimony. Based on this, Dr. Neyhart was asked a series of questions about the events depicted in these recordings.

In her review of the first visit by Agent Breeden to Dr. Pettinger's office, Dr. Neyhart noted first the language used by the agent in offering his MRI to

¹⁵² *Id.* at 317.

¹⁵³ *Id.* at 318.

¹⁵⁴ *Id.* at 320.

¹⁵⁵ *Id.* at 321.

¹⁵⁶ *Id.* at 322.

¹⁵⁷ *Id.* at 323.

¹⁵⁸ *Id.* at 324.

¹⁵⁹ *Id.* at 325.

¹⁶⁰ *Id.*

¹⁶¹ *Id.*

¹⁶² *Id.* at 325–6.

¹⁶³ *Id.* at 326.

¹⁶⁴ *Id.* at 326–7.

¹⁶⁵ *Id.* at 328.

¹⁶⁶ *Id.* at 329.

¹⁶⁷ *Id.* at 332–3.

¹⁶⁸ *Id.* at 333–4.

¹⁶⁹ *Id.* at 334.

¹⁷⁰ *Id.*

¹⁷¹ *Id.* at 334.

¹⁷² *Id.* at 335.

¹⁷³ *Id.* at 432.

¹⁷⁴ *Id.* at 336.

Dr. Pettinger. She observed that in a “standard medical visit,” a patient would offer a complaint of pain, saying something like “I hurt my knee,” whereas here, the agent said words to the effect that he was giving the doctor a copy of his MRI because “I knew you needed something for your records.”¹⁷⁵ Dr. Neyhart explained that ordinarily a history of present illness “would tend to go along the lines of ‘Have you had any previous testing? May I review that previous testing so I can use it in the course of formulating the diagnosis?’ Not in order of justifying a later prescription.”¹⁷⁶

Dr. Neyhart next considered Agent Breeden’s discussion with Dr. Pettinger regarding sleep. She described sleep difficulty as “a very common complaint,” and one that “doesn’t really stand out as a unique thing.”¹⁷⁷ According to Dr. Neyhart, if sleep disorder is a “dominant complaint, a physician operating within the standard of care would inquire [in] more detail what strategies had been employed by this individual to solve their sleep problems that did not involve the use of medication.”¹⁷⁸ This would include questions such as “[d]o they calm down at the end of the day? Do they not eat huge meals at the end of the day? Alcohol commonly can interfere with sleep, and [the character Agent Breeden was playing] was of a misuser of alcohol. So alcohol would factor rather significantly into any inquiry into sleep.”¹⁷⁹

Dr. Neyhart next considered the colloquy between Agent Breeden and Dr. Pettinger regarding the putative patient’s admission that he “basically uses whatever opioids he can get his hands on rather than a more systematic fashion as would customarily be used for somebody who is under treatment for chronic pain condition.”¹⁸⁰ Such a patient presentation would, in Dr. Neyhart’s opinion, constitute a red flag for abuse.¹⁸¹ She said another red flag arose when the agent was vague about treatment in the past, locations for such treatment, and providers of such treatment. She explained that such vagueness gives rise to a concern for doctor shopping.¹⁸² Similarly, where the agent told Dr. Pettinger words to the effect that he could not recall whether he had knee pain or back pain, she was

“not very clear from this exchange whether or not the pain is driving the clinical encounter or the desire for a preconceived prescriptive opioid is driving that encounter.”¹⁸³

During the initial medical examination, Dr. Pettinger asked Agent Breeden if he had any of the following conditions: nosebleeds, sore throat, difficulty swallowing, respiratory problems, asthma, bronchitis, pneumonia, irregular heartbeat, chest pain, [something that was unintelligible], fever, scarlet fever, GI problems, nausea, vomiting, diarrhea, hepatitis, pancreatitis, urinary difficulties, kidney stones, or blood in the urine.¹⁸⁴ I listened to this recitation, and found it to be presented with such great speed and lack of interest as to be almost a sham. Dr. Neyhart was more charitable in her description, stating that, “I listened to this recording and what was impressive to me was how rapidly this particular array of symptoms was recited by Dr. Pettinger. I would not have been able to follow it myself, and I consider myself a person who is familiar with medical language.”¹⁸⁵ The words followed one to the next without pause and without distinction. As Dr. Neyhart explained, “[t]he standard practice would be to separate it out. Do you have any problems with your eyes, nose or throat? Pause for response. Do you have any problems with lumps or bumps in your neck or problems with your thyroid? Pause for response. Do you have any problems with breathing or shortness of breath or asthma or wheezing? Pause for response.”¹⁸⁶ Having listened to this presentation of symptoms, I too found Dr. Pettinger’s questions to have been perfunctorily presented in a manner not designed to elicit a meaningful response.

Next, Dr. Neyhart was asked about the exchange between Agent Breeden and Dr. Pettinger during which Dr. Pettinger asked whether the patient intended to grow cannabis. In response, the agent stated “um, probably not. Really, um, I just wanted to get, ah the—my meds; that’s the main thing I was trying, ‘cause we talked on the phone and you said, um, the discount.”¹⁸⁷ Dr. Neyhart stated that in this exchange, the agent “was really getting down to his agenda, and his agenda was to obtain a prescription.”¹⁸⁸ This, she said, would

be “a red flag for most clinicians for a patient to come in with a complaint but really direct the encounter towards obtaining the specific remedy for the complaint, especially if said remedy is a controlled substance.”¹⁸⁹

Dr. Neyhart next considered the exchange between Agent Breeden and Dr. Pettinger in which Dr. Pettinger asks “Okay. So basically you want to be given oxycodone?”¹⁹⁰ Dr. Neyhart explained that after listening to the audio recording and reading the transcript, “this seemed more of a business negotiation than a clinical encounter to me. A clinical encounter would be, ‘Let’s get back to your knee pain and what is the best way to relieve your knee pain.’ This . . . had more of a flavor of, ‘So what is it that you want from me in terms of a prescription?’”¹⁹¹ She expressed a similar concern regarding the exchange between Agent Breeden and Dr. Pettinger in which Dr. Pettinger explained that prescriptions for Norco could include refills, but those for oxycodone cannot. She said “[t]hat should not factor into the decision of what is the most appropriate treatment.”¹⁹²

Dr. Neyhart was asked to offer her impressions about the responses found in the patient questionnaire for this encounter. One red flag, according to Dr. Neyhart, is that the patient indicates he works as a “tile man,” but after listening to the patient interview and exam, she said “nowhere is the information that I listened to or read was there any conversation about how his pain condition was interfering with his ability to be a tile man. It seems to me that it would be very hard to be a tile man if you had knee pain or back pain.”¹⁹³ In addition, Dr. Neyhart observed that while the patient reported drinking ten drinks per week, and while that amount itself is not excessive, the character being portrayed by Agent Breeden “disclosed that there was a much greater use of alcohol” than was reported in the questionnaire.¹⁹⁴ Elaborating on this point, Dr. Neyhart said that if a patient presented to her in her office holding a bottle of alcohol, as was the case with Agent Breeden, this would have caused a concern on her part, “because that is so inappropriate . . . in the middle of a clinical

¹⁷⁵ *Id.* at 336–7.

¹⁷⁶ *Id.* at 337.

¹⁷⁷ *Id.*

¹⁷⁸ *Id.* at 338.

¹⁷⁹ *Id.*

¹⁸⁰ *Id.*

¹⁸¹ *Id.*

¹⁸² *Id.* at 339.

¹⁸³ *Id.*

¹⁸⁴ Government Exhibit 5, recording and transcript at 33.

¹⁸⁵ *Tr.* at 340.

¹⁸⁶ *Id.*

¹⁸⁷ Government Exhibit 5, recording and transcript at 37.

¹⁸⁸ *Tr.* at 341.

¹⁸⁹ *Id.*

¹⁹⁰ *Id.* at 342, quoting Government Exhibit 5, at 41 (Dr. Pettinger: “ok so basically you want to end up getting the oxycodones. You want the IRs, the 30 IRs?” Agent Breeden: “ah yea.”)

¹⁹¹ *Tr.* at 342.

¹⁹² *Id.* at 343.

¹⁹³ *Id.*

¹⁹⁴ *Id.*

encounter.”¹⁹⁵ She also noted that the patient (on page five of the questionnaire) reported “an array of different opioid medications that are listed as presently using,” but that the patient “had purportedly not seen a physician since his days in Florida except for perhaps one encounter with a physician in Sonoma County. So there is an inconsistency about how these substances would have been obtained in the course of a legitimate medical encounter.”¹⁹⁶

Dr. Neyhart next described her impressions of the physician notes found on page six of this patient’s records. She identified several areas of concern:

[T]he first thing that stood out for me is there is really not much detail with regard to the history of present illness recorded there. There is no indication about how long knee pain has been present, no indication of whether or not other modalities of treatment have been employed or prior imaging or prior consultations. There’s just not a lot of detail. I don’t get the idea from what is recorded there, nor did I get any impression from the transcript or the recording of the degree of pain that was being suffered on a scale of one to ten, or even using such words as mild, moderate or severe. None of that language was employed. I also don’t get an impression from this form of whether or not there is periodicity to the pain or an intermittent nature to the pain, or how it is interfering with occupational work. I mean, it’s just not there. The next thing that came up for me on this is that the weight is recorded, and my understanding was that there was not a scale in Dr. Pettinger’s office because there is much interchange about what is your weight, and then Dr. Pettinger would record whatever number the agent posing as a patient would state. So the weight as recorded here, it is implied that it was actually objectively determined, but actually it wasn’t. It was actually a piece of history and . . . in the customary course of medical practice you might write up under review of systems ‘Patient states weight is X’.

The next thing that shows up for me is a very detailed examination of the HEENT, although that was not really relevant to the pain complaint, and a very non-detailed examination of the musculoskeletal system, although that was quite relevant to the pain complaint, the pain complaint being knee pain. One would customarily expect to see a highly detailed knee examination and an examination of the joints on either side of the knee, that being the ankle and the hip. With a complaint of back pain, there would be a full examination of the back, and that would involve a palpitation of [the] entire spine by range of motion of the entire spine, [the] integrity of the nerve roots emanating from the spine. These are not evaluations that can be made in a fully clothed patient seated on a standard chair, and it was my impression of little snippets of video that I was able to

see that there was no exam table in Dr. Pettinger’s office, nor were the characters asked to remove their clothing.¹⁹⁷

Dr. Neyhart was asked considering the recording and transcript, and considering the medical records presented regarding this encounter, whether (in her expert opinion) the issuance of prescription medications recorded here was legitimate. In response, Dr. Neyhart stated “there is no evidence that this prescription was provided in the course of usual medical care for a pain condition.”¹⁹⁸ She explained that “[t]he agent comes to Dr. Pettinger with a complaint of pain. There was a very limited history taken pertaining to the pain complaint. There was no examination that I could see, that I could discern was done in the area of the pain complaint. Thus, no diagnosis could be rendered beyond ‘patient states pain.’ While ‘patient states pain’ is commonly the case, there are many ways to address a complaint of pain that do not involve the prescribing of controlled substances.”¹⁹⁹

In her evaluation of each of the other patient encounters presented her, Dr. Neyhart found similar areas of concern. These included:

- Prescribing a synthetic form of cannabis (Marinol) not for treatment purposes but to help the patient (Agent Breeden) avoid problems with employers or law enforcement personnel;²⁰⁰
- Failing to maintain control over the MRI provided by Agent Breeden, and failure to request a replacement copy during the course of his treatment;²⁰¹
- Failing to adequately inquire in follow up visits, to determine whether prescribed medications worked as intended and whether they caused any adverse reactions for the patient (Agent Breeden);²⁰²
- Describing in written physician’s records a “quite extensive” physical examination, where the actual time that elapsed (as revealed in the audio recording) “was very, very brief, so it’s impossible . . . to imagine how such a complete physical examination had been performed”;²⁰³
- Failing to resolve inconsistency in Agent Breeden’s report that he was working out and running on the one hand, with his complaint of knee pain on the other hand;²⁰⁴

- Failing to address information provided by Agent Breeden that he diverted some of the previously prescribed units of oxycodone for profit or to pay off a debt;²⁰⁵

- Failing to address red flags associated with self-reported substance abuse in a patient (Agent Kvach) presented to Dr. Pettinger for the purpose of obtaining controlled substances for a third person;²⁰⁶

- Failing to inquire further regarding prior prescriptions that had been issued to a patient (Agent Kvach) outside of the course of a medical encounter;²⁰⁷

- Failing to resolve the red flag that arose when a patient asked for a particular prescription by brand name, by milligram amount, and by quantity (Agent Kvach);²⁰⁸

- Requesting that a patient (Agent Kvach) obtain an MRI not to address or relieve suffering, but so that the doctor can justify providing the patient with the prescription being sought by the patient, and negotiating with the patient by offering to continue prescribing or increase the amount of controlled substances prescribed, provided the patient produces an MRI;²⁰⁹

- Failing to resolve the red flag that arose when a patient (Agent Kvach) was vague about the amount of medication prescribed and taken in the past, in order to determine the medical validity of past use of controlled substances;²¹⁰

- Failing to obtain a sufficient medical history of treatment for back pain in a patient (Agent Kvach);²¹¹

- Failing to examine the specific area in issue, failure to render a specific diagnosis, failure to inquire about alternative treatments, and representing to perform a complete physical examination during a time that was too short to permit such an exam of a patient (Agent Kvach);²¹²

- Prescribing pain medication under conditions where the patient (Agent Bianchi) reported having no pain symptoms, under conditions where it was clear the patient intended to use the medication recreationally;²¹³

- Failing to resolve medical concerns with a patient’s possible substance abuse through the recreational use of cannabis, prior to prescribing pain medication for the patient (Agent Bianchi and Agent Ghazanfari);²¹⁴

²⁰⁵ *Id.* at 356.

²⁰⁶ *Id.* at 363.

²⁰⁷ *Id.* at 364.

²⁰⁸ *Id.* at 366.

²⁰⁹ *Id.* at 366–8.

²¹⁰ *Id.* at 367.

²¹¹ *Id.* at 368.

²¹² *Id.* at 368–9, 372–3.

²¹³ *Id.* at 374–5, 377.

²¹⁴ *Id.* at 376–7, 406–7.

¹⁹⁵ *Id.* at 346.

¹⁹⁶ *Id.* at 344.

¹⁹⁷ *Id.* at 344–6.

¹⁹⁸ *Id.* at 347.

¹⁹⁹ *Id.*

²⁰⁰ *Id.* at 349.

²⁰¹ *Id.*

²⁰² *Id.* at 353.

²⁰³ *Id.*

²⁰⁴ *Id.* at 355.

- Failing to resolve the red flag that arose when it appeared one patient (Agent Kvach) was sharing his controlled substance medication with another patient (Agent Bianchi), without any medical indication;²¹⁵

- “Trolling for symptomatology,” by concluding a patient (Agent Bianchi) had anxiety based on the fact that she feels good when taking cannabis or oxycodone, in order to justify prescribing oxycodone, and suggesting the patient claim that she has pain radiating from her back to her leg, in order to justify obtaining an MRI that would then be used to justify prescribing pain medication;²¹⁶

- Failing to resolve the red flag that arose when a patient (Agent Ghazanfari) who sought pain medication also abused alcohol;²¹⁷

- Failing to resolve the red flag that arose when a patient seeking pain medication (Agent Ghazanfari) was vague about where and when he had knee surgery, vague about pain medication prescribed after that surgery, and suggested that the surgery was performed by his general practitioner;²¹⁸

- Failing to resolve the red flag that arose when a patient (Agent Ghazanfari) acknowledged selling oxycodone, prior to issuing a prescription for the same;²¹⁹

- Failing to include the examination of knees in the course of an examination based on a complaint of knee pain by a patient (Agent Ghazanfari);²²⁰

- Concluding that a patient (Agent Ghazanfari) needed four oxycodone tablets daily, without first waiting for the patient to indicate what his past daily use had been, and then failing to resolve the red flag that arose when the patient stated that if the number was too high, he would be able to get rid of any excess units.²²¹

Based on her review of each of these examination records, Dr. Neyhart expressed the expert medical opinion that the prescriptions for controlled substances reflected in this record were not rendered because of a determination of a legitimate medical condition.²²² In

one instance, however, Dr. Neyhart stated that “an argument could have been made for the legitimacy” of the prescription. She explained that in the case of Dr. Pettinger’s treatment of Agent Moriarty (under the assumed name of Jason Kelly), she noted the agent’s character was “vague on the details” about past prescriptions and past treatment, both of which raised red flags the doctor should have resolved.²²³ Dr. Pettinger noted that the past prescriptions for oxycodone appeared to be “out of proportion to the degree of disability it caused”.²²⁴ Dr. Neyhart, however, described Dr. Pettinger’s questions along these lines to be generally sufficient: “It was a reasonable exchange and there was some vagueness in terms of how disabling this particular condition was, but it appeared that it had been going on for some time. History seemed reasonable, that the pain comes and goes, and that’s what happens with knee pain. It does come and go. This is all consistent with usual medical practice, this exchange.”²²⁵

Left unclear, however, was whether there had been a specific injury, what kinds of diagnostics were utilized, what treatment modalities were tried, or why those modalities were changed.²²⁶ Also of concern, according to Dr. Neyhart, was the “rapid-fire review” of possible medical conditions seen here, as in the other cases, and the fact that Dr. Pettinger prescribed oxycodone after recognizing that the patient’s use was “out of proportion to the amount of functional disability or pain that he was suffering.”²²⁷

Asked to summarize her findings, Dr. Neyhart stated that it was her expert opinion that in eight of the nine prescriptions, there was no medical indication that would support issuing those prescriptions, and that in the prescription issued to Agent Moriarty, this was a “soft call.”²²⁸ She expanded on this during cross examination, stating that the agent “did present with a history that made sense. He presented with an MRI report that made sense relative to his history. He stated that he was using oxycodone for this medical condition. And so the holes in the Swiss cheese kind of lined up, and that’s what made it a softer call than, for instance, the agent who presented herself as Hancock.”²²⁹ She also agreed that the

fact that three of the agents all used the same MRI (save for altering the names thereon) would not be something a doctor would likely notice, and that if someone were to give her this MRI, she would likely be fooled into believing it was real.²³⁰

During cross examination, Dr. Neyhart agreed that a physician, when presented with Agent Moriarty’s claim that he took 180 oxycodone tablets a month, could reasonably believe such a statement; however, Dr. Neyhart stated that it would be “a big assumption” to assume such a prescription was medically indicated, because in her experience “if somebody requires 180 oxycodone a month or more, there are more appropriate long-acting medications that could be used.”²³¹ When asked to address the premise that Dr. Pettinger was trying to “titrate down” this patient to where he used only 90 units a month, Dr. Neyhart stated there was no documentation in the medical record supporting such a premise—only documentation proposing “a future tapering. There is no agreement entered into between Dr. Pettinger and this patient. Thus it is impossible for me to conclude that this was step one of a plan.”²³²

Also on cross examination Dr. Neyhart agreed with the premise that, with some patients suffering from acute intractable pain, the patient will sometimes take medication that is not prescribed to them, and on occasion will get medication from relatives or others, without waiting for an appointment to see a doctor. She said such behavior is “not an all-in-all deal breaker, but it is a red flag.”²³³ She also agreed with the premise that, after an initial diagnosis calling for pain medication is made, the failure to administer a physical exam in a follow up visit with the doctor is not in and of itself problematic, but here “[w]hat is problematic is the documentation of the physical exam that did not occur.”²³⁴

Dr. Neyhart said she has experience treating patients who exhibit drug-seeking behavior. She agreed that this population of patients will make a great effort to try to convince physicians to prescribe controlled substances, and will sometimes provide false information or vague answers when asked about their medical history.²³⁵ In addition, while it is not a typical experience, Dr. Neyhart has had patients

²¹⁵ *Id.* at 378.

²¹⁶ *Id.* at 378–81.

²¹⁷ *Id.* at 407, 409.

²¹⁸ *Id.* at 408–9.

²¹⁹ *Id.* at 411.

²²⁰ *Id.* at 412.

²²¹ *Id.* at 413.

²²² *Id.* at 354 (prescription at Government Exhibit 25 at 14); 357–8 (prescription at Government Exhibit 25 at 13); 361–2 (prescription at Government Exhibit 25 at 12); 369–70 (prescription at Government Exhibit 8); 372–3 (prescription at Government Exhibit 14); 385 (prescription at Respondent Exhibit B at 8); 406 (Government

Exhibit 12); 414 (prescription at Government Exhibit 19).

²²³ *Id.* at 402.

²²⁴ *Id.* at 403.

²²⁵ *Id.*

²²⁶ *Id.* at 404.

²²⁷ *Id.* at 405–6.

²²⁸ *Id.* at 415.

²²⁹ *Id.* at 417.

²³⁰ *Id.* at 418–9.

²³¹ *Id.* at 423–4.

²³² *Id.* at 430.

²³³ *Id.* at 435–6.

²³⁴ *Id.* at 437.

²³⁵ *Id.* at 444.

in this population attempt to divert her attention when she was inquiring into the patient's medical history, to avoid answering the questions presented.²³⁶

Testimony by Dr. Pettinger and Evidence Regarding Remediation

Dr. Pettinger testified briefly, on direct examination as a witness for the Government.²³⁷ After responding to questions establishing his identity, Dr. Pettinger declined to answer questions regarding the substance of the charges against him, invoking the privilege against self-incrimination.²³⁸

On his own behalf, Dr. Pettinger offered the testimony of two patients and a member of his staff. Dr. Pettinger began treating Tammy Gouthro in December 2010.²³⁹ According to Ms. Gouthro, she sought Dr. Pettinger's help for pain management, and continued treatment with him through June 2012.²⁴⁰ She explained that she had a work-related back injury seventeen years earlier that required fusing the L4 and L5 vertebrae.²⁴¹ She said this fusion and damage to her right sciatic nerve led to a 91 percent disability rating and created significant chronic pain, leaving her bedridden for much of the time.²⁴²

Due to a lack of insurance, Ms. Gouthro had no doctor at the time she visited Dr. Pettinger, and "pain medicine wasn't an option for me. It didn't work[.]"²⁴³ When asked to describe Dr. Pettinger's office, Ms. Gouthro said she was examined in the office where Dr. Pettinger has his desk and file cabinets. She said the room had a stethoscope and "reflection gadgets"—possibly referring to a reflex hammer used to strike the patellar ligament when testing the synapses at the L4 level of the spinal cord. She said Dr. Pettinger took her blood pressure, asked her about her pain level, had her stand, "and asked me if I'd walk on my heel and walk on my toes and performed pressure points and did the actual just the exterior of my back. That's all that he examined was the exterior where the injury and all that is, and then, like I said, he had me see how I walked forward on tippy-toes and walked back on my heel to see balance[.]"²⁴⁴

Dr. Pettinger did not offer any medical records to support Ms. Gouthro's testimony. In addition, Ms. Gouthro said she told Dr. Pettinger she had x-rays of

the areas needing treatment, but she never provided them because he did not require them.²⁴⁵ When asked how this examination was different than others she has had, Ms. Gouthro said "my normal doctors have a lounge, a bed that you lay on if they wanted further extension, but other than that this is pretty much basically the same as I get from my doctors."²⁴⁶

Following this examination, Dr. Pettinger prescribed cannabis for Ms. Gouthro, and then prescribed Norco, which Ms. Gouthro said did not work for her.²⁴⁷ Ms. Gouthro praised Dr. Pettinger for helping her end her use of opiates, stating that by using cannabis she has been free of other pain medication since December 4, 2010.²⁴⁸

Brenda Sue Martin testified on Dr. Pettinger's behalf, stating that Dr. Pettinger began treating her at the end of 2011 or the beginning of 2012.²⁴⁹ She explained that she sought treatment for degenerative disc disease following neck surgery, in the hope that she might avoid back surgery.²⁵⁰ She said while she has a regular doctor, she went to Dr. Pettinger for pain management, understanding that he specializes in that field.²⁵¹ Ms. Martin testified that during the first office visit, Dr. Pettinger examined "my back, my neck, my range of motion with my arms, the bending over, different things like that."²⁵² Dr. Pettinger did not, however, offer any medical records documenting this examination.

Ms. Martin said she had already been diagnosed, so "[i]t wasn't like he had to diagnose me."²⁵³ She explained that when she first met with Dr. Pettinger, she was taking methadone 10 mg units, 480 units a month, 90 Norco units, 90 Soma units, and clonazepam as needed for panic attacks.²⁵⁴ She said she did not want to continue taking these medications, and Dr. Pettinger agreed to take steps to reduce her dependence on these, first by reducing the amount of methadone she took each day.²⁵⁵ This proved effective, allowing her to reduce her daily dose of methadone from 480 to 360 units.²⁵⁶

Dr. Pettinger sought to present testimony from three other patients: Kim Parham, Lorenzo Watkins, and Jean

Kea.²⁵⁷ According to the Respondent's prehearing statement, these three witnesses were called for the same reasons Ms. Gouthro and Ms. Martin were called. All five, according to the prehearing statement, would testify that, beginning in September 2012, before becoming aware of the DEA investigation, Dr. Pettinger modified his medication protocols, drastically reduced his prescribing patterns, and instituted new procedures designed to minimize diversion and improper use of scheduled substances. They would also testify that Dr. Pettinger's actions were within the ordinary course of medical practice, and that his prescriptions were for a legitimate medical purpose.²⁵⁸ In none of these cases did Dr. Pettinger offer copies of his physician notes or medical records of treatment.

I sustained the Government's objection to allowing testimony from Ms. Parham, Mr. Wakins, and Ms. Kea.²⁵⁹ In his oral proffer of what these three witnesses would say, Respondent's counsel represented that each witness "has a different medical condition. Some of them were experiencing a need to reduce dependence on pain medication. . . . Also, some of them have different experiences regarding history taking, diversion of a conversation, that type of thing[.]"²⁶⁰

By the time this proffer was made it was clear—based on the testimony provided by Ms. Gouthro and Ms. Martin—that these witnesses lacked any knowledge about any "new procedures designed to minimize diversion and improper use of scheduled substances," as had been averred in the Respondent's Prehearing Statement. It was clear Dr. Pettinger would offer no written documentation reflecting his treatment of these patients. It was also clear the witnesses were being presented to describe the manner in which Dr. Pettinger treated patients who were not engaged in drug-seeking behavior. Given the nature of the charges in the Order to Show Cause, the testimony of Ms. Martin and Ms. Gouthro was tangential at best, and of little evidentiary value. The testimony of three additional patients would not have contributed in a meaningful way to the record and was for that reason excluded.

Dr. Pettinger's final witness was Nancy McGowan, Practice Manager at Greenleaf Urgent Care.²⁶¹ She explained

²³⁶ *Id.*

²³⁷ *Id.* at 303–4.

²³⁸ *Id.* at 304.

²³⁹ *Id.* at 252–3.

²⁴⁰ *Id.* at 253.

²⁴¹ *Id.* at 254.

²⁴² *Id.*

²⁴³ *Id.* at 255.

²⁴⁴ *Id.* at 257, 260.

²⁴⁵ *Id.* at 266.

²⁴⁶ *Id.* at 257–8.

²⁴⁷ *Id.* at 255.

²⁴⁸ *Id.* at 259.

²⁴⁹ *Id.* at 390.

²⁵⁰ *Id.*

²⁵¹ *Id.* at 391.

²⁵² *Id.* at 392.

²⁵³ *Id.* at 393.

²⁵⁴ *Id.*

²⁵⁵ *Id.* at 394.

²⁵⁶ *Id.*

²⁵⁷ *Id.* at 395–6.

²⁵⁸ Respondent's Supplemental Prehearing Statement at 3–5.

²⁵⁹ Tr. at 396.

²⁶⁰ *Id.*

²⁶¹ *Id.* at 459.

that Greenleaf Urgent Care is a medical office owned by Jim Daniels and operated by Dr. Pettinger.²⁶² Ms. McGowan stated that she began her job as the office manager at Greenleaf in August 2012, and understands that, prior to that time, the focus of the office had been pain management.²⁶³ She explained that when she arrived, Dr. Pettinger was not accepting any new patients “because he was scaling his business down, scaling the pain management part of it down, and we were going to transition to more of an urgent care.”²⁶⁴ There was no testimony regarding Dr. Pettinger’s operation of the medical office known as Medical Cannabis of Northern California, nothing to indicate what happened with the two medical offices (in Sacramento and Modesto) visited by the five undercover agents, nor was there any testimony establishing that MCNC was now operating as Greenleaf Urgent Care.

Ms. McGowan did state that Dr. Pettinger wanted to scale down the pain management practice because some of his patients “were just not complying well, and he wanted to get out of that business.”²⁶⁵ She explained that in some cases, patients were asked to produce medical records such as test results, MRIs, x-rays, and medication histories, and when a patient could not produce needed documentation, Dr. Pettinger would no longer treat them.²⁶⁶ She said these patients also needed to provide referrals from primary care physicians, indicating the need for pain management, along with progress notes from those referring doctors.²⁶⁷

Ms. McGowan stated that even before she began working at the office, Dr. Pettinger had developed a pain management consent form which he had his patients sign—although no such form has been presented in this matter.²⁶⁸ She stated that the agreement prohibits sharing medications and includes a requirement that the patient agree to use only one pharmacist, so that the patient doesn’t “doctor-shop”.²⁶⁹ Rather than accept the patient’s word about referring sources, the office will require enough information to permit the doctor or staff to contact the referring source to confirm the patient’s diagnosis and note the existing course of treatment.²⁷⁰

According to Ms. McGowan, efforts to address non-compliant patients were being made even before she arrived in August 2012. She said she saw records of patients who had been discharged from Dr. Pettinger’s practice due to noncompliance in her review of charts once she started working there.²⁷¹ Further, she said she and Dr. Pettinger discussed applying these same standards to new patients, if at some point he decided to resume that part of the practice.²⁷² Ms. McGowan was aware of instances where a pharmacist would call to inquire about customers who presented prescriptions from both Dr. Pettinger and another doctor, for the same medication. In those cases, a termination letter had been developed and would be used to terminate the patient from Dr. Pettinger’s practice.²⁷³ She said similar steps were taken when it appeared that multiple prescriptions for the same controlled substances were being presented from people living in the same household.²⁷⁴

According to Ms. McGowan, efforts to determine whether a patient was obtaining prescriptions for pain medication from more than one doctor could have been aided by reports under the CURES system, which is used by pharmacies and doctors to reflect patient prescription use.²⁷⁵

Ms. McGowan said that at this time, a patient who produced nothing more than an MRI would not qualify for treatment, and that during the time she has been with the office, Dr. Pettinger has reduced the amount of scheduled medications he prescribes.²⁷⁶ When asked whether the owner’s instructions to her regarding patient noncompliance changed at all between August 2012 and now, Ms. McGowan said no; the only changes she noted were that “we were terminating patients a lot more” and “decreasing the amount of medications significantly.”²⁷⁷

There was, however, no evidence or other testimony establishing that Dr. Pettinger has ever acknowledged writing prescriptions for controlled substances without conducting a sufficient medical examination, without requiring objective medical documentation relevant to the patient’s report of pain, or in the course of an office visit that resembled more a negotiation by a drug-seeker than a legitimate medical examination.

Analysis

This administrative action began when the DEA’s Administrator issued an Order suspending Dr. Pettinger’s DEA Certificate of Registration and ordering him to show cause why that Certificate should not be revoked. The Order alleged that Dr. Pettinger distributed controlled substances by issuing prescriptions under conditions that violated provisions in sections 823(f)(4) and 841(a)(1) and 842 of Chapter 21 of the United States Code, and provisions of section 1306.04(a) of Chapter 21 of the Code of Federal Regulations. Thus, in order to revoke Dr. Pettinger’s Certificate of Registration, the Government has the burden of establishing, by at least a preponderance of the evidence, that allowing Dr. Pettinger to continue to issue prescriptions for controlled substances is contrary to the public interest. If the Government meets this burden, the burden of production then shifts to the Respondent, who has the opportunity to present evidence that he accepts responsibility for his misconduct, and has taken appropriate steps to prevent misconduct in the future.²⁷⁸

Under the registration requirements found in 21 U.S.C. 823(f), the Administrator should consider five factors in determining the public interest when presented with the actions of a physician engaged in prescribing controlled substances²⁷⁹ These factors are:

- (1) The recommendation of the appropriate State licensing board or professional disciplinary authority.
- (2) The applicant’s experience in dispensing, or conducting research with respect to controlled substances.
- (3) The applicant’s conviction record under Federal or State laws relating to the manufacture, distribution, or dispensing of controlled substances.
- (4) Compliance with applicable State, Federal, or local laws relating to controlled substances.
- (5) Such other conduct which may threaten the public health and safety.²⁸⁰

Any one of these factors may constitute a sufficient basis for taking action against a registrant.²⁸¹ Any one or a combination of factors may be relied upon, and when exercising authority as an impartial adjudicator, the Administrator may properly give each factor whatever weight she deems appropriate in determining whether a

²⁶² *Id.*

²⁶³ *Id.* at 460.

²⁶⁴ *Id.* at 461.

²⁶⁵ *Id.* at 462.

²⁶⁶ *Id.*

²⁶⁷ *Id.* at 462–3.

²⁶⁸ *Id.* at 463.

²⁶⁹ *Id.* at 465–6.

²⁷⁰ *Id.* at 464.

²⁷¹ *Id.* at 468.

²⁷² *Id.* at 469.

²⁷³ *Id.* at 470.

²⁷⁴ *Id.* at 471.

²⁷⁵ *Id.* at 473.

²⁷⁶ *Id.* at 477.

²⁷⁷ *Id.* at 478–9.

²⁷⁹ Government’s Proposed Findings of Fact and Conclusions of Law at 27.

²⁸⁰ 21 U.S.C. 823(f) (2005), current through Public Law 112–207 approved 12–7–12.

²⁸¹ *Robert A. Leslie, M.D.*, 68 FR 15227–01, 15230 (March 28, 2003).

registration should be rejected.²⁸² Moreover, the Administrator is “not required to make findings as to all of the factors[.]”²⁸³ The Administrator is not required to discuss each factor in equal detail, or even every factor in any given level of detail.²⁸⁴ The balancing of the public interest factors “is not a contest in which score is kept; the Agency is not required to mechanically count up the factors and determine how many favor the Government and how many favor the registrant. Rather, it is an inquiry which focuses on protecting the public interest[.]”²⁸⁵ In this case, the Government does not contend there is a history of professional discipline by a licensing board, nor did it offer evidence of a criminal conviction pertaining to Dr. Pettinger. Accordingly, Factors One and Three are not presented as bases for revoking this Certificate.

Factors One, Two, Three and Five

There is some question regarding whether Factors Two and Five are properly before me. In its post-hearing brief, the Government initially posits that the issue in this matter is whether the Respondent’s registration “is inconsistent with the public interest, as that term is used in 21 U.S.C. 824(a)(4) and 823(f).”²⁸⁶ As noted above, the citation to section 824(a)(4) calls for the Administrator to consider the “public interest” by examining the Respondent’s “[c]ompliance with applicable State, Federal, or local laws relating to controlled substances.” The specific federal law relied upon by the Government is found in 21 CFR 1306.04(a), which prohibits a practitioner from writing a prescription for controlled substances unless the prescription is “issued for a legitimate purpose by an individual practitioner acting in the usual course of his professional practice.”

Guided by this language, the Government contends that Dr. Pettinger departed from the usual course of his professional practice by prescribing oxycodone to the five undercover agents, and that the prescriptions were not issued for a legitimate purpose.²⁸⁷

As will be addressed below, the evidence pertaining to the issuance of these prescriptions does indeed lend itself to a finding that the prescriptions in question were not issued for a legitimate purpose and were not issued by a medical doctor who was acting in the usual course of his professional practice. Thus, an analysis under Factor Four appears warranted both by the express terms of the Order to Show Cause and by the nature of the evidence now before me.

In its post-hearing brief, however, the Government contends that the public interest issue also should include an analysis of this evidence under Factors Two and Five.²⁸⁸ On its face, Factor Two does not appear to be directly related to registrants like Dr. Pettinger. By its express terms, Factor Two applies to applicants, and calls for an inquiry into the applicant’s “experience in dispensing, or conducting research with respect to controlled substances.” Thus, it is not clear that the inquiry into Dr. Pettinger’s experience in dispensing controlled substances is warranted, given the limited scope of this Factor.

Assuming, however, that Factor Two does indeed pertain to both registrants and applicants, the record here does not include any substantial notice to Dr. Pettinger that the Government intended to rely on Factor Two as justification for revoking his Certificate of Registration. As the Respondent points out in his post-hearing brief, the first time the Government asserted it would seek an analysis under Factor Two was during the opening statement given during the hearing. From my review of the record, there was no clear mention of the Government intending to rely on the provisions of 21 CFR 823(a)(2) in the Order to Show Cause, nor was it brought forward in either the initial or supplemental prehearing statements filed by the Government. The same is true with respect to the Government’s reliance on Factor Five—and in this instance the Government raised Factor Five only after the hearing, in its post-hearing brief.

From this set of circumstances, Dr. Pettinger argues that I have “no alternative but to conclude that factors 1, 3 and 5 all militate in favor of respondents [*sic*] continued registration.”²⁸⁹ I reach another conclusion, at least regarding Factor Five. I do agree that I should take into account, and regard as evidence favorable to Dr. Pettinger, the fact that the board licensing him has permitted him to renew that license,

notwithstanding these pending administrative actions. Factor One calls for me to consider the “recommendation of the appropriate State licensing board or professional disciplinary authority.” Implicit in the fact that the California state licensing authority renewed Dr. Pettinger’s medical license is a tacit endorsement by the medical board of his continuing ability to safely and professionally serve his community.

Further, and although it may be faint praise, the fact that Dr. Pettinger has not been charged or convicted of any crime does fall within the scope of Factor Three, which requires that I consider “[t]he applicant’s conviction record under Federal or State laws relating to the manufacture, distribution, or dispensing of controlled substances.” As is the case with Factor Two, Factor Three does not appear, on its face, to apply to registrants like Dr. Pettinger. Assuming, however, that this Factor applies with equal force to applicants and registrants alike, the evidence does reflect an absence of criminal convictions.

As noted above, the Government did not identify Factors Two or Five as bases for taking action against Dr. Pettinger when it issued its Order to Show Cause and its Order of Immediate Suspension. Dr. Pettinger correctly notes that the first time Factor Two was mentioned was during the Government’s opening statement.²⁹⁰ Apart from making this observation, however, the Respondent does not make any objection to a Factor Two analysis, and as such any issue based on lack of notice is waived.

The Administrator may consider evidence of positive experience under Factor Two; however, this evidence does not necessarily outweigh acts against the public interest, particularly where those acts are done intentionally. As stated in *Holiday CVS*: “In some (but not all) cases, viewing a registrant’s actions against a backdrop of how she has performed activity within the scope of the certificate can provide a contextual lens to assist in a fair adjudication of whether continued registration is in the public interest. In this regard, however, the Agency has applied principles of reason, coupled with its own expertise in the application of this factor. For example, the Agency has taken the reasonable position that this factor can be outweighed by acts held to be inconsistent with the public interest.”²⁹¹

²⁹⁰ *Id.* at 4.

²⁹¹ *Holiday CVS, LLC*, 77 FR 62316, 62340 (October 12, 2012) (adopting the ALJ’s recommended decision).

²⁸² *Morall v. DEA*, 412 F.3d 165, 173–74 (D.C. Cir. 2005); *JLB, Inc., d/b/a Boyd Drugs*, 53 FR 43945–02, 43947 (October 31, 1988); see also *David E. Trawick, D.D.S.*, 53 FR 5326–01, 5327 (February 23, 1988).

²⁸³ *Hoxie v. DEA*, 419 F.3d 477, 482 (6th Cir. 2005); see also *Morall v. DEA*, 412 F.3d 165, 173–74 (D.C. Cir. 2005).

²⁸⁴ *Trawick v. DEA*, 861 F.2d 72, 76 (4th Cir. 1988).

²⁸⁵ *Jayam Krishna-Iyer, M.D.*, 74 FR 459–01, 462 (January 6, 2009).

²⁸⁶ Government’s Proposed Findings of Fact and Conclusions of Law at 1.

²⁸⁷ *Id.* at 15.

²⁸⁸ *Id.* at 18–20.

²⁸⁹ Respondent’s Post-Hearing Brief at 4.

Assuming Factor Two applies equally to applicants and registrants, in analyzing a registrant's experience under Factor Two the Administrator should consider the context of a registrant's entire dispensing practices, notwithstanding that isolated acts against the public interest can outweigh substantial positive experience. This premise is explained as follows:

- In *Krishna-Iyer*, the Agency, "[i]n considering Petitioner's experience in dispensing controlled substances under [Factor 2, [] identified only four visits by three undercover patient[s], who were all attempting to make a case against [the Respondent]. The DEA failed to consider [the Respondent's] experience with twelve patients whose medical charts were seized by the DEA, or with thousands of other patients. In short, the DEA did not consider any of [the Respondent's] positive experience in dispensing controlled substances." ²⁹² In an unpublished opinion, the Eleventh Circuit found the Agency's failure to consider the Respondent's positive experience "arbitrary and unfair." The Court "vacated the [Final] Order and remanded the case for reconsideration, directing that 'DEA should pay particular attention to the entire corpus of Petitioner's record in dispensing controlled substances, not only the experience [with the] undercover officer.' The Court further ordered that '[t]he five factors should . . . be re-balanced.'" ²⁹³

- But in *T.J. McNichol, M.D.*,²⁹⁴ the Administrator declined to adopt the "positive experience" arguments offered by the ALJ, "who ignored both the Agency's subsequent decision on remand in *Krishna-Iyer*, which addressed the role of 'positive experience' evidence in cases where the Government has proved intentional or knowing diversion, subsequent Agency cases applying this rule, and several court of appeals' decisions (including that of the Eleventh Circuit), which have since upheld the Agency's position".

- Further, in *Becker*, the Administrator reaffirmed that "evidence [of a] significant level of sustained activity within the scope of the registration for a sustained period can be a relevant and correct consideration, which may be accorded due weight. The registrant's knowledge and experience regarding the rules and regulations applicable to practitioners also may be considered. . . . Experience which occurred prior or subsequent to proven allegations of malfeasance may be relevant. Evidence that precedes proven misconduct may add support to the contention that, even acknowledging the gravity of a registrant's transgressions, they are sufficiently isolated and/or attenuated that adverse action against his registration is not compelled by public interest concerns." ²⁹⁵

- And most recently, in *Casanova*, the ALJ properly considered evidence of the Respondent's positive prescribing practices, alongside evidence of diversion to undercover agents. The Division Investigator testified that the Respondent's practice was "not a pill mill, and that aside from the absence of a biennial inventory . . . [the practice] appeared to be within the scope of a normal medical practice. . . . Additionally, Respondent offered testimony that he gained experience dealing with acute and chronic pain patients and treating them with opioids, and familiarized himself with the [applicable state medical standards]. . . . Finally, Respondent testified that . . . he turned away a large number of patients [who exhibited signs of drug-seeking behavior]." ²⁹⁶

In the record now before me, we have evidence establishing multiple instances where Dr. Pettinger improperly issued prescriptions for oxycodone. The record, however, is silent with respect to his overall practice history: We do not know how long he has practiced medicine in the type of office reflected in this record; we do not know the number of patients he has served, or the value of that service to the community, or other similar demographic factors relevant to this issue. We know he was highly regarded by the two patients who testified, and we can assume the same can be said regarding the three patients who appeared and were willing to give testimony on the day of the hearing.

We know from his office manager that by the time she began working for Dr. Pettinger, he was operating out of medical office using the name Greenleaf Urgent Care. It is not clear that this office was the successor to Dr. Pettinger's medical office known as Medical Cannabis of Northern California, but we are expected to believe this is the case. Assuming this is true, both practices had an active caseload of patients, although there is no evidence with respect to the actual numbers of patients treated either before or after the Order to Show Cause was issued. We know from his office manager that Dr. Pettinger reportedly no

recommended decision, which noted that, "[w]hile the Respondent's level of professional achievement is undeniably impressive, he has offered no affirmative evidence regarding his experience dispensing controlled substances from peers, co-workers, or even himself. Still, his professional experience and contributions to his field have been considered in this recommended decision".

²⁹⁶ *Rene Casanova, M.D.*, 77 FR 58150, 58168–9 (Sept. 19, 2012) ("carefully consider[ing] the evidence of Respondent's past positive experiences in dispensing controlled substances," yet "find[ing] those experiences are considerably outweighed by the substantial evidence of Respondent's repeated misconduct in issuing controlled substance prescriptions to undercover law enforcement officers . . . [and] diminished by Respondent's failure on the whole to admit or accept responsibility for any wrongdoing").

longer seeks new patients in need of pain management, and has taken steps to identify drug seeking patients and terminate his professional relationship with them. We cannot, however, point to substantial evidence establishing that the nine instances leading to the prescriptions of record are either isolated or are instead typical of Dr. Pettinger's past or present practice.

To the extent the Government would have me determine Dr. Pettinger's experience in distributing controlled substances, it has given me little to permit me to compare the volume of Dr. Pettinger's history of compliant service with the nine incidents of record here. Given the lack of evidence that would permit such an analysis, and given the lack of notice provided by the Government regarding its intention to rely on Factor Two in this hearing, I conclude Factor Two neither supports nor contradicts a finding that Dr. Pettinger's continued registration is inconsistent with the public interest.

Our record establishes that the Government did not indicate its reliance on Factor Five until after the hearing was over. Moreover, the factual allegations appearing in the Order to Show Cause do not, in and of themselves, suggest the Government intended to rely on theories that fall within the ambit of Factors Two or Five. The theories identified in the Order to Show Cause remained generally intact in the presentation of issues and summaries of witness testimony presented by the Government in both its initial and supplemental prehearing statements.

The exception to this, as noted by the Respondent, is that fewer bases for action were presented during the hearing than had been alleged in the Order to Show Cause.²⁹⁷ In the Order to Show Cause, the Government noted that records provided by the California Department of Justice Controlled Substance Utilization Review and Evaluation System (CURES) suggested a pattern of prescribing a sufficiently high volume of oxycodone to warrant finding his continued registration with the DEA inconsistent with the public interest. As the Respondent correctly noted, the Government presented no evidence concerning data from the CURES system, apparently abandoning this evidence as a basis for action under the Order to Show Cause.

Action based on Factor Five requires evidence of "[s]uch other conduct which may threaten the public health

²⁹² *Jayam Krishna-Iyer, M.D.*, 74 FR 459, 459 (January 6, 2009) (citing *Krishna-Iyer v. DEA*, No. 06–15034 (11th Cir. 2007), Slip Op. at 3).

²⁹³ *Id.*

²⁹⁴ *T.J. McNichol, M.D.*, 77 FR 57133, 57144 (September 17, 2012).

²⁹⁵ *Jeffery J. Becker, D.D.S.*, 77 FR 72387, 72404 (December 5, 2012) (adopting the ALJ's

²⁹⁷ Respondent's Post-Hearing Brief at 5.

and safety.”²⁹⁸ Accordingly, if the conduct falls within the scope of Factors One through Four, it would not be “other” conduct and would be addressed by those Factors, and not through a Factor Five analysis.

The Order to Show Cause and the evidence presented at the hearing both focused almost exclusively on the actions recorded during the nine occasions described by the five undercover agents. The one exception to this is the evidence establishing that Dr. Pettinger wrote a prescription for Norco after acknowledging receipt of the order that he issue no further controlled substance prescriptions. As will be discussed below, this presentation of evidence establishes by at least a preponderance that the prescriptions appearing as exhibits in this record were issued outside the usual course of professional practice and were issued for other than a legitimate medical purpose. As such, when he wrote these prescriptions Dr. Pettinger violated 21 U.S.C. 841(a)(1). Given that the primary basis for taking action against Dr. Pettinger is conduct that falls within the scope of Factor Four, an analysis under Factor Five would be unwarranted.

I am mindful of the evidence introduced during the hearing establishing that Dr. Pettinger misrepresented his office practice when he was questioned by DEA Special Agent Kittrell. Summarized, this evidence includes Agent Kittrell recalling what Dr. Pettinger told him during his initial inquiry into Dr. Pettinger’s standard operating procedures. In his testimony, Agent Kittrell credibly stated that Dr. Pettinger assured him that he conducted a full physical examination prior to prescribing any controlled substances, and that he did so whether the patient was presenting for the first time or for a follow up visit. As evaluated by the Government’s expert medical witness, the evidence establishes that this was a false statement by Dr. Pettinger. The evidence establishes that Dr. Pettinger failed to perform a full physical examination in each of the cases reported by the undercover agents, leading to the conclusion that (as the Government suggests in its post-hearing brief) Dr. Pettinger lied to Agent Kittrell when he described his standard operating procedures in cases involving the prescription of controlled substances.²⁹⁹ Similarly, the evidence establishes that Dr. Pettinger lied to Agent Kittrell when he represented that

if a patient presented seeking pain medication but had not medical records, all Dr. Pettinger would prescribe was Norco (hydrocodone)—a claim that was patently contradicted during the initial meetings with Agent Kvach and Agent Bianchi.³⁰⁰

Lying to a DEA agent in the course of the agent’s investigation into diversion of controlled substances is not conduct that falls within the scope of Factors One through Four, but it does fall squarely within the scope of Factor Five. Of concern here, however, is the fact that throughout its pre-hearing notices, the Government made no mention of its intention to raise such a claim. I have reviewed the Order to Show Cause and both the initial and supplemental prehearing statements and find no suggestion that the Government intended to confront Dr. Pettinger with evidence about his statement to Agent Kittrell regarding his practice of performing full physical examinations. The question thus is whether the Administrator should take disciplinary action based on evidence of improper conduct that was not disclosed to the Respondent until the hearing had begun.

The Government’s failure to notify a responding party of the theory of the Government’s case becomes a critical issue in cases, such as the present case, that are brought under the Administrative Procedure Act. For example, in *Bendix*, the FTC “violated § 5 of the Administrative Procedure Act, 5 U.S.C. 554, when it decided the case on a theory of illegality which was never charged, raised, nor tried during the administrative hearing; never presented for consideration by the Hearing Examiner; and not raised as an issue or discussed by Complaint Counsel in the appeal to the Commission from the order of the Hearing Examiner dismissing the complaint. Bendix had no notice that it was charged under [this] theory of illegality and was accorded no opportunity to present evidence in defense against this theory.”³⁰¹

The court remanded the case, affording the parties a second opportunity to offer evidence. In *Bendix*, Government counsel presented three theories of illegality, each rejected by the Hearing Examiner. Thereafter, the Commission based its final decision on a wholly separate legal theory.³⁰² “This [was] not a case where the initial complaint was couched in broad

generalities but subsequently was tried on the specific theory that ultimately justified [the Commission’s] finding[s].”³⁰³ Indeed, “[c]ounsel for Bendix specifically asked both the Hearing Examiner and the [Government’s] Counsel for the theory upon which the case would be tried.” Government counsel expressly limited the legal theories at issue: “[r]epeated statements by counsel, witnesses, and the [Hearing] Examiner showed that everyone believed [these] to be the only issue[s]” in contention.³⁰⁴ At the conclusion of the hearing, Government counsel submitted a final brief to the Commission, which omitted any mention of alternative legal theories.³⁰⁵ “Bendix’s case was prepared and presented in response to certain enumerated theories. . . . The witnesses were questioned and cross-examined in terms of these issues. The documentary proof was keyed to these theories.”³⁰⁶ Because “different defenses and proofs would be used in defending” the Commission’s alternate legal theory, Bendix was entitled to a remanded hearing.³⁰⁷

Similarly, the court remanded where it found on review that the NLRB did not afford the respondent a full and fair opportunity to litigate the issues comprising the final decision.³⁰⁸ After an administrative law judge conducted a hearing on the charges set forth in the Board’s complaint, the Board adopted the ALJ’s decision, but did so based on an “alter-ego” theory of corporate liability.³⁰⁹ Although the NLRB found “sufficient connection to the complaint for Respondent to anticipate” the newly-articulated legal theory, the Court of Appeals determined that the respondent was not accorded his due process rights as to the alter ego claim.³¹⁰ “Respondent was unaware that the [] alter ego claim was raised in the proceeding. Even during the course of the evidentiary hearing, Respondent received no notice of the claim that [its subsidiary] was an alter ego[,]” and “[t]he ALJ never advised the parties that he would consider an alter ego claim.”³¹¹ Because the respondent never received notice of the alter ego claim through the pleadings, the Court of Appeals determined that first time the respondent was informed that an

³⁰³ *Id.* at 541.

³⁰⁴ *Id.*

³⁰⁵ *Id.*

³⁰⁶ *Id.* at 542.

³⁰⁷ *Id.* at 541–2.

³⁰⁸ *NLRB v. I.W.G., Inc.*, 144 F.3d 685 (10th Cir. 1998).

³⁰⁹ *Id.* at 687.

³¹⁰ *Id.*

³¹¹ *Id.* at 688.

²⁹⁸ 21 CFR 823(f)(5).

²⁹⁹ Government’s Proposed Findings of Fact and Conclusions of Law at 20.

³⁰⁰ *Id.*, and citations therein.

³⁰¹ *Bendix Corp. v. FTC*, 450 F.2d 534, 537 (6th Cir. 1971).

³⁰² *Id.* at 537.

alter ego claim was alleged was in the post hearing brief filed prior to the ALJ's decision.³¹²

During the review by the Court of Appeals, the NLRB argued that the alter ego claim was fully and fairly litigated because "considerable evidence relevant to" the claim was presented and challenged at the hearing.³¹³ However, the Court of Appeals noted that "the simple presentation of evidence important to an alternative claim does not satisfy the requirement that any claim at variance from the complaint be 'fully and fairly litigated' in order for the Board to decide the issue without transgressing [Respondent's] due process rights."³¹⁴

Given the substantial evidence of Dr. Pettinger's violation of regulations controlling the distribution of oxycodone under Factor Four (thereby rendering a Factor Five analysis superfluous), given Dr. Pettinger's failure to rebut the Government's prima facie case (as will be addressed below), and given the Government's failure to disclose in advance of the hearing its intention to rely on a Factor Five analysis, I cannot recommend relying on a Factor Five analysis, even as an alternative theory of the case.

Factor Four

Although it is unfortunately blended with a discussion of Factor Two, the Government's post-hearing brief discussing Factor Four cogently summarizes the facts and the legal issues that lead me to conclude the Government has met its prima facie responsibilities in this case.³¹⁵ While the overarching question is whether Dr. Pettinger's continued certification is inconsistent with the public interest, the specific question under Factor Four is whether the behavior captured by the undercover agents reveals action by the Certificate holder that violates drug diversion laws. I find that it does.

The specific instances of misconduct cited by the Government at pages 15 through 20 of its brief have been established by at least a preponderance of the evidence. Without attempting an exhaustive inventory here, these included failing to conduct a sufficient

physical examination of each of the five undercover agents on each of their office visits; prescribing oxycodone without first resolving material medical issues suggesting the putative patients had serious alcohol, cannabis, and addictive painkiller problems; prescribing oxycodone to patients who were diverting oxycodone to help pay off debts and to share with friends; prescribing oxycodone to patients who had presented no medical records that would support their self-reported medical histories; and prescribing oxycodone to patients based on complaints of pain and sleep disorders despite the fact that those complaints were absent from the patient's self-reported medical histories. The Government in its post-hearing brief aptly notes that in her review of these nine patient encounters with the five undercover agents and Dr. Pettinger, it appeared to the medical expert that Dr. Pettinger was more interested in negotiating the amount of oxycodone and related controlled substances that would be dispensed through his prescriptions, than he was in actually diagnosing the medical conditions of the agents.

As the Respondent correctly notes, it is clear from the evidence that Dr. Pettinger encouraged these patients to avoid the use of oxycodone and other highly addictive painkillers. Both in his presentation to the Government's undercover agents and in his treatment of his own patients, it is clear Dr. Pettinger sought to wean his patients off of oxycodone, and sought to discourage resorting to oxycodone wherever possible. That being said, however, it is also clear that he abandoned his own professed requirements when he issued the prescriptions at issue, by authorizing the dispensation of oxycodone without first requiring medical records and without ever evaluating treatment modalities that did not include narcotics.

The testimony of the Government's medical expert, Dr. Neyhart, provides substantial credible evidence establishing that the prescriptions shown in our record were not "issued for a legitimate medical purpose," and were not issued "by an individual practitioner in the usual course of his professional practice."³¹⁶ In his post-hearing brief, Dr. Pettinger notes that Dr. Neyhart's credentials do not include operating a pain management clinic and asserts that the weight to be given to her opinions should be tempered by the fact that the expert "is not a pain

management specialist and had not even practiced primary care for at least eighteen months."³¹⁷ This can be duly noted, but from the presentation of Dr. Neyhart's credentials and from her very credible testimony, I find substantial evidence establishing that the actions recorded during these nine patient visits did not constitute the "usual course" of the professional practice of medicine, irrespective of whether the practitioner has or has not limited his practice to pain management.

On the point of such limitation, I note that Dr. Pettinger's cannabis practice, M.C.N.C., appears not to be a pain management clinic, but rather a clinic specializing in dispensing prescriptive cannabis. One of Dr. Pettinger's patients stated she saw nothing that would indicate the office specialized in pain management, and the letterhead and signage in our record indicates Dr. Pettinger used the name "Medical Cannabis of Northern California" or the initials "M.C.N.C." The impression I got from the evidence as a whole is that the practice focused not on pain management but on the medicinal use of cannabis. This is not to be critical of the practice but only to state that the practice bore few of the markings found in practices dedicated exclusively to the management of pain.

This impression is primarily based on what I observed as I listened to the undercover patient visits and on the testimony of Dr. Pettinger's three witnesses. A consistent pattern in the recorded visits by undercover agents was the thorough explanation Dr. Pettinger gave regarding the medicinal use of cannabis, along with his very clear exhortation that the patients do all they can to avoid the use of oxycodone and similar narcotic painkillers. That being said, however, the record also establishes a factual basis for Dr. Neyhart's observation that Dr. Pettinger failed to engage in medical examinations of the type needed to diagnose these patients' medical conditions or to explore treatment modalities other than the use of either cannabis or oxycodone.

In his closing brief, Dr. Pettinger argues that "the undercover agents conduct is highly atypical and therefore cannot be extrapolated to the general population of drug seeking patients and therefore cannot demonstrate that Respondent's prescribing constituted a danger to the general public (as opposed to the miniscule subset of hypothetical patients represented by the undercover

³¹² *Id.*

³¹³ *Id.*

³¹⁴ *Id.* (internal citations omitted). See also *Soule Glass and Glazing Co. v. NLRB*, 652 F.2d 1055 (1st Cir. 1981) (noting that "even if such an argument appeared explicitly in the General Counsel's post-hearing brief, such post-hoc characterizations of the case would not be relevant in determining whether the employer had notice of the issue and a meaningful opportunity to defend against it at the hearing").

³¹⁵ Government's Proposed Findings of Fact and Conclusions of Law at 14–19.

³¹⁶ See *Sun & Lake Pharmacy*, 76 FR 24,530, 24523 (quoting 21 CFR 1306.04(a)).

³¹⁷ Respondent's Post-Hearing Brief at 7.

agents).”³¹⁸ The evidence from Dr. Neyhart did establish that drug seeking patients will attempt to divert attention and to ingratiate themselves with their potential prescribing sources. Agent Kittrell confirmed the same in his very credible testimony on this point. Further, nothing in the behavior of these undercover agents was so clearly incredible or outlandish as to warrant dismissing their actions as being “atypical”. To the contrary, testimony from Dr. Neyhart and Special Agent Kittrell establishes that the means by which these agents sought to procure controlled substances were well within those employed by persons seeking to illegally divert controlled substances through this kind of office visit.

It also should be noted that, even if I were to accept the premise that this was either outlandish or atypical behavior, I would nonetheless reach the conclusion that such behavior should have prompted a more studied response by Dr. Pettinger, rather than his capitulation or accommodation when the agents asked him to prescribe oxycodone. His failure to resolve the many red flags shown here compels the conclusion that his decision to prescribe dangerous narcotics put the public at risk and constitutes action “outside the usual course of his professional practice.”³¹⁹

Because it was thorough, internally consistent, consistent with the evidence presented generally, and not contradicted by any professional opinion to the contrary, I place great weight in the medical expert’s opinions regarding Dr. Pettinger’s practice. I find that the failure to resolve the multiple red flags present with each of the five undercover agents constitutes action outside the usual course of medical practice, and I find Dr. Pettinger’s decision to issue prescriptions based on a negotiation with these five patients, rather than based on a properly rendered medical diagnosis, compels the conclusion that the prescriptions in evidence here were not issued for a legitimate medical purpose. Upon these findings, the Government has met its burden of establishing a *prima facie* case in support of the Order to Show Cause.

In his discussion about remediation, Dr. Pettinger posits that his decision to stop treating pain patients should be taken into account, and that he should be credited for improving his approach to drug seekers.³²⁰ First, as aptly pointed out by the Government in its post-hearing brief, the significant drop

in prescriptions issued by Dr. Pettinger was doubtlessly precipitated, in part at least, by the fact that the Administrator suspended his Certificate.³²¹ Beyond this, however, Dr. Pettinger did present evidence through his office manager, who testified that Dr. Pettinger has implemented measures to reduce “double dipping,” is accepting no new patients, is discharging problematic patients, refuses to prescribe to patients who appear to be trafficking, and is discharging patients who appear to be providing falsified records.³²²

As Dr. Pettinger correctly notes, all of these steps are steps that every practitioner should undertake when operating under a DEA Certificate. The record does not, however, include an express or implied acknowledgement by Dr. Pettinger that his actions with respect to the five undercover agents put the public at risk. The practices described by Dr. Pettinger’s office manager do not establish remedial efforts taken to correct the mistakes that have been revealed by the undercover action. Instead, they suggest Dr. Pettinger tired of having to negotiate with patients who came to know that he was willing to prescribe oxycodone without requiring medical justification.

As noted above, Dr. Pettinger elected not to give sworn testimony on the issue of remediation, depriving the Administrator and the public with a clear demonstration of contrition and remediation. His silence also permits a negative inference to be drawn with respect to factual issues presented, as noted by the Government in its post-hearing brief.³²³ Instead of hearing from Dr. Pettinger, we have the testimony of his office manager, who stated that many of the steps she described had been in place for some time, making it impossible to determine whether any of the steps were actually remedial in nature. It also must be noted that most of the measures listed as remedial in Dr. Pettinger’s post-hearing brief require him to act in a specific manner,³²⁴ but as we have only Ms. McGowan’s testimony on this point we have no clear record from Dr. Pettinger himself to confirm that he will in fact do what his office manager says he will do. Accordingly, I find insufficient evidence of remediation as to counter the Government’s *prima facie* case.

Findings of Fact

1. Respondent is registered with DEA as an individual practitioner in Schedules II–V under DEA Certificate of Registration Number AP6572716, at 4707 Greenleaf Court, Suite A, Modesto, California, 95356. Respondent’s Certificate of Registration expires by its own terms on March 31, 2015.

2. The Respondent’s DEA Certificate of Registration expires by its own terms on March 31, 2015. He is licensed to practice medicine as a physician and surgeon in the State of California under license number G29874, which will expire by its own terms on March 31, 2015.

3. On December 12, 2012, DEA served Respondent with an Order to Show Cause and Immediate Suspension of Registration dated December 10, 2012, whereby Respondent’s DEA Certificate of Registration Number AP6572716 was suspended.

4. Between November 10, 2011 and May 9, 2012, undercover agents employed by the DEA, the FBI, and the U.S. Department of Health and Human Services represented to be patients seeking controlled substances from the Respondent at the Respondent’s medical offices in Sacramento and Modesto California. In each of nine instances reported here, the Respondent wrote prescriptions for controlled substances regulated by the DEA, including oxycodone, promethazine with codeine, and hydrocodone.

5. Prior to issuing these nine prescriptions, the Respondent did not conduct sufficient medical examinations to be able to diagnose the medical conditions for which these controlled substances were sought. In addition, the Respondent inappropriately counseled a patient on how to obtain a prescription for oxycodone where there were no objective signs or findings that would support such a prescription; counseled a patient on the use of Marinol as a means by which the patient could avoid adverse legal consequences if found to have the active ingredients of cannabis in his blood or urine; and failed to resolve issues arising when the undercover agents presented facts in the course of the medical examinations that warranted further inquiry, including the failure to produce objective signs and findings through MRIs and other medical sources to substantiate the need for pain medication; the failure to inquire into abuse of alcohol, opioids and cannabis when presented with evidence of the same; the illegal acquisition, diversion, and distribution of controlled substances; the failure to

³¹⁸ *Id.* at 9.

³¹⁹ 21 CFR 1306.04(a).

³²⁰ Respondent’s Post-Hearing Brief at 11.

³²¹ Government’s Proposed Findings of Fact and Conclusions of Law at 21.

³²² Respondent’s Post-Hearing Brief at 11 and citations to the transcript therein.

³²³ Government’s Proposed Findings of Fact and Conclusions of Law at 20–1.

³²⁴ *Id.* at 12.

make appropriate inquiries and take appropriate action when presented with drug-seeking behavior by these five agents; the failure to follow his own reported diagnostic and treatment procedures when presented with patients who lacked objective medical evidence supporting pain diagnoses; and the failure to reconcile inconsistencies between symptoms being reported by the undercover agents and reports of symptoms and conditions appearing in the physician's notes from these patient visits.

6. On December 11, 2012, Special Agent Robert Kittrell served upon the Respondent the Administrator's Order to Show Cause and Immediate Suspension of DEA Registration. After receiving this Order, the Respondent was prohibited from dispensing controlled substances under his DEA Certificate of Registration. Despite acknowledging this prohibition, the Respondent thereafter issued a prescription for hydrocodone for a patient who had exhausted an earlier prescription for the same.

Conclusions of Law

1. When it proposes to revoke a DEA Certificate of Registration or deny any pending applications for such a Certificate, the Government is required to establish by at least a preponderance of the evidence that the holder's continued registration is inconsistent with the public interest. 21 U.S.C. 823(f) and 824; and 21 CFR 1301.36 and 1301.37.

2. Five factors must be considered when determining the public interest in this case:

(1) The recommendation of the appropriate state licensing board or professional disciplinary authority.

(2) The applicant's experience in dispensing, or conducting research with respect to controlled substances.

(3) The applicant's conviction record under federal or state laws relating to the manufacture, distribution, or dispensing of controlled substances.

(4) Compliance with applicable state, federal, or local laws relating to controlled substances.

(5) Such other conduct which may threaten the public health and safety. 21 U.S.C. 823(f).

3. Under 21 U.S.C. 23(f)(1) (Factor One), where the evidence establishes the Respondent's California medical credentials were renewed by the state medical authority while DEA administrative proceedings were pending, the renewal of those credentials constitutes evidence that is consistent with continued Registration by the DEA. Such evidence is not,

however, dispositive of the question whether the Respondent's continued DEA Certification is or is not consistent with the public interest.

4. In order to establish a basis for revoking a Certificate of Registration based on the provisions of 21 U.S.C. 823(f)(2) (Factor Two), and assuming Factor Two applies to both applicants and registrants, the Government must present evidence establishing, by at least a preponderance, that the experience of the Respondent in dispensing controlled substances is of such character and quality that his continued registration is inconsistent with the public interest. This requires evidence of both the qualitative manner and quantitative volume of the Respondent's experience. Where evidence of the Respondent's experience, as expressed through his patients and employees, is silent with respect to the quantitative volume of the Respondent's experience, and requires speculation to support an adverse finding under Factor Two, this Factor should not be used to determine whether the Respondent's continued registration is inconsistent with the public interest.

5. In order to establish a basis for revoking a Certificate of Registration based on the provisions of 21 U.S.C. 823(f)(3) (Factor Three), and assuming Factor Three applies to both applicants and registrants, the Government must present evidence of the Respondent's conviction record under federal or state laws relating to the manufacture, distribution, or dispensing of controlled substances. As this Factor is neither alleged by the Government nor suggested by the evidence, and as there is evidence that the applicable licensing authority renewed the Respondent's license while these administrative proceedings were pending, the Factor may be considered as supporting the Respondent's continued registration.

6. Under 21 U.S.C. 823(f)(4) (Factor Four), the Administrator must consider the Respondent's compliance with applicable state, federal, or local laws relating to controlled substances. A prescription for a controlled substance is unlawful unless it has been issued for a legitimate medical purpose by an individual practitioner acting in the usual course of his professional practice.³²⁵

7. Under the conditions presented in the record, the Respondent issued nine prescriptions for controlled substances regulated by the DEA that were not for a legitimate medical need and were not

issued in the ordinary course of a professional medical practice. Upon such evidence, the Government has established by at least a preponderance that the Respondent's continued DEA Certification is inconsistent with the public interest, warranting the revocation of that Certification and the denial of any pending application for such a Certification.

8. Under the conditions presented in the record, the Government has established by at least a preponderance of the evidence that the Respondent issued a prescription for hydrocodone on December 21, 2011, at a time when his DEA Certificate had been suspended. Because such prescription activity requires a DEA Certificate, the actions attributed to the Respondent constitute noncompliance with applicable federal laws relating to controlled substances. Upon such proof, the Government has established by sufficient evidence that the Respondent's continued DEA Certification is inconsistent with the public interest, warranting the revocation of that Certification and the denial of any pending application for such a Certification.

9. Under 21 U.S.C. 823(f)(5) (Factor Five), the Government may base its determination to revoke a DEA Certification on "such other conduct which may threaten the public health and safety." Such a determination thus may not be based on circumstances falling within the scope of Factors One through Four, but rather must be based on circumstances not otherwise addressed in this section of the regulation. In this matter, the Government presented evidence that the Respondent falsely reported to Special Agent Kittrell that prior to dispensing controlled substances, the Respondent conducted appropriate medical examinations. This contention was raised for the first time in the Government's post-hearing brief, and the Respondent has objected to the late introduction of this Factor as a basis for revocation. Under the Due Process Clause of the Fifth Amendment to the United States Constitution, the Government must provide adequate notice of the factual allegations it intends to prove.³²⁶ Where the Order to Show Cause and all prehearing statements provided to the Respondent did not include notice that the

³²⁵ *Sun & Lake Pharmacy*, 76 FR 24520, 23523 (May 2, 2011) (quoting 21 CFR 1306.04(a)).

³²⁶ *CBS Wholesale Distribs.*, 74 FR 36746, 36749 (2009) ("The Agency must provide a Respondent with notice of those acts which the Agency intends to rely on in seeking the revocation of its registration so as to provide a full and fair opportunity to challenge the factual and legal basis for the Agency's Action.").

Government intended to apply Factor Five in these proceedings, and where such intention was not made known to the Respondent until after the end of the evidentiary hearing, the provisions of Factor Five should not be used as a basis for taking adverse action against the Respondent.

10. Upon such evidence as is now before the Administrator, the Government has under Factor Four met its burden and has made a prima facie case in support of the proposed order revoking the Respondent's DEA Certificate of Registration.

11. Upon a review of the record as a whole, including all claims made in the

Respondent's post-hearing brief, where the Respondent has failed to affirmatively acknowledge specific acts of improper prescribing of controlled substances and failed to establish by credible and substantial evidence effective steps taken in remediation, there is insufficient evidence of remediation. Accordingly, the Government has established cause to revoke the Respondent's DEA Certification.

Recommendation

As the Government has established its prima facie case by at least a preponderance of the evidence, and the

Respondent has failed to rebut that case through a demonstration of sufficient remediation, the Respondent's DEA Certificate of Registration should be REVOKED and any pending application for the renewal or modification of the same should be DENIED.

Dated: June 5, 2013.

Christopher B. McNeil,

Administrative Law Judge.

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Department of the Interior

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50 CFR Part 17

Endangered and Threatened Wildlife and Plants; Proposed Threatened Status for the Western Distinct Population Segment of the Yellow-billed Cuckoo (*Coccyzus americanus*); Proposed Rule

DEPARTMENT OF THE INTERIOR

Fish and Wildlife Service

50 CFR Part 17

[FWS-R8-ES-2013-0104; 4500030113]

RIN 1018-AY53

Endangered and Threatened Wildlife and Plants; Proposed Threatened Status for the Western Distinct Population Segment of the Yellow-billed Cuckoo (*Coccyzus americanus*)**AGENCY:** Fish and Wildlife Service, Interior.**ACTION:** Proposed rule.

SUMMARY: We, the U.S. Fish and Wildlife Service (Service), propose to list the yellow-billed cuckoo in the western portions of the United States, Canada, and Mexico (western yellow-billed cuckoo) as a threatened distinct vertebrate population segment under the Endangered Species Act of 1973, as amended (Act). If we finalize this rule as proposed, it would extend the Act's protections to the western yellow-billed cuckoo. The effect of this regulation would be to add the western yellow-billed cuckoo to the List of Endangered and Threatened Wildlife under the Act.

DATES: We will accept comments received or postmarked on or before December 2, 2013. Comments submitted electronically using the Federal eRulemaking Portal (see **ADDRESSES** section, below) must be received by 11:59 p.m. Eastern Time on the closing date. We must receive requests for public hearings, in writing, at the address shown in the **ADDRESSES** section by November 18, 2013.

ADDRESSES: You may submit comments by one of the following methods:

(1) *Electronically:* Go to the Federal eRulemaking Portal: <http://www.regulations.gov>. In the Search box, enter FWS-R8-ES-2013-0104, which is the docket number for this rulemaking. You may submit a comment by clicking on "Comment Now!"

(2) *By hard copy:* Submit by U.S. mail or hand-delivery to: Public Comments Processing, Attn: Docket No. FWS-R8-ES-2013-0104; Division of Policy and Directives Management; U.S. Fish and Wildlife Service; 4401 N. Fairfax Drive, MS 2042-PDM; Arlington, VA 22203.

We request that you send comments only by the methods described above. We will post all comments on <http://www.regulations.gov>. This generally means that we will post any personal information you provide us (see the Information Requested section below for more information).

FOR FURTHER INFORMATION CONTACT:

Jennifer Norris, Field Supervisor, U.S. Fish and Wildlife Service, Sacramento Fish and Wildlife Office, 2800 Cottage Way, Room W-2605, Sacramento, California 95825, by telephone 916-414-6600 or by facsimile 916-414-6712. Persons who use a telecommunications device for the deaf (TDD) may call the Federal Information Relay Service (FIRS) at 800-877-8339.

SUPPLEMENTARY INFORMATION:**Executive Summary**

Why we need to publish a rule? Under the Act, if a species is determined to be an endangered or threatened species throughout all or a significant portion of its range, we are required to promptly publish a proposal in the **Federal Register** and make a determination on our proposal within 1 year. Listing a species as an endangered or threatened species can only be completed by issuing a rule.

This rule proposes the listing of the yellow-billed cuckoo as a threatened species in western North America as a distinct vertebrate population segment (DPS) under the Act and our policy regarding the recognition of DPSs (61 FR 4721; February 7, 1996).

What does this rule consist of and what is the potential outcome of this rule making? This document consists of a proposed rule to list populations of the yellow-billed cuckoo in the western United States, Canada, and Mexico as a threatened species. This rule, if finalized, will add the western yellow-billed cuckoo to the list of endangered or threatened species.

What is the basis for our action? Under the Act and Service policy, we can determine that a species (or a distinct population segment of a vertebrate species) is an endangered or threatened species based on any of five factors: (A) The present or threatened destruction, modification, or curtailment of its habitat or range; (B) overutilization for commercial, recreational, scientific, or educational purposes; (C) disease or predation; (D) the inadequacy of existing regulatory mechanisms; or (E) other natural or manmade factors affecting its continued existence. We reviewed all available scientific and commercial information pertaining to the five threat factors in our evaluation of each species.

We have determined that the western yellow-billed cuckoo is threatened by two of these five factors (A and E). We consider Factors A and E to be the main threats to the species.

Factor A threats result from habitat destruction, modification, and degradation from dam construction and

operations; water diversions; riverflow management; stream channelization and stabilization; conversion to agricultural uses, such as crops and livestock grazing; urban and transportation infrastructure; and increased incidence of wildfire. These factors also contribute to fragmentation and promote conversion to nonnative plant species, particularly tamarisk. The threats affecting western yellow-billed cuckoo habitat are ongoing. Such a loss of riparian habitat leads not only to a direct reduction in yellow-billed cuckoo numbers but also leaves a highly fragmented landscape, which can reduce breeding success through increased predation rates and barriers to dispersal by juvenile and adult yellow-billed cuckoos.

Factor E threats, including habitat rarity and small, isolated populations of the western yellow-billed cuckoo, cause the remaining populations in western North America to be increasingly susceptible to further declines through lack of immigration, chance weather events, fluctuating availability of prey populations, pesticides, collisions with tall vertical structures during migration, spread of the introduced tamarisk leaf beetle as a biocontrol agent in the Southwest, and climate change. The ongoing threat of small overall population size leads to an increased chance of local extinctions through random events.

We will seek peer review. We are seeking comments and soliciting information from knowledgeable individuals with scientific expertise to review our analysis of the best available scientific and commercial data and application of that information to improve this proposed rule. Because we will consider all comments and information received during the comment period, our final determinations may differ from this proposal.

Information Requested

We intend that any final action resulting from this proposed rule will be based on the best scientific and commercial data available and be as accurate and as effective as possible. Therefore, we request comments or information from the public, other concerned governmental agencies, Native American tribes, the scientific community, industry, or any other interested parties concerning this proposed rule. We particularly seek comments concerning:

(1) The western yellow-billed cuckoo's biology, range, and population trends, including:

- (a) Habitat requirements for feeding, breeding, and sheltering;
- (b) Genetics and taxonomy;
- (c) Historical and current range including distribution patterns;
- (d) Historical and current population levels, and current and projected trends;
- (e) Past and ongoing conservation measures for the DPS, its habitat, or both;
- (f) Locations of any additional populations of western yellow-billed cuckoo;
- (g) Breeding season data in the mountain ranges of southeastern Arizona and southwestern New Mexico;
- (h) Breeding season data north and south of the United States in Canada and Mexico; and
- (i) Additional morphological and genetic data on yellow-billed cuckoos along the DPS boundary in New Mexico and Texas.

(2) The factors that are the basis for making a listing determination for a species under section 4(a) of the Act, which are:

- (a) The present or threatened destruction, modification, or curtailment of its habitat or range;
 - (b) Overutilization for commercial, recreational, scientific, or educational purposes;
 - (c) Disease or predation;
 - (d) The inadequacy of existing regulatory mechanisms; or
 - (e) Other natural or manmade factors affecting its continued existence.
- (3) Biological, commercial trade, or other relevant data concerning any threats (or lack thereof) to the western yellow-billed cuckoo, and regulations that may be addressing those threats.
- (4) Any information on the biological or ecological requirements, and ongoing conservation measures for the western yellow-billed cuckoo and its habitat including but not limited to any changes in dam operations that may benefit the species or its habitat.

(5) Current or planned activities in the areas occupied by the western yellow-billed cuckoo, and possible impacts of these activities on the species or its habitat.

(6) Information on the projected and reasonably likely impacts of climate change on the western yellow-billed cuckoo and its habitat.

Please include sufficient information with your submission (such as scientific journal articles or other publications) to allow us to verify any scientific or commercial information you include.

Please note that submissions merely stating support for or opposition to the action under consideration without providing supporting information, although noted, will not be considered

in making a determination, as section 4(b)(1)(A) of the Act directs that determinations as to whether any species is a threatened or endangered species must be made “solely on the basis of the best scientific and commercial data available.”

You may submit your comments and materials concerning this proposed rule by one of the methods listed in the **ADDRESSES** section. We request that you send comments only by the methods described in the **ADDRESSES** section.

If you submit information via <http://www.regulations.gov>, your entire submission—including any personal identifying information—will be posted on the Web site. If your submission is made via a hardcopy that includes personal identifying information, you may request at the top of your document that we withhold this information from public review. However, we cannot guarantee that we will be able to do so. We will post all hardcopy submissions on <http://www.regulations.gov>.

Comments and materials we receive, as well as supporting documentation we used in preparing this proposed rule, will be available for public inspection on <http://www.regulations.gov>, or by appointment, during normal business hours, at the U.S. Fish and Wildlife Service, Sacramento Fish and Wildlife Office (see **FOR FURTHER INFORMATION CONTACT**).

Previous Federal Actions

On February 9, 1998, we received a petition from the Southwest Center for Biological Diversity (Center for Biological Diversity) on behalf of 22 groups to list the yellow-billed cuckoo under the Act. The petitioners stated that they believe the yellow-billed cuckoo “is endangered in a significant portion of its range (the western United States).” The petitioners also stated they “believe this range of endangerment is coterminous with a valid subspecies, the western yellow-billed cuckoo (*Coccyzus americanus occidentalis*),” and that they would concur with a decision to list this taxon. Petitioners also requested that critical habitat be designated for the yellow-billed cuckoo concurrent with the listing, pursuant to 50 CFR 424.12 and the Administrative Procedure Act (5 U.S.C. 553). The petition included supporting information on the species relating to taxonomy, ecology, adequacy of existing regulatory mechanisms, historical and present distribution, current status, and threats in the western United States.

On February 17, 2000, we announced a 90-day petition finding in the **Federal Register** (65 FR 8104) concluding that the petition presented substantial

scientific or commercial information to indicate that further investigation, through a status review, was required to determine the taxonomic validity of a western subspecies, and to determine if listing the western population of the yellow-billed cuckoo as a DPS may be warranted. In our finding, we noted that the petition did not present sufficient information to indicate that listing of the species as a whole may be warranted.

On July 25, 2001, we published a 12-month petition finding in the **Federal Register** (66 FR 38611) concluding that the yellow-billed cuckoo populations west of the Continental Divide constituted a valid DPS and that the DPS was warranted for listing; however, this action was precluded by higher priority listing actions, and the DPS was placed on our candidate species list. The range of the DPS was identified to include at least portions of 12 western States west of the crest of the Rocky Mountains, with the Canadian and Mexican borders constituting the northern and southern boundaries respectively. On October 30, 2001, a list of new candidate species included the yellow-billed cuckoo, western continental United States DPS, giving it a listing priority number of 6 based on non-imminent threats of high magnitude (66 FR 54810, 54818) as defined by our policy on determining listing priorities (48 FR 43098; September 21, 1983). In the 2005 candidate notice of review document (70 FR 24875; May 11, 2005), the listing priority number was upgraded from 6 to 3 based on reassessing the nature of the threats as imminent and of a high magnitude. The 2011 notice indicated that preparation of a listing rule was under way (76 FR 66391; October 26, 2011).

On July 12, 2011, a court settlement, *Center for Biological Diversity v. Salazar*, 10-cv-0230 required the Service to submit to the **Federal Register** for publication either a proposed rule or a not-warranted finding for the western yellow-billed cuckoo on or before September 30, 2013.

Background

In this section of the proposed rule, it is our intent to discuss only those topics directly relevant to the proposed listing of the yellow-billed cuckoo in the western portions of the United States, Canada, and Mexico as a threatened DPS.

Species Information

The yellow-billed cuckoo (*Coccyzus americanus*) is a member of the avian family Cuculidae and is a Neotropical migrant bird that winters in South

America and breeds in North America. Yellow-billed cuckoos spend the winter in South America, east of the Andes, primarily south of the Amazon Basin in southern Brazil, Paraguay, Uruguay, eastern Bolivia, and northern Argentina (Ehrlich *et al.* 1992, pp. 129–130; AOU 1998, p. 247; Johnson *et al.* 2008b, pp. 18–29). The breeding range of the entire species formerly included most of North America from southeastern and western Canada (southern Ontario and Quebec and southwestern British Columbia) to the Greater Antilles and northern Mexico (AOU 1957, pp. 269–270; AOU 1983, p. 284; AOU 1998, p. 247).

Adult yellow-billed cuckoos have moderate to heavy bills, somewhat elongated bodies, and a narrow yellow ring of colored bare skin around the eye. The plumage is loose and grayish-brown above and white below, with reddish primary flight feathers. The tail feathers are boldly patterned with black and white below. They are a medium-sized bird about 12 inches (in) (30 centimeters (cm)) in length, and about 2 ounces (oz) (60 grams (g)) in weight. The species has a slender, long-tailed profile, with a fairly stout and slightly down-curved bill, which is blue-black with yellow on the basal half of the lower mandible. The legs are short and bluish-gray. Yellow-billed cuckoos have a zygodactyl foot, in which two toes point forwards and two toes point backwards. Juveniles resemble adults, except the tail patterning is less distinct and the lower bill has little or no yellow. Males and females differ slightly; the males have a slightly smaller body size, smaller bill, and the white portions of the tail tend to form distinct oval spots. In females the white spots are less distinct and tend to be connected (Hughes 1999, pp. 2–3).

Typically a secretive and hard-to-detect bird, mated yellow-billed cuckoos have a distinctive “kowlp” call, which is a loud, nonmusical series of notes that slows down and slurs toward the end. Unmated yellow-billed cuckoos advertise for a mate using a series of soft “cooing” notes. Both members of a pair use the “knocker” call, a series of soft notes given as a contact or warning call near the nest (Hughes 1999, pp. 8–9).

Little information exists on lifespan for yellow-billed cuckoos, which is a result of the scarcity of banded yellow-billed cuckoos and a very low recovery rate (0.4 percent) (Hughes 1999, p. 18). The longest known lifespan of a banded yellow-billed cuckoo is 5 years (U.S. Geological Survey (USGS) Patuxent Wildlife Research Center 2012, p. 1).

Taxonomy

The separation of yellow-billed cuckoos into subspecies was first discussed by Ridgway (1887, p. 273) who separated the yellow-billed cuckoo into an eastern (*Coccyzus americanus americanus*) and western (*C. a. occidentalis*) subspecies, based on western birds being “larger, with proportionately larger and stouter bill.” Ridgway’s western subspecies included birds from western Texas through the Great Basin portions of Colorado and Wyoming, west and north to the Pacific coast and southwestern British Columbia. Historically the western subspecies was known as the California cuckoo (Ridgway 1887, p. 273; Belding 1890, p. 57) or California yellow-billed cuckoo (Grinnell and Miller 1944, pp. 186–187). Recently, in the literature, it has been called the western yellow-billed cuckoo, a name we are using in this document to refer to the DPS. Wetmore (1968, pp. 325–326) added that western yellow-billed cuckoos are slightly grayer above, and eastern yellow-billed cuckoos are browner. Oberholser and Kincaid (1974, pp. 434–435) concurred with Ridgway and split the subspecies’ range in western Texas between the Rio Grande and the Pecos Rivers, west of Big Bend. The two subspecies were generally included in ornithological treatments through the 1970s (for example, American Ornithologists’ Union (AOU) 1957, pp. 269–270; Oberholser and Kincaid 1974, pp. 434–435).

Some ornithologists have questioned the separation of the yellow-billed cuckoo into two subspecies (Todd and Carriker 1922, pp. 209–213; Swarth 1929, pp. 297–298; Van Tyne and Sutton 1937, p. 35; Bent 1940, p. 67), citing the small magnitude and inconsistency of differences and broad overlap in size between eastern and western birds. These questions, however, were not based on systematic analysis of geographical variation as it pertains to resolving the yellow-billed cuckoo subspecies question. Since 1957, AOU checklists, the recognized authority for taxonomy of North American birds, have not listed subspecies, stating practical grounds (for example, space limitations), and that the validity (in the sense of their distinguishability) of many described avian subspecies still needs to be evaluated, as does the potential for unrecognized subspecies (AOU 1983, p. 284; AOU 1998, pp. 1–19). The most recent checklist (AOU 1998, pp. 1–19) refers readers to the 1957 checklist (AOU 1957, pp. 269–270) for subspecies taxonomy, which presents the yellow-

billed cuckoo as comprising two separate subspecies.

In response to a 1986 petition (52 FR 2239; January 21, 1987) to list the yellow-billed cuckoo in the States of California, Washington, Oregon, Idaho, and Nevada, we requested that Dr. Richard C. Banks, an avian taxonomist and Fish and Wildlife Service employee at the National Museum of Natural History, evaluate the validity of the subspecies. Dr. Banks compared three morphological characteristics (bill length, depth of upper mandible, and wing length) of almost 700 specimens of adult yellow-billed cuckoos from throughout the species’ range and visually examined the colors of specimens. He found: (1) No pattern of geographical variation in color; (2) substantial overlap between eastern and western birds in wing length, bill length, and mandible depth; and (3) no statistically significant differences for these three characteristics. He concluded that the data did not justify the separation into eastern and western subspecies (Banks 1988, pp. 473–477). Subsequently, statistical errors were discovered in Banks’ study (Spiller 1988, pp. 1–3), and a reanalysis of the same data yielded statistically significant differences ($p < 0.001$) between eastern and western yellow-billed cuckoos for the three characteristics measured by Banks. Dr. Banks published a correction to his earlier paper (Banks 1990, p. 538), acknowledging the computational error and stating that the “statistical difference cannot be equated to a biological or practical difference.” In support of this, he cited the small differences between mean measurements, the large degree of overlap between eastern and western birds in the ranges of measurements for the three characteristics he measured, and the sensitivity of the statistical procedure to detect very small differences as “significant,” given the large sample sizes. His conclusion that the species was monotypic remained unchanged (Banks 1990, p. 538).

Dr. Banks later provided his data to two avian ecologists (Franzreb and Laymon 1993, pp. 17–28), who analyzed the same data set, supplemented by measurements from an additional 41 specimens of western birds and the inclusion of a fourth characteristic, tail length. Franzreb and Laymon (1993, pp. 17–28), noting statistical errors by Banks (1988, pp. 473–477), found that western birds are larger than eastern birds. They developed a discriminant function analysis (DFA) equation that correctly predicted origin for 83.8 percent of eastern male and 74.6 percent of

western male yellow-billed cuckoos, and for 89.6 percent of eastern and 85.8 percent of western female yellow-billed cuckoos. These predictive DFA equations have been accepted as a useful tool to separate the eastern and western populations by several researchers (Pyle 1997, pp. 56–57; Hughes 1999, p. 23; and Pruett *et al.* 2001, p. 229). Franzreb and Laymon (1993, pp. 17–28) also analyzed behavioral and ecological differences between western and eastern birds, and found differences in the timing of migration and breeding, with western birds arriving on breeding grounds later and laying eggs later than eastern birds at the same latitude. They concluded that: (1) The recognition of subspecies on the basis of measurements of existing specimens is equivocal; (2) the study of geographical variation in vocalizations, bill color, and genetics was needed; (3) the two subspecies should be retained pending the above studies; and (4) “because the western yellow-billed cuckoo is so critically endangered . . . changes in its taxonomic classification should be made only after the best possible study.”

In 2001, two separate research labs conducted studies on the genetic differences between eastern and western yellow-billed cuckoos (Fleischer 2001, pp. 14–16; Pruett *et al.* 2001, pp. 228–231), reaching different conclusions regarding the taxonomic status of yellow-billed cuckoos from the two regions. Fleischer examined two neutral regions of the mitochondrial DNA (Control Region and ATPase subunit 8 regions) and found no genetic structure that separated eastern from western yellow-billed cuckoos, or supported subspecies or evolutionarily significant unit (for example, a species, a subspecies, or a distinct population) status for the species. He did suggest that an examination of markers with higher mutation rates (for example, microsatellites) might reveal significant genetic structure and suggested that microsatellite studies be conducted.

Pruett *et al.* (2001, p. 229) examined a different region of the mitochondrial DNA (cytochrome b), and came to a different conclusion from Fleischer. They found substantial differences between the two subspecies, and concluded that they were genetically distinct and had diverged 205,000 to 465,000 years ago. They concluded that the western yellow-billed cuckoo was an evolutionarily significant unit, probably at the subspecies level, and that these results were particularly significant because the differences were found on a gene that codes for a protein important in cell respiration, not a

neutral zone, meaning that the differences were derived through selective evolutionary pressure rather than chance events. However, their study was done with a very small sample of specimens that did not cover the range of either the eastern or western yellow-billed cuckoo.

Although mitochondrial analyses are routinely used in phylogenetic studies, they have well-known limitations, sometimes lumping taxa that are different or separating taxa that are the same (Funk and Omland 2003, p. 403). Farrell (2006, pp. 9–32) reexamined the subspecies status of western yellow-billed cuckoo mitochondrial DNA with a larger geographic distribution of samples representative of overall species range with focused sampling effort on the zones of contact between the eastern and western populations. Farrell's (2006, pp. 33–44) results revealed only limited genetic divergence between eastern and western populations of yellow-billed cuckoo and concluded that the sequences used were not sufficiently variable to detect genetic differentiation within this species. Genetic markers such as microsatellites in nuclear DNA are ideal for population studies and preferable over mitochondrial DNA sequence analysis due to their higher mutation rates and additional information content. These studies, when conducted, may provide a better understanding of genetics and geography variation in yellow-billed cuckoo populations (Hailer *et al.* 2012, pp. 346–347).

However, Hughes (1999, pp. 1–27) concluded that size alone was sufficient to separate the subspecies, and that the discriminant function analysis equations developed by Franzreb and Laymon (1993, pp. 17–28), and used by Pyle (1997, pp. 56–57), worked to identify individuals to subspecies level. She also concluded that: (1) The size differences between the subspecies in western Texas and southern New Mexico, the closest distance between eastern and western yellow-billed cuckoos, were not gradual east to west and the change in size was too abrupt to be clinal; (2) the difference in timing of migration and breeding “must have evolved independently for some time;” and (3) the eastern and western yellow-billed cuckoos were different taxa, probably at the subspecies level (Hughes 2000, pp. 1–2).

In summary, the available genetic data regarding the distinguishability of the western subspecies of the yellow-billed cuckoo is conflicting. Since 2001, three genetic studies have been completed on the yellow-billed cuckoo using

mitochondrial DNA. Two of the studies did not and one study did find significant differences between eastern and western populations of the species. The reason for the inconsistency is not known. It is possible that future research using microsatellite markers that have higher mutation rates rather than the slowly evolving mitochondrial DNA would better determine more subtle genetic differences. Because of these inconsistencies the available genetic data are not considered sufficient to distinguish the subspecies. However, a large majority of yellow-billed cuckoo individuals can be grouped into separate population segments along an east-west divide by comparing morphological data. Similarly, genetically controlled behavior, especially migration timing, also appears to separate the species into two populations segments along an east-west divide.

Thus, our review of the best scientific and commercial data available indicates that some information suggests that the western population segment described in the scientific literature as the western yellow-billed cuckoo (*Coccyzus americanus occidentalis*) is distinguishable at the subspecific level; however, there is enough equivocality in the literature to conclude for the purposes of this proposed rule that recognition of the subspecies is not justified at this time. In the 12-month finding (66 FR 38611), we determined that the population segment of the yellow-billed cuckoo that nests in the portion of the United States west of the Continental Divide is a DPS under the Act per our 1996 DPS Policy. Because it has been more than a decade since we conducted that analysis, it is appropriate to reevaluate the available data, including any new information, to determine whether the population segment of yellow-billed cuckoos that nest in western North America is a DPS under the Act. This evaluation is presented below.

Distinct Vertebrate Population Segment Analysis

Under the Act, we must consider for listing any species, subspecies, or, for vertebrates, any DPS of these taxa if there is sufficient information to indicate that such action may be warranted. To implement the measures prescribed by the Act and its Congressional guidance, we (along with the National Marine Fisheries Service) developed policy that addresses the recognition of DPSs for potential listing actions (61 FR 4721; February 7, 1996). The policy allows for more refined application of the Act that better reflects

the biological needs of the taxon being considered, and avoids the inclusion of entities that do not require its protective measures.

Before we can evaluate whether a given population segment is a DPS under the Act, we must first determine if any population segments exist for the vertebrate species. As discussed in the Taxonomy section above, much of the available scientific information supports considering the yellow-billed cuckoos that nest in western and eastern North America as biologically separate population segments.

To establish the range of the population segment under consideration, we used the area occupied by the western yellow-billed cuckoo (the subspecies) originally defined by Ridgway (1887, p. 273) and later refined by other researchers (AOU 1957, pp. 269–270; Oberholser and Kincaid 1974, pp. 434–435; Hughes 1999, Figure 1). After careful consideration of other possible

population segment configurations, we determined that the Continental Divide (generally the crest of the Rocky Mountains based on watershed boundaries), the watershed divide between the Rio Grande and Pecos River, and the Chihuahuan Desert in Mexico was the best division between eastern and western populations. The area that we are considering occupied by the potential DPS for the yellow-billed cuckoo is closely aligned with the traditionally defined range of the western yellow-billed cuckoo subspecies as partially described in the July 25, 2001, 12-month finding (66 FR 38611). Our goal is to determine if this western population meets the criteria of a distinct population segment and, if so, whether the range boundaries identified in the literature are appropriate for the boundary of the DPS. This DPS analysis is based solely on the range during the breeding season because the migration route and winter range of western

yellow-billed cuckoos are poorly known.

The geographical breeding range of the yellow-billed cuckoo in western North America includes suitable habitat within the low- to moderate-elevation areas west of the crest of the Rocky Mountains in Canada and the United States including the upper and middle Rio Grande, the Colorado River Basin, the Sacramento and San Joaquin River systems, the Columbia River system, and the Fraser River. In Mexico the range includes the Cape Region of Baja California Sur, and river systems in the Mexican States of Sonora, Sinaloa, western Chihuahua, and northwestern Durango. Eastern yellow-billed cuckoos (*Coccyzus americanus americanus*) breed east of the Rocky Mountains, north to North Dakota and southern Ontario, Canada, and south to eastern Mexico, and the islands of the Caribbean (AOU 1957, pp. 269–270) (Figure 1).

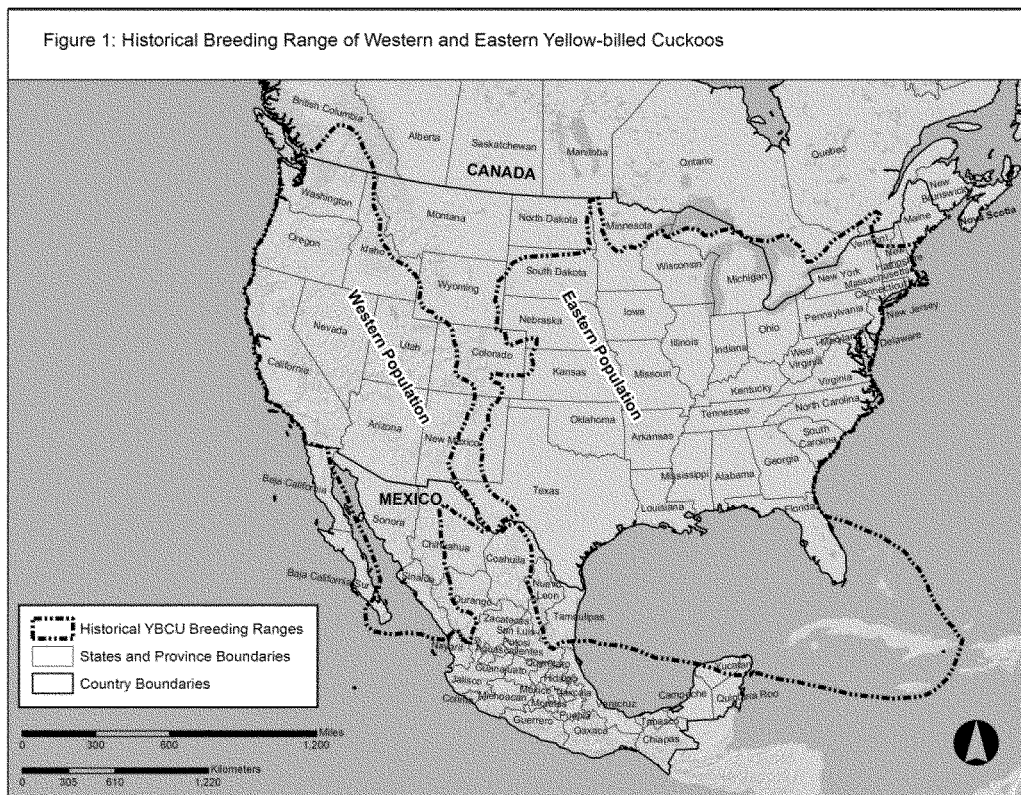


Figure 1. Historical Breeding Range of Eastern and Western Yellow-billed Cuckoos

based on American Ornithological Union's 1957 Checklist.

Under our DPS policy, three elements are considered in a decision regarding the status of a possible DPS as

endangered or threatened under the Act. The elements are: (1) Discreteness of the population segment in relation to the

remainder of the species to which it belongs; (2) the significance of the population segment to the species to

which it belongs; and (3) the population segment's conservation status in relation to the Act's standards for listing. In other words, if we determine that a population segment of a vertebrate species being considered for listing is both discrete and significant, we would conclude that it represents a DPS, and thus a "species" under section 3(16) of the Act, whereupon we would evaluate the level of threat to the DPS based on the five listing factors established under section 4(a)(1) of the Act to determine whether listing the DPS as an "endangered species" or a "threatened species" is warranted.

Below, we evaluate under our DPS policy whether the population segment of yellow-billed cuckoos that occurs in the western United States, northwestern Mexico, and southwestern Canada qualifies as a DPS under the Act.

Discreteness

Under our DPS Policy, a population segment of a vertebrate species may be considered discrete if it satisfies either of the following two conditions: (1) It is markedly separated from other populations of the same taxon as a consequence of physical, physiological, ecological, or behavioral factors (quantitative measures of genetic or morphological discontinuity may provide evidence of this separation); or (2) it is delimited by international governmental boundaries within which significant differences in control of exploitation, management of habitat, conservation status, or regulatory mechanisms exist that are significant in light of section 4(a)(1)(D) of the Act.

The analysis of the population segment of the yellow-billed cuckoo in western North America is based on the first of those two conditions, the marked separation from other populations. From southwest British Columbia along the Canadian border to the southern end of the Sangre de Cristo Mountains in northern New Mexico, nesting yellow-billed cuckoos in western North America are separated from nesting yellow-billed cuckoos in eastern North America by the high-elevation zone of the Rocky Mountains. Yellow-billed cuckoos breed both east and west of the crest of the Rocky Mountains, where suitable habitat occurs (Johnsgard 1986, p. 201) (we define the crest of the Rocky Mountains and Continental Divide as the high elevation zone between the drainages flowing west and east in the U.S., Canada, and Mexico). The division between the western and eastern population segments spans a distance of about 2,200 miles (mi) (3,540 kilometers (km)) from southwest British Columbia near the Canadian border along the crest

of the Rocky Mountains based on watershed boundaries, south along the Rio Grande-Pecos Rivers watershed divide to the United States-Mexico border in the Big Bend area of Texas, then into Mexico along the eastern and southern boundaries of the State of Chihuahua south to the southern border of the State of Durango and to the Pacific Ocean along the southern border of the State of Sinaloa. The distance of separation between breeding yellow-billed cuckoos in the east and west varies along this division from 160 mi (257 km) to more than 400 mi (644 km), and consists entirely of areas of unoccupied, unsuitable habitat for breeding yellow-billed cuckoos. The one exception to this distance of separation is along the Rio Grande in southwestern Texas in Brewster County, where eastern yellow-billed cuckoos breed as far west as Rio Grande Village and western yellow-billed cuckoos are found upstream along the river approximately 50 mi (80 km) to the west.

Yellow-billed cuckoos historically bred at the southern tip of Vancouver Island and in the Fraser River valley north to Kamloops in southwestern British Columbia, Canada (Bent 1940, p. 64; Campbell *et al.* 1990, p. 481). The species was apparently never common, with 23 records (18 specimen and 5 sight records) between 1881 and 1927. Two of these observations were of pairs believed to be nesting but not confirmed. Since the 1920s, the species has been recorded five times in British Columbia, with four of those records occurring since 1990 from the eastern half of the Province in areas not considered breeding habitat (Campbell *et al.* 1990, p. 481; Siddle 1992, p. 1169; Cornell Lab of Ornithology 2012). Today, the species is considered extirpated as a breeder from the Province, but adult, nonbreeding individuals still occur irregularly (British Columbia Conservation Data Centre 2013).

In the northern Rocky Mountains and northern Great Plains—from the Canada border south through Colorado—the yellow-billed cuckoo is "extremely rare and local" as a breeding bird both east and west of the Rocky Mountains (Hughes 1999, p. 3). While the species breeds locally in river valleys in southern Idaho, southwestern Wyoming, western Colorado, and in Utah (Hughes 1999, pp. 1–3), it is quite rare or absent within the higher Rocky Mountains (Johnsgard 1986, p. 201). An examination of the distributional records for the Rocky Mountain region indicates that the area has had few records of yellow-billed cuckoos and the species is even scarcer at elevations

above approximately 6,000 feet (ft) (1,850 meters (m)), and almost never breeds above 7,000 ft (2,154 m) (Bailey 1928, pp. 307–309; Phillips *et al.* 1964, p. 45; Bailey and Niedrach 1965, pp. 404–406; Johnsgard 1986, p. 201; Corman and Magill 2000, pp. 10, 15; Howe and Hanberg 2000, p. 1–20). Exceptions to the elevational limit do occur and recent records of yellow-billed cuckoos have been confirmed above 6,000 ft (1,850 m) in the areas of Lower Green River Basin from the Seedsdakee National Wildlife Refuge (NWR) to the Flaming Gorge Reservoir and west to the Bear River Drainage in Wyoming; along the Yampa River near Craig in northwest Colorado, and the Rio Grande River near Del Norte, and San Luis Valley of south-central Colorado; and the Henry's Fork River in Utah and Wyoming. Nevertheless, most of the crest of the Rocky Mountains includes a wide region of higher elevation where habitat for the species does not occur. In Colorado and Wyoming the region above 6,000 ft (1,850 m) is typically more than 150 mi (240 km) wide on an east-west axis (Oxford 1995, p. 82).

The separation of the yellow-billed cuckoo western population segment from yellow-billed cuckoos in the eastern population segment continues south along the crest of the Rockies into southern Colorado and northern New Mexico, then the Rocky Mountains end and the separation is along the watershed boundary between the Rio Grande and the Pecos Rivers in central New Mexico (Sangre de Cristo Mountains), and southwest Texas, terminating at the Rio Grande in the Big Bend National Park. In this region, the eastern and western yellow-billed cuckoo populations are separated by arid basins and isolated mountain ranges that emerge from a high desert plateau. These mountain ranges from north to south include the Sangre de Cristo Mountains and Sacramento Mountains in central and southern New Mexico, the Guadalupe Mountains and Delaware Mountains on the Texas-New Mexico border, and the Davis Mountains, Del Norte Mountains, and Santiago Mountains in western Texas south to the Chisos Mountains in the Big Bend National Park on the border with Mexico.

In southern New Mexico and western Texas where western yellow-billed cuckoos nest along the Rio Grande and eastern yellow-billed cuckoos nest along the Pecos River, the geographical separation is as little as 160 mi (257 km) and even closer along the Rio Grande (50 mi; 80 km). The closer proximity of western and eastern yellow-billed

cuckoos in this region may be caused in part by the lower height of the mountain range being a less effective barrier (Hubbard 1978, p. 32; Howe 1986, p. 2). Historically, this gap was wider, because the banks of the Pecos River did not have riparian woodland and the area was not used by the species. Today, the riverine habitat along the Pecos River consists primarily of introduced tamarisk (*Tamarix* spp.), and it is thought that yellow-billed cuckoos from eastern North America have colonized the Pecos River system. Much of the area between the Pecos River and the Rio Grande in New Mexico and Texas consists of internal ephemeral drainages that are not connected to any major river systems and have no riparian habitat. Considering these factors along with the information on physical factors, we have included Texas west of the Rio Grande–Pecos River watershed boundary within the range of the western population. This physical division coincides with behavioral differences between eastern and western yellow-billed cuckoos, as discussed below.

South of the United States–Mexico border, yellow-billed cuckoos are separated by extensive areas of desert that lack suitable nesting and foraging habitat. In Mexico, the Chihuahuan Desert widens to 350 mi (563 km), and includes nearly all of the States of Chihuahua and Coahuila. There are very few records of yellow-billed cuckoos for this region, and we are not aware of any nesting records for either State. Suitable breeding habitat or connective riparian corridors are also lacking. Published range maps for the species do not include the eastern three-quarters of Chihuahua or the western three-quarters of Coahuila as part of the species' breeding range (Howell and Webb 1995, p. 347; Hughes 1999, p. 1). There are only 12 records of yellow-billed cuckoos from Chihuahua: 11 specimens from the 1940s to 1960 and a sight observation in 2003. There are only nine records of the species from Coahuila: six specimen and three sight records (1958, 1988, and 2011). Three of the specimens from Coahuila were identified as eastern yellow-billed cuckoos on their museum records, and the remainder were not identified to subspecies. Seven specimens from Chihuahua were identified to subspecies and six of these were considered the western subspecies. It is likely that many, if not most, of the records from this region are of migrating yellow-billed cuckoos, as 16 are from May to mid-June or from late September, and only 5 are from late

June or July, the primary breeding season.

From this information we concluded that the Chihuahua–Coahuila border was the most biologically reasonable boundary for the population segment. The boundary then follows the southern border of Chihuahua west to the Continental Divide, then south along the divide through the State of Durango and west along the southern border of Durango and Sinaloa. There are no breeding season records for yellow-billed cuckoos from the State of Nayarit or Jalisco or farther south along the Pacific coast of Mexico. The species has occurred sporadically in the State of Zacatecas, but the records are from east of the Continental Divide.

Eastern and western yellow-billed cuckoos are highly migratory and the two populations may spend winters in overlapping regions in South America. However, we do not have information to indicate that there is anything more than an extremely low level of interchange (if any at all) between the two populations during the breeding season. This conclusion is supported by differences in habitat use and morphology, which are genetically controlled traits, as discussed in the following sections.

Although the Rocky Mountains and the Chihuahuan Desert may not wholly prevent movement of yellow-billed cuckoos between the east and west, especially in a migratory species that winters far to the south, and moves thousands of miles between its wintering and breeding grounds, the available information indicates that this mountain range and desert substantially separates yellow-billed cuckoo populations during the breeding season thereby effectively separating them into discrete populations. The separation between yellow-billed cuckoo population segments in the east and west is a physical one that is maintained by their behavioral differences, which we discuss below.

Behavioral Discreteness

Data collected from publications and other sources demonstrate the existence of behavioral differences between yellow-billed cuckoos in the east and west.

Yellow-billed cuckoo populations in the east and west differ in the timing of arrival on the breeding grounds in the spring. Yellow-billed cuckoos in western North America arrive on the breeding grounds 4 to 8 weeks later than eastern yellow-billed cuckoos at similar latitude (Franzreb and Laymon 1993, pp. 24–25; Hughes 1999, pp. 5–6, 12–13; Laymon 2000, *in litt.*, pp. 15–16).

Timing of spring migration and arrival on the breeding grounds has been determined to be the result of an evolved response under genetic control, and is likely caused by east-west climatic, habitat, and food availability differences (Cresswell *et al.* 2011, pp. 13–15). The watershed boundary between the Rio Grande and the Pecos Rivers also appears to separate yellow-billed cuckoos that arrive in spring migration earlier on the Pecos River and those that arrive later on the Rio Grande in addition to separating morphological differences.

Information, including timing of migration, indicates that yellow-billed cuckoos from Texas west of the Pecos River (from the Rio Grande upstream of Big Bend) and from northwestern Mexico (Chihuahua, Sonora, Sinaloa, Durango, Baja California Sur) exhibit greater similarity to yellow-billed cuckoos in western North America, and those on the Pecos River in Texas and eastern Mexico (Coahuila, Nuevo Leon, Tamaulipas, San Luis Potosi) are more similar to yellow-billed cuckoos in the east (Wauer 1971, p. 96; Oberholser and Kincaid 1974, pp. 434–435; Franzreb and Laymon 1993, pp. 17–28; Hughes 2000, pp. 1–2, 26; Sproul 2001, *in litt.*, pp. 1–5). Based on the best available science, the watershed boundary between the Rio Grande and Pecos Rivers is the optimum dividing line between eastern and western yellow-billed cuckoo in this area.

Based on migration timing, yellow-billed cuckoos split into two populations. This split occurs along the line that corresponds with the traditional subspecies boundary (see Figure 1).

Discreteness Conclusion

The available information indicates that the yellow-billed cuckoo population segment that occurs west of the Continental Divide in the United States, in southwestern Canada, and in northwestern Mexico is markedly separated from the eastern population segment of yellow-billed cuckoo, including those that nest in eastern North America, eastern Mexico, certain Caribbean Islands, and the Yucatan Peninsula. The distribution of the western populations is markedly separated physically (geographically) during the breeding season from the distribution of other yellow-billed cuckoo populations by high mountains, extensive desert, or nonhabitat areas with the shortest geographical separation occurring across 160 mi (257 km) of desert between the Pecos River and Rio Grande in southern New Mexico and western Texas. Evidence

that this geographical separation between populations has been consistent through time may be found in the differences in the two populations' biology and morphology. Even in this area of closest proximity, genetically controlled behavior available in the scientific literature provides evidence of a biological separation between the western populations and eastern populations.

Under our DPS policy, the standard for discreteness does not require absolute separation because this can rarely be demonstrated for any population of organism. The standard for discreteness is simply a mechanism for the entity being considered for a DPS to be defined and described. For the yellow-billed cuckoo populations in western North America, we have met this standard, and, therefore, we consider the western population segment of the yellow-billed cuckoo from southern British Columbia, Canada south along the Continental Divide in the United States into Mexico, and ending at the coast in the State of Sinaloa, Mexico, to be discrete per our DPS policy. We conclude that the western population segment of the yellow-billed cuckoo is discrete from the remainder of the species because the yellow-billed cuckoo population segment that nests west of the Continental Divide and in northwestern Mexico is markedly separated geographically and behaviorally from all other populations of yellow-billed cuckoo, including those that nest in eastern North America.

Significance

Under our DPS policy, once we have determined that a population segment is discrete, we consider its biological and ecological significance to the larger taxon to which it belongs. Our DPS policy provides several potential considerations that may demonstrate the significance of a population segment to the remainder of its taxon, including: (1) Evidence of the persistence of the discrete population segment in an ecological setting unusual or unique for the taxon, (2) evidence that loss of the discrete population segment would result in a significant gap in the range of the taxon, (3) evidence that the population segment represents the only surviving natural occurrence of a taxon that may be more abundant elsewhere as an introduced population outside its historic range, or (4) evidence that the discrete population segment differs markedly from the remainder of the species in its genetic characteristics.

We have found substantial evidence that two of these four significance

criteria (numbers 2 and 4) are met by the discrete population segment of yellow-billed cuckoos that occurs west of the Continental Divide. We address these significance factors below as they relate to the population segment of yellow-billed cuckoos that nests west of the Continental Divide and in northwestern Mexico. We focus on whether the loss of this population segment would result in a significant gap in the range of the taxon and evidence that the discrete population segment differs from other population segments in its genetic characteristics in demonstrating significance of the DPS.

Evidence indicates that loss of the discrete population segment would result in a significant gap in the range of the taxon. An extensive area would be without yellow-billed cuckoos if the western population segment were lost. Seven entire states and substantial portions of five additional states in the United States, and six states in Mexico, that are currently occupied would have no breeding populations of the species. Bird migration experts divide the North American continent into four migratory flyways: the Atlantic, Mississippi, Central, and Pacific. The range of the yellow-billed cuckoo west of the Rocky Mountains covers the entire Pacific flyway and half of the Central flyway. Additionally, the range of the yellow-billed cuckoo west of the Rocky Mountains covers 1,350,000 square (sq) mi (3,496,500 sq km), or approximately 40 percent of the lower 48 states. Even though the actual area occupied by the species in western North America is less than the total area identified above, the potential loss of the western population of the yellow-billed cuckoo would constitute a significant gap in the range of the species in North America.

Evidence That the Discrete Population Segment Differs Markedly From Other Populations of the Species in Its Genetic Characteristics

Data collected from publications and other sources demonstrate the existence of morphological and physiological differences between yellow-billed cuckoos in the east and west. Morphologically, the yellow-billed cuckoos in western North America are generally larger, with significantly longer wings, longer tails, and longer and deeper bills (Franzreb and Laymon 1993, p. 25). Banks, in a review of the species taxonomic status (1988, pp. 473–477) grouped yellow-billed cuckoo specimens into 19 regional groups, 7 in the western United States and western Mexico, 10 in the eastern United States and eastern Mexico, 1 in New Mexico, and 1 in the Caribbean. He found

yellow-billed cuckoos in the east to be uniform in measurement throughout their range and yellow-billed cuckoos in the west to be uniform in measurements throughout their range (Banks 1988, p. 475). Banks stated that the change from smaller to larger yellow-billed cuckoos appeared to take place in extreme western New Mexico or extreme eastern Arizona (Banks 1988 p. 476). A subsequent analysis, based on available specimens from New Mexico and western Texas, showed the watershed boundary between the Pecos River and the Rio Grande as the apparent boundary between the smaller eastern and larger western birds, with a majority of yellow-billed cuckoos on the Rio Grande above Big Bend being larger western birds (63 percent, n=19) and the majority of yellow-billed cuckoos on the Pecos River being smaller eastern birds (82 percent, n=11) (Franzreb and Laymon 1993, p. 25). This is the only area where the ranges of the western and eastern population segments are in close proximity; elsewhere the two populations are separated by wide expanses of unsuitable, unoccupied habitat (Figure 1).

Other physical and morphological differences exist between yellow-billed cuckoos in the east and west, and provide additional evidence of ecological significance. These include:

- Yellow-billed cuckoos in western North America produce larger eggs (1.2 percent longer, 0.6 percent wider, and 3.2 percent heavier) with thicker eggshells (7.1 percent thicker) (Hughes 1999, p. 14), which is an evolved trait that would help yellow-billed cuckoos in the west to cope with potential higher egg water loss in the hotter, drier conditions of western North America (Hamilton and Hamilton 1965, pp. 426–430; Ar *et al.* 1974, pp. 153–158; Rahn and Ar 1974, pp. 147–152).
- Juvenile yellow-billed cuckoos in the east have yellow bills (Oberholser and Kincaid 1974, pp. 434–435), while juvenile yellow-billed cuckoos in the west have all-black bills (Franzreb and Laymon 1993, p. 26).
- Adult yellow-billed cuckoos in the west have a lower mandible that is orange-yellow, while yellow-billed cuckoos in the east have lower mandibles that are bright yellow (Franzreb and Laymon 1993, p. 26; Laymon 2000, *in litt.*, p. 14).
- As noted previously, adult yellow-billed cuckoos in the west are larger and heavier, on average, than adult yellow-billed cuckoos in the east. More than 80 percent of individuals can be assigned to east or west based on morphological measurements. These differences are discussed above in the “Taxonomy”

section (Oberholser and Kincaid 1974, pp. 434–435; Banks 1988, pp. 473–477; 1990, p. 538; Franzreb and Laymon 1993, pp. 17–28).

Information, including morphology, indicates that yellow-billed cuckoos from Texas west of the Pecos River (from the Rio Grande upstream of Big Bend) and from northwestern Mexico (Chihuahua, Sonora, Sinaloa, Durango, Baja California Sur) exhibit greater similarity to yellow-billed cuckoos in western North America, and those on the Pecos River in Texas and eastern Mexico (Coahuila, Nuevo Leon, Tamaulipas, San Luis Potosi) are more similar to yellow-billed cuckoos in the east (Wauer 1971, p. 96; Oberholser and Kincaid 1974, pp. 434–435; Franzreb and Laymon 1993, pp. 17–28; Hughes 2000, pp. 1–2, 26; Sproul 2001, *in litt.*, pp. 1–5). Based on the best available science, the watershed boundary between the Rio Grande and Pecos Rivers is the optimum dividing line between eastern and western yellow-billed cuckoo in this area.

Based on morphological measurements, bill color of young and adults, egg size and weight, and migration timing, yellow-billed cuckoos split into two populations. This split occurs along the line that corresponds with the traditional subspecies boundary (see Figure 1). Phenotypically expressed traits do present substantial evidence that the western population segment of yellow-billed cuckoo differs markedly from other populations of the species.

However, the strongest evidence of differences between yellow-billed cuckoos in the western population segment and those of the east in genetic characteristics is the difference in timing of migrations. This difference can only have developed as an evolved

trait in response to environmental factors over a long period of time, and thus is genetically linked (Cresswell *et al.* 2011, pp. 13–15). As previously discussed, the difference in size of yellow-billed cuckoos between east and west, as well as differences in size, weight, and shell thickness of eggs, are also evolved genetically linked traits. As stated earlier, researchers have developed methods using these phenotypic (outwardly expressed) traits that correctly predicted separation for nearly 90 percent of yellow-billed cuckoos that were eastern, and up to approximately 86 percent that were western (Franzreb and Laymon 1993, pp. 17–28). Thus, based on the phenotypic traits, there is indirect evidence that the discrete population segment differs markedly from other populations of the species in its genetic characteristics.

Significance Conclusion

The best available information indicates that the discrete yellow-billed cuckoo population segment that nests west of the Continental Divide and in northwestern Mexico is important to the taxon to which it belongs because: (1) Loss of the population segment would leave a significant gap in the species' range (more than one third of the species' range would be vacant); and (2) it differs markedly from other yellow-billed cuckoo populations in morphology (western yellow-billed cuckoos are larger) Therefore, we conclude that the western population segment of the yellow-billed cuckoo is *significant* per our DPS Policy.

DPS Conclusion

Based on the best scientific and commercial data available on distribution as well as behavioral and morphological characteristics of the

species, we have determined that the western population segment of the yellow-billed cuckoo is both discrete and significant per our DPS policy. Therefore, we conclude that the western population segment of the yellow-billed cuckoo is a DPS, and thus a “species” under section 3(16) of the Act. We believe that we used the DPS authority appropriately in our determination of biological and ecological significance because we chose a population segment with a geographical distribution that is biologically meaningful and at an appropriate scope and scale to respond to the petitioners' request.

The term “distinct population segment” is not commonly used in scientific discourse. As such, and in contrast to taxonomically defined species and subspecies, there is no established name for the western distinct population segment of the yellow-billed cuckoo in the available literature; we will refer to this “species” (DPS) as the western yellow-billed cuckoo. The range of the western yellow-billed cuckoo in Canada includes the area of Vancouver Island and along the Fraser River system upstream to Kamloops to the Rocky Mountains west of the Continental Divide. In the United States the DPS includes the area west of the Continental Divide, south through Montana, Wyoming, Colorado, and along the watershed divide between the upper and middle Rio Grande and Pecos Rivers in New Mexico and Texas, south to Big Bend in southwestern Texas, and extending to the states of the west coast. In Mexico, the DPS is the area west of the eastern and southern border of the State of Chihuahua, west of the Continental Divide in the State of Durango, and the southern border of the State of Sinaloa (Figure 2).

Figure 2: Boundary of the Western Distinct Population Segment of the Yellow-billed Cuckoo



Figure 2. Western Yellow-billed Cuckoo distinct population segment boundary.

Status Assessment for the Western Yellow-billed Cuckoo

Distribution

Breeding Range

Based on historical accounts, the western yellow-billed cuckoo was widespread and locally common in California and Arizona, locally common in a few river reaches in New Mexico, locally common in portions of Oregon and Washington, generally local and uncommon in scattered drainages of the arid and semiarid portions of western Colorado, western Wyoming, Idaho, Nevada, and Utah, and probably uncommon and local in southern British Columbia, Canada (AOU 1998, p. 247; Hughes 1999, p. 3). In the past 90 years, the species' range in the western United States has contracted. The northern limit of breeding along the west coast is now in the Sacramento Valley, California, though recent surveys suggest a small, potentially breeding population exists in coastal northern California on the Eel River (AOU 1998, p. 247; Hughes 1999, p. 3; McAllister 2010, pp. 1–2). The current northern

breeding limit in the western interior States is in southeastern Idaho.

Winter Range and Migration Routes

The winter range of the western yellow-billed cuckoo is poorly known. Eastern and western yellow-billed cuckoos may intermingle on the wintering grounds and in migration, or they may have separate wintering areas and migration routes. Data provided by the U.S. Geological Survey (USGS) Biological Resources Division, Bird Banding Laboratory (BBL) from bird band returns to date have been insufficient to determine wintering patterns for the western yellow-billed cuckoo (BBL 1998, *in litt.*, p. 1; USGS 2012, web search). A single western yellow-billed cuckoo from the breeding population on the middle Rio Grande River in New Mexico was recently equipped with a geolocator and recaptured a year later near where it was originally tagged. Data from the geolocator indicated that the yellow-billed cuckoo wintered in eastern Bolivia, southwestern Brazil, Paraguay, and northeastern Argentina, spending 5

months from late November through late April moving around an area 1,243 mi (2,000 km) in length, 373 mi (600 km) in width, and 463,323 sq mi (1.2 million sq km) in extent (Sechrist *et al.* 2012, pp. 2–11). The light level geolocator is a 0.05-oz (1.5-g) recording instrument used to determine flight paths of migrating birds. It records the change in light levels at different latitudes and longitudes, and stores the data. The bird must then be recaptured so the time and location data can be downloaded and analyzed. The extent to which the western yellow-billed cuckoo commingles with eastern yellow-billed cuckoos during migration or while overwintering is unknown. However, because mates are selected on the breeding grounds, commingling in migration or in the winter does not affect the DPS status of the western yellow-billed cuckoo.

Migration routes of the western yellow-billed cuckoo are also poorly known. Miller (1950, p. 83) recorded a migrating flock of yellow-billed cuckoos in the Cape region of Baja California Sur in late May or early June. A fledgling

yellow-billed cuckoo that was banded in the South Fork Kern River Valley in late July 1985 was found dead near Phoenix in early September of the same year (BBL 1998, *in litt.*, p. 2) indicating a southeastern migratory direction. The yellow-billed cuckoo equipped with a geolocator (Sechrist *et al.* 2012, pp. 2–11) traveled from the middle Rio Grande River south to southern Sonora, Mexico, in late July, then back north to the Rio Grande before migrating southeast through central Texas and eastern Mexico in August and September, and Honduras, Panama, and Columbia in October. In November, the bird traveled through the upper Amazon Basin of southern Columbia and western Brazil before flying to its wintering area later in November. During spring migration, the yellow-billed cuckoo moved north into western Brazil in early May, traveling throughout the month through Columbia, Venezuela, and the Caribbean, including Haiti and Jamaica, before arriving on the Yucatan Peninsula in Mexico on June 1. It then flew overland to the lower Rio Grande before moving to the Conchos River in Chihuahua, Mexico, in mid-June, and returned to the middle Rio Grande near its original capture point in early July (Sechrist *et al.* 2012, pp. 2–11).

Life History Parameters

Migration Timing

The western yellow-billed cuckoo generally arrives on its breeding grounds in mid-June. Available data from California, Arizona, and western New Mexico indicate a small number of arrivals in May, but most birds arrive in June and some do not arrive until early July (Gaines and Laymon 1984, pp. 53–58; Hughes 1999, p. 5; Cornell Lab of Ornithology 2012). In late summer, the birds begin their southbound migration in mid-August, and most have left the breeding grounds by mid-September (Gaines and Laymon 1984, pp. 53–58). Migration timing is similar throughout the range of the western DPS (Hughes 1999, p. 5). As mentioned previously, a yellow-billed cuckoo with a geolocator departed its breeding grounds in the middle Rio Grande on August 28, 2009, and arrived back on its breeding ground on June 14, 2010 (Sechrist *et al.* 2012, pp. 2–11).

Breeding Season

The western yellow-billed cuckoo's breeding season varies regionally with the availability of its preferred food. Nesting peaks later (mid-June through August) than in most co-occurring bird species, and may be triggered by an abundance of cicadas (*Cicadidae* sp.),

katydid (*Tettigoniidae* sp.), caterpillars (*Lepidoptera* sp.), or other large prey items that form the bulk of their diet (Hamilton and Hamilton 1965, pp. 427–428; Rosenberg *et al.* 1982, p. 271). On the South Fork Kern River, the primary food items fed to young were caterpillars, tree frogs (*Pseudacris regilla*), katydids, and grasshoppers (*Caelifera* sp.) (Laymon *et al.* 1997, p. 7). In Arizona, cicadas are an important food source (Halterman 2009, p. 112).

In California and Arizona, yellow-billed cuckoos rarely begin nesting before mid-June. Nesting in western North America continues through August, and up to three broods can be raised in a season if the prey base is sufficient (Laymon *et al.* 1997, p. 11; Halterman 2009, p. 77). First egg dates for 104 nests at the South Fork Kern River from 1985 to 2001 ranged from June 6 to August 5, and the peak of the breeding season was between June 21 and July 20, with 82.5 percent of the clutches initiated during that time period (Laymon and Halterman 1985, p. 33; Laymon and Halterman 1986, p. 12; Laymon *et al.* 1987, p. 10; Laymon and Whitfield 1988, p. 6; Laymon *et al.* 1989, p. 9; Laymon 1991, p. 8; Laymon *et al.* 1993, p. 10; Laymon *et al.* 1994, p. 9; Laymon and Williams 1998, p. 6; Laymon and Williams 1999a, p. 7; Laymon and Williams 1999b, p. 7; Laymon and Williams 2001, p. 7; Laymon and Williams 2002, p. 8). Yellow-billed cuckoos may breed at multiple disjunct locations in the same year, with birds nesting in the United States and then nesting again in Sonora, Mexico (Rohwer *et al.* 2009, pp. 19050–19055).

Reproduction

Yellow-billed cuckoos exhibit a variety of reproductive strategies that are thought to increase population recruitment during years with abundant food. Long-term research at the South Fork Kern River in California shows that most pairs (approximately 70 percent) are monogamous during a breeding attempt (Laymon 1998, p. 4). There are instances of communal nesting, with two pairs laying eggs and tending young in the same nest (Laymon 1998, p. 4). In approximately 30 percent of nests, apparently unrelated helper males attend the nest. Yellow-billed cuckoos regularly nest twice during a single breeding season (double brood) and, during years of exceptionally abundant food, have successfully raised three broods in a season. While the male mate tends the young of the first nest, the female can initiate a second clutch either with the same mate or with a new

male (Laymon *et al.* 1997, pp. 6–7; Halterman 2009, p. 114).

Yellow-billed cuckoos build an open cup nest with a loose saucer-shaped stick construction. Both parents build the nest, incubate, and tend the young. Clutch size varies from two to five eggs depending on the available food supply. The incubation and nestling periods are short, with the eggs hatching in 11–12 days and young fledging in 5–7 days. Incubation begins when the first egg is laid and the young hatch asynchronously, with the oldest near fledging while the youngest has just hatched (Hughes 1999, p. 15).

Nesting success is high in comparison to other open-cup nesting birds (Laymon *et al.* 1997, p. 11). On the South Fork Kern River from 1985 to 2001, of 104 nests that were monitored, 92 (88 percent) successfully produced at least one young and 76 percent of eggs laid produced fledged young (Laymon and Williams 2002, p. 8). On the Bill Williams River in western Arizona from 1993 to 2000, of 20 nests that were monitored, 16 (80 percent) successfully produced at least one young and 72 percent of the eggs laid produced fledged young (Halterman 2001, p. 26). Another study on the lower Colorado and Bill Williams Rivers from 2008 to 2011, found that, of 59 nests monitored, 73 percent were successful in fledging at least one young (Bill Williams River, 100 percent; lower Colorado River, 59 percent) (McNeil *et al.* 2012, pp. 49–54). On the San Pedro River in southeastern Arizona from 2001 to 2005, of 83 nests that were monitored, 58 (70 percent) successfully fledged at least one young (Halterman 2002, p. 11; Halterman 2003, p. 11; Halterman 2004, p. 12; Halterman 2005, p. 10; Halterman 2006, pp. 10–11).

Breeding Site Fidelity

Breeding site fidelity, whether yellow-billed cuckoos return to breed in the same area in which they hatched or nested in a previous year, is difficult to study. Banding birds with unique combination of bands is a way for researchers to track individuals through time, allowing them to determine whether an individual has returned to the same area. However, yellow-billed cuckoos often perch in dense foliage and have short legs that are often covered by body feathers, so bands are hard to see. As a result, there is a limited amount of information on site fidelity.

The available data show that adults and nestlings do return to the same or nearby nesting sites in successive years (Laymon 1998, p. 6). For example, along the San Pedro River in Arizona, Halterman (2009, p. 77) re-sighted 5 of

52 (9.6 percent) yellow-billed cuckoos banded between 2001 and 2005. On the Colorado River in California and Arizona, 4 of 14 yellow-billed cuckoos (31 percent) banded in 2009 were re-sighted in 2010, and 7 of 51 yellow-billed cuckoos (11.8 percent) banded in 2010 were re-sighted in 2011 (McNeil *et al.* 2011, p. 32; McNeil *et al.* 2012, p. 63). Banded male yellow-billed cuckoos on both the Colorado and Kern Rivers have returned to the same area to breed for three consecutive seasons (Laymon 1998, p. 6; McNeil *et al.* 2011, p. 32; McNeil *et al.* 2012, p. 63). Two female yellow-billed cuckoos dispersed 21 and 24 mi (33 and 38 km) to other sites along the same reach of the Colorado River (McNeil *et al.* 2012, p. 74). They also report a relatively high re-sight rate of 13 percent among returning yellow-billed cuckoos banded as chicks in 2010 and returning as adults in 2011 (McNeil *et al.* 2012, pp. 73–74).

Conversely, the dramatic fluctuation in breeding pairs at long-term study sites indicates that year-to-year movement between potential breeding areas also occurs. On the South Fork Kern River from 1985 to 2000, the population increased from a low of 2 pairs in 1990 to a high of 24 pairs in 1992, an increase that could not have come totally from local population growth and recruitment (Laymon and Williams 2001, p. 9). On the Bill Williams River from 1993 to 2002, the population varied from a low of 9 pairs or less in 1999 to a high of more than 28 pairs in 2001, again, an increase that unlikely came entirely from local population growth and recruitment (Halterman 2003, p. 31). In addition, geolocator data from the cuckoo on the middle Rio Grande indicates that the species can make long-distance movements during the breeding season (Sechrist *et al.* 2012, pp. 2–11). It is likely that cuckoos return to sites of previous successful breeding, but, if the conditions are not suitable that year they move to other potential breeding sites.

Habitat Use and Needs

The western yellow-billed cuckoo currently nests almost exclusively in low to moderate elevation riparian woodlands that cover 50 acres (ac) (20 hectares (ha)) or more within arid to semiarid landscapes (Hughes 1999, p. 6). Biologists have hypothesized that yellow-billed cuckoos may be restricted to these extensive, moist habitats because of humidity requirements for successful hatching and rearing of young (Hamilton and Hamilton 1965, p. 427; Gaines and Laymon 1984, pp. 75–76; Rosenberg *et al.* 1991 pp. 203–204).

In California, Grinnell and Miller (1944, pp. 186–187) described the yellow-billed cuckoo habitat as “riparian jungles of willows of fairly old growth, often mixed with Fremont cottonwoods (*Populus fremontii*), and with a tangled ‘lower story’ of blackberry (*Rubus* sp.), nettles (*Urtica* sp.), or wild grape (*Vitis californica*).” In other portions of the range, narrow-leaf cottonwood (*Populus angustifolia*) and mesquite (*Prosopis* spp.) are important habitat component (Righter *et al.* 2004, p. 82; Saab 1999, pp. 136–137). Occupied habitat in Arizona may also contain box elder (*Acer negundo*), Arizona alder (*Alnus oblongifolia*), Arizona walnut (*Juglans major*), Arizona sycamore (*Platanus wrightii*), oak (*Quercus* spp.), netleaf hackberry (*Celtis reticulata*), velvet ash (*Fraxinus velutina*), Mexican elderberry (*Sambucus mexicanus*), tamarisk (*Tamarix* spp.; also called salt cedar), and seepwillow (*Baccharis glutinosa*) (Corman and Magill 2000, p. 5). Surveys conducted by the Arizona Breeding Bird Atlas (Corman and Wise-Gervais 2005, p. 202) reported 68 percent of the yellow-billed cuckoo observations were in lowland riparian woodlands, often containing a variable combination of Fremont cottonwood, willow, velvet ash, Arizona walnut, mesquite, and tamarisk.

Throughout the western DPS range, a large majority of nests are placed in willow trees, but alder (*Alnus* spp.), cottonwood, mesquite, walnut (*Juglans* spp.), box elder, sycamore, and tamarisk are also used (Jay 1911, pp. 69–73; Hanna 1937, p. 58; Laymon 1980, p. 12; Halterman and Laymon 1995, pp. 15–16; Corman and Magill, p. 16; Holmes *et al.* 2008, p. 21). Most nests are placed on well-foliaged horizontal branches at sites with dense canopy cover above the nest (Laymon *et al.* 1997, pp. 7–8).

Western yellow-billed cuckoos require large blocks of riparian habitat for breeding. Home ranges are large, vary in size depending on seasonal food abundance, and overlap greatly both between members of a pair and between neighboring pairs. At the landscape level, the amount of cottonwood–willow-dominated vegetation cover and the width of riparian habitat influences western yellow-billed cuckoo distribution and abundance (Gaines and Laymon 1984, p. 76). In California, yellow-billed cuckoos are most likely to be found in patches of willow–cottonwood riparian habitat greater than 200 ac (81 ha) in size. Yellow-billed cuckoos rarely used smaller patches of habitat, particularly when they were distantly isolated from other patches of riparian habitat (Laymon and Halterman 1989, pp. 274–275). On the Sacramento

River, size of site, amount of riparian habitat in each 5-mi (8-km) river segment, and presence of young woody vegetation were the most important factors in a model explaining the distribution of yellow-billed cuckoo pairs (Halterman 1991, p. 30). On the lower Colorado River, in a comparison of occupied versus unoccupied habitat, yellow-billed cuckoos were found at sites with denser riparian vegetation and more variation in vegetation density, and less tamarisk and shrubby vegetation, compared to unoccupied sites (Johnson *et al.* 2012, pp. 15–17).

Recent radio telemetry studies on the Rio Grande in New Mexico, the San Pedro River in Arizona, and the Colorado River in Arizona and California have shown that yellow-billed cuckoos use large home ranges of 204 ac (82 ha), 125 ac (51 ha), and 95 ac (38 ha), respectively (Halterman 2009, p. 93; Sechrist *et al.* 2009, p. vii; McNeil *et al.* 2010, p. 75; McNeil *et al.* 2011, p. 37; and McNeil *et al.* 2012, p. 69). Breeding densities on the South Fork Kern River, where intensive surveys for yellow-billed cuckoos were conducted for 17 years, averaged 0.81 pairs per 100 ac (40 ha) (Laymon *et al.* 1997, p. 19; Laymon and Williams 2002, p. 5), which means they had home ranges of about 123 ac (50 ha) on average.

On the Verde River in Arizona, sites occupied by yellow-billed cuckoos were composed of deciduous riparian habitat at least 325 ft (100 m) in width, dominated by Fremont cottonwood, Goodding’s willow (*Salix gooddingii*), Arizona alder, and Arizona sycamore, often adjacent to patches of mesquite (Holmes *et al.* 2008, p. 27).

In Sonora, Mexico, yellow-billed cuckoos were summer residents in willow–cottonwood riparian woodland, older mesquite woodland, tropical deciduous forest, and tropical thorn scrub habitats (Russell and Monson 1998, p. 131). In southern Sonora, Mexico, Short (1974, p. 24) found the yellow-billed cuckoos breeding in upland thorn forest, but they were more common in the riparian zone. In a study focusing on cactus ferruginous pygmy-owls (*Glaucidium brasilianum cactorum*) during late spring and summer from 2001 through 2010, Flesch (2012 *in litt.*) found yellow-billed cuckoos at 95 sites from June to September at elevations from 328 to 6,902 ft (100 to 2,104 m). The number of birds at each site ranged from 1 to 15 individuals. Flesch also confirmed breeding at four sites in thornscrub habitats and at one site in upland Sonoran Desert habitat. These records indicate a broader use of habitat by

yellow-billed cuckoos in Sonora, Mexico, possibly as a result of more humid conditions caused by increased summer rainfall.

Little information is available on the foraging habitat of the western yellow-billed cuckoos. Laymon (1980, p. 6) found that yellow-billed cuckoos nesting along the Sacramento River in English walnut orchards captured 88 percent of their food in riparian habitat, foraging primarily in cottonwoods, willows, and white alders (Laymon 1980, pp. 16–18). On the South Fork Kern River, yellow-billed cuckoos foraged primarily in cottonwood and willow woodlands with abundant leafy vegetation (high foliage volume) (Laymon and Halterman 1985, p. 11). High foliage volume of cottonwoods appeared to be an important characteristic of foraging sites, a parameter also noted by researchers studying yellow-billed cuckoos along the Colorado River (Rosenberg *et al.* 1991, pp. 203–204).

Little is known about migratory habitat for the western yellow-billed cuckoo. Yellow-billed cuckoos may be found in a variety of vegetation types during migration, including coastal scrub, secondary growth woodland, hedgerows, humid lowland forests, and forest edges from sea level to 8,125 ft (2,500 m) (Hughes 1999, pp. 6–7). Additionally, during migration they may be found in smaller riparian patches than those in which they typically nest. An account of a migrating flock of yellow-billed cuckoos from the Cape region of Baja California Sur documented them using mesquite scrub woodland (Miller 1950, p. 83). This variety of vegetation types suggests that the habitat needs of the yellow-billed cuckoo during migration are not as restricted as their habitat needs when nesting and tending young.

Wintering habitat of the western yellow-billed cuckoo is poorly known. The species as a whole winters in woody vegetation bordering fresh water in the lowlands to 1,500 m (4,921 ft), including dense scrub, deciduous broadleaf forest, gallery forest, secondary forest, subhumid and scrub forest, and arid and semiarid forest edges (Hughes 1999, p. 7).

Historical and Current Status

Populations of the western yellow-billed cuckoo are too small and isolated in inaccessible habitat patches to be effectively sampled or analyzed for trends by the USGS Breeding Bird Survey (BBS) program, which is conducted at point count along roads. In the eastern United States and Canada, where BBS data can be used to analyze

yellow-billed populations, these populations have declined by 59 to 67 percent over the past 43 years (USGS 2012). This decline has been linked to both the North Atlantic Oscillation and the El Niño Southern Oscillation, as well as to rising local temperatures (Anders and Post 2006, pp. 221–227). For the western yellow-billed cuckoo, only information from regional and local sources is available to determine population trends.

Pacific Northwest

In the Pacific Northwest, including Oregon, Washington, and British Columbia, Canada, the western yellow-billed cuckoo was formerly fairly common locally in cottonwood and willow bottoms along the Willamette and lower Columbia Rivers in Oregon and Washington, and in the Puget Sound lowlands of Washington (Jewett *et al.* 1953, pp. 342–343; Gabrielson and Jewett 1970, pp. 329–330; Roberson 1980, pp. 225–226; Marshall 1996, pp. 1–2; Marshall *et al.* 2003, p. 306). They were also found locally in southwestern British Columbia (Hughes 1999, p. 4), but the available data are not adequate to determine historical abundance. Yellow-billed cuckoos were rare east of the Cascade Mountains in these States and Province (Campbell *et al.* 1990, p. 481; Marshall *et al.* 2003, p. 306; Wahl *et al.* 2005, p. 210).

In Oregon, the last confirmed breeding records are from the 1940s. Historically, western yellow-billed cuckoo were considered rare in the State, both in the Willamette Valley, along the lower Columbia River, and in eastern Oregon along the Snake River, although they were fairly common along the Columbia River from 1923 to 1925 (Gabrielson and Jewett 1970, pp. 329–330). Between 1970 and 1977, four yellow-billed cuckoo sightings were made west of the Cascade Mountains in the Willamette Valley (Gilligan 1994, pp. 162–163). Between 1970 and 1994 at least 20 yellow-billed cuckoos have been sighted east of the Cascade Mountains (Gilligan 1994, pp. 162–163). A 1988 survey in eastern Oregon and Klamath County located no yellow-billed cuckoos, but identified potential breeding habitat along the lower Owyhee River (Littlefield 1988, p. 34). Recent records from 1990 to 2009 are primarily from May and June and from the east side of the Cascades in Deschutes, Malheur, and Harney Counties (Johnson and O'Neil 2001, pp. 460–461; Cornell Lab of Ornithology 2012). Yellow-billed cuckoos were previously considered a rare annual visitor in Harney County at isolated groves of trees known as vagrant traps

and the Malheur NWR (Altman 2001 pers. comm.), but in the last decade it has not been a regular visitor (Marshall *et al.* 2003, p. 306).

Recent records from the west side of the Cascades at the Sandy River Delta near its confluence with the Columbia River in July of 2009, 2010, and 2012 (Withgott 2012, *in litt.*; Leal 2012, *in litt.*) were the first observations of the species west of the Cascades since 1977. In June 2010 during surveys on the Columbia River a possible cuckoo response was heard at Wallace Island, Columbia County, but the sighting could not be verified (Flotlin 2011). Up to 87 percent of wetland and riparian habitat have been lost in the Willamette Valley due to agricultural practices and urbanization (Roth *et al.* 2004). The available data suggest that if yellow-billed cuckoos still breed in Oregon the numbers are extremely low, with pairs numbering in the single digits.

In Washington, the last confirmed breeding records of yellow-billed cuckoos are from the 1930s, and it is likely to have been extirpated as a breeder in the State. Of the 24 records between 1836 and 1940 (9 egg sets, 7 specimens, and 8 sight records), 23 were found west and one east of the Cascades. The Washington Department of Fish and Wildlife ranks the species as having historical occurrences only but still expected to occur in the State. Incidental sightings have occurred throughout the State, and the possibility of a vestigial breeding population may still exist (Wahl *et al.* 2005, p. 210). Researchers made 17 records from 1956 to 2012, of which 13 were east of the Cascades. The yellow-billed cuckoo is currently a candidate species for State listing as threatened or endangered (Washington Natural Heritage Program 2009, pp. 9, 35). Exploratory surveys have been conducted in Okanogan, Yakima, Cowlitz, and Wahkiakum Counties in recent years to check locations of previous sightings (Okanogan County) and potential habitat (Yakima, Cowlitz, and Wahkiakum Counties), but no yellow-billed cuckoos have been positively detected (Salzer 2010, pp. 1–3; Flotlin 2011, pp. 1–2); however, protocol level surveys have not been conducted. There are few remaining examples, none of which are extensive, of the river floodplain habitats bordering Puget Sound, which historically had the most yellow-billed cuckoo sightings in the State (King County 2007, p. 2). The available data suggest that if yellow-billed cuckoos still breed in Washington, the numbers are extremely low, with pairs numbering in the single digits.

Yellow-billed cuckoos historically occurred in southwest British Columbia, Canada, in the vicinity of Victoria on Vancouver Island and along the Fraser River system from Vancouver upstream to Kamloops (Bent 1940, p. 64; Campbell *et al.* 1990, p. 481). The species was apparently never common, with 23 records (18 specimen and 5 sight records) between 1881 and 1927. Two of these observations were of pairs believed to be nesting. The species has been recorded five times in British Columbia since the 1920s, with four of those records from the eastern half of the Province where historically the species had not been observed (Campbell *et al.* 1990, p. 481; Siddle 1992, p. 1169; Cornell Lab of Ornithology 2012). As mentioned previously, the species is considered as an extirpated breeder in the Province and is still very rare based on reported observations (British Columbia Conservation Data Centre 2013).

Montana

We have very limited data for yellow-billed cuckoos from the area west of the Continental Divide in Montana. Three specimens have been collected since the early 1960s, and there are few recorded sightings since the early 1900s (Saunders 1921, p. 174). A few records indicate that yellow-billed cuckoos occurred around the Flathead River area, but there are no confirmed breeding records (Lenard 2001, pp. 1–3). Potential habitat within the range of the western yellow-billed cuckoo in Montana is very limited, and it is unlikely that a breeding population exists within the State.

Idaho

In Idaho, the yellow-billed cuckoo is considered a rare visitor and local summer resident that occurs in scattered drainages, primarily in the southeastern portion of the State (Burleigh 1972, p. 159; Idaho Fish and Game 2005, pp. 222–223; Cavallaro 2011, *entire*). In northern and central Idaho, there were only four records of yellow-billed cuckoos during the 20th century (Taylor 2000, p. 252). Reynolds and Hinckley (2005, p. 5) concluded that the few sightings in northern Idaho are most likely of transient, nomadic, or migrant individuals; with no data suggesting that the species historically or currently nests there. In southwestern Idaho the yellow-billed cuckoo has historically been considered a rare summer visitor and breeder in the Snake River Valley (Idaho Fish and Game 2005, p. 223).

Recent records are primarily from the southeastern portion of the State along the South Fork of the Snake River

(Stephens and Sturts 1997, p. 36; Taylor 2000, pp. 252–254; Reynolds and Hinckley 2005, p. 7; Cavallaro 2011, *entire*). Taylor (2000, pp. 252–254), in his 2000 review of the status of the species in Idaho, concluded that they had declined greatly as a breeding bird in the State, and that there were currently fewer than a few dozen breeding pairs and possibly fewer than 10. More recent surveys of yellow-billed cuckoos continue to show the majority of sightings are in the Snake River corridor in southeast Idaho with few or no sightings in other areas where the yellow-billed cuckoo had been historically observed (Reynolds and Hinckley 2005, p. 7; Cavallaro 2011, p. 3). In addition, yellow-billed cuckoos likely nested in south-central Idaho near Stanton Crossing, Blaine County, in 2003 and 2004 (Reynolds and Hinckley 2005, p. 7). A survey in 2009 near Magic Lake on the Big Wood River located a singing male in a location that was previously unknown (Carlisle and Ware 2010, p. 4). Follow-up surveys in 2010 along the Big Wood River and Little Wood River failed to detect any yellow-billed cuckoos (Carlisle and Ware 2010, p. 12). The most recent statewide assessment estimated the breeding population in Idaho is likely limited to no more than 10 to 20 breeding pairs in the Snake River Basin (Reynolds and Hinckley 2005, p. 7).

Wyoming

Historically, yellow-billed cuckoos were rare and local in Wyoming. Knight (1902, p. 86), in his summary of the birds of Wyoming, did not include the species on the State's list, and Grave and Walker (1913, p. 46) reported only one record for the State. Prior to 2001, the distribution of yellow-billed cuckoos from summer records of the Wyoming Natural Heritage Database showed a few scattered sightings, with only 12 records from southwestern Wyoming (Bennett and Keinath 2001, pp. 9, 17). Currently, yellow-billed cuckoo occurs on the western side of the Rocky Mountains along the Lower Green River Basin from the Seedskaadee NWR to the Flaming Gorge Reservoir and west to the Bear River Drainage. Within the range of the DPS defined in this document, breeding activity is unconfirmed in Wyoming, but observations suggest that nesting may occur within the Green River Basin and along the Snake River within the State (Deibert 2001, *pers. comm.*, pp. 1–16). On July 4, 2003 a yellow-billed cuckoo was found by Wyoming Game and Fish Department in the town of Green River after it collided with a window of their office building (Wyoming Natural

Diversity Database 2003 (WYNDD)). In July 2003, yellow-billed cuckoo surveys were conducted at the Seedskaadee NWR and on July 10, 2003, a yellow-billed cuckoo near Big Island in Seedskaadee NWR responded with 'kowlp' calls to a recorded play-back call (Sweanor *pers. comm.*, WYNDD 2003). Call-back surveys were again conducted near Big Island in 2004 by Service personnel. Subsequently, one observation was made of a yellow-billed cuckoo in 2005 and three cuckoos were observed in 2006 near Big Island, Seedskaadee NWR (Seedskaadee NWR, unpublished reports). No other recent surveys have been done (Beason 2010, pp. 2–3). The available literature suggests that the breeding population of the yellow-billed cuckoo within the State is extremely low, numbering in the single digits, and potential nesting habitat is very limited. Therefore, we conclude that the western yellow-billed cuckoo occurs in very small numbers as a breeder in Wyoming, with likely fewer than five breeding pairs.

Colorado

West of the Continental Divide in Colorado, the yellow-billed cuckoo was probably never common (Bailey and Niedrach 1965, pp. 404–406), and it is now extremely rare (Kingery 1998, pp. 204–205). Yellow-billed cuckoos were found along the Colorado River in Palisade, near Grand Junction (Mesa County), annually through the 1950s and 1960s (Richter *et al.* 2004, p. 82). Yellow-billed cuckoos were also regularly detected as recently as the mid-1980s along the Uncompahgre and Gunnison Rivers near Delta (Delta County) (Beason 2010, p. 1).

In 1998, the Colorado Breeding Bird Atlas (Kingery 1998, pp. 204–205) gave the general status of the yellow-billed cuckoo in Colorado as nearly extirpated in the western half of the State. During the 1987 to 1994 period covered by the Atlas, only three yellow-billed cuckoos were recorded on the western slope, with one confirmed nesting observation along the Yampa River near Hayden in 1988. Other confirmed nesting records (mid-1980s) were associated with outbreaks of caterpillars in box elders in the Four Corners region and Durango area (Colyer 2001, pp. 1–6). National Park Service surveys in southwest Colorado from 1988 through 1995 for the Colorado Bird Breeding Atlas provided no records of yellow-billed cuckoos.

In 1998, biologists conducted focused yellow-billed cuckoo surveys along 242 mi (389 km) of lowland river riparian habitat along six rivers in west-central Colorado. They found one probable

nesting pair (Dexter 1998, p. 3). Reports of single yellow-billed cuckoos have come primarily from the Grand Junction area and Mesa County in 2001, 2002, 2005, 2008, and 2011, with a report of more than one yellow-billed cuckoo at Orchard Mesa Wildlife Area in 2006 (Beason 2010, p. 1; Beason 2012, p. 5). Additional reports include one yellow-billed cuckoo south of Montrose in Montrose County near the Uncompahgre River in 2009, one yellow-billed cuckoo along the Gunnison River near Gunnison in 2007 (Beason 2010, p. 1), and detections by the Rocky Mountain Bird Observatory along the Yampa River near Craig in 2007 and 2008 and in far western Colorado near Nucla in 2005 and 2008 (Beason 2010, p. 1). However, surveys repeated near Craig and Nucla in 2009 failed to detect yellow-billed cuckoos. Since 2003, yellow-billed cuckoos have been detected annually at the North Fork of the Gunnison River Valley of west-central Colorado in Delta County, and breeding was confirmed in 2008 and again in 2011 near Hotchkiss (Beason 2010, p. 1; Beason 2012, p. 5).

Yellow-billed cuckoos have been detected annually since 2001 in the San Luis Valley of south-central Colorado in Conejos County where breeding is suspected, but not confirmed (Beason 2010, p. 1). Surveys conducted on the Rio Grande near Del Norte, Rio Grande County, in 2008 and 2011 found yellow-billed cuckoos at several locations (Wildlife Specialties, LLC, 2008; Rawinski 2011). Surveys by the Rocky Mountain Bird Observatory in 2010 were conducted near historical detections and at sites with suitable habitat in Archuleta, Conejos, Montezuma, and Rio Grande Counties in south-central and southwest Colorado; no yellow-billed cuckoos were detected (Beason 2010, p. 2). Survey results and the available literature indicate an extremely small breeding population of yellow-billed cuckoos in western Colorado. Therefore, we conclude that the population of breeding pairs numbers in the low single digits in the State.

Utah

Historically yellow-billed cuckoos were uncommon in Utah in woodlands along streams in the lower valleys, especially the Salt Lake Valley (Hayward *et al.* 1976, p. 107). There are scattered records for the State, mainly from the vicinity of Provo, Ogden, and Salt Lake City, as well as the Virgin River in the southwestern portion of Utah, and one record from southeastern Utah (Hayward *et al.* 1976, p. 107). Recently, nesting has been documented at Ouray NWR on the Green River and

the Matheson Wetland Preserve near Moab. Additionally, there are reports from at least five other areas where breeding has been suspected (Owens 1998, pp. 3–6). Avian surveys of riparian habitats within the historical range (the Salt Lake Valley) recorded 3 yellow-billed cuckoos in 7,000 survey hours (Owens 1998, pp. 3–6). No statewide systematic surveys for yellow-billed cuckoos have been conducted. Survey results and the available literature indicate an extremely small breeding population of yellow-billed cuckoos in Utah. Therefore, we conclude that the number of breeding pairs in the State is fewer than 10 and not likely more than 20 pairs.

Nevada

The historical status of the yellow-billed cuckoo in Nevada is poorly documented, although there is evidence the species nested in western Nevada along the lower Truckee and Carson Rivers and in southern Nevada along the Colorado and Virgin Rivers (Linsdale 1951, p. 235; Neel 1999, pp. 118–120).

Surveys using call-playback techniques were completed along the Truckee, Carson, and Walker Rivers in the early 1970s. In surveys of the six remaining areas of habitat able to support yellow-billed cuckoos, as described by Gaines (1974, p. 206), no birds were heard or seen (Oakleaf 1974, pp. 18–19). Early documentation of yellow-billed cuckoos nesting in Nevada included a pair at Beaver Dam Wash, Lincoln County, in 1979 (Neel 1999, p. 119). The only set of persistent sightings along the Carson River occurred on portions near Lahontan Reservoir (Neel 1999, pp. 118–120), where sightings of single birds year after year suggested long-term occupancy from 1986 to 1997 (Tomlinson 2010, p. 1). At least one yellow-billed cuckoo was detected during surveys at the Lahontan Reservoir delta in 2012 indicating continued residency at that location (Great Basin Bird Observatory 2013, p. 48). Between 1990 and 1999, Neel (1999, p. 119) reported only sporadic sightings of single birds throughout the State.

Beginning in 2000, annual survey efforts became more consistent in the southern portion of the State. The Nevada Division of Wildlife (NDOW) (2001, pp. 1–8) conducted surveys in 2000 in southern Nevada and documented 19 yellow-billed cuckoos, comprising 4 pairs and 11 unpaired birds with no nests found. NDOW surveys in 2000 and 2001 detected more birds (19 and 28, respectively) than in subsequent years, with a general decline in detections from 2002 to 2009,

although the survey area was smaller because of reduced access to private lands (Tomlinson 2010, p. 1). Surveys conducted at the Warm Springs Natural Area on the Muddy River documented a nesting record for the species in 2000, but also indicated a general decline in bird numbers from 2002 to 2009 (Tomlinson 2010, p. 1). Surveys conducted by the San Bernardino County Museum at sites along the Virgin and Muddy Rivers between 2000 and 2008 detected yellow-billed cuckoos in all but one year, with the number of individuals detected ranging from a low of 3 to a high of 12 (Braden *et al.* 2009, pp. 1–58). These surveys were resumed by the Southern Sierra Research Station in 2009 and detected one bird at each of two locations: Pahrnatagat Valley and the Key Pittman Wildlife Area (Tomlinson 2010, p. 2).

Incidental yellow-billed cuckoo detections were also made during other bird surveys in the Pahrnatagat Valley in 2008, 2010, and 2012 (SWCA 2013, Table C–1). In 2006, surveys were conducted for the species at four Nevada sites within the Lower Colorado River Multi-Species Conservation Plan Boundary area (Johnson *et al.* 2007, pp. 1–220), resulting in detection of eight yellow-billed cuckoos (Johnson *et al.* 2007, pp. 13–16). Fairly extensive surveys of potential habitat at the Ash Meadows NWR resulted in detection of single yellow-billed cuckoos in 2008 and 2009 (Tomlinson 2010, p. 2). Additional protocol surveys were conducted in 2009 and 2010 in southern Nevada along the Muddy and Virgin Rivers, resulting in the detections of 3 cuckoos at Overton Wildlife Management Area along the Muddy River and 1 cuckoo detection at Mormon Mesa along the Virgin River in 2010 (McNeil *et al.* 2010, pp. 27–29; McNeil *et al.* 2011, pp. 140–142). In addition, incidental detections of cuckoos were made almost annually during other bird surveys along the Virgin and lower Muddy Rivers between 2008 and 2012 with the highest number of 4 cuckoos occurring in 2010 (SWCA 2013, Table C–1). Survey results and the available literature indicate a small breeding population of yellow-billed cuckoos in Nevada. Therefore, we conclude that fewer than 10 breeding pairs occur in the State.

California

In California prior to the 1930s, the species was widely distributed in suitable river bottom habitats, and was locally common (Grinnell and Miller 1944, pp. 186–187; Small 1994, pp. 130–131). Yellow-billed cuckoos primarily nested in three general areas

of the State: (1) Coastal counties from San Diego County near the Mexico border to Sonoma County in the San Francisco Bay region, (2) the Central Valley from Kern County through Shasta County, and (3) along the lower Colorado River (Dawson 1923, pp. 2–7; Grinnell and Miller 1944, pp. 186–187; Gaines and Laymon 1984, pp. 53–58; Small 1994, 130–131). Yellow-billed cuckoos also bred locally elsewhere in the State, including in Inyo, San Bernardino, and Siskiyou Counties (Grinnell and Miller 1944, pp. 186–187).

The early ornithological literature for California was summarized and evaluated by Gaines (1974a, p. 204; 1974b, pp. 2–4), Gaines and Laymon (1984, pp. 53–58), and Hughes (1999, p. 4). Collectively, they report 42 locations where the yellow-billed cuckoo was historically reported or collected in abundance, but is no longer found today. Laymon and Halterman (1987b, p. 24) estimated that the geographical range of the yellow-billed cuckoo in California is about 30 percent of what it was historically. Hughes (1999, p. 2) provides an estimate of 15,000 breeding pairs in California during the late 19th century. Gaines (1974, p. 208) believed that predevelopment yellow-billed cuckoo populations in California were even greater than implied by the early

literature, due to the species' inconspicuous behavior and the fact that large tracts of floodplain riparian habitat had already been lost to development before the first records and accounts of the species began appearing in literature. Most modern investigators believe that the initial decline of the yellow-billed cuckoo population in California occurred following the major era of development that began about the mid-1800s (Gaines and Laymon 1984, p. 73; Laymon and Halterman 1987b, pp. 19–25; Launer *et al.* 1990, pp. 2–3). The species was listed by the State of California as threatened in 1971, and was reclassified as endangered in 1987.

The species' population no longer breeds in the San Joaquin Valley. Yellow-billed cuckoos historically were recorded from every county in the San Joaquin Valley region except Kings County, and were locally common as a breeding bird at least in San Joaquin, Kern, Fresno, and Stanislaus Counties (Gaines and Laymon 1984, p. 66). The last nesting record for this region was in 1974 on Lewis Creek near Lindsey, Tulare County (Laymon and Halterman 1987a, p. 24).

The first statewide survey for yellow-billed cuckoos was conducted in 1977 and located 121 to 163 pairs of yellow-billed cuckoos during 44 days of survey effort (0.55–0.74 yellow-billed cuckoo

pairs per survey hour)(Gaines and Laymon 1984, p. 77; Halterman *et al.* 2001, p. 47). The second statewide survey, conducted in 1986 and 1987 with 124 days of survey effort, estimated 32 to 42 breeding pairs in the State, a decline of 66–81 percent from the 1977 survey (0.05–0.07 yellow-billed cuckoo pairs per survey hour)(Gaines and Laymon 1984, pp. 59–72; Laymon and Halterman 1987a, p. 7). The third statewide survey, in 1999 and 2000, was conducted over 134 days, and estimated 39 to 43 breeding pairs (0.06 yellow-billed cuckoo pairs per survey hour), a similar population level to 1987, but lower than 1977 (Halterman *et al.* 2001, p. 47) (Figure 3). The main difference in the most recent statewide survey (1999 to 2000) when compared to earlier surveys (1977 and 1987) was the absence of yellow-billed cuckoos at isolated sites in the Prado Flood Control Basin in Riverside County, the Mojave and Amargosa Rivers in San Bernardino County, and the Owens Valley in Inyo County where they had previously bred, indicating a contraction of the range to the core areas of occurrence along the Sacramento, Kern, and Colorado Rivers. In all, the California population of the western yellow-billed cuckoo today is less than 1 percent of its estimated historical population size.

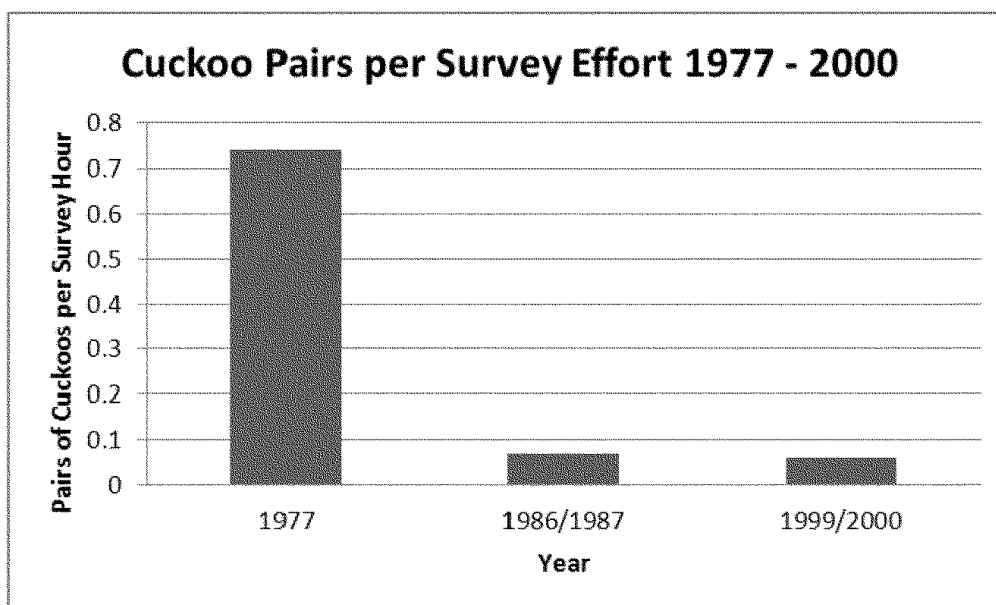


Figure 3. Yellow-billed cuckoo pairs per survey effort on California statewide surveys 1977–2000.

Yellow-billed cuckoos have been considered accidental in coastal northern California; however, from 2000 through 2012, surveys and anecdotal observations along the lower Eel River in Humboldt County detected yellow-billed cuckoos, and breeding was probable during at least two of those years (McAllister *et al.* 2010, pp. 1–6). If nesting is confirmed, this would document a new breeding site in the State.

Based on statewide survey results, only three areas in the State support more than a few breeding pairs on a regular basis: (1) The Sacramento River (roughly between Colusa and Red Bluff), (2) the South Fork of the Kern River upstream of Lake Isabella, and (3) the lower Colorado River (Laymon and Halterman 1987a, pp. 1–18). Results of surveys and population trends for these sites are summarized below.

Sacramento River—Grinnell and Miller (1944, pp. 186–187) listed the yellow-billed cuckoo as a common to fairly common breeder in the Sacramento Valley. Gaines and Laymon (1984, pp. 59–60) summarized historical occurrence in the Sacramento Valley, and cited Cooper (1870, pp. 371–373) who found the species quite common in the vicinity of Sacramento in 1865 and

Belding (1890, p. 87) who found them common in the vicinity of Marysville in 1878. Gaines (1974, pp. 204–205) conducted the first surveys for yellow-billed cuckoos on the Sacramento River between Red Bluff and Colusa during 1972, and found 28 individuals at 15 sites. The following year (1973) he repeated this survey, and found 29 yellow-billed cuckoos at 21 sites (40 survey hours) (Gaines and Laymon 1984, p. 59). During a statewide yellow-billed cuckoo survey in 1977, researchers found 44 yellow-billed cuckoos at 29 sites in this same stretch of the Sacramento River, but with greater survey effort (60 survey hours) (Gaines and Laymon 1984, pp. 59–62). From these surveys it was estimated that 29 to 60 pairs of yellow-billed cuckoos nested along the Sacramento River in 1977.

The Sacramento River was resurveyed in 1987, and a much lower population of 18 to 22 pairs was found despite a more intense survey effort (128 survey hours) (Laymon and Halterman 1987a, p. 6). Halterman (1991, p. 24) continued surveys on the river for 3 additional years with even greater survey effort (255 survey hours each year), and found breeding populations of 35 pairs, 26

pairs, and 23 pairs in 1988, 1989, and 1990, respectively. Surveys in 1999 found 28 to 32 pairs of yellow-billed cuckoos, and surveys in 2000 located 35 to 40 pairs (Halterman *et al.* 2001, p. 39). The most recent survey on the Sacramento River, conducted in 2010, located only 16–18 yellow-billed cuckoos at 48 sites, despite many more hours of surveying effort (1,191 survey hours) (Dettling and Howell 2011, p. 31).

Yellow-billed cuckoo populations have declined on the Sacramento River in the past 40 years. In the 1970s a yellow-billed cuckoo was found about once every 1.4 hours of survey effort. During the 1980s a yellow-billed cuckoo was found half as often with one every 2.8 hours of survey effort. From 1990 to 2000 a yellow-billed cuckoo was found every 2.9 hours of survey effort, but in 2010 it took 66.2 hours of survey effort to locate a yellow-billed cuckoo (Figure 4). Yellow-billed cuckoos still occupy this site, but the population has declined by at least 80 percent over the past 35 years, with a major continuing decline in the most recent 10 years. Since the extent of habitat has remained stable or increased, it appears that much of the potential habitat today is unused.

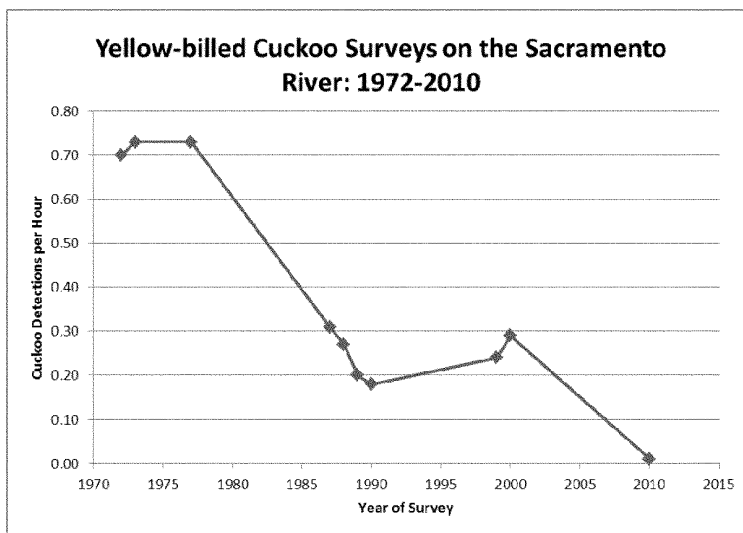


Figure 4. Yellow-billed cuckoo detection during surveys on the Sacramento River on 10 separate years from 1972 to 2010.

South Fork Kern River—The 3,300-ac (1,335-ha) riparian forest in the South Fork Kern River Valley is one of the largest remaining contiguous tracts of riparian habitat in California. This site has been the most regularly surveyed of any of the yellow-billed cuckoo

breeding locations in California. The species' occurrence at this site was first documented in 1911 by a specimen collected by Grinnell's Mount Whitney Expedition (MVZ Birds #19836, Museum of Vertebrate Zoology, University of California (UC) Berkeley).

Gaines (Gaines and Laymon 1984, p. 64) rediscovered this population, finding nine individual yellow-billed cuckoos there during his 1977 statewide survey of the species. From 1985 through 2001 this population was intensively monitored, and the number of pairs and

most nests found each year were documented (Laymon and Williams 2001, p. 4; Laymon and Williams 2002, p. 5). During this period, the population fluctuated from a low of 2 pairs in 1990 to a high of 24 pairs in 1992, with a yearly average of 10.6 pairs.

From 2002 to 2004 and 2008 to 2010, the population was surveyed less intensively and fewer nests found (Halterman 2003, p. 10; Halterman 2004, p. 10; Henneman 2008, pp. 8–10; Henneman 2010, pp. 8–10; Whitfield and Stanek 2011, pp. 8–10). The number of yellow-billed cuckoo pairs is no longer being estimated, but from reviewing the location of the survey sightings, approximately 8 to 14 pairs (with an average of 10.5 pairs) have nested in the area during this period. From the available survey data and literature, this small breeding population currently appears to be stable. Most of the population is currently nesting on the U.S. Army Corps of Engineers (USACE), U.S. Forest Service (USFS) South Fork Wildlife Area in the western third of the site. The eastern two-thirds of the site is sparsely occupied, and it appears that not all of the potential nesting habitat is currently being used (Henneman 2008, pp. 8–10; Henneman 2010, pp. 8–10; Whitfield and Stanek 2011).

Lower Colorado River—The lower Colorado River on the California-Arizona border supported an estimated 180 yellow-billed cuckoo pairs during the first California statewide yellow-billed cuckoo survey in 1976 to 1977 (Gaines and Laymon 1984, p. 72). When the second California statewide survey was conducted in 1986 yellow-billed cuckoos had decreased by 80–90 percent (Laymon and Halterman 1987a, pp. 34–35). Another study (Rosenberg *et al.* 1991, p. 203) estimated a decline of 93 percent over this same time period, from an estimated initial 242 pairs in 1976 to 1977. Final results from a Service-funded 1999 statewide survey found only two pairs of yellow-billed cuckoos on the California side of the Colorado River (Halterman *et al.* 2001, p. 19), an area where 44 yellow-billed cuckoos were found in 1977 (Gaines and Laymon 1984, pp. 64–65).

In 2006, surveys were conducted at various sites throughout the Lower Colorado River Multi-Species Conservation Plan Boundary area for the yellow-billed cuckoo (Johnson *et al.* 2007, pp. 1–220). Two survey areas were on the California side of the lower Colorado River, the Picacho State Recreation Area and the Imperial NWR (Imperial Paradise area); only one bird was detected, at the Picacho State Recreation Area, Imperial County

(Johnson *et al.* 2007, p. 25). During 2010 and 2011, yellow-billed cuckoos were found at two locations on the California side of the river. One pair was found at the Picacho State Recreation Area in both years. At the newly created restoration habitat at Palo Verde Ecological Reserve, Riverside County, two to five pairs were found in 2010, and 10 to 19 pairs were found in 2011 (McNeil *et al.* 2011, p. 19; McNeil *et al.* 2012, p. 24). Yellow-billed cuckoo numbers on the lower Colorado River went from the largest known range-wide population in 1977 to near extirpation from the region in the 1980s. Recent population increases appear to be a result of increased habitat from active riparian habitat restoration along the river, though numbers are still well below 1977 population levels.

Yellow-billed cuckoos have declined by more than 99 percent from historical levels in California, and declines appear to be continuing, especially along the Sacramento River and at isolated sites that recently supported small populations, but are now unoccupied. Current nesting populations for the State are found at only 3 locations, and likely do not exceed 40 to 50 pairs, down from approximately 280 pairs as recently as 1977 and perhaps as many as 15,000 pairs prior to the increased human settlement in the 1850s.

Arizona

The yellow-billed cuckoo was historically widespread and locally common in Arizona (Phillips *et al.* 1964, p. 45; Groschupf 1987, p. 7). A 1976 study based on existing habitat and known yellow-billed cuckoo population densities estimated 846 pairs were present on the lower Colorado River and its five major tributaries in Arizona (Groschupf 1987, pp. 20–28). In a statewide survey in 1999 that covered 265 mi (426 km) of river and creek bottoms, 172 yellow-billed cuckoo pairs and 81 single birds were located in Arizona (Corman and Magill 2000, pp. 9–10). While this survey did not cover all potential yellow-billed cuckoo habitat in Arizona, it indicated that the number of yellow-billed cuckoos in 1999 was substantially lower than previous estimates for the State. However, Arizona still contains the largest remaining yellow-billed cuckoo population among the States west of the Rocky Mountains, and the species is considered a Species of Concern by the Arizona Game and Fish Department, a designation that does not provide protection to the species (Corman 1999, p. 1). As habitat has declined, yellow-billed cuckoo numbers have likely declined, as has been documented for

the lower Colorado River (Rosenberg *et al.* 1991, pp. 202–205) and described above for California.

Yellow-billed cuckoo populations greater than 10 pairs are found at 12 locations in Arizona: Bill Williams River, Colorado River, Gila River, Hassayampa River, San Pedro River, Santa Maria River, Verde River, Sonoita Creek, Santa Cruz River, Upper Cienega Creek, Altar Valley, and Agua Fria River. Sites with smaller populations are found at the Roosevelt Lake Complex, Upper Tonto Creek, Pinto Creek, Sycamore Creek in Pajarita Mountains, Oak Creek, Lower Cienega Creek, Babocomari River, Pinal Creek, Bonita Creek, San Bernardino NWR, Hooker Hot Springs, Big Sandy River, and many smaller drainages. However, many drainages have not been thoroughly surveyed, and it is likely that some additional yellow-billed cuckoo locations will be discovered. These include, but are not limited to the mountain ranges of southeastern Arizona, Eagle Creek, and along the Gila, San Francisco, and Blue Rivers.

Yellow-billed cuckoo sightings reported by birders between 15 June and 31 August, 1998 to 2012, in more than 1 year in southeastern Arizona mountain ranges include Carr Canyon, Ash Canyon, Garden Canyon, Ramsey Canyon, and Miller Canyon in the Huachuca Mountains; Walker Canyon, Madera Canyon, and Montosa Canyon in the Santa Rita Mountains; Scotia Canyon and Sycamore Canyon in the Atascosa/Pajarito Mountains; French Joe Canyon in the Whetstone Mountains; Harshaw Canyon and Paymaster Spring in the Patagonia Mountains; Kitt Peak on Baboquivari Mountain; and a few locations in the Chiricahua Mountains (Bird05 listserve, 2012). Yellow-billed cuckoos are breeding in at least some of these locations, with nesting confirmed at Sycamore Canyon (Arizona Game and Fish Department, unpublished data). The Arizona Breeding Bird Atlas recorded yellow-billed cuckoos on 50 of 1,834 blocks (2.7 percent), illustrating the species' rare status. Yellow-billed cuckoos were confirmed breeding and probably breeding on 29 of these blocks, and possibly on 21 blocks (Corman and Wise-Gervais 2005, pp. 202–203). Multiyear surveys have been conducted at five of these locations, which are discussed below.

Bill Williams River—In the mid-1970s, an estimated 57 pairs of yellow-billed cuckoos bred in the riparian forest of the Bill Williams River Delta (Gaines and Laymon 1984, p. 71). Following the sustained high water levels of 1983 to 1984 and 1986, which inundated and killed most of the

cottonwoods and willows along the Colorado River, yellow-billed cuckoo numbers also declined on the Bill Williams River Delta where similar habitat mortality occurred (Rosenberg *et al.* 1991, p. 203). In 1987, 17 pairs of yellow-billed cuckoos were located at this site and a total of 25 to 30 pairs were estimated to be present, a decline of 47 to 56 percent over 10 years (Laymon and Halterman 1987a, p. 32). Surveys were conducted regularly at this site from 1993 to 2002. The breeding population fluctuated from a low of 6 to 9 pairs in 1999 and 8 pairs in 2002 to a high of 28 to 30 pairs in 1993 and 28 to 39 pairs in 2001 (Halterman 2003, p. 32). Surveys were next conducted at this site in 2006 using revised survey protocols; 117 detections were recorded and no attempt was made to estimate the number of pairs occupying the site. In 2007, researchers recorded 139 detections at this site, and no estimate of pairs was made (Johnson *et al.* 2008a, p. 29). In 2010, researchers estimated 12 to 31 pairs, and the most recent survey in 2011 estimated 9 to 23 pairs (McNeil *et al.* 2010, p. 19; McNeil *et al.* 2012, p. 24). Bill Williams River NWR is considered the largest, highest quality stand of suitable habitat for the yellow-billed cuckoo along the lower Colorado River (Johnson *et al.* 2008a, p. 106). Data from this site show an important, but fluctuating, breeding population that has not recovered to 1977 levels.

Lower Colorado River—The lower Colorado River on the California-Arizona border supported an estimated 180 yellow-billed cuckoo pairs in 1976 to 1977 (Gaines and Laymon 1984, p. 72), a number that had declined by an estimated 80–90 percent in 1986 (Laymon and Halterman 1987a, pp. 34–35). In 2006 and 2007, surveys were conducted at various sites throughout the Lower Colorado River Multi-Species Conservation Plan Boundary area for the yellow-billed cuckoo (Johnson *et al.* 2007, pp. 1–220; Johnson *et al.* 2008a p. 1). Breeding was detected at the Grand Canyon National Park/Lake Mead National Recreation Area in 2006 (Johnson *et al.* 2008a, p. 1107). In addition to the Bill Williams River NWR, other sites in Arizona where Johnson *et al.* (2008a, p. 29) detected yellow-billed cuckoos in 2006 and 2007 include: the Grand Canyon National Park/Lake Mead National Recreation Area, Havasu NWR, Cibola NWR, Imperial NWR, Gila-Colorado River confluence, Limitrophe Division, and Quigley Pond Wildlife Management Area (Johnson *et al.* 2008a p. 107). In 2010, based on intensive surveys, 8 to

18 pairs were estimated, and the most recent survey in 2011 estimated 9 to 23 pairs on the Arizona side of the Colorado River, excluding the Bill Williams River (McNeil *et al.* 2010, p. 19; McNeil *et al.* 2012, p. 24). Recent population estimates are well below the breeding population in 1977, even though more area was surveyed.

Upper San Pedro River—This site has had the largest yellow-billed cuckoo population in Arizona. Yellow-billed cuckoos were surveyed on 42 mi (67 km) of riparian habitat on the upper San Pedro River for 7 years from 2001 to 2007 (Halterman 2002, pp. 10, 22; Halterman 2003, pp. 9, 23; Halterman 2004, pp. 9, 33–34; Halterman 2005, pp. 8, 22–23; Halterman 2006, pp. 26–27; Halterman 2007, pp. 5, 11; Halterman 2009, p. 23). The number of surveys varied from year-to-year with one to five surveys per year and with different methods used to determine population size. In 2001, researchers estimated a total of 40 to 52 pairs, and 29 to 50 pairs the next year. A total of 26 or more pairs was estimated in 2003, but the number of pairs was not estimated after that year. Year-to-year comparisons were made by summing the maximum number of yellow-billed cuckoos in each transect for each year, which yields a minimum population of individual yellow-billed cuckoos over the breeding season.

In 2001, researchers located 71 individual yellow-billed cuckoos. The population rose to 114 individual yellow-billed cuckoos in 2002 and 128 individual yellow-billed cuckoos in 2003, before dropping to 101 yellow-billed cuckoos in 2004, 76 in 2005, and a low of 47 in 2006. In 2007, the number of yellow-billed cuckoos detected increased to 83. The 2006 results indicated a continuing downward trend, but the 2007 results show a substantial increase in the population. Other yellow-billed cuckoo populations have shown annual fluctuation in detections (Halterman 2007, p. 23). Unfortunately, intensive yellow-billed cuckoo surveys have not been conducted at this site since 2007, so it is uncertain whether or not the population has truly rebounded from the 2006 low. During 2001 and 2002, researchers detected 36 and 81 yellow-billed cuckoos, respectively, along the San Pedro River during southwestern willow flycatcher surveys (EEC 2002, pp. 6, 12, 13). A repeat of these surveys in 2009 detected only 26 yellow-billed cuckoos (The Vernadero Group 2009, pp. 9, 19). While survey effort between these two time periods may not be comparable, the findings show evidence of a long-term

downward trend for yellow-billed cuckoos at this location.

Sonoita Creek—A 4-mi (6-km) segment of Sonoita Creek was surveyed in 7 years between 1976 and 1986 (Groschupf 1987, p. 14). Yellow-billed cuckoo pairs were not estimated, but lows of 5 and 6 individuals were found in 1976 and 1986, respectively, and highs of 24 to 28 individuals were found between 1977 and 1979. The site was surveyed again in 1998 and 1999, with 11 to 12 pairs and 8 to 9 single yellow-billed cuckoos located (Corman and Magill 2000, pp. 39–40). In 2005, 17 individuals were found while conducting bird surveys for Important Bird Area designation (Arizona Audubon 2012, <http://iba.audubon.org/iba>). This population, while fluctuating, does not appear to have decreased in size from 1976 to 2005. No recent yellow-billed cuckoo surveys have been conducted at this site.

Verde River—Surveys conducted in 2004 and 2005 at 37 sites within the Verde River watershed were done at historical sites (16) at locations where yellow-billed cuckoos were previously detected in 1998 to 1999 and at random sites (21) with riparian forest that appeared to be suitable nesting habitat (Holmes *et al.* 2008, pp. 6–7). In the 2 years, 59 percent of sites had detections: 75 percent of historical sites and 48 percent of random sites (Holmes *et al.* 2008, p. v). Holmes *et al.* (2008, p. 20) confirmed nesting at five sites and found evidence of probable breeding at nine additional sites. The maximum number of detections during any one survey period was 23 in 2004 and 31 in 2005.

Thus, the available literature and surveys suggest that yellow-billed cuckoo populations in Arizona over the past 30 years have declined by 70 to 80 percent, with recent declines since approximately 2000 at some of largest populations (for example, San Pedro River). At present, it appears that the State's population could be as low as 170 pairs of yellow-billed cuckoos, and probably does not exceed 250 pairs. Despite these recent declines, the population of the western yellow-billed cuckoo in Arizona is the largest in the United States.

Western New Mexico

Yellow-billed cuckoos were historically common in riparian areas along the Rio Grande, as well as uncommon to common locally along portions of the Gila, San Francisco, and San Juan Rivers (Bailey 1928, pp. 307–309; Hubbard 1978, p. 32). A habitat analysis and wildlife survey of the middle Rio Grande Valley from

Espanola to La Joya estimated that 315 pairs of yellow-billed cuckoos bred along this river segment (Howe 1986, p. 10).

Recent surveys have been conducted by the Bureau of Reclamation (Reclamation) from 2006 through 2010 along the middle Rio Grande, from Highway 60 downstream to Elephant Butte Reservoir (Ahlers *et al.* 2010, p. 4; Ahlers and Moore 2011, p. 13). The area covered by the surveys increased from 36 mi (58 km) in 2006 to 90 mi (144 km) in 2009 and 2010. Data indicate detection of an estimated 44 pairs in 2006, 71 in 2007, 87 in 2008, 95 in 2009, and 75 in 2010; however, these estimates are not directly comparable due to variation in survey efforts and protocols (Ahlers *et al.* 2010, pp. i, 3, 12, 17). These surveys have documented a sizable population, but many fewer than the 315 pairs estimated for this region in 1984 (Howe 1986, p. 10).

Systematic surveys have not been carried out on the Gila, San Francisco, and San Juan Rivers. The extent of habitat in these areas is limited, and much is discontinuous and fragmented. Based on available habitat, a maximum of 35 yellow-billed cuckoo pairs could breed on the Gila River, while no more than 15 and 5 pairs could breed on the San Juan and San Francisco Rivers, respectively. An estimated 100 to 155 yellow-billed cuckoo pairs currently breed in western New Mexico.

Western Texas

The yellow-billed cuckoo historically was considered to be fairly common in riparian habitat at elevations of 3,000–7,500 ft (900–2,200 m) in El Paso, Hudspeth, Culberson, and Presidio Counties (Oberholser and Kincaid 1974, pp. 434–435; Rappole and Blacklock 1994, pp. 125–126). Recent information reports that yellow-billed cuckoos have declined in El Paso County (Peterson and Zimmer, 1998, p. 66). Population reports in the Trans-Pecos area of western Texas near Big Bend National Park show scattered populations of yellow-billed cuckoos (Wauer 1971, pp. 18, 27). These populations tend to be associated with areas of springs and developed wells or earthen ponds that support cottonwoods and willows.

Yellow-billed cuckoo population trends from 1966 to 1998 for the entire State of Texas, eastern and western, show a decline (USGS Biological Resources Division 1999, p. 1). The Texas Parks and Wildlife Department (TPWD) currently does not separate the eastern and western populations of the yellow-billed cuckoo, and identifies the species as globally abundant and State secure since the State ranking was last

revised in 1994. However, subsequent publications by the TPWD indicate the species is becoming increasingly rare and declining (Shackelford and Lockwood 2000, p. 1). During 4 years, between 1988 and 1998, a 116-mi (189-km) segment of the Rio Grande (16 mi (26 km) in New Mexico and 99 mi (159 km) in Texas) was surveyed for yellow-billed cuckoos. The 1988 and 1992 survey results were similar, with yellow-billed cuckoos responding at 20 of 67 sites and 25 of 109 sites, respectively. The population then dramatically declined, with only 4 yellow-billed cuckoos at 113 sites in 1995 and 7 yellow-billed cuckoos at 134 sites in 1998 (Sproul 2000, p. 3). The author concluded that the yellow-billed cuckoo is a rare, highly vulnerable, and declining species in the Rio Grande Valley of southern New Mexico and extreme west Texas (Sproul 2000, p. 5). Sproul attributed the decline to habitat loss and degradation as well as other unknown factors in the species' migratory and wintering grounds (Sproul 2000, pp. 3–4). The current population of the western yellow-billed cuckoo in western Texas is likely fewer than 10 pairs.

Northwestern Mexico

The yellow-billed cuckoo breeds locally in northwestern Mexico, and is a widespread transient during migration (Howell and Webb 1995, pp. 346–347). In northwestern Mexico, it has been recorded as a summer resident (presumably breeding), including the extreme northern and southern portions of the Baja California Peninsula, northwest Mexico from Sonora and Chihuahua south to western Durango and Sinaloa (Howell and Webb 1995, pp. 346–347), and irregularly and locally south to western Nayarit and western Zacatecas (World Bird Info 2012).

Baja California Peninsula—Historically, the yellow-billed cuckoo was a rare and local migrant and summer resident in Baja California and Baja California Sur (Grinnell 1928, p. 119). Miller (1950, p. 83) observed a migrating flock of yellow-billed cuckoos in the Cape region of Baja California Sur in late May or early June 1896. Lamb (1927, p. 157), during 2 years living in the Cape region, saw yellow-billed cuckoos on only two occasions, once in late June and again in early September. A recent status review of birds on the Baja California Peninsula listed the species as a probable breeder only along the Colorado River and in the Cape region (Howell 2001, p. 17; Howell *et al.* 2001, p. 182). The population along the Colorado River was formerly numerous,

but now very few yellow-billed cuckoos can be found (Patten *et al.* 2001, p. 46). Bird surveys conducted along the Colorado River, Mexico, from May 2002 to July 2003 concluded that the presence and density of breeding yellow-billed cuckoos is largely dependent on the state of riparian habitat and presence of water (Hinojosa-Huerta *et al.* 2008, pp. 75–92). Suitable habitat disappeared from the Río Colorado floodplain in the latter part of the 20th century due to dewatering of this portion of the river. Pulse floods in the 1990s and 2000s promoting cottonwood and willow habitat regeneration resulted in yellow-billed cuckoos returning to breed once riparian nesting habitat developed. Yellow-billed cuckoo persistence will depend on dedicated instream flows and pulse floods, maintenance of vegetative cover and structural diversity, and an increase in older riparian stands (Hinojosa-Huerta *et al.* 2008, pp. 75–92). The population levels of yellow-billed cuckoos in the Cape Region of Baja California Sur are not known, but from available information they appear to be extremely small and may not exceed 10 breeding pairs.

Sonora—Yellow-billed cuckoos are a common summer resident in Sonora, and were observed with higher frequency than in adjacent Arizona (Russell and Monson 1998, p. 131). In the vicinity of Alamos in southern Sonora, Short (1974, p. 24) found the species a common to abundant breeder during the rainy season in late July and early August. During general bird surveys in northern Sonora from 2000 to 2007, yellow-billed cuckoos were detected in 11 of 16 watersheds (Flesch 2008, pp. 35–36). On the Sonoyta River in northwestern Sonora, the species was not found on the lower stretches and was rare upstream on the Vamori section. On Río de la Concepción, yellow-billed cuckoos were not found on the lower river section or the upper or lower Plomo sections. They were rare on the upper and lower Sasabe sections and uncommon on the Altar, Busani, Coyotillo Magdalena, and Cocospera-Bambuto sections. They were not found on the Santa Cruz River and were uncommon on the San Pedro River. They were also uncommon on the San Miguel and Bacanuchi-Sonora section of the Río Sonora. The author defined rare as “present but rarely detected and often restricted to localized area” and defined uncommon as “present but may not be found in a day or two of field observations” (Flesch 2008, pp. 35–36).

Yellow-billed cuckoos were described as fairly common summer residents, probable breeders, on bird transect

surveys conducted in July and September 2007 and July 2008 between 1,542–3,773 ft (470–1150 m) in the 45,000-ac (18,211-ha) Northern Jaguar Reserve in the foothills of the Sierra Madre near the town of Sahuaripa in east-central Sonora (Flesch 2009, pp. 5, 9, 12, 16, 21). The reserve, bordered by the Ríos Aros and Bavispe, is composed of oak forests mixed with native fan palms, dense thornscrub that transitions into subtropical vegetation, mesquite bosque, and perennial streams lined with sycamores.

Breeding yellow-billed cuckoos were documented from July through September along approximately 60 km (37 mi) of the Santa Cruz River in northern Sonora during riparian bird point count surveys in 2001 and 2003. They were fairly common at sites ranging from typical cottonwood-dominated riparian habitat (with or without understory) to mesquite-oak-grass habitat. The riparian habitat in this region is moderately impacted from water use, vegetation loss, presence of cattle, and land clearing for agriculture (Sonoran Institute 2008; pp. 2, 25, 55).

Yellow-billed cuckoo call playback surveys conducted from 21 June through 26 September 2003 documented 142 yellow-billed cuckoos at 10 sites ranging from 1,148 ft to 3,937 ft (350 to 1,200 m). Yellow-billed cuckoos were found in riparian habitat at Agua Caliente on the Río Bambuto north of Imuris; Río Tubutama near Tubutama and La Reforma; Río Cuchujaqui northwest of Alamos; Río Sonora at Aconchi and Baviacora, northeast of Hermosillo on the Cananea-Ures stretch of State Highway 116; El Gavilan on Río Sonora east of Ures; Upper Río San Pedro near San Pedro Palominas, and near the ejido Jose Ma. Morelos in Cananea (IMADES 2003, pp. 4, 14, 20).

Yellow-billed cuckoo call playback surveys conducted from July through September 2005 documented yellow-billed cuckoos in northeastern Sonora along the Ríos Sonora, Bacanuchi, Cajon Bonito, Bavispe, Moctezuma, and Sahuaripa. Habitat consisted of cottonwood, willow, and mesquite (CEDES 2005, pp. 5, 10, 11). Extensive grazing, agriculture, mining and related water withdrawals have reduced the riparian quality on these rivers.

Marshall (1957, p. 74), in his pine-oak woodland bird study in southern Arizona and adjacent Mexico, found the yellow-billed cuckoo as a migrant or wanderer in riparian timber only once in Sonora in the Ajos Mountains on July 17, 1952. During wildlife surveys by boat and foot in July and August 2005, of the 115-mi (185-km) stretch of the Ríos Aros and Yaqui and tributaries

from Nátorá (2,275 ft (700 m)) to El Río (1,138 ft (350 m)) in east-central Sonora, yellow-billed cuckoos were described as common in riparian groves and thorn scrub woodland. They were detected on both side drainages and main river channels (O'Brien *et al.* 2006, pp. 4, 8, 24, 37, 46, 51).

In a study focusing on cactus ferruginous pygmy-owls during late spring and summer from 2001 through 2010, Flesch (2012 *in litt.*) found yellow-billed cuckoos at 95 sites from June to September at elevations from 328 to 6,902 ft (100 to 2,104 m). The number of birds at each site ranged from 1 to 15 individuals. Flesch also confirmed breeding at four sites in thorn scrub habitats and at one site in upland Sonoran Desert habitat. These records indicate a broader use of habitat by yellow-billed cuckoos in Sonora. Yellow-billed cuckoos are more common as breeders in southern Sonora where they nest in thorn forest than in the more arid northern Sonora. There is some evidence that yellow-billed cuckoos may be nesting farther north and then re-nest in southern Sonora and northern Sinaloa during the rainy season in late July and August (Rohwer *et al.* 2009, pp. 19050–19055), but additional data are needed to confirm where and how commonly this occurs. Yellow-billed cuckoos appear to breed at higher density, especially in southern Sonora, but the breeding population for the State of Sonora is probably similar to the State of Arizona with 150 to 250 pairs because Sonora is half the size of Arizona. However, some of the yellow-billed cuckoos that breed in southern Sonora late in the nesting season may have been counted on breeding grounds farther north earlier the same year.

Chihuahua—Most of the State of Chihuahua is desert with very little rainfall and few waterways with significant riparian habitat. The Río Conchos is the primary river system that drains the southern half of the State. This river is highly degraded, with a high density of nonnative tamarisk and little regeneration of willows and cottonwoods due to extremely heavy grazing. This problem has been worsened by a prolonged drought from the late 1990s to the present. Only one sighting of a yellow-billed cuckoo is listed on the e-Bird online database for the State of Chihuahua, found on July 1, 2003, along Highway 16 between the city of Chihuahua and the town of Lopez Mateos (Cornell Lab of Ornithology 2012). The breeding population for the State of Chihuahua is likely very low, probably in the low double digits and possibly in the single digits.

Sinaloa—How far south yellow-billed cuckoos breed in Sinaloa is uncertain. The only two observations of the species (Cornell Lab of Ornithology 2012) are from extreme northern Sinaloa along the Río Fuerte. Because a thorough survey has not been conducted, the yellow-billed cuckoo population in the State is likely higher than these records imply. However, much of the thorn forest and riparian habitat has been converted to industrial agriculture over the past 30 years (Rohwer 2010, p. E16). The breeding population of yellow-billed cuckoos in Sinaloa is unlikely to exceed that of Sonora (150 to 250 breeding pairs), and it may be less.

Western Durango—Three observations of the yellow-billed cuckoo (Cornell Lab of Ornithology 2012) have been made for the State of Durango west of the Continental Divide. The population for this region is likely very low, possibly in the low double or single digits.

Population summary in Mexico—The available literature indicates that knowledge about the status of the breeding population of the western yellow-billed cuckoo in Mexico is less certain than in the United States. No systematic State-level surveys for the species have been carried out in any of the Mexican States. General bird surveys in Sonora have found yellow-billed cuckoos in similar habitats and abundances as in Arizona, as well as in thorn forest and dry deciduous forest, which do not occur north of Mexico. The riparian habitat in Mexico appears to be more fragmented and heavily grazed than it is north of the international border, and the thorn-forest habitat that the species is using in southern Sonora and Sinaloa is being converted to industrial agriculture at a high rate. Therefore, we conclude that the western yellow-billed cuckoo in Mexico has a breeding population of 330 to 530 pairs that is likely declining.

Population Summary of the Western Yellow-billed Cuckoo—The available surveys and literature support the conclusion that the population of the western yellow-billed cuckoo has declined by several orders of magnitude over the past 100 years, and that this decline is continuing. Recent declines over the past 15 years have shown both a loss of breeding yellow-billed cuckoos in smaller isolated sites and declines in numbers at core breeding areas. The current breeding population is low, with 350 to 495 pairs north of the Mexican border and another 330 to 530 pairs in Mexico for a total of 680 to 1,025 breeding pairs. The breeding population may actually be lower than these estimates, as some of these pairs may be counted twice since yellow-billed

cuckoos apparently move into southern Sonora and Sinaloa during the rainy season in late July and August after they have previously bred farther north. Therefore, we conclude that the western yellow-billed cuckoo has a small and declining population.

Summary of Factors Affecting the Species

Section 4 of the Act, and its implementing regulations at 50 CFR part 424, set forth the procedures for adding species to the Federal Lists of Endangered and Threatened Wildlife and Plants. Under section 4(a)(1) of the Act, we may list a species based on any of the following five factors: (A) The present or threatened destruction, modification, or curtailment of its habitat or range; (B) overutilization for commercial, recreational, scientific, or educational purposes; (C) disease or predation; (D) the inadequacy of existing regulatory mechanisms; and (E) other natural or manmade factors affecting its continued existence. Listing actions may be warranted based on any of the above threat factors, singly or in combination. Each of these factors is discussed below.

Factor A. The Present or Threatened Destruction, Modification, or Curtailment of Its Habitat or Range

The decline of the western yellow-billed cuckoo is primarily the result of riparian habitat loss and degradation. Within the three States with the highest historical number of yellow-billed cuckoo pairs, past riparian habitat losses are estimated to be about 90 to 95 percent in Arizona, 90 percent in New Mexico, and 90 to 99 percent in California (Ohmart 1994, pp. 276–281; U.S. Department of Interior 1994, p. 215; Noss *et al.* 1995, pp. 37, 46; Greco 2008, p. 5). Many of these habitat losses occurred historically, and although habitat destruction continues, many past impacts have subsequent ramifications that are ongoing and are affecting the size, extent, and quality of riparian vegetation within the range of the western yellow-billed cuckoo. These ongoing impacts are occurring now and are anticipated to continue for decades to come.

Moreover, these impacts are often subtle. As described in the Habitat Use and Needs section, above, during the breeding season, the habitat of the western yellow-billed cuckoo consists of expansive blocks of riparian vegetation containing trees of various ages, including in particular larger, more mature trees used for nesting and foraging. In order for these areas to remain as viable yellow-billed cuckoo

habitat, the dynamic transitional process of vegetation recruitment and maturity must be maintained. Without such a process of ongoing recruitment, habitat becomes degraded and is eventually lost. In our discussion below, we identify the manmade impacts to riparian vegetation as resulting in current and ongoing destruction and modification of existing and future potential habitat for the western yellow-billed cuckoo.

Additional subtle consequences from the manmade impacts are the indirect effects that result in the curtailment of the habitat of the western yellow-billed cuckoo. Past actions by humans have resulted in changes to the landscape, the hydrology, or both such that they prevent the riparian plants that are the basis of the species' habitat from growing at all. The consequences of these past actions may have initially resulted in destruction or modification of then-existing riparian habitat; however, once that habitat is lost, the changed conditions (such as changed hydrologic regime) also prevents riparian habitat from regenerating, even in the absence of other impacts. For example, channelization—through manmade levees or other constructs, or through channel incising as a consequence of other actions—may leave the geographical area where riparian plants once grew (such as the watercourse's floodplain) physically untouched, but the altered hydrology prevents riparian plant species from germinating and growing.

Principal causes of riparian habitat destruction, modification, and degradation in the range of the western yellow-billed cuckoo has occurred from alteration of hydrology due to dams, water diversions, management of riverflow that differs from natural hydrological patterns, channelization, and levees and other forms of bank stabilization that encroach into the floodplain. These losses are further exacerbated by conversion of floodplains for agricultural uses, such as crops and livestock grazing. In combination with altered hydrology, these threats promote the conversion of existing primarily native habitats to monotypic stands of nonnative vegetation, which reduce the suitability of riparian habitat for the western yellow-billed cuckoo. Other threats to riparian habitat include long-term drought and climate change. These threats are summarized in a recent detailed review of the literature on the subject (Poff *et al.* 2011). These Factor A threats are described in more detail below. Moreover, past and ongoing impacts to the species' habitat are

working in combination with other threats, which are discussed in greater detail in Factors C and E, below.

Habitat Loss From Dams and Alteration of Hydrology

Dams

Poff *et al.* (1997, pp. 769–784), Greco (1999, pp. 36–38), National Academy of Sciences (NAS) (2002, pp. 145–150), and the Service (2002, Appendix I, pp. 1–12) reviewed the following effects of human modification of natural hydrological processes on riparian habitat, including those from dams. Dams result in an immediate effect of destroying riparian structure and functioning due to habitat displacement from dam construction and by permanent inundation, sometimes flooding miles of upstream riparian areas. This results in the physical loss of riparian vegetation. In the absence of vegetation, the yellow-billed cuckoo cannot breed, feed, or find shelter. Current and future releases of water downstream from dams at unnatural rates of flow, inappropriate times of year, or at too frequent or too infrequent intervals, may lead to flooding or desiccation beyond the tolerance limits of the native riparian vegetation, thus resulting in loss of habitat of the western yellow-billed cuckoo.

Dam construction has been occurring since the settlement of western North America with its peak in the mid-20th century. These include most major western rivers, many of which have a series of dams, and include, but are not limited to, the Sacramento, Kern, San Joaquin, Mojave, Snake, Gila, Salt, Verde, and Rio Grande, including 25 major reservoirs built on the Colorado and Green Rivers alone between the 1930s and 1970s (Richter *et al.* 1998, p. 332). In northern Mexico, some of these rivers include the Río Conchos, Yaqui, and Mayo, Río Bambuto, Río Bravo, Tubutama, La Reforma, Cuchujaqui River in Alamos, Aconchi and Baviacora in Río Sonora, and Upper San Pedro River in Sonora, Mexico (Instituto del Medio Ambiente y el Desarrollo Sustentable del Estado de Sonora (IMADES) 2003, p. 4; Kelly and Arias Rojo 2007, pp. 2–3; Cornell *et al.* 2008, p. 96).

There are now dozens of large dams and scores of smaller dams on rivers throughout the range of the western yellow-billed cuckoo. Today the rate of building new dams has slowed because most of the highest quality dam sites already have dams constructed on them. There were proposals to build two dams on Cottonwood Creek, one of the major tributaries of the Sacramento River

(USACE 1982), but it is not clear when or if these dams will be built. A larger current threat is the enlargement of existing dams. Enlargement of Terminus Dam on the Tule River in California by 21 ft (6.5 m) in height was completed in 2004 (Barcouda *et al.* 2006, p. 12), and proposals to enlarge Shasta Dam on the Sacramento River by up to 200 ft (62 m) in height and doubling its storage capacity (Reclamation 1999, pp. 3–8) and Friant Dam on the San Joaquin River by up to 140 ft (43 m) in height are being explored (Reclamation 2003, pp. 3.1–3.8). Larger dams with additional storage would likely flood potential western yellow-billed cuckoo habitat upstream and cause additional hydrologic disruption downstream.

While the amount of habitat lost within the construction zone of a dam is relatively small, far greater amounts of habitat are destroyed in the areas of inundation and through the ongoing effects of the amount and timing of water releases through the dam operation, which affects both upstream and downstream habitats. Ongoing downstream effects to riparian habitat from dams include changes in sediment transport due to sediment retention behind the dams so that channels below a dam become increasingly “sediment starved.” This situation causes vertical erosion (downcutting), which can lead to loss of river terraces that sustain riparian vegetation (NAS 2002, pp. 145–150; Poff *et al.* 2009, pp. 773–774).

Ongoing operations of large dams can also dampen the magnitude of normal high flows, thus preventing cottonwood germination (Howe and Knopf 1991, p. 218), and dewater downstream reaches, causing substantial declines of riparian forests (NAS 2002, pp. 145–150). For example, Groschupf (1987, p. 19) found that almost all cottonwoods and over half of all willow trees were eliminated from one waterway in Arizona that was exposed to repeated large releases of water from a dam. This situation reduced the density of yellow-billed cuckoos from 13 per 100 ac (40 ha) before the flooding to 3 per 100 ac (40 ha) after the flooding (Groschupf 1987, p. 19). In another example, a study of the San Joaquin River from downstream of the Friant Dam to the Merced River confluence found that, between 1937 and 1993, the area of riparian forest and scrub decreased 28 percent, from 6,787 to 4,914 ac (2,727 to 1,989 ha), and the herbaceous riparian vegetation decreased from 4,076 to 780 ac (1,650 to 316 ha) (Jones and Stokes Associates, Inc. 1998, Chap. 5, pp. 1–2). These losses are most likely attributed to reduced stream flow down the river as a result of water diversions. In the case

of the San Joaquin River, efforts are under way for restoring a more natural functioning hydrologic system and to restore riparian habitat (San Joaquin River Restoration Program Record of Decision 2012, pp. 7–8). Generally, in absence of ongoing dam operations in such circumstances, the habitat is likely to regenerate naturally; however, because of the way the majority of dams are operated, these impacts are happening now and are likely to continue for decades to come.

After the completion of the larger dams on the Colorado River system starting in the 1930s, limited pulse flows reached the lower Colorado River in Mexico for nearly 50 years, resulting in the loss of cottonwood–willow forests and the establishment of tamarisk (Glenn *et al.* 2001, pp. 1175–1186; Nagler *et al.* 2005, pp. 1843–1844). Local decline of the yellow-billed cuckoo western DPS and other riparian birds has been attributed to that habitat loss and degradation (Hinojosa-Huerta *et al.* 2008, p. 81). Additionally, along the Río Altar in northern Mexico, completion of the Cuauhtémoc Dam and Reservoir (Presa Cuauhtémoc) in 1950 diverted surface water and contributed to increased vegetation clearing for agriculture, degradation of mature cottonwood forests, and subsequent declines in distribution and abundance of riparian bird species associated with these forests (Flesch 2008, p. 43), including the yellow-billed cuckoo, which is known to occur there. In addition to past habitat losses, the altered hydrology caused by dams continues to have an ongoing impact on riparian habitat.

While alteration of hydrology due to dam construction and other water supply projects has been widely implicated in the loss and degradation of downstream riparian habitat for the western yellow-billed cuckoo (Gaines and Laymon 1984, p. 73; Greco 1999, pp. 36–38; Greco 2012, pp. 8–9), some dams have resulted in temporary habitat expansion for the yellow-billed cuckoo within the immediate upstream influence of the associated reservoirs. For example, one of the largest concentrations of yellow-billed cuckoo in New Mexico occurs at the inflow to Elephant Butte Reservoir on the middle Río Grande (Sechrist *et al.* 2009, p. 1; Ahlers *et al.* 2011, pp. 19–20). Yellow-billed cuckoo numbers increased following several years when water levels receded and riparian vegetation expanded into the exposed area of the reservoir pool. The yellow-billed cuckoo population there continues to increase, likely as a result of continued drawdown from long-term drought that

allows maturation of the riparian forest into suitable breeding habitat (Ahlers *et al.* 2011, pp. 19–20). Drought patterns are cyclical and, when wetter conditions return to the region, Elephant Butte Reservoir likely will be refilled. When this happens, approximately 92 percent of 44 to 87 pairs of yellow-billed cuckoos there (detected during the 2007 and 2008 surveys) would be displaced through inundation (Reclamation 2009, pp. 64–65).

The threat to the yellow-billed cuckoo's habitat from fluctuating water levels behind dams is likely to occur elsewhere in the range of the western yellow-billed cuckoo. In California, the State's second largest population of yellow-billed cuckoos occurs within the inflow delta footprint of Lake Isabella, a dammed reservoir on the Kern River. Breeding yellow-billed cuckoos are also found at other reservoir inflow deltas, such as Horseshoe Reservoir on the Verde River (Dockens and Ashbeck 2011a, p. 1) and the Tonto Creek and Salt River inflows to Roosevelt Lake in Arizona (Sferra 2012, *in litt.*).

The temporary gain in riparian habitat at the inflow of reservoirs can be beneficial to the western yellow-billed cuckoo by providing large expanses of additional nesting and foraging habitat during a sequence of low-water years. However, the value of such habitat is affected by fluctuating water levels between years. Drastically fluctuating water levels with alternating inundation and desiccation cycles have been associated with fluctuations in populations of western yellow-billed cuckoos that breed in reservoir inflow sites (Laymon and Williams 2002, pp. 12–13; Henneman 2008, pp. 12–13). For example, along the Kern River, yellow-billed cuckoo numbers increased during low reservoir levels for multiple years when vegetation recolonized the drawdown area (Laymon *et al.* 1997, p. 10), but yellow-billed cuckoos moved to other sites during a wet year when lake levels rose and flooded out habitat (Launer *et al.* 1990, p. 10; Halterman *et al.* 2001, p. 20). When the water receded, it took up to 2 years for yellow-billed cuckoos to return to breed, but at reduced numbers (Laymon and Williams 2002, pp. 12–13; Henneman 2008, pp. 12–13), although the actual mechanism needs further study (Henneman 2010, pp. 12–14). The water level continues to remain below capacity at Lake Isabella due to dam safety concerns (Stewart 2012, pers. comm.).

Once Lake Isabella fills again to capacity, the riparian habitat that has since formed at the inflow and that supports cuckoos will become

inundated, at least periodically (Whitfield 2012, pers. comm.), thereby impacting the habitat of the western yellow-billed cuckoo. In addition, the USACE and the USFS are developing a proposal and have completed a final environmental impact statement (EIS) on options to repair dam deficiencies and raise the height of the dam an additional 16 ft (4.9 m) (Isabella Lake Dam Safety Modification Project Environmental Impact Statement Final October 2012). Pursuant to section 7 of the Act, a biological opinion was completed for the proposed action, but the yellow-billed cuckoo was not a species addressed in the section 7 consultation.

Lake Isabella is currently managed under long-term biological opinions issued by the Service to the USACE and the USFS to address impacts to the southwestern willow flycatcher (flycatcher) (*Empidonax traillii extimus*) from reservoir operations and recreation (Service 1996, 1999, and 2005, entire). Some of the measures to conserve the flycatcher in those biological opinions may be beneficial to the western yellow-billed cuckoo; however, the eventual inundation of the drawdown area of the reservoir will result in some degree of temporary habitat loss and degradation under current conditions and may result in permanent loss of habitat for the western yellow-billed cuckoo if the proposed dam raise is implemented. Similar periods of inundation and drawdown, resulting in corresponding development and destruction of suitable yellow-billed cuckoo habitat, occurs at Roosevelt Lake (Salt River Project (SRP) 2002, entire).

In Arizona, following the high water levels of 1983–1984 and 1986 on the Bill Williams River Delta, which is influenced by fluctuating water levels from dams in the Colorado River system (Rosenberg *et al.* 1991, pp. 18–23), the yellow-billed cuckoo numbers declined by 70–75 percent. Habitat has since recovered on the Bill Williams River Delta, but yellow-billed cuckoo numbers remained low for several years (Laymon and Halterman 1987a, pp. 10–18). The actual mechanism that influences the yellow-billed cuckoo's response to fluctuations in water levels is unknown, but loss of prey has been implicated; areas that were inundated normally support ground-nesting invertebrates, such as katydids and sphinx moths, that yellow-billed cuckoos feed upon, and it may take several years for these prey populations to rebound (Laymon and Williams 2002, pp. 12–13; Henneman 2008, pp. 12–13).

In Sonora, Mexico, large dams exist on the Mayo, Yaqui, and Sonora Rivers

(Villaseñor 2006, p. 107). We do not have information on the magnitude or frequency of effects, positive or negative, from water management activities, to the western yellow-billed cuckoo in those locations. However, we have no reason to believe that the dams are managed in a substantially different manner in Mexico than in the southwestern United States, and the effects to riparian habitat are expected to be similar.

Despite some positive effects of dams on increasing western yellow-billed cuckoo habitat in a few areas, these gains in habitat are only temporary, and overall, the net effect of dams on the species has been negative. As such, dams and their ongoing operations are a threat to the western yellow-billed cuckoo over most of its range. This threat has resulted in substantial historical losses of western yellow-billed cuckoo habitat resulting in a curtailment of the DPS's range. The ongoing operation of these dams is likely to have minor impacts to the DPS at any given location, but because so many of the waterways within the range of the DPS have been dammed, we believe this threat has a substantial cumulative impact on the habitat of the western yellow-billed cuckoo, especially when considered with other threats. Moreover, we expect the operation of these dams will continue in a similar manner for decades to come, and thus we expect this threat to be an ongoing impact to the DPS's habitat.

The areas where the floodplain is still hydrologically connected to the river and has relatively unconstrained riverflow, such as in some areas of California and Sonora, Mexico, support the highest number of western yellow-billed cuckoos (Villaseñor 2006, pp. 107–108; Greco 2008, p. 6; Greco 2012, pp. 8–9). For example, the Sacramento River from Red Butte to Colusa has a highly dynamic mosaic of habitat patches of varying ages that form, disappear, and re-form in response to active river channel processes that operate over decades (Greco 2008, p. 6; Greco 2012, pp. 8–9). Although this section of the Sacramento River is also affected by altered hydrology, it is far enough below Shasta Dam and below several major undammed tributaries, such as Cottonwood Creek and Battle Creek, that it still has flood events every few years that help support riparian habitat processes (Werner 2012, pers. comm.). The river provides habitat characteristics that Laymon (1998, p. 4) indicated were important for the yellow-billed cuckoo in California, such as a meandering system with young riparian habitat that, compared to mature

woodlands, provides preferred nesting sites, high productivity of invertebrate prey, and reduced predator abundance (Laymon 1998, p. 4). Another example of relatively unimpacted riparian habitat in the range of the western yellow-billed cuckoo is found in the highlands of central Sonora, Mexico, which supports occupied habitat of the yellow-billed cuckoo. Villaseñor (2005, p. 108) found that the maintenance of the natural flooding regimes due to the limited number of water development structures has allowed riparian vegetation along sections of the Sonora, Moctezuma, and Sahiaripa Rivers to persist in very good condition in some areas. Most of the known occurrences of yellow-billed cuckoo in central Sonora are associated with these regions.

Therefore, even though most of the dams within the range of the western yellow-billed cuckoo were constructed in the past, dams continue to affect both the downstream and upstream habitat through alteration of flows. These effects can include widely fluctuating water levels at inflow sites that inundate nesting habitat, limit food resources, and flood or desiccate habitat (Poff *et al.* 1997, pp. 769–784; Greco 1999, pp. 36–38; NAS 2002, pp. 145–150; Service 2002, Appendix I, pp. 1–12). Downstream effects such as sediment retention caused by controlled water flows, or sediment scouring and removal caused by excessive water releases, do not mimic the natural flow regimes and often result in the inability for cottonwoods to become established or regenerate and provide habitat for the yellow-billed cuckoo. Woody and herbaceous debris accumulates in the absence of these scouring flows, increasing fire risk and intensity (Stromberg and Chew 2002, pp. 195–219) (see section on Wildfire below).

Dams and their flow modifications have ongoing effects to habitat and will likely do so for decades to come, further modifying the habitat of the western yellow-billed cuckoo. Furthermore, because a relatively high proportion of individual yellow-billed cuckoos utilize reservoir inflow areas, dam operations at those sites that result in changes in water level can negatively affect a high proportion of the western yellow-billed cuckoo. Therefore, direct and indirect destruction of riparian habitat resulting from altered hydrology from past dam-building activities continues to contribute to the curtailment of the range of the western yellow-billed cuckoo. Additionally, as a result of future predicted climate change (see Climate Change section below), the climate within the range of the western yellow-billed cuckoo will likely become

drier, which will increase the demand for water storage and conveyance systems, which in turn will likely increase the frequency and severity of impacts on western yellow-billed cuckoo habitat (Stromberg *et al.* 2013, pp. 411–415).

Surface and Ground Water Diversion

Water extractions, both from surface water diversions and ground water pumping, can negatively affect riparian vegetation (Poff *et al.* 1997, pp. 769–784; Service 2002, Appendix I, pp. 1–8). Water diversions and withdrawals can lower ground water levels in the vicinity of riparian vegetation. Because ground water and surface water are generally connected in floodplains, lowering ground water levels by only about 3 ft (1 m) beneath riparian areas is sometimes sufficient to induce water stress in riparian trees, especially in the western United States (NAS 2002, p. 158). Physiological stress in native vegetation from prolonged lower flows or ground water results in reduced plant growth rate, morphological change, or mortality, as well as alters species composition to favor more drought-tolerant vegetation, and conversion to habitat dominated by nonnative species (Poff *et al.* 1997, p. 776). These effects reduce and degrade habitat for the western yellow-billed cuckoo for foraging, nesting, and cover.

Adverse effects of excessive ground water extraction on riparian vegetation have been well documented in the southwestern United States. Case histories on many river systems in Arizona including the Santa Cruz River and on the Owens River in California have documented the connection between overutilization of the ground water, lowering of the water table, and the decline and eventual elimination of riparian vegetation (Zektser *et al.* 2005, pp. 400–401; Webb and Leake 2006, pp. 317–320). Ground water extraction is also affecting river flows and riparian vegetation along rivers that support the western yellow-billed cuckoo in Mexico, including the Río Conchos in Chihuahua (Kelly and Aria-Rojo 2007, p. 174; Cornell *et al.* 2008, p. 98) and the Río Altar in Sonora, where the quantity of surface water declined greatly between 2000 and 2007 (Flesch 2008, pp. 44–45). Therefore, ground water extraction and water diversions create an ongoing threat to western yellow-billed cuckoo habitat.

The hydrologic regime (stream flow pattern) and supply of (and interaction between) surface and subsurface water is a driving factor in the long-term maintenance, growth, recycling, and regeneration of western yellow-billed

cuckoo habitat (Service 2002, p. 16). As streams reach the lowlands, their gradients typically flatten and surrounding terrain opens into broader floodplains (Service 2002, p. 32). In these geographic settings, the stream-flow patterns (frequency, magnitude, duration, and timing) will provide the necessary stream-channel conditions (wide configuration, high sediment deposition, periodic inundation, recharged aquifers, lateral channel movement, and elevated ground water tables throughout the floodplain) that result in the development of western yellow-billed cuckoo habitat (Poff *et al.* 1997, pp. 770–772; Service 2002, p. 16).

Allowing the river to flow over the width of the floodplain, when overbank flooding occurs, is integral to allow deposition of fine moist soils, water, nutrients, and seeds that provide the essential material for plant germination and growth. An abundance and distribution of fine sediments extending farther laterally across the floodplain and deeper underneath the surface retains much more subsurface water, which in turn supplies water for the development of the vegetation that provides western yellow-billed cuckoo habitat and microhabitat conditions (Service 2002, p. 16). The interconnected interaction between ground water and surface water contributes to the quality of riparian vegetation community (structure and plant species) and will influence the ability of vegetation to regenerate and maintain itself as well as germination, density, vigor, and composition (Arizona Department of Water Resources 1994, pp. 31–32).

In many instances, western yellow-billed cuckoo breeding sites occur along streams where human impacts are minimized enough to allow more natural processes to create, recycle, and maintain the habitat. However, there are also breeding sites that are supported by various types of supplemental water including agricultural and urban runoff, treated water outflow, irrigation or diversion ditches, reservoirs, and dam outflows (Service 2002, p. D–15). Although the waters provided to these habitats might be considered “artificial,” they are often important for maintaining the habitat in appropriate condition for breeding western yellow-billed cuckoos within the existing environment.

Encroachment of Levees and Flood Control and Bank Stabilization Structures Into the River Channel and Floodplain

Other alterations in river hydrology with ongoing effects on western yellow-

billed cuckoo habitat include river channelization, construction of levees, bank stabilization, and placement of any flood control structures that encroach into the river and its floodplain. These actions result in direct loss of habitat from construction and from maintenance activities that remove woody vegetation that has become established on the structures. Furthermore, these structures are effective, by design, at severing the hydrologic connection of the river's main channel and the river's immediate floodplain, thereby preventing overbank flooding. By preventing overbank flooding, levees and other similar structures reduce the amount of water available to riparian vegetation in the floodplain, which results in desiccation and eventual loss and degradation of riparian habitat (Vogl 1980, pp. 84–86; NAS 2002, p. 155; Greco 2012, pp. 8–9). Such effects are less destructive, however, for those levees located farther from the stream system, such as those outside the meander belt of a river (Greco 2012, p. 4).

As an illustrative example, we provide a brief summary of how river channelization, construction of levees close to the river, and rock riprap armoring along the levees have caused destruction and modification of yellow-billed cuckoo habitat on the Sacramento River, one of the most substantial historical nesting and foraging habitat areas for the DPS. The Sacramento River is now disconnected from ecological processes that both renew and restore riparian and aquatic habitats (Laymon and Halterman 1987a, pp. 11–14; Halterman 1991, pp. 1–2; Greco 2008, p. 6; Greco 2012, pp. 8–9). More than one-half of the Sacramento River's banks within the lowermost 194 mi (312 km) of river have now been rip-rapped by 40 years of bank protection (Service 2000, pp. 26–29). Rock riprap armoring a river reach often changes the river dynamics and leads to cutting and erosion immediately downstream from the riprap. Therefore, riprapping banks leads to the need for more riprapping, a repeating process that is not complete until the entire river is channelized.

Channelizing the river and severing the connection to the floodplain has severely altered the natural disturbance regime that would have allowed riparian habitat to regenerate now and in the future (Poff *et al.* 1997, pp. 769–784; Greco 2008, p. 6; Greco 2012, pp. 8–9). The result is that much of the river's remaining riparian habitat is modified, and now occurs in narrow, disconnected, linear strips (Service 2000, pp. 26–29; Halterman *et al.* 2001, p. 4) that are not utilized by the yellow-

billed cuckoo for breeding (Gaines 1974, p. 204; Greco 2012, p. 9). With the example of the Sacramento River, nesting yellow-billed cuckoos no longer occur south of Colusa as the river has been channelized and riprapped from that point to the Sacramento San Joaquin River Delta. These flood control and bank stabilization structures also keep the riparian habitat from regenerating and maturing. The factors that reduce yellow-billed cuckoo breeding in these areas are not well understood, but reductions of breeding population have been attributed to lack of patches of adequate size for nesting (Greco 2012, pp. 8–9), increased predators, and the species inability to use highly isolated patches (Haltermann 1991, pp. 33–38), as discussed under Factor E. The Sacramento River is but one of many rivers within the range of the western yellow-billed cuckoo where these activities have destroyed and modified riparian habitat and where the ramifications of these past actions are continuing to impact the DPS's habitat today. These ongoing impacts will likely continue for decades to come.

Transportation Systems

Similarly, transportation systems have directly and indirectly altered a large number of riparian areas in western North America (NAS 2002, p. 182). Road and rail systems are frequently sited along rivers, and often entail removing riparian vegetation for construction of the roadbed, and modifying local hydrology to reroute surface water and ground-water. Bridges or culverts require abutments along the bank to provide roadway support. Because abutments and roadbeds physically constrain the stream, future lateral adjustments by the stream, which can affect floodplain dynamics, are effectively eliminated, which reduces and degrades riparian habitat (NAS 2002, p. 182). Such impacts result in additional destruction and modification of habitat for the western yellow-billed cuckoo. In comparison with construction of dams and altered hydrology this threat, by itself, is less likely to result in severe impacts to riparian habitat; however, this threat is but one of many that, in combination, result in substantial changes to physical and hydrological properties of a watercourse, which in turn contributes to a substantial curtailment in the habitat of the western yellow-billed cuckoo.

Gravel Mining

Other past and ongoing effects to riparian habitat result from gravel mining (Kondolf *et al.* 2001, pp. 54, 59).

Extraction of gravel, primarily for construction products, typically occurs along rivers and adjacent floodplains where gravel deposits are naturally found. Large amounts of gravel removal result in channel downcutting or incision, which affects groundwater levels, frequency of overbank flows, bank stability, and the extent and character of riparian vegetation of specific stream reaches (Collins and Dunne, 1989, pp. 213–224; Kondolf 1995 pp.133–136; NAS 2002, p. 179). Some examples of downcutting on streams in California that historically had, but no longer have, populations of yellow-billed cuckoos, include: Cache Creek, Yolo County (15.0 ft (4.6 m) average and 26.0 ft (8.2 m) maximum downcutting); Merced River, Merced County (5.9 ft (1.8 m) average and 7.8 ft (2.4 m) maximum downcutting); Putah Creek, Yolo County (7.8 ft (2.4 m) average and 15.0 ft (4.6 m) maximum downcutting); Russian River, Sonoma County (11.4 ft (3.5 m) average and 17.9 ft (5.5 m) maximum downcutting); and Santa Clara River, Ventura County (15.6 ft (4.8 m) average and 20.2 ft (6.2 m) maximum downcutting) (Kondolf *et al.* 2001, p.50).

Furthermore, gravel extraction creates a knickpoint (a sharp change in channel slope) that typically erodes upstream in a process known as headcutting, which has the potential to propagate upstream for miles on the main river and its tributaries. As headcuts migrate upstream, the incision propagates upstream (Kondolf *et al.* 2001, p. 49). This process creates ongoing and future impacts to habitat from past as well as current gravel mining operations. Similar to the effects of manmade levees when they disconnect floodplain habitat from the active river channel, artificial channel incision as a result of gravel mining and similar activities reduces overbank flooding. This situation reduces the hydrological connection to the floodplain (Kondolf *et al.* 2001, p. 56), thereby resulting in subsequent loss and degradation of riparian habitat for the western yellow-billed cuckoo, throughout its range, including Mexico (Cornell *et al.* 2008, p. 98). The effects of incision and channel erosion are further exacerbated where gravel mining occurs in sediment-starved reaches below dams (Kondolf *et al.* 2001, p. 10). We expect past and ongoing gravel mining activities, either alone or in combination with other hydrological changes in riparian areas, to continue to modify habitat and further curtail the range of the western yellow-billed cuckoo for decades.

In conclusion, dams, channelization, and other manmade features that alter the watercourse hydrology and encroach into the active channel and floodplain are threats to the habitat of the western yellow-billed cuckoo because they, separately or in combination, significantly reduce and degrade nesting and foraging habitats. The natural processes that sustain riparian habitat in these and similar dammed and channelized river systems in the American West and in northwestern Mexico have been altered, resulting in only fragments or remnants of formerly large tracts of native riparian forests that no longer support breeding yellow-billed cuckoos. The multiple effects from altered hydrology comprise the most widespread and greatest magnitude of current threats to habitat that supports the western yellow-billed cuckoo. Such effects continue to modify habitat and further curtail the range of the western yellow-billed cuckoo. Moreover, we expect these alterations in the hydrology to continue to affect habitat of the western yellow-billed cuckoo into the future.

Habitat Loss and Degradation From Agricultural Activities

Following the effects from alterations in hydrology, in severity, conversion of riparian areas for agricultural crops and livestock grazing has been, and continues to be, a major contributor to riparian habitat loss and degradation (NAS 2002, p. 161; Johnson *et al.* 2007, p. 61).

Large areas of cottonwood–willow floodplain vegetation have been converted to agricultural uses, further reducing the extent of habitat available to western yellow-billed cuckoos for breeding (Swift 1984, pp. 225–226; Rosenberg *et al.* 1991, pp. 18–23). For example, within areas that support the yellow-billed cuckoo, clearing for agricultural uses occurred extensively in the past. On the floodplains of the Sacramento River (Greco 1999, pp. 2, 107), riparian habitat was reduced from 775,000 ac (314,000 ha) in the 1850s to less than 18,000 ac (7,287 ha) by 1977 (Swift 1984, p. 226). Clearing for agriculture is also extensive along the lower Colorado River (Rosenberg *et al.* 1991, pp. 18–23), San Pedro River, Gila River (Swift 1984, p. 226), Río Grande, and several river courses in northern Mexico including, but not limited to, the Río Yaqui, Río Mayo, Río Bambuto, Río Tubutama, and Río Sonora (Russell and Monson 1998, p. 11; IMADES 2003, p. 4; Villaseñor 2006, p. 108). Clearing also occurred along the coasts of Sinaloa and southern Sonora, Mexico, resulting in massive losses of thorn forest to

industrial agriculture (Rohwer *et al.* 2009, p. 19054).

Although most riparian and thorn scrub habitat losses largely stem from past agricultural clearing, effects from cultivated agricultural lands are ongoing. Agricultural lands continue to dominate much of the remaining riparian landscape, particularly along the Sacramento (Greco 1999, pp. 94, 104, 107), parts of the Gila, and lower Colorado Rivers (Johnson *et al.* 2007, p. 207); along the latter, 65 percent of yellow-billed cuckoo survey sites are bordered on at least one side by agriculture fields (Johnson *et al.* 2007, p. 61). Riparian areas are sometimes viewed as a potential source of plant and animal pests, a source of shade that may reduce crop yields, and competition for scarce water resources (NAS 2002, pp. 170–171). For example, in the Salinas Valley in California, a vigorous program is under way to comply with food safety practices that involve the clearing of riparian habitat adjacent to certain types of crops in an effort to eliminate wildlife presence, which has been linked to contamination of crops with a virulent strain of the bacteria *Escherichia coli* (Beretti and Stuart 2008, pp. 68–69). While yellow-billed cuckoos do not currently breed along the Salinas River (Gaines and Laymon 1984, p. 52), if these same rules are applied to farmland along the Gila, Rio Grande, Sacramento and Colorado Rivers, yellow-billed cuckoo habitat will be eliminated to meet these food safety concerns.

Accidental fire from farm workers operating machinery or burning weeds sporadically escapes into adjacent riparian habitat. Recent fires on western yellow-billed cuckoo and southwestern willow flycatcher conservation properties occurred in 2011, burning 58 ac (24 ha) and 6 ac (2 ha), respectively, within the Fort Thomas Preserve, on parcels owned by the Salt River Project and U.S. Bureau of Reclamation. Both fires were determined to be human-caused, likely from farm workers burning weeds along irrigation drains (SRP 2011, p. 39).

Other ongoing effects from cultivated agriculture on the western yellow-billed cuckoo are addressed under Factor E. These include fragmentation of habitat into smaller, more widely disjunct patches, ongoing influence of agriculture on riparian bird community composition, and effects from pesticides, which can negatively impact insect prey populations of the western yellow-billed cuckoo.

Domestic livestock grazing is a traditional agricultural land use practice in the southwestern United States since

at least the 1600s (Little 1992, p. 88; Clary and Kruse 2004, p. 239). Livestock grazing continues to be a widespread agricultural use of riparian areas in the western United States and is one of the most common sources of past and ongoing riparian habitat degradation (Carothers 1977, p. 3; Rickard and Cushing 1982, pp. 2–4; Cannon and Knopf 1984, p. 236; Klebenow and Oakleaf 1984, p. 202; Swift 1984, pp. 225–226; Clary and Webster 1989, pp. 1–2; Schultz and Leininger 1990, pp. 298–299; Bock *et al.* 1993, p. 300). Livestock grazing occurs in yellow-billed cuckoo habitat along sections of the middle Rio Grande in New Mexico (Lehmann and Walker 2001, p. 12), Río Conchos (Cornell *et al.* 2008, p. 96), Río Bambuto, Tubutama, La Reforma, Cuchujaqui River in Alamos, Aconchi and Baviacora in Río Sonora, and upper San Pedro River (IMADES 2003, p. 4), and several other rivers in central Sonora, Mexico (Villaseñor 2006, p. 108). Grazing also occurs extensively along watercourses in a protected reserve on the Río Aros and Río Yaqui in Sonora, Mexico, where the yellow-billed cuckoo has been documented (O'Brien *et al.* 2008, p. 8). Grazing intensity in northern Sonora, Mexico, is generally much higher than in adjacent Arizona (Balling 1988, pp. 106–107; Flesch 2008, pp. 44–45), which leads to greater degradation of riparian habitat than in Arizona.

The Service (2002, Appendix G, pp. 5–7) and Krueper *et al.* (2003, p. 608) reviewed the effects of livestock grazing, primarily in southwestern riparian systems. The frequency and intensity of effects vary across the range of the species, due to variations in grazing practices, climate, hydrology, ecological setting, habitat quality, and other factors (Service 2002, Appendix G, p. 1). However, these effects generally include the removal and trampling of vegetation and compaction of underlying soils, which can inhibit germination and change hydrology (Rea 1983, p. 40; Belsky *et al.* 1999, pp. 419–431) and promote the dispersal of nonnative plant species. Such effects are most significant when riparian areas have been subject to overuse by livestock (NAS 2002, pp. 24, 168–173). Overuse occurs when grazed vegetation does not recover sufficiently to maintain itself and soils are left bare and vulnerable to erosion. Over time, livestock grazing in riparian habitats, combined with other alterations in streamflow, typically results in reduction of plant species diversity and density, and may increase the distribution and density of nonnative tamarisk by eliminating

competition from native cottonwood and willow saplings, which are preferred forage for livestock (Krueper *et al.* 2003, p. 608).

Long-term cumulative effects of livestock grazing involve changes in the structure and composition of riparian vegetation (Service 2002, Appendix G, pp. 5–7), which may affect suitability of habitat for yellow-billed cuckoo breeding and prey population abundance. The western yellow-billed cuckoo nesting habitat is structurally complex with tall trees, a multistoried vegetative understory, low woody vegetation (Halterman 1991, p. 35) and higher shrub area than sites without yellow-billed cuckoos (Hammond 2011, p. 48). Livestock grazing alters understory vegetation, reducing height and density or eliminating new growth in riparian areas, and thereby hampering recruitment of woody species that, when mature, provide nest sites. Furthermore, the relatively cool, damp, and shady areas favored by yellow-billed cuckoos are those favored by livestock over the surrounding drier uplands. This can concentrate the effects of habitat degradation from livestock in western yellow-billed cuckoo habitat (Ames 1977, p. 49; Valentine *et al.* 1988, p. 111; Johnson 1989, pp. 38–39; Clary and Kruse 2004, pp. 242–243).

Removal, reduction, or modification of cattle grazing has resulted in increases in abundance of some riparian bird species. For example, Krueper (1993, pp. 322–323) documented responses of 61 bird species, most of which increased significantly 4 years after removal of livestock grazing in Arizona's San Pedro River Riparian National Conservation Area (NCA). The bird species guilds that increased most dramatically were riparian species, open-cup nesters, Neotropical migrants, and insectivores, all species that share characteristics with the yellow-billed cuckoo. The yellow-billed cuckoo numbers in the study increased, although not significantly ($p=0.13$) (Krueper 2003, p. 612) but their survey methodology was not designed to detect yellow-billed cuckoos. Recovery of vegetation in response to grazing removal in that study was quickest and most pronounced in the lower vegetation layers, the most accessible to grazing cattle. Thus, this situation would allow a greater number of seedlings and saplings of cottonwoods and other nest trees to attain maturity as suitable nesting sites.

In another example, livestock grazing was terminated along portions of the South Fork Kern River at the Kern River Preserve in the 1980s, and yellow-billed

cuckoos increased in number in the years following livestock removal. Smith (1996, p. 4) contended that termination of grazing at the Kern River Preserve was responsible for the dramatic increase in riparian vegetation, which was concurrent with the increase in yellow-billed cuckoo numbers. These examples suggest that even severely degraded riparian systems can recover quickly, in at least some cases, after livestock removal (Krueper 2003, p. 615), and that damage to riparian vegetation from grazing is at least partly reversible. They also illustrate the extent to which livestock grazing destroys and modifies nesting and foraging habitat of the western yellow-billed cuckoo.

In conclusion, most of the direct loss of habitat from farming has occurred in the past, but ongoing agricultural activities, in whole or in combination with other impacts, especially those that result in changes in a watercourse's hydrology, have resulted in the curtailment of nesting and foraging habitat for the western yellow-billed cuckoo by restricting or preventing the growth of riparian plants, and such activities present an ongoing threat. Most of the current impacts from agricultural land uses arise from livestock overgrazing in riparian areas. Riparian vegetation can recover relatively quickly from these effects after livestock removal (Smith 1996, p. 4; Krueper 2003, p. 615). However, without proper management to reduce overgrazing, ongoing overgrazing will continue to contribute to habitat modification in the range of the western yellow-billed cuckoo into the future.

Habitat Loss and Degradation Due to Conversion to Nonnative Vegetation

Throughout most of its range, habitat for the western yellow-billed cuckoo is threatened by the conversion of native riparian woodlands to riparian vegetation dominated by tamarisk and other nonnative vegetation. The major threat from this habitat conversion is the change from vegetation that supplies the western yellow-billed cuckoos with essential food and adequate thermal cover to vegetation that does not supply these attributes. The establishment and persistence of tamarisk is often, but not always, aided by altered hydrology, as described above. Altered hydrology is not the cause for establishment and persistence of other types of nonnative vegetation; therefore, we present information on nonnative vegetation in this separate section.

Tamarisk is the most widespread nonnative woody plant species found in habitat for the western yellow-billed

cuckoo. Glenn and Nagler (2005, pp. 420–423) provide most of the following overview of tamarisk. Tamarisk is present in nearly every southwestern riparian plant community, but varies in dominance from stream to stream. On streams where altered hydrology can no longer support native species, it has replaced native plant communities entirely, but occurs at a low frequency on other streams. Tamarisk was introduced into western North America in the 1800s to serve as ornamental windbreaks, and for erosion control and other purposes. Several species escaped cultivation and have since spread rapidly. The center of distribution is currently Arizona, New Mexico, and Utah, and tamarisk has spread throughout most of the range of the western yellow-billed cuckoo at least as far north as the Yellowstone River in Montana in the Rockies, and at least as far south as the Yaqui River Valley in Sonora, Mexico. Recent studies in the northwest have located major populations of tamarisk in southwestern Idaho, and eastern Washington and Oregon. Models based on projected climate change predict that this invasive species will become more dominant in this region over the next 100 years (Kerns *et al* 2009). Tamarisk also occurs west to the Owens, San Joaquin, and Sacramento Rivers in California, although it is still nearly absent from the mainstem Sacramento River in California, and suitable habitat west of the Cascades in Oregon and Washington.

Tamarisk also occurs as isolated individuals along sections of the Sonora, Moctezuma, and Sahiaripa Rivers in Sonora, Mexico, where the hydrology has been little altered by human modifications (Villaseñor 2006, pp. 107–108). Its presence is highly variable within sections of the Río Conchos in Chihuahua, Mexico, and becomes dominant in some reaches of that river (Kelly and Arias Rojo 2007, pp. 177–178; Cornell *et al.* 2008, p. 4).

The threshold (in terms of percent tamarisk) for abandonment of a riparian system by western yellow-billed cuckoos is not known. They are not found in areas that are totally dominated by tamarisk with the complete lack of willows or cottonwoods. In California, two native-dominated areas occupied in 1977 by several pairs of yellow-billed cuckoos had, by 1986, converted to monotypic stands of tamarisk and were found to be uninhabited by yellow-billed cuckoos. For example, above Laguna Dam on the Colorado River in 1977 at least three pairs of yellow-billed cuckoos occupied a 30-ac (12-ha) site that was

approximately 20–40 percent willow (Laymon and Halterman 1987a, p. 12). By 1986 no yellow-billed cuckoos were detected on the site where the dominant vegetation had become tamarisk, with less than 1 percent willow cover. In the vicinity of Picacho State Recreation Area, on the California side of the Colorado River, in 1977, 21 yellow-billed cuckoos were found in 297 ac (120 ha) of a 230-ft-wide (70-m-wide) willow forest (Gaines and Laymon 1984, p. 72). By 1986, tamarisk and aquatic vegetation dominated this area, and no yellow-billed cuckoos were found in the 12 ac (5 ha) of scattered willow–cottonwood habitat that remained (Laymon and Halterman 1987a, pp. 12–13).

Human disturbance, such as water diversion, flood control, vegetation clearing, and improper grazing management, often facilitates replacement of native vegetation with tamarisk (Kerpez and Smith 1987, pp. 1–5; Hunter *et al.* 1988, p. 113; Rosenberg *et al.* 1991, pp. 18–23). Altered hydrologic regimes (flooding or reduction in water flows from dams) has disrupted natural flooding events that are essential for maintaining native riparian ecosystems (Vogl 1980, pp. 84–86; Rosenberg *et al.* 1991, pp. 18–23), and the disruption (usually elimination) of flooding tends to favor tamarisk. In contrast to native cottonwoods, tamarisk does not need flooding to regenerate (Kerpez and Smith 1987, pp. 1–5).

Tamarisk is also tolerant of high salt levels, which can be present in river systems as a combined result of water diversions that lower the near-surface ground water and irrigation water runoff that contains high levels of dissolved salts (Kerpez and Smith 1987, pp. 1–5; Busch and Smith 1993, pp. 186–194). This higher tolerance to water stress and salt accumulation is a principle mechanism by which tamarisk has become dominant on some regulated western rivers (Glenn and Nagler 2005, p. 439). In addition, tamarisk takes salts from the ground water and exudes them from its leaves, rendering the soil even more unsuitable for germination of native riparian vegetation. This is a significant problem in streams with artificially reduced streamflows where salts accumulate and are not flushed from the system. These factors favor regeneration of tamarisk over native trees and shrubs and are an ongoing threat. Additional areas of native habitat are continuing to be lost to this process. In summary, the persistence and expansion of tamarisk-dominated habitat is the result of multiple forms of ongoing human-related disturbances, which result in degradation of native-

dominated riparian habitat, thus reducing its suitability as breeding habitat for the western yellow-billed cuckoo.

Other nonnative tree and shrub species have become established within the range of the western yellow-billed cuckoo. In western Colorado and Utah, Russian olive (*Elaeagnus angustifolia*) has become established and is a dominant tree species in many riparian systems. Giant reed (*Arundo donax*), common edible fig (*Ficus carica*), and the Himalayan blackberry (*Rubus discolor*) are some of the more conspicuous nonnative plants widely established along the Sacramento River, with Himalayan blackberry dominating the understory at some restoration sites (Borders *et al.* 2006, p. 310). Along the Sacramento River, yellow-billed cuckoos were far less likely to be detected at sites with an understory dominated by Himalayan blackberry than sites with a predominant native understory. Himalayan blackberry may prevent establishment of native understory species due to its dense growth habit (Hammond 2011, pp. 48–49). Nesting of the yellow-billed cuckoo has not been documented in riparian stands dominated by giant reed, common fig, or Himalayan blackberry that lack at least some native canopy trees.

In conclusion, because of the absence or near absence of nesting by yellow-billed cuckoos in nearly monotypic stands of tamarisk and other nonnative vegetation, the available literature suggests that conversion of native or mixed (native and nonnative) riparian woodlands to nearly monotypic stands of tamarisk and other nonnative vegetation, coupled with the inability of native vegetation to regenerate under altered hydrological conditions, is a significant threat to the western yellow-billed cuckoo now and in the future. Nonnative vegetation occurs across most of the range of the western yellow-billed cuckoo; its establishment can be caused by altered hydrology or other disturbances, which are widespread throughout the range. We expect nonnative vegetation to increasingly modify and curtail habitat for the western yellow-billed cuckoo within a majority of its range in the United States and northern Mexico into the future.

Use of Tamarisk by Western Yellow-billed Cuckoos and the Spread of the Introduced Tamarisk Leaf Beetle Into the Southwest

Yellow-billed cuckoos use habitat with a tamarisk component for nesting in southern California, Arizona, and western New Mexico, but are not found

in monotypic stands of tamarisk. Yellow-billed cuckoo presence in tamarisk-dominated habitats does not necessarily equate to habitat suitability (Sogge *et al.* 2008, p. 149; Hammond 2011, p. 50), and additional research is needed to determine productivity, survivorship, physiological condition, and food availability in these habitats. Healthy native riparian vegetation provides much better habitat for the species.

Tamarisk can add to foliar cover that contributes toward reducing temperatures in riparian areas (Paxton *et al.* 2011, p. 259). Even relatively small decreases in foliar cover may render a site unsuitable for nesting western yellow-billed cuckoos (Paxton *et al.* 2011, p. 260). Removal of tamarisk in drainages occupied by western yellow-billed cuckoos could be considered a threat if the removal leaves little or no woody vegetation and native riparian vegetation is unable to reestablish. The available literature that pertains to riparian restoration in New Mexico and Arizona (Poff *et al.* 1997, pp. 769–784; Glen and Nagler 2005, pp. 439–441; Sogge *et al.* 2008, pp. 151–152; Stromberg *et al.* 2009, pp. 181–182) suggests that restoration of natural hydrological processes, rather than direct removal programs, would be a more effective method for promoting regeneration of native riparian vegetation and diminishing the presence of tamarisk. However, tamarisk removal programs coupled with native riparian plantings can speed up the restoration process assuming that the hydrologic system will support the native vegetation.

Tamarisk leaf beetle insects (leaf beetles) (*Diorhabda* spp.) were released into many locations throughout the southwest to control tamarisk. Leaf beetles are now spreading within the more arid range of the yellow-billed cuckoo in Nevada, Utah, Arizona, New Mexico, and Texas. Defoliation of tamarisk by the beetles occurs in the summer months when western yellow-billed cuckoos are in the process of nesting. Tamarisk leaf beetles could eventually occur throughout the western United States and northern Mexico (Tracy *et al.* 2008, pp. 1–3). The future effects of the beetle introductions to the western yellow-billed cuckoo are unknown. If beetles succeed in killing tamarisk, western yellow-billed cuckoo numbers may decline in areas where the hydrology is no longer capable of supporting a native riparian habitat and the numbers may increase in areas where native riparian vegetation is able to become reestablished.

Wildfire

Historically, wildfire was uncommon in native riparian woodlands (Busch and Smith 1993, pp. 186–194). However, the lack of scouring floods on regulated and unregulated rivers has resulted in the accumulation of fuel on the floodplain, which increases fire risk and intensity (Stromberg and Chew 2002, pp. 195–219). Water withdrawal, dams, climate change, drought, and human use also contribute toward an increased fuel load and probability of wildfire occurrence. Most fires today are human-caused (Service 2002, p. L–8). In degraded habitat with tamarisk the threat of fire may be greater. Tamarisk ignites quickly, further increasing the incidence of periodic fires. Exacerbating the immediate loss of native trees from fire, tamarisk recovers more quickly than native trees (Glenn and Nagler 2005, pp. 435–436). Along the Rio Grande River in New Mexico and Texas, wildfire has been documented as destroying, degrading, or setting back successional stages of vegetation development of yellow-billed cuckoo habitat (Sprout 2000, p. 3). In summary, the alteration of riparian systems through changes in hydrologic functioning and the introduction of nonnative tamarisk have increased the incidence of wildfire into yellow-billed cuckoo habitat. These fires further degrade, isolate, or fragment yellow-billed cuckoo habitat.

Environmental Impacts of Cross Border Foot Traffic in the Southwest

The environmental impact caused by cross border foot traffic has been increasingly occurring in more fragile and remote areas. The number of U.S. Border Patrol apprehensions of border crossers varies annually. Between October 1, 1999, and September 30, 2012, a yearly average of 333,517 border crossers were apprehended by the United States Border Patrol in the Tucson Sector, which does not account for the many others who were not caught (U.S. Border Patrol 2013, p. 1). Impacts associated with border crossings include creation of erosion and watershed degradation, loss of vegetation and wildlife, and human-caused wildfire (Defenders of Wildlife 2006, pp. 1–42). Drainages used by border crossers include the San Pedro River, Santa Cruz River, Cienega Creek, and many remote drainages in the mountain ranges of southeastern Arizona.

Human-caused wildland fires have been particularly damaging to areas of riparian habitat in Arizona, especially within 100 mi (161 km) of the United

States-Mexico border where border crossers are known to set fires to divert law enforcement agents. Border crossers are also responsible for campfires that can escape and spread as wildfires. At least 2,467 wildfires began along the Arizona border with Mexico from 2006 to 2010 (Government Accounting Office (GAO) 2011, p. 1). Federal officials have officially investigated only 77 of those fires. Of the fires investigated, 30 were started by border crossers. The resulting environmental impacts include the expansion of nonnative plant species, degraded endangered species habitat, and soil erosion.

Climate Change

Climate change may be impacting the western yellow-billed cuckoo. Climate change is discussed here under Factor A because, although it may affect the western yellow-billed cuckoo directly by creating physiological stress, the primary impacts of climate change on the species are expected to be through changes in the availability and distribution of western yellow-billed cuckoo habitat.

Our analyses under the Act include consideration of ongoing and projected changes in climate. The terms “climate” and “climate change” are defined by the Intergovernmental Panel on Climate Change (IPCC). The term “climate” refers to the mean and variability of different types of weather conditions over time, with 30 years being a typical period for such measurements (IPCC 2007a, p. 78). The term “climate change” thus refers to a change in the mean or variability of one or more measures of climate (for example, temperature or precipitation) that persists for an extended period, whether the change is due to natural variability or human activity (IPCC 2007a, p. 78).

Scientific measurements spanning several decades demonstrate that changes in climate are occurring, and that the rate of change has increased since the 1950s. Examples include warming of the global climate system, and substantial increases in precipitation in some regions of the world and decreases in other regions (for these and other examples, see IPCC 2007a, p. 30; Solomon *et al.* 2007, pp. 35–54, 82–85). Results of scientific analyses presented by the IPCC show that most of the observed increase in global average temperature since the mid-20th century cannot be explained by natural variability in climate and is “very likely” (defined by the IPCC as 90 percent or higher probability) due to the observed increase in greenhouse gas (GHG) concentrations in the atmosphere as a result of human activities,

particularly carbon dioxide emissions from use of fossil fuels (IPCC 2007a, pp. 5–6 and figures SPM.3 and SPM.4; Solomon *et al.* 2007, pp. 21–35). Further confirmation of the role of GHGs comes from analyses by Huber and Knutti (2011, p. 4), who concluded it is extremely likely that approximately 75 percent of global warming since 1950 has been caused by human activities.

Scientists use a variety of climate models, which include consideration of natural processes and variability, as well as various scenarios of potential levels and timing of GHG emissions, to evaluate the causes of changes already observed and to project future changes in temperature and other climate conditions (for example, Meehl *et al.* 2007, entire; Ganguly *et al.* 2009, pp. 11555, 15558; Prinn *et al.* 2011, pp. 527, 529). All combinations of models and emissions scenarios yield very similar projections of increases in the most common measure of climate change, average global surface temperature (commonly known as global warming), until about 2030. Although projections of the magnitude and rate of warming differ after about 2030, the overall trajectory of all the projections is one of increasing global warming through the end of this century, even for the projections based on scenarios that assume that GHG emissions will stabilize or decline. Thus, there is strong scientific support for projections that warming will continue through the 21st century, and that the magnitude and rate of change will be influenced substantially by the extent of GHG emissions (IPCC 2007a, pp. 44–45; Meehl *et al.* 2007, pp. 760–764, 797–811; Ganguly *et al.* 2009, pp. 15555–15558; Prinn *et al.* 2011, pp. 527, 529). See IPCC 2007b, p. 8, for a summary of other global projections of climate-related changes, such as frequency of heat waves and changes in precipitation. Also see IPCC 2011 (entire) for a summary of observations and projections of extreme climate events.

Various changes in climate may have direct or indirect effects on species. These effects may be positive, neutral, or negative, and they may change over time, depending on the species and other relevant considerations, such as threats in combination and interactions of climate with other variables (for example, habitat fragmentation) (IPCC 2007a, pp. 8–14, 18–19). Identifying likely effects often involves aspects of climate change vulnerability analysis. Vulnerability refers to the degree to which a species (or system) is susceptible to, and unable to cope with, adverse effects of climate change,

including climate variability and extremes. Vulnerability is a function of the type, magnitude, and rate of climate change and variation to which a species is exposed, its sensitivity, and its adaptive capacity (IPCC 2007a, p. 89; see also Glick *et al.* 2011, pp. 19–22). There is no single method for conducting such analyses that applies to all situations (Glick *et al.* 2011, p. 3). We use our expert judgment and appropriate analytical approaches to weigh relevant information, including uncertainty, in our consideration of the best scientific information available regarding various aspects of climate change.

Global climate projections are informative, and, in some cases, the only or the best scientific information available for us to use. However, projected changes in climate and related impacts can vary substantially across and within different regions of the world (IPCC 2007a, pp. 8–12). Therefore, we use “downscaled” projections when they are available and have been developed through appropriate scientific procedures, because such projections provide higher resolution information that is more relevant to spatial scales used for analyses of a given species (see Glick *et al.* 2011, pp. 58–61, for a discussion of downscaling). With regard to our analysis for the western yellow-billed cuckoo, downscaled projections are available.

The Southwest is already experiencing the impacts of climate change. The region has heated up markedly in recent decades, and the period since 1950 has been hotter than any comparably long period in at least 600 years (Graumlich 1993, pp. 249–255; Salzer and Kipfmüller 2005, pp. 465–487; Millar *et al.* 2006, pp. 273–287; Ababneh 2008, pp. 59–78; Bonfils *et al.* 2008, pp. 6404–6424; Stevens *et al.* 2008, pp. 1–15; Salzer *et al.* 2009, pp. 20348–20353; Woodhouse *et al.* 2010, pp. 21283–21288; Hoerling *et al.* 2012, pp. 74–92). The decade 2001–2010 was the warmest in the 110-year instrumental record, with temperatures almost 2°F higher than historic averages, with fewer cold snaps and more heat waves (Hoerling *et al.* 2012, pp. 74–92). Compared to temperature, precipitation trends vary considerably across the region, with portions experiencing both decreases and increases (Hoerling *et al.* 2012, pp. 74–92). There is mounting evidence that the combination of human-caused temperature increases and recent drought has influenced widespread tree mortality (Van Mantgem *et al.* 2009, pp. 521–524; Allen *et al.* 2010, pp. 660–684), increased fire

occurrence and area burned (Westerling *et al.* 2006, pp. 940–943), and forest insect outbreaks (Bentz *et al.* 2010, pp. 602–613). Human-caused temperature increases and drought have also caused earlier spring snowmelt and shifted runoff to earlier in the year (Barnett *et al.* 2008, pp. 1080–1083).

There are three predictions for anticipated effects from climate change in the southwestern United States and parts of northwestern Mexico. First, climate change is expected to shorten periods of snowpack accumulation, as well as reduce snowpack levels. With gradually increasing temperatures and reduced snowpack (due to higher spring temperatures and reduced winter-spring precipitation), annual runoff will be reduced (Smith *et al.* 2003, p. 226; Ellis *et al.* 2010, p. 236), consequently reducing ground water recharge. Second, snowmelt is expected to occur earlier in the season because increased minimum winter and spring temperatures could melt snowpacks sooner, causing peak water flows to occur much sooner than the historical spring and summer peak flows (Smith *et al.* 2003, p. 226; Stewart *et al.* 2005, pp. 217–218, 224, 230) and reducing flows later in the season. Third, the hydrological cycle is expected to become more dynamic on average with climate models predicting increases in the variability and intensity of rainfall events. This will modify disturbance regimes by changing the magnitude and frequency of floods.

Precipitation events under most climate change scenarios will decrease in frequency, but increase in severity so that, paradoxically, a warmer atmosphere and an intensified water cycle are likely to mean not only a greater likelihood of drought for the Southwest, but also an increased risk of flooding (Karl *et al.* 2009, pp. 132–133; Dominguez *et al.* 2012, pp. 1–7). Precipitation patterns are already observed to be shifting in the Southwest, with more rain falling in heavy downpours that can lead to flooding (Karl *et al.* 2009, p. 133). Adding to flood risk is that the earlier streamflow from earlier snowmelt may impinge on the flood protection stages of reservoir operations so that less streamflow can be captured safely in key reservoirs, increasing spring flooding downstream (Smith *et al.* 2005, p. 1154; Karl *et al.* 2009, p. 133). In some sites, where natural floodplain dynamics allow for overbank flooding, this could result in a positive regenerating effect on habitat for the western yellow-billed cuckoo. However, where floodplains have been constrained, as in many areas of the

range, such changes in hydrology could excessively scour remaining habitat, thus preventing their reestablishment and resulting in smaller patch size or loss of habitat for the western yellow-billed cuckoo. Long drought cycles could also hamper recruitment of riparian vegetation following scouring floods and lead to reduced cover and nest sites for the western yellow-billed cuckoo.

Exactly how climate change will affect precipitation from site to site within the range of the western yellow-billed cuckoo in the southwestern United States and northwestern Mexico is uncertain. However, consistent with recent observations of regional effects of climate change, the projections presented for the southwest predict overall warmer, drier, and more drought-like conditions (Hoerling and Eischeid 2007, p. 19; Seager *et al.* 2007, p. 1181; Ellis *et al.* 2010, p. 243). For example, climate simulations of the Palmer Drought Severity Index (PDSI) (a calculation of the cumulative effects of precipitation and temperature on surface moisture balance) for the Southwest for the periods of 2006 to 2030 and 2035 to 2060 show an increase in drought severity with surface warming. Additionally, drought-like conditions will increase even during wetter simulations because of the effect of heat-related moisture loss through evaporation and evapotranspiration (Hoerling and Eischeid 2007, p. 19). Annual mean precipitation is likely to decrease in the Southwest, as is the length of snow season and snow depth (IPCC 2007b, p. 887; Sun *et al.* 2013, pp. 21–22). Most models project a widespread decrease in snow depth and earlier snowmelt in the Rocky Mountains (IPCC 2007b, p. 891).

Assessments for the Sonoran Desert are few, but the region is also expected to warm (IPCC 2007a, p. 887). Since about the 1970s, the Sonoran Desert region appears to have experienced “widespread warming trends in winter and spring, decreased frequency of freezing temperatures, lengthening of the freeze-free season, and increased minimum temperatures per winter year” (Weiss and Overpeck 2005, p. 2065).

In California, regional downscaled climate change assessments (Point Reyes Bird Observatory (PRBO) Conservation Science 2011, pp. 1–68) indicate changes in precipitation and temperature of varying magnitude across ecoregions. Assessments for areas occupied by the western yellow-billed cuckoo, such as the Sacramento River, Sierra Nevada (southern), and Sonora Desert (lower Colorado River) (PRBO Conservation Science 2011, pp. 25, 28,

48), mostly indicate an overall reduction in precipitation and increase in average temperature, which can alter hydrology and negatively affect habitat for the western yellow-billed cuckoo, as described previously. Furthermore, Gardali *et al.* (2012, pp. 8–10) ranked 358 avian taxa in California, and classified 128 as vulnerable to climate change. They ranked the western yellow-billed cuckoo as subject to a moderate level of climate vulnerability, owing in part to its specialization in habitat (riparian) that has already experienced significant loss or alteration. Of the 128 species that were rated vulnerable, only 48 were rated as having high or moderate climate vulnerability.

Regionally downscaled climate models for the Pacific Northwest project higher air temperatures in the next century (Littell *et al.* 2009, pp. 6–7) that will lead to lower soil moisture and increased evaporation from streams and lakes (Climate Leadership Initiative (CLI) and the National Center for Conservation Science and Policy 2009, p. 8). While high uncertainty exists in the total precipitation projections for the region (Littell *et al.* 2009, p. 1), effective precipitation (precipitation that contributes to runoff) may be reduced significantly even if there is no decline in total precipitation (CLI and the National Center for Conservation Science and Policy 2009, p. 8). Increases in extreme high precipitation falling as rain in the western Cascades and reductions in snowpack are key projections from high-resolution regional climate models (Littell *et al.* 2009, p. 1). These may result in more winter flooding and reduced summer streamflows in rivers that depend on snowmelt, which include many of the rivers in the Pacific Northwest.

In drier climates overall, there will be increases in riverine system temperatures that are predicted to result in periods of prolonged low flows and stream drying (Stromberg *et al.* 2013, pp. 411–415) and increased demand for water storage and conveyance systems (Stromberg *et al.* 2013, pp. 411–415). Warmer water temperatures across temperate regions are likely to increase the density and expand distribution of tamarisk because it has a higher tolerance for drought and salt than native cottonwoods and willows (Glenn and Nagler 2005, p. 439). This situation is expected to lead to the conversion of native and mixed (native and nonnative) riparian habitat to monotypic stands of tamarisk, which, outside of the Southwest, provides little or no suitable breeding habitat for the western yellow-

billed cuckoo (as described previously above).

Increased drought is expected to adversely affect food availability for western yellow-billed cuckoos (Newton 1980, pp. 11–12; Durst 2004, pp. 40–41; Scott *et al.* 2004, p. 70) through the disruption of the timing between a species and its food resources (Visser and Both 2005, pp. 2561–2569). For example, changes in precipitation or temperature may influence the peak timing of insect emergence or timing of the yellow-billed cuckoo's arrival from its wintering grounds so that the nesting season does not coincide as closely with peak insect abundance (Anders and Post 2006, p. 225). This change in timing could result in reduced food availability for the western yellow-billed cuckoo and breeding success, possibly causing further population decline and curtailment of its occupied range.

Virtually all future climate scenarios for the Pacific Northwest predict increases in wildfire in western North America, especially east of the Cascades, due to higher summer temperatures, earlier spring snowmelt, and lower summer flows, which can lead to drought stress in trees (Littell *et al.* 2009, p. 14). These effects could result in both short-term and long-term loss of riparian habitat from excessive winter scouring, summer drying, and wildfire. Regional downscaled climate change models for the Intermountain West also provide similar projections for warmer, drier climate with a reduced snowpack and episodic precipitation events. Prolonged drought in the southwestern United States and northern Mexico is expected to increase fire frequency, which results in a short-term loss of patches of riparian or thorn forest habitat for breeding. When fire frequency increases, riparian and thorn forests do not have sufficient time to recover, resulting in habitat conversion to fire-adapted nonforested vegetation types unsuitable for nesting. Furthermore, the effects of climate change and ongoing reduction in habitat and patch fragmentation, discussed previously, would increase.

Little is known about the wintering habitat of the western yellow-billed cuckoo in South America, and uncertainty exists about how climate change will affect it there. Regional downscaled models project an increase in wet-season precipitation and a decrease in dry-season precipitation over most of South America (Kitoh *et al.* 2011, p. 1). In the future, precipitation intensity will increase over most of South America. In particular, precipitation intensity will be greatest over southeast South America, implying

an increasing risk of flooding in this region (Kitoh *et al.* 2011, p. 1). At the same time, a large increase of consecutive dry days is projected over the western part of the Amazon, where extremes in seasonal precipitation and resulting runoff is projected to increase in the Amazon River, implying more floods in the wet season and droughts in the dry season (Kitoh *et al.* 2011, p. 1). Uncertainty exists regarding the specific effects of such changes on the wintering habitat of the western yellow-billed cuckoo.

In summary, the available climate change models are predicting altered future environmental conditions across the breeding range of the western yellow-billed cuckoo. In the southwestern United States, northern Mexico, California, Intermountain West, and Pacific Northwest, climate change is generally predicted to result in an overall warmer, drier climate, with periodic episodic precipitation events that, depending on site conditions, are expected to have adverse effects on habitat of the western yellow-billed cuckoo. In rivers that depend on snowmelt, these changes are expected to result in more winter flooding and reduced summer stream flows. The amount of surface ground water available to regenerate and sustain riparian forests is expected to decline overall with persistent drought, favor the spread of tamarisk and other nonnative vegetation, and increase fire frequency. Precipitation events under most climate change scenarios will decrease in frequency and increase in severity. This change may reduce available nesting sites, patch size, and affect prey abundance as a result of lower humidity in riparian areas from reduced moisture retention, and through periods of prolonged desiccation followed by scouring flood events. In addition, evidence shows that climate change may disrupt the synchrony of nesting yellow-billed cuckoos and their food supply, causing further population decline and curtailment of its occupied range.

Impacts to habitat from climate change exacerbate impacts from impoundments, channelization, and alteration of river flows across the western United States and Mexico, and from conversion of habitat from native to mostly nonnative vegetation. Changing climate is expected to place an added stress on the species and its habitats. While we do not have evidence to suggest that the habitat of the western yellow-billed cuckoo is being substantially affected by climate change at this time, we expect long-term climate trends to have an overall

negative effect on the available habitat throughout the breeding range of the western yellow-billed cuckoo.

Moreover, a drying trend associated with global climate change may result in more dams, levees, or other activities to ensure fresh water for human consumption, which may result in additional habitat loss from the activities described in the Habitat Loss from Dams and Alteration of Hydrology section, above.

Conservation Efforts To Reduce Habitat Destruction, Modification, or Curtailment of Its Range

A number of beneficial actions with the potential to partially offset decades of habitat loss and degradation have occurred within the range of the western yellow-billed cuckoo. These actions include land acquisition and habitat restoration efforts for the western yellow-billed cuckoo and its habitat.

Along the Sacramento River and its tributaries in California, beneficial actions that are hoped to eventually counter some of the long-term decline of riparian habitat include the acquisition of approximately 25,000 ac (10,117 ha) of riparian habitat, which has been preserved by public and private resource conservation entities, mostly in the past 20 years (Werner 2012, pers. comm.). The Sacramento River NWR is encompassed in this area and consists of 27 units totaling 10,146 ac along the river between Red Bluff and Princeton (Service 2012, p. 1). Riparian habitat restoration activities have been conducted on 4,513 ac (1,826 ha) with 2,400 ac (738 ha) slated for additional restoration (Hammond 2011, p. 14), and is resulting in larger habitat patch sizes (Werner 2012, pers. comm.). Yellow-billed cuckoos have been found utilizing these restoration sites as early as 4 years after planting, but the total number observed on the sites is very low (23 sightings during 2 years of intensive study) (Hammond 2011, pp. 3, 50). Overbank flows have been restored in a small section of the Sacramento River on the Sacramento River NWR through a small-scale levee removal project that has resulted in increased riparian habitat and floodplain function (Silveira 2012, pers. comm.). Additional riparian habitat is owned and managed by the California Department of Parks and Recreation (CDPR) (671 ac (272 ha)) and the California Department of Fish and Wildlife (CDFW) (4,014 ac (1,625 ha)).

Conservation efforts elsewhere in California include the protection of the Kern River Preserve near Lake Isabella in Kern County, which was purchased for permanent conservation in 1979 by

The Nature Conservancy (TNC) and is now managed by Audubon California. This 2,987-ac (1,209-ha) site has had an active ongoing riparian habitat restoration program for the past 20 years, and more than 500 ac (202 ha) have been restored. Livestock grazing has been eliminated or managed to reduce impacts to riparian habitat for 30 years (Audubon Kern River Preserve 2012).

In Nevada, Arizona, and other southwestern States, numerous conservation plans are in various stages of implementation that result in actions covering thousands of acres of riparian habitat that could benefit the western yellow-billed cuckoo, as reviewed by the Service (2010, pp. 5–7). These include, but are not limited to, the Lower Colorado River Multi-Species Conservation Program (LCRMSCP), which calls for restoring more than 4,000 ac (1,618 ha) of habitat for the western yellow-billed cuckoo, various State Wildlife Action Plans, the Virgin River Habitat Conservation and Recovery Program, Muddy River Recovery Implementation Program, Warm Spring Natural Area Stewardship Plan, Horseshoe and Bartlett Reservoirs Habitat Conservation Plan, and Las Vegas Wash Comprehensive Adaptive Management Plan (Service 2010a, pp. 5–7).

In Arizona, implementation of the LCRMSCP has successfully increased occupied western yellow-billed cuckoo habitat through restoration, and researchers have found greater occupancy of yellow-billed cuckoos in restored compared to natural habitat along the lower Colorado River and tributaries (McNeil *et al.* 2011, pp. 40–41). Additionally, a number of conservation properties have been purchased in fee title or as easements since 1996 to offset the effects elsewhere to southwestern willow flycatchers at Roosevelt Lake and the Salt River (SRP 2011b, pp. 17–50), and southwestern willow flycatchers and yellow-billed cuckoos at Horseshoe Reservoir and the Verde River (SRP 2011a, pp. 25–35). These properties, which also support yellow-billed cuckoos, include the San Pedro River Preserve, Adobe Preserve, Stillinger Preserve, Spirit Hollow and Spirit Hollow Annex on the lower San Pedro River, Camp Verde Riparian Preserve, and the Fort Thomas Preserve on the Gila River. Other conservation properties along the lower San Pedro River include Cook's Lake, owned by Reclamation, and Three Links Farm, with conservation easements held by TNC and Reclamation. Management actions that have benefitted riparian habitat include retiring water rights,

hiring onsite managers, fencing livestock from streams, prohibiting off-road vehicles, removing trespass livestock, and patrolling properties for trespassers and breaks in fences (Sferra 2012, in litt.).

In Arizona, permanent protection of the 6,105-ac (2,472-ha) Bill Williams River NWR in 1941 conserved one of the best remaining willow-cottonwood riparian habitat areas on the lower Colorado River, though it is vulnerable to periodic inundation from Lake Havasu, reduced flows from Alamo Dam, and an increase in tamarisk. The San Pedro Riparian National Conservation Area (NCA) encompasses approximately 40 mi (64 km) of the upper San Pedro River meanders. It was designated by Congress in 1988 with its primary purpose to protect and enhance the desert riparian ecosystem as an example of what was once an extensive network of similar riparian systems throughout the American Southwest. It contains nearly 57,000 ac (23,077 ha) of public land between the international border with Mexico and St. David, Arizona, and supports one of the largest western yellow-billed cuckoo populations in Arizona. However, continually increasing demands for water use within the basin threatens future flow in the upper San Pedro River. The 2011 District of Arizona case, *Center for Biological Diversity, et al. v. Kenneth Salazar, et al.*, CV 07–484–TUC–AWT, ruled that the 2007 plan by the U.S. Army and U.S. Fish and Wildlife Service failed to protect the upper San Pedro River or properly analyze Fort Huachuca's ground water pumping effect on the ecosystem's endangered species and critical habitat.

In Colorado's San Luis Valley, approximately 1,500 ac (607 ha) of riparian habitat are under permanent conservation easement along the Rio Grande and Conejos River, which supports the western yellow-billed cuckoo. The easements prohibit any activity that alters or diminishes the value of the wildlife habitat (Service 2011, p. 11). In northern Mexico, some riparian habitat has regenerated along the lower Colorado River floodplain in recent years in response to improved hydrological conditions resulting from binational water agreements, as discussed previously. During 50 years of reduced flows resulting from extensive damming of the upper Colorado River in the 1930s, the lower Colorado River nearly lost its cottonwood–willow forests and was being replaced by tamarisk (Glenn *et al.* 2001, pp. 1175–1186; Nagler *et al.* 2005, pp. 1843–1844). Local loss of the yellow-billed cuckoo and other riparian birds has

been attributed to this habitat loss and degradation, resulting from decades of limited river flows reaching Mexico. Large-volume releases of water now reach the floodplain of the lower Colorado River in Mexico, which has allowed regeneration of limited but vital stands of native riparian vegetation (Zamora-Arroyo *et al.* 2001, pp. 49–50; Nagler *et al.* 2005, pp. 1849–1851; Hinojosa-Huerta *et al.* 2008, p. 81). The yellow-billed cuckoo has been regularly detected during May–July surveys, and is presumably breeding (Hinojosa-Huerta *et al.* 2008, pp. 80–81).

In northeastern Sonora, Mexico, habitat conservation action includes the purchase and protection in 2003 of the 10,000-ac (4,046-ha) Los Pavos-Northern Jaguar Preserve by a nongovernmental conservation organization. While not managed on the site, yellow-billed cuckoos were commonly sighted during bird surveys (O'Brien *et al.* 2008, p. 1). This rugged roadless area is located on the Río Aros, which is part of the Río Yaqui watershed, and is in the core area that supports one of the largest unfragmented wild areas of foothills thorn scrub in the State of Sonora (Lorenzana-Piña *et al.* 2004, p. 354). The region surrounding the preserve, however, remains vulnerable to various new resource extraction activities (O'Brien *et al.* 2008, p. 1).

In summary, we believe that conservation actions, such as habitat protection and restoration, have strong potential to be beneficial to the species. However, because many of these projects are either in the planning stages or have not been fully implemented, there is no data to show that these efforts have reduced or eliminated impacts from ongoing long-term effects to riparian habitat from the multiple threats of altered hydrology, livestock grazing, and nonnative vegetation. Conservation actions that have been implemented have either had insufficient time in which to demonstrate a population increase or other factors continue to affect the western yellow-billed cuckoos and keep abundance low. Even if all of these conservation actions are successful, they are not of a sufficient magnitude to counter the long-term decline of the western yellow-billed cuckoo. Impacts to habitat continue to modify and curtail the occupied range of the western yellow-billed cuckoo.

Summary of Factor A

We have identified a number of threats to the habitat of the western yellow-billed cuckoo that have operated in the past, are impacting the species now, and will continue to impact the

species in the future. The curtailment and decline in the habitat of the western yellow-billed cuckoo is primarily the result of the long-lasting effects of habitat loss from manmade features that alter watercourse hydrology so that the natural processes that sustained riparian habitat in western North America are greatly diminished. Loss and degradation of habitat has also occurred as a result of livestock overgrazing and encroachment from agriculture. All of these have the potential to promote, and are exacerbated by, the conversion of native habitat to predominantly nonnative vegetation. The curtailment, degradation, fragmentation, and loss of habitat for the western yellow-billed cuckoo is ongoing and, absent changes in the landscape, hydrology, or other factors, it will likely continue to be negatively impacted or lost into the future.

We recognize that climate change is a critical issue with potentially severe wide-ranging effects on the species and its habitat. The available scientific literature suggests that the effects of climate change will likely exacerbate multiple existing threats to the western yellow-billed cuckoo and its habitat. These threats include habitat loss and degradation from altered hydrology, with secondary effects from increases in nonnative vegetation and wildfire. These threats may result in smaller patch sizes of habitat such that many will be no longer occupied by the western yellow-billed cuckoo.

Conservation actions, such as habitat protection and restoration described above, have strong potential to be beneficial to the species by increasing the amount of available habitat and patch size. However, these efforts offset only a small portion of past losses and degradation of riparian habitat in the range of the western yellow-billed cuckoo. Habitat elsewhere in the range continues to be vulnerable to loss and degradation from ongoing alterations in hydrology, nonnative vegetation, and agricultural activities combined with additional or synergistic effects associated with climate change. Moreover, we expect these multiple stressors to continue to affect habitat of the western yellow-billed cuckoo into the future.

Factor B. Overutilization for Commercial, Recreational, Scientific, or Educational Purposes

There are no known threats to the western yellow-billed cuckoo resulting from overutilization for commercial, scientific, or educational purposes. Our review of the best available scientific and commercial information yielded

nothing to indicate that overutilization for commercial, recreational, scientific, or educational purposes is occurring at this time or is likely to in the near future in any portion of the western yellow-billed cuckoo range. We, therefore, conclude that such overutilization does not currently constitute a threat to the western yellow-billed cuckoo, nor do we expect it to be a threat in the future.

Factor C. Disease or Predation

Little is known about diseases in the western yellow-billed cuckoo. West Nile virus has recently spread throughout portions of the western United States. It poses a potential threat to many bird species. The USGS National Wildlife Health Center has identified the yellow-billed cuckoo as a species that is subject to the effects of West Nile virus (USGS—National Wildlife Health Center 2005, p. 2). The Center for Disease Control's Vector-Borne Disease Web site reports that West Nile virus has been documented in a dead yellow-billed cuckoo (Center for Disease Control 2012); however, if this yellow-billed cuckoo was from the western DPS is unknown. Although the population of the western yellow-billed cuckoo has been in decline over several decades (see Historical and Current Status section, above), no evidence suggests that it has undergone a precipitous decline coincident with the relatively recent arrival of West Nile virus in western North America. Therefore, we conclude, based on the best available scientific and commercial information, which is limited, that the adverse effects of West Nile virus to the western yellow-billed cuckoo are not significant and do not constitute a threat at this time, nor is there any information to suggest that this situation will change in the future.

All bird species, including the yellow-billed cuckoo, are exposed, to some extent, to parasites. Greiner *et al.* (1975, pp. 1762–1787) found 5 of 16 yellow-billed cuckoos infected with Leucocytozoon, Trypanosoma, and microfilaria blood parasites. No information indicates whether these and other parasites (see Hughes 1999, p. 18, for a brief review) pose any threat to the western yellow-billed cuckoo.

Predation is a potential threat to the western yellow-billed cuckoo. On the Kern River, red-shouldered hawks (*Buteo lineatus*) and northern harriers (*Circus cyaneus*) have been observed preying on nestlings, and yellow-billed cuckoos have been observed chasing western scrub-jays (*Aphelocoma californica*) and loggerhead shrikes (*Lanius ludovicianus*) away from their nests (Laymon 1998, pp. 12–14);

however, we do not have any information of the frequency of predation. An inverse relationship appears to exist between the presence of yellow-billed cuckoos and western scrub-jays on the Sacramento River, indicating a possible aversion by the yellow-billed cuckoos to nesting at sites occupied by western scrub-jays, a known predator of eggs and young (Halterman 1991, p. 38). Cooper's hawks (*Accipiter cooperii*) are thought to be the only avian predator capable of taking adult western yellow-billed cuckoos (Laymon 1998, pp. 12–13), and during migration adults are susceptible to predation by raptors, such as aplomado falcons (*Falco femoralis*) (Hector 1985, p. 338); however, we have no information to suggest that the rate of adult predation is significantly affecting the yellow-billed cuckoo population. In the Sonoran town of Alamos, Mexico, Mackay (David Mackay 2012, *in litt.*) witnessed a brown vine snake (*Oxybelis aeneus*) leaving a yellow-billed cuckoo nest after eating one of four nestlings.

On the lower Colorado River, McNeil *et al.* (2011, p. 41) found that high nest predation rates (63 percent of nests failed) contributed to the much lower average nest productivity at restoration sites (1.25 young fledged per nest) compared to nests at the Bill Williams River NWR (2.14 young fledged per nest). Most of that predation was attributed to avian predators; however, for 2 consecutive years a nest was preyed upon by a California king snake (*Lampropeltis getula californica*) (McNeil *et al.* 2011, p. 41; McNeil *et al.* 2012, p. 50). Nest predation may have been high in restoration sites because most were located adjacent to agricultural areas, which may have increased the exposure of nests to human-adapted avian predators that thrive in agricultural areas. Additionally, these sites did not yet have the height, structure, and composition of more complex riparian habitats (McNeil *et al.* 2011, pp. 41, 49; McNeil *et al.* 2012, p. 56) that may serve to hide nests from predators. Nest predation can be partially compensated by the ability of yellow-billed cuckoos to renest when a nest fails. In general, despite the instances of nest predation listed above, western yellow-billed cuckoos have higher than normal nest success and lower nest predation rates than other open-cup nesting birds (Laymon *et al.* 1997, p. 11).

In summary, western yellow-billed cuckoos, particularly the eggs or young in nests, are vulnerable to predation. Predation may be a significant threat in some localities and in some years, and may be influenced by several factors,

such as surrounding land use and size and complexity of riparian habitat. As a result, predation may act periodically in concert with other stressors that contribute to the decline of the species (which we discuss in greater detail under Factor E, below). However, we conclude, that predation by itself does not pose a significant threat to the western yellow-billed cuckoo at this time, and we do not have any reason to believe that this will change substantially in the future.

We conclude that predation, parasites, and disease are not currently significant threats to the western yellow-billed cuckoo, and are not expected to become significant threats in the near future.

Factor D. The Inadequacy of Existing Regulatory Mechanisms

We have identified a number of significant threats to the western yellow-billed cuckoo that are impacting the species now and will continue to impact the species in the future. The decline of the western yellow-billed cuckoo is primarily the result of the long-lasting effects of habitat loss and modification from altered hydrology resulting from decades of dam construction, channelization, water extraction, and other activities, as well as impacts associated with climate change. Other threats include loss of habitat to agricultural and other land uses, overgrazing, exposure to pesticides (which is addressed in Factor E, below), wildfire, and conversion of habitat to monotypic stands of nonnative vegetation. Under this factor, we discuss whether the existing regulatory mechanisms adequately address impacts to the western yellow-billed cuckoo described under Factors A and E, based on the best available information.

Federal Regulatory Mechanisms

In the United States, the Migratory Bird Treaty Act (MBTA) (16 U.S.C. 703–712) is the only current Federal protection provided for the yellow-billed cuckoo. The yellow-billed cuckoo (the entire taxonomically defined species), which includes the western yellow-billed cuckoo, is considered a “migratory bird” under the MBTA. The MBTA prohibits “take” of any migratory bird. Take is defined as: “to pursue, hunt, shoot, wound, kill, trap, capture, or collect, or attempt to pursue, hunt, shoot, wound, kill, trap, capture, or collect.” However, no provisions in the MBTA prevent habitat destruction unless direct mortality or destruction of active nests occurs.

The Federal Land Policy and Management Act of 1976 (FLPMA) (43 U.S.C. 1701 *et seq.*) requires that “the

public lands be managed in a manner that will protect the quality of scientific, scenic, historical, ecological, environmental, air and atmospheric, water resource, and archeological values; that . . . will preserve and protect certain public lands in their natural condition; (and) that will provide food and habitat for fish and wildlife” Furthermore, it is the policy of the Bureau of Land Management (BLM) “to manage habitat with emphasis on ecosystems to ensure self-sustaining populations and a natural abundance and diversity of wildlife, fish, and plant resources on public lands” (BLM manual 6500.06). Similarly, the National Forest Management Act of 1976 (NFMA) directs that the National Forest System “where appropriate and to the extent practicable, will preserve and enhance the diversity of plant and animal communities.” Additionally, section 219.12(g) calls for the maintenance of viable populations of native vertebrates in national forests. As such, FLPMA and NFMA have the potential to benefit the western yellow-billed cuckoo and its habitat. However, given that the BLM and USFS have discretion in how these statutes are carried out and measures are implemented, we continue to see continued loss and degradation of habitat for the western yellow-billed cuckoo on lands that these agencies manage.

Congress passed the Federal Water Pollution Control Act Amendments of 1972 and the Clean Water Act (CWA) of 1977 (33 U.S.C. section 1251 *et seq.*) to provide for the restoration and maintenance of the chemical, physical, and biological integrity of the Nation’s lakes, streams, and coastal waters. Primary authority for the implementation and enforcement of the CWA now rests with the U.S. Environmental Protection Agency (EPA) and, to a lesser extent, the USACE. In addition to the measures authorized before 1972, the CWA implements a variety of programs, including Federal effluent limitations and State water quality standards, permits for the discharge of pollutants and dredged and fill materials into navigable waters, and enforcement mechanisms. Section 404 of the CWA is the principal Federal program that regulates activities affecting the physical integrity of wetlands and other waters of the United States.

Section 404 prohibits the discharge of dredged or fill material in jurisdictional waters of the United States, unless permitted by USACE under section 404(a) (individual permits), 404(e) (general permits), or unless the

discharge is otherwise exempt from regulation as designated in section 404 (r). Some areas of riparian habitat may be considered “waters of the United States,” but many areas of riparian habitat do not meet the term’s strict definition. The Service can review permit applications and provide recommendations to the USACE to avoid and minimize impacts and to implement conservation measures for fish and wildlife resources, including the western yellow-billed cuckoo. However, incorporation of Service recommendations into section 404 permits is at the discretion of the USACE.

Furthermore, not all activities in wetlands or streams involve fill, and not all wetlands or streams fall under the jurisdiction of the USACE. For example, in areas where the historical floodplain has been cut off from the river by levees, determining the boundaries of wetlands subject to USACE jurisdiction becomes complex. The areas behind these levees have had their hydrological characteristics altered, soil conditions changed, and riparian vegetation removed. As a result, these former floodplains, which in some cases would be important to protect and restore as habitat for the western yellow-billed cuckoo, fall outside the jurisdiction of the USACE. Additionally, many actions that resulted in adverse hydrological modifications, such as channelization and levees, were implemented in compliance with the CWA.

The National Environmental Policy Act (NEPA) (42 U.S.C. 4321 *et seq.*) requires all Federal agencies to formally document, consider, and publicly disclose the environmental impacts of major Federal actions and management decisions that have significant effects on the human environment (including natural resources); however, NEPA does not require that mitigation alternatives be implemented. Additionally, NEPA applies only to actions by Federal agencies, so private landowners are not required to comply with NEPA unless a Federal agency is involved through provision of Federal funding or a Federal permit.

Through the Fish and Wildlife Coordination Act (FWCA) (16 U.S.C. 661 *et seq.*), the Service may recommend discretionary conservation measures to avoid, minimize, and offset impacts to fish and wildlife resources resulting from Federal projects and water development projects authorized by the USACE and other Federal agencies such as Reclamation. Therefore, FWCA may provide some protection for the yellow-billed cuckoo and its habitat through avoidance and

minimization measures that may be incorporated into Federal projects. However, these measures are discretionary.

A majority of dams in the western United States supply hydropower, and their construction and ongoing operation is authorized by the Federal Energy Regulatory Commission (FERC), under the Federal Power Act of 1920, which incorporates by reference the FWCA and NEPA. The remainder of hydropower in the western United States is largely produced by the USACE and Reclamation. Reclamation also oversees water diversion and delivery projects. FERC reconsiders its hydropower licenses every 30 to 50 years. Through the various Federal regulations under which these agencies implement their water projects, the Service has an opportunity to periodically review their permits and relicensing applications and provide its recommendations to avoid and minimize impacts, and implement conservation measures for fish and wildlife resources, including species such as the western yellow-billed cuckoo. Implementation of these recommendations by FERC, USACE, and Reclamation is discretionary for nonlisted species. We continue to see loss and degradation of habitat for the yellow-billed cuckoo as a result of altered hydrology from operation of dams and other water supply projects, as described under Factor A.

The EPA is responsible for regulating pesticides under the Federal Insecticide, Fungicide, and Rodenticide Act and the Food Quality Protection Act. Before a pesticide can be distributed, sold, and used in the United States it must first go through a registration process through the EPA. The EPA conducts short- and long-term toxicity tests to evaluate potential adverse effects on humans, wildlife, fish, and plants, including endangered species and nontarget organisms, and evaluates the potential for possible contamination of surface water or ground water from leaching, runoff, and spray drift. The sensitivity of any life stages of the yellow-billed cuckoo or its prey items to exposure from common agricultural pesticides that could leach, runoff, or migrate from agricultural areas into the habitat of the yellow-billed cuckoo has not been tested. However the EPA does conduct evaluation on these factors on surrogate species and has determined the use of certain approved pesticides are appropriate in areas used by the western yellow-billed cuckoo. Even if approved application procedures are followed, pesticides could reduce available insect

prey for the western yellow-billed cuckoos.

State Regulatory Mechanisms

The majority of occupied areas for the western yellow-billed cuckoo north of Mexico occur within California, Arizona, and New Mexico (Hughes 1999, p. 1). Only California classifies the yellow-billed cuckoo as endangered (CDFW 2011, p. 10). The California Endangered Species Act (CESA) prohibits unpermitted possession, purchase, sale, or take of listed species. However, the CESA definition of take does not include harm, which under the Federal Act can include destruction of habitat that actually kills or injures wildlife by significantly impairing essential behavioral patterns (50 CFR 17.3). CESA does require consultation between the CDFW and other State agencies to ensure that their activities will not jeopardize the continued existence of State-listed species; however, the yellow-billed cuckoo continues to decline in California despite its status as a State-listed species. In Arizona, the yellow-billed cuckoo is listed as a species of concern (Arizona Game and Fish Department 2002, p. 3), with no protective status. The yellow-billed cuckoo has no special protective status in New Mexico.

Washington State's Department of Fish and Wildlife considers the yellow-billed cuckoo a candidate for listing. The State wildlife agencies in Wyoming, Montana, Colorado, Utah, and Texas classify the yellow-billed cuckoo as a species of concern or a sensitive species. The yellow-billed cuckoo is identified as a Species of Greatest Conservation Need in Idaho's Comprehensive Wildlife Conservation Strategy (Idaho Department of Fish and Game 2005, Appendix B, p. 7), and, under Idaho State law, is considered a protected nongame species for which it is illegal to intentionally take or possess, except as provided in sections 36–106(e) and 36–1107, Idaho Code, by Commission rule, or the Idaho Administrative Procedures Act 13.01.10, "Rules Governing the Importation, Possession, Release, Sale, or Salvage of Wildlife," subsection 100.06.b (Idaho Department of Fish and Game 2005, Appendix B, p. 5). While protected status extends certain protections to the yellow-billed cuckoo in Idaho, neither this status nor the Species of Greatest Conservation Need designation protects its habitat. In Nevada, the yellow-billed cuckoo is identified as critically imperiled due to extreme rarity, imminent threats, or biological factors, but this designation provides no protection for habitat. Yellow-billed cuckoos have no State

status in Oregon because it has not been considered an active breeding species since the 1940s (Oregon Department of Fish and Wildlife 2005, p. 3). State Wildlife Action Plans that include the yellow-billed cuckoo as a species of conservation concern are: California, Washington, Arizona, Colorado, Montana, Idaho, New Mexico, Utah, Texas, Nevada, and Wyoming. These plans identify conservation needs and actions for a broad range of species and habitats, but their implementation is discretionary.

In summary, where the yellow-billed cuckoo is State-listed (CA), a State candidate (WA), a species of concern or sensitive species (AZ, ID, WY, MT, CO, TX), or critically imperiled (NV), these designations contain no protection for the western yellow-billed cuckoo from habitat modification or destruction, as described under Factors A and E. Existing State regulatory mechanisms have not protected the western yellow-billed cuckoo from habitat loss and degradation from altered hydrology from upstream dams and surface water and ground water diversions, encroachment into the floodplain by agricultural and other development activities, bank stabilization and levee construction and maintenance activities, overgrazing, pesticide use on adjacent agricultural lands, conversion of habitat to monotypic stands of nonnative vegetation, gravel mining, wildfire, drought, and climate change across the range of the western yellow-billed cuckoo.

Canadian, Mexican, and other International Laws

Canada

The Canadian Government through the Department of the Environment (Environment Canada, which was first established by the Department of the Environment Act of 1971) administers numerous acts to preserve and enhance the quality of Canada's natural environment. Acts identified for conservation of wildlife and plant species or their habitat are identified below.

1916 Great Britain-United States Convention for the Protection of Migratory Birds. Canada has committed to migratory bird protection through the 1916 Great Britain-United States Convention for the Protection of Migratory Birds in Canada, which encourages voluntary cooperative actions to protect identified migratory birds. The yellow-billed cuckoo is listed under the 1916 Great Britain-United States Convention for the Protection of Migratory Birds in Canada. In addition,

Canada has enacted the Migratory Birds Convention Act of 1994 (MBCA). The MBCA is intended to ensure the conservation of migratory bird populations by regulating potentially harmful human activities. The implementing regulations of the MBCA ban all activities that are harmful to migratory birds, their eggs or their nests, but does not protect habitat. Also, some activities, such as hunting or scientific collection may be allowed with an appropriate permit.

The Species at Risk Act of 2002. The purpose of the Species at Risk Act (SARA) is to prevent Canadian native wildlife and plant species, subspecies, and distinct populations from becoming extirpated or extinct, to provide for the recovery of endangered or threatened species, and encourage the management of other species to prevent them from becoming at risk. SARA, establishes the Committee on the Status of Endangered Wildlife in Canada (COSEWIC) as an independent body of experts responsible for assessing and identifying species at risk. SARA also, among other objectives, establishes: prohibitions to protect listed Canadian threatened and endangered species and their critical habitat; requirements for use of the best available knowledge on assessing threats to and conservation for wildlife and plant species; and long- and short-term objectives for development of recovery strategies and action plans.

The yellow-billed cuckoo is not identified as a species that is sensitive, threatened, or endangered under Canadian law. Within the range of the western yellow-billed cuckoo, British Columbia considers the yellow-billed cuckoo as an extirpated breeder, but that the species still does occur within the Province (British Columbia Conservation Data Centre, 2013).

Canadian Environmental Protection Act of 1999. The Canadian Environmental Protection Act sets out several guiding principles for conserving the environment including but not limited to supporting: Sustainable development; pollution prevention; elimination of releases of substances that are persistent or that bioaccumulate; an ecosystem approach and using the precautionary principle on issues related to the environment; science-based national standards; and seeking intergovernmental cooperation for consistency and avoidance of duplication of efforts. Because the yellow-billed cuckoo is not considered a species at risk, implementation of environmental protection regulations are optional for the species.

Mexico

The Mexican Government, through its Secretaria de Medio Ambiente y Recursos Naturales (SEMARNAT), has authority to designate species as threatened or endangered. The western yellow-billed cuckoo is not listed by the Mexican Government's Official Mexican Norm NOM-059-SEMARNAT-2010, Mexico's threatened species law. The yellow-billed cuckoo is listed under the 1936 Mexico-United States Convention for the Protection of Migratory Birds and Game Mammals (Service 2012b), which encourages voluntary cooperative actions to protect identified migratory birds and mammals.

In 1988, the Mexican Government passed the General Law of Ecological Equilibrium and Environmental Protection, which is similar to NEPA in the United States. This Mexican statute requires an environmental assessment of private or government actions that may affect wildlife or their habitat. Currently, no known regulatory mechanisms or conservation planning is in place that specifically targets the conservation of yellow-billed cuckoo habitat within the range of the DPS in Mexico. Therefore, we anticipate continued threats in Mexico, with little or no protection to the western yellow-billed cuckoo.

The National Natural Protected Areas (NPAs) system is a Mexican program to protect sensitive habitats and species. NPA designation is supposed to protect areas that have not been significantly altered by human activities and that provide diverse ecosystem services. However, prior to 1994, most NPAs lacked sound and comprehensive management plans. By 2000, approximately 30 percent of new and existing NPAs had developed management plans; however, under the NPA model these plans lacked detailed information, and in many cases could be considered obsolete. NPA goals to promote sustainable natural resources are often unattainable because of conflicting land ownership interests (Valdez *et al.* 2006, p. 272). The allocation of funds for management of natural reserve areas in Sonora is not assured, and some reserves have not received protection other than that given by government edicts or their natural isolation (Burquez and Martinez-Yrizar 1997, p. 378). Urban development has reduced some of Sonora's natural reserves. Three of the reserves have already disappeared, reflecting the tenuous state of many nature reserves in Mexico (Burquez and Martinez-Yrizar 2007, p. 546).

Wildlife management units, or UMAs, were part of a program developed and implemented by SEMARANT in 1997 to promote wildlife management on private property in Mexico (Weber *et al.* 2006, p. 1480). The UMA program has not been effective in promoting wildlife management or biodiversity conservation. It has increased the introduction of exotic wildlife species to meet hunting demands. There is a lack of technical capability on private lands to conduct proper wildlife monitoring and management (Weber *et al.* 2006, p. 1482). In Mexico, the exploitation of minerals and industrial development has not been matched by strong measures to protect the environment (Burquez and Martinez-Yrizar 2007, p. 547). Surface water and ground water management in Mexico is also lacking, and restoring water quality and quantity to water bodies is a primary concern (OECD 2013, p. 102). In the State of Sonora, 30 years of unregulated water extraction from both above and below ground has resulted in serious water resource overexploitation and degradation (OECD 2013, p. 115). Although regulatory measures are in place, they lack consistent implementation and oversight (OECD 2013, p. 133).

Current efforts for protecting the western yellow-billed cuckoo in Mexico primarily consist of Important Areas for Bird Conservation (Áreas de Importancia para la Conservación de las Aves), but no specific projects or conservation efforts are focused on the yellow-billed cuckoo (Sánchez-González and Berlanga 2012 in litt.).

Lack of habitat protection for the yellow-billed cuckoo in northwestern Mexico also impacts the western yellow-billed cuckoo in the United States because individuals are known to make transitory movements up to several hundred miles between the southwestern United States and northern Mexico within a single breeding season (Sechrist *et al.* 2012, p. 5), so that individuals that breed in the United States also depend to some extent on habitat in northern Mexico. No known information is known on the number of yellow-billed cuckoos that utilize habitats in both countries during a given breeding season; however, these are also stopovers areas between breeding and wintering grounds in South America, and are important as foraging habitat. Therefore, lack of regulatory protections for habitat of the yellow-billed cuckoos in northwestern Mexico also affects western yellow-billed cuckoos in the southwestern United States.

In regard to potential for pesticide exposure south of the United States border, Mexico has the second largest pesticide sales in Latin America, behind Brazil, which together account for 78 percent of the volume of pesticides within 11 Latin American countries (Mora 1997, pp. 3–4). While Mexico has laws concerning pesticide use, and import regulations on certain pesticides, there is limited enforcement capacity (Behre 2003, pp. 337–338). The same is true in Paraguay, Bolivia, Brazil, and Argentina where yellow-billed cuckoos winter. For example, in Paraguay, at the center of the yellow-billed cuckoo's wintering range, importation and use of many pesticides are banned, but it is estimated that the amount of pesticides that are imported illegally are double the amount that are imported legally (Scribano 2013).—For additional information on pesticides see Factor E below.

Based on the best available information, the regulatory mechanisms in Mexico that would protect the western yellow-billed cuckoo from threats described under Factors A and E are either lacking or not being fully implemented. These include water supply projects, water diversions, expansion of agricultural activities and overgrazing, conversion of habitat to nonnative vegetation, climate change (Factor A), and pesticides, as well as the threat of small, isolated patches of western yellow-billed cuckoo habitat (Factor E).

Summary of Factor D

Various Federal, State, and international regulatory mechanisms in place provide varying degrees of conservation oversight that may to some degree address the threat of ongoing habitat loss and degradation resulting from altered hydrology, conversion of habitat to nonnative vegetation, climate change, agricultural activities (Factor A), or exposure to pesticides and effects of small and isolated habitat patches (Factor E). In California, where the species is listed as endangered, regulations prohibit unpermitted possession, purchase, sale, or take of listed species. Such prohibition of take does not include the species habitat, and the yellow-billed cuckoo continues to decline in California despite its status as a State-listed species. However, because the yellow-billed cuckoo is not a protected or sensitive species in Canada, Mexico, or in a majority of the United States, application of these regulatory mechanisms to conserve yellow-billed cuckoo or its habitat is unknown and the effectiveness of these regulatory mechanisms is uncertain.

Factor E. Other Natural or Manmade Factors Affecting Its Continued Existence

Small and Widely Separated Habitat Patches

As described in the Background section and under Factor A, the habitat of the western yellow-billed cuckoo has undergone significant loss and modification within its occupied breeding range as a result of widespread multiple human-caused effects. These include altered hydrology in watercourses and past loss and degradation from agriculture. Past destruction and modification transformed formerly large expanses of riparian habitat into a number of smaller patches of smaller total area, isolated from each other by a matrix of mostly human-altered habitats (McGill, 1975, pp. 1–4; Thompson, 1961, pp. 294–315; Wilcove *et al.* 1986, p. 237). As a result, the DPS now primarily occurs in smaller, more widely separated populations. Compared to large populations, smaller populations are disproportionately affected by natural and manmade factors. These stressors vary in frequency, timing, and magnitude across the species' range. They are related or correlated to each other or act in combination to result in significant impacts to the western yellow-billed cuckoo within all or portions of its range.

One of the ramifications of smaller, more isolated habitat patches is that the smaller the patch, the more edge it has in proportion to its area, which increases the percentage of the available habitat exposed to the surrounding land uses (Hunter 1996, pp. 186–187). This is a particularly prevalent characteristic of the yellow-billed cuckoo's remaining disjunct habitat patches, as many patches are in proximity to agricultural and other human-altered landscapes. For example, such land use currently dominates much of the riparian landscape within many regions, particularly along some reaches of the lower Colorado River, Sacramento River, Snake River, Verde River, Gila River, Santa Cruz River, San Pedro River, and Río Grande; and also in parts of northern Mexico in the vicinity of floodplain farming along the Sonora, Magdalena, and Moctezuma Rivers (Villaseñor-Gomez 2006, p. 111).

Agricultural activities on adjacent lands affect riparian bird communities in ways that may result in lower reproductive success, and possible abandonment of the patch, as reviewed by Saab (1999, pp. 136, 147–148). Saab (1999, p. 147) found that bird species, including the yellow-billed cuckoo,

were more likely to occur in riparian habitat along the Snake River, Idaho, in sites surrounded by upland natural vegetation than in habitat adjacent to agricultural lands. Saab found that, compared to habitat patches surrounded by natural habitat, patches near agricultural lands supported more avian nest predators that prosper in human-altered landscapes and have a greater effect on the smaller, fragmented habitats (Saab 1999, p. 147). Increases in these predators can result in more nest losses and discourage yellow-billed cuckoos from nesting, thus suppressing local yellow-billed cuckoo population size. Increases in nonnative vegetation can displace or degrade suitable nesting and foraging habitat, thereby leading to lower utilization of such areas by western yellow-billed cuckoos. Together, the effects can lead to yellow-billed cuckoos abandoning these small habitat patches.

The western yellow-billed cuckoo is currently found in the largest contiguous and least-fragmented remaining habitat patches. For example, in California, sites larger than 198 ac (80 ha) in extent and wider than 950 ft (600 m) provided optimal patch size for yellow-billed cuckoos (Laymon and Halterman 1989, p. 275). Nesting yellow-billed cuckoos are sensitive to patch size and seldom use patches smaller than 325 × 975 ft (100 × 300 m) (Hughes 1999, p. 20). This observed preferential use of large patches strongly suggests that the DPS is sensitive to fragmentation and reductions in habitat patch size. Moreover, patch-size reduction combined with the scarcity of larger patches keeps the yellow-billed cuckoo breeding population size depressed. Such effects prevent the western yellow-billed cuckoo from reversing its long-term decline in population and range (Hunter 1996, pp. 179–187).

Moreover, isolated breeding sites separated by hundreds of miles of nonhabitat also reduce the ease with which dispersing juvenile and returning adult yellow-billed cuckoos are able to find these sites. This isolation may result in low colonization and re-occupation rates, so that otherwise suitable habitat remains unoccupied or occupied at low densities (Laymon and Halterman 1989, p. 274; Hunter 1996, p. 185). For example, the Sacramento River still appears to have sufficient habitat to maintain a self-sustaining population of yellow-billed cuckoos, as over 25,000 ac (10,117 ha) of riparian and associated natural habitat has been protected and other sections are in the process of being restored. However, not all suitable patches are occupied or may only be

occupied in very low densities, and the yellow-billed cuckoo population remains much lower than its potential (Dettling and Howell 2011, pp. 20–21).

In summary, despite efforts to protect and restore riparian habitat along the Sacramento River and elsewhere in the range of the western yellow-billed cuckoo, these efforts offset only a small fraction of historical habitat that has been lost. Therefore, the threats resulting from the species' behavioral response to the multiple, combined effects of small and widely separated habitat patches exacerbate the effect of other threats within a large portion of the range of the western yellow-billed cuckoo. Moreover, because the threats that create small and isolated patches are ongoing (see Factor A), we expect the effects of the species' response to small patch size to continue to adversely impact the western yellow-billed cuckoo into the future.

Pesticides

Exposure to pesticides may also be a threat to western yellow-billed cuckoos because it negatively impacts populations of insect prey (Groschupf 1987, p. 29; Hughes 1999, p. 2). The effects of pesticides on western yellow-billed cuckoos can be from intentional aerial spraying of habitat for mosquito or forest pest control, or from overspray when foraging habitat is located next to agricultural fields. Prey populations were affected by aerial spraying of larvicides for control of mosquitoes at Caswell State Park in California (Laymon 1998, p. 12) and in Colorado to control an outbreak of caterpillars on box elders near Durango (Colyer 2001, pp. 1–6). The available evidence suggests that a reduction in prey availability results in reduced nesting success (Laymon 1980, p. 27; Hughes 1999, pp. 19–20), and pairs may even forgo breeding in years with inadequate food supplies (Veit and Petersen 1993, pp. 258–259). Therefore, the application of pesticides directly onto areas of riparian habitat may indirectly affect the reproductive success of the western yellow-billed cuckoo, leading to nest failure and lowered population size. Additionally, because breeding site fidelity is in part dependent on previous successful nesting (see the Breeding Site Fidelity section), yellow-billed cuckoos may abandon otherwise suitable nest sites where prey availability is limited by pesticide use, resulting in curtailment of its occupied range.

Effects from overspray of pesticides are more pronounced in smaller patches next to agricultural fields (because they have more edges, which allows for increased chances of exposure) but the

effects of pesticides could also affect larger habitat patches as well. In areas where riparian habitat borders agricultural lands, such as California's Central Valley, the lower Colorado River, Snake River, Gila River, Río Grande Valley, and rivers in northern Mexico, including the Sonora, Yaqui, Mayo, and Moctezuma, pesticide use indirectly affects western yellow-billed cuckoos by reducing prey numbers, or by poisoning nestlings if sprayed directly in areas where the birds are nesting (Laymon and Halterman 1987b, p. 23; Lehman and Walker 2001, p. 12). Accumulation of chlorinated hydrocarbon pesticides, particularly dichlorodiphenyltrichloroethane (DDT), has affected other bird species, particularly top predators (Robinson and Bolen 1989, pp. 269–275). Pesticides may affect behavior (for example, loss of balance) or cause death by direct contact. Laymon (1980, pp. 11–12) reported sublethal poisoning of young yellow-billed cuckoos caused by spraying active nests in walnut orchards in California.

Although DDT use has been banned in the United States since 1972, and in Mexico since 1999, yellow-billed cuckoos may be exposed to DDT in Mexico or on wintering grounds where DDT is still used despite any bans on its use. For example, yellow-billed cuckoos (most likely of the eastern population) collected during the spring and fall migration in Florida had unusually high concentrations of DDT, suggesting exposure on the wintering grounds in South America (Grocki and Johnston 1974, pp. 186–188). Analysis of two eggs collected in California in 1979 showed very low levels of dichlorodiphenyldichloroethylene (DDE), a stable metabolite of DDT, but eggshell fragments collected in 1985 from three nests along the South Fork Kern River in California averaged 19 percent thinner than pre-DDT era eggshells (Laymon and Halterman 1987b, pp. 22–23). DDT has caused eggshell thinning in other bird species, and this percentage of thinning in other species has allowed eggs to be crushed during incubation, but there is no information showing that yellow-billed cuckoo eggs have been crushed during incubation because of shell thinning.

A recent study in southern Sonora, Mexico, tested for the presence of a group of agricultural pesticides banned in the United States, known as organochlorine pesticides (beta-hexachlorocyclohexane (BHC), lindane, aldrin, endrin, b-endosulfan, methoxychlor, p, p0-DDE, p, p0-Dichlorodiphenyldichloroethane (DDD), p, p0-DDT). Collectively called OCPs,

these pesticides are persistent in the environment and, therefore, have the potential to move long distances in surface runoff or ground water. Soil samples collected from 24 localities in the Yaqui and Mayo Valleys of southern Sonora, Mexico, watersheds in which the western yellow-billed cuckoo is known to breed, were found to have higher OCP levels than other regions of the world. The OCPs were predominantly DDT (Cantu-Soto *et al.* 2011, p. 559), despite its having been discontinued in Mexico in 1999 after decades of heavy use in agriculture and for malaria control (Yañez *et al.* 2004, p. 18). This finding may indicate recent applications of DDT in agricultural soils (Cantu-Soto *et al.* 2011, p. 559). Because of the proximity of habitat for yellow-billed cuckoos to these valleys and the prevalence of floodplain agriculture in northern Mexico, these pesticides, especially DDT, may be having widespread long-lasting effects on the western yellow-billed cuckoo. These include direct and indirect exposure through ingestion of contaminated prey items, and reduction in prey availability from direct exposure and pesticide runoff into habitat that supports western yellow-billed cuckoos.

In summary, pesticide use is widespread in agricultural areas in the western yellow-billed cuckoo breeding range in the United States and northern Mexico. Yellow-billed cuckoos are exposed to the effects of pesticides on their wintering grounds, as evidenced by DDT found in their eggs and eggshell thinning in the United States. Because much of the species' habitat is in proximity to agriculture, the potential exists for direct and indirect effects to a large portion of the species in these areas through altered physiological functioning, prey availability, and therefore, reproductive success, which ultimately results in lower population abundance and curtailment of the occupied range. While agricultural pesticides can kill prey of the yellow-billed cuckoo, and documentation exists of pesticide exposure in the wild, described above, no known data is available to determine specifically how often agricultural chemicals are affecting yellow-billed cuckoo prey availability, locations where it may be particularly significant, or the extent to which pesticides are responsible for population-level effects in the western yellow-billed cuckoo. However, based on the close proximity of agricultural areas to where the western yellow-billed cuckoo breeds, the threat is potentially significant.

Collisions With Communication Towers and Other Tall Structures

Yellow-billed cuckoos are vulnerable to collision with communication towers and other tall structures, particularly during their migration. For example, several hundred yellow-billed cuckoo mortalities were documented at a single television tower in Florida over a 29-year period (Crawford and Stevenson 1984, p. 199; Crawford and Engstrom 2001, p. 383), and at an airport ceilometer in the east (Howell *et al.* 1954, p. 212). Lesser numbers of yellow-billed cuckoos have been reported as killed at other sites with both television towers and wind turbines in Wisconsin, West Virginia, and northern Texas (Kemper 1996, p. 223; Schechter 2009, p. 1; Bird Watching 2011, p. 1). Although these mortalities were in the eastern segment of the population, with the number of tall towers that have been constructed in recent years in western United States, the potential exists for collisions with the western yellow-billed cuckoo. Without further study, we anticipate this to be a minor, but ongoing, effect to individual yellow-billed cuckoos, but in combination with all the other effects to this species, as described under Factors A and E, mortality from collision would have an additive effect to the threats facing the western yellow-billed cuckoo.

Conservation Efforts To Reduce Other Natural or Manmade Factors Affecting Its Continued Existence

Restoration of riparian habitat on the Colorado, Kern, and Sacramento Rivers and elsewhere will help reduce habitat fragmentation, small patch size, and overall lack of habitat. In some restoration plans, reduction of fragmentation is a stated goal, and restoration sites are planned for sites adjacent to existing habitat. The Colorado River riparian habitat restoration work is just beginning and is part of the Lower Colorado River Multi-Species Conservation Plan. This habitat conservation plan call for the creation of 5,940 ac (2405 ha) of riparian habitat of which 4,050 ac (1,640 ha) will be suitable for western yellow-billed cuckoos (Reclamation 2012, pp. 1–3). Restoration work began on the South Fork Kern River in California, in 1986. To date, 340 ac (138 ha) of riparian habitat have been restored (Audubon California 2012, pp. 1–10). Along the Sacramento River, the Sacramento River National Wildlife Refuge has implemented a riparian restoration program. Riparian habitat restoration activities have been conducted on 4,513 ac (1,826 ha) with 2,400 ac (738 ha)

slated for additional restoration (Hammond 2011, p. 14). At present, restoration is being done on a relatively small scale in comparison to the need to reduce habitat fragmentation and increase the overall extent of suitable habitat.

DDT has been banned in the United States for several decades, which reduces the exposure of yellow-billed cuckoos to this pesticide. However, use of DDT south of the border in Central and South America continues, and the yellow-billed cuckoos are exposed during migration and winter.

To date, conservation efforts, though helpful, have been inadequate to significantly reduce the effects of these other natural or manmade factors affecting the western yellow-billed cuckoo.

Summary of Factor E

As noted in Factor A, habitat for the western yellow-billed cuckoo has been modified and curtailed, resulting in only remnants of formerly large tracts of native riparian forests, many of which are no longer occupied by western yellow-billed cuckoos. Despite recent efforts to protect existing, and restore additional, riparian habitat in the Sacramento, Kern, and Colorado Rivers, and other rivers in the range of the western yellow-billed cuckoo, these efforts offset only a small fraction of historical habitat that has been lost. Therefore, we expect the threat resulting from the combined effects associated with small and widely separated habitat patches to continue to affect a large portion of the range of the western yellow-billed cuckoo. This threat is particularly persistent where small habitat patches are in proximity to human-altered landscapes, such as near agricultural fields that dominate the landscape in many areas where the western yellow-billed cuckoo occurs. As a result, the potential exists for pesticides to directly affect (poisoning individual cuckoos) and indirectly affect (reducing the prey base) a large portion of the species. These effects could ultimately result in lower population abundance and curtailment of its occupied range. Mortality from collisions with tall structures is also an ongoing, but largely unquantified effect.

Effects From Factors A through E in Combination

Habitat loss and degradation occurs throughout the range of the western yellow-billed cuckoo (see Background section and Factor A above), and many of the threats under Factor A have worked and are working in combination to reduce the amount, configuration,

and quality of the riparian habitat that remains. To provide a generalized example, the following scenario is not atypical for much of the species' range: Installation of a dam along a watercourse allows for increased agricultural and urban development downstream of the dam because of the reduced risk of flooding and increased assurance of available water for human uses. This development, as it expands through time, results in increased channelization of the watercourse and increased ground and surface water extraction. These activities affect the watercourse's hydrological regime and natural hydrologic functioning such that, through reduced flooding, changes in the watercourse's channel, and a lowered water table, the native riparian vegetation becomes stressed, woody debris accumulates, and few new native plants grow. This situation then allows for increased intensity and extent of wildfires (which, in riparian areas, often has a human ignition source, another indirect effect of development) and favors conditions that encourages the growth of nonnative plants. All of these actions result in a continued loss and degradation of native riparian vegetation, which occurs as smaller, more isolated (fragmented) patches that are less likely to adequately provide for the needs of the western yellow-billed cuckoo.

This array of Factor A threats, working in combination, creates the situation that then allows threats from the other listing factors to markedly affect the species. These other-factor threats may not be significant in and of themselves, but because they are not occurring in isolation they, in combination, are contributing to the population decline of the species. For example, as discussed in the Small and Widely Separated Habitat Patches section of Factor E, above, small habitat patches (resulting from the effects of Factor A threats) are more likely to have a larger number and a wider range of nest predators (see the Predation section of Factor C, above) because more nest predators occur in ecological edges. Additionally, habitat patches near areas of agricultural or urban development can foster higher densities of potential nest predators. Thus, any western yellow-billed cuckoo nesting in a small habitat patch near development may be subject to higher levels of nest predation and thus lower productivity. Moreover, the mere presence of certain nest predators in a habitat patch may elicit a behavioral response from yellow-billed cuckoos such that they do not even attempt to nest in such habitat

patches, even if other aspects of the habitat would suggest that it is suitable for nesting.

Similarly, riparian habitat patches that occur near urban and agricultural development may be subject to intentional or accidental pesticide spraying, as discussed in the Pesticide section under Factor E. This spraying would be unlikely to occur but for the habitat patch's proximity to development. This development likely occurs close to the riparian habitat through a process similar to the generalized scenario described above (see also specific details under Factor A).

Much of the available habitat is now in small patches with only a relatively few patches regularly occupied by nesting western yellow-billed cuckoos. Thus, the species' intolerance of small patch size in combination with extensive habitat loss has resulted in much less suitable habitat and a greatly reduced western yellow-billed cuckoo population size. In areas at the edge of the western yellow-billed cuckoo's current range (e.g. the Sacramento River) restoration of riparian habitat has not been accompanied by an increase in the species' population indicating that other factors may be limiting the population in those areas. Moreover, because (1) western yellow-billed cuckoos need riparian habitat in a range of ages, including older, more structurally diverse areas for nesting, and (2) nearly all of the areas where riparian habitat could grow in western North America are modified by dams, channelization, water extraction, and other activities that disrupt natural processes to allow good-quality riparian habitat to grow in a mosaic of different ages (see Factor A), and climate change is likely to further add to these impacts, it is unlikely that large areas of suitable habitat will naturally regenerate within the range of the species into the future.

Proposed Determination

We have carefully assessed the best scientific and commercial data available regarding the past, present, and reasonably anticipated future threats to the western yellow-billed cuckoo. Threats to the western yellow-billed cuckoo exist for two of five threat factors. Threats also occur in combination, resulting in synergistically greater effects.

Factor A threats result from habitat destruction, modification, and degradation from dam construction and operations, water diversions, riverflow management; stream channelization and stabilization; conversion to agricultural uses, such as crops and livestock

grazing; urban and transportation infrastructure; and increased incidence of wildfire. Continuing ramifications of actions that caused habitat loss in the past have resulted in ongoing curtailment of the habitat of the yellow-billed cuckoo western DPS throughout its range. These factors also contribute to fragmentation and promote conversion to nonnative plant species, particularly tamarisk. The threats affecting western yellow-billed cuckoo habitat are ongoing and significant and have resulted in curtailment of the range of the species. Loss of riparian habitat leads not only to a direct reduction in yellow-billed cuckoo numbers but also leaves a highly fragmented landscape, which in combination with other threats (see below), can reduce breeding success through increased predation rates and barriers to dispersal by juvenile and adult yellow-billed cuckoos.

Factor E threats, including habitat rarity and small and isolated population sizes cause the remaining yellow-billed cuckoo populations to be increasingly susceptible to further declines through lack of immigration, reduced populations of prey species (food items), pesticides, and collisions with tall vertical structures during migration. The serious and ongoing threat of small overall population size, which is the result of other threats in combination, leads to an increased chance of local extirpations.

The threats that affect the western yellow-billed cuckoo are important on a threat-by-threat basis, but are even more significant in combination. Habitat loss has been extensive throughout the range of the western yellow-billed cuckoo. The remaining riparian habitat is fragmented into small patches, which the species does not normally select as breeding habitat. Additionally, the western yellow-billed cuckoos need riparian habitat in a range of ages, including older structurally diverse areas for nesting. This diversity of tree ages within the riparian vegetation (the DPS's habitat) is largely dependent on disturbances that affect some but not all of vegetation within that habitat patch at one time. A number of threats, working in combination or individually, prevent this from happening, now and will continue to do so in the future.

For example, dams and other flood control modifications to a watercourse may prevent floods from being severe enough to affect that habitat patch; channelization may restrict floodwaters to a narrow channel, allowing floodwaters to cause too much damage to habitat within the channel and not enough (or no) damage to habitat

outside the channel; altered flood regimes may allow dead wood to accumulate, allowing fires, when they occur, to be severe and affect most of the patch; development and other human activities next to habitat patches may allow more wildfires to be ignited; and the reduction in patch size, through neighboring development, alteration of hydrology, or encroachment by nonnative plants, makes it more likely that a larger proportion of that patch will be affected during any given disturbance event. Moreover, nearly all areas where riparian habitat could potentially grow are modified by dams or water withdrawal and disrupted by other activities, often in combination, that prevent the reestablishment of riparian habitat. Patch size, when coupled with habitat loss and Factor C and E threats, including proximity to incompatible land uses which increases exposure to predators and pesticides, is a significant cumulative threat to the western yellow-billed cuckoo now and in the future.

Per section 4(b)(1)(A) of the Act, prior to making our determination, we must first "[take] into account those efforts, if any, being made by any State or foreign nation, or any political subdivision of a State or foreign nation, to protect such species, whether by predator control, protection of habitat and food supply, or other conservation practices, within any area under its jurisdiction, or on the high seas." Restoration of riparian habitat on the Colorado, Kern, and Sacramento Rivers and elsewhere will help reduce habitat fragmentation, small patch size, and overall lack of habitat. Moreover, at present, restoration is being done on a relatively small scale in comparison to the need to reduce habitat fragmentation and increase the overall extent of suitable habitat. DDT has been banned in the United States for several decades, but use of DDT continues in Central and South America, thus exposing western yellow-billed cuckoos during migration and winter.

Through our analysis of the best available scientific and commercial information on the abundance, life history, current population status and trends, and the response of the species and its habitat to natural and anthropogenic threats, we have determined that the western yellow-billed cuckoo DPS meets the definition of threatened under the Act, rather than endangered. The Act defines an endangered species as any species that is "in danger of extinction throughout all or a significant portion of its range" and a threatened species as any species "that is likely to become endangered

throughout all or a significant portion of its range within the foreseeable future.” Our general understanding of an “endangered” species is one that is currently on the brink of extinction in the wild.

The geographic extent of the western yellow-billed cuckoo remains rather widespread through much of its historic range, conferring some measure of ecological and geographic redundancy and resilience. Although there is a general decline in the overall population trend and its breeding range has been reduced, the rate of the population decline and contraction of its breeding range is not so severe to indicate extinction is imminent for the western yellow-billed cuckoo. This current downward trend is slow and not expected to increase in the near future. The majority of large-scale habitat losses and conversions through dam building and agricultural development have already occurred, and we are not aware of any large-scale projects that would affect the species to the extent that the current trend of decline would change. Therefore, threats to the species and population declines do not currently reach the level typical of an endangered species.

Because the western yellow-billed cuckoo does not face any known sudden and calamitous threats, it is not a narrowly endemic species vulnerable to extinction from elevated or cumulative threats, is not yet restricted to a critically small range or critically low numbers, and currently does not show any substantial reduction in numbers, it would not meet the definition of “endangered” as determined by the Act. More appropriately, we find that the western yellow-billed cuckoo is likely to become endangered throughout all or a significant portion of its range within the foreseeable future, based on the timing, severity, and scope of the threats described above. Therefore, on the basis of the best available scientific and commercial information, we propose listing the western yellow-billed cuckoo DPS as threatened in accordance with sections 3(6), 3(20), and 4(a)(1) of the Act.

Under the Act and our implementing regulations, a species may warrant listing if it is threatened or endangered throughout all or a significant portion of its range. The western yellow-billed cuckoo proposed for listing in this rule is highly restricted to riparian habitat, and the threats to the species and its habitat occur throughout its breeding range. Therefore, we assessed the status of the western yellow-billed cuckoo throughout its entire breeding range. The threats to the survival of the species

occur throughout the western DPS’ breeding range and are not restricted to any particular significant portion of that range. We conclude that what affects the entire breeding portion of the western DPS’ range affects the status of the entire western yellow-billed cuckoo throughout its breeding range, including migration corridors and stopover areas. Accordingly, our assessment and proposed determination applies to the western yellow-billed cuckoo throughout its entire breeding range.

Available Conservation Measures

Conservation measures provided to species listed as endangered or threatened under the Act include recognition, recovery actions, requirements for Federal protection, and prohibitions against certain practices. Recognition through listing results in public awareness and conservation by Federal, State, tribal, and local agencies, private organizations, and individuals. The Act encourages cooperation with the States, and requires that recovery actions be carried out for all listed species. The protection required by Federal agencies and the prohibitions against certain activities are discussed, in part, below.

The primary purpose of the Act is the conservation of endangered and threatened species and the ecosystems upon which they depend. The ultimate goal of such conservation efforts is the recovery of these listed species, so that they no longer need the protective measures of the Act. Subsection 4(f) of the Act requires the Service to develop and implement recovery plans for the conservation of endangered and threatened species, unless the Secretary finds that such a plan will not promote the conservation of the species. The recovery planning process involves the identification of actions necessary to halt or reverse the species’ decline by addressing the threats to its survival and recovery. The goal of this process is to restore listed species to a point where they are secure, self-sustaining, and functioning components of their ecosystems.

Recovery planning includes the development of a recovery outline shortly after a species is listed, preparation of a draft and final recovery plan, and revisions to the plan as significant new information becomes available. The recovery outline indicates the species recovery number, whether or not a recovery plan will be prepared and the estimated date of completion, whether a recovery team will be appointed, and what immediate actions are anticipated to conserve the species. The recovery plan identifies site-

specific management actions that will achieve recovery of the species, measurable criteria that determine when a species may be downlisted or delisted, and methods for monitoring the recovery progress. Recovery plans also establish a framework for agencies to coordinate their recovery efforts and provide estimates of the cost of implementing recovery tasks. Recovery teams (composed of species experts, Federal and State agencies, nongovernmental organizations, and stakeholders) are often established to develop recovery plans. When completed, the recovery outline, and any draft recovery plan, or final recovery plan, subsequently developed, will be available on our Web site (<http://www.fws.gov/endangered>) or from our Sacramento Fish and Wildlife Office (see **FOR FURTHER INFORMATION CONTACT**).

Implementation of recovery actions generally requires the participation of a broad range of partners, including other Federal agencies, States, tribes, nongovernmental organizations, businesses, and private landowners. Examples of recovery actions include habitat restoration (for example, restoration of native vegetation), research, captive propagation and reintroduction, and outreach and education. The recovery of many listed species cannot be accomplished solely on Federal lands because their range may occur primarily or solely on non-Federal lands. To achieve recovery of these species requires cooperative conservation efforts on private, State, and tribal lands.

If this species is listed, funding for recovery actions will be available from a variety of sources, including Federal budgets, State programs, and cost-share grants for non-Federal landowners, the academic community, and nongovernmental organizations. In addition, pursuant to section 6 of the Act, the States of California, Nevada, Arizona, New Mexico, Texas, Colorado, Wyoming, Idaho, Washington, and Oregon would be eligible for Federal funds to implement management actions that promote the protection and recovery of the western yellow-billed cuckoo. Information on our grant programs that are available to aid species recovery can be found at: <http://www.fws.gov/grants>.

Although the western yellow-billed cuckoo is only proposed for listing under the Act at this time, please let us know if you are interested in participating in recovery efforts for this species. Additionally, we invite you to submit any new information on this species whenever it becomes available and any information you may have for

recovery planning purposes (see **FOR FURTHER INFORMATION CONTACT**).

Section 7(a) of the Act requires Federal agencies to evaluate their actions with respect to any species that is proposed or listed as endangered or threatened and with respect to its critical habitat, if any is designated. Regulations implementing this interagency cooperation provision of the Act are codified at 50 CFR part 402. Section 7(a)(4) of the Act requires Federal agencies to confer with the Service on any action likely to jeopardize the continued existence of a species proposed for listing or result in destruction or adverse modification of proposed critical habitat. If a species is listed subsequently, section 7(a)(2) of the Act requires Federal agencies to ensure that activities they authorize, fund, or carry out are not likely to jeopardize the continued existence of the species or destroy or adversely modify its critical habitat. If a Federal action may adversely affect a listed species or its critical habitat, the responsible Federal agency must enter into formal consultation with the Service.

Federal agency actions within or affecting the species' habitat that may require conference or consultation or both as described in the preceding paragraph include, but are not limited to, projects that will result in removal or degradation of riparian vegetation, altered streamflow or fluvial dynamics, or other habitat-altering activities on Federal lands or as a result of issuance of section 404 CWA permits by the USACE; construction and management of energy and power line rights-of-way by the FERC; construction and maintenance of roads, highways, or bridges by the Federal Highway Administration; grazing leases by the USFS or the BLM; and projects funded through Federal loan programs. Such projects may include, but are not limited to, construction or modification of reservoirs, levees, bank stabilization structures, water diversion and withdrawal projects, roads and bridges, utilities, recreation sites, and other forms of development, and livestock grazing.

The Act and its implementing regulations set forth a series of general prohibitions and exceptions that apply to all endangered wildlife. The prohibitions of section 9(a)(2) of the Act, codified at 50 CFR 17.21 for endangered wildlife, in part, make it illegal for any person subject to the jurisdiction of the United States to take (includes harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect; or to attempt any of these), import, export, ship in

interstate commerce in the course of commercial activity, or sell or offer for sale in interstate or foreign commerce any listed species. Under the Lacey Act (18 U.S.C. 42–43; 16 U.S.C. 3371–3378), it is also illegal to possess, sell, deliver, carry, transport, or ship any such wildlife that has been taken illegally. Certain exceptions apply to agents of the Service and State conservation agencies.

We may issue permits to carry out otherwise prohibited activities involving endangered and threatened wildlife species under certain circumstances. Regulations governing permits are codified at 50 CFR 17.22 for endangered species, and at 50 CFR 17.32 for threatened species. With regard to endangered wildlife, a permit must be issued for the following purposes: for scientific purposes, to enhance the propagation or survival of the species, and for incidental take in connection with otherwise lawful activities.

Our policy, as published in the **Federal Register** on July 1, 1994 (59 FR 34272), is to identify to the maximum extent practicable at the time a species is listed, those activities that would or would not constitute a violation of section 9 of the Act. The intent of this policy is to increase public awareness of the effects of a proposed listing on proposed and ongoing activities within the range of species proposed for listing. The following activities could potentially result in a violation of section 9 of the Act; this list is not comprehensive:

(1) Unauthorized collecting, handling, possessing, selling, delivering, carrying, or transporting of western yellow-billed cuckoos in the range of the western DPS, including import or export across State lines and international boundaries, except for properly documented antique specimens of these taxa at least 100 years old, as defined by section 10(h)(1) of the Act.

(2) Intentional introduction of nonnative species that compete with or prey upon western yellow-billed cuckoos in the range of the western DPS, or degrade its habitat, including the intentional introduction of nonnative vegetation, which may include, but is not limited to, tamarisk, Russian olive, and giant reed.

(3) Unauthorized destruction or alteration of western yellow-billed cuckoo habitat from alteration of the hydrology or fluvial geomorphic processes that include, but are not limited to, channelization, impoundment, bank stabilization, water extractions and diversions, and channel clearing along any watercourse in which

the western yellow-billed cuckoo is known to occur.

(4) Unauthorized activities that result in removal, destruction, or degradation of riparian vegetation from actions that include, but are not limited to, streamside clearings, prescribed fire, off-road vehicle use, human trampling, tree harvesting, and intensive livestock grazing along any watercourse in which the western yellow-billed cuckoo is known to occur.

(5) Unauthorized use of pesticides that would reduce insect prey populations within or immediately adjacent to riparian areas in which the western yellow-billed cuckoo is known to occur.

In California, if the western yellow-billed cuckoo is listed under the Federal Endangered Species Act, the CESA (California Fish and Game Code, § 2050 et seq.) is automatically invoked, which would also prohibit take of these species and encourage conservation by California State government agencies. Further, the State may enter into agreements with Federal agencies to administer and manage any area required for the conservation, management, enhancement, or protection of endangered species. Funds for these activities could be made available under section 6 of the Act (Cooperation with the States). Thus, the Federal protection afforded to this species by listing it as a threatened species would be reinforced and supplemented by protection under State law.

Questions regarding whether specific activities would constitute a violation of section 9 of the Act should be directed to the Sacramento Fish and Wildlife Office (see **FOR FURTHER INFORMATION CONTACT**). Requests for copies of the regulations concerning listed animals and general inquiries regarding prohibitions and permits may be addressed to the U.S. Fish and Wildlife Service, Sacramento Fish and Wildlife Office, Endangered Species Permits, 2800 Cottage Way, Room W–2605, Sacramento, CA 95825 (telephone at 916–414–6600; facsimile at 916–414–6712).

Peer Review

In accordance with our joint policy on peer review published in the **Federal Register** on July 1, 1994 (59 FR 34270), we will seek the expert opinions of at least three appropriate and independent specialists regarding this proposed rule. The purpose of peer review is to ensure that our critical habitat designation is based on scientifically sound data, assumptions, and analyses. We have invited these peer reviewers to comment

during the public comment period on our specific assumptions and conclusions in this proposed rule.

We will consider all comments and information received during the comment period on this proposed rule during our preparation of a final determination. Accordingly, the final decision may differ from this proposal.

Public Hearings

Section 4(b)(5) of the Act provides for one or more public hearings on this proposal, if requested. Requests must be received within 45 days after the date of publication of this proposed rule in the **Federal Register**. Such requests must be sent to the address shown in the **FOR FURTHER INFORMATION CONTACT**. We will schedule public hearings on this proposal, if any are requested, and announce the dates, times, and places of those hearings, as well as how to obtain reasonable accommodations, in the **Federal Register** and local newspapers at least 15 days before the hearing.

Required Determinations

Clarity of the Rule

Executive Order 12866 requires each agency to write regulations that are easy to understand. We invite your comments on how to make this rule easier to understand including answers to questions such as the following: (1) Are the requirements in the rule clearly stated? (2) Does the rule contain technical language or jargon that interferes with its clarity? (3) Does the format of the rule (grouping and order of sections, use of headings, paragraphing, etc.) aid or reduce its clarity? (4) Would the rule be easier to

understand if it were divided into more (but shorter) sections? (5) Is the description of the rule in the

SUPPLEMENTARY INFORMATION section of the preamble helpful in understanding the rule? What else could we do to make the proposed rule easier to understand?

Send a copy of any comments that concern how we could make this proposed rule easier to understand to Office of Regulatory Affairs, Department of the Interior, Room 7229, 1849 C Street NW., Washington, DC 20240. You also may email the comments to this address: Exsec@ios.goi.gov.

Paperwork Reduction Act of 1995 (44 U.S.C. 3501 et seq.)

This rule does not contain any new collections of information that require approval by OMB under the Paperwork Reduction Act of 1995 (44 U.S.C. 3501 et seq.). This rule will not impose recordkeeping or reporting requirements on State or local governments, individuals, businesses, or organizations. An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB control number.

National Environmental Policy Act (42 U.S.C. 4321 et seq.)

We have determined that environmental assessments and environmental impact statements, as defined under the authority of the National Environmental Policy Act of 1969 (42 U.S.C. 4321 et seq.), need not be prepared in connection with regulations pursuant to section 4(a) of the Act. We published a notice outlining our reasons for this determination in the

Federal Register on October 25, 1983 (48 FR 49244).

References Cited

A complete list of references cited in this rulemaking is available on the Internet at <http://www.regulations.gov> and upon request from the Sacramento Fish and Wildlife Office (see **ADDRESSES** for contact information).

Authors

The primary authors of this document are the staff members of the Sacramento Fish and Wildlife Office.

List of Subjects in 50 CFR Part 17

Endangered and threatened species, Exports, Imports, Reporting and recordkeeping requirements, Transportation.

Proposed Regulation Promulgation

Accordingly, we propose to amend part 17, subchapter B of chapter I, title 50 of the Code of Federal Regulations, as follows:

PART 17—[AMENDED]

■ 1. The authority citation for part 17 continues to read as follows:

Authority: 16 U.S.C. 1361–1407; 1531–1544; 4201–4245; unless otherwise noted.

■ 2. Amend § 17.11(h) by adding an entry for “Cuckoo, yellow-billed (Western DPS) to the List of Endangered and Threatened Wildlife in alphabetical order under Birds, to read as follows:

§ 17.11 Endangered and threatened wildlife.

* * * * *

(h) * * *

Species		Historic Range	Vertebrate population where endangered or threatened	Status	When listed	Critical habitat	Special rules
Common name	Scientific name						
*	*	*	*	*	*		*
BIRDS							
*	*	*	*	*	*		*
Cuckoo, yellow-billed (Western DPS).	<i>Coccyzus americanus</i> .	U.S.A., Canada, Mexico.	U.S.A. (AZ, CA, CO (western), ID, MT (western), NM (western), NV, OR, TX (western), UT, WA, WY (western)), Canada (British Columbia), Mexico (Baja California, Baja California Sur, Chihuahua, Durango (western), Sinaloa, Sonora)).	T		NA	NA

Species		Historic Range	Vertebrate popu- lation where endan- gered or threatened	Status	When listed	Critical habitat	Special rules
Common name	Scientific name						
*	*	*	*	*	*		*
*	*	*	*	*	*		*

* * * * *

Dated: September 19, 2013.
Dan Ashe,
Director, U.S. Fish and Wildlife Service.
[FR Doc. 2013–23725 Filed 10–2–13; 8:45 am]
BILLING CODE 4310–55–P



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Part VI

Department of Housing and Urban Development

Final Fair Market Rents for the Housing Choice Voucher Program and
Moderate Rehabilitation Single Room Occupancy Program Fiscal Year
2014; Notice

DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT

[Docket No. FR-5725-N-02]

Final Fair Market Rents for the Housing Choice Voucher Program and Moderate Rehabilitation Single Room Occupancy Program Fiscal Year 2014

AGENCY: Office of the Assistant Secretary for Policy Development and Research, HUD.

ACTION: Notice of Final Fiscal Year (FY) 2014 Fair Market Rents (FMRs).

SUMMARY: Section 8(c)(1) of the United States Housing Act of 1937 (USHA) requires the Secretary to publish FMRs periodically, but not less than annually, adjusted to be effective on October 1 of each year. This notice publishes the FMRs for the Housing Choice Voucher, the Moderate Rehabilitation, the project-based voucher, and any other programs requiring their use. Today's notice provides final FY 2014 FMRs for all areas that reflect the estimated 40th and 50th percentile rent levels trended to April 1, 2014. The FY 2014 FMRs are based on 5-year, 2007–2011 data collected by the American Community Survey (ACS). These data are updated by one-year recent-mover 2011 ACS data for areas where statistically valid one-year ACS data are available. The Consumer Price Index (CPI) rent and utility indexes are used to further update the data from 2011 to the end of 2012. HUD continues to use ACS data in different ways according to the statistical reliability of rent estimates for areas of different population sizes and counts of rental units.

The final FY 2014 FMR areas are based on Office of Management and Budget (OMB) metropolitan area definitions as updated through December 1, 2009 and include HUD modifications that were first used in the determination of FY 2006 FMR areas. The February 28, 2013 OMB Area definition update has not been incorporated in the FMR process due to the timing of the release and the availability of ACS data. HUD will work toward incorporating these new area definitions into the Proposed FY 2015 FMR calculations; however, this is dependent on the availability of ACS data conforming to the new area definitions.

The final FY 2014 FMRs in this notice reflect several updates from FY 2013 to the methodology used to calculate FMRs. Specifically, HUD has updated the information used to calculate FMRs in Puerto Rico. Puerto Rico FMRs are now based on 2007–2011 Puerto Rico Community Survey (PRCS) data (the

PRCS is a part of the ACS program). Moreover, HUD is using Consumer Price Index data calculated specifically for Puerto Rico rather than using South Census Region CPI data. In response to comments on the proposed notice, HUD has also adjusted the FMRs for Puerto Rico based on validated information related to utility rates. HUD will continue to refine its methodology for incorporating validated utility rates into FMR calculations, as appropriate, in future notices. The remaining methodology used to calculate FMRs remains the same, including the use of the annually updated trend factor calculation methodology. This trend factor for the FY 2014 FMRs is based on the change in national gross rents from 2006 to 2011.

The FMR for Danbury, CT was updated to incorporate the results of a survey. This survey was not available in time for inclusion in the proposed FY 2014 FMRs and results in an increase.

DATES: *Effective Date:* The FMRs published in this notice are effective on October 1, 2013.

FOR FURTHER INFORMATION CONTACT: For technical information on the methodology used to develop FMRs or a listing of all FMRs, please call the HUD USER information line at 800–245–2691 or access the information on the HUD USER website <http://www.huduser.org/portal/datasets/fmr.html>. FMRs are listed at the 40th or 50th percentile in Schedule B. For informational purposes, 40th percentile recent-mover rents for the areas with 50th percentile FMRs will be provided in the HUD FY 2014 FMR documentation system at <http://www.huduser.org/portal/datasets/fmr/fmrs/docsys.html&data=fmr14> and 50th percentile rents for all FMR areas will be published at <http://www.huduser.org/portal/datasets/50per.html> after publication of final FY 2014 FMRs.

Questions related to use of FMRs or voucher payment standards should be directed to the respective local HUD program staff. Questions on how to conduct FMR surveys or concerning further methodological explanations may be addressed to Marie L. Lihn or Peter B. Kahn, Economic and Market Analysis Division, Office of Economic Affairs, Office of Policy Development and Research, telephone 202–708–0590. Persons with hearing or speech impairments may access this number through TTY by calling the toll-free Federal Relay Service at 800–877–8339. (Other than the HUD USER information line and TDD numbers, telephone numbers are not toll-free.)

SUPPLEMENTARY INFORMATION:

I. Background

Section 8 of the USHA (42 U.S.C. 1437f) authorizes housing assistance to aid lower-income families in renting safe and decent housing. Housing assistance payments are limited by FMRs established by HUD for different geographic areas. In the HCV program, the FMR is the basis for determining the “payment standard amount” used to calculate the maximum monthly subsidy for an assisted family (see 24 CFR 982.503). In general, the FMR for an area is the amount that would be needed to pay the gross rent (shelter rent plus utilities) of privately owned, decent, and safe rental housing of a modest (non-luxury) nature with suitable amenities. In addition, all rents subsidized under the HCV program must meet reasonable rent standards. HUD's regulations at 24 CFR 888.113 permit it to establish 50th percentile FMRs for certain areas.

Electronic Data Availability: This **Federal Register** notice is available electronically from the HUD User page at <http://www.huduser.org/datasets/fmr.html>. **Federal Register** notices also are available electronically from <http://www.gpoaccess.gov/fr/index.html>, the U.S. Government Printing Office Web site. Complete documentation of the methodology and data used to compute each area's final FY 2014 FMRs is available at <http://www.huduser.org/portal/datasets/fmr/fmrs/docsys.html&data=fmr14>. Final FY 2014 FMRs are available in a variety of electronic formats at <http://www.huduser.org/portal/datasets/fmr.html>. FMRs may be accessed in PDF format as well as in Microsoft Excel. Small Area FMRs based on final FY 2014 Metropolitan Area Rents are available in Microsoft Excel format at the same web address. Please note that these Small Area FMRs are for reference only, except where they are used by PHAs participating in the Small Area FMR demonstration.

II. Procedures for the Development of FMRs

Section 8(c) of the USHA requires the Secretary of HUD to publish FMRs periodically, but not less frequently than annually. Section 8(c) states, in part, as follows:

Proposed fair market rentals for an area shall be published in the **Federal Register** with reasonable time for public comment and shall become effective upon the date of publication in final form in the **Federal Register**. Each fair market rental in effect under this subsection shall be adjusted to be

effective on October 1 of each year to reflect changes, based on the most recent available data trended so the rentals will be current for the year to which they apply, of rents for existing or newly constructed rental dwelling units, as the case may be, of various sizes and types in this section.

HUD's regulations at 24 CFR part 888 provide that HUD will develop proposed FMRs, publish them for public comment, provide a public comment period of at least 30 days, analyze the comments, and publish final FMRs. (See 24 CFR 888.115.) For FY 2014 FMRs, HUD has considered all comments submitted in response to its August 5, 2013 (78 FR 47339) proposed FY 2014 FMRs and provides its responses later in this preamble.

In addition, HUD's regulations at 24 CFR 888.113 set out procedures for HUD to assess whether areas are eligible for

FMRs at the 50th percentile. Minimally qualified areas¹ are reviewed each year unless not qualified to be reviewed. Areas that currently have 50th percentile FMRs are evaluated for progress in voucher tenant concentration after three years in the program. Continued eligibility is determined using HUD administrative data that show levels of voucher tenant concentration. The levels of voucher tenant concentration must be above 25 percent and show a decrease in concentration since the last evaluation. At least 85 percent of the voucher units in the area must be used to make this determination. Areas are not qualified to be reviewed if they have been made a 50th-percentile area within the last three years or have lost 50th-percentile status for failure to de-concentrate within the last three years.

In FY 2013 there were 20 areas using 50th-percentile FMRs. Of these 20 areas, only one area, the Bergen-Passaic, NJ HMFA, has completed three years of program participation and is due for re-evaluation. Voucher tenant concentration in the Bergen-Passaic, NJ HMFA has decreased below what is required to be eligible for a 50th percentile FMR and the area has "graduated" from the 50th percentile program. Under current 50th percentile regulations, the Bergen-Passaic, NJ HMFA will be evaluated annually and may return to the program in the future.

In summary, there will be 19 50th-percentile FMR areas in FY 2014. These areas are indicated by an asterisk in Schedule B, where all FMRs are listed by state. The following table lists the FMR areas along with the year of their next evaluation.

FY 2014 50TH-PERCENTILE FMR AREAS AND YEAR OF NEXT REEVALUATION

Austin-Round Rock-San Marcos, TX MSA	2015	Sacramento—Arden-Arcade—Roseville, CA HUD Metro FMR Area.	2015
Fort Worth-Arlington, TX HUD Metro FMR Area	2015	Tucson, AZ MSA	2015
Hartford-West Hartford-East Hartford, CT HUD Metro FMR Area.	2015	Virginia Beach-Norfolk-Newport News, VA-NC MSA	2015
Honolulu, HI MSA	2015	Baltimore-Towson, MD HUD Metro FMR Area	2016
Houston-Baytown-Sugar Land, TX HUD Metro FMR Area.	2015	Fort Lauderdale, FL HUD Metro FMR Area	2016
Las Vegas-Paradise, NV MSA	2015	New Haven-Meriden, CT HUD Metro FMR Area	2016
North Port-Bradenton-Sarasota, FL MSA	2015	Philadelphia-Camden-Wilmington, PA-NJ-DE-MD MSA	2016
Orange County, CA HUD Metro FMR Area	2015	Richmond, VA HUD Metro FMR Area	2016
Phoenix-Mesa-Glendale, AZ MSA	2015	West Palm Beach-Boca Raton, FL HUD Metro FMR Area.	2016
Riverside-San Bernardino-Ontario, CA MSA	2015		

III. Proposed FY 2014 FMRs

On August 5, 2013 (78 FR 47339), HUD published proposed FY 2014 FMRs with a comment period that ended September 4, 2013. HUD has considered all public comments received and HUD provides responses to these comments later in this preamble. HUD does not specifically identify each commenter, but all comments are available for review on the Federal Government's Web site for capturing comments on proposed regulations and related documents (Regulations.gov—<http://www.regulations.gov/%23docketDetail;D=HUD-2013-0073>).

IV. FMR Methodology

This section provides a brief overview of how the FY 2014 FMRs are computed. For complete information on

how FMR areas are determined, and on how each area's FMRs are derived, see the online documentation at <http://www.huduser.org/portal/datasets/fmr/fmrs/docsys.html&data=fmr14>.

The FY 2014 FMRs are based on current OMB metropolitan area definitions and standards that were first used in the FY 2006 FMRs. OMB changes to the metropolitan area definitions through December 2009 are incorporated. The February 28, 2013 OMB area definition update has not been incorporated in the FMR process due to the timing of the release and the availability of ACS data. HUD will work toward incorporating these new area definitions into the Proposed FY 2015 FMR calculations; however, this is dependent on the availability of ACS

data conforming to the new area definitions.

A. Base Year Rents

The U.S. Census Bureau provided special tabulations of 5-year ACS data collected between 2007 through 2011 to HUD in June 2013. For FY 2014 FMRs, HUD updates the base rents set in FY 2013 using the 2006–2010 5-year data with the 2007–2011 5-year ACS data.²

FMRs are historically based on gross rents for recent movers (those who have moved into their current residence in the last 24 months). However, due to the way the 5-year ACS data are constructed, HUD developed a new methodology for calculating recent-mover FMRs in FY 2012. As in FY 2013 FMRs, all areas are assigned as a base rent the estimated two-bedroom

¹ As defined in 24 CFR 888.113(c), a minimally qualified area is an area with at least 100 Census tracts where 70 percent or fewer of the Census tracts with at least 10 two-bedroom rental units are Census tracts in which at least 30 percent of the two bedroom rental units have gross rents at or below the two bedroom FMR set at the 40th percentile

rent. This continues to be evaluated with 2000 Decennial Census information. Although the 5-year ACS tract level data is available, HUD plans to implement new 50th percentile areas in conjunction with the implementation of new OMB area definitions.

² The only difference in survey data between the 2006–2010 5-year ACS data and the 2007–2011 5-year ACS data is the replacement of 2006 survey responses with survey responses collected in 2011. The 2007, 2008, 2009, and 2010 survey responses remain intact.

standard quality 5-year gross rent from the ACS.³ Because HUD's regulations mandate that FMRs must be published as recent mover gross rents, HUD continues to apply a recent mover factor to the standard quality base rents assigned from the 5-year ACS data. Calculation of the recent mover factor is described in section B below.

The 2011 ACS is not used as the base rent for 11 areas based on surveys conducted in 2012 and 2013 by HUD or by PHAs. The FY 2013 FMRs were revised for seven areas, based on surveys conducted in 2012 by the PHA (for Hood River, OR) and by HUD (for Cheyenne, WY, Odessa, TX, Burlington, VT, Mountrail County, ND, Ward County, ND, and Williams County, ND). Two surveys conducted by HUD in 2012 were not included in the revised FY 2013 FMR publications because HUD wanted to provide the opportunity to comment on the proposed decreases. The survey results for these areas (Flagstaff, AZ and Rochester, MN) replaced the base rent of the 2011 ACS for the proposed FY 2014 FMRs. The PHAs that administer programs in the Oakland, CA metropolitan area conducted a survey in 2013, and submitted results in time to replace the 2011 ACS base rent for the proposed FMRs. The Danbury, CT survey conducted by HUD was not completed in time to be included in the proposed FY 2014 publication, but is included in this final publication.

B. Recent Mover Factor

The calculation of the recent mover factor for FY 2014 is similar to the methodology used in FY 2013, with the only difference being the use of updated ACS data. As described below, HUD calculates a similar percentage increase as the FY 2013 factor using data from the smallest geographic area containing the FMR area where the recent mover gross rent is statistically reliable.⁴ The following describes the process for determining the appropriate recent mover factor.

In general, HUD uses the 1 year ACS-based two-bedroom recent mover gross rent estimate from the smallest geographic area encompassing the FMR area for which the estimate is statistically reliable to calculate the recent mover factor. HUD calculates

some areas' recent mover factors using data collected just for the FMR area. Other areas' recent mover factors are based on larger geographic areas. For metropolitan areas that are sub-areas of larger metropolitan areas, the order is subarea, metropolitan area, state metropolitan area, and state. Metropolitan areas that are not divided follow a similar path from FMR area, to state metropolitan areas, to state. In nonmetropolitan areas the recent mover factor is based on the FMR area, the state nonmetropolitan area, or if that is not available, on the basis of the whole state. The recent mover factor is calculated as the percentage change between the 5-year 2007–2011 standard quality two-bedroom gross rent and the 1 year 2011 recent mover two-bedroom gross rent for the recent mover factor area. Recent mover factors are not allowed to lower the standard quality base rent; therefore, if the 5-year standard quality rent is larger than the comparable 1 year recent mover rent, the recent mover factor is set to 1. The process for calculating each area's recent mover factor is detailed in the FY 2014 Final FMR documentation system available at: <http://www.huduser.org/portal/datasets/fmr/fmrs/docsys.html&data=fmr14>. This process produces an "as of" 2011 recent mover two-bedroom base gross rent for the FMR area.⁵

C. Updates From 2011 to 2012

The ACS-based "as of" 2011 rent is updated through the end of 2012 using the annual change in CPI from 2011 to 2012. As in previous years, HUD uses Local CPI data coupled with Consumer Expenditure Survey (CEX) data for FMR areas with at least 75 percent of their population within Class A metropolitan areas covered by local CPI data. HUD uses Census region CPI data for FMR areas in Class B and C size metropolitan areas and nonmetropolitan areas without local CPI update factors. Additionally, HUD is using CPI data collected locally in Puerto Rico as the basis for CPI adjustments from 2011 to 2012 for all Puerto Rico FMR areas. Following the application of the appropriate CPI update factor, HUD converts the "as of" 2012 CPI adjusted rents to "as of" December 2012 rents by

multiplying each rent by the national December 2012 CPI divided by the national annual 2012 CPI value. HUD does this in order to apply an exact amount of the annual trend factor to place the FY 2014 FMRs as of the mid-point of the 2014 fiscal year.

D. Trend From 2012 to 2014

As in FY 2013, HUD continues to calculate the trend factor as the annualized change in median gross rents as measured across the most recent 5 years of available 1 year ACS data. The national median gross rent in 2006 was \$763 and \$871 in 2011. The overall change between 2006 and 2011 is 14.15 percent and the annualized change is 2.68 percent. Over a 15-month time period, the effective trend factor is 3.365 percent.

E. Bedroom Rent Adjustments

HUD calculates the primary FMR estimates for two-bedroom units. This is generally the most common sized rental unit and, therefore, the most reliable to survey and analyze. Formerly, after each decennial Census, HUD calculated rent relationships between two-bedroom units and other unit sizes and used them to set FMRs for other units. HUD did this because it is much easier to update two-bedroom estimates annually and to use pre-established cost relationships with other bedroom sizes than it is to develop independent FMR estimates for each bedroom size. When calculating FY 2013 FMRs, HUD updated the bedroom ratio adjustment factors using 2006–2010 5-year ACS data using similar methodology to what was implemented when calculating bedroom ratios using 2000 Census data to establish rent ratios. The bedroom ratios used in the calculation of FY 2014 FMRs were unchanged from those calculated using 2006–2010 ACS data. The bedroom ratios for Puerto Rico were calculated for the FY 2014 FMRs using the 2006–2010 Puerto Rico Community survey. HUD will continue to use the same bedroom ratios until the 5-year ACS from 2011–2015 is released, probably in time for the FY 2018 FMRs.

HUD established bedroom interval ranges based on an analysis of the range of such intervals for all areas with large enough samples to permit accurate bedroom ratio determinations. These ranges are: Efficiency FMRs are constrained to fall between 0.59 and 0.81 of the two-bedroom FMR; one-bedroom FMRs must be between 0.74 and 0.84 of the two-bedroom FMR; three-bedroom FMRs must be between 1.15 and 1.36 of the two-bedroom FMR; and four-bedroom FMRs must be between 1.24 and 1.64 of the two-

³ For areas with a two-bedroom standard quality gross rent from the ACS that have a margin of error greater than the estimate or no estimate due to inadequate sample in the 2011 5-year ACS, HUD uses the two-bedroom state non-metro rent for non-metro areas.

⁴ For the purpose of the recent mover factor calculation, statistically reliable is where the recent mover gross rent has a margin of error that is less than the estimate itself.

⁵ The ACS is not conducted in the Pacific Islands (Guam, Northern Marianas and American Samoa) or the U.S. Virgin Islands. As part of the 2010 Decennial Census, the Census Bureau conducted a "long-form" sample surveys for these areas. The results gathered by this long form survey were expected to be available late in 2012; however, these data have not yet become available. Therefore, HUD uses the national change in gross rents, measured between 2010 and 2011 to update last year's FMRs for these areas.

bedroom FMR. (The maximums for the three-bedroom and four-bedroom FMRs are irrespective of the adjustments discussed in the next paragraph.) HUD adjusts bedroom rents for a given FMR area if the differentials between bedroom-size FMRs were inconsistent with normally observed patterns (*i.e.*, efficiency rents are not allowed to be higher than one-bedroom rents and four-bedroom rents are not allowed to be lower than three-bedroom rents). The bedroom ratios for Puerto Rico follow these constraints.

HUD further adjusts the rents for three-bedroom and larger units to reflect HUD's policy to set higher rents for these units than would result from using unadjusted market rents. This adjustment is intended to increase the likelihood that the largest families, who have the most difficulty in leasing units, will be successful in finding eligible program units. The adjustment adds 8.7 percent to the unadjusted three-bedroom FMR estimates and adds 7.7 percent to the unadjusted four-bedroom FMR estimates. The FMRs for unit sizes larger than four bedrooms are calculated by adding 15 percent to the four-bedroom FMR for each extra bedroom. For example, the FMR for a five-bedroom unit is 1.15 times the four-bedroom FMR, and the FMR for a six-bedroom unit is 1.30 times the four-bedroom FMR. FMRs for single-room occupancy units are 0.75 times the zero-bedroom (efficiency) FMR.

For low-population, nonmetropolitan counties with small or statistically insignificant 2006–2010 5-year ACS recent-mover rents, HUD uses state nonmetropolitan data to determine bedroom ratios for each bedroom size. HUD made this adjustment to protect against unrealistically high or low FMRs due to insufficient sample sizes.

V. Manufactured Home Space Surveys

The FMR used to establish payment standard amounts for the rental of manufactured home spaces (pad rentals including utilities) in the HCV program is 40 percent of the FMR for a two-bedroom unit. HUD will consider exceptions of the manufactured home space FMRs where public comments present statistically valid survey data of manufactured home space rent (including the cost of utilities) for the entire FMR area.

All approved exceptions to these rents based on survey data that were in effect in FY 2013 were updated to FY 2014 using the same data used to estimate the HCV program FMRs. This computation is compared to the new payment standard of 40 percent of the new two-bedroom FMR for the area, and if

higher, the exception remains and is listed in Schedule D. No additional exception requests were received in the comments to the FY 2014 FMRs and all areas with manufactured housing exception rents in FY 2013 continued to have exception rents for FY 2014.

VI. Small Area Fair Market Rents

Public housing authorities in the Dallas, TX HMFA, along with the Housing Authority of the County of Cook (IL), the City of Long Beach (CA) Housing Authority, the Chattanooga, (TN) Housing Authority, the Town of Mamaroneck (NY) Housing Authority, and the Laredo, (TX) Housing Authority continue to be the only PHAs managing their voucher programs using Small Area Fair Market Rents (SAFMRs). These FMRs are listed in the Schedule B addendum. The department is working to secure more housing authority participants in its Small Area FMR Demonstration program.

SAFMRs are calculated using a rent ratio determined by dividing the median gross rent across all bedrooms for the small area (a ZIP code) by the similar median gross rent for the metropolitan area of the ZIP code. This rent ratio is multiplied by the current two-bedroom rent for the entire metropolitan area containing the small area to generate the current year two-bedroom rent for the small area. In small areas where the median gross rent is not statistically reliable, HUD substitutes the median gross rent for the county containing the ZIP code in the numerator of the rent ratio calculation. For FY 2014 SAFMRs, HUD continues to use the rent ratios developed in conjunction with the calculation of FY 2013 FMRs based on 2006–2010 5-year ACS data.⁶

VII. Public Comments

A. Overview

A total of 59 comments were received and posted on the regulations.gov site (<http://www.regulations.gov/#/docketDetail;D=HUD-2013-0073>), which is also linked on the HUD User FMR page <http://www.huduser.org/portal/datasets/fmr.html>). Most comments contested FMR reductions compared with the FY 2013 FMRs and some contested reductions in FMRs over several years. A majority of the

comments, assisted by a form letter provided by an advocacy organization, criticized the variability in FMRs from year-to-year for smaller metropolitan and nonmetropolitan areas and requested an analysis of the FY 2006 FMRs compared with the 2006 one-year data. Decreases of any level were opposed especially for certain HUD programs and other programs that use FMRs but do not allow flexibility in applying FMRs. Two PHAs from different FMR areas notified HUD of their intent to conduct surveys to adjust their rents and several areas requested HUD to conduct surveys of their areas. Several comments requested that HUD hold the FY 2014 FMRs harmless, that is they wanted the FMR to remain at the FY 2013 level, or some earlier level if it would otherwise be lower. In addition to, or instead of, implementing a hold harmless policy, several comments asked HUD to limit annual increases and decreases of FMRs to five percent, or at the very least impose a hard floor of five percent on decreases.

While HUD has been able to use such measures in constraining income limit increases and decreases, HUD is specifically precluded from incorporating these changes into the FMR methodology by the statutory language governing FMRs requiring the use of the most recent available data. As stated in previous FMR notices, HUD's Housing Choice Voucher program counsel reviewed the statutory language governing the calculation of FMRs to determine if the Department has the authority to institute caps and floors on the amount the FMRs could change annually. Based on this review, HUD's program counsel issued a legal opinion that HUD CANNOT impose floors or caps in changes in FMRs because this would violate the portion of the statute that directs HUD to use the most current data available. The legal opinion is that the statute needs to be changed in order for HUD to implement these types of caps and floors. No statutory changes regarding the use of the most recent available data have since been enacted; consequently, HUD does not have the authority to use a hold harmless policy or other policy which would permit HUD to impose caps and floors on FMR changes. HUD is required to use the most recent available data and FMRs must increase or decrease based on this data. Ignoring decreases or phasing decreases or increases in over several years would not fully implement FMRs based on the most recent available data. Comments formulated using the assistance of the aforementioned form letter also posed the question of whether

⁶ HUD has provided numerous detailed accounts of the calculation methodology used for Small Area Fair Market Rents. Please see our **Federal Register** notice of April 20, 2011 (76 FR 22125) for more information regarding the calculation methodology. Also, HUD's Final FY 2014 FMR documentation system available at (<http://www.huduser.org/portal/datasets/fmr/fmrs/docsys.html#data=fmr14>) contains detailed calculations for each ZIP code area in participating jurisdictions.

or not the statutory changes to FMR provisions requested by the Department in recent budget requests would address the Department's inability to implement limits on the amount of change in FMRs from year to year. Statutory changes proposed affecting FMRs in HUD's FY 2014 budget request do not include language that would give the department the flexibility to implement caps and floors on the FMRs. The statutory language HUD has included in the FY 2014 budget request is designed primarily to provide the Department with greater flexibility in the way FMRs are published each year.

Comments were received that oppose the current methodology used to define FMR areas. There was no specific request, as in past years, to use the area definitions last used for the FY 2005 FMRs, nor were there any recommendations as to how HUD should determine FMR areas. HUD has not incorporated the new metropolitan area definitions released by the Office of Management and Budget (OMB) on February 28, 2013 for the FY 2014 FMRs, but will begin to review how to incorporate these new area definitions. While HUD will work to incorporate these new area definitions into the Proposed FY 2015 FMRs, based on when the Census Bureau incorporates the new areas into its data collection and production, it is possible that HUD may not be able to incorporate the new metropolitan area definitions into FMRs until the FY 2016 FMRs are produced.

Several PHAs with lower proposed FY 2014 FMRs relative to FY 2013 or earlier FMRs requested that HUD conduct a survey of rents for their FMR areas. As stated in the proposed FY 2014 FMR Notice, HUD anticipates it will have no funds to conduct surveys in FY 2014. While one area provided data, most of this data could not be accepted as the basis for changing FMRs because it did not meet the threshold for representativeness and/or statistical reliability established for rental survey data to be used in FMR determinations. HUD may not use data from newspaper ads because these do not represent actual contracted rents, or rent reasonableness studies as these typically do not sample units randomly. Other data provided may be acceptable, but the sources and method of collection must be identified. Data must be collected randomly and cover the entire rental stock including single-family units, not just large apartment projects. Single family units and smaller apartment buildings are an important part of the rental market and cannot be ignored. HUD did receive notification that two PHAs in different metropolitan

areas are conducting their own surveys and have sought guidance from HUD on how to conduct the surveys. Any other PHAs interested in surveys to support changes in FMRs should review section VIII of this notice for further information regarding acceptable survey methodology.

For areas that are considering conducting their own surveys, HUD would caution them to explore all no-cost options as a means of alleviating problems they are having with low FMRs. HUD has experience conducting surveys in areas with low or no vacancy rates and this experience has shown that it is extremely difficult to capture accurate gross rent levels in tight markets. For that reason, HUD provides emergency exception payment standards up to 135 percent of the FMR for the Section 8 voucher program in areas impacted by natural resource exploration or in presidentially declared disaster areas. PHAs interested in applying for these emergency payment standards should contact their local HUD field office. Other programs that use FMRs will have to pursue similar strategies such as exception payment standards or hold harmless provisions within the statutory and regulatory framework governing those programs.

B. Issues Raised in Comments and HUD Responses

In accordance with 24 CFR 888.115, HUD has reviewed the public comments that have been submitted by the due date and has determined that there are no comments with "statistically valid rental survey data that justify the requested changes." The following are HUD's responses to all known comments received by the comment due date and a part of the notice record at <http://www.regulations.gov/#!docketDetail;D=HUD-2013-0073>.

Comment: FMRs should be held harmless at the FY 2013 levels. Several comments requested that FMRs not be allowed to decline from their FY 2013 level. Some of these comments asked HUD to delay implementation of FY 2014 FMRs for their area to allow local housing authorities to complete a rent survey, or until HUD completes a survey for them.

HUD Response: HUD cannot ignore the more current 2011 American Community Survey (ACS) data and allow FMRs to stay the same as they were for FY 2013, which were based on gross rents from the 2010 ACS, except for areas where there was a HUD-sponsored or PHA-sponsored survey. By statute (42 U.S.C. 1437f(c)(1)(B)) and regulation (24 CFR 888.113(e)), HUD is required to use the most current data

available. While rent surveys conducted either by HUD or a PHA would provide more current data than the ACS, these surveys take about two months to complete and can be quite expensive. HUD does not have the funds to conduct any surveys in 2014 and HUD cannot delay the implementation of FY2014 FMRs while new surveys are being conducted. Areas with relatively short-term market tightening are not easily measured by rent surveys. Based on past experience, HUD finds that an area must have rent increases or declines for a period of at least two years before changes can be accurately measured by surveys. Should the survey results show market conditions that are statistically different from the published FMRs, HUD will revise the Final FY 2014 FMRs. HUD recommends following the survey guidance available at <http://www.huduser.org/portal/datasets/fmr.html> for small metropolitan areas without consistent one-year ACS data and nonmetropolitan areas. For large areas with significant one-year ACS data, the requirement for completed recent mover surveys are greater; there must be about 200 2-BR (or 2-BR and equivalent 1-BR) recent mover surveys completed with a margin of error of plus or minus 5 percent. HUD will review the results of these private surveys and will revise the Final FY 2014 FMRs if warranted.

Comment: The Puerto Rico Community Survey should not be used because it is seriously deficient. A 2012 publication by the Census Bureau that analyzed the 2005–2009 Puerto Rico Community Survey (PRCS) discussed how 20 percent of the population of Puerto Rico is excluded from the survey.

HUD Response: The 2012 publication did show much lower coverage of the 2005–2009 PRCS compared with the 2005–2009 ACS, 79.5 percent compared with 94.2 percent; however, before FY 2014, the FMRs for Puerto Rico were based on a 2005 telephone survey of Puerto Rico, conducted by HUD, with even greater coverage issues than the 2009 PRCS. The FY 2014 FMRs are based on the 2007–2011 PRCS and 2011 PRCS data has much better coverage than the 2009 PRCS. Based on statistics published by the Census Bureau (available at: http://www.census.gov/acs/www/methodology/coverage_rates_data/index.php) the population coverage rate of the PRCS is up to 89.2 percent. While the Census does acknowledge that there would be serious data deficiencies with coverage rates below 70 percent, the PRCS has a sufficiently high coverage rate to alleviate this concern and moreover, the

survey coverage is well above the HUD survey conducted in 2005.

Comment: The FMR decreases do not reflect the reality of the rental market in Puerto Rico. The majority of rental units do not include utilities and utility rates have recently been substantially increased.

HUD Response: HUD has reviewed the utility data referenced in the comments for the entire island of Puerto Rico and has made changes to the FY 2014 Final FMRs. These data included average consumption amounts and the increase in the rates which made it possible for HUD to determine a utility adjustment for each FMR bedroom size

that would be applied uniformly across all areas, as the rate changes by these state-owned utilities are also being applied. The table below shows the fixed amount that is added to the proposed FY 2014 FMRs at each bedroom count level in all Puerto Rico FMR areas.

ADDITIONS TO PUERTO RICO PROPOSED FMRs TO ACCOUNT FOR RECENT UTILITY RATE INCREASES

	0-Bedroom	1-Bedroom	2-Bedroom	3-Bedroom	4-Bedroom
Utility Adjustment	\$20	\$25	\$35	\$40	\$50

HUD expects to phase out these increases over time as the utility rate increases are observed in Puerto Rico data, and will adjust FMRs as HUD refines its methodology for incorporating data on utility rates.

Comment: Market rents did not decrease in the past year and neither should FMRs. Several comments were received that stated that market rents did not decrease over the past year and so FMRs also should not decrease.

HUD Response: FMRs should not be considered a time series of rent data for each market in which FMRs are published. FMR data cannot justify claims that rents in a particular area are increasing, decreasing, or unchanged. The FMR process is designed to develop the best estimate of rents for a particular area using the timeliest available data covering the entire market area; this process does not take into account whether previous FMRs make sense in light of new data, and no attempt is made to revise past FMR estimates. Therefore, year-over-year FMR changes can sometimes seemingly conflict with perceived market trends.

Annual revisions to all of the underlying data used to estimate FMRs are now possible with the 5-year ACS data. Because of the nature of the ACS 5-year tabulations, however, 80 percent of the survey observations will remain the same from one year to the next. Also, many small FMR areas rely on update factors based on survey results from a larger, encompassing geographic area (for example, state-based update factors used for nonmetropolitan counties). Even if the base rent is not adjusted, therefore, the annual changes in FMRs do not necessarily reflect very recent changes in the housing market conditions for the smaller area but still represent HUD's best estimate of 40th-percentile gross rents in the FMR area.

Comment: FMR decreases do not reflect the annual or recent change in rents for an area. To seek changes in FMRs, some comments provided rent

reasonableness findings, or rent data from large apartment projects that show that the rents in their area increased in the past year, while the FY 2014 FMRs show a decline from the FY 2013 FMRs.

HUD Response: FMRs are estimated rents, and can change from year-to-year in ways that are different from market rent changes or economic activity. First, as one commenter noted, when economic activity decreases, rents don't necessarily decrease and some increased economic activity that might put pressure on rents cannot be measured in real time. HUD is required to use the most current data available. HUD is also precluded from using sources of data that are not statistically reliable. Rent reasonableness studies are not subject to the same constraints on statistical reliability and cannot be used to alter FMRs. Surveys of large apartment projects provide indications of where the market is going, but do not account for the majority of most markets made up of single family homes and small apartment buildings (2–4 units). Much of the apartment project data submitted by the commenter was for larger apartment projects and represented less than 20 percent of the rental market.

Comment: For the areas affected by Superstorm Sandy, the FY 2014 FMRs cannot go down; HUD should conduct a survey of the area. A commenter stated that lower income renters were disproportionately victims of the storm. Their already disadvantaged situation should not be made worse by a reduction in available assistance at a time when there is a demonstrated need for increased, not decreased, help.

HUD Response: While there are modest FMR decreases in areas impacted by Sandy, HUD can continue to allow for the successful operation of the HCV program through regulatory waivers provided in disaster areas, and through its emergency exception payment standard process. The modest decreases in the FMRs can be offset by emergency payment standards up to 135

percent, depending on current rental vacancy data and storm damage data. HUD developed the emergency payment standards as an alternative to conducting surveys which do not work well in areas where there has been loss of rental housing. Also, for FY 2014, there are no funds available for HUD-conducted surveys.

Comment: HUD should validate its FMR estimation methodology by comparing one-year ACS data with fiscal year FMRs for the same year, beginning with a comparison of 2006 one-year ACS rent data to the FY 2006 FMRs. This analysis would determine which aspects of HUD's discretionary methodology is less accurate and could help HUD modify its methodology to improve accuracy while adhering to the requirement to use the most recent data available. The up and down changes that occur with the final fair market rents cause a lot of problems and stress for the landlords, tenants and the PHA.

HUD Response: Because the integration of ACS data into the FMR estimation process has been gradual and evolving, and will continue to evolve to address issues like volatility in estimates arising from large sampling variation in smaller markets, there is not yet a basis for making the suggested comparison. FMR methodology and the underlying data have been relatively stable only between FY2013 and FY2014 FMRs. ACS data on recent-mover rents are not yet available for 2013 and 2014. Further, because the ACS only produces highly reliable estimates of the 40th percentile recent mover 2-bedroom rent in the largest metropolitan areas, the comparison would only be valid for large markets, and FMRs have not been particularly volatile in these markets. Finally, the logic of this comment suggests that HUD should change the FMR estimation process to a model-based forecast system derived from time-series-panel data on rents. Again, this methodology would only be valid for the largest

metropolitan FMR areas where a highly reliable recent mover rent can be derived from ACS data. It is not clear that the model would be feasible and accurate for smaller FMR areas, or how a model-based FMR estimate would accord with statutory language regarding FMR estimates.

Comment: The year-to-year volatility in FMRs has significant adverse impacts. A reduction of more than five percent in the published FMRs triggers a rent reasonableness analysis on the part of the PHA with jurisdiction over the area (Housing Choice Voucher Guidebook, directive 7420.10G). If the PHA's analysis finds that the rent being charged by a property owner is no longer reasonable, the owner will be required to reduce the rent. If the owner determines that this reduction will adversely affect the financial stability of the property, the owner will likely choose to leave the program, and the tenant will then have to move. Another consequence of a large reduction in FMRs is that owners may have to defer maintenance items because cash flows are no longer adequate to cover operating expenses.

Alternatively, higher FMRs force the PHA with jurisdiction over the area to increase their payment standards and serve far fewer families within the community. This is detrimental at a time when PHAs are already stretching the limited amount of funding received from HUD to help as many families as they can. Increased FMRs will increase the waiting list for the HCV program and will increase the homeless population for an area.

HUD Response: In estimating FMRs, HUD must carefully balance the use of the most local data available with possible volatility of FMRs from year to year. Most of the large changes in FMRs for smaller metropolitan and nonmetropolitan counties come from changes in the one-year ACS data. It is not clear how much of the variation is due to actual market movement and how much is variability in the ACS sample. HUD will examine possibly limiting the application of one-year ACS data based on the size of the margin of error of the estimate of recent mover rent. Members of the public should be aware, however, that changes in methodology designed to limit FMR volatility in future years may result in substantial volatility of FMRs in the year of implementation.

Comment: The decrease in the FMR for smaller bedroom sizes has a disproportionate impact on elderly, disabled and homeless programs.

HUD Response: HUD recognizes that the reduction in efficiency and one-

bedroom FMRs impacts these programs and is working to develop new tools or use existing ones that can alleviate program problems. PHAs may use Exception Payment Standards at 24 CFR 982.503 (c), or Success Rate Payment Standards 24 CFR 982.503(e) for certain bedroom sizes, to the extent allowed.

Comment: The reduction in the recent mover adjustment factor caused a reduction in FMRs.

HUD Response: While the recent mover adjustment factor cannot be below one, it can increase or decrease from year to year, just like the base rent for the FMR. FMRs cannot be held harmless for the reasons discussed in prior responses.

Comment: Small Area FMRs (SAFMRs) should not be used as the areas for the Difficult to Develop Areas. ZIP Codes cannot be used to delineate housing market because ZIP Codes were developed to facilitate mail delivery. The use of SAFMRs could cause rents to drop significantly and create a disincentive for investment, and put existing properties into an unsustainable revenue loss position. While HUD says it will impose a floor of 10 percent annually if rents decrease, this is still a substantial drop in revenue for the property.

HUD Response: The use of Small Area FMRs in the determination of Difficult to Develop Areas (DDAs) in the Low-Income Housing Tax Credit program is outside of the scope of this notice. However, HUD would like to point out that the proposed use of Small Area FMRs in the construction of DDAs was published for public comment in a **Federal Register** Notice on October 27, 2011 and that HUD further published a **Federal Register** notice on September 28, 2012 which contains HUD's responses to the comments received.

Comment: The Small Area FMR Demonstration program should have a better analysis than the three questions listed in an article in Cityscape: A Journal of Policy Development and Research regarding HUD's intent to evaluate the demonstration program.

HUD Response: The content of any analysis of the Small Area FMR Demonstration is beyond the scope of this notice. HUD will, however, consider any public input it receives regarding the design of the evaluation of the Small Area FMR demonstration program. In accordance with HUD's evidence-based policymaking philosophy, HUD will not require metropolitan housing authorities generally to use Small Area FMRs until the demonstration has been evaluated, and then only if the evaluation shows

that Small Area FMRs achieve the intended policy objectives.

Comment: Small Area FMRs should be estimated directly from the ZIP Code Tabulation Area (ZCTA) data published by the Census Bureau; the data and technology is available to determine FMRs without the use of the ratio method.

HUD Response: HUD cannot generate FMRs directly from the 5-year ZCTA data tables because recent mover rents cannot be determined from 5-year ACS data and ZCTA tabulations are only created from the 5-year data. HUD has maintained the ZCTA-to-metropolitan area rent relationships based on the 2006–2010 5-year ACS data to ensure stability of the Small Area FMR estimates. HUD uses the 2011 ACS data to estimate the metropolitan level rent that is used in conjunction with the rent ratio to determine the FY 2014 Small Area FMR for each ZIP Code area.

Comment: FMRs cannot decrease in economic growth areas; some of these areas cannot manage the voucher program even with modest FMR increases. Several comments, even pertaining to FMR areas with decreases below 5 percent, or with modest increases, pressed for higher FY 2014 FMRs. Some of these areas had very tight markets and some of these areas already used payment standards at 110 percent of the FMRs.

HUD Response: For rent data, the ACS provides the most current data, and the 5-year 2007–2011 data is the most current data available for FMR areas of all sizes. HUD must use the most current statistically reliable data available. None of the areas that found FMRs too low because of economic and population growth provided statistically valid data that could be used to update the proposed FY 2014 FMRs. To help manage the program during times of FMR decreases, PHAs operating the Housing Choice Voucher program may be able to use Success Rate Payment Standards 24 CFR 982.503(e), or request Exception Payment Standards for subareas within a FMR area (not to exceed 50 percent of the population) at 24 CFR 982.503 (c), or in severely disrupted rental markets, emergency payment standards.

Comment: Vacancy rates are low, making it impossible to absorb FMR decreases. Several comments stated that low or no vacancy rates in areas with increased economic activity require higher FMRs so that voucher tenants can compete for housing. In these areas, there is not sufficient rental housing and generally the 2011 rental data from the ACS does not reflect this situation.

HUD Response: When a market tightens rapidly, the FMRs cannot keep pace. The most accurate, statistically reliable data available to HUD is lagged by two years. Even if HUD conducts surveys of these areas, capturing the full scope of rent increases is difficult if the market condition has been occurring for less than two years; furthermore, it is challenging to get valid results for surveys of relatively small housing markets (under 1,000). Most of the areas suffering from very rapidly tightening market conditions meet one or both of these criteria. Areas with sustained extremely low vacancy rates require construction of additional units. Higher FMR levels will not necessarily encourage additional development. These areas will have to rely on the use of Exception Payment Standards for subareas within an FMR area (not to exceed 50 percent of the population) as described at 24 CFR 982.503 (c), or through the use of Success Rate Payment Standards available at 24 CFR 982.503(e) to alleviate market pressures, or in severely disrupted rental markets, emergency payment standards.

Comment: FY 2014 FMR decreases reduce the ability of families to find affordable housing. Several comments stated that decreases in FMRs would negatively affect tenants' ability to find affordable housing and therefore should not be implemented. The decrease in FMRs from FY 2013 to FY2014 will reduce the availability of affordable housing in the area; landlords will be able to get higher rents from tenants that are not Section 8 voucher holders and so many will opt out of the program.

HUD Response: FMRs must reflect the most current statistically valid data and this means that FMRs cannot be held harmless when this data shows a decline. Most of the declines in the FMRs are based on lower 2011 rents, in a few cases the 2011 to 2012 CPI adjustment reflects a decline.

Comment: FMR reductions will lead to poverty concentration. Decreases in the FMR, whether by loss of a 50th percentile FMR status or by reductions in Small Area FMRs (SAFMRs) lead to poverty concentration and prevent tenants from moving to areas of opportunity.

HUD Response: HUD is required to increase or decrease FMRs (and SAFMRs are the FMRs for Dallas) based on the most currently available data that meets the statistical reliability tests. PHAs may use Exception Payment Standards to increase payment standards for higher rent parts of their FMR areas as a means to reduce poverty concentration. Areas that lost their 50th percentile FMR because they graduated

from the program or failed to show measurable poverty deconcentration can use higher payment standards as shown at 24 CFR 982.503 (f) to mitigate FMR decreases.

Comment: A significant increase in the FMR is detrimental to managing the HCV program. PHAs must already stretch the limited amount of funding received from HUD to help as many families as possible. A proposed increase will increase the waiting list for the HCV program and also increase the homeless population. The commenter assumes that new luxury apartments in the area may be responsible for the increase in the FMR.

HUD Response: HUD is required to increase or decrease FMRs based on the most currently available data that meets the statistical reliability tests. While the commenter assumes that new luxury apartments in the area may be responsible for the increase in the FMR, the ACS rent data, which is from 2011, excludes units built in the past two years, so units built since 2009 are not included in the data set.

Comment: A reduction in the FMRs puts HUD-financed projects and low-income housing tax credit projects at risk. If a current HUD Section 8 project uses rents at 110 percent of the FMR, a reduction in the FMR puts this project at risk. An FMR reduction could mean that LIHTC landlords will no longer accept Section 8 voucher tenants.

HUD Response: HUD is required to increase or decrease FMRs based on the most currently available data that meets the statistical reliability tests. PHAs may use the Exception Payment Standard to increase payment standards for higher rent areas and reduce poverty concentration. While there are no project-based exception areas, an area already at 110 percent of the FMR may be eligible for Success Rate Payment Standards or a portion of the FMR area may be granted exceptions above 110 percent, if warranted. PHAs interested in exploring this option are encouraged to review the FY 2014 Small Area FMRs published at <http://www.huduser.org/portal/datasets/fmr.html> in the section labeled "Small Area FMRs." The manner in which SAFMRs are calculated makes them ideal to be used as in the "median rent method" section of the exception payment standard regulations found at 24 CFR 982.503(c)(2)(A). While certain HUD and non-HUD programs are limited to the use of the FMR and not the potentially higher payment standard, we are working to resolve this issue with HUD programs and would suggest that non-HUD programs also make rule

changes to allow for flexibility during times of decreases in FMRs.

Comment: FY 2014 FMR decreases will require existing tenants to pay a greater share of their income on rents. Several comments stated that their current tenants will have to pay a greater share of their income on rents, with FMR decreases.

HUD Response: New tenants are not allowed to pay more than 40 percent of their income on rent. Existing tenants will not have to pay rent based on reduced FMRs until the second anniversary of their Housing Assistance Payment (HAP) contract. If tenant rent burden increases for an area, PHAs may use this as a justification for higher payment standards.

Comment: Disabled and difficult-to-place residents suffer a disproportionately greater impact from FMR decreases because they have fewer housing choice options. Disabled residents already have fewer units available to them, and reducing the FMR will further reduce their options. Difficult to place residents, because of history of late payments or other issues, will have fewer landlords willing to rent to them if the FMR is lower.

HUD Response: If an FMR decreases there may be fewer units available at or below the FMR. However, HUD must use the most current data available and rents may increase and decrease. The data used as the basis for FY 2014 FMRs is more current than what was available in the estimation of the 40th percentile FMRs for FY 2013, so while more units were available, those rents are being replaced with rents based on more current information. If a family has a member with a disability, a PHA may establish a higher payment standard for that family as a reasonable accommodation as discussed in 24 CFR 982.505(d).

Comment: Construction and/or preservation of affordable housing is threatened by FMR decreases. In areas where affordable housing construction is increasing, a reduction in the FMR will reduce the benefit of existing affordable housing projects and may prevent additional affordable housing construction. Several areas claim that there has been an increase in affordable housing production and that HUD's failure to include units built in the past two years ignores new affordable housing production, which in turn artificially reduces the FMR.

HUD Response: HUD has long eliminated rents from units built in the last two years from its calculation of the 40th percentile FMR. This is because new units typically receive a premium over other units of the same size in the

same area, and may skew the distribution of market rent. Maximum allowable rents in Low-Income Housing Tax Credit properties are set based upon 50- or 60-percent income limit levels, or if the payment standard is higher, this amount can be used for voucher holders. If the FMR is below the rent determined by the income limit levels, then generally the income limit rent is used. So if FMRs fall below the income limit rents, voucher holders would either pay more out of pocket for units or would be unable to use their voucher for these units. However, PHAs could use their authority to adjust payment standards where warranted, to increase FMRs so voucher holders can have access to these existing units. FMRs are used in the determination of High- and Low-Rent levels for HOME funded projects. However, when the income limit hold harmless policy was removed for the FY 2010 Income Limits, HUD instituted a specific hold harmless provision for HOME rents. A decrease in the FY 2013 FMR will not necessarily affect HOME rents or home project funding unless the FMR is lower than the held harmless income limit rent.

Comment: FMRs in nonmetro counties adjacent to metropolitan areas should be more like those in the neighboring metropolitan areas.

HUD Response: HUD will not make changes to metropolitan area composition until it incorporates the February 28, 2013 OMB new metropolitan area definitions, and it will begin its analysis of these areas with the FY 2015 FMRs. HUD relies on OMB guidance for determining metropolitan areas and plans to continue market area definitions based on income and rent differences of more than 5 percent.

Comment: Homelessness will increase in areas where the FY 2014 FMRs decreased. Several comments suggest that FMR decreases, even those under five percent, will reduce the ability of tenants to find units that meet housing quality standards and will increase homelessness, as fewer units are available at the lower FMR.

HUD Response: Where market conditions warrant, HUD encourages PHAs to use Exception Payment Standards and Success Rate Payment Standards to increase voucher holder's success in finding housing.

Comment: Decreases in FMRs will undo PHAs efforts to maintain a high success rate; program utilization will be reduced with lower FMRs.

HUD Response: Where market conditions warrant, HUD encourages PHAs to use Exception Payment Standards and Success Rate Payment

Standards to increase voucher holder's success in finding housing.

Comment: HUD should institute caps and floors to limit annual FMR changes to five percent. A five percent change in the FMR triggers a rent reasonableness study, which is costly for cash-strapped PHAs. HUD should have instituted the same cap and floor of five percent that it instituted for Income Limits with the FY 2010 Income Limits.

HUD Response: HUD is constrained by legal and regulatory language for its calculation of FMRs, and therefore cannot ignore the requirement to use the most current data by only implementing FMR changes in five percent increments. Statutory and regulatory changes are required before HUD would be able to implement any methodology changes to not fully use the most current rent data in setting FMRs. No such regulation or legislative requirement governs the calculation of income limits and prior to FY 2010, income limits were held harmless, that is, not allowed to ever decline. The change to incorporate caps and floors of up to five percent was a way to remove this hold harmless policy and create parity with increases and decreases.

Comment: The FY 2014 Small Area FMRs for Dallas do not affirmatively further fair housing. HUD's 2014 proposed SAFMRs will perpetuate racial segregation by increasing SAFMRs in the Black and other predominantly minority ZIP Codes while decreasing SAFMRs in many majority White ZIP Codes. The landlords for 9,609 of the 9,952 voucher holders in the less than 10-percent White Zip Codes will have an SAFMR increase averaging 10 percent more than the 2011 SAFMRs. The landlords in the 10 majority Black ZIP Codes will have an SAFMR increase averaging 12 percent over the 2011 SAFMRs. The landlords for only 343 of the 9,952 existing voucher participants in these ZIP Codes will have a decreased SAFMR that will average 1 percent less than the 2011 SAFMRs. HUD will decrease by 9 percent the SAFMRs for 2,622 of the voucher participants in those majority White ZIP Codes where SAFMRs decrease. This is 54 percent of participants in all majority White ZIP Codes. HUD's 2014 proposed SAFMRs will perpetuate the segregation of Black voucher participants into predominantly minority areas with conditions substantially inferior to the conditions in which White voucher participants are housed.

HUD Response: HUD must follow its statutory and regulatory requirements to update FMRs using the most current data available. This means that both

increases and decreases must be applied to the Dallas SAFMRs. A decrease that reflects more current data does not prevent HUD from affirmatively further fair housing. The data HUD uses in the calculation of FMRs (both metropolitan-wide and small area FMRs) are compiled across all survey respondents in a given area and are not segmented in any way by demographic traits.

Comment: The FMRs are too low and do not reflect market rents; HUD must conduct a survey of rents.

HUD Response: While rent surveys conducted either by HUD or a PHA would provide more current data, these surveys take about two months to complete and are quite expensive. HUD does not anticipate having the funds to conduct any surveys in FY 2014 and HUD cannot delay the implementation while any surveys are being conducted. Areas with relatively short-term market tightening are not easily measured by rent surveys. Based on past experience, HUD finds that an area must have rent increases or decreases for a period of at least two years before it can be measured.

Comment: HUD should publish 2000 decennial Census data to help PHAs determine exception payment standards.

HUD Response: Data from the 2010 ACS is much more current than the 2000 Decennial Census long form data. Moreover, with the calculation of Small Area FMRs for metropolitan areas, HUD is relying on the SAFMRs, published by ZIP Code, to help determine what portions of a metropolitan area may qualify for exception payment standards. This data for metropolitan areas only is already available to PHAs at http://www.huduser.org/portal/datasets/fmr/fmrs/index_sa.html&data=fy2014.

VIII. Rental Housing Surveys

In 2011, HUD solicited bidders to study the methodology used to conduct local area surveys of gross rents to determine if the Random Digit Dialing (RDD) methodology could be improved upon. The Department undertook this study due to the increasing costs and declining response rates associated with telephone surveys. Furthermore, the advent of the 1-year ACS limits the need for surveys in large metropolitan areas. Based on this research, the Department decided that its survey methodology should be changed with mail surveys being the preferred method for conducting surveys, because of the lower cost and greater likelihood of survey responses. These surveys, however, take almost twice as long to conduct as prior survey methods took,

and when response times are most critical, the Department may choose to conduct random digit dialing surveys as well, as the budget permits. Unfortunately, the anticipated budget does not permit any surveys to be conducted in FY 2014. The methodology for both types of surveys along with the survey instruments is posted on the HUD USER website, at the bottom of the FMR page in a section labeled Fair Market Rent Surveys at: <http://www.huduser.org/portal/datasets/fmr.html>.

Other survey methodologies are acceptable in providing data to support comments if the survey methodology can provide statistically reliable, unbiased estimates of the gross rent. Survey samples should preferably be randomly drawn from a complete list of rental units for the FMR area. If this is not feasible, the selected sample must be drawn to be statistically representative of the entire rental housing stock of the FMR area. Surveys must include units at all rent levels and be representative of structure type (including single-family, duplex, and other small rental properties), age of housing unit, and geographic location. The 2007–2011 5-year ACS data should be used as a means of verifying if a sample is representative of the FMR area's rental housing stock.

Most surveys cover only one- and two-bedroom units, which has statistical advantages. If the survey is statistically acceptable, HUD will estimate FMRs for other bedroom sizes using ratios based on the 2006–2010 5-year ACS data. A PHA or contractor that cannot obtain the recommended number of sample responses after reasonable efforts should consult with HUD before abandoning its survey; in such situations, HUD may find it appropriate to relax normal sample size requirements.

HUD will consider increasing manufactured home space FMRs where public comment demonstrates that 40 percent of the two-bedroom FMR is not adequate. In order to be accepted as a basis for revising the manufactured home space FMRs, comments must include a pad rental survey of the mobile home parks in the area, identify the utilities included in each park's rental fee, and provide a copy of the applicable public housing authority's utility schedule.

As stated earlier in this Notice, HUD is required to use the most recent data available when calculating FMRs. Therefore, in order to re-evaluate an area's FMR, HUD requires more current rental market data than the 2011 ACS.

VIII. Environmental Impact

This Notice involves the establishment of fair market rent schedules, which do not constitute a development decision affecting the physical condition of specific project areas or building sites. Accordingly, under 24 CFR 50.19(c)(6), this Notice is categorically excluded from environmental review under the National Environmental Policy Act of 1969 (42 U.S.C. 4321).

Accordingly, the Fair Market Rent Schedules, which will not be codified in 24 CFR part 888, are proposed to be amended as shown in the Appendix to this notice:

Dated: September 27, 2013.

Jean Lin Pao,

General Deputy Assistant Secretary for Policy Development and Research.

Fair Market Rents for the Housing Choice Voucher Program

Schedules B and D—General Explanatory Notes

1. Geographic Coverage

a. Metropolitan Areas—Most FMRs are market-wide rent estimates that are intended to provide housing opportunities throughout the geographic area in which rental-housing units are in direct competition. HUD is using the metropolitan CBSAs, which are made up of one or more counties, as defined by the Office of Management and Budget (OMB), with some modifications. HUD is generally assigning separate FMRs to the component counties of CBSA Micropolitan Areas.

b. Modifications to OMB Definitions—Following OMB guidance, the estimation procedure for the FY 2014 Final FMRs incorporates the OMB definitions of metropolitan areas based on the CBSA standards as implemented with 2000 Census data updated through December 1, 2009, but makes adjustments to the definitions to separate subparts of these areas where FMRs or median incomes would otherwise change significantly if the new area definitions were used without modification. In CBSAs where subareas are established, it is HUD's view for programmatic purposes that the geographic extent of the housing markets are not yet the same as the geographic extent of the CBSAs, but may become so in the future as the social and economic integration of the CBSA component areas increases. Modifications to metropolitan CBSA definitions are made according to a formula as described below.

Metropolitan area CBSAs (referred to as MSAs) may be modified to allow for subarea FMRs within MSAs based on the boundaries of old FMR areas (OFAs) within the boundaries of new MSAs. (OFAs are the FMR areas defined for the FY 2005 FMRs. Collectively they include 1999-definition MSAs/Primary Metropolitan Statistical Areas (PMSAs), metro counties deleted from 1999-definition MSAs/PMSAs by HUD for FMR purposes, and counties and county parts outside of 1999-definition MSAs/PMSAs referred to as nonmetropolitan counties.) Subareas of MSAs are assigned their own FMRs when the subarea 2000 Census Base Rent differs by at least 5 percent from (*i.e.*, is at most 95 percent or at least 105 percent of) the MSA 2000 Census Base Rent, or when the 2000 Census Median Family Income for the subarea differs by at least 5 percent from the MSA 2000 Census Median Family Income. MSA subareas, and the remaining portions of MSAs after subareas have been determined, are referred to as HUD Metro FMR Areas (HMFAs) to distinguish these areas from OMB's official definition of MSAs.

The specific counties and New England towns and cities within each state in MSAs and HMFAs are listed in Schedule B.

2. Bedroom Size Adjustments

Schedule B shows the FMRs for zero-bedroom through four-bedroom units. The Schedule B addendum shows Small Area FMRs for all PHAs operating using Small Area FMRs. The FMRs for unit sizes larger than four bedrooms are calculated by adding 15 percent to the four-bedroom FMR for each extra bedroom. For example, the FMR for a five-bedroom unit is 1.15 times the four-bedroom FMR, and the FMR for a six-bedroom unit is 1.30 times the four-bedroom FMR. FMRs for single-room-occupancy (SRO) units are 0.75 times the zero-bedroom FMR.

3. Arrangement of FMR Areas and Identification of Constituent Parts

a. The FMR areas in Schedule B are listed alphabetically by metropolitan FMR area and by nonmetropolitan county within each state. The exception FMRs for manufactured home spaces in Schedule D are listed alphabetically by state.

b. The constituent counties (and New England towns and cities) included in each metropolitan FMR area are listed immediately following the listings of the FMR dollar amounts. All constituent parts of a metropolitan FMR area that are in more than one state can be identified by consulting the listings for each applicable state.

c. Two nonmetropolitan counties are listed alphabetically on each line of the non-metropolitan county listings.

d. The New England towns and cities included in a nonmetropolitan county

are listed immediately following the county name.

BILLING CODE 4210-67-P

ALABAMA

METROPOLITAN FMR AREAS	0 BR	1 BR	2 BR	3 BR	4 BR	Counties of FMR AREA within STATE
Anniston-Oxford, AL MSA.....	494	516	679	877	913	Calhoun
Auburn-Opelika, AL MSA.....	532	535	724	997	1224	Lee
Birmingham-Hoover, AL HMFA.....	524	627	743	976	1098	Bibb, Blount, Jefferson, St. Clair, Shelby
Chilton County, AL HMFA.....	399	449	566	758	1002	Chilton
Columbus, GA-AL MSA.....	508	595	705	971	1249	Russell
Decatur, AL MSA.....	415	502	595	825	850	Lawrence, Morgan
Dothan, AL HMFA.....	411	440	566	755	933	Geneva, Houston
Florence-Muscle Shoals, AL MSA.....	495	498	636	849	853	Colbert, Lauderdale
Gadsden, AL MSA.....	355	458	596	742	837	Etowah
Henry County, AL HMFA.....	411	440	566	834	933	Henry
Huntsville, AL MSA.....	499	559	689	948	1002	Limestone, Madison
Mobile, AL MSA.....	622	649	770	1032	1186	Mobile
Montgomery, AL MSA.....	566	597	710	976	1161	Autauga, Elmore, Lowndes, Montgomery
Tuscaloosa, AL MSA.....	485	616	815	1023	1161	Greene, Hale, Tuscaloosa
Walker County, AL HMFA.....	457	467	566	782	950	Walker

NONMETROPOLITAN COUNTIES	0 BR	1 BR	2 BR	3 BR	4 BR	NONMETROPOLITAN COUNTIES	0 BR	1 BR	2 BR	3 BR	4 BR
Baldwin.....	536	698	827	1219	1431	Barbour.....	428	431	583	726	779
Bullock.....	454	477	566	748	1002	Butler.....	428	431	566	822	844
Chambers.....	452	455	616	767	915	Cherokee.....	454	472	566	834	844
Choctaw.....	508	511	692	862	1032	Clarke.....	436	438	566	790	842
Clay.....	421	424	566	759	762	Cleburne.....	438	441	597	744	798
Coffee.....	463	466	598	811	838	Conecuh.....	433	436	566	834	837
Coosa.....	454	477	566	705	756	Covington.....	435	437	566	818	908
Crenshaw.....	422	425	575	811	858	Cullman.....	463	472	577	727	771
Dale.....	377	443	566	825	990	Dallas.....	361	418	566	724	923
DeKalb.....	350	455	589	736	939	Escambia.....	457	477	566	705	823
Fayette.....	454	477	566	743	1002	Franklin.....	421	424	573	714	855
Jackson.....	454	477	566	705	775	Lamar.....	454	477	566	705	844
Macon.....	416	418	566	705	802	Marengo.....	448	451	566	753	756
Marion.....	454	464	566	821	824	Marshall.....	424	427	568	783	785
Monroe.....	454	477	566	834	1002	Perry.....	433	436	566	826	844
Pickens.....	416	418	566	705	756	Pike.....	457	477	566	831	834
Randolph.....	481	484	612	762	818	Sumter.....	454	477	566	705	794
Talladega.....	416	418	566	773	776	Tallapoosa.....	451	454	573	781	783
Washington.....	454	477	566	834	849	Wilcox.....	416	418	566	705	756
Winston.....	454	477	566	775	1002						

ALASKA

METROPOLITAN FMR AREAS	0 BR	1 BR	2 BR	3 BR	4 BR	Counties of FMR AREA within STATE
Anchorage, AK HMFA.....	774	895	1146	1689	2030	Anchorage
Fairbanks, AK MSA.....	789	980	1326	1954	2277	Fairbanks North Star
Matanuska-Susitna Borough, AK HMFA.....	706	817	1081	1593	1915	Matanuska-Susitna

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ALASKA continued

NONMETROPOLITAN COUNTIES	0 BR	1 BR	2 BR	3 BR	4 BR	NONMETROPOLITAN COUNTIES	0 BR	1 BR	2 BR	3 BR	4 BR
Aleutians East.....	512	601	713	888	1030	Aleutians West.....	854	1061	1436	1788	2074
Bethel.....	765	875	1184	1475	1582	Bristol Bay.....	725	747	1010	1358	1363
Denali.....	457	537	637	939	942	Dillingham.....	741	870	1032	1285	1490
Haines.....	587	663	818	1205	1209	Hoonah-Angoon.....	523	539	729	908	1126
Juneau.....	742	900	1218	1594	1894	Kenai Peninsula.....	622	660	826	1035	1354
Ketchikan Gateway.....	574	741	965	1422	1543	Kodiak Island.....	694	818	1023	1507	1812
Lake and Peninsula.....	510	599	710	954	1258	Nome.....	809	1005	1360	1694	1818
North Slope.....	627	789	936	1166	1501	Northwest Arctic.....	922	962	1141	1421	1525
Petersburg.....	595	612	828	1031	1467	Prince of Wales-Hyder.....	532	536	725	903	969
Sitka.....	790	838	1134	1580	1637	Skagway.....	804	944	1119	1394	1616
Southeast Fairbanks.....	591	699	926	1153	1592	Valdez-Cordova.....	649	687	858	1208	1305
Wade Hampton.....	521	612	726	904	1048	Wrangell.....	577	627	804	1185	1189
Yakutat.....	513	558	715	1054	1266	Yukon-Koyukuk.....	574	589	710	884	1102

ARIZONA

METROPOLITAN FMR AREAS	0 BR	1 BR	2 BR	3 BR	4 BR	Counties of FMR AREA within STATE	NONMETROPOLITAN COUNTIES	0 BR	1 BR	2 BR	3 BR	4 BR
Flagstaff, AZ MSA.....	702	816	1021	1296	1651	Coconino	Cochise.....	641	662	828	1196	1467
Lake Havasu City-Kingman, AZ MSA.....	475	587	749	1015	1175	Mohave	Graham.....	384	542	646	952	955
*Phoenix-Mesa-Glendale, AZ MSA.....	614	774	957	1410	1647	Maricopa, Pinal	La Paz.....	473	490	663	826	1029
Prescott, AZ MSA.....	546	620	784	1155	1221	Yavapai	Santa Cruz.....	474	536	665	839	1178
*Tucson, AZ MSA.....	507	633	852	1251	1489	Pima						
Yuma, AZ MSA.....	576	615	812	1197	1370	Yuma						
Apache.....	385	471	637	797	958							
Gila.....	515	537	723	1044	1225							
Greenlee.....	454	471	637	793	851							
Navajo.....	485	489	661	932	942							

ARKANSAS

METROPOLITAN FMR AREAS	0 BR	1 BR	2 BR	3 BR	4 BR	Counties of FMR AREA within STATE
Fayetteville-Springdale-Rogers, AR HMFA.....	466	533	685	1009	1190	Benton, Madison, Washington
Fort Smith, AR-OK HMFA.....	455	458	600	799	901	Crawford, Sebastian
Franklin County, AR HMFA.....	412	415	561	723	843	Franklin
Grant County, AR HMFA.....	404	473	561	827	994	Grant
Hot Springs, AR MSA.....	468	582	787	1047	1285	Garland
Jonesboro, AR HMFA.....	373	497	614	863	866	Craighead
Little Rock-North Little Rock-Conway, AR HMFA.....	532	615	739	1033	1147	Faulkner, Lonoke, Perry, Pulaski, Saline
Memphis, TN-MS-AR HMFA.....	576	658	780	1066	1188	Crittenden
Pine Bluff, AR MSA.....	416	489	651	815	997	Cleveland, Jefferson, Lincoln
Poinsett County, AR HMFA.....	352	429	561	822	968	Poinsett
Texarkana, TX-Texarkana, AR MSA.....	441	573	704	877	941	Miller

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ARKANSAS continued

NONMETROPOLITAN COUNTIES	0 BR	1 BR	2 BR	3 BR	4 BR	NONMETROPOLITAN COUNTIES	0 BR	1 BR	2 BR	3 BR	4 BR
Arkansas.....	427	430	582	725	826	Ashley.....	412	415	561	760	763
Baxter.....	440	447	596	874	1056	Boone.....	412	415	561	784	941
Bradley.....	395	415	561	814	817	Calhoun.....	412	415	561	699	849
Carroll.....	476	479	635	828	849	Chicot.....	414	417	561	827	994
Clark.....	427	430	567	752	758	Clay.....	412	415	561	728	769
Cleburne.....	452	455	583	766	894	Columbia.....	412	415	561	790	793
Conway.....	455	458	620	772	1005	Cross.....	459	462	597	821	996
Dallas.....	437	473	561	827	981	Desha.....	412	415	561	770	965
Drew.....	412	415	561	807	994	Fulton.....	412	415	561	699	849
Greene.....	386	458	616	855	1091	Hempstead.....	437	459	561	699	912
Hot Spring.....	437	473	561	748	867	Howard.....	374	415	561	737	908
Independence.....	418	421	569	721	913	Izard.....	412	415	561	699	771
Jackson.....	412	415	561	827	994	Johnson.....	429	432	580	722	889
Lafayette.....	412	415	561	827	849	Lawrence.....	412	415	561	746	893
Lee.....	437	473	561	719	750	Little River.....	444	458	619	771	1096
Logan.....	334	415	561	699	782	Marion.....	412	415	561	699	821
Mississippi.....	351	415	562	747	829	Monroe.....	412	415	561	762	965
Montgomery.....	412	415	561	699	849	Nevada.....	412	415	561	724	974
Newton.....	412	415	561	699	849	Ouachita.....	432	435	561	722	750
Phillips.....	412	415	561	827	915	Pike.....	426	429	561	699	849
Polk.....	431	433	561	751	754	Pope.....	437	440	589	804	1043
Prairie.....	437	473	561	827	994	Randolph.....	412	415	561	716	849
St. Francis.....	453	473	561	781	898	Scott.....	413	415	562	700	850
Searcy.....	412	415	561	699	750	Sevier.....	437	445	561	720	787
Sharp.....	412	415	561	738	841	Stone.....	413	415	562	722	850
Union.....	455	458	620	772	886	Van Buren.....	437	473	561	712	849
White.....	429	432	585	862	906	Woodruff.....	412	415	561	827	849
Yell.....	412	415	561	827	994						

CALIFORNIA

METROPOLITAN FMR AREAS	0 BR	1 BR	2 BR	3 BR	4 BR	Counties of FMR AREA within STATE
Bakersfield-Delano, CA MSA.....	619	623	815	1195	1443	Kern
Chico, CA MSA.....	516	646	851	1215	1507	Butte
El Centro, CA MSA.....	514	626	809	1192	1433	Imperial
Fresno, CA MSA.....	630	655	827	1162	1356	Fresno
Hanford-Corcoran, CA MSA.....	555	657	889	1264	1329	Kings
Los Angeles-Long Beach, CA HMFA.....	896	1083	1398	1890	2106	Los Angeles
Madera-Chowchilla, CA MSA.....	576	580	785	1140	1251	Madera
Merced, CA MSA.....	522	604	795	1171	1408	Merced
Modesto, CA MSA.....	575	710	910	1341	1556	Stanislaus
Napa, CA MSA.....	843	1057	1414	2018	2025	Napa
Oakland-Fremont, CA HMFA.....	1035	1255	1578	2204	2704	Alameda, Contra Costa
*Orange County, CA HMFA.....	1142	1312	1644	2300	2561	Orange

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CALIFORNIA continued

METROPOLITAN FMR AREAS	0 BR	1 BR	2 BR	3 BR	4 BR	Counties of FMR AREA within STATE
Oxnard-Thousand Oaks-Ventura, CA MSA.....	922	1102	1479	2043	2364	Ventura
Redding, CA MSA.....	727	748	940	1385	1544	Shasta
*Riverside-San Bernardino-Ontario, CA MSA.....	766	882	1120	1582	1930	Riverside, San Bernardino
*Sacramento--Arden-Arcade--Roseville, CA HMFA.....	717	854	1072	1580	1899	El Dorado, Placer, Sacramento
Salinas, CA MSA.....	871	980	1234	1800	2012	Monterey
San Benito County, CA HMFA.....	712	884	1196	1762	2118	San Benito
San Diego-Carlsbad-San Marcos, CA MSA.....	939	1032	1354	1969	2398	San Diego
San Francisco, CA HMFA.....	1191	1551	1956	2657	3212	Marin, San Francisco, San Mateo
San Jose-Sunnyvale-Santa Clara, CA HMFA.....	1105	1293	1649	2325	2636	Santa Clara
San Luis Obispo-Paso Robles, CA MSA.....	814	941	1215	1790	1867	San Luis Obispo
Santa Barbara-Santa Maria-Goleta, CA MSA.....	924	1061	1272	1700	1968	Santa Barbara
Santa Cruz-Watsonville, CA MSA.....	976	1180	1597	2058	2296	Santa Cruz
Santa Rosa-Petaluma, CA MSA.....	820	956	1251	1843	2161	Sonoma
Stockton, CA MSA.....	595	709	930	1370	1647	San Joaquin
Vallejo-Fairfield, CA MSA.....	738	928	1163	1714	2037	Solano
Visalia-Porterville, CA MSA.....	561	576	749	1104	1283	Tulare
Yolo, CA HMFA.....	757	817	1104	1627	1898	Yolo
Yuba City, CA MSA.....	512	617	790	1142	1351	Sutter, Yuba

NONMETROPOLITAN COUNTIES	0 BR	1 BR	2 BR	3 BR	4 BR	NONMETROPOLITAN COUNTIES	0 BR	1 BR	2 BR	3 BR	4 BR
Alpine.....	665	675	913	1137	1474	Amador.....	623	775	1048	1391	1692
Calaveras.....	675	736	928	1367	1644	Colusa.....	596	600	812	1197	1438
Del Norte.....	639	643	870	1282	1399	Glenn.....	605	609	824	1189	1459
Humboldt.....	665	731	986	1453	1691	Inyo.....	777	809	962	1418	1704
Lake.....	644	648	877	1292	1306	Lassen.....	660	698	945	1321	1326
Mariposa.....	563	572	774	964	1249	Mendocino.....	656	702	927	1277	1544
Modoc.....	464	537	637	939	1120	Mono.....	924	1056	1252	1559	2021
Nevada.....	785	790	1047	1543	1784	Plumas.....	555	690	933	1162	1534
Sierra.....	630	639	865	1275	1396	Siskiyou.....	519	618	789	1150	1295
Tehama.....	500	621	840	1185	1358	Trinity.....	701	706	943	1390	1670
Tuolumne.....	575	698	944	1391	1396						

COLORADO

METROPOLITAN FMR AREAS	0 BR	1 BR	2 BR	3 BR	4 BR	Counties of FMR AREA within STATE
Boulder, CO MSA.....	820	952	1178	1736	2062	Boulder
Colorado Springs, CO HMFA.....	501	622	807	1189	1429	El Paso
Denver-Aurora-Broomfield, CO MSA.....	600	742	960	1409	1633	Adams, Arapahoe, Broomfield, Clear Creek, Denver, Douglas, Elbert, Gilpin, Jefferson, Park
Fort Collins-Loveland, CO MSA.....	602	744	896	1320	1587	Larimer
Grand Junction, CO MSA.....	483	575	765	1127	1295	Mesa
Greeley, CO MSA.....	472	551	709	1040	1256	Weld
Pueblo, CO MSA.....	437	530	693	991	1070	Pueblo
Teller County, CO HMFA.....	534	689	861	1243	1247	Teller

COLORADO continued

NONMETROPOLITAN COUNTIES	0 BR	1 BR	2 BR	3 BR	4 BR	NONMETROPOLITAN COUNTIES	0 BR	1 BR	2 BR	3 BR	4 BR
Alamosa.....	516	537	639	796	854	Archuleta.....	560	563	731	956	977
Baca.....	515	537	637	939	978	Bent.....	468	471	637	793	978
Chaffee.....	512	515	697	1027	1197	Cheyenne.....	468	471	637	873	978
Conejos.....	515	537	637	793	851	Costilla.....	515	537	637	939	942
Crowley.....	468	471	637	797	1128	Custer.....	468	471	637	829	978
Delta.....	558	562	760	947	1310	Dolores.....	515	537	637	939	978
Eagle.....	877	883	1194	1545	1964	Fremont.....	536	552	664	954	1029
Garfield.....	822	828	1120	1400	1984	Grand.....	653	658	890	1246	1251
Gunnison.....	583	660	893	1112	1494	Hinsdale.....	660	664	862	1181	1323
Huerfano.....	512	515	697	868	931	Jackson.....	532	535	695	866	1067
Kiowa.....	488	491	637	793	916	Kit Carson.....	468	471	637	793	1123
Lake.....	670	725	981	1222	1506	La Plata.....	696	741	922	1250	1606
Las Animas.....	502	506	684	952	955	Lincoln.....	535	539	688	857	1056
Logan.....	383	475	643	801	950	Mineral.....	604	608	789	983	1211
Moffat.....	576	580	738	1087	1091	Montezuma.....	515	537	637	939	1128
Montrose.....	485	562	760	1073	1346	Morgan.....	503	506	660	854	937
Otero.....	379	471	637	793	851	Ouray.....	744	749	1014	1494	1642
Phillips.....	491	494	660	822	882	Pitkin.....	792	984	1331	1763	1779
Prowers.....	468	471	637	796	867	Rio Blanco.....	526	530	717	1057	1109
Rio Grande.....	515	537	637	846	1128	Routt.....	650	876	1080	1478	1484
Saguache.....	515	537	637	809	1128	San Juan.....	543	622	842	1241	1293
San Miguel.....	707	914	1119	1626	1935	Sedgwick.....	515	537	637	906	909
Summit.....	734	995	1233	1619	2059	Washington.....	474	477	645	803	871
Yuma.....	468	471	637	841	992						

CONNECTICUT

METROPOLITAN FMR AREAS	0 BR	1 BR	2 BR	3 BR	4 BR	Components of FMR AREA within STATE
Bridgeport, CT HMFA.....	727	912	1161	1519	1645	Fairfield County towns of Bridgeport town, Easton town, Fairfield town, Monroe town, Shelton town, Stratford town, Trumbull town
Colchester-Lebanon, CT HMFA.....	753	822	1112	1385	1611	New London County towns of Colchester town, Lebanon town
Danbury, CT HMFA.....	1022	1165	1576	1965	2486	Fairfield County towns of Bethel town, Brookfield town, Danbury town, New Fairfield town, Newtown town, Redding town, Ridgefield town, Sherman town
*Hartford-West Hartford-East Hartford, CT HMFA....	749	939	1170	1457	1693	Hartford County towns of Avon town, Berlin town, Bloomfield town, Bristol town, Burlington town, Canton town, East Granby town, East Hartford town, East Windsor town, Enfield town, Farmington town, Glastonbury town, Granby town, Hartford town, Hartland town, Manchester town, Marlborough town, New Britain town, Newington town, Plainville town, Rocky Hill town, Simsbury town, Southington town, South Windsor town, Suffield town, West Hartford town, Wethersfield town, Windsor town, Windsor Locks town

SCHEDULE B - FY 2014 Final FAIR MARKET RENTS FOR EXISTING HOUSING

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CONNECTICUT continued

METROPOLITAN FMR AREAS	0 BR	1 BR	2 BR	3 BR	4 BR	Components of FMR AREA within STATE
						Middlesex County towns of Chester town, Cromwell town, Durham town, East Haddam town, East Hampton town, Haddam town, Middlefield town, Middletown town, Portland town
						Tolland County towns of Andover town, Bolton town, Columbia town, Coventry town, Ellington town, Hebron town, Mansfield town, Somers town, Stafford town, Tolland town, Union town, Vernon town, Willington town
Milford-Ansonia-Seymour, CT HMFA.....	931	982	1214	1537	1712	New Haven County towns of Ansonia town, Beacon Falls town, Derby town, Milford town, Oxford town, Seymour town
*New Haven-Meriden, CT HMFA.....	812	980	1223	1523	1690	New Haven County towns of Bethany town, Branford town, Cheshire town, East Haven town, Guilford town, Hamden town, Madison town, Meriden town, New Haven town, North Branford town, North Haven town, Orange town, Wallingford town, West Haven town, Woodbridge town
Norwich-New London, CT HMFA.....	701	788	1035	1325	1528	New London County towns of Bozrah town, East Lyme town, Franklin town, Griswold town, Groton town, Ledyard town, Lisbon town, Lyme town, Montville town, New London town, North Stonington town, Norwich town, Old Lyme town, Preston town, Salem town, Sprague town, Stonington town, Voluntown town, Waterford town
Southern Middlesex County, CT HMFA.....	958	965	1305	1816	1822	Middlesex County towns of Clinton town, Deep River town, Essex town, Killingworth town, Old Saybrook town, Westbrook town
Stamford-Norwalk, CT HMFA.....	1030	1249	1551	1932	2403	Fairfield County towns of Darien town, Greenwich town, New Canaan town, Norwalk town, Stamford town, Weston town, Westport town, Wilton town
Waterbury, CT HMFA.....	583	787	960	1196	1299	New Haven County towns of Middlebury town, Naugatuck town, Prospect town, Southbury town, Waterbury town, Wolcott town
NONMETROPOLITAN COUNTIES	0 BR	1 BR	2 BR	3 BR	4 BR	Towns within nonmetropolitan counties
Litchfield County, CT.....	750	762	978	1239	1469	Barkhamsted town, Bethlehem town, Bridgewater town, Canaan town, Colebrook town, Cornwall town, Goshen town, Harwinton town, Kent town, Litchfield town, Morris town, New Hartford town, New Milford town, Norfolk town, North Canaan town, Plymouth town, Roxbury town, Salisbury town, Sharon town, Thomaston town, Torrington town, Warren town, Washington town, Watertown town, Winchester town, Woodbury town
Windham County, CT.....	558	700	938	1168	1308	Ashford town, Brooklyn town, Canterbury town, Chaplin town, Eastford town, Hampton town, Killingly town, Plainfield town, Pomfret town, Putnam town, Scotland town, Sterling town, Thompson town, Windham town, Woodstock town

DELAWARE

METROPOLITAN FMR AREAS	0 BR	1 BR	2 BR	3 BR	4 BR	Counties of FMR AREA within STATE
Dover, DE MSA.....	600	768	910	1274	1608	Kent

DELAWARE continued

METROPOLITAN FMR AREAS	0 BR	1 BR	2 BR	3 BR	4 BR	Counties of FMR AREA within STATE

*Philadelphia-Camden-Wilmington, PA-NJ-DE-MD MSA..	799	942	1135	1414	1518	New Castle

NONMETROPOLITAN COUNTIES	0 BR	1 BR	2 BR	3 BR	4 BR	NONMETROPOLITAN COUNTIES	0 BR	1 BR	2 BR	3 BR	4 BR

Sussex.....	603	616	834	1138	1325						

DISTRICT OF COLUMBIA

METROPOLITAN FMR AREAS	0 BR	1 BR	2 BR	3 BR	4 BR	Counties of FMR AREA within STATE

Washington-Arlington-Alexandria, DC-VA-MD HMFA....	1176	1239	1469	1966	2470	District of Columbia

FLORIDA

METROPOLITAN FMR AREAS	0 BR	1 BR	2 BR	3 BR	4 BR	Counties of FMR AREA within STATE

Baker County, FL HMFA.....	493	617	731	976	1062	Baker
Cape Coral-Fort Myers, FL MSA.....	700	705	893	1212	1247	Lee
Crestview-Fort Walton Beach-Destin, FL MSA.....	707	711	889	1310	1531	Okaloosa
Deltona-Daytona Beach-Ormond Beach, FL MSA.....	555	713	878	1199	1291	Volusia
*Fort Lauderdale, FL HMFA.....	762	992	1260	1797	2232	Broward
Gainesville, FL MSA.....	665	684	869	1161	1510	Alachua, Gilchrist
Jacksonville, FL HMFA.....	631	778	935	1233	1509	Clay, Duval, Nassau, St. Johns
Lakeland-Winter Haven, FL MSA.....	619	623	807	1094	1332	Polk
Miami-Miami Beach-Kendall, FL HMFA.....	747	910	1166	1600	1869	Miami-Dade
Naples-Marco Island, FL MSA.....	702	808	1006	1314	1618	Collier
*North Port-Bradenton-Sarasota, FL MSA.....	710	790	1011	1355	1591	Manatee, Sarasota
Ocala, FL MSA.....	507	628	787	1060	1064	Marion
Orlando-Kissimmee-Sanford, FL MSA.....	697	825	983	1311	1586	Lake, Orange, Osceola, Seminole
Palm Bay-Melbourne-Titusville, FL MSA.....	533	696	862	1193	1419	Brevard
Palm Coast, FL MSA.....	683	766	999	1301	1427	Flagler
Panama City-Lynn Haven-Panama City Beach, FL MSA..	684	727	862	1174	1483	Bay
Pensacola-Ferry Pass-Brent, FL MSA.....	614	700	830	1119	1451	Escambia, Santa Rosa
Port St. Lucie, FL MSA.....	674	748	926	1273	1501	Martin, St. Lucie
Punta Gorda, FL MSA.....	511	673	859	1220	1224	Charlotte
Sebastian-Vero Beach, FL MSA.....	560	693	864	1162	1167	Indian River
Tallahassee, FL HMFA.....	709	754	910	1167	1586	Gadsden, Jefferson, Leon
Tampa-St. Petersburg-Clearwater, FL MSA.....	605	758	951	1269	1520	Hernando, Hillsborough, Pasco, Pinellas
Wakulla County, FL HMFA.....	557	561	759	1024	1344	Wakulla
*West Palm Beach-Boca Raton, FL HMFA.....	750	962	1202	1623	1938	Palm Beach

NONMETROPOLITAN COUNTIES	0 BR	1 BR	2 BR	3 BR	4 BR	NONMETROPOLITAN COUNTIES	0 BR	1 BR	2 BR	3 BR	4 BR

Bradford.....	515	537	637	939	942	Calhoun.....	515	528	637	793	897
Citrus.....	582	586	747	989	1232	Columbia.....	502	648	781	1151	1383
DeSoto.....	528	552	654	892	895	Dixie.....	515	537	637	930	933
Franklin.....	568	593	703	1036	1039	Glades.....	572	576	746	968	1050
Gulf.....	571	596	707	1042	1045	Hamilton.....	515	528	637	793	931
Hardee.....	548	558	678	844	906	Hendry.....	571	575	778	1026	1182

SCHEDULE B - FY 2014 Final FAIR MARKET RENTS FOR EXISTING HOUSING

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FLORIDA continued

NONMETROPOLITAN COUNTIES	0 BR	1 BR	2 BR	3 BR	4 BR	NONMETROPOLITAN COUNTIES	0 BR	1 BR	2 BR	3 BR	4 BR
Highlands.....	548	552	697	1027	1030	Holmes.....	515	537	637	873	897
Jackson.....	515	534	637	793	990	Lafayette.....	515	528	637	793	897
Levy.....	515	526	637	887	1128	Liberty.....	515	528	637	939	942
Madison.....	531	545	657	968	1089	Monroe.....	1003	1010	1366	1782	1826
Okeechobee.....	557	561	759	945	1014	Putnam.....	524	528	651	811	870
Sumter.....	576	601	713	1051	1125	Suwannee.....	383	476	644	925	928
Taylor.....	515	537	637	939	1015	Union.....	468	471	637	826	852
Walton.....	650	654	885	1173	1183	Washington.....	468	471	637	845	897

GEORGIA

METROPOLITAN FMR AREAS	0 BR	1 BR	2 BR	3 BR	4 BR	Counties of FMR AREA within STATE					
Albany, GA MSA.....	513	581	700	969	995	Baker, Dougherty, Lee, Terrell, Worth					
Athens-Clarke County, GA MSA.....	536	590	721	978	1101	Clarke, Madison, Oconee, Oglethorpe					
Atlanta-Sandy Springs-Marietta, GA HMFA.....	693	756	896	1187	1442	Barrow, Bartow, Carroll, Cherokee, Clayton, Cobb, Coweta, Dawson, DeKalb, Douglas, Fayette, Forsyth, Fulton, Gwinnett, Heard, Henry, Jasper, Newton, Paulding, Pickens, Pike, Rockdale, Spalding, Walton					
Augusta-Richmond County, GA-SC MSA.....	543	612	730	993	1229	Burke, Columbia, McDuffie, Richmond					
Brunswick, GA MSA.....	492	495	670	834	938	Brantley, Glynn, McIntosh					
Butts County, GA HMFA.....	565	568	769	990	1028	Butts					
Chattanooga, TN-GA MSA.....	452	546	679	923	1041	Catoosa, Dade, Walker					
Columbus, GA-AL MSA.....	508	595	705	971	1249	Chattahoochee, Harris, Marion, Muscogee					
Dalton, GA HMFA.....	529	572	697	895	1115	Whitfield					
Gainesville, GA MSA.....	640	644	815	1058	1089	Hall					
Haralson County, GA HMFA.....	467	470	636	894	1023	Haralson					
Hinesville-Fort Stewart, GA HMFA.....	575	598	747	1054	1310	Liberty					
Lamar County, GA HMFA.....	492	536	636	937	1038	Lamar					
Long County, GA HMFA.....	489	509	636	870	1126	Long					
Macon, GA MSA.....	512	616	730	1008	1102	Bibb, Crawford, Jones, Twiggs					
Meriwether County, GA HMFA.....	492	536	636	815	850	Meriwether					
Monroe County, GA HMFA.....	457	549	651	959	1153	Monroe					
Murray County, GA HMFA.....	491	495	667	840	1170	Murray					
Rome, GA MSA.....	495	498	674	839	1192	Floyd					
Savannah, GA MSA.....	591	725	860	1147	1360	Bryan, Chatham, Effingham					
Valdosta, GA MSA.....	575	579	719	921	1096	Brooks, Echols, Lanier, Lowndes					
Warner Robins, GA MSA.....	598	616	760	975	1165	Houston					
NONMETROPOLITAN COUNTIES											
Appling.....	514	536	636	792	929	Atkinson.....	378	470	636	792	850
Bacon.....	491	495	636	792	850	Baldwin.....	485	559	710	920	949
Banks.....	567	592	702	964	1159	Ben Hill.....	496	499	663	826	886
Berrien.....	467	470	636	792	1113	Bleckley.....	467	470	636	937	963
Bulloch.....	504	569	725	1050	1275	Calhoun.....	467	470	636	792	963
Camden.....	597	601	813	1130	1297	Candler.....	467	470	636	792	959
Charlton.....	471	475	642	892	972	Chattooga.....	467	470	636	854	1126

GEORGIA continued

NONMETROPOLITAN COUNTIES	0 BR	1 BR	2 BR	3 BR	4 BR	NONMETROPOLITAN COUNTIES	0 BR	1 BR	2 BR	3 BR	4 BR
Clay.....	519	523	661	823	1001	Clinch.....	467	470	636	917	963
Coffee.....	474	477	636	925	1118	Colquitt.....	471	474	636	937	940
Cook.....	529	552	655	965	968	Crisp.....	485	488	642	800	1062
Decatur.....	528	552	654	846	874	Dodge.....	514	536	636	937	1126
Dooley.....	514	536	636	937	996	Early.....	479	482	636	937	1069
Elbert.....	514	519	636	937	963	Emanuel.....	467	470	636	885	1001
Evans.....	513	516	636	801	850	Fannin.....	467	470	636	800	1126
Franklin.....	467	470	636	873	1126	Gilmer.....	528	531	695	866	1231
Glascock.....	467	470	636	792	850	Gordon.....	540	543	705	951	1175
Grady.....	467	470	636	794	941	Greene.....	479	483	653	911	973
Habersham.....	514	536	636	937	1126	Hancock.....	467	470	636	792	850
Hart.....	467	470	636	896	1126	Irwin.....	467	470	636	792	850
Jackson.....	570	574	777	968	1107	Jeff Davis.....	514	536	636	866	870
Jefferson.....	514	521	636	792	850	Jenkins.....	491	495	636	897	985
Johnson.....	467	470	636	792	884	Laurens.....	514	536	636	880	883
Lincoln.....	467	470	636	937	1126	Lumpkin.....	548	551	746	1006	1010
Macon.....	514	536	636	792	1041	Miller.....	467	470	636	912	938
Mitchell.....	506	509	689	858	921	Montgomery.....	514	536	636	792	963
Morgan.....	565	590	699	1030	1195	Peach.....	381	474	641	873	876
Pierce.....	475	478	636	792	1126	Polk.....	493	496	671	871	981
Pulaski.....	467	470	636	937	963	Putnam.....	652	671	807	1186	1190
Quitman.....	514	536	636	937	963	Rabun.....	456	634	767	988	1025
Randolph.....	467	470	636	840	963	Schley.....	467	470	636	887	1126
Screven.....	467	470	636	845	850	Seminole.....	514	536	636	873	876
Stephens.....	504	507	686	946	1215	Stewart.....	514	536	636	885	963
Sumter.....	514	526	636	869	872	Talbot.....	524	528	714	889	1081
Taliaferro.....	634	638	820	1021	1242	Tattnall.....	514	536	636	881	894
Taylor.....	378	495	636	917	963	Telfair.....	467	470	636	792	907
Thomas.....	517	521	698	974	977	Tift.....	504	509	654	828	1073
Toombs.....	487	490	636	826	887	Towns.....	527	530	682	849	979
Treutlen.....	491	495	636	792	850	Troup.....	565	580	700	956	960
Turner.....	471	474	636	792	1126	Union.....	530	534	722	937	965
Upton.....	514	536	636	937	1126	Ware.....	422	473	640	797	855
Warren.....	514	521	636	937	940	Washington.....	514	536	636	831	1126
Wayne.....	467	470	636	795	850	Webster.....	491	495	636	792	963
Wheeler.....	491	495	636	917	1080	White.....	476	480	649	892	983
Wilcox.....	467	470	636	792	1092	Wilkes.....	479	482	636	937	1126
Wilkinson.....	467	470	636	792	963						

HAWAII

METROPOLITAN FMR AREAS	0 BR	1 BR	2 BR	3 BR	4 BR	Counties of FMR AREA within STATE
*Honolulu, HI MSA.....	1267	1382	1820	2682	3078	Honolulu

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HAWAII continued

NONMETROPOLITAN COUNTIES	0 BR	1 BR	2 BR	3 BR	4 BR	NONMETROPOLITAN COUNTIES	0 BR	1 BR	2 BR	3 BR	4 BR
Hawaii.....	619	780	950	1281	1604	Kalawao.....	458	509	637	844	965
Kauai.....	1170	1180	1597	2173	2574	Maui.....	868	977	1262	1739	1746

IDAHO

METROPOLITAN FMR AREAS

	0 BR	1 BR	2 BR	3 BR	4 BR	Counties of FMR AREA within STATE
Boise City-Nampa, ID HMFA.....	428	572	719	1059	1178	Ada, Boise, Canyon, Owyhee
Coeur d'Alene, ID MSA.....	499	595	753	1072	1321	Kootenai
Gem County, ID HMFA.....	380	472	639	942	1132	Gem
Idaho Falls, ID MSA.....	413	488	660	931	1169	Bonneville, Jefferson
Lewiston, ID-WA MSA.....	403	510	659	853	1167	Nez Perce
Logan, UT-ID MSA.....	478	481	637	917	1118	Franklin
Pocatello, ID MSA.....	379	477	637	939	1128	Bannock, Power

NONMETROPOLITAN COUNTIES	0 BR	1 BR	2 BR	3 BR	4 BR	NONMETROPOLITAN COUNTIES	0 BR	1 BR	2 BR	3 BR	4 BR
Adams.....	468	471	637	939	1113	Bear Lake.....	468	471	637	939	1113
Benewah.....	510	537	637	855	1128	Bingham.....	510	532	637	939	942
Blaine.....	698	703	926	1292	1361	Bonner.....	481	581	689	1004	1220
Boundary.....	468	471	637	793	1113	Butte.....	484	487	637	925	1113
Camas.....	499	502	637	880	1113	Caribou.....	499	502	637	891	1113
Cassia.....	379	472	637	939	1128	Clark.....	499	502	637	939	1113
Clearwater.....	510	537	637	877	1113	Custer.....	468	471	637	876	1113
Elmore.....	468	471	637	911	1128	Fremont.....	472	475	643	801	864
Gooding.....	493	496	637	896	1128	Idaho.....	484	487	637	892	1128
Jerome.....	422	493	641	934	954	Latah.....	508	511	655	965	1160
Lemhi.....	510	537	637	939	1113	Lewis.....	515	521	637	939	942
Lincoln.....	510	537	637	865	1128	Madison.....	504	508	652	961	1155
Minidoka.....	510	537	637	939	1003	Oneida.....	510	537	637	916	1087
Payette.....	480	483	654	917	1104	Shoshone.....	465	518	637	820	906
Teton.....	552	582	690	928	1222	Twin Falls.....	463	509	662	869	1129
Valley.....	480	580	688	1014	1219	Washington.....	468	471	637	939	1113

ILLINOIS

METROPOLITAN FMR AREAS

	0 BR	1 BR	2 BR	3 BR	4 BR	Counties of FMR AREA within STATE
Bloomington-Normal, IL MSA.....	606	657	865	1217	1471	McLean
Bond County, IL HMFA.....	449	508	687	856	918	Bond
Cape Girardeau-Jackson, MO-IL MSA.....	404	502	679	881	1074	Alexander
Champaign-Urbana, IL MSA.....	565	708	862	1111	1496	Champaign, Ford, Piatt
Chicago-Joliet-Naperville, IL HMFA.....	727	826	979	1248	1455	Cook, DuPage, Kane, Lake, McHenry, Will
Danville, IL MSA.....	520	568	711	903	950	Vermilion
Davenport-Moline-Rock Island, IA-IL MSA.....	431	533	683	921	969	Henry, Mercer, Rock Island
DeKalb County, IL HMFA.....	572	676	876	1242	1448	DeKalb
Decatur, IL MSA.....	411	525	684	952	1044	Macon

ILLINOIS continued

METROPOLITAN FMR AREAS

0 BR 1 BR 2 BR 3 BR 4 BR Counties of FMR AREA within STATE

Grundy County, IL HMFA.....	543	675	913	1336	1341	Grundy
Kankakee-Bradley, IL MSA.....	452	574	758	1067	1287	Kankakee
Kendall County, IL HMFA.....	594	750	999	1472	1539	Kendall
Macoupin County, IL HMFA.....	416	483	637	926	1013	Macoupin
Peoria, IL MSA.....	431	565	725	937	1125	Marshall, Peoria, Stark, Tazewell, Woodford
Rockford, IL MSA.....	490	560	754	1029	1168	Boone, Winnebago
Springfield, IL MSA.....	472	584	743	972	1024	Menard, Sangamon
St. Louis, MO-IL HMFA.....	532	631	814	1061	1203	Calhoun, Clinton, Jersey, Madison, Monroe, St. Clair

NONMETROPOLITAN COUNTIES

0 BR 1 BR 2 BR 3 BR 4 BR

Adams.....	379	471	637	877	1023
Bureau.....	396	499	665	919	922
Cass.....	478	481	651	811	918
Clark.....	463	515	697	868	931
Coles.....	490	493	667	983	1034
Cumberland.....	423	537	637	863	866
Douglas.....	461	513	694	864	953
Edwards.....	423	512	637	793	936
Fayette.....	483	520	637	793	964
Fulton.....	496	499	642	822	1083
Greene.....	423	537	637	793	1128
Hancock.....	379	510	637	793	851
Henderson.....	423	526	637	795	851
Jackson.....	419	504	682	903	1013
Jefferson.....	485	506	637	859	1107
Johnson.....	423	537	637	793	991
La Salle.....	456	567	767	1048	1052
Lee.....	495	499	640	907	910
Logan.....	424	472	639	889	892
Marion.....	423	485	637	906	910
Massac.....	445	496	671	836	1188
Morgan.....	387	481	651	811	870
Ogle.....	479	532	689	981	1153
Pike.....	467	537	637	835	1114
Pulaski.....	423	537	637	793	851
Randolph.....	433	485	652	879	996
Saline.....	468	471	637	917	1053
Scott.....	423	484	637	884	1056
Stephenson.....	433	483	653	813	1006
Wabash.....	433	482	652	812	929
Washington.....	439	497	662	856	972
White.....	421	537	637	797	872
Williamson.....	477	480	650	918	1151

NONMETROPOLITAN COUNTIES

0 BR 1 BR 2 BR 3 BR 4 BR

Brown.....	463	575	778	969	1143
Carroll.....	423	471	637	793	851
Christian.....	493	497	672	837	1068
Clay.....	423	537	637	793	936
Crawford.....	423	537	637	925	928
De Witt.....	423	471	637	834	1016
Edgar.....	471	474	637	876	1128
Effingham.....	468	471	637	939	1095
Franklin.....	379	471	637	793	1062
Gallatin.....	423	537	637	939	942
Hamilton.....	423	537	637	793	936
Hardin.....	423	471	637	793	936
Iroquois.....	480	483	649	897	1034
Jasper.....	423	537	637	939	1078
Jo Daviess.....	423	537	637	846	851
Knox.....	379	471	637	793	1128
Lawrence.....	515	537	637	939	942
Livingston.....	479	511	680	920	923
McDonough.....	421	523	708	887	1064
Mason.....	423	471	637	793	1041
Montgomery.....	452	574	681	848	1126
Moultrie.....	423	537	637	893	930
Perry.....	468	471	637	801	1076
Pope.....	423	537	637	939	942
Putnam.....	433	551	653	813	873
Richland.....	423	471	637	909	912
Schuyler.....	423	537	637	939	942
Shelby.....	423	471	637	793	944
Union.....	423	471	637	842	851
Warren.....	459	519	692	1013	1017
Wayne.....	423	537	637	864	936
Whiteside.....	497	535	684	852	946

SCHEDULE B - FY 2014 Final FAIR MARKET RENTS FOR EXISTING HOUSING

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INDIANA

METROPOLITAN FMR AREAS	0 BR	1 BR	2 BR	3 BR	4 BR	Counties of FMR AREA within STATE					
Anderson, IN MSA.....	412	500	677	903	985	Madison					
Bloomington, IN HMFA.....	571	624	779	1087	1380	Monroe					
Carroll County, IN HMFA.....	506	528	626	895	898	Carroll					
Cincinnati-Middleton, OH-KY-IN HMFA.....	442	554	735	1018	1121	Dearborn, Franklin, Ohio					
Columbus, IN MSA.....	608	665	827	1087	1122	Bartholomew					
Elkhart-Goshen, IN MSA.....	459	569	742	961	1130	Elkhart					
Evansville, IN-KY HMFA.....	533	572	739	941	1028	Posey, Vanderburgh, Warrick					
Fort Wayne, IN MSA.....	474	520	664	854	969	Allen, Wells, Whitley					
Gary, IN HMFA.....	478	645	803	1006	1073	Lake, Newton, Porter					
Gibson County, IN HMFA.....	452	474	626	838	841	Gibson					
Greene County, IN HMFA.....	372	463	626	780	942	Greene					
Indianapolis, IN HMFA.....	506	625	777	1036	1209	Boone, Brown, Hamilton, Hancock, Hendricks, Johnson, Marion, Morgan, Shelby					
Jasper County, IN HMFA.....	507	511	691	861	923	Jasper					
Kokomo, IN MSA.....	472	490	663	888	970	Howard, Tipton					
Lafayette, IN HMFA.....	540	618	780	1021	1283	Benton, Tippecanoe					
Louisville, KY-IN HMFA.....	485	567	705	976	1104	Clark, Floyd, Harrison					
Michigan City-La Porte, IN MSA.....	458	531	719	952	961	LaPorte					
Muncie, IN MSA.....	465	518	668	877	1183	Delaware					
Owen County, IN HMFA.....	454	487	626	802	1109	Owen					
Putnam County, IN HMFA.....	506	514	626	922	1059	Putnam					
South Bend-Mishawaka, IN HMFA.....	490	558	714	895	954	St. Joseph					
Sullivan County, IN HMFA.....	506	528	626	919	922	Sullivan					
Terre Haute, IN HMFA.....	434	540	730	909	1067	Clay, Vermillion, Vigo					
Washington County, IN HMFA.....	430	508	626	881	884	Washington					
NONMETROPOLITAN COUNTIES											
Adams.....	408	495	626	830	1019	Blackford.....	408	463	626	780	1106
Cass.....	408	463	626	780	1107	Clinton.....	397	494	668	852	959
Crawford.....	408	463	626	780	889	Daviess.....	408	463	626	899	902
Decatur.....	406	505	683	863	913	DeKalb.....	399	481	626	891	1049
Dubois.....	408	472	626	922	933	Fayette.....	446	481	644	825	861
Fountain.....	408	528	626	885	889	Fulton.....	426	523	653	813	873
Grant.....	390	464	626	828	908	Henry.....	463	467	626	796	863
Huntington.....	401	484	645	827	862	Jackson.....	406	504	682	910	1050
Jay.....	408	483	626	871	918	Jefferson.....	372	485	626	855	892
Jennings.....	402	506	676	872	968	Knox.....	467	474	626	781	882
Kosciusko.....	440	504	674	872	996	LaGrange.....	393	489	661	823	905
Lawrence.....	382	496	642	851	918	Marshall.....	439	500	673	838	899
Martin.....	408	528	626	922	973	Miami.....	372	528	626	867	1019
Montgomery.....	426	513	693	971	989	Noble.....	399	485	637	793	1093
Orange.....	408	463	626	853	1062	Parke.....	408	463	626	851	1109
Perry.....	408	471	626	888	904	Pike.....	408	528	626	922	1041
Pulaski.....	372	465	626	813	837	Randolph.....	408	482	626	872	1025
Ripley.....	375	466	630	785	903	Rush.....	408	463	626	804	837
Scott.....	421	477	646	886	983	Spencer.....	372	463	626	780	837

INDIANA continued

NONMETROPOLITAN COUNTIES	0 BR	1 BR	2 BR	3 BR	4 BR	NONMETROPOLITAN COUNTIES	0 BR	1 BR	2 BR	3 BR	4 BR
Starke.....	445	537	637	828	851	Steuben.....	441	501	676	842	943
Switzerland.....	408	463	626	922	972	Union.....	408	528	626	922	1109
Wabash.....	408	463	626	780	837	Warren.....	408	528	626	852	855
Wayne.....	480	500	638	842	948	White.....	408	528	626	851	854

IOWA

METROPOLITAN FMR AREAS	0 BR	1 BR	2 BR	3 BR	4 BR	Counties of FMR AREA within STATE
Ames, IA MSA.....	491	575	717	1014	1186	Story
Benton County, IA HMFA.....	422	469	579	752	923	Benton
Bremer County, IA HMFA.....	446	480	650	888	892	Bremer
Cedar Rapids, IA HMFA.....	390	484	655	887	987	Linn
Davenport-Moline-Rock Island, IA-IL MSA.....	431	533	683	921	969	Scott
Des Moines-West Des Moines, IA MSA.....	525	631	783	1090	1161	Dallas, Guthrie, Madison, Polk, Warren
Dubuque, IA MSA.....	452	559	725	972	1129	Dubuque
Iowa City, IA HMFA.....	558	668	851	1254	1507	Johnson
Jones County, IA HMFA.....	344	428	579	798	905	Jones
Omaha-Council Bluffs, NE-IA HMFA.....	470	629	790	1059	1177	Harrison, Mills, Pottawattamie
Sioux City, IA-NE-SD MSA.....	414	541	696	914	1027	Woodbury
Washington County, IA HMFA.....	429	512	645	950	1086	Washington
Waterloo-Cedar Falls, IA HMFA.....	495	573	720	957	1275	Black Hawk, Grundy

NONMETROPOLITAN COUNTIES	0 BR	1 BR	2 BR	3 BR	4 BR	NONMETROPOLITAN COUNTIES	0 BR	1 BR	2 BR	3 BR	4 BR
Adair.....	419	458	619	863	866	Adams.....	423	461	624	777	862
Allamakee.....	392	488	579	853	886	Appanoose.....	425	428	579	734	774
Audubon.....	392	466	579	721	956	Boone.....	374	464	628	823	975
Buchanan.....	432	435	579	750	939	Buena Vista.....	413	480	610	768	888
Butler.....	392	488	579	853	884	Calhoun.....	392	443	579	784	787
Carroll.....	458	461	579	721	827	Cass.....	386	474	579	784	834
Cedar.....	430	469	635	822	896	Cerro Gordo.....	396	492	666	871	890
Cherokee.....	392	434	579	721	774	Chickasaw.....	392	470	579	853	856
Clarke.....	434	474	641	798	1135	Clay.....	392	428	579	782	939
Clayton.....	410	488	579	816	936	Clinton.....	386	499	624	791	993
Crawford.....	392	488	579	747	1025	Davis.....	421	499	622	775	859
Decatur.....	432	454	579	853	1025	Delaware.....	468	474	579	842	863
Des Moines.....	501	504	682	849	918	Dickinson.....	408	445	602	847	854
Emmet.....	418	489	617	780	852	Fayette.....	361	487	579	744	783
Floyd.....	392	448	579	816	818	Franklin.....	425	428	579	808	990
Fremont.....	392	470	579	805	883	Greene.....	400	436	590	735	1045
Hamilton.....	442	482	652	812	1066	Hancock.....	392	428	579	721	842
Hardin.....	392	446	579	723	774	Henry.....	405	482	598	829	832
Howard.....	392	428	579	721	774	Humboldt.....	392	428	579	816	819
Ida.....	392	439	579	769	774	Iowa.....	392	456	579	853	994
Jackson.....	392	488	579	853	856	Jasper.....	390	501	655	831	919

SCHEDULE B - FY 2014 Final FAIR MARKET RENTS FOR EXISTING HOUSING

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IOWA continued

NONMETROPOLITAN COUNTIES	0 BR	1 BR	2 BR	3 BR	4 BR	NONMETROPOLITAN COUNTIES	0 BR	1 BR	2 BR	3 BR	4 BR
Jefferson.....	433	477	639	796	854	Keokuk.....	392	440	579	806	809
Kossuth.....	392	428	579	769	811	Lee.....	399	435	589	808	811
Louisa.....	419	462	618	770	954	Lucas.....	392	428	579	761	973
Lyon.....	392	483	579	721	991	Mahaska.....	451	454	585	748	899
Marion.....	566	577	701	873	1242	Marshall.....	438	508	625	807	888
Mitchell.....	392	488	579	853	856	Monona.....	392	428	579	773	776
Monroe.....	401	438	592	737	818	Montgomery.....	425	428	579	842	845
Muscatine.....	483	527	713	978	1057	O'Brien.....	429	471	579	839	842
Osceola.....	416	501	614	765	821	Page.....	392	452	579	788	791
Palo Alto.....	392	486	579	853	1025	Plymouth.....	423	496	625	866	869
Pocahontas.....	392	449	579	721	1025	Poweshiek.....	437	516	645	847	898
Ringgold.....	392	469	579	726	878	Sac.....	347	434	579	750	774
Shelby.....	392	447	579	750	870	Sioux.....	392	457	579	794	797
Tama.....	404	441	596	746	871	Taylor.....	392	488	579	853	856
Union.....	392	432	579	777	945	Van Buren.....	392	488	579	813	816
Wapello.....	420	495	650	830	869	Wayne.....	392	428	579	853	856
Webster.....	466	469	579	823	858	Winnebago.....	392	460	579	853	886
Winneshiek.....	425	428	579	757	1025	Worth.....	383	488	579	733	774
Wright.....	392	456	579	721	774						

KANSAS

METROPOLITAN FMR AREAS	0 BR	1 BR	2 BR	3 BR	4 BR	Counties of FMR AREA within STATE	0 BR	1 BR	2 BR	3 BR	4 BR
Franklin County, KS HMFA.....	467	579	784	976	1247	Franklin					
Kansas City, MO-KS HMFA.....	534	687	852	1168	1300	Johnson, Leavenworth, Linn, Miami, Wyandotte					
Lawrence, KS MSA.....	476	601	779	1141	1253	Douglas					
Manhattan, KS MSA.....	594	598	786	1132	1392	Geary, Pottawatomie, Riley					
St. Joseph, MO-KS MSA.....	516	557	745	955	1176	Doniphan					
Sumner County, KS HMFA.....	492	495	670	892	1187	Sumner					
Topeka, KS MSA.....	424	537	713	1007	1223	Jackson, Jefferson, Osage, Shawnee, Wabaunsee					
Wichita, KS HMFA.....	450	556	740	1021	1125	Butler, Harvey, Sedgwick					
NONMETROPOLITAN COUNTIES	0 BR	1 BR	2 BR	3 BR	4 BR	NONMETROPOLITAN COUNTIES	0 BR	1 BR	2 BR	3 BR	4 BR
Allen.....	404	525	622	857	860	Anderson.....	404	467	622	917	1102
Atchison.....	370	465	622	917	920	Barber.....	404	460	622	818	904
Barton.....	502	524	622	821	1070	Bourbon.....	405	468	633	788	1029
Brown.....	404	460	622	852	855	Chase.....	404	464	622	883	886
Chautauqua.....	404	525	622	872	904	Cherokee.....	404	460	622	844	1001
Cheyenne.....	404	460	622	775	831	Clark.....	404	513	622	809	1102
Clay.....	528	531	719	895	961	Cloud.....	404	475	622	917	920
Coffey.....	404	460	622	841	844	Comanche.....	404	525	622	809	904
Cowley.....	416	489	640	855	858	Crawford.....	435	518	669	986	1171
Decatur.....	404	462	622	775	904	Dickinson.....	404	475	622	859	1102

SCHEDULE B - FY 2014 Final FAIR MARKET RENTS FOR EXISTING HOUSING

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KANSAS continued

NONMETROPOLITAN COUNTIES	0 BR	1 BR	2 BR	3 BR	4 BR	NONMETROPOLITAN COUNTIES	0 BR	1 BR	2 BR	3 BR	4 BR
Edwards.....	404	460	622	775	1041	Elk.....	404	525	622	917	920
Ellis.....	447	464	628	876	947	Ellsworth.....	404	484	622	798	904
Finney.....	428	514	659	833	1117	Ford.....	492	528	655	835	1009
Gove.....	404	525	622	790	904	Graham.....	404	525	622	917	920
Grant.....	404	462	622	895	904	Gray.....	404	508	622	833	836
Greeley.....	404	462	622	775	849	Greenwood.....	404	489	622	868	1011
Hamilton.....	441	505	679	846	987	Harper.....	404	471	622	917	1094
Haskell.....	424	483	653	813	1020	Hodgeman.....	404	460	622	775	904
Jewell.....	404	525	622	849	888	Kearny.....	404	462	622	895	904
Kingman.....	404	525	622	775	1056	Kiowa.....	404	525	622	917	920
Labette.....	404	460	622	775	831	Lane.....	436	499	671	836	976
Lincoln.....	404	508	622	775	831	Logan.....	404	460	622	775	831
Lyon.....	377	468	633	856	859	McPherson.....	428	486	658	820	879
Marion.....	404	460	622	775	831	Marshall.....	482	485	622	829	1024
Meade.....	404	460	622	775	831	Mitchell.....	404	525	622	917	944
Montgomery.....	496	500	622	838	980	Morris.....	404	502	622	780	904
Morton.....	404	481	622	775	831	Nemaha.....	404	485	622	917	920
Neosho.....	404	460	622	825	831	Ness.....	404	525	622	775	970
Norton.....	404	525	622	889	904	Osborne.....	404	525	622	908	911
Ottawa.....	404	514	622	917	1102	Pawnee.....	419	477	645	803	862
Phillips.....	404	483	622	906	1044	Pratt.....	420	477	646	805	863
Rawlins.....	404	460	622	775	904	Reno.....	439	494	668	939	1000
Republic.....	404	460	622	775	831	Rice.....	404	473	622	842	951
Rooks.....	404	519	622	775	831	Rush.....	404	525	622	839	904
Russell.....	446	508	687	896	1028	Saline.....	518	529	675	873	1031
Scott.....	404	462	622	917	920	Seward.....	471	594	725	914	1075
Sheridan.....	404	460	622	775	831	Sherman.....	404	462	622	829	1102
Smith.....	404	496	622	917	920	Stafford.....	404	473	622	775	831
Stanton.....	404	462	622	840	885	Stevens.....	517	588	796	991	1158
Thomas.....	404	525	622	892	1102	Trego.....	425	483	654	964	967
Wallace.....	404	462	622	775	904	Washington.....	457	460	622	775	831
Wichita.....	447	519	688	857	1000	Wilson.....	404	460	622	844	1102
Woodson.....	404	460	622	917	920						

KENTUCKY

METROPOLITAN FMR AREAS	0 BR	1 BR	2 BR	3 BR	4 BR	Counties of FMR AREA within STATE
Bowling Green, KY MSA.....	485	501	661	840	1015	Edmonson, Warren
Cincinnati-Middleton, OH-KY-IN HMFA.....	442	554	735	1018	1121	Boone, Bracken, Campbell, Gallatin, Kenton, Pendleton
Clarksville, TN-KY HMFA.....	516	588	767	1016	1102	Christian, Trigg
Elizabethtown, KY MSA.....	441	443	585	862	1036	Hardin, Larue
Evansville, IN-KY HMFA.....	533	572	739	941	1028	Henderson, Webster
Grant County, KY HMFA.....	413	507	686	854	917	Grant

KENTUCKY continued

METROPOLITAN FMR AREAS

0 BR 1 BR 2 BR 3 BR 4 BR Counties of FMR AREA within STATE

Huntington-Ashland, WV-KY-OH MSA.....	383	523	643	849	1043	Boyd, Greenup
Lexington-Fayette, KY MSA.....	469	548	717	1021	1143	Bourbon, Clark, Fayette, Jessamine, Scott, Woodford
Louisville, KY-IN HMFA.....	485	567	705	976	1104	Bullitt, Henry, Jefferson, Oldham, Spencer, Trimble
Meade County, KY HMFA.....	437	470	636	902	905	Meade
Nelson County, KY HMFA.....	421	485	612	902	918	Nelson
Owensboro, KY MSA.....	446	463	626	810	891	Daviess, Hancock, McLean
Shelby County, KY HMFA.....	507	510	690	927	1089	Shelby

NONMETROPOLITAN COUNTIES

0 BR 1 BR 2 BR 3 BR 4 BR

Adair.....	415	418	565	833	835
Anderson.....	531	534	671	836	972
Barren.....	415	418	565	792	893
Bell.....	348	453	565	793	796
Breathitt.....	425	477	565	704	785
Butler.....	425	477	565	833	1001
Calloway.....	471	529	636	908	911
Carroll.....	485	545	646	952	1090
Casey.....	415	418	565	769	792
Clinton.....	373	448	565	796	1001
Cumberland.....	425	455	565	833	835
Estill.....	425	442	565	704	958
Floyd.....	425	471	565	712	1001
Fulton.....	425	477	565	833	835
Graves.....	432	435	576	717	846
Green.....	425	477	565	775	778
Harrison.....	356	443	599	746	904
Hickman.....	425	448	565	704	755
Jackson.....	475	533	632	808	886
Knott.....	415	418	565	804	807
Laurel.....	439	493	584	772	1034
Lee.....	425	477	565	830	833
Letcher.....	425	461	565	704	755
Lincoln.....	415	418	565	734	767
Logan.....	452	460	611	761	817
McCracken.....	480	483	615	766	822
Madison.....	461	464	604	856	1070
Marion.....	434	437	591	736	790
Martin.....	425	477	565	815	1001
Menifee.....	425	477	565	723	792
Metcalf.....	443	446	604	752	847
Montgomery.....	435	488	579	841	1025
Muhlenberg.....	370	436	565	704	1001
Ohio.....	421	424	565	800	1001

NONMETROPOLITAN COUNTIES

0 BR 1 BR 2 BR 3 BR 4 BR

Allen.....	425	477	565	833	835
Ballard.....	415	418	565	775	924
Bath.....	425	475	565	833	835
Boyle.....	470	473	640	889	1134
Breckinridge.....	425	460	565	833	835
Caldwell.....	425	476	565	797	800
Carlisle.....	456	512	607	756	811
Carter.....	425	477	565	790	1001
Clay.....	425	477	565	833	1001
Crittenden.....	425	477	565	808	811
Elliott.....	425	448	565	704	792
Fleming.....	425	477	565	833	835
Franklin.....	409	543	665	980	983
Garrard.....	430	482	572	799	802
Grayson.....	425	433	565	795	865
Harlan.....	456	477	565	769	842
Hart.....	415	418	565	704	755
Hopkins.....	445	448	565	833	968
Johnson.....	415	418	565	732	755
Knox.....	415	418	565	814	817
Lawrence.....	425	435	565	729	974
Leslie.....	423	426	576	717	770
Lewis.....	415	418	565	745	755
Livingston.....	425	477	565	833	835
Lyon.....	415	418	565	704	792
McCreary.....	425	477	565	777	792
Magoffin.....	415	418	565	704	792
Marshall.....	427	460	623	799	833
Mason.....	423	426	576	812	815
Mercer.....	448	453	596	808	952
Monroe.....	418	421	565	704	755
Morgan.....	445	448	565	833	849
Nicholas.....	415	418	565	811	1001
Owen.....	446	449	608	788	1077

KENTUCKY continued

NONMETROPOLITAN COUNTIES	0 BR	1 BR	2 BR	3 BR	4 BR
Owsley.....	425	448	565	740	792
Pike.....	521	525	710	914	949
Pulaski.....	444	447	576	799	900
Rockcastle.....	425	431	565	805	846
Russell.....	346	418	565	748	944
Taylor.....	371	448	606	755	810
Union.....	450	462	565	780	792
Wayne.....	425	439	565	704	792
Wolfe.....	476	481	633	933	1121

LOUISIANA

METROPOLITAN FMR AREAS	0 BR	1 BR	2 BR	3 BR	4 BR	Counties of FMR AREA within STATE					
Alexandria, LA MSA.....	530	539	656	889	1020	Grant, Rapides					
Baton Rouge, LA HMFA.....	550	670	799	995	1147	Ascension, East Baton Rouge, East Feliciana, Livingston, Pointe Coupee, St. Helena, West Baton Rouge, West Feliciana					
Houma-Bayou Cane-Thibodaux, LA MSA.....	496	571	773	1000	1369	Lafourche, Terrebonne					
Iberville Parish, LA HMFA.....	438	471	637	861	1006	Iberville					
Lafayette, LA MSA.....	501	667	791	1038	1283	Lafayette, St. Martin					
Lake Charles, LA MSA.....	549	578	729	972	1190	Calcasieu, Cameron					
Monroe, LA MSA.....	522	525	693	863	926	Ouachita, Union					
New Orleans-Metairie-Kenner, LA MSA.....	646	765	948	1190	1440	Jefferson, Orleans, Plaquemines, St. Bernard, St. Charles, St. John the Baptist, St. Tammany					
Shreveport-Bossier City, LA MSA.....	543	609	757	943	1032	Bossier, Caddo, De Soto					
NONMETROPOLITAN COUNTIES	0 BR	1 BR	2 BR	3 BR	4 BR	NONMETROPOLITAN COUNTIES	0 BR	1 BR	2 BR	3 BR	4 BR
Acadia.....	492	495	637	856	859	Allen.....	501	534	637	901	904
Assumption.....	516	553	656	967	1002	Avoyelles.....	451	492	665	956	1155
Beauregard.....	543	557	672	897	1190	Bienville.....	501	537	637	939	960
Caldwell.....	501	537	637	939	1067	Catahoula.....	501	532	637	939	1026
Claiborne.....	501	537	637	939	1128	Concordia.....	468	471	637	939	942
East Carroll.....	497	501	637	793	1126	Evangeline.....	468	471	637	843	866
Franklin.....	468	471	637	828	851	Iberia.....	519	523	707	881	945
Jackson.....	489	508	637	939	1035	Jefferson Davis.....	501	537	637	903	906
La Salle.....	476	480	637	878	960	Lincoln.....	613	617	759	1053	1344
Madison.....	484	487	659	843	881	Morehouse.....	514	517	691	861	1130
Natchitoches.....	587	613	727	967	983	Red River.....	501	537	637	939	960
Richland.....	468	471	637	868	898	Sabine.....	515	522	637	793	1128
St. James.....	501	537	637	939	1017	St. Landry.....	428	471	637	798	851
St. Mary.....	518	522	696	977	1045	Tangipahoa.....	540	693	822	1038	1217
Tensas.....	468	471	637	793	851	Vermilion.....	516	554	657	959	1123
Vernon.....	546	676	915	1140	1223	Washington.....	482	486	657	818	1041
Webster.....	501	515	637	835	851	West Carroll.....	468	471	637	912	950
Winn.....	501	537	637	856	859						

SCHEDULE B - FY 2014 Final FAIR MARKET RENTS FOR EXISTING HOUSING

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MAINE

METROPOLITAN FMR AREAS	0 BR	1 BR	2 BR	3 BR	4 BR	Components of FMR AREA within STATE
Bangor, ME HMFA.....	590	682	861	1072	1245	Penobscot County towns of Bangor city, Brewer city, Eddington town, Glenburn town, Hampden town, Hermon town, Holden town, Kenduskeag town, Milford town, Old Town city, Orono town, Orrington town, Penobscot Indian Island Reservation, Veazie town
Cumberland County, ME (part) HMFA.....	525	661	876	1253	1493	Cumberland County towns of Baldwin town, Bridgton town, Brunswick town, Harpswell town, Harrison town, Naples town, New Gloucester town, Pownal town, Sebago town
Lewiston-Auburn, ME MSA.....	486	575	752	948	1006	Androscoggin County towns of Auburn city, Durham town, Greene town, Leeds town, Lewiston city, Lisbon town, Livermore town, Livermore Falls town, Mechanic Falls town, Minot town, Poland town, Sabattus town, Turner town, Wales town
Penobscot County, ME (part) HMFA.....	458	574	680	952	1100	Penobscot County towns of Alton town, Argyle UT, Bradford town, Bradley town, Burlington town, Carmel town, Carroll plantation, Charleston town, Chester town, Clifton town, Corinna town, Corinth town, Dexter town, Dixmont town, Drew plantation, East Central Penobscot UT, East Millinocket town, Edinburg town, Enfield town, Etna town, Exeter town, Garland town, Greenbush town, Howland town, Hudson town, Kingman UT, Lagrange town, Lakeville town, Lee town, Levant town, Lincoln town, Lowell town, Mattawamkeag town, Maxfield town, Medway town, Millinocket town, Mount Chase town, Newburgh town, Newport town, North Penobscot UT, Passadumkeag town, Patten town, Plymouth town, Prentiss UT, Seboeis plantation, Springfield town, Stacyville town, Stetson town, Twombly UT, Webster plantation, Whitney UT, Winn town, Woodville town
Portland, ME HMFA.....	688	819	1012	1339	1406	Cumberland County towns of Chebeague Island town Cumberland County towns of Cape Elizabeth town, Casco town, Cumberland town, Falmouth town, Freeport town, Frye Island town, Gorham town, Gray town, Long Island town, North Yarmouth town, Portland city, Raymond town, Scarborough town, South Portland city, Standish town, Westbrook city, Windham town, Yarmouth town York County towns of Buxton town, Hollis town, Limington town, Old Orchard Beach town
Sagadahoc County, ME HMFA.....	685	727	862	1118	1407	Sagadahoc County towns of Arrowsic town, Bath city, Bowdoin town, Bowdoinham town, Georgetown town, Perkins UT, Phippsburg town, Richmond town, Topsham town, West Bath town, Woolwich town
York County, ME (part) HMFA.....	599	691	876	1189	1231	York County towns of Acton town, Alfred town, Arundel town, Biddeford city, Cornish town, Dayton town, Kennebunk town, Kennebunkport town, Lebanon town, Limerick town, Lyman town, Newfield town, North Berwick town, Ogunquit town, Parsonsfield town, Saco city, Sanford town, Shapleigh town, Waterboro town, Wells town
York-Kittery-South Berwick, ME HMFA.....	729	798	1050	1416	1422	York County towns of Berwick town, Eliot town, Kittery town, South Berwick town, York town

MAINE continued

NONMETROPOLITAN COUNTIES

0 BR 1 BR 2 BR 3 BR 4 BR Towns within nonmetropolitan counties

Aroostook County, ME.....	515	530	637	807	884	Allagash town, Amity town, Ashland town, Bancroft town, Blaine town, Bridgewater town, Caribou city, Cary plantation, Castle Hill town, Caswell town, Central Aroostook UT, Chapman town, Connor UT, Crystal town, Cyr plantation, Dyer Brook town, Eagle Lake town, Easton town, Fort Fairfield town, Fort Kent town, Frenchville town, Garfield plantation, Glenwood plantation, Grand Isle town, Hamlin town, Hammond town, Haynesville town, Hersey town, Hodgdon town, Houlton town, Island Falls town, Limestone town, Linneus town, Littleton town, Ludlow town, Macwahoc plantation, Madawaska town, Mapleton town, Mars Hill town, Masardis town, Merrill town, Monticello town, Moro plantation, Nashville plantation, New Canada town, New Limerick town, New Sweden town, Northwest Aroostook UT, Oakfield town, Orient town, Oxbow plantation, Penobscot Indian Island Reservation, Perham town, Portage Lake town, Presque Isle city, Reed plantation, St. Agatha town, St. Francis town, St. John plantation, Sherman town, Smyrna town, South Aroostook UT, Square Lake UT, Stockholm town, Van Buren town, Wade town, Wallagrass town, Washburn town, Westfield town, Westmanland town, Weston town, Winterville plantation, Woodland town
Franklin County, ME.....	536	559	663	826	1174	Avon town, Carrabassett Valley town, Carthage town, Chesterville town, Coplin plantation, Dallas plantation, East Central Franklin UT, Eustis town, Farmington town, Industry town, Jay town, Kingfield town, Madrid town, New Sharon town, New Vineyard town, North Franklin UT, Phillips town, Rangeley town, Rangeley plantation, Sandy River plantation, South Franklin UT, Strong town, Temple town, Weld town, West Central Franklin UT, Wilton town, Wyman UT
Hancock County, ME.....	571	646	823	1083	1100	Amherst town, Aurora town, Bar Harbor town, Blue Hill town, Brooklin town, Brooksville town, Bucksport town, Castine town, Central Hancock UT, Cranberry Isles town, Dedham town, Deer Isle town, Eastbrook town, East Hancock UT, Ellsworth city, Franklin town, Frenchboro town, Gouldsboro town, Great Pond town, Hancock town, Lamoine town, Mariaville town, Mount Desert town, Northwest Hancock UT, Orland town, Osborn town, Otis town, Penobscot town, Sedgwick town, Sorrento town, Southwest Harbor town, Stonington town, Sullivan town, Surry town, Swans Island town, Tremont town, Trenton town, Verona Island town, Waltham town, Winter Harbor town
Kennebec County, ME.....	522	604	772	968	1032	Albion town, Augusta city, Belgrade town, Benton town, Chelsea town, China town, Clinton town, Farmingdale town, Fayette town, Gardiner city, Hallowell city, Litchfield town, Manchester town, Monmouth town, Mount Vernon town, Oakland town, Pittston town, Randolph town, Readfield town,

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MAINE continued

NONMETROPOLITAN COUNTIES

0 BR 1 BR 2 BR 3 BR 4 BR Towns within nonmetropolitan counties

						Rome town, Sidney town, Unity UT, Vassalboro town, Vienna town, Waterville city, Wayne town, West Gardiner town, Windsor town, Winslow town, Winthrop town
Knox County, ME.....	713	717	884	1133	1181	Appleton town, Camden town, Crieshaven UT, Cushing town, Friendship town, Hope town, Isle au Haut town, Matinicus Isle plantation, North Haven town, Owls Head town, Rockland city, Rockport town, St. George town, South Thomaston town, Thomaston town, Union town, Vinalhaven town, Warren town, Washington town
Lincoln County, ME.....	546	728	918	1143	1227	Alna town, Boothbay town, Boothbay Harbor town, Bremen town, Bristol town, Damariscotta town, Dresden town, Edgcomb town, Hibberts gore, Jefferson town, Monhegan plantation, Newcastle town, Nobleboro town, Somerville town, South Bristol town, Southport town, Waldo town, Westport Island town, Whitefield town, Wiscasset town
Oxford County, ME.....	521	554	697	940	1218	Andover town, Bethel town, Brownfield town, Buckfield town, Byron town, Canton town, Denmark town, Dixfield town, Fryeburg town, Gilead town, Greenwood town, Hanover town, Hartford town, Hebron town, Hiram town, Lincoln plantation, Lovell town, Magalloway plantation, Mexico town, Milton UT, Newry town, North Oxford UT, Norway town, Otisfield town, Oxford town, Paris town, Peru town, Porter town, Roxbury town, Rumford town, South Oxford UT, Stoneham town, Stow town, Sumner town, Sweden town, Upton town, Waterford town, West Paris town, Woodstock town
Piscataquis County, ME.....	486	548	650	843	891	Abbot town, Atkinson town, Beaver Cove town, Blanchard UT, Bowerbank town, Brownville town, Dover-Foxcroft town, Greenville town, Guilford town, Kingsbury plantation, Lake View plantation, Medford town, Milo town, Monson town, Northeast Piscataquis UT, Northwest Piscataquis UT, Parkman town, Sangerville town, Sebec town, Shirley town, Southeast Piscataquis UT, Wellington town, Willimantic town
Somerset County, ME.....	566	593	706	961	964	Anson town, Athens town, Bingham town, Brighton plantation, Cambridge town, Canaan town, Caratunk town, Central Somerset UT, Cornville town, Dennistown plantation, Detroit town, Embden town, Fairfield town, Harmony town, Hartland town, Highland plantation, Jackman town, Madison town, Mercer town, Moose River town, Moscow town, New Portland town, Norridgewock town, Northeast Somerset UT, Northwest Somerset UT, Palmyra town, Pittsfield town, Pleasant Ridge plantation, Ripley town, St. Albans town, Seboomook Lake UT, Skowhegan town, Smithfield town, Solon town, Starks town, The Forks plantation, West Forks plantation
Waldo County, ME.....	518	621	736	1002	1066	Belfast city, Belmont town, Brooks town, Burnham town, Frankfort town, Freedom town, Islesboro town, Jackson town, Knox town, Liberty town, Lincolnville town, Monroe town, Montville town, Morrill town, Northport town, Palermo town, Prospect town, Searsmont town, Searsport town,

MAINE continued

NONMETROPOLITAN COUNTIES

0 BR 1 BR 2 BR 3 BR 4 BR Towns within nonmetropolitan counties

Washington County, ME.....	507	557	664	846	1026	Stockton Springs town, Swanville town, Thorndike town, Troy town, Unity town, Waldo town, Winterport town Addison town, Alexander town, Baileyville town, Baring plantation, Beals town, Beddington town, Calais city, Centerville town, Charlotte town, Cherryfield town, Codyville plantation, Columbia town, Columbia Falls town, Cooper town, Crawford town, Cutler town, Danforth town, Deblois town, Dennysville town, East Central Washington UT, East Machias town, Eastport city, Grand Lake Stream plantation, Harrington town, Jonesboro town, Jonesport town, Lubec town, Machias town, Machiasport town, Marshfield town, Meddybemps town, Milbridge town, Northfield town, North Washington UT, Passamaquoddy Indian Township Reservation, Passamaquoddy Pleasant Point Reservation, Pembroke town, Perry town, Princeton town, Robbinston town, Roque Bluffs town, Steuben town, Talmadge town, Topsfield town, Vanceboro town, Waite town, Wesley town, Whiting town, Whitneyville town

MARYLAND

METROPOLITAN FMR AREAS

0 BR 1 BR 2 BR 3 BR 4 BR Counties of FMR AREA within STATE

*Baltimore-Towson, MD HMFA.....	847	1001	1252	1599	1741	Anne Arundel, Baltimore, Carroll, Harford, Howard, Queen Anne's, Baltimore city
Columbia city, MD HMFA.....	1047	1307	1556	1994	2186	Columbia city
Cumberland, MD-WV MSA.....	454	537	637	867	988	Allegany
Hagerstown, MD HMFA.....	616	748	968	1340	1359	Washington
*Philadelphia-Camden-Wilmington, PA-NJ-DE-MD MSA..	799	942	1135	1414	1518	Cecil
Salisbury, MD HMFA.....	521	647	875	1126	1242	Wicomico
Somerset County, MD HMFA.....	414	587	696	875	962	Somerset
Washington-Arlington-Alexandria, DC-VA-MD HMFA....	1176	1239	1469	1966	2470	Calvert, Charles, Frederick, Montgomery, Prince George's

NONMETROPOLITAN COUNTIES

0 BR 1 BR 2 BR 3 BR 4 BR

Caroline.....	654	659	891	1186	1332
Garrett.....	537	576	691	879	923
St. Mary's.....	819	1026	1216	1768	2147
Worcester.....	584	669	888	1106	1348

NONMETROPOLITAN COUNTIES

0 BR 1 BR 2 BR 3 BR 4 BR

Dorchester.....	658	689	847	1055	1132
Kent.....	693	698	944	1241	1672
Talbot.....	808	814	1060	1320	1821

MASSACHUSETTS

METROPOLITAN FMR AREAS

0 BR 1 BR 2 BR 3 BR 4 BR Components of FMR AREA within STATE

Barnstable Town, MA MSA.....	787	877	1176	1538	1615	Barnstable County towns of Barnstable Town city, Bourne town, Brewster town, Chatham town, Dennis town, Eastham town, Falmouth town, Harwich town, Mashpee town, Orleans town, Provincetown town, Sandwich town, Truro town, Wellfleet town,

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MASSACHUSETTS continued

METROPOLITAN FMR AREAS	0 BR	1 BR	2 BR	3 BR	4 BR	Components of FMR AREA within STATE
Berkshire County, MA (part) HMFA.....	649	678	804	1019	1242	Yarmouth town Berkshire County towns of Alford town, Becket town, Clarksburg town, Egremont town, Florida town, Great Barrington town, Hancock town, Monterey town, Mount Washington town, New Ashford town, New Marlborough town, North Adams city, Otis town, Peru town, Sandisfield town, Savoy town, Sheffield town, Tyringham town, Washington town, West Stockbridge town, Williamstown town, Windsor town
Boston-Cambridge-Quincy, MA-NH HMFA.....	1042	1164	1454	1811	1969	Essex County towns of Amesbury Town city, Beverly city, Danvers town, Essex town, Gloucester city, Hamilton town, Ipswich town, Lynn city, Lynnfield town, Manchester-by-the-Sea town, Marblehead town, Middleton town, Nahant town, Newbury town, Newburyport city, Peabody city, Rockport town, Rowley town, Salem city, Salisbury town, Saugus town, Swampscott town, Topsfield town, Wenham town Middlesex County towns of Acton town, Arlington town, Ashby town, Ashland town, Ayer town, Bedford town, Belmont town, Boxborough town, Burlington town, Cambridge city, Carlisle town, Concord town, Everett city, Framingham town, Holliston town, Hopkinton town, Hudson town, Lexington town, Lincoln town, Littleton town, Malden city, Marlborough city, Maynard town, Medford city, Melrose city, Natick town, Newton city, North Reading town, Reading town, Sherborn town, Shirley town, Somerville city, Stoneham town, Stow town, Sudbury town, Townsend town, Wakefield town, Waltham city, Watertown city, Wayland town, Weston town, Wilmington town, Winchester town, Woburn city Norfolk County towns of Bellingham town, Braintree Town city, Brookline town, Canton town, Cohasset town, Dedham town, Dover town, Foxborough town, Franklin Town city, Holbrook town, Medfield town, Medway town, Millis town, Milton town, Needham town, Norfolk town, Norwood town, Plainville town, Quincy city, Randolph town, Sharon town, Stoughton town, Walpole town, Wellesley town, Westwood town, Weymouth Town city, Wrentham town Plymouth County towns of Carver town, Duxbury town, Hanover town, Hingham town, Hull town, Kingston town, Marshfield town, Norwell town, Pembroke town, Plymouth town, Rockland town, Scituate town, Wareham town Suffolk County towns of Boston city, Chelsea city, Revere city, Winthrop Town city
Brockton, MA HMFA.....	876	882	1152	1470	1557	Norfolk County towns of Avon town Plymouth County towns of Abington town, Bridgewater town, Brockton city, East Bridgewater town, Halifax town, Hanson town, Lakeville town, Marion town, Mattapoissett town, Middleborough town, Plympton town, Rochester town, West Bridgewater town, Whitman town
Eastern Worcester County, MA HMFA.....	720	818	1107	1379	1479	Worcester County towns of Berlin town, Blackstone town, Bolton town, Harvard town, Hopedale town, Lancaster town,

MASSACHUSETTS continued

METROPOLITAN FMR AREAS	0 BR	1 BR	2 BR	3 BR	4 BR	Components of FMR AREA within STATE
						Mendon town, Milford town, Millville town, Southborough town, Upton town
Easton-Raynham, MA HMFA.....	916	1010	1278	1822	1828	Bristol County towns of Easton town, Raynham town
Fitchburg-Leominster, MA HMFA.....	527	716	886	1103	1312	Worcester County towns of Ashburnham town, Fitchburg city, Gardner city, Leominster city, Lunenburg town, Templeton town, Westminster town, Winchendon town
Franklin County, MA (part) HMFA.....	697	752	952	1232	1501	Franklin County towns of Ashfield town, Bernardston town, Buckland town, Charlemont town, Colrain town, Conway town, Deerfield town, Erving town, Gill town, Greenfield Town city, Hawley town, Heath town, Leverett town, Leyden town, Monroe town, Montague town, New Salem town, Northfield town, Orange town, Rowe town, Shelburne town, Shutesbury town, Warwick town, Wendell town, Whately town
Lawrence, MA-NH HMFA.....	743	848	1088	1355	1454	Essex County towns of Andover town, Boxford town, Georgetown town, Groveland town, Haverhill city, Lawrence city, Merrimac town, Methuen city, North Andover town, West Newbury town
Lowell, MA HMFA.....	783	901	1157	1441	1697	Middlesex County towns of Billerica town, Chelmsford town, Dracut town, Dunstable town, Groton town, Lowell city, Pepperell town, Tewksbury town, Tyngsborough town, Westford town
New Bedford, MA HMFA.....	653	691	819	1020	1095	Bristol County towns of Acushnet town, Dartmouth town, Fairhaven town, Freetown town, New Bedford city
Pittsfield, MA HMFA.....	527	678	804	1001	1129	Berkshire County towns of Adams town, Cheshire town, Dalton town, Hinsdale town, Lanesborough town, Lee town, Lenox town, Pittsfield city, Richmond town, Stockbridge town
Providence-Fall River, RI-MA HMFA.....	663	748	913	1137	1361	Bristol County towns of Attleboro city, Fall River city, North Attleborough town, Rehoboth town, Seekonk town, Somerset town, Swansea town, Westport town
Springfield, MA HMFA.....	634	761	951	1187	1353	Franklin County towns of Sunderland town Hampden County towns of Agawam Town city, Blandford town, Brimfield town, Chester town, Chicopee city, East Longmeadow town, Granville town, Hampden town, Holland town, Holyoke city, Longmeadow town, Ludlow town, Monson town, Montgomery town, Palmer Town city, Russell town, Southwick town, Springfield city, Tolland town, Wales town, Westfield city, West Springfield Town city, Wilbraham town Hampshire County towns of Amherst town, Belchertown town, Chesterfield town, Cummington town, Easthampton Town city, Goshen town, Granby town, Hadley town, Hatfield town, Huntington town, Middlefield town, Northampton city, Pelham town, Plainfield town, Southampton town, South Hadley town, Ware town, Westhampton town, Williamsburg town, Worthington town
Taunton-Mansfield-Norton, MA HMFA.....	770	813	1057	1316	1413	Bristol County towns of Berkley town, Dighton town, Mansfield town, Norton town, Taunton city
Western Worcester County, MA HMFA.....	495	641	760	985	1346	Worcester County towns of Athol town, Hardwick town, Hubbardston town, New Braintree town, Petersham town, Phillipston town, Royalston town, Warren town
Worcester, MA HMFA.....	616	753	947	1179	1289	Worcester County towns of Auburn town, Barre town,

SCHEDULE B - FY 2014 Final FAIR MARKET RENTS FOR EXISTING HOUSING

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MASSACHUSETTS continued

METROPOLITAN FMR AREAS	0 BR	1 BR	2 BR	3 BR	4 BR	Components of FMR AREA within STATE
						Boylston town, Brookfield town, Charlton town, Clinton town, Douglas town, Dudley town, East Brookfield town, Grafton town, Holden town, Leicester town, Millbury town, Northborough town, Northbridge town, North Brookfield town, Oakham town, Oxford town, Paxton town, Princeton town, Rutland town, Shrewsbury town, Southbridge Town city, Spencer town, Sterling town, Sturbridge town, Sutton town, Uxbridge town, Webster town, Westborough town, West Boylston town, West Brookfield town, Worcester city
NONMETROPOLITAN COUNTIES	0 BR	1 BR	2 BR	3 BR	4 BR	Towns within nonmetropolitan counties
Dukes County, MA.....	776	964	1304	1694	1743	Aquinnah town, Chilmark town, Edgartown town, Gosnold town, Oak Bluffs town, Tisbury town, West Tisbury town
Nantucket County, MA.....	1070	1330	1799	2525	2534	Nantucket town

MICHIGAN

METROPOLITAN FMR AREAS	0 BR	1 BR	2 BR	3 BR	4 BR	Counties of FMR AREA within STATE
Ann Arbor, MI MSA.....	666	803	952	1301	1686	Washtenaw
Barry County, MI HMFA.....	479	503	680	891	950	Barry
Battle Creek, MI MSA.....	418	547	689	869	964	Calhoun
Bay City, MI MSA.....	391	514	658	877	1037	Bay
Cass County, MI HMFA.....	483	486	637	915	918	Cass
Detroit-Warren-Livonia, MI HMFA.....	508	646	843	1124	1228	Lapeer, Macomb, Oakland, St. Clair, Wayne
Flint, MI MSA.....	422	546	710	927	1046	Genesee
Grand Rapids-Wyoming, MI HMFA.....	521	590	740	1033	1162	Kent
Holland-Grand Haven, MI MSA.....	636	664	787	1087	1161	Ottawa
Ionia County, MI HMFA.....	509	512	676	911	984	Ionia
Jackson, MI MSA.....	512	594	772	1062	1066	Jackson
Kalamazoo-Portage, MI MSA.....	465	565	718	945	1150	Kalamazoo, Van Buren
Lansing-East Lansing, MI MSA.....	481	612	762	1013	1228	Clinton, Eaton, Ingham
Livingston County, MI HMFA.....	536	749	888	1286	1544	Livingston
Monroe, MI MSA.....	502	628	843	1086	1285	Monroe
Muskegon-Norton Shores, MI MSA.....	380	472	638	870	995	Muskegon
Newaygo County, MI HMFA.....	496	499	637	836	1031	Newaygo
Niles-Benton Harbor, MI MSA.....	468	532	694	933	1087	Berrien
Saginaw-Saginaw Township North, MI MSA.....	425	564	709	944	1088	Saginaw
NONMETROPOLITAN COUNTIES						NONMETROPOLITAN COUNTIES
	0 BR	1 BR	2 BR	3 BR	4 BR	
Alcona.....	444	471	637	848	1128	Alger..... 444 471 637 793 1023
Allegan.....	561	570	694	902	938	Alpena..... 407 516 637 939 1112
Antrim.....	386	489	648	880	1106	Arenac..... 480 521 637 911 1128
Baraga.....	444	471	637	793	878	Benzie..... 553 577 684 1008 1211
Branch.....	517	521	662	904	908	Charlevoix..... 555 568 687 856 1086
Cheboygan.....	444	526	637	939	942	Chippewa..... 449 488 644 802 861

SCHEDULE B - FY 2014 Final FAIR MARKET RENTS FOR EXISTING HOUSING

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MICHIGAN continued

NONMETROPOLITAN COUNTIES	0 BR	1 BR	2 BR	3 BR	4 BR	NONMETROPOLITAN COUNTIES	0 BR	1 BR	2 BR	3 BR	4 BR
Clare.....	444	471	637	793	851	Crawford.....	480	509	688	871	1219
Delta.....	478	481	637	939	1026	Dickinson.....	444	476	637	793	1128
Emmet.....	556	568	769	983	1337	Gladwin.....	444	537	637	939	1128
Gogebic.....	437	471	637	872	1004	Grand Traverse.....	584	614	815	1092	1096
Gratiot.....	444	471	637	815	1020	Hillsdale.....	404	506	661	907	911
Houghton.....	468	478	647	806	923	Huron.....	444	527	637	927	995
Iosco.....	515	537	637	939	1128	Iron.....	462	471	637	813	851
Isabella.....	434	585	694	921	1127	Kalkaska.....	500	530	717	991	994
Keweenaw.....	448	475	643	948	951	Lake.....	444	471	637	876	1124
Leelanau.....	553	676	801	998	1070	Lenawee.....	565	570	699	871	969
Luce.....	444	492	637	905	920	Mackinac.....	455	551	653	825	935
Manistee.....	446	473	640	809	855	Marquette.....	479	544	695	866	929
Mason.....	467	495	670	877	895	Mecosta.....	463	537	637	886	894
Menominee.....	444	484	637	844	985	Midland.....	570	573	744	1096	1206
Missaukee.....	444	537	637	899	902	Montcalm.....	486	516	651	922	1045
Montmorency.....	444	492	666	928	1180	Oceana.....	489	493	647	820	1053
Ogemaw.....	445	490	638	795	853	Ontonagon.....	497	500	637	843	912
Osceola.....	444	471	637	903	960	Oscoda.....	478	506	685	853	915
Otsego.....	462	490	663	933	1004	Presque Isle.....	444	490	637	899	1128
Roscommon.....	444	490	637	840	1009	St. Joseph.....	465	530	657	869	938
Sanilac.....	444	471	637	831	929	Schoolcraft.....	444	471	637	793	1128
Shiawassee.....	402	499	675	848	902	Tuscola.....	381	509	637	881	1045
Wexford.....	386	501	649	889	892						

MINNESOTA

METROPOLITAN FMR AREAS	0 BR	1 BR	2 BR	3 BR	4 BR	Counties of FMR AREA within STATE					
Duluth, MN-WI MSA.....	438	527	692	902	1005	Carlton, St. Louis					
Fargo, ND-MN MSA.....	437	529	684	1008	1192	Clay					
Grand Forks, ND-MN MSA.....	444	541	725	981	1183	Polk					
La Crosse, WI-MN MSA.....	416	520	699	972	1183	Houston					
Mankato-North Mankato, MN MSA.....	492	563	704	966	1247	Blue Earth, Nicollet					
Minneapolis-St. Paul-Bloomington, MN-WI MSA.....	608	756	946	1332	1573	Anoka, Carver, Chisago, Dakota, Hennepin, Isanti, Ramsey, Scott, Sherburne, Washington, Wright					
Rochester, MN HMFA.....	590	641	863	1156	1528	Dodge, Olmsted					
St. Cloud, MN MSA.....	607	628	752	993	1332	Benton, Stearns					
Wabasha County, MN HMFA.....	508	511	637	939	997	Wabasha					
NONMETROPOLITAN COUNTIES	0 BR	1 BR	2 BR	3 BR	4 BR	NONMETROPOLITAN COUNTIES	0 BR	1 BR	2 BR	3 BR	4 BR
Aitkin.....	514	595	706	1040	1250	Becker.....	424	512	637	841	851
Beltrami.....	435	513	674	930	962	Big Stone.....	424	536	637	793	851
Brown.....	424	537	637	793	851	Cass.....	508	544	715	890	1266
Chippewa.....	430	545	646	952	955	Clearwater.....	424	471	637	795	1119
Cook.....	557	591	792	1013	1153	Cottonwood.....	424	471	637	939	942

SCHEDULE B - FY 2014 Final FAIR MARKET RENTS FOR EXISTING HOUSING

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MINNESOTA continued

NONMETROPOLITAN COUNTIES	0 BR	1 BR	2 BR	3 BR	4 BR	NONMETROPOLITAN COUNTIES	0 BR	1 BR	2 BR	3 BR	4 BR
Crow Wing.....	430	533	721	1062	1066	Douglas.....	425	471	637	866	1070
Faribault.....	424	501	637	939	942	Fillmore.....	515	535	637	915	982
Freeborn.....	424	471	637	793	851	Goodhue.....	483	551	745	1087	1297
Grant.....	424	537	637	939	942	Hubbard.....	415	471	637	928	1078
Itasca.....	444	552	747	930	998	Jackson.....	424	494	637	909	1072
Kanabec.....	512	569	770	1022	1029	Kandiyohi.....	483	486	654	818	1050
Kittson.....	424	537	637	893	985	Koochiching.....	424	471	637	793	927
Lac qui Parle.....	424	471	637	793	976	Lake.....	407	477	646	918	941
Lake of the Woods.....	424	471	637	793	927	Le Sueur.....	474	526	712	889	1167
Lincoln.....	424	537	637	793	851	Lyon.....	478	482	637	939	942
McLeod.....	508	511	671	924	988	Mahnomen.....	424	471	637	793	929
Marshall.....	498	508	637	880	884	Martin.....	396	492	665	828	1029
Meeker.....	447	620	751	935	1004	Mille Lacs.....	432	559	726	904	970
Morrison.....	487	490	638	822	853	Mower.....	465	532	698	940	1141
Murray.....	424	537	637	793	1128	Nobles.....	515	537	637	939	1045
Norman.....	424	473	637	939	942	Otter Tail.....	424	507	637	910	935
Pennington.....	379	471	637	793	1128	Pine.....	480	561	722	946	1090
Pipestone.....	424	537	637	937	1032	Pope.....	465	516	698	869	933
Red Lake.....	424	494	637	909	927	Redwood.....	424	471	637	857	1128
Renville.....	424	533	637	793	871	Rice.....	505	628	849	1231	1237
Rock.....	468	471	637	793	853	Roseau.....	424	471	637	793	949
Sibley.....	424	501	637	939	1005	Steele.....	440	580	739	1019	1309
Stevens.....	505	508	637	793	851	Swift.....	424	471	637	938	1128
Todd.....	476	528	715	1033	1098	Traverse.....	424	471	637	793	851
Wadena.....	424	535	637	839	1128	Waseca.....	429	477	645	950	1142
Watonwan.....	424	474	637	939	942	Wilkin.....	424	480	637	857	927
Winona.....	425	493	641	847	985	Yellow Medicine.....	424	479	637	937	1108

MISSISSIPPI

METROPOLITAN FMR AREAS	0 BR	1 BR	2 BR	3 BR	4 BR	Counties of FMR AREA within STATE
Gulfport-Biloxi, MS MSA.....	669	689	828	1065	1135	Hancock, Harrison, Stone
Hattiesburg, MS MSA.....	531	560	718	962	1012	Forrest, Lamar, Perry
Jackson, MS HMFA.....	459	639	771	960	1055	Copiah, Hinds, Madison, Rankin
Marshall County, MS HMFA.....	451	454	614	882	1087	Marshall
Memphis, TN-MS-AR HMFA.....	576	658	780	1066	1188	DeSoto
Pascagoula, MS MSA.....	648	652	818	1123	1132	George, Jackson
Simpson County, MS HMFA.....	365	518	614	770	821	Simpson
Tate County, MS HMFA.....	521	525	710	884	1228	Tate
Tunica County, MS HMFA.....	494	513	694	864	1057	Tunica

MISSISSIPPI continued

NONMETROPOLITAN COUNTIES	0 BR	1 BR	2 BR	3 BR	4 BR	NONMETROPOLITAN COUNTIES	0 BR	1 BR	2 BR	3 BR	4 BR
Adams.....	418	518	614	805	1038	Alcorn.....	418	518	614	833	920
Amite.....	418	518	614	838	1011	Attala.....	418	518	614	905	908
Benton.....	418	518	614	790	821	Bolivar.....	457	460	622	775	831
Calhoun.....	365	462	614	867	1055	Carroll.....	605	731	888	1271	1275
Chickasaw.....	380	454	614	765	821	Choctaw.....	418	488	614	905	908
Claiborne.....	418	518	614	812	821	Clarke.....	418	518	614	905	908
Clay.....	448	486	658	820	879	Coahoma.....	381	540	640	797	855
Covington.....	418	505	614	905	1068	Franklin.....	418	454	614	905	908
Greene.....	418	479	614	905	908	Grenada.....	418	513	614	774	821
Holmes.....	418	518	614	765	821	Humphreys.....	418	454	614	894	897
Issaquena.....	661	798	970	1429	1434	Itawamba.....	418	518	614	905	908
Jasper.....	418	518	614	905	992	Jefferson.....	418	454	614	830	833
Jefferson Davis.....	418	468	614	905	908	Jones.....	488	692	821	1043	1097
Kemper.....	438	475	643	801	859	Lafayette.....	556	642	816	1040	1091
Lauderdale.....	418	518	614	877	1087	Lawrence.....	457	566	671	837	1188
Leake.....	422	523	620	847	868	Lee.....	365	518	614	836	839
Leflore.....	496	508	614	765	832	Lincoln.....	414	454	614	808	991
Lowndes.....	435	558	662	926	929	Marion.....	418	483	614	765	833
Monroe.....	426	463	626	801	837	Montgomery.....	418	505	614	861	964
Neshoba.....	418	508	614	826	949	Newton.....	447	485	656	918	1162
Noxubee.....	418	518	614	905	908	Oktibbeha.....	572	600	716	1026	1229
Panola.....	428	530	628	860	863	Pearl River.....	461	500	677	991	994
Pike.....	445	483	653	813	873	Pontotoc.....	418	454	614	829	1046
Prentiss.....	418	483	614	856	877	Quitman.....	365	518	614	765	821
Scott.....	394	517	662	826	1077	Sharkey.....	418	518	614	765	821
Smith.....	477	518	701	873	1057	Sunflower.....	428	454	614	804	911
Tallahatchie.....	496	518	614	905	908	Tippah.....	418	518	614	816	912
Tishomingo.....	418	462	614	894	932	Union.....	418	518	614	905	1087
Walthall.....	522	630	766	954	1024	Warren.....	533	536	683	851	940
Washington.....	488	491	616	862	865	Wayne.....	418	454	614	768	1087
Webster.....	496	518	614	905	1087	Wilkinson.....	422	458	620	772	829
Winston.....	418	505	614	888	891	Yalobusha.....	418	518	614	905	1087
Yazoo.....	456	494	669	834	894						

MISSOURI

METROPOLITAN FMR AREAS	0 BR	1 BR	2 BR	3 BR	4 BR	Counties of FMR AREA within STATE
Bates County, MO HMFA.....	405	477	646	869	872	Bates
Calloway County, MO HMFA.....	454	457	618	829	901	Callaway
Cape Girardeau-Jackson, MO-IL MSA.....	404	502	679	881	1074	Bollinger, Cape Girardeau
Columbia, MO MSA.....	523	536	691	1011	1222	Boone, Howard
Dallas County, MO HMFA.....	402	492	596	742	796	Dallas
Jefferson City, MO HMFA.....	380	472	639	890	919	Cole, Osage

SCHEDULE B - FY 2014 Final FAIR MARKET RENTS FOR EXISTING HOUSING

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MISSOURI continued

METROPOLITAN FMR AREAS						0 BR	1 BR	2 BR	3 BR	4 BR	Counties of FMR AREA within STATE										
Joplin, MO MSA.....						456	463	617	843	846	Jasper, Newton										
Kansas City, MO-KS HMFA.....						534	687	852	1168	1300	Caldwell, Cass, Clay, Clinton, Jackson, Lafayette, Platte, Ray										
McDonald County, MO HMFA.....						441	444	596	878	903	McDonald										
Moniteau County, MO HMFA.....						389	483	654	836	954	Moniteau										
Polk County, MO HMFA.....						405	441	596	850	1056	Polk										
Springfield, MO HMFA.....						438	483	650	957	961	Christian, Greene, Webster										
St. Joseph, MO-KS MSA.....						516	557	745	955	1176	Andrew, Buchanan, DeKalb										
St. Louis, MO-IL HMFA.....						532	631	814	1061	1203	Sullivan city part of Crawford, Franklin, Jefferson, Lincoln, St. Charles, St. Louis, Warren, St. Louis city										
Washington County, MO HMFA.....						481	503	596	832	881	Washington										
NONMETROPOLITAN COUNTIES						0 BR	1 BR	2 BR	3 BR	4 BR	NONMETROPOLITAN COUNTIES					0 BR	1 BR	2 BR	3 BR	4 BR	
Adair.....						372	498	596	777	1056	Atchison.....						393	442	596	878	881
Audrain.....						434	486	657	897	1015	Barry.....						386	503	596	769	796
Barton.....						355	456	596	750	796	Benton.....						399	447	605	892	895
Butler.....						380	457	605	753	812	Camden.....						413	527	625	890	1107
Carroll.....						461	464	596	742	796	Carter.....						393	503	596	878	921
Cedar.....						393	441	596	837	921	Chariton.....						393	441	596	742	796
Clark.....						355	461	596	777	921	Cooper.....						393	456	596	878	952
Crawford.....						478	483	596	742	888	Dade.....						393	457	596	809	812
Daviess.....						393	447	596	878	921	Dent.....						393	448	596	843	846
Douglas.....						393	503	596	821	824	Dunklin.....						438	441	596	878	881
Gasconade.....						393	461	596	878	1023	Gentry.....						393	441	596	818	911
Grundy.....						390	498	596	878	984	Harrison.....						396	470	600	747	802
Henry.....						418	474	633	897	1102	Hickory.....						416	441	596	742	796
Holt.....						393	441	596	778	919	Howell.....						355	455	596	762	1056
Iron.....						393	503	596	794	1056	Johnson.....						490	508	674	993	1019
Knox.....						393	452	596	878	921	Laclede.....						393	503	596	822	954
Lawrence.....						452	455	596	847	1056	Lewis.....						438	441	596	772	921
Linn.....						438	441	596	801	804	Livingston.....						471	475	642	848	858
Macon.....						438	441	596	815	915	Madison.....						413	462	625	799	835
Maries.....						393	503	596	878	974	Marion.....						370	458	620	773	967
Mercer.....						393	441	596	820	921	Miller.....						432	488	610	769	815
Mississippi.....						377	441	596	766	796	Monroe.....						393	441	596	742	807
Montgomery.....						414	463	627	790	1111	Morgan.....						368	457	618	770	874
New Madrid.....						477	480	596	776	796	Nodaway.....						475	478	596	747	879
Oregon.....						393	503	596	796	960	Ozark.....						393	503	596	742	921
Pemiscot.....						393	468	596	767	796	Perry.....						401	449	607	854	989
Pettis.....						486	489	662	874	964	Phelps.....						377	469	634	861	989
Pike.....						393	441	596	867	870	Pulaski.....						440	615	740	1090	1311
Putnam.....						421	472	638	795	986	Ralls.....						393	503	596	878	1024
Randolph.....						374	469	628	782	1112	Reynolds.....						393	475	596	742	796

SCHEDULE B - FY 2014 Final FAIR MARKET RENTS FOR EXISTING HOUSING

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MISSOURI continued

NONMETROPOLITAN COUNTIES	0 BR	1 BR	2 BR	3 BR	4 BR	NONMETROPOLITAN COUNTIES	0 BR	1 BR	2 BR	3 BR	4 BR
Ripley.....	393	441	596	878	905	St. Clair.....	393	489	596	742	796
Ste. Genevieve.....	443	446	603	849	932	St. Francois.....	483	486	658	888	974
Saline.....	393	441	596	809	915	Schuyler.....	406	441	596	878	1056
Scotland.....	393	441	596	759	921	Scott.....	366	455	616	775	848
Shannon.....	355	441	596	742	921	Shelby.....	393	441	596	808	811
Stoddard.....	393	446	596	802	805	Stone.....	396	492	665	828	889
Sullivan.....	461	464	628	883	970	Taney.....	502	532	660	822	1169
Texas.....	355	441	596	878	997	Vernon.....	390	462	625	826	835
Wayne.....	393	503	596	820	1056	Worth.....	393	441	596	764	921
Wright.....	393	441	596	752	1048						

MONTANA

METROPOLITAN FMR AREAS

	0 BR	1 BR	2 BR	3 BR	4 BR	Counties of FMR AREA within STATE
Billings, MT MSA.....	466	517	699	967	970	Carbon, Yellowstone
Great Falls, MT MSA.....	476	497	637	922	939	Cascade
Missoula, MT MSA.....	624	676	845	1212	1497	Missoula

NONMETROPOLITAN COUNTIES	0 BR	1 BR	2 BR	3 BR	4 BR	NONMETROPOLITAN COUNTIES	0 BR	1 BR	2 BR	3 BR	4 BR
Beaverhead.....	468	471	637	939	1010	Big Horn.....	465	537	637	903	907
Blaine.....	465	471	637	793	851	Broadwater.....	479	485	656	817	1040
Carter.....	465	524	637	895	1010	Chouteau.....	465	537	637	939	952
Custer.....	450	534	637	929	932	Daniels.....	465	491	637	870	1010
Dawson.....	465	478	637	914	1128	Deer Lodge.....	465	537	637	939	1094
Fallon.....	465	524	637	939	1010	Fergus.....	465	517	637	833	1128
Flathead.....	508	595	736	1085	1304	Gallatin.....	551	596	747	1101	1323
Garfield.....	465	491	637	895	1010	Glacier.....	515	537	637	939	1012
Golden Valley.....	469	541	642	800	1018	Granite.....	467	473	640	797	1014
Hill.....	465	480	637	939	942	Jefferson.....	538	545	737	918	985
Judith Basin.....	465	537	637	909	1010	Lake.....	379	537	637	821	1066
Lewis and Clark.....	514	518	699	944	1120	Liberty.....	465	491	637	895	1010
Lincoln.....	515	537	637	896	1128	McCone.....	465	491	637	939	1128
Madison.....	509	588	697	868	931	Meagher.....	465	471	637	793	1010
Mineral.....	465	529	637	881	884	Musselshell.....	465	471	637	885	1010
Park.....	446	554	749	933	1326	Petroleum.....	465	491	637	895	1010
Phillips.....	465	501	637	895	1010	Pondera.....	465	537	637	939	1128
Powder River.....	465	491	637	939	1010	Powell.....	465	537	637	793	1111
Prairie.....	465	537	637	895	1010	Ravalli.....	507	510	687	1012	1016
Richland.....	465	537	637	816	1128	Roosevelt.....	465	471	637	793	851
Rosebud.....	465	471	637	793	851	Sanders.....	381	474	637	810	912
Sheridan.....	465	537	637	939	1128	Silver Bow.....	468	471	637	793	932
Stillwater.....	429	471	637	899	1128	Sweet Grass.....	469	541	642	946	1137
Teton.....	465	496	637	883	1010	Toole.....	465	537	637	939	1128

SCHEDULE B - FY 2014 Final FAIR MARKET RENTS FOR EXISTING HOUSING

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MONTANA continued

NONMETROPOLITAN COUNTIES	0 BR	1 BR	2 BR	3 BR	4 BR	NONMETROPOLITAN COUNTIES	0 BR	1 BR	2 BR	3 BR	4 BR
Treasure.....	465	491	637	888	1010	Valley.....	465	537	637	882	885
Wheatland.....	465	491	637	895	1010	Wibaux.....	465	491	637	895	1010

NEBRASKA

METROPOLITAN FMR AREAS

	0 BR	1 BR	2 BR	3 BR	4 BR	Counties of FMR AREA within STATE
Lincoln, NE HMFA.....	416	530	700	973	1215	Lancaster
Omaha-Council Bluffs, NE-IA HMFA.....	470	629	790	1059	1177	Cass, Douglas, Sarpy, Washington
Saunders County, NE HMFA.....	436	542	733	913	980	Saunders
Seward County, NE HMFA.....	349	457	587	813	1040	Seward
Sioux City, IA-NE-SD MSA.....	414	541	696	914	1027	Dakota, Dixon

NONMETROPOLITAN COUNTIES	0 BR	1 BR	2 BR	3 BR	4 BR	NONMETROPOLITAN COUNTIES	0 BR	1 BR	2 BR	3 BR	4 BR
Adams.....	431	434	587	731	784	Antelope.....	396	495	587	762	784
Arthur.....	398	442	590	869	872	Banner.....	396	440	587	740	802
Blaine.....	398	442	590	735	807	Boone.....	396	495	587	731	784
Box Butte.....	396	450	587	770	816	Boyd.....	396	495	587	865	868
Brown.....	396	434	587	731	865	Buffalo.....	400	478	647	873	1115
Burt.....	396	434	587	807	810	Butler.....	396	434	587	774	968
Cedar.....	396	434	587	731	1040	Chase.....	396	434	587	731	830
Cherry.....	424	465	629	783	860	Cheyenne.....	396	459	587	850	853
Clay.....	396	495	587	731	784	Colfax.....	396	495	587	731	816
Cuming.....	402	441	597	744	809	Custer.....	396	495	587	865	1040
Dawes.....	418	434	587	865	868	Dawson.....	405	444	601	749	803
Deuel.....	396	434	587	731	802	Dodge.....	389	495	654	859	874
Dundy.....	396	434	587	731	802	Fillmore.....	396	434	587	759	791
Franklin.....	396	440	587	863	1040	Frontier.....	442	485	656	817	877
Furnas.....	396	434	587	731	802	Gage.....	398	457	610	795	829
Garden.....	396	440	587	731	972	Garfield.....	396	440	587	731	784
Gosper.....	408	448	606	755	828	Grant.....	396	440	587	731	802
Greeley.....	396	440	587	865	916	Hall.....	393	493	637	795	851
Hamilton.....	396	434	587	746	891	Harlan.....	396	434	587	731	784
Hayes.....	398	442	590	735	788	Hitchcock.....	396	440	587	731	826
Holt.....	396	495	587	731	813	Hooker.....	398	442	590	756	807
Howard.....	396	434	587	743	784	Jefferson.....	396	445	587	731	958
Johnson.....	396	434	587	731	784	Kearney.....	396	495	587	795	798
Keith.....	396	495	587	796	972	Keya Paha.....	396	440	587	731	802
Kimball.....	410	450	609	758	814	Knox.....	396	495	587	865	1040
Lincoln.....	374	464	628	782	896	Logan.....	480	533	712	887	973
Loup.....	396	440	587	731	802	McPherson.....	398	442	590	735	807
Madison.....	402	447	597	770	957	Merrick.....	396	434	587	865	868
Morrill.....	396	434	587	744	863	Nance.....	396	495	587	731	795
Nemaha.....	396	466	587	731	1040	Nuckolls.....	396	495	587	865	868

SCHEDULE B - FY 2014 Final FAIR MARKET RENTS FOR EXISTING HOUSING

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NEBRASKA continued

NONMETROPOLITAN COUNTIES	0 BR	1 BR	2 BR	3 BR	4 BR	NONMETROPOLITAN COUNTIES	0 BR	1 BR	2 BR	3 BR	4 BR
Otoe.....	402	456	597	880	1057	Pawnee.....	396	434	587	731	784
Perkins.....	396	440	587	731	921	Phelps.....	396	495	587	731	1040
Pierce.....	396	495	587	731	1036	Platte.....	474	495	587	731	896
Polk.....	396	434	587	731	784	Red Willow.....	396	463	587	731	925
Richardson.....	396	487	587	731	784	Rock.....	398	443	591	752	808
Saline.....	466	511	691	861	923	Scotts Bluff.....	445	473	630	785	924
Sheridan.....	396	495	587	793	796	Sherman.....	396	434	587	731	929
Sioux.....	396	495	587	791	802	Stanton.....	396	434	587	865	946
Thayer.....	396	434	587	731	784	Thomas.....	404	449	599	746	819
Thurston.....	396	434	587	731	784	Valley.....	396	434	587	731	802
Wayne.....	396	434	587	817	820	Webster.....	396	495	587	865	1040
Wheeler.....	396	440	587	865	868	York.....	404	453	600	747	802

NEVADA

METROPOLITAN FMR AREAS	0 BR	1 BR	2 BR	3 BR	4 BR	Counties of FMR AREA within STATE	NONMETROPOLITAN COUNTIES	0 BR	1 BR	2 BR	3 BR	4 BR
Carson City, NV MSA.....	545	683	869	1239	1508	Carson	Douglas.....	586	788	974	1435	1725
*Las Vegas-Paradise, NV MSA.....	675	843	1038	1530	1816	Clark	Esmeralda.....	380	471	637	895	1022
Reno-Sparks, NV MSA.....	549	697	921	1357	1631	Storey, Washoe	Humboldt.....	414	513	694	992	1114
Churchill.....	486	632	815	1015	1443	NONMETROPOLITAN COUNTIES	Lincoln.....	466	578	782	1017	1064
Elko.....	524	650	880	1124	1432		Mineral.....	530	750	889	1107	1427
Eureka.....	494	612	828	1031	1329		Pershing.....	380	537	637	939	1022
Lander.....	449	635	753	982	1208							
Lyon.....	473	662	785	1157	1390							
Nye.....	487	605	818	1098	1109							
White Pine.....	453	641	760	1098	1102							

NEW HAMPSHIRE

METROPOLITAN FMR AREAS	0 BR	1 BR	2 BR	3 BR	4 BR	Components of FMR AREA within STATE
Boston-Cambridge-Quincy, MA-NH HMFA.....	1042	1164	1454	1811	1969	Rockingham County towns of Seabrook town, South Hampton town,
Hillsborough County, NH (part) HMFA.....	710	753	907	1132	1297	Hillsborough County towns of Antrim town, Bannington town,
						Deering town, Francestown town, Greenfield town,
						Hancock town, Hillsborough town, Lyndeborough town,
						New Boston town, Peterborough town, Sharon town, Temple town,
						Windsor town
Lawrence, MA-NH HMFA.....	743	848	1088	1355	1454	Rockingham County towns of Atkinson town, Chester town,
						Danville town, Derry town, Fremont town, Hampstead town,
						Kingston town, Newton town, Plaistow town, Raymond town,
						Salem town, Sandown town, Windham town
Manchester, NH HMFA.....	626	829	1052	1310	1484	Hillsborough County towns of Bedford town, Goffstown town,
						Manchester city, Weare town

NEW HAMPSHIRE continued

METROPOLITAN FMR AREAS	0 BR	1 BR	2 BR	3 BR	4 BR	Components of FMR AREA within STATE
Nashua, NH HMFA.....	809	919	1199	1612	1871	Hillsborough County towns of Amherst town, Brookline town, Greenville town, Hollis town, Hudson town, Litchfield town, Mason town, Merrimack town, Milford town, Mont Vernon town, Nashua city, New Ipswich town, Pelham town, Wilton town
Portsmouth-Rochester, NH HMFA.....	718	838	1065	1459	1523	Rockingham County towns of Brentwood town, East Kingston town, Epping town, Exeter town, Greenland town, Hampton town, Hampton Falls town, Kensington town, New Castle town, Newfields town, Newington town, Newmarket town, North Hampton town, Portsmouth city, Rye town, Stratham town Strafford County towns of Barrington town, Dover city, Durham town, Farmington town, Lee town, Madbury town, Middleton town, Milton town, New Durham town, Rochester city, Rollinsford town, Somersworth city, Strafford town
Western Rockingham County, NH HMFA.....	949	962	1302	1787	1794	Rockingham County towns of Auburn town, Candia town, Deerfield town, Londonderry town, Northwood town, Nottingham town
NONMETROPOLITAN COUNTIES	0 BR	1 BR	2 BR	3 BR	4 BR	Towns within nonmetropolitan counties
Belknap County, NH.....	694	699	946	1346	1351	Alton town, Barnstead town, Belmont town, Center Harbor town, Gilford town, Gilmanton town, Laconia city, Meredith town, New Hampton town, Sanbornton town, Tilton town
Carroll County, NH.....	703	782	1013	1410	1415	Albany town, Bartlett town, Brookfield town, Chatham town, Conway town, Eaton town, Effingham town, Freedom town, Hale's location, Hart's location town, Jackson town, Madison town, Moultonborough town, Ossipee town, Sandwich town, Tamworth town, Tuftonboro town, Wakefield town, Wolfeboro town
Cheshire County, NH.....	614	737	972	1211	1583	Alstead town, Chesterfield town, Dublin town, Fitzwilliam town, Gilsum town, Harrisville town, Hinsdale town, Jaffrey town, Keene city, Marlborough town, Marlow town, Nelson town, Richmond town, Rindge town, Roxbury town, Stoddard town, Sullivan town, Surry town, Swanzey town, Troy town, Walpole town, Westmoreland town, Winchester town
Coos County, NH.....	531	554	657	877	1051	Atkinson and Gilmanton Academy grant, Beans grant, Beans purchase, Berlin city, Cambridge township, Carroll town, Chandlers purchase, Clarksville town, Colebrook town, Columbia town, Crawfords purchase, Cutts grant, Dalton town, Dixs grant, Dixville township, Dummer town, Errol town, Ervings location, Gorham town, Greens grant, Hadleys purchase, Jefferson town, Kilkenny township, Lancaster town, Low and Burbanks grant, Martins location, Milan town, Millsfield township, Northumberland town, Odell township, Pinkhams grant, Pittsburg town, Randolph town, Sargents purchase, Second College grant, Shelburne town, Stark town, Stewartstown town, Stratford town, Success township,

SCHEDULE B - FY 2014 Final FAIR MARKET RENTS FOR EXISTING HOUSING

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NEW HAMPSHIRE continued

NONMETROPOLITAN COUNTIES	0 BR	1 BR	2 BR	3 BR	4 BR	Towns within nonmetropolitan counties
Grafton County, NH.....	789	808	1016	1275	1418	Thompson and Meserves purchase, Wentworth location, Whitefield town Alexandria town, Ashland town, Bath town, Benton town, Bethlehem town, Bridgewater town, Bristol town, Campton town, Canaan town, Dorchester town, Easton town, Ellsworth town, Enfield town, Franconia town, Grafton town, Groton town, Hanover town, Haverhill town, Hebron town, Holderness town, Landaff town, Lebanon city, Lincoln town, Lisbon town, Littleton town, Livermore town, Lyman town, Lyme town, Monroe town, Orange town, Orford town, Piermont town, Plymouth town, Rumney town, Sugar Hill town, Thornton town, Warren town, Waterville Valley town, Wentworth town, Woodstock town
Merrimack County, NH.....	640	801	1002	1321	1576	Allenstown town, Andover town, Boscawen town, Bow town, Bradford town, Canterbury town, Chichester town, Concord city, Danbury town, Dunbarton town, Epsom town, Franklin city, Henniker town, Hill town, Hooksett town, Hopkinton town, Loudon town, Newbury town, New London town, Northfield town, Pembroke town, Pittsfield town, Salisbury town, Sutton town, Warner town, Webster town, Wilmot town
Sullivan County, NH.....	660	752	917	1242	1263	Acworth town, Charlestown town, Claremont city, Cornish town, Croydon town, Goshen town, Grantham town, Langdon town, Lempster town, Newport town, Plainfield town, Springfield town, Sunapee town, Unity town, Washington town

NEW JERSEY

METROPOLITAN FMR AREAS	0 BR	1 BR	2 BR	3 BR	4 BR	Counties of FMR AREA within STATE
Atlantic City-Hammondon, NJ MSA.....	792	917	1139	1575	1830	Atlantic
Bergen-Passaic, NJ HMFA.....	1094	1182	1402	1816	2059	Bergen, Passaic
Jersey City, NJ HMFA.....	990	1089	1291	1643	1813	Hudson
Middlesex-Somerset-Hunterdon, NJ HMFA.....	928	1184	1458	1892	2482	Hunterdon, Middlesex, Somerset
Monmouth-Ocean, NJ HMFA.....	917	1083	1345	1865	2193	Monmouth, Ocean
Newark, NJ HMFA.....	1022	1059	1265	1632	1865	Essex, Morris, Sussex, Union
Ocean City, NJ MSA.....	610	761	1025	1451	1526	Cape May
*Philadelphia-Camden-Wilmington, PA-NJ-DE-MD MSA..	799	942	1135	1414	1518	Burlington, Camden, Gloucester, Salem
Trenton-Ewing, NJ MSA.....	900	1017	1225	1602	1852	Mercer
Vineland-Millville-Bridgeton, NJ MSA.....	753	870	1071	1375	1724	Cumberland
Warren County, NJ HMFA.....	716	960	1171	1530	1707	Warren

NEW MEXICO

METROPOLITAN FMR AREAS	0 BR	1 BR	2 BR	3 BR	4 BR	Counties of FMR AREA within STATE
Albuquerque, NM MSA.....	521	655	802	1161	1420	Bernalillo, Sandoval, Torrance, Valencia
Farmington, NM MSA.....	505	543	735	915	982	San Juan
Las Cruces, NM MSA.....	517	620	736	1053	1171	Dona Ana

SCHEDULE B - FY 2014 Final FAIR MARKET RENTS FOR EXISTING HOUSING

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NEW MEXICO continued

METROPOLITAN FMR AREAS	0 BR	1 BR	2 BR	3 BR	4 BR	Counties of FMR AREA within STATE					
Santa Fe, NM MSA.....	742	807	957	1283	1372	Santa Fe					
NONMETROPOLITAN COUNTIES	0 BR	1 BR	2 BR	3 BR	4 BR	NONMETROPOLITAN COUNTIES	0 BR	1 BR	2 BR	3 BR	4 BR
Catron.....	478	537	637	939	956	Chaves.....	434	477	645	910	1125
Cibola.....	484	487	637	879	1128	Colfax.....	498	501	678	844	906
Curry.....	494	497	669	978	1185	De Baca.....	478	537	637	939	956
Eddy.....	540	554	737	947	985	Grant.....	478	537	637	939	1024
Guadalupe.....	478	495	637	939	956	Harding.....	478	495	637	844	956
Hidalgo.....	478	495	637	939	956	Lea.....	581	585	791	1005	1064
Lincoln.....	529	657	889	1107	1188	Los Alamos.....	655	842	1092	1427	1850
Luna.....	478	536	637	918	921	McKinley.....	491	537	637	793	851
Mora.....	502	564	669	881	1004	Otero.....	393	537	637	930	1128
Quay.....	496	500	676	869	903	Rio Arriba.....	440	547	740	922	989
Roosevelt.....	423	551	711	886	1259	San Miguel.....	392	542	659	870	902
Sierra.....	454	493	667	831	1001	Socorro.....	448	471	637	793	1128
Taos.....	627	754	902	1123	1205	Union.....	490	493	667	966	1001

NEW YORK

METROPOLITAN FMR AREAS	0 BR	1 BR	2 BR	3 BR	4 BR	Counties of FMR AREA within STATE					
Albany-Schenectady-Troy, NY MSA.....	662	750	929	1157	1242	Albany, Rensselaer, Saratoga, Schenectady, Schoharie					
Binghamton, NY MSA.....	512	542	692	987	1119	Broome, Tioga					
Buffalo-Niagara Falls, NY MSA.....	537	570	710	908	1027	Erie, Niagara					
Elmira, NY MSA.....	500	600	787	1009	1130	Chemung					
Glens Falls, NY MSA.....	652	835	1015	1364	1557	Warren, Washington					
Ithaca, NY MSA.....	769	943	1130	1565	1571	Tompkins					
Kingston, NY MSA.....	659	819	1062	1392	1613	Ulster					
Nassau-Suffolk, NY HMFA.....	1033	1309	1613	2097	2415	Nassau, Suffolk					
New York, NY HMFA.....	1163	1215	1440	1852	2075	Bronx, Kings, New York, Putnam, Queens, Richmond, Rockland					
Poughkeepsie-Newburgh-Middletown, NY MSA.....	886	1023	1258	1576	1681	Dutchess, Orange					
Rochester, NY MSA.....	563	685	834	1051	1123	Livingston, Monroe, Ontario, Orleans, Wayne					
Syracuse, NY MSA.....	561	626	801	1051	1153	Madison, Onondaga, Oswego					
Utica-Rome, NY MSA.....	601	612	779	1032	1159	Herkimer, Oneida					
Westchester County, NY Statutory Exception Area...	967	1177	1449	1853	2152	Westchester					
NONMETROPOLITAN COUNTIES	0 BR	1 BR	2 BR	3 BR	4 BR	NONMETROPOLITAN COUNTIES	0 BR	1 BR	2 BR	3 BR	4 BR
Allegany.....	507	510	637	833	937	Cattaraugus.....	479	525	662	879	940
Cayuga.....	551	586	746	978	1168	Chautauqua.....	485	489	637	904	928
Chenango.....	505	508	637	903	933	Clinton.....	567	638	814	1092	1178
Columbia.....	717	721	896	1161	1490	Cortland.....	592	601	749	967	1001
Delaware.....	525	529	667	836	959	Essex.....	542	636	817	1018	1261
Franklin.....	553	556	716	1029	1139	Fulton.....	548	551	708	935	1071
Genesee.....	471	610	765	981	1082	Greene.....	582	659	781	1045	1154
Hamilton.....	495	548	650	810	935	Jefferson.....	676	779	1012	1287	1453

NEW YORK continued

NONMETROPOLITAN COUNTIES	0 BR	1 BR	2 BR	3 BR	4 BR	NONMETROPOLITAN COUNTIES	0 BR	1 BR	2 BR	3 BR	4 BR
Lewis.....	506	548	665	980	1028	Montgomery.....	583	587	740	922	1044
Otsego.....	628	680	844	1134	1205	St. Lawrence.....	503	570	724	972	1052
Schuyler.....	489	535	643	927	1099	Seneca.....	484	599	710	1013	1017
Steuben.....	468	553	677	876	986	Sullivan.....	727	731	907	1180	1606
Wyoming.....	445	500	677	883	905	Yates.....	501	506	659	899	1167

NORTH CAROLINA

METROPOLITAN FMR AREAS	0 BR	1 BR	2 BR	3 BR	4 BR	Counties of FMR AREA within STATE	0 BR	1 BR	2 BR	3 BR	4 BR
Anson County, NC HMFA.....	487	537	637	932	1128	Anson					
Asheville, NC HMFA.....	428	606	719	922	1197	Buncombe, Henderson, Madison					
Burlington, NC MSA.....	539	542	684	889	914	Alamance					
Charlotte-Gastonia-Rock Hill, NC-SC HMFA.....	622	686	813	1096	1359	Cabarrus, Gaston, Mecklenburg, Union					
Durham-Chapel Hill, NC HMFA.....	575	711	843	1087	1273	Chatham, Durham, Orange					
Fayetteville, NC HMFA.....	634	638	816	1091	1374	Cumberland					
Goldensboro, NC MSA.....	490	511	691	901	1101	Wayne					
Greene County, NC HMFA.....	468	471	637	800	851	Greene					
Greensboro-High Point, NC HMFA.....	522	598	709	964	1087	Guilford, Randolph					
Greenville, NC HMFA.....	528	531	686	929	1215	Pitt					
Haywood County, NC HMFA.....	516	519	669	928	1185	Haywood					
Hickory-Lenoir-Morganton, NC MSA.....	515	537	637	833	1037	Alexander, Burke, Caldwell, Catawba					
Hoke County, NC HMFA.....	515	518	663	922	1143	Hoke					
Jacksonville, NC MSA.....	612	616	757	1065	1341	Onslow					
Pender County, NC HMFA.....	484	487	659	971	1098	Pender					
Person County, NC HMFA.....	461	499	675	841	968	Person					
Raleigh-Cary, NC MSA.....	618	722	856	1108	1377	Franklin, Johnston, Wake					
Rockingham County, NC HMFA.....	501	504	637	793	851	Rockingham					
Rocky Mount, NC MSA.....	541	545	673	918	968	Edgecombe, Nash					
*Virginia Beach-Norfolk-Newport News, VA-NC MSA...	913	939	1130	1562	1966	Currituck					
Wilmington, NC HMFA.....	617	661	818	1078	1230	Brunswick, New Hanover					
Winston-Salem, NC MSA.....	545	566	693	1000	1055	Davie, Forsyth, Stokes, Yadkin					
NONMETROPOLITAN COUNTIES	0 BR	1 BR	2 BR	3 BR	4 BR	NONMETROPOLITAN COUNTIES	0 BR	1 BR	2 BR	3 BR	4 BR
Alleghany.....	515	537	637	912	915	Ashe.....	444	486	637	793	851
Avery.....	516	520	703	1036	1039	Beaufort.....	493	496	637	939	1059
Bertie.....	468	471	637	844	851	Bladen.....	468	471	637	793	851
Camden.....	642	646	807	1005	1215	Carteret.....	558	583	691	988	1224
Caswell.....	468	471	637	911	987	Cherokee.....	468	471	637	842	1082
Chowan.....	515	537	637	845	1128	Clay.....	515	537	637	939	1128
Cleveland.....	508	511	644	893	935	Columbus.....	515	520	637	793	851
Craven.....	470	584	790	1025	1379	Dare.....	658	690	934	1310	1566
Davidson.....	477	506	637	887	1004	Duplin.....	503	506	637	793	931
Gates.....	507	510	637	847	1119	Graham.....	468	471	637	939	1128
Granville.....	591	615	732	912	994	Halifax.....	464	527	637	830	1124
Harnett.....	520	524	709	943	1156	Hertford.....	515	537	637	793	1128

SCHEDULE B - FY 2014 Final FAIR MARKET RENTS FOR EXISTING HOUSING

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NORTH CAROLINA continued

NONMETROPOLITAN COUNTIES	0 BR	1 BR	2 BR	3 BR	4 BR	NONMETROPOLITAN COUNTIES	0 BR	1 BR	2 BR	3 BR	4 BR
Hyde.....	635	639	799	995	1068	Iredell.....	625	653	774	1004	1368
Jackson.....	525	529	676	877	1100	Jones.....	553	577	684	896	914
Lee.....	591	617	731	910	977	Lenoir.....	387	498	650	810	889
Lincoln.....	515	537	637	868	871	McDowell.....	468	471	637	795	1042
Macon.....	523	527	713	888	953	Martin.....	515	537	637	793	851
Mitchell.....	468	471	637	819	959	Montgomery.....	500	503	637	835	956
Moore.....	517	532	640	938	1128	Northampton.....	474	477	637	850	1093
Pamlico.....	468	471	637	909	1114	Pasquotank.....	585	589	741	995	1168
Perquimans.....	600	627	743	1095	1316	Polk.....	483	486	642	800	1067
Richmond.....	515	537	637	844	851	Robeson.....	486	489	637	808	981
Rowan.....	511	514	665	885	1021	Rutherford.....	515	537	637	903	1061
Sampson.....	379	513	637	860	989	Scotland.....	471	475	642	821	858
Stanly.....	379	483	637	880	1112	Surry.....	515	537	637	939	1128
Swain.....	534	538	728	907	1098	Transylvania.....	491	495	647	862	865
Tyrrell.....	515	537	637	816	959	Vance.....	394	489	662	824	965
Warren.....	396	484	637	939	1128	Washington.....	507	510	637	913	1076
Watauga.....	480	627	807	1132	1317	Wilkes.....	478	537	637	793	1064
Wilson.....	514	594	803	1068	1073	Yancey.....	478	481	637	801	851

NORTH DAKOTA

METROPOLITAN FMR AREAS 0 BR 1 BR 2 BR 3 BR 4 BR Counties of FMR AREA within STATE

Bismarck, ND MSA.....	497	563	704	998	1177	Burleigh, Morton
Fargo, ND-MN MSA.....	437	529	684	1008	1192	Cass
Grand Forks, ND-MN MSA.....	444	541	725	981	1183	Grand Forks

NONMETROPOLITAN COUNTIES	0 BR	1 BR	2 BR	3 BR	4 BR	NONMETROPOLITAN COUNTIES	0 BR	1 BR	2 BR	3 BR	4 BR
Adams.....	506	510	637	939	942	Barnes.....	524	527	668	832	893
Benson.....	515	537	637	939	942	Billings.....	513	516	645	803	875
Bottineau.....	468	471	637	793	851	Bowman.....	515	537	637	939	942
Burke.....	491	494	637	824	851	Cavalier.....	468	471	637	887	1056
Dickey.....	515	537	637	851	864	Divide.....	506	510	637	887	891
Dunn.....	490	493	637	939	942	Eddy.....	515	537	637	939	942
Emmons.....	515	537	637	939	1063	Foster.....	495	498	637	937	1128
Golden Valley.....	515	537	637	887	891	Grant.....	468	471	637	887	891
Griggs.....	515	537	637	939	1128	Hettinger.....	515	537	637	939	942
Kidder.....	475	478	637	921	924	LaMoure.....	468	471	637	939	942
Logan.....	506	510	637	887	891	McHenry.....	497	500	637	836	992
McIntosh.....	572	576	779	970	1042	McKenzie.....	468	471	637	939	942
McLean.....	509	513	637	868	914	Mercer.....	515	537	637	939	942
Mountrail.....	863	902	1069	1331	1865	Nelson.....	515	537	637	887	891
Oliver.....	506	510	637	887	891	Pembina.....	515	537	637	793	851

NORTH DAKOTA continued

NONMETROPOLITAN COUNTIES	0 BR	1 BR	2 BR	3 BR	4 BR
Pierce.....	515	537	637	939	942
Ransom.....	508	511	686	1011	1014
Richland.....	468	471	637	933	1008
Sargent.....	468	471	637	919	1003
Sioux.....	506	510	637	878	881
Stark.....	599	626	742	1029	1033
Stutsman.....	503	507	667	831	1094
Traill.....	475	478	647	825	866
Ward.....	794	847	1116	1644	1712
Williams.....	792	864	1053	1311	1407

NONMETROPOLITAN COUNTIES	0 BR	1 BR	2 BR	3 BR	4 BR
Ramsey.....	510	514	654	898	901
Renville.....	468	471	637	939	942
Rolette.....	515	537	637	939	1026
Sheridan.....	515	524	637	887	891
Slope.....	513	516	645	899	902
Steele.....	511	514	637	844	864
Towner.....	468	471	637	887	1041
Walsh.....	515	537	637	861	964
Wells.....	515	537	637	939	1010

OHIO

METROPOLITAN FMR AREAS	0 BR	1 BR	2 BR	3 BR	4 BR	Counties of FMR AREA within STATE
Akron, OH MSA.....	477	554	750	965	1002	Portage, Summit
Brown County, OH HMFA.....	365	472	614	871	931	Brown
Canton-Massillon, OH MSA.....	406	509	662	870	934	Carroll, Stark
Cincinnati-Middleton, OH-KY-IN HMFA.....	442	554	735	1018	1121	Butler, Clermont, Hamilton, Warren
Cleveland-Elyria-Mentor, OH MSA.....	493	592	750	1005	1037	Cuyahoga, Geauga, Lake, Lorain, Medina
Columbus, OH HMFA.....	498	620	806	1039	1202	Delaware, Fairfield, Franklin, Licking, Madison, Morrow, Pickaway
Dayton, OH HMFA.....	483	543	712	953	1068	Greene, Miami, Montgomery
Huntington-Ashland, WV-KY-OH MSA.....	383	523	643	849	1043	Lawrence
Lima, OH MSA.....	486	489	655	816	888	Allen
Mansfield, OH MSA.....	459	462	614	902	905	Richland
Parkersburg-Marietta-Vienna, WV-OH MSA.....	436	470	614	824	907	Washington
Preble County, OH HMFA.....	391	486	658	877	880	Preble
Sandusky, OH MSA.....	474	645	796	1037	1064	Erie
Springfield, OH MSA.....	486	547	713	939	1030	Clark
Steubenville-Weirton, OH-WV MSA.....	432	499	614	823	943	Jefferson
Toledo, OH MSA.....	403	516	677	913	966	Fulton, Lucas, Ottawa, Wood
Union County, OH HMFA.....	495	599	800	996	1069	Union
Wheeling, WV-OH MSA.....	466	493	614	788	821	Belmont
Youngstown-Warren-Boardman, OH HMFA.....	454	515	637	840	888	Mahoning, Trumbull

NONMETROPOLITAN COUNTIES	0 BR	1 BR	2 BR	3 BR	4 BR
Adams.....	417	486	614	778	821
Ashtabula.....	407	475	618	837	841
Auglaize.....	389	475	642	882	1055
Clinton.....	439	479	648	846	1010
Coshocton.....	417	481	614	846	867
Darke.....	449	506	614	887	997
Fayette.....	515	518	701	873	1035
Guernsey.....	365	481	614	767	856
Hardin.....	402	479	614	848	1022
Henry.....	424	515	624	906	1105

NONMETROPOLITAN COUNTIES	0 BR	1 BR	2 BR	3 BR	4 BR
Ashland.....	381	503	641	907	948
Athens.....	566	591	701	882	937
Champaign.....	400	502	614	905	976
Columbiana.....	391	476	614	813	890
Crawford.....	383	461	624	880	883
Defiance.....	473	476	614	809	1045
Gallia.....	417	494	614	810	914
Hancock.....	384	491	629	919	949
Harrison.....	365	511	614	874	877
Highland.....	375	467	614	765	821

OHIO continued

NONMETROPOLITAN COUNTIES	0 BR	1 BR	2 BR	3 BR	4 BR	NONMETROPOLITAN COUNTIES	0 BR	1 BR	2 BR	3 BR	4 BR
Hocking.....	417	480	614	815	821	Holmes.....	417	475	614	772	821
Huron.....	365	464	614	862	972	Jackson.....	496	513	614	810	821
Knox.....	511	515	645	900	966	Logan.....	463	466	631	837	966
Marion.....	480	545	700	928	1027	Meigs.....	417	463	614	798	932
Mercer.....	417	454	614	850	853	Monroe.....	417	518	614	765	821
Morgan.....	455	500	614	905	908	Muskingum.....	378	518	636	912	1002
Noble.....	478	481	614	845	901	Paulding.....	417	486	614	785	821
Perry.....	418	454	614	804	859	Pike.....	496	518	614	905	1068
Putnam.....	425	474	626	780	837	Ross.....	475	519	702	886	1137
Sandusky.....	417	504	614	811	1087	Scioto.....	419	518	614	765	903
Seneca.....	473	476	614	855	863	Shelby.....	409	486	657	818	878
Tuscarawas.....	385	491	647	807	865	Van Wert.....	452	461	614	802	846
Vinton.....	417	518	614	871	967	Wayne.....	405	506	643	830	859
Williams.....	457	460	614	765	897	Wyandot.....	437	518	614	886	1058

OKLAHOMA

METROPOLITAN FMR AREAS	0 BR	1 BR	2 BR	3 BR	4 BR	Counties of FMR AREA within STATE	0 BR	1 BR	2 BR	3 BR	4 BR
Fort Smith, AR-OK HMFA.....	455	458	600	799	901	Sequoyah					
Grady County, OK HMFA.....	404	443	600	807	810	Grady					
Lawton, OK MSA.....	528	540	730	1010	1194	Comanche					
Le Flore County, OK HMFA.....	473	476	600	787	978	Le Flore					
Lincoln County, OK HMFA.....	411	483	600	817	820	Lincoln					
Oklahoma City, OK HMFA.....	486	565	723	989	1188	Canadian, Cleveland, Logan, McClain, Oklahoma					
Okmulgee County, OK HMFA.....	360	510	605	753	809	Okmulgee					
Pawnee County, OK HMFA.....	379	506	600	752	991	Pawnee					
Tulsa, OK HMFA.....	467	567	739	1002	1117	Creek, Osage, Rogers, Tulsa, Wagoner					
NONMETROPOLITAN COUNTIES	0 BR	1 BR	2 BR	3 BR	4 BR	NONMETROPOLITAN COUNTIES	0 BR	1 BR	2 BR	3 BR	4 BR
Adair.....	423	443	600	755	802	Alfalfa.....	423	443	600	751	927
Atoka.....	423	443	600	747	802	Beaver.....	423	460	600	768	904
Beckham.....	501	505	683	851	1029	Blaine.....	446	468	633	933	936
Bryan.....	469	472	602	834	905	Caddo.....	444	471	600	747	1063
Carter.....	385	458	619	771	862	Cherokee.....	357	498	600	747	994
Choctaw.....	423	451	600	884	1031	Cimarron.....	423	506	600	758	904
Coal.....	423	443	600	880	904	Cotton.....	426	447	605	753	809
Craig.....	423	506	600	797	859	Custer.....	485	496	600	884	887
Delaware.....	457	460	600	846	1063	Dewey.....	423	460	600	747	839
Ellis.....	423	506	600	747	904	Garfield.....	415	521	618	824	923
Garvin.....	379	443	600	747	836	Grant.....	423	506	600	747	802
Greer.....	452	528	642	800	967	Harmon.....	423	460	600	769	903
Harper.....	423	460	600	770	904	Haskell.....	423	443	600	828	831
Hughes.....	423	506	600	771	802	Jackson.....	429	458	600	871	1063
Jefferson.....	423	443	600	747	802	Johnston.....	423	443	600	747	802

OKLAHOMA continued

NONMETROPOLITAN COUNTIES	0 BR	1 BR	2 BR	3 BR	4 BR	NONMETROPOLITAN COUNTIES	0 BR	1 BR	2 BR	3 BR	4 BR
Kay.....	467	470	636	823	1015	Kingfisher.....	465	488	660	850	1137
Kiowa.....	441	444	600	853	904	Latimer.....	423	478	600	867	870
Love.....	423	506	600	835	838	McCurtain.....	423	443	600	817	1005
McIntosh.....	407	445	602	750	1066	Major.....	423	460	600	884	1063
Marshall.....	433	455	615	846	894	Mayes.....	357	443	600	825	1063
Murray.....	436	458	619	771	827	Muskogee.....	375	457	600	839	876
Noble.....	423	506	600	811	876	Nowata.....	425	484	604	752	910
Okfuskee.....	423	503	600	835	838	Ottawa.....	460	463	627	781	900
Payne.....	438	540	703	1024	1245	Pittsburg.....	392	501	659	821	881
Pontotoc.....	423	506	600	806	1027	Pottawatomie.....	533	537	726	919	972
Pushmataha.....	423	443	600	790	884	Roger Mills.....	423	460	600	798	802
Seminole.....	397	476	600	882	915	Stephens.....	423	443	600	840	1063
Texas.....	433	518	614	765	1087	Tillman.....	423	451	600	779	802
Washington.....	390	543	656	958	1143	Washita.....	423	506	600	884	1063
Woods.....	424	445	602	750	809	Woodward.....	485	506	600	884	1063

OREGON

METROPOLITAN FMR AREAS	0 BR	1 BR	2 BR	3 BR	4 BR	Counties of FMR AREA within STATE	0 BR	1 BR	2 BR	3 BR	4 BR
Bend, OR MSA.....	557	645	803	1147	1373	Deschutes					
Corvallis, OR MSA.....	490	629	824	1214	1459	Benton					
Eugene-Springfield, OR MSA.....	496	621	834	1200	1409	Lane					
Medford, OR MSA.....	610	616	834	1229	1385	Jackson					
Portland-Vancouver-Hillsboro, OR-WA MSA.....	666	774	922	1359	1633	Clackamas, Columbia, Multnomah, Washington, Yamhill					
Salem, OR MSA.....	547	578	780	1149	1381	Marion, Polk					
NONMETROPOLITAN COUNTIES	0 BR	1 BR	2 BR	3 BR	4 BR	NONMETROPOLITAN COUNTIES	0 BR	1 BR	2 BR	3 BR	4 BR
Baker.....	498	514	654	837	919	Clatsop.....	523	568	767	1093	1358
Coos.....	465	530	691	979	1206	Crook.....	426	550	678	999	1161
Curry.....	515	591	799	1175	1226	Douglas.....	420	496	654	964	1158
Gilliam.....	411	484	637	919	1072	Grant.....	411	495	637	939	1128
Harney.....	411	471	637	793	851	Hood River.....	675	704	835	1230	1361
Jefferson.....	397	506	637	939	942	Josephine.....	484	618	814	1177	1286
Klamath.....	427	561	692	998	1207	Lake.....	411	537	637	793	1128
Lincoln.....	563	601	751	1107	1110	Linn.....	480	556	752	1095	1201
Malheur.....	439	489	637	898	958	Morrow.....	411	471	637	813	986
Sherman.....	411	537	637	838	1072	Tillamook.....	481	607	759	1050	1340
Umatilla.....	418	526	702	923	1243	Union.....	385	478	647	885	1117
Wallowa.....	411	510	637	793	898	Wasco.....	524	577	730	1069	1187
Wheeler.....	411	471	637	793	1072						

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PENNSYLVANIA

METROPOLITAN FMR AREAS	0 BR	1 BR	2 BR	3 BR	4 BR	Counties of FMR AREA within STATE
Allentown-Bethlehem-Easton, PA HMFA.....	672	771	974	1219	1382	Carbon, Lehigh, Northampton
Altoona, PA MSA.....	536	571	684	900	1004	Blair
Armstrong County, PA HMFA.....	379	471	637	805	876	Armstrong
Erie, PA MSA.....	433	528	666	832	994	Erie
Harrisburg-Carlisle, PA MSA.....	594	662	845	1090	1129	Cumberland, Dauphin, Perry
Johnstown, PA MSA.....	459	537	637	845	851	Cambria
Lancaster, PA MSA.....	616	703	898	1157	1200	Lancaster
Lebanon, PA MSA.....	424	554	713	916	1012	Lebanon
*Philadelphia-Camden-Wilmington, PA-NJ-DE-MD MSA..	799	942	1135	1414	1518	Bucks, Chester, Delaware, Montgomery, Philadelphia
Pike County, PA HMFA.....	908	913	1161	1460	1849	Pike
Pittsburgh, PA HMFA.....	551	633	789	991	1054	Allegheny, Beaver, Butler, Fayette, Washington, Westmoreland
Reading, PA MSA.....	523	649	859	1070	1148	Berks
Scranton--Wilkes-Barre, PA MSA.....	468	557	694	881	989	Lackawanna, Luzerne, Wyoming
Sharon, PA HMFA.....	461	498	641	809	857	Mercer
State College, PA MSA.....	679	743	914	1197	1242	Centre
Williamsport, PA MSA.....	459	517	655	867	888	Lycoming
York-Hanover, PA MSA.....	497	630	836	1080	1153	York

NONMETROPOLITAN COUNTIES	0 BR	1 BR	2 BR	3 BR	4 BR	NONMETROPOLITAN COUNTIES	0 BR	1 BR	2 BR	3 BR	4 BR
Adams.....	636	640	827	1099	1201	Bedford.....	515	530	637	825	851
Bradford.....	475	481	637	854	858	Cameron.....	463	537	637	922	1128
Clarion.....	463	537	637	795	1012	Clearfield.....	450	495	637	853	856
Clinton.....	532	535	724	940	1175	Columbia.....	522	525	667	858	1157
Crawford.....	467	520	643	851	932	Elk.....	463	514	637	793	851
Forest.....	561	586	695	1024	1231	Franklin.....	499	580	746	992	1245
Fulton.....	463	537	637	797	851	Greene.....	463	521	637	793	851
Huntingdon.....	510	531	637	908	912	Indiana.....	553	578	685	922	925
Jefferson.....	381	523	637	793	876	Juniata.....	414	527	637	905	908
Lawrence.....	406	548	683	888	913	McKean.....	460	510	637	806	851
Mifflin.....	493	496	637	800	851	Monroe.....	562	666	871	1209	1327
Montour.....	503	584	692	916	925	Northumberland.....	515	525	637	835	949
Potter.....	463	537	637	827	991	Schuylkill.....	379	489	637	874	880
Snyder.....	521	544	645	832	862	Somerset.....	446	524	637	793	897
Sullivan.....	510	513	637	880	883	Susquehanna.....	547	571	677	887	1035
Tioga.....	386	546	647	806	984	Union.....	504	519	693	950	1089
Venango.....	476	480	642	800	858	Warren.....	515	529	637	800	934
Wayne.....	437	598	709	1045	1048						

RHODE ISLAND

METROPOLITAN FMR AREAS	0 BR	1 BR	2 BR	3 BR	4 BR	Components of FMR AREA within STATE
Newport-Middleton-Portsmouth, RI HMFA.....	895	901	1119	1649	1982	Newport County towns of Middletown town, Newport city, Portsmouth town
Providence-Fall River, RI-MA HMFA.....	663	748	913	1137	1361	Bristol County towns of Barrington town, Bristol town, Warren town

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RHODE ISLAND continued

METROPOLITAN FMR AREAS

0 BR 1 BR 2 BR 3 BR 4 BR Components of FMR AREA within STATE

Kent County towns of Coventry town, East Greenwich town,
Warwick city, West Greenwich town, West Warwick town
Newport County towns of Jamestown town, Little Compton town,
Tiverton town
Providence County towns of Burrillville town,
Central Falls city, Cranston city, Cumberland town,
East Providence city, Foster town, Glocester town,
Johnston town, Lincoln town, North Providence town,
North Smithfield town, Pawtucket city, Providence city,
Scituate town, Smithfield town, Woonsocket city
Washington County towns of Charlestown town, Exeter town,
Narragansett town, North Kingstown town, Richmond town,
South Kingstown town
Washington County towns of Hopkinton town, New Shoreham town,
Westerly town

Westerly-Hopkinton-New Shoreham, RI HMFA..... 571 710 960 1208 1511

SOUTH CAROLINA

METROPOLITAN FMR AREAS

0 BR 1 BR 2 BR 3 BR 4 BR Counties of FMR AREA within STATE

Anderson, SC MSA..... 527 535 652 893 923 Anderson
Augusta-Richmond County, GA-SC MSA..... 543 612 730 993 1229 Aiken, Edgefield
Charleston-North Charleston-Summerville, SC MSA... 724 754 896 1160 1539 Berkeley, Charleston, Dorchester
Charlotte-Gastonia-Rock Hill, NC-SC HMFA..... 622 686 813 1096 1359 York
Columbia, SC HMFA..... 617 669 793 1046 1326 Calhoun, Fairfield, Lexington, Richland, Saluda
Darlington County, SC HMFA..... 523 547 657 818 991 Darlington
Florence, SC HMFA..... 518 523 650 810 869 Florence
Greenville-Mauldin-Easley, SC MSA..... 492 620 735 975 1154 Greenville, Pickens
Kershaw County, SC HMFA..... 498 539 640 856 1086 Kershaw
Laurens County, SC HMFA..... 377 499 634 816 910 Laurens
Myrtle Beach-North Myrtle Beach-Conway, SC MSA... 643 648 805 1003 1177 Horry
Spartanburg, SC MSA..... 429 572 678 906 1018 Spartanburg
Sumter, SC MSA..... 596 599 769 958 1188 Sumter

NONMETROPOLITAN COUNTIES

0 BR 1 BR 2 BR 3 BR 4 BR

Abbeville..... 472 475 634 861 1123
Bamberg..... 465 469 634 790 1123
Beaufort..... 613 745 883 1120 1352
Chester..... 512 535 634 827 972
Clarendon..... 465 469 634 790 1064

Dillon..... 465 469 634 905 908
Greenwood..... 485 488 634 837 875
Jasper..... 471 543 734 981 1071
Lee..... 512 535 634 934 1123
Marion..... 512 535 634 797 933

Newberry..... 518 521 705 908 1227
Orangeburg..... 408 534 674 839 1139

NONMETROPOLITAN COUNTIES

0 BR 1 BR 2 BR 3 BR 4 BR

Allendale..... 507 510 635 791 1125
Barnwell..... 465 469 634 894 897
Cherokee..... 512 535 634 858 1123
Chesterfield..... 512 535 634 836 1044
Colleton..... 558 562 708 906 946

Georgetown..... 530 534 722 958 1207
Hampton..... 465 469 634 798 847
Lancaster..... 511 514 649 893 956
McCormick..... 495 498 634 934 937
Marlboro..... 465 469 634 790 855

Oconee..... 498 501 634 790 991
Union..... 471 474 641 847 857

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SOUTH CAROLINA continued

NONMETROPOLITAN COUNTIES	0 BR	1 BR	2 BR	3 BR	4 BR
Williamsburg.....	377	535	634	814	884

SOUTH DAKOTA

METROPOLITAN FMR AREAS	0 BR	1 BR	2 BR	3 BR	4 BR	Counties of FMR AREA within STATE
Meade County, SD HMFA.....	415	529	655	923	927	Meade
Rapid City, SD HMFA.....	491	581	776	1048	1374	Pennington
Sioux City, IA-NE-SD MSA.....	414	541	696	914	1027	Union
Sioux Falls, SD MSA.....	514	604	760	1069	1258	Lincoln, McCook, Minnehaha, Turner

NONMETROPOLITAN COUNTIES	0 BR	1 BR	2 BR	3 BR	4 BR	NONMETROPOLITAN COUNTIES	0 BR	1 BR	2 BR	3 BR	4 BR
Aurora.....	473	479	648	885	888	Beadle.....	434	439	594	798	801
Bennett.....	434	501	594	875	972	Bon Homme.....	434	479	594	833	908
Brookings.....	396	461	624	920	1105	Brown.....	406	460	623	793	1103
Brule.....	434	501	594	820	823	Buffalo.....	506	511	692	862	925
Butte.....	434	486	594	875	878	Campbell.....	434	464	594	820	823
Charles Mix.....	434	501	594	771	794	Clark.....	434	439	594	740	794
Clay.....	475	506	650	958	1151	Codington.....	379	459	596	768	796
Corson.....	434	440	594	846	849	Custer.....	515	521	705	878	1168
Davison.....	442	475	642	845	858	Day.....	434	439	594	875	878
Deuel.....	434	501	594	859	862	Dewey.....	434	439	594	826	837
Douglas.....	434	439	594	740	794	Edmunds.....	479	485	656	967	970
Fall River.....	541	548	741	1016	1020	Faulk.....	434	501	594	820	823
Grant.....	434	467	594	822	1020	Gregory.....	434	501	594	875	878
Haakon.....	434	440	594	875	878	Hamlin.....	471	474	594	875	878
Hand.....	434	451	594	866	869	Hanson.....	438	444	600	747	802
Harding.....	434	440	594	820	823	Hughes.....	468	473	640	943	1134
Hutchinson.....	434	496	594	794	1052	Hyde.....	434	440	594	875	878
Jackson.....	434	501	594	875	878	Jerauld.....	434	466	594	875	878
Jones.....	434	440	594	875	878	Kingsbury.....	434	457	594	875	954
Lake.....	434	501	594	875	878	Lawrence.....	415	482	608	866	869
Lyman.....	434	480	594	875	1052	McPherson.....	434	439	594	820	823
Marshall.....	434	439	594	875	878	Mellette.....	434	440	594	875	878
Miner.....	434	501	594	820	823	Moody.....	434	439	594	873	876
Perkins.....	468	473	640	797	855	Potter.....	434	501	594	740	794
Roberts.....	434	497	594	829	832	Sanborn.....	434	501	594	875	957
Shannon.....	434	483	594	790	817	Spink.....	480	501	594	875	878
Stanley.....	515	522	705	1039	1088	Sully.....	498	505	682	849	911
Todd.....	434	440	594	740	794	Tripp.....	434	439	594	805	808
Walworth.....	434	501	594	875	878	Yankton.....	424	439	594	829	990
Ziebach.....	434	462	594	868	986						

TENNESSEE

METROPOLITAN FMR AREAS

	0 BR	1 BR	2 BR	3 BR	4 BR	Counties of FMR AREA within STATE
Chattanooga, TN-GA MSA.....	452	546	679	923	1041	Hamilton, Marion, Sequatchie
Clarksville, TN-KY HMFA.....	516	588	767	1016	1102	Montgomery
Cleveland, TN MSA.....	446	480	649	835	1075	Bradley, Polk
Hickman County, TN HMFA.....	458	467	632	931	1095	Hickman
Jackson, TN MSA.....	408	537	685	913	997	Chester, Madison
Johnson City, TN MSA.....	433	514	646	883	1108	Carter, Unicoi, Washington
Kingsport-Bristol-Bristol, TN-VA MSA.....	432	480	617	807	913	Hawkins, Sullivan
Knoxville, TN MSA.....	492	628	774	1034	1162	Anderson, Blount, Knox, Loudon, Union
Macon County, TN HMFA.....	408	416	563	701	752	Macon
Memphis, TN-MS-AR HMFA.....	576	658	780	1066	1188	Fayette, Shelby, Tipton
Morristown, TN MSA.....	439	485	637	854	998	Grainger, Hamblen, Jefferson
Nashville-Davidson--Murfreesboro--Franklin, TN MSA	616	711	851	1131	1214	Cannon, Cheatham, Davidson, Dickson, Robertson, Rutherford, Sumner, Trousdale, Williamson, Wilson
Smith County, TN HMFA.....	406	426	573	777	799	Smith
Stewart County, TN HMFA.....	379	433	563	773	809	Stewart

NONMETROPOLITAN COUNTIES

	0 BR	1 BR	2 BR	3 BR	4 BR	NONMETROPOLITAN COUNTIES	0 BR	1 BR	2 BR	3 BR	4 BR
Bedford.....	419	520	616	868	1028	Benton.....	383	416	563	830	997
Bledsoe.....	383	430	563	701	796	Campbell.....	383	451	563	739	997
Carroll.....	383	416	563	701	861	Claiborne.....	348	470	563	701	997
Clay.....	383	416	563	830	834	Cocke.....	383	462	563	814	817
Coffee.....	384	464	615	844	899	Crockett.....	396	491	582	735	895
Cumberland.....	400	492	588	736	786	Decatur.....	383	475	563	733	939
DeKalb.....	383	416	563	822	825	Dyer.....	424	426	577	778	781
Fentress.....	383	416	563	717	785	Franklin.....	396	431	583	779	782
Gibson.....	451	454	563	771	774	Giles.....	421	522	619	888	891
Greene.....	397	487	584	776	787	Grundy.....	383	433	563	830	832
Hancock.....	383	423	563	773	997	Hardeman.....	383	475	563	708	924
Hardin.....	383	416	563	705	997	Haywood.....	380	538	638	795	853
Henderson.....	384	418	565	704	755	Henry.....	394	488	579	721	1025
Houston.....	335	416	563	710	752	Humphreys.....	383	475	563	737	752
Jackson.....	383	416	563	830	832	Johnson.....	383	416	563	701	752
Lake.....	440	442	563	830	906	Lauderdale.....	383	416	563	798	988
Lawrence.....	383	435	563	701	777	Lewis.....	383	475	563	830	997
Lincoln.....	383	430	563	701	946	McMinn.....	348	487	585	770	880
McNairy.....	358	416	563	701	757	Marshall.....	442	481	651	829	881
Maury.....	462	465	618	830	948	Meigs.....	383	430	563	830	832
Monroe.....	383	427	563	753	796	Moore.....	408	459	601	805	850
Morgan.....	383	444	563	701	863	Obion.....	368	416	563	702	752
Overton.....	383	419	563	830	997	Perry.....	383	475	563	701	796
Pickett.....	383	430	563	701	796	Putnam.....	406	458	598	855	939
Rhea.....	455	459	563	753	775	Roane.....	413	449	608	829	833
Scott.....	398	475	563	791	997	Sevier.....	491	541	723	900	1160
Van Buren.....	383	430	563	701	796	Warren.....	383	416	563	812	997

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TENNESSEE continued

NONMETROPOLITAN COUNTIES	0 BR	1 BR	2 BR	3 BR	4 BR	NONMETROPOLITAN COUNTIES	0 BR	1 BR	2 BR	3 BR	4 BR
Wayne.....	383	416	563	821	997	Weakley.....	421	445	563	786	790
White.....	404	439	594	771	794						

TEXAS

METROPOLITAN FMR AREAS	0 BR	1 BR	2 BR	3 BR	4 BR	Counties of FMR AREA within STATE					
Abilene, TX MSA.....	510	586	790	1000	1276	Callahan, Jones, Taylor					
Amarillo, TX MSA.....	474	560	736	1004	1051	Armstrong, Carson, Potter, Randall					
Aransas County, TX HMFA.....	435	519	702	1034	1093	Aransas					
Atascosa County, TX HMFA.....	410	526	689	922	1049	Atascosa					
Austin County, TX HMFA.....	471	533	700	1031	1181	Austin					
*Austin-Round Rock-San Marcos, TX MSA.....	696	853	1074	1454	1762	Bastrop, Caldwell, Hays, Travis, Williamson					
Beaumont-Port Arthur, TX MSA.....	518	650	806	1056	1077	Hardin, Jefferson, Orange					
Brazoria County, TX HMFA.....	640	644	828	1141	1408	Brazoria					
Brownsville-Harlingen, TX MSA.....	459	542	676	885	984	Cameron					
Calhoun County, TX HMFA.....	522	525	710	887	1114	Calhoun					
College Station-Bryan, TX MSA.....	699	704	868	1255	1505	Brazos, Burleson, Robertson					
Corpus Christi, TX HMFA.....	546	654	839	1111	1307	Nueces, San Patricio					
Dallas, TX HMFA.....	602	722	913	1218	1471	Collin, Dallas, Delta, Denton, Ellis, Hunt, Kaufman, Rockwall					
El Paso, TX MSA.....	553	605	747	1059	1270	El Paso					
*Fort Worth-Arlington, TX HMFA.....	620	725	938	1258	1498	Johnson, Parker, Tarrant					
*Houston-Baytown-Sugar Land, TX HMFA.....	623	750	926	1264	1563	Chambers, Fort Bend, Galveston, Harris, Liberty, Montgomery, San Jacinto, Waller					
Kendall County, TX HMFA.....	533	712	844	1244	1495	Kendall					
Killeen-Temple-Fort Hood, TX HMFA.....	537	551	734	1082	1227	Bell, Coryell					
Lampasas County, TX HMFA.....	466	537	637	939	1049	Lampasas					
Laredo, TX MSA.....	573	618	777	1021	1057	Webb					
Longview, TX HMFA.....	645	650	798	994	1277	Gregg, Upshur					
Lubbock, TX MSA.....	505	589	774	1130	1301	Crosby, Lubbock					
McAllen-Edinburg-Mission, TX MSA.....	444	503	655	816	996	Hidalgo					
Medina County, TX HMFA.....	460	512	693	916	991	Medina					
Midland, TX MSA.....	556	717	935	1164	1292	Midland					
Odessa, TX MSA.....	665	771	992	1263	1326	Ector					
Rusk County, TX HMFA.....	502	506	682	902	1090	Rusk					
San Angelo, TX MSA.....	469	547	730	1013	1085	Irion, Tom Green					
San Antonio-New Braunfels, TX HMFA.....	542	683	857	1117	1226	Bandera, Bexar, Comal, Guadalupe, Wilson					
Sherman-Denison, TX MSA.....	497	623	806	1085	1381	Grayson					
Texarkana, TX-Texarkana, AR MSA.....	441	573	704	877	941	Bowie					
Tyler, TX MSA.....	628	738	875	1161	1169	Smith					
Victoria, TX HMFA.....	542	578	731	910	1166	Goliad, Victoria					
Waco, TX MSA.....	475	558	755	989	1106	McLennan					
Wichita Falls, TX MSA.....	424	570	712	1009	1155	Archer, Clay, Wichita					
Wise County, TX HMFA.....	473	588	795	990	1062	Wise					
NONMETROPOLITAN COUNTIES						NONMETROPOLITAN COUNTIES					
Anderson.....	474	565	670	875	1187	Andrews.....	451	493	637	939	942
Angelina.....	539	589	713	933	1050	Bailey.....	463	508	654	815	949
Baylor.....	451	471	637	793	924	Bee.....	534	547	661	974	1071

TEXAS continued

NONMETROPOLITAN COUNTIES						NONMETROPOLITAN COUNTIES					
	0 BR	1 BR	2 BR	3 BR	4 BR		0 BR	1 BR	2 BR	3 BR	4 BR
Blanco.....	570	595	805	1003	1076	Borden.....	462	507	653	813	947
Bosque.....	451	491	637	935	1053	Brewster.....	545	549	743	925	1078
Briscoe.....	451	495	637	849	924	Brooks.....	451	537	637	939	942
Brown.....	398	494	669	858	1185	Burnet.....	483	504	682	1005	1208
Camp.....	451	537	637	824	939	Cass.....	451	499	637	877	1128
Castro.....	451	537	637	793	919	Cherokee.....	451	530	637	828	890
Childress.....	470	560	664	827	963	Cochran.....	451	471	637	939	942
Coke.....	379	471	637	793	924	Coleman.....	451	471	637	939	1128
Collingsworth.....	451	495	637	939	942	Colorado.....	417	471	637	914	1127
Comanche.....	451	471	637	793	924	Concho.....	720	752	1017	1267	1475
Cooke.....	576	601	813	1062	1086	Cottle.....	451	518	637	939	942
Crane.....	528	580	746	929	1082	Crockett.....	451	471	637	939	942
Culberson.....	451	495	637	912	924	Dallam.....	451	537	637	930	934
Dawson.....	451	531	637	939	942	Deaf Smith.....	452	472	638	889	892
DeWitt.....	468	471	637	793	924	Dickens.....	451	495	637	793	924
Dimmit.....	451	537	637	793	851	Donley.....	451	471	637	793	924
Duval.....	501	597	708	882	1027	Eastland.....	468	471	637	793	1121
Edwards.....	451	495	637	793	924	Erath.....	525	528	694	932	935
Falls.....	438	481	651	899	902	Fannin.....	388	482	652	896	1056
Fayette.....	467	488	660	833	882	Fisher.....	451	471	637	939	942
Floyd.....	451	537	637	939	1098	Foard.....	451	495	637	939	942
Franklin.....	451	471	637	939	1128	Freestone.....	467	580	785	978	1139
Frio.....	451	537	637	939	1128	Gaines.....	452	472	639	898	956
Garza.....	451	537	637	939	942	Gillespie.....	619	647	875	1090	1550
Glasscock.....	462	507	653	813	947	Gonzales.....	468	471	637	939	945
Gray.....	451	497	637	799	1011	Grimes.....	451	509	637	849	924
Hale.....	465	500	637	867	1057	Hall.....	425	495	637	939	942
Hamilton.....	451	471	637	939	942	Hansford.....	451	537	637	842	947
Hardeman.....	457	501	645	803	936	Harrison.....	401	511	637	836	851
Hartley.....	451	471	637	884	924	Haskell.....	451	495	637	939	942
Hemphill.....	496	578	701	873	1017	Henderson.....	554	560	686	899	1109
Hill.....	496	517	700	950	1010	Hockley.....	503	527	711	886	950
Hood.....	627	631	854	1143	1209	Hopkins.....	518	521	705	905	1138
Houston.....	390	484	655	936	939	Howard.....	389	483	654	847	971
Hudspeth.....	451	495	637	939	942	Hutchinson.....	503	559	710	901	949
Jack.....	472	562	666	829	1180	Jackson.....	447	591	752	1019	1332
Jasper.....	515	565	727	905	972	Jeff Davis.....	451	537	637	849	924
Jim Hogg.....	451	537	637	808	924	Jim Wells.....	538	584	760	947	1016
Karnes.....	515	537	637	939	1128	Kenedy.....	529	580	747	996	1084
Kent.....	536	588	757	943	1098	Kerr.....	619	623	788	1114	1118
Kimble.....	477	498	674	839	901	King.....	462	507	653	813	947
Kinney.....	451	488	637	939	942	Kleberg.....	517	520	704	966	1247

SCHEDULE B - FY 2014 Final FAIR MARKET RENTS FOR EXISTING HOUSING

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TEXAS continued

NONMETROPOLITAN COUNTIES						NONMETROPOLITAN COUNTIES					
	0 BR	1 BR	2 BR	3 BR	4 BR		0 BR	1 BR	2 BR	3 BR	4 BR
Knox.....	451	495	637	793	851	Lamar.....	451	537	637	928	1104
Lamb.....	451	537	637	851	1026	La Salle.....	451	471	637	939	942
Lavaca.....	404	471	637	914	924	Lee.....	451	537	637	939	942
Leon.....	462	495	652	848	1018	Limestone.....	533	567	753	1060	1070
Lipscomb.....	451	471	637	793	851	Live Oak.....	451	537	637	793	851
Llano.....	451	471	637	939	942	Loving.....	462	507	653	871	947
Lynn.....	451	537	637	939	942	McCulloch.....	451	471	637	926	930
McMullen.....	462	507	653	962	966	Madison.....	451	537	637	939	942
Marion.....	451	471	637	793	924	Martin.....	451	537	637	793	924
Mason.....	451	495	637	939	942	Matagorda.....	427	530	717	972	1270
Maverick.....	422	537	637	906	924	Menard.....	451	475	637	864	924
Milam.....	451	502	637	939	1128	Mills.....	451	496	637	939	1128
Mitchell.....	451	537	637	916	1128	Montague.....	469	489	662	932	935
Moore.....	550	554	683	851	1133	Morris.....	451	478	637	913	924
Motley.....	451	495	637	793	924	Nacogdoches.....	551	571	716	892	957
Navarro.....	555	558	732	918	983	Newton.....	451	528	637	793	851
Nolan.....	451	537	637	939	1128	Ochiltree.....	456	543	644	907	934
Oldham.....	484	576	683	1006	1210	Palo Pinto.....	467	531	719	963	1010
Panola.....	451	471	637	813	1128	Parmer.....	451	537	637	835	1078
Pecos.....	464	533	646	854	1144	Polk.....	463	474	637	933	1074
Presidio.....	451	537	637	939	942	Rains.....	451	471	637	939	942
Reagan.....	451	517	637	794	924	Real.....	451	471	637	939	942
Red River.....	451	471	637	834	1128	Reeves.....	451	506	637	939	1128
Refugio.....	460	480	650	930	943	Roberts.....	462	507	653	813	947
Runnels.....	451	537	637	939	1128	Sabine.....	451	537	637	939	942
San Augustine.....	468	471	637	793	1100	San Saba.....	451	471	637	866	1128
Schleicher.....	451	471	637	793	924	Scurry.....	468	471	637	939	942
Shackelford.....	451	495	637	939	942	Shelby.....	451	471	637	793	924
Sherman.....	451	537	637	880	924	Somervell.....	451	537	637	939	1128
Starr.....	451	471	637	793	1016	Stephens.....	469	489	662	865	960
Sterling.....	491	585	694	995	1007	Stonewall.....	451	506	637	931	934
Sutton.....	451	519	637	815	924	Swisher.....	451	471	637	856	924
Terrell.....	451	537	637	849	924	Terry.....	451	486	637	816	924
Throckmorton.....	451	495	637	939	942	Titus.....	379	498	637	798	917
Trinity.....	451	531	637	939	1128	Tyler.....	451	493	637	939	942
Upton.....	451	537	637	864	924	Uvalde.....	487	537	637	875	924
Val Verde.....	461	471	637	923	926	Van Zandt.....	513	535	724	937	968
Walker.....	493	602	714	970	973	Ward.....	451	537	637	793	851
Washington.....	519	612	732	931	978	Wharton.....	419	520	704	930	941
Wheeler.....	451	537	637	915	924	Wilbarger.....	475	496	671	912	973
Willacy.....	455	475	643	853	1139	Winkler.....	451	471	637	939	942
Wood.....	487	490	663	891	1130	Yoakum.....	462	507	653	884	947

SCHEDULE B - FY 2014 Final FAIR MARKET RENTS FOR EXISTING HOUSING

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TEXAS continued

NONMETROPOLITAN COUNTIES	0 BR	1 BR	2 BR	3 BR	4 BR	NONMETROPOLITAN COUNTIES	0 BR	1 BR	2 BR	3 BR	4 BR
Young.....	436	542	733	940	980	Zapata.....	451	471	637	793	924
Zavala.....	451	537	637	939	942						

UTAH

METROPOLITAN FMR AREAS	0 BR	1 BR	2 BR	3 BR	4 BR	Counties of FMR AREA within STATE	0 BR	1 BR	2 BR	3 BR	4 BR
Logan, UT-ID MSA.....	478	481	637	917	1118	Cache					
Ogden-Clearfield, UT MSA.....	481	589	772	1089	1307	Davis, Morgan, Weber					
Provo-Orem, UT MSA.....	477	610	729	1054	1291	Juab, Utah					
Salt Lake City, UT HMFA.....	589	707	876	1249	1471	Salt Lake					
St. George, UT MSA.....	499	573	753	1033	1327	Washington					
Summit County, UT HMFA.....	615	676	914	1268	1272	Summit					
Tooele County, UT HMFA.....	545	575	767	990	1257	Tooele					
NONMETROPOLITAN COUNTIES	0 BR	1 BR	2 BR	3 BR	4 BR	NONMETROPOLITAN COUNTIES	0 BR	1 BR	2 BR	3 BR	4 BR
Beaver.....	474	526	624	863	866	Box Elder.....	473	525	623	918	1103
Carbon.....	472	475	623	776	882	Daggett.....	586	651	772	961	1205
Duchesne.....	510	567	672	990	1190	Emery.....	473	525	623	776	935
Garfield.....	484	488	655	816	948	Grand.....	532	590	700	1031	1035
Iron.....	421	525	623	878	1103	Kane.....	600	666	790	1164	1168
Millard.....	473	525	623	918	1079	Piute.....	591	657	779	970	1216
Rich.....	598	664	787	980	1229	San Juan.....	473	525	623	841	844
Sanpete.....	481	484	637	793	851	Sevier.....	473	525	623	805	963
Uintah.....	667	671	908	1227	1421	Wasatch.....	639	709	841	1239	1243
Wayne.....	473	525	623	885	999						

VERMONT

METROPOLITAN FMR AREAS	0 BR	1 BR	2 BR	3 BR	4 BR	Components of FMR AREA within STATE
Burlington-South Burlington, VT MSA.....	923	1003	1309	1639	1925	Chittenden County towns of Bolton town, Buels gore, Burlington city, Charlotte town, Colchester town, Essex town, Hinesburg town, Huntington town, Jericho town, Milton town, Richmond town, St. George town, Shelburne town, South Burlington city, Underhill town, Westford town, Williston town, Winooski city Franklin County towns of Bakersfield town, Berkshire town, Enosburg town, Fairfax town, Fairfield town, Fletcher town, Franklin town, Georgia town, Highgate town, Montgomery town, Richford town, St. Albans city, St. Albans town, Sheldon town, Swanton town Grand Isle County towns of Alburg town, Grand Isle town, Isle La Motte town, North Hero town, South Hero town

VERMONT continued

NONMETROPOLITAN COUNTIES	0 BR	1 BR	2 BR	3 BR	4 BR	Towns within nonmetropolitan counties
Addison County, VT.....	674	734	870	1206	1458	Addison town, Bridport town, Bristol town, Cornwall town, Ferrisburgh town, Goshen town, Granville town, Hancock town, Leicester town, Lincoln town, Middlebury town, Monkton town, New Haven town, Orwell town, Panton town, Ripton town, Salisbury town, Shoreham town, Starksboro town, Vergennes city, Waltham town, Weybridge town, Whiting town
Bennington County, VT.....	516	666	836	1056	1177	Arlington town, Bennington town, Dorset town, Glastenbury town, Landgrove town, Manchester town, Peru town, Pownal town, Readsboro town, Rupert town, Sandgate town, Searsburg town, Shaftsbury town, Stamford town, Sunderland town, Winhall town, Woodford town
Caledonia County, VT.....	541	572	678	844	1033	Barnet town, Burke town, Danville town, Groton town, Hardwick town, Kirby town, Lyndon town, Newark town, Peacham town, Ryegate town, St. Johnsbury town, Sheffield town, Stannard town, Sutton town, Walden town, Waterford town, Wheelock town
Essex County, VT.....	516	568	674	839	1079	Averill town, Avery's gore, Bloomfield town, Brighton town, Brunswick town, Canaan town, Concord town, East Haven town, Ferdinand town, Granby town, Guildhall town, Lemington town, Lewis town, Lunenburg town, Maidstone town, Norton town, Victory town, Warner's grant, Warren's gore
Lamoille County, VT.....	625	756	942	1369	1658	Belvidere town, Cambridge town, Eden town, Elmore town, Hyde Park town, Johnson town, Morristown town, Stowe town, Waterville town, Wolcott town
Orange County, VT.....	484	680	814	1014	1442	Bradford town, Braintree town, Brookfield town, Chelsea town, Corinth town, Fairlee town, Newbury town, Orange town, Randolph town, Strafford town, Thetford town, Topsham town, Tunbridge town, Vershire town, Washington town, West Fairlee town, Williamstown town
Orleans County, VT.....	571	591	707	885	959	Albany town, Barton town, Brownington town, Charleston town, Coventry town, Craftsbury town, Derby town, Glover town, Greensboro town, Holland town, Irasburg town, Jay town, Lowell town, Morgan town, Newport city, Newport town, Troy town, Westfield town, Westmore town
Rutland County, VT.....	590	651	825	1027	1253	Benson town, Brandon town, Castleton town, Chittenden town, Clarendon town, Danby town, Fair Haven town, Hubbardton town, Ira town, Killington town, Mendon town, Middletown Springs town, Mount Holly town, Mount Tabor town, Pawlet town, Pittsfield town, Pittsford town, Poultney town, Proctor town, Rutland city, Rutland town, Shrewsbury town, Sudbury town, Tinmouth town, Wallingford town, Wells town, West Haven town, West Rutland town
Washington County, VT.....	722	726	900	1142	1428	Barre city, Barre town, Berlin town, Cabot town, Calais town, Duxbury town, East Montpelier town, Fayston town, Marshfield town, Middlesex town, Montpelier city, Moretown town, Northfield town, Plainfield town, Roxbury town, Waitsfield town, Warren town, Waterbury town, Woodbury town, Worcester town
Windham County, VT.....	575	647	832	1053	1325	Athens town, Brattleboro town, Brookline town, Dover town,

VERMONT continued

NONMETROPOLITAN COUNTIES

	0 BR	1 BR	2 BR	3 BR	4 BR	Towns within nonmetropolitan counties
Windsor County, VT.....	677	682	885	1121	1231	Dummerston town, Grafton town, Guilford town, Halifax town, Jamaica town, Londonderry town, Marlboro town, Newfane town, Putney town, Rockingham town, Somerset town, Stratton town, Townshend town, Vernon town, Wardsboro town, Westminster town, Whitingham town, Wilmington town, Windham town Andover town, Baltimore town, Barnard town, Bethel town, Bridgewater town, Cavendish town, Chester town, Hartford town, Hartland town, Ludlow town, Norwich town, Plymouth town, Pomfret town, Reading town, Rochester town, Royalton town, Sharon town, Springfield town, Stockbridge town, Weathersfield town, Weston town, West Windsor town, Windsor town, Woodstock town

VIRGINIA

METROPOLITAN FMR AREAS

	0 BR	1 BR	2 BR	3 BR	4 BR	Counties of FMR AREA within STATE
Blacksburg-Christiansburg-Radford, VA HMFA.....	514	604	716	1002	1268	Montgomery, Radford city
Charlottesville, VA MSA.....	643	850	1008	1283	1455	Albemarle, Fluvanna, Greene, Nelson, Charlottesville city
Danville, VA MSA.....	395	502	617	874	877	Pittsylvania, Danville city
Franklin County, VA HMFA.....	427	488	617	788	936	Franklin
Giles County, VA HMFA.....	471	520	617	899	1021	Giles
Harrisonburg, VA MSA.....	564	568	740	940	1311	Rockingham, Harrisonburg city
Kingsport-Bristol-Bristol, TN-VA MSA.....	432	480	617	807	913	Scott, Washington, Bristol city
Louisa County, VA HMFA.....	575	605	717	1057	1060	Louisa
Lynchburg, VA MSA.....	492	538	657	841	969	Amherst, Appomattox, Bedford, Campbell, Bedford city, Lynchburg city
Pulaski County, VA HMFA.....	498	520	617	787	974	Pulaski
*Richmond, VA HMFA.....	790	830	984	1294	1568	Amelia, Caroline, Charles, Chesterfield, Cumberland, Dinwiddie, Goochland, Hanover, Henrico, King and Queen, King William, New Kent, Powhatan, Prince George, Sussex, Colonial Heights city, Hopewell city, Petersburg city, Richmond city
Roanoke, VA HMFA.....	498	578	720	943	1069	Botetourt, Craig, Roanoke, Roanoke city, Salem city
*Virginia Beach-Norfolk-Newport News, VA-NC MSA...	913	939	1130	1562	1966	Gloucester, Isle of Wight, James, Mathews, Surry, York, Chesapeake city, Hampton city, Newport News city, Norfolk city, Poquoson city, Portsmouth city, Suffolk city, Virginia Beach city, Williamsburg city
Warren County, VA HMFA.....	682	687	914	1297	1302	Warren
Washington-Arlington-Alexandria, DC-VA-MD HMFA....	1176	1239	1469	1966	2470	Arlington, Clarke, Fairfax, Fauquier, Loudoun, Prince William, Spotsylvania, Stafford, Alexandria city, Fairfax city, Falls Church city, Fredericksburg city, Manassas city, Manassas Park city
Winchester, VA-WV MSA.....	569	621	804	1093	1365	Frederick, Winchester city

SCHEDULE B - FY 2014 Final FAIR MARKET RENTS FOR EXISTING HOUSING

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VIRGINIA continued

NONMETROPOLITAN COUNTIES	0 BR	1 BR	2 BR	3 BR	4 BR	NONMETROPOLITAN COUNTIES	0 BR	1 BR	2 BR	3 BR	4 BR
Accomack.....	593	619	734	914	1167	Alleghany.....	498	502	617	909	991
Augusta.....	461	569	719	948	1258	Bath.....	498	520	617	795	991
Bland.....	498	520	617	768	991	Brunswick.....	453	456	617	768	1093
Buchanan.....	498	520	617	768	825	Buckingham.....	523	546	647	953	1146
Carroll.....	498	520	617	835	1047	Charlotte.....	479	482	617	835	838
Culpeper.....	490	642	824	1214	1459	Dickenson.....	453	456	617	768	825
Essex.....	607	702	832	1036	1336	Floyd.....	453	456	617	768	991
Grayson.....	498	520	617	814	1093	Greensville.....	498	520	617	909	912
Halifax.....	478	481	617	787	825	Henry.....	431	518	617	793	913
Highland.....	498	520	617	909	912	King George.....	708	713	964	1272	1504
Lancaster.....	589	593	802	999	1288	Lee.....	498	508	617	768	991
Lunenburg.....	453	456	617	768	825	Madison.....	553	577	684	1008	1011
Mecklenburg.....	498	520	617	815	890	Middlesex.....	508	531	629	927	1114
Northampton.....	520	523	708	882	1192	Northumberland.....	504	508	658	970	973
Nottoway.....	578	604	716	985	988	Orange.....	607	611	827	1081	1465
Page.....	527	540	652	812	871	Patrick.....	498	520	617	790	991
Prince Edward.....	530	533	705	908	942	Rappahannock.....	800	835	990	1453	1590
Richmond.....	528	531	719	1059	1153	Rockbridge.....	469	538	638	795	1114
Russell.....	498	520	617	848	991	Shenandoah.....	431	593	714	972	1232
Smyth.....	498	520	617	769	945	Southampton.....	563	567	748	932	1000
Tazewell.....	498	520	617	780	878	Westmoreland.....	556	560	709	904	1139
Wise.....	498	520	617	768	976	Wythe.....	466	469	617	793	1093
Buena Vista city.....	469	538	638	795	1114	Clifton Forge city.....	498	502	617	909	991
Covington city.....	498	502	617	909	991	Emporia city.....	498	520	617	909	912
Franklin city.....	563	567	748	932	1000	Galax city.....	498	520	617	835	1047
Lexington city.....	469	538	638	795	1114	Martinsville city.....	431	518	617	793	913
Norton city.....	498	520	617	768	976	Staunton city.....	461	569	719	948	1258
Waynesboro city.....	461	569	719	948	1258						

WASHINGTON

METROPOLITAN FMR AREAS	0 BR	1 BR	2 BR	3 BR	4 BR	Counties of FMR AREA within STATE
Bellingham, WA MSA.....	572	673	885	1281	1431	Whatcom
Bremerton-Silverdale, WA MSA.....	566	725	951	1366	1628	Kitsap
Kennewick-Pasco-Richland, WA MSA.....	515	589	754	1007	1299	Benton, Franklin
Lewiston, ID-WA MSA.....	403	510	659	853	1167	Asotin
Longview, WA MSA.....	426	555	683	1006	1210	Cowlitz
Mount Vernon-Anacortes, WA MSA.....	607	675	908	1275	1279	Skagit
Olympia, WA MSA.....	706	770	943	1365	1670	Thurston
Portland-Vancouver-Hillsboro, OR-WA MSA.....	666	774	922	1359	1633	Clark, Skamania
Seattle-Bellevue, WA HMFA.....	771	913	1123	1655	1989	King, Snohomish
Spokane, WA MSA.....	447	546	739	1057	1199	Spokane
Tacoma, WA HMFA.....	630	767	999	1472	1769	Pierce
Wenatchee-East Wenatchee, WA MSA.....	481	598	809	1018	1433	Chelan, Douglas

WASHINGTON continued

METROPOLITAN FMR AREAS

0 BR 1 BR 2 BR 3 BR 4 BR Counties of FMR AREA within STATE

Yakima, WA MSA..... 466 568 732 977 1180 Yakima

NONMETROPOLITAN COUNTIES

0 BR 1 BR 2 BR 3 BR 4 BR

Adams..... 415 537 637 889 1042
 Columbia..... 415 471 637 914 1042
 Garfield..... 415 537 637 793 1036
 Grays Harbor..... 457 531 686 979 1013
 Jefferson..... 538 669 905 1127 1603
 Klickitat..... 431 558 661 827 1021
 Lincoln..... 423 480 649 808 867
 Okanogan..... 458 511 637 810 1128
 Pend Oreille..... 379 471 637 838 1042
 Stevens..... 468 471 637 890 1128

Walla Walla..... 465 527 713 942 1263

NONMETROPOLITAN COUNTIES

0 BR 1 BR 2 BR 3 BR 4 BR

Clallam..... 457 558 755 1084 1089
 Ferry..... 462 537 637 938 1042
 Grant..... 468 499 660 892 1080
 Island..... 565 686 896 1320 1381
 Kittitas..... 532 588 795 1171 1408
 Lewis..... 465 550 733 963 1113
 Mason..... 491 609 824 1115 1120
 Pacific..... 413 561 695 930 1088
 San Juan..... 665 669 853 1126 1140
 Wahkiakum..... 415 471 637 793 1042

Whitman..... 445 539 705 1039 1242

WEST VIRGINIA

METROPOLITAN FMR AREAS

0 BR 1 BR 2 BR 3 BR 4 BR Counties of FMR AREA within STATE

Boone County, WV HMFA..... 423 426 573 714 854 Boone
 Charleston, WV HMFA..... 539 605 721 949 1075 Clay, Kanawha, Lincoln, Putnam
 Cumberland, MD-WV MSA..... 454 537 637 867 988 Mineral
 Huntington-Ashland, WV-KY-OH MSA..... 383 523 643 849 1043 Cabell, Wayne
 Jefferson County, WV HMFA..... 624 661 894 1179 1223 Jefferson
 Martinsburg, WV HMFA..... 488 558 741 957 990 Berkeley, Morgan
 Morgantown, WV MSA..... 607 634 752 1014 1025 Monongalia, Preston
 Parkersburg-Marietta-Vienna, WV-OH MSA..... 436 470 614 824 907 Pleasants, Wirt, Wood
 Steubenville-Weirton, OH-WV MSA..... 432 499 614 823 943 Brooke, Hancock
 Wheeling, WV-OH MSA..... 466 493 614 788 821 Marshall, Ohio
 Winchester, VA-WV MSA..... 569 621 804 1093 1365 Hampshire

NONMETROPOLITAN COUNTIES

0 BR 1 BR 2 BR 3 BR 4 BR

Barbour..... 434 470 636 792 869
 Calhoun..... 448 476 573 714 808
 Fayette..... 398 443 573 768 795
 Grant..... 509 512 693 863 1227
 Hardy..... 447 450 606 755 855
 Jackson..... 421 424 573 734 925
 Logan..... 463 483 573 811 814
 Marion..... 524 530 649 951 955
 Mercer..... 445 448 573 714 766
 Monroe..... 448 483 573 714 808

Pendleton..... 448 483 573 844 847
 Raleigh..... 502 505 666 829 890

NONMETROPOLITAN COUNTIES

0 BR 1 BR 2 BR 3 BR 4 BR

Braxton..... 364 424 573 714 789
 Doddridge..... 429 432 585 729 841
 Gilmer..... 459 462 586 730 828
 Greenbrier..... 431 519 615 766 1016
 Harrison..... 580 584 746 966 1013
 Lewis..... 468 471 637 793 851
 McDowell..... 463 483 573 727 808
 Mason..... 433 436 573 832 835
 Mingo..... 341 481 573 714 940
 Nicholas..... 448 483 573 763 875

Pocahontas..... 421 424 573 714 808
 Randolph..... 506 510 636 904 1107

SCHEDULE B - FY 2014 Final FAIR MARKET RENTS FOR EXISTING HOUSING

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WEST VIRGINIA continued

NONMETROPOLITAN COUNTIES	0 BR	1 BR	2 BR	3 BR	4 BR	NONMETROPOLITAN COUNTIES	0 BR	1 BR	2 BR	3 BR	4 BR
Ritchie.....	448	483	573	810	813	Roane.....	369	483	573	844	847
Summers.....	451	464	577	758	771	Taylor.....	408	481	573	835	838
Tucker.....	448	483	573	844	953	Tyler.....	448	472	573	714	766
Upshur.....	440	443	573	769	808	Webster.....	448	480	573	714	766
Wetzel.....	455	461	581	856	1029	Wyoming.....	448	453	573	714	1015

WISCONSIN

METROPOLITAN FMR AREAS	0 BR	1 BR	2 BR	3 BR	4 BR	Counties of FMR AREA within STATE	0 BR	1 BR	2 BR	3 BR	4 BR
Appleton, WI MSA.....	399	521	670	987	1045	Calumet, Outagamie					
Columbia County, WI HMFA.....	487	538	728	1027	1094	Columbia					
Duluth, MN-WI MSA.....	438	527	692	902	1005	Douglas					
Eau Claire, WI MSA.....	497	578	740	1090	1129	Chippewa, Eau Claire					
Fond du Lac, WI MSA.....	408	509	679	867	1043	Fond du Lac					
Green Bay, WI HMFA.....	422	514	681	973	999	Brown, Kewaunee					
Iowa County, WI HMFA.....	522	560	757	980	1012	Iowa					
Janesville, WI MSA.....	459	584	771	972	1030	Rock					
Kenosha County, WI HMFA.....	634	756	970	1409	1476	Kenosha					
La Crosse, WI-MN MSA.....	416	520	699	972	1183	La Crosse					
Madison, WI HMFA.....	620	742	898	1239	1380	Dane					
Milwaukee-Waukesha-West Allis, WI MSA.....	524	646	812	1036	1120	Milwaukee, Ozaukee, Washington, Waukesha					
Minneapolis-St. Paul-Bloomington, MN-WI MSA.....	608	756	946	1332	1573	Pierce, St. Croix					
Oconto County, WI HMFA.....	464	514	637	910	913	Oconto					
Oshkosh-Neenah, WI MSA.....	465	503	653	870	1157	Winnebago					
Racine, WI MSA.....	541	545	735	964	982	Racine					
Sheboygan, WI MSA.....	488	579	719	944	972	Sheboygan					
Wausau, WI MSA.....	477	495	646	912	989	Marathon					
NONMETROPOLITAN COUNTIES	0 BR	1 BR	2 BR	3 BR	4 BR	NONMETROPOLITAN COUNTIES	0 BR	1 BR	2 BR	3 BR	4 BR
Adams.....	404	537	637	863	995	Ashland.....	404	496	637	821	851
Barron.....	399	519	671	838	1077	Bayfield.....	385	546	647	902	905
Buffalo.....	524	528	714	941	1024	Burnett.....	404	516	637	939	942
Clark.....	384	471	637	793	851	Crawford.....	468	471	637	798	914
Dodge.....	439	562	738	941	986	Door.....	409	564	688	902	919
Dunn.....	432	495	670	845	895	Florence.....	404	483	637	793	881
Forest.....	404	471	637	831	851	Grant.....	437	484	637	810	987
Green.....	419	488	660	822	897	Green Lake.....	404	494	637	871	1128
Iron.....	379	471	637	868	1128	Jackson.....	403	500	677	843	905
Jefferson.....	472	605	794	1071	1194	Juneau.....	448	494	652	916	1155
Lafayette.....	404	488	637	867	931	Langlade.....	432	497	637	939	1128
Lincoln.....	404	471	637	939	1045	Manitowoc.....	425	478	637	793	955
Marinette.....	489	492	637	913	1050	Marquette.....	410	509	689	858	921
Menominee.....	423	493	667	831	891	Monroe.....	427	537	717	963	1087
Oneida.....	543	567	698	932	1236	Pepin.....	404	537	637	939	942

WISCONSIN continued

NONMETROPOLITAN COUNTIES	0 BR	1 BR	2 BR	3 BR	4 BR
Polk.....	450	560	757	1005	1012
Price.....	404	471	637	793	972
Rusk.....	468	471	637	845	1128
Sawyer.....	408	542	643	801	859
Taylor.....	379	471	637	793	851
Vernon.....	404	471	637	811	851
Walworth.....	541	592	786	1119	1146
Waupaca.....	484	487	652	865	894
Wood.....	425	492	637	853	945

NONMETROPOLITAN COUNTIES	0 BR	1 BR	2 BR	3 BR	4 BR
Portage.....	415	516	693	863	946
Richland.....	462	524	644	832	1067
Sauk.....	531	588	771	966	1030
Shawano.....	468	471	637	878	1010
Trempealeau.....	412	471	637	851	1038
Vilas.....	522	526	711	886	1133
Washburn.....	456	534	719	946	994
Waushara.....	474	477	645	823	862

WYOMING

METROPOLITAN FMR AREAS	0 BR	1 BR	2 BR	3 BR	4 BR	Counties of FMR AREA within STATE
Casper, WY MSA.....	503	576	762	1123	1334	Natrona
Cheyenne, WY MSA.....	513	583	789	1081	1268	Laramie

NONMETROPOLITAN COUNTIES	0 BR	1 BR	2 BR	3 BR	4 BR
Albany.....	555	578	746	1068	1132
Campbell.....	681	710	891	1122	1191
Converse.....	468	472	638	940	943
Fremont.....	523	534	722	981	984
Hot Springs.....	487	537	637	939	1128
Lincoln.....	583	629	762	1123	1127
Park.....	474	524	662	946	1172
Sheridan.....	613	646	802	999	1420
Sweetwater.....	563	672	909	1132	1610
Uinta.....	486	489	651	911	1086
Weston.....	487	495	637	793	972

NONMETROPOLITAN COUNTIES	0 BR	1 BR	2 BR	3 BR	4 BR
Big Horn.....	468	471	637	892	913
Carbon.....	501	504	682	912	1009
Crook.....	487	537	637	939	1128
Goshen.....	470	473	637	877	880
Johnson.....	487	521	637	939	1006
Niobrara.....	488	538	638	893	1006
Platte.....	487	537	637	890	972
Sublette.....	735	811	961	1405	1410
Teton.....	691	822	993	1463	1514
Washakie.....	487	537	637	903	1086

GUAM

NONMETROPOLITAN COUNTIES	0 BR	1 BR	2 BR	3 BR	4 BR
Pacific Islands.....	800	859	1049	1528	1827

NONMETROPOLITAN COUNTIES	0 BR	1 BR	2 BR	3 BR	4 BR

PUERTO RICO

METROPOLITAN FMR AREAS	0 BR	1 BR	2 BR	3 BR	4 BR	Counties of FMR AREA within STATE
Aguadilla-Isabela-San Sebastián, PR MSA.....	333	351	422	543	577	Aguada, Aguadilla, Añasco, Isabela, Lares, Moca, Rincón, San Sebastián
Arecibo, PR HMFA.....	430	454	543	752	766	Arecibo, Camuy, Hatillo
Barranquitas-Aibonito-Quebradillas, PR HMFA.....	321	357	429	531	582	Aibonito, Barranquitas, Ciales, Maunabo, Orocovi, Quebradillas
Caguas, PR HMFA.....	405	412	536	778	877	Caguas, Cayey, Cidra, Gurabo, San Lorenzo

SCHEDULE B - FY 2014 Final FAIR MARKET RENTS FOR EXISTING HOUSING

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PUERTO RICO continued

METROPOLITAN FMR AREAS						Counties of FMR AREA within STATE									
	0 BR	1 BR	2 BR	3 BR	4 BR										
Fajardo, PR MSA.....	388	410	491	712	765	Ceiba, Fajardo, Luquillo									
Guayama, PR MSA.....	310	386	523	648	724	Arroyo, Guayama, Patillas									
Mayagüez, PR MSA.....	393	415	497	660	835	Hormigueros, Mayagüez									
Ponce, PR MSA.....	346	365	438	634	764	Juana Díaz, Ponce, Villalba									
San Germán-Cabo Rojo, PR MSA.....	333	352	423	596	715	Cabo Rojo, Lajas, Sabana Grande, San Germán									
San Juan-Guaynabo, PR HMFA.....	455	493	590	795	957	Aguas Buenas, Barceloneta, Bayamón, Canóvanas, Carolina, Cataño, Comerío, Corozal, Dorado, Florida, Guaynabo, Humacao, Juncos, Las Piedras, Loíza, Manatí, Morovis, Naguabo, Naranjito, Río Grande, San Juan, Toa Alta, Toa Baja, Trujillo Alto, Vega Alta, Vega Baja, Yabucoa									
Yauco, PR MSA.....	325	344	413	552	719	Guánica, Guayanilla, Peñuelas, Yauco									
NONMETROPOLITAN COUNTIES						NONMETROPOLITAN COUNTIES									
	0 BR	1 BR	2 BR	3 BR	4 BR		0 BR	1 BR	2 BR	3 BR	4 BR				
Adjuntas.....	316	323	401	521	609	Coamo.....	316	323	401	521	609				
Culebra.....	316	323	401	521	609	Jayuya.....	316	323	401	521	609				
Las Marías.....	316	323	401	521	609	Maricao.....	316	323	401	521	609				
Salinas.....	316	323	401	521	609	Santa Isabel.....	316	323	401	521	609				
Utuado.....	316	323	401	521	609	Vieques.....	316	323	401	521	609				
VIRGIN ISLANDS															
NONMETROPOLITAN COUNTIES						NONMETROPOLITAN COUNTIES									
	0 BR	1 BR	2 BR	3 BR	4 BR		0 BR	1 BR	2 BR	3 BR	4 BR				
St. Croix.....	588	612	742	927	1060	St. John.....	668	798	1027	1272	1330				
St. Thomas.....	668	798	1027	1272	1330										

Note1: The FMRs for unit sizes larger than 4 BRs are calculated by adding 15% to the 4 BR FMR for each extra bedroom.

Note2: 50th percentile FMRs are indicated by an * before the FMR Area name.

Note3: PHAs participating in the Small Area Demonstration Program and the PHAs serving Dallas, TX using small area FMRs will use the FMRs found on Schedule B Addendum.

09/17/2013

SCHEDULE B Addendum - FY 2014 SMALL AREA FAIR MARKET RENTS FOR DEMONSTRATION PARTICIPANTS

The Housing Authority of the City of Long Beach

ZIP Codes	0 BR	1 BR	2 BR	3 BR	4 BR	ZIP Codes	0 BR	1 BR	2 BR	3 BR	4 BR
90802.....	730	890	1160	1590	1780	90803.....	940	1150	1500	2060	2300
90804.....	810	1000	1300	1780	2000	90805.....	760	940	1220	1670	1870
90806.....	740	910	1180	1620	1810	90807.....	860	1050	1370	1880	2100
90808.....	1010	1240	1610	2210	2470	90810.....	740	910	1180	1620	1810
90813.....	690	840	1100	1510	1690	90815.....	1100	1340	1750	2400	2690
90822.....	860	1060	1380	1890	2120						

The Housing Authority of the County of Cook

ZIP Codes	0 BR	1 BR	2 BR	3 BR	4 BR	ZIP Codes	0 BR	1 BR	2 BR	3 BR	4 BR
60004.....	870	990	1170	1490	1740	60005.....	790	890	1060	1350	1580
60006.....	730	830	980	1250	1460	60007.....	760	870	1030	1310	1530
60008.....	820	940	1110	1420	1650	60009.....	730	830	980	1250	1460
60010.....	1070	1210	1440	1840	2140	60011.....	730	830	980	1250	1460
60016.....	760	860	1020	1300	1520	60017.....	730	830	980	1250	1460
60018.....	650	730	870	1110	1290	60022.....	980	1110	1320	1680	1960
60025.....	820	940	1110	1420	1650	60026.....	970	1100	1300	1660	1930
60029.....	730	830	980	1250	1460	60043.....	730	830	980	1250	1460
60053.....	850	960	1140	1450	1690	60056.....	720	820	970	1240	1440
60062.....	920	1050	1240	1580	1840	60065.....	730	830	980	1250	1460
60067.....	860	980	1160	1480	1720	60068.....	890	1010	1200	1530	1780
60070.....	760	860	1020	1300	1520	60074.....	770	880	1040	1330	1550
60076.....	880	1000	1180	1500	1750	60077.....	810	920	1090	1390	1620
60078.....	730	830	980	1250	1460	60089.....	970	1100	1310	1670	1950
60090.....	790	890	1060	1350	1580	60091.....	1090	1240	1470	1870	2180
60093.....	1050	1200	1420	1810	2110	60103.....	910	1040	1230	1570	1830
60104.....	720	820	970	1240	1440	60107.....	1090	1240	1470	1870	2180
60120.....	730	830	980	1250	1460	60130.....	710	800	950	1210	1410
60131.....	620	700	830	1060	1230	60133.....	770	880	1040	1330	1550
60141.....	730	830	980	1250	1460	60153.....	730	830	980	1250	1460
60154.....	980	1110	1320	1680	1960	60155.....	620	700	830	1060	1230
60159.....	730	830	980	1250	1460	60160.....	650	730	870	1110	1290
60161.....	730	830	980	1250	1460	60162.....	630	720	850	1080	1260
60163.....	750	850	1010	1290	1500	60164.....	620	710	840	1070	1250
60165.....	690	780	930	1190	1380	60168.....	730	830	980	1250	1460
60169.....	790	890	1060	1350	1580	60171.....	650	740	880	1120	1310
60172.....	790	890	1060	1350	1580	60173.....	910	1040	1230	1570	1830
60176.....	680	780	920	1170	1370	60192.....	1090	1240	1470	1870	2180
60193.....	900	1020	1210	1540	1800	60194.....	910	1030	1220	1560	1810
60195.....	930	1050	1250	1590	1860	60201.....	940	1060	1260	1610	1870
60202.....	820	930	1100	1400	1630	60203.....	1080	1230	1460	1860	2170
60204.....	730	830	980	1250	1460	60301.....	900	1020	1210	1540	1800

SCHEDULE B Addendum - FY 2014 SMALL AREA FAIR MARKET RENTS FOR DEMONSTRATION PARTICIPANTS

The Housing Authority of the County of Cook continued

ZIP Codes	0 BR	1 BR	2 BR	3 BR	4 BR	ZIP Codes	0 BR	1 BR	2 BR	3 BR	4 BR
60302.....	740	840	990	1260	1470	60303.....	730	830	980	1250	1460
60304.....	690	780	930	1190	1380	60305.....	720	820	970	1240	1440
60402.....	680	770	910	1160	1350	60406.....	620	710	840	1070	1250
60409.....	680	770	910	1160	1350	60411.....	690	780	930	1190	1380
60412.....	730	830	980	1250	1460	60415.....	680	770	910	1160	1350
60419.....	790	890	1060	1350	1580	60422.....	1090	1240	1470	1870	2180
60425.....	710	800	950	1210	1410	60426.....	740	840	990	1260	1470
60428.....	940	1060	1260	1610	1870	60429.....	930	1050	1250	1590	1860
60430.....	690	780	930	1190	1380	60438.....	680	770	910	1160	1350
60439.....	650	740	880	1120	1310	60443.....	910	1030	1220	1560	1810
60445.....	670	760	900	1150	1340	60452.....	710	800	950	1210	1410
60453.....	710	800	950	1210	1410	60454.....	730	830	980	1250	1460
60455.....	650	740	880	1120	1310	60456.....	480	540	640	820	950
60457.....	660	750	890	1130	1320	60458.....	720	820	970	1240	1440
60459.....	710	810	960	1220	1430	60461.....	730	830	980	1250	1460
60462.....	750	850	1010	1290	1500	60463.....	1090	1240	1470	1870	2180
60464.....	1090	1240	1470	1870	2180	60465.....	720	820	970	1240	1440
60466.....	710	810	960	1220	1430	60467.....	1090	1240	1470	1870	2180
60469.....	790	900	1070	1360	1590	60471.....	770	880	1040	1330	1550
60472.....	650	740	880	1120	1310	60473.....	1080	1230	1460	1860	2170
60475.....	630	720	850	1080	1260	60476.....	620	710	840	1070	1250
60477.....	740	840	1000	1270	1490	60478.....	1090	1240	1470	1870	2180
60480.....	630	720	850	1080	1260	60482.....	680	780	920	1170	1370
60487.....	850	970	1150	1470	1710	60499.....	730	830	980	1250	1460
60501.....	680	770	910	1160	1350	60513.....	760	870	1030	1310	1530
60521.....	870	990	1170	1490	1740	60525.....	710	800	950	1210	1410
60526.....	770	880	1040	1330	1550	60527.....	800	910	1080	1380	1610
60534.....	690	780	930	1190	1380	60546.....	660	750	890	1130	1320
60558.....	730	830	980	1250	1460	60601.....	1090	1240	1470	1870	2180
60602.....	1090	1240	1470	1870	2180	60603.....	1090	1240	1470	1870	2180
60604.....	1090	1240	1470	1870	2180	60605.....	1090	1240	1470	1870	2180
60606.....	1090	1240	1470	1870	2180	60607.....	1020	1160	1370	1750	2040
60608.....	610	690	820	1050	1220	60609.....	630	720	850	1080	1260
60610.....	970	1100	1300	1660	1930	60611.....	1090	1240	1470	1870	2180
60612.....	760	860	1020	1300	1520	60613.....	850	960	1140	1450	1690
60614.....	960	1090	1290	1640	1920	60615.....	700	790	940	1200	1400
60616.....	700	790	940	1200	1400	60617.....	630	720	850	1080	1260
60618.....	760	860	1020	1300	1520	60619.....	640	730	860	1100	1280
60620.....	680	770	910	1160	1350	60621.....	670	760	900	1150	1340
60622.....	850	970	1150	1470	1710	60623.....	620	700	830	1060	1230
60624.....	750	850	1010	1290	1500	60625.....	720	820	970	1240	1440
60626.....	650	740	880	1120	1310	60628.....	740	840	1000	1270	1490

SCHEDULE B Addendum - FY 2014 SMALL AREA FAIR MARKET RENTS FOR DEMONSTRATION PARTICIPANTS

The Housing Authority of the County of Cook continued

ZIP Codes	0 BR	1 BR	2 BR	3 BR	4 BR	ZIP Codes	0 BR	1 BR	2 BR	3 BR	4 BR
60629.....	680	780	920	1170	1370	60630.....	720	820	970	1240	1440
60631.....	770	880	1040	1330	1550	60632.....	640	730	860	1100	1280
60633.....	660	750	890	1130	1320	60634.....	710	810	960	1220	1430
60636.....	720	820	970	1240	1440	60637.....	700	790	940	1200	1400
60638.....	670	760	900	1150	1340	60639.....	710	810	960	1220	1430
60640.....	650	740	880	1120	1310	60641.....	680	780	920	1170	1370
60642.....	840	950	1130	1440	1680	60643.....	710	800	950	1210	1410
60644.....	670	760	900	1150	1340	60645.....	740	840	990	1260	1470
60646.....	710	810	960	1220	1430	60647.....	750	850	1010	1290	1500
60649.....	630	720	850	1080	1260	60651.....	740	840	1000	1270	1490
60652.....	760	870	1030	1310	1530	60653.....	580	660	780	990	1160
60654.....	1090	1240	1470	1870	2180	60655.....	690	780	930	1190	1380
60656.....	770	880	1040	1330	1550	60657.....	900	1020	1210	1540	1800
60659.....	740	840	990	1260	1470	60660.....	650	730	870	1110	1290
60661.....	1080	1230	1460	1860	2170	60666.....	730	830	980	1250	1460
60677.....	730	830	980	1250	1460	60681.....	730	830	980	1250	1460
60682.....	730	830	980	1250	1460	60690.....	730	830	980	1250	1460
60693.....	730	830	980	1250	1460	60694.....	730	830	980	1250	1460
60706.....	670	760	900	1150	1340	60707.....	680	780	920	1170	1370
60712.....	1090	1240	1470	1870	2180	60714.....	710	810	960	1220	1430
60803.....	640	730	860	1100	1280	60804.....	620	710	840	1070	1250
60805.....	760	870	1030	1310	1530	60827.....	730	830	980	1250	1460

Town of Mamaroneck Public Housing Agency

ZIP Codes	0 BR	1 BR	2 BR	3 BR	4 BR	ZIP Codes	0 BR	1 BR	2 BR	3 BR	4 BR
10501.....	1210	1270	1500	1950	2300	10502.....	1700	1780	2110	2740	3230
10503.....	1210	1270	1500	1950	2300	10504.....	1700	1780	2110	2740	3230
10505.....	1210	1270	1500	1950	2300	10506.....	1320	1380	1640	2130	2510
10507.....	1410	1480	1750	2280	2680	10510.....	1530	1590	1890	2460	2900
10511.....	1180	1230	1460	1900	2240	10514.....	1670	1750	2070	2690	3170
10517.....	1670	1750	2070	2690	3170	10518.....	1210	1270	1500	1950	2300
10519.....	1210	1270	1500	1950	2300	10520.....	1170	1220	1450	1890	2220
10522.....	1360	1420	1680	2190	2570	10523.....	1700	1780	2110	2740	3230
10526.....	1210	1270	1500	1950	2300	10527.....	1210	1270	1500	1950	2300
10528.....	1700	1780	2110	2740	3230	10530.....	1380	1440	1710	2220	2620
10532.....	1210	1270	1500	1950	2300	10533.....	1470	1540	1820	2370	2790
10535.....	1540	1610	1910	2480	2930	10536.....	1360	1420	1680	2190	2570
10537.....	930	970	1150	1500	1760	10538.....	1410	1480	1750	2280	2680
10540.....	1210	1270	1500	1950	2300	10543.....	1470	1540	1820	2370	2790
10546.....	1340	1400	1660	2160	2540	10547.....	1140	1190	1410	1830	2160

SCHEDULE B Addendum - FY 2014 SMALL AREA FAIR MARKET RENTS FOR DEMONSTRATION PARTICIPANTS

Town of Mamaroneck Public Housing Agency continued

ZIP Codes	0 BR	1 BR	2 BR	3 BR	4 BR	ZIP Codes	0 BR	1 BR	2 BR	3 BR	4 BR
10548.....	1370	1430	1690	2200	2590	10549.....	1240	1300	1540	2000	2360
10550.....	1070	1110	1320	1720	2020	10551.....	1210	1270	1500	1950	2300
10552.....	1110	1160	1380	1790	2120	10553.....	1200	1250	1480	1920	2270
10560.....	1210	1270	1500	1950	2300	10562.....	1260	1320	1560	2030	2390
10566.....	1230	1280	1520	1980	2330	10567.....	1530	1600	1900	2470	2910
10570.....	1490	1560	1850	2410	2840	10573.....	1360	1420	1680	2190	2570
10576.....	1700	1780	2110	2740	3230	10577.....	1210	1270	1500	1950	2300
10578.....	1210	1270	1500	1950	2300	10580.....	1620	1690	2000	2600	3070
10583.....	1700	1780	2110	2740	3230	10587.....	1210	1270	1500	1950	2300
10588.....	840	880	1040	1350	1590	10589.....	1210	1270	1500	1950	2300
10590.....	1700	1780	2110	2740	3230	10591.....	1310	1370	1620	2110	2480
10594.....	1610	1680	1990	2590	3050	10595.....	1360	1420	1680	2190	2570
10596.....	950	1000	1180	1530	1810	10597.....	1210	1270	1500	1950	2300
10598.....	1320	1380	1640	2130	2510	10601.....	1220	1270	1510	1960	2310
10602.....	1210	1270	1500	1950	2300	10603.....	1350	1410	1670	2170	2560
10604.....	1410	1470	1740	2260	2670	10605.....	1240	1290	1530	1990	2350
10606.....	1410	1480	1750	2280	2680	10607.....	1630	1700	2020	2630	3100
10701.....	1070	1110	1320	1720	2020	10702.....	1210	1270	1500	1950	2300
10703.....	1110	1160	1370	1780	2100	10704.....	1200	1250	1480	1920	2270
10705.....	1050	1100	1300	1690	1990	10706.....	1190	1240	1470	1910	2250
10707.....	1390	1450	1720	2240	2640	10708.....	1400	1460	1730	2250	2650
10709.....	1380	1440	1710	2220	2620	10710.....	1110	1160	1370	1780	2100
10801.....	1180	1230	1460	1900	2240	10802.....	1210	1270	1500	1950	2300
10803.....	1250	1310	1550	2020	2380	10804.....	1490	1550	1840	2390	2820
10805.....	1240	1300	1540	2000	2360						

Chattanooga Housing Authority

ZIP Codes	0 BR	1 BR	2 BR	3 BR	4 BR	ZIP Codes	0 BR	1 BR	2 BR	3 BR	4 BR
37302.....	430	520	650	880	1000	37308.....	460	550	690	940	1060
37311.....	460	550	690	940	1060	37315.....	460	550	690	940	1060
37336.....	430	510	640	870	980	37341.....	610	730	910	1240	1390
37343.....	490	590	740	1010	1130	37350.....	460	550	690	940	1060
37351.....	520	630	780	1060	1200	37353.....	450	550	680	920	1040
37363.....	490	590	740	1010	1130	37373.....	450	540	670	910	1030
37377.....	490	590	740	1010	1130	37379.....	480	580	720	980	1100
37384.....	460	550	690	940	1060	37401.....	460	550	690	940	1060
37402.....	430	510	640	870	980	37403.....	430	510	640	870	980
37404.....	430	510	640	870	980	37405.....	470	570	710	970	1090
37406.....	430	510	640	870	980	37407.....	480	580	720	980	1100
37408.....	430	510	640	870	980	37409.....	450	540	670	910	1030
37410.....	430	510	640	870	980	37411.....	430	510	640	870	980
37412.....	450	550	680	920	1040	37414.....	460	550	690	940	1060

SCHEDULE B Addendum - FY 2014 SMALL AREA FAIR MARKET RENTS FOR DEMONSTRATION PARTICIPANTS

Chattanooga Housing Authority continued

ZIP Codes	0 BR	1 BR	2 BR	3 BR	4 BR	ZIP Codes	0 BR	1 BR	2 BR	3 BR	4 BR
37415.....	450	540	670	910	1030	37416.....	500	600	750	1020	1150
37419.....	430	510	640	870	980	37421.....	500	600	750	1020	1150
37422.....	460	550	690	940	1060	37424.....	460	550	690	940	1060
37450.....	460	550	690	940	1060						

The Housing Authority of the City of Laredo

ZIP Codes	0 BR	1 BR	2 BR	3 BR	4 BR	ZIP Codes	0 BR	1 BR	2 BR	3 BR	4 BR
78040.....	500	540	680	890	920	78041.....	610	660	830	1090	1130
78043.....	560	600	760	1000	1030	78045.....	720	780	980	1290	1330
78046.....	550	590	740	970	1010						

SCHEDULE B Addendum - FY 2014 PROPOSED FAIR MARKET RENTS FOR EXISTING HOUSING WITHIN THE DALLAS, TX HMFA

Collin County

ZIP Codes	0 BR	1 BR	2 BR	3 BR	4 BR	ZIP Codes	0 BR	1 BR	2 BR	3 BR	4 BR
75002.....	770	930	1170	1560	1880	75009.....	620	740	940	1250	1510
75013.....	780	930	1180	1570	1900	75023.....	720	860	1090	1450	1760
75024.....	700	840	1060	1410	1710	75025.....	780	930	1180	1570	1900
75026.....	680	810	1030	1370	1660	75033.....	630	760	960	1280	1550
75034.....	750	890	1130	1510	1820	75035.....	890	1070	1350	1800	2170
75048.....	760	920	1160	1550	1870	75058.....	680	810	1030	1370	1660
75069.....	600	720	910	1210	1470	75070.....	860	1040	1310	1750	2110
75071.....	630	760	960	1280	1550	75074.....	650	770	980	1310	1580
75075.....	650	780	990	1320	1590	75078.....	760	910	1150	1530	1850
75080.....	710	850	1080	1440	1740	75082.....	750	900	1140	1520	1840
75086.....	680	810	1030	1370	1660	75093.....	700	840	1060	1410	1710
75094.....	900	1080	1370	1830	2210	75098.....	750	900	1140	1520	1840
75164.....	570	690	870	1160	1400	75166.....	900	1080	1370	1830	2210
75173.....	750	900	1140	1520	1840	75189.....	690	820	1040	1390	1680
75252.....	550	660	830	1110	1340	75287.....	590	700	890	1190	1430
75370.....	680	810	1030	1370	1660	75407.....	690	820	1040	1390	1680
75409.....	650	770	980	1310	1580	75424.....	650	770	980	1310	1580
75442.....	550	660	840	1120	1350	75452.....	550	660	830	1110	1340
75454.....	750	900	1140	1520	1840	75491.....	680	810	1030	1370	1660
75495.....	580	700	880	1170	1420						

Dallas County

ZIP Codes	0 BR	1 BR	2 BR	3 BR	4 BR	ZIP Codes	0 BR	1 BR	2 BR	3 BR	4 BR
75001.....	640	770	970	1290	1560	75006.....	610	730	920	1230	1480
75007.....	670	810	1020	1360	1640	75011.....	590	710	900	1200	1450
75014.....	590	710	900	1200	1450	75015.....	590	710	900	1200	1450
75016.....	590	710	900	1200	1450	75017.....	590	710	900	1200	1450
75019.....	760	920	1160	1550	1870	75030.....	590	710	900	1200	1450
75038.....	600	720	910	1210	1470	75039.....	740	890	1120	1490	1800
75040.....	750	890	1130	1510	1820	75041.....	590	710	900	1200	1450
75042.....	570	680	860	1150	1390	75043.....	630	760	960	1280	1550
75044.....	690	830	1050	1400	1690	75045.....	590	710	900	1200	1450
75046.....	590	710	900	1200	1450	75047.....	590	710	900	1200	1450
75048.....	760	920	1160	1550	1870	75049.....	590	710	900	1200	1450
75050.....	570	680	860	1150	1390	75051.....	560	670	850	1130	1370
75052.....	730	880	1110	1480	1790	75053.....	590	710	900	1200	1450
75060.....	550	660	840	1120	1350	75061.....	510	620	780	1040	1260
75062.....	570	680	860	1150	1390	75063.....	690	830	1050	1400	1690
75080.....	710	850	1080	1440	1740	75081.....	730	870	1100	1470	1770
75082.....	750	900	1140	1520	1840	75083.....	590	710	900	1200	1450
75085.....	590	710	900	1200	1450	75088.....	860	1040	1310	1750	2110
75089.....	900	1080	1370	1830	2210	75104.....	780	940	1190	1590	1920

SCHEDULE B Addendum - FY 2014 PROPOSED FAIR MARKET RENTS FOR EXISTING HOUSING WITHIN THE DALLAS, TX HMFA

Dallas County continued

ZIP Codes	0 BR	1 BR	2 BR	3 BR	4 BR	ZIP Codes	0 BR	1 BR	2 BR	3 BR	4 BR
75106.....	590	710	900	1200	1450	75115.....	620	740	940	1250	1510
75116.....	630	760	960	1280	1550	75123.....	590	710	900	1200	1450
75134.....	630	750	950	1270	1530	75137.....	780	930	1180	1570	1900
75138.....	590	710	900	1200	1450	75141.....	560	670	850	1130	1370
75146.....	610	740	930	1240	1500	75149.....	670	800	1010	1350	1630
75150.....	630	750	950	1270	1530	75154.....	750	900	1140	1520	1840
75159.....	620	740	940	1250	1510	75172.....	490	590	740	990	1190
75180.....	550	660	840	1120	1350	75181.....	900	1080	1370	1830	2210
75182.....	590	710	900	1200	1450	75185.....	590	710	900	1200	1450
75187.....	590	710	900	1200	1450	75201.....	850	1020	1290	1720	2080
75202.....	900	1080	1370	1830	2210	75203.....	460	550	690	920	1110
75204.....	770	930	1170	1560	1880	75205.....	750	890	1130	1510	1820
75206.....	620	740	940	1250	1510	75207.....	600	720	910	1210	1470
75208.....	530	630	800	1070	1290	75209.....	770	930	1170	1560	1880
75210.....	460	550	690	920	1110	75211.....	540	650	820	1090	1320
75212.....	520	620	790	1050	1270	75214.....	560	670	850	1130	1370
75215.....	490	590	750	1000	1210	75216.....	530	630	800	1070	1290
75217.....	590	700	890	1190	1430	75218.....	670	800	1010	1350	1630
75219.....	610	740	930	1240	1500	75220.....	500	600	760	1010	1220
75221.....	590	710	900	1200	1450	75222.....	590	710	900	1200	1450
75223.....	540	650	820	1090	1320	75224.....	510	610	770	1030	1240
75225.....	900	1080	1370	1830	2210	75226.....	720	860	1090	1450	1760
75227.....	550	660	830	1110	1340	75228.....	480	580	730	970	1180
75229.....	570	680	860	1150	1390	75230.....	500	600	760	1010	1220
75231.....	480	580	730	970	1180	75232.....	540	650	820	1090	1320
75233.....	560	670	850	1130	1370	75234.....	610	730	920	1230	1480
75235.....	590	700	890	1190	1430	75236.....	570	690	870	1160	1400
75237.....	530	640	810	1080	1300	75238.....	510	620	780	1040	1260
75240.....	540	650	820	1090	1320	75241.....	630	760	960	1280	1550
75242.....	590	710	900	1200	1450	75243.....	530	630	800	1070	1290
75244.....	760	910	1150	1530	1850	75246.....	460	550	690	920	1110
75247.....	490	590	750	1000	1210	75248.....	660	790	1000	1330	1610
75249.....	740	890	1120	1490	1800	75250.....	590	710	900	1200	1450
75251.....	800	960	1210	1610	1950	75253.....	570	690	870	1160	1400
75254.....	600	720	910	1210	1470	75313.....	590	710	900	1200	1450
75315.....	590	710	900	1200	1450	75342.....	590	710	900	1200	1450
75354.....	590	710	900	1200	1450	75355.....	590	710	900	1200	1450
75356.....	590	710	900	1200	1450	75360.....	590	710	900	1200	1450
75367.....	590	710	900	1200	1450	75371.....	590	710	900	1200	1450
75372.....	590	710	900	1200	1450	75374.....	590	710	900	1200	1450
75378.....	590	710	900	1200	1450	75379.....	590	710	900	1200	1450

SCHEDULE B Addendum - FY 2014 PROPOSED FAIR MARKET RENTS FOR EXISTING HOUSING WITHIN THE DALLAS, TX HMFA

Dallas County continued

ZIP Codes	0 BR	1 BR	2 BR	3 BR	4 BR	ZIP Codes	0 BR	1 BR	2 BR	3 BR	4 BR
75380.....	590	710	900	1200	1450	75381.....	590	710	900	1200	1450
75382.....	590	710	900	1200	1450						

Delta County

ZIP Codes	0 BR	1 BR	2 BR	3 BR	4 BR	ZIP Codes	0 BR	1 BR	2 BR	3 BR	4 BR
75415.....	550	660	840	1120	1350	75432.....	530	630	800	1070	1290
75441.....	550	660	840	1120	1350	75448.....	550	660	840	1120	1350
75450.....	550	660	840	1120	1350	75469.....	550	660	840	1120	1350

Denton County

ZIP Codes	0 BR	1 BR	2 BR	3 BR	4 BR	ZIP Codes	0 BR	1 BR	2 BR	3 BR	4 BR
75007.....	670	810	1020	1360	1640	75009.....	620	740	940	1250	1510
75010.....	760	920	1160	1550	1870	75022.....	770	930	1170	1560	1880
75027.....	620	740	940	1250	1510	75028.....	900	1080	1370	1830	2210
75029.....	620	740	940	1250	1510	75033.....	630	760	960	1280	1550
75033.....	630	760	960	1280	1550	75034.....	750	890	1130	1510	1820
75056.....	810	970	1230	1640	1980	75057.....	630	750	950	1270	1530
75065.....	670	810	1020	1360	1640	75067.....	620	740	940	1250	1510
75068.....	730	870	1100	1470	1770	75077.....	790	950	1200	1600	1930
75093.....	700	840	1060	1410	1710	75287.....	590	700	890	1190	1430
76052.....	900	1080	1370	1830	2210	76177.....	590	710	900	1200	1450
76201.....	470	570	720	960	1160	76202.....	620	740	940	1250	1510
76205.....	580	700	880	1170	1420	76206.....	620	740	940	1250	1510
76207.....	570	680	860	1150	1390	76208.....	630	760	960	1280	1550
76209.....	570	690	870	1160	1400	76210.....	730	880	1110	1480	1790
76226.....	900	1080	1370	1830	2210	76227.....	850	1020	1290	1720	2080
76247.....	720	860	1090	1450	1760	76249.....	760	910	1150	1530	1850
76258.....	580	700	880	1170	1420	76259.....	640	770	970	1290	1560
76262.....	730	870	1100	1470	1770	76266.....	640	770	970	1290	1560
76272.....	620	740	940	1250	1510						

Ellis County

ZIP Codes	0 BR	1 BR	2 BR	3 BR	4 BR	ZIP Codes	0 BR	1 BR	2 BR	3 BR	4 BR
75101.....	550	660	840	1120	1350	75119.....	560	670	850	1130	1370
75125.....	550	660	840	1120	1350	75152.....	490	590	750	1000	1210
75154.....	750	900	1140	1520	1840	75165.....	610	730	920	1230	1480
75167.....	760	910	1150	1530	1850	75168.....	610	730	920	1230	1480
76041.....	610	730	920	1230	1480	76055.....	610	730	920	1230	1480
76064.....	690	830	1050	1400	1690	76065.....	630	760	960	1280	1550
76084.....	620	740	940	1250	1510	76623.....	610	730	920	1230	1480

SCHEDULE B Addendum - FY 2014 PROPOSED FAIR MARKET RENTS FOR EXISTING HOUSING WITHIN THE DALLAS, TX HMFA

Ellis County continued

ZIP Codes	0 BR	1 BR	2 BR	3 BR	4 BR	ZIP Codes	0 BR	1 BR	2 BR	3 BR	4 BR
76626.....	610	730	920	1230	1480	76651.....	680	810	1030	1370	1660
76670.....	480	580	730	970	1180						

Hunt County

ZIP Codes	0 BR	1 BR	2 BR	3 BR	4 BR	ZIP Codes	0 BR	1 BR	2 BR	3 BR	4 BR
75135.....	550	660	840	1120	1350	75160.....	580	700	880	1170	1420
75169.....	500	600	760	1010	1220	75189.....	690	820	1040	1390	1680
75401.....	500	600	760	1010	1220	75402.....	520	620	790	1050	1270
75403.....	500	600	760	1010	1220	75404.....	500	600	760	1010	1220
75422.....	520	620	790	1050	1270	75423.....	530	630	800	1070	1290
75428.....	400	480	610	810	980	75442.....	550	660	840	1120	1350
75449.....	410	490	620	830	1000	75452.....	550	660	830	1110	1340
75453.....	670	800	1010	1350	1630	75474.....	460	550	690	920	1110
75496.....	390	470	590	790	950						

Kaufman County

ZIP Codes	0 BR	1 BR	2 BR	3 BR	4 BR	ZIP Codes	0 BR	1 BR	2 BR	3 BR	4 BR
75114.....	750	890	1130	1510	1820	75126.....	900	1080	1370	1830	2210
75142.....	550	660	830	1110	1340	75143.....	520	620	790	1050	1270
75147.....	510	620	780	1040	1260	75156.....	580	700	880	1170	1420
75157.....	440	530	670	890	1080	75158.....	530	640	810	1080	1300
75159.....	620	740	940	1250	1510	75160.....	580	700	880	1170	1420
75161.....	590	700	890	1190	1430						

Rockwall County

ZIP Codes	0 BR	1 BR	2 BR	3 BR	4 BR	ZIP Codes	0 BR	1 BR	2 BR	3 BR	4 BR
75032.....	840	1000	1270	1690	2050	75087.....	760	920	1160	1550	1870
75088.....	860	1040	1310	1750	2110	75089.....	900	1080	1370	1830	2210
75132.....	790	950	1200	1600	1930	75189.....	690	820	1040	1390	1680

BILLING CODE 4210-67-C

SCHEDULE D—FY 2014 FAIR MARKET RENTS FOR MANUFACTURED HOME SPACES IN THE SECTION 8 HOUSING CHOICE VOUCHER PROGRAM

State	Area name	Space rent
California	Orange County, CA HUD Metro FMR Area *	\$818
	Riverside-San Bernardino-Ontario, CA MSA *	532
	Los Angeles-Long Beach, CA HUD Metro FMR Area	674
	San Diego-Carlsbad-San Marcos, CA MSA	819
	Santa Rosa-Petaluma, CA MSA	738

**SCHEDULE D—FY 2014 FAIR MARKET RENTS FOR MANUFACTURED HOME SPACES IN THE SECTION 8 HOUSING CHOICE
VOUCHER PROGRAM—Continued**

State	Area name	Space rent
	Vallejo-Fairfield, CA MSA	594
Colorado	Boulder, CO MSA	479
Maryland	St. Mary's County	500
Oregon	Bend, OR MSA	355
	Salem, OR MSA	506
Pennsylvania	Adams County	568
Washington	Olympia, WA MSA	603
	Seattle-Bellevue, WA HUD Metro FMR Area	664
West Virginia	Logan County	453
	McDowell County	453
	Mercer County	453
	Mingo County	453
	Wyoming County	453

* 50th percentile FMR areas.

[FR Doc. 2013-24155 Filed 10-2-13; 8:45 am]

BILLING CODE 4210-67-P



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Part VII

Department of Commerce

Bureau of Industry and Security

15 CFR Parts 730, 732, 734, et al.

Revisions to the Export Administration Regulations: Initial Implementation of
Export Control Reform; Correction; Final Rule

DEPARTMENT OF COMMERCE

Bureau of Industry and Security

15 CFR Parts 730, 732, 734, 736, 738, 740, 742, 743, 744, 746, 748, 750, 756, 758, 762, 764, 770, 772, and 774

[Docket No. 120403246–3635–02]

RIN 0694–AF65

Revisions to the Export Administration Regulations: Initial Implementation of Export Control Reform; Correction

AGENCY: Bureau of Industry and Security, Commerce.

ACTION: Final rule; correction

SUMMARY: The Bureau of Industry and Security (BIS) is correcting a final rule that appeared in the **Federal Register** of April 16, 2013. As part of the Export Control Reform (ECR) Initiative, the Bureau of Industry and Security (BIS), and the Directorate of Defense Trade Controls (DDTC), Department of State, have published multiple proposed amendments to the Export Administration Regulations (EAR) and the International Traffic in Arms Regulations (ITAR), respectively, to strengthen national security by fundamentally reforming the export control system. The final rule implements the initial ECR changes by adding a structure and related provisions to control munitions items that the President has determined no longer warrant export control on the U.S. Munitions List (USML) on the Commerce Control List (CCL), specifically aircraft, gas turbine engines, and related items. The final rule was published in conjunction with a Department of State document that revises the USML so that upon the effective date of both documents, the USML and CCL and corresponding regulatory structures will be complementary. The Department of State is also correcting their final rule that appeared in the **Federal Register** of April 16, 2013, in a document published elsewhere in this issue of the **Federal Register**.

DATES: This rule is effective October 15, 2013.

ADDRESSES: Commerce's full retrospective regulatory review plan can be accessed at: <http://open.commerce.gov/news/2011/08/23/commerce-plan-retrospective-analysis-existing-rules>.

FOR FURTHER INFORMATION CONTACT: For general questions about the “600 series” control structure or transition related questions, contact Hillary Hess,

Regulatory Policy Division, Office of Exporter Services, Bureau of Industry and Security, at 202–482–2440 or rp22@bis.doc.gov. For technical questions about the ECCNs included in this rule contact Gene Christiansen, Office of National Security and Technology Transfer Controls, at 202–482–2984 or gene.christiansen@bis.doc.gov. For questions about the definition of “specially designed,” contact Timothy Mooney, Regulatory Policy Division, Office of Exporter Services, Bureau of Industry and Security, at 202–482–2440 or timothy.mooney@bis.doc.gov.

SUPPLEMENTARY INFORMATION:

Background

The Bureau of Industry and Security (BIS) provides the following corrections to the final rule that appeared in the **Federal Register** of April 16, 2013 (78 FR 22660). These include correcting typographical and other minor grammatical issues and correcting certain amendatory instructions to reflect the revised regulatory text included in the final rule. In addition, these corrections to the final rule include updating cross references and other regulatory text to ensure the regulatory text reflects the intent of the April 16 final rule and the regulatory text of subsequent final rules published implementing Export Control Reform.

In FR Doc. 2013–8352 appearing on page 22660 in the **Federal Register** of Tuesday, April 16, 2013, the following corrections are made:

■ 1. On page 22674, in the second column, in the second to the last sentence in the first paragraph, “The new provision would allow the continued use of STA for exports of controlled items to a foreign consignee in one of the STA–36 countries so long as the foreign consignee has a valid license authorizing such a use of STA.” is corrected to read “The new provision would allow the use of STA for exports, reexports or in-country transfers to a consignee in one of the Country Group A:5 countries so long as the foreign consignee has a valid license where the United States Government has authorized the ultimate end use, the license or other authorization is in effect, and the consignee verifies in writing that they have such authorization and provides the license or other approval identifier to the exporter.”

■ 2. On page 22690, in the first column, in the heading 10, “Paragraphs (b)(4) and (b)(5), and the new paragraph (b)(6) (i.e., the “development” exclusions)—incorporating intent during the development phase for consideration of

whether to exclude certain commodities from “specially designed”” is corrected to read “Paragraphs (b)(4) and (b)(5), and the new paragraph (b)(6) (i.e., the “development” exclusions)—incorporating intent during the development phase for consideration of whether to exclude certain commodities and software from “specially designed””.

■ 3. On page 22702, in the third column, in the last sentence of the second full paragraph, “BIS has also revised the STA paragraph to provide that paragraph (c)(2) of STA is not available any technology controlled in 9E619.” is corrected to read “BIS has also revised the STA paragraph to provide that paragraph (c)(2) of STA is not available for any technology controlled in 9E619.”

■ 4. On page 22703, in the second column, in the first sentence under heading 8., “BIS is clarifying that 9D619 and 9E619 control software and technology, respectively, for the development of production of “tip shrouds” rather than just “shrouds.” is corrected to read “BIS is clarifying that 9D619 and 9E619 control software and technology, respectively, for the development or production of “tip shrouds” rather than just “shrouds.””

§ 734.3—[Corrected]

■ 5. On page 22707, in the first column, in § 734.3 Items subject to the EAR, in the note to paragraph (b)(1)(i) in the fourth sentence, “As the Attorney General exercises independent delegated authority to designate defense articles and services for purposes of permanent import controls, the permanent import control list administered by the Department of Justice has been separately labeled the U.S. Munitions Import List (27 CFR Part 447) to distinguish it from the list set out in the International Trade in Arms Regulations.” is corrected to read “As the Attorney General exercises independent delegated authority to designate defense articles and services for purposes of permanent import controls, the permanent import control list administered by the Department of Justice has been separately labeled the U.S. Munitions Import List (27 CFR Part 447) to distinguish it from the list set out in the International Traffic in Arms Regulations.”

Supplement No. 1 to Part 736 General Orders—[Corrected]

■ 6. On page 22708, in the first column, in Supplement No. 1 to Part 736 General Orders, under General Order No. 5 in the last sentence of paragraph (a). “DDTC licenses, agreements, or other

approvals that contain items transitioning from the USML to the CCL and that are issued prior to the effective date of the final rule transferring such items to the CCL may continue to be used in accordance with the Department of State's final rule, *Amendments to the International Trade in Arms Regulations: Initial Implementation of Export Control Reform*, published on April 16, 2013 in the **Federal Register**." is revised to read "DDTC licenses, agreements, or other approvals that contain items transitioning from the USML to the CCL and that are issued prior to the effective date of the final rule transferring such items to the CCL may continue to be used in accordance with the Department of State's final rule, *Amendments to the International Traffic in Arms Regulations: Initial Implementation of Export Control Reform*, published on April 16, 2013 in the **Federal Register**."

§ 740.2—[Corrected]

■ 7. On page 22709, in the first column, in § 740.2 Restrictions on all license exceptions, in paragraph (a)(13)(iv), "License Exception TSU (§ 740.13(a) or (b) of the EAR);" is corrected to read "License Exception TSU (§ 740.13(a), (b), (f) and (g) of the EAR);"

§ 740.9—[Corrected]

■ 8. On page 22709, in the second column, in § 740.9 Temporary imports, exports, reexports, and transfers (in-country)(TMP), in amendment 21, the instruction "Section 740.9 is amended by revising paragraphs (a) and (b) to read as follows:" is corrected to read "Section 740.9 is amended by revising the section heading and paragraphs (a) and (b) to read as follows:"

■ 9. On page 22711, in the third column, in § 740.9 Temporary imports, exports, reexports, and transfers (in-country)(TMP), in paragraph (a)(14)(i), "(Part 748 of the EAR contains for more information about license applications.)" is corrected to read "(Part 748 of the EAR contains more information about license applications.)"

§ 740.20—[Corrected]

■ 10. On page 22719, in the first column, in § 740.20 License Exception Strategic Trade Authorization (STA), in paragraph (b)(3)(ii)(C), "The United States Government has issued a license that authorizes the use of License Exception STA, the license is in effect, and the consignee provides a copy of such authorization to the exporter." is corrected to read "The United States Government has otherwise authorized the ultimate end use, the license or

other authorization is in effect, and the consignee verifies in writing that the consignee has such authorization and provides the license or other approval identifier to the exporter, reexporter or transferor (as applicable)."

■ 11. On page 22719, in the second column, in § 740.20 License Exception Strategic Trade Authorization (STA), in paragraph (d)(2)(vi)(C), "A United States Government license authorizes the use of License Exception STA, the license is in effect, and is attached to the consignee statement." is corrected to read "The United States Government has otherwise authorized the ultimate end use, the license or other authorization is in effect, and the consignee verifies in writing that the consignee has such authorization and provides the license or other approval identifier to the exporter, reexporter or transferor (as applicable)."

§ 743.4—[Corrected]

■ 12. On page 22722, in the second column, in § 743.4 Conventional arms reporting, in amendment 34, the instruction "Add § 743.4 to read as follows:" is corrected to read "Section 743.4 is added to read as follows:"

§ 748.3—[Corrected]

■ 13. On page 22724, in the second column, in § 748.3 Classification requests, advisory opinions, and encryption registrations, in paragraph (e)(3)(ii), "The overall role of the "part," "component," "accessory," "attachment," or "software" in the performance capabilities of the enumerated item that it is used in or with;" is corrected to read "The overall role of the "part," "component," "accessory," "attachment," or "software" in the performance capabilities of the enumerated or otherwise described item that it is used in or with;"

SUPPLEMENT NO. 1 TO PART 748—ITEM APPENDIX, AND BIS-748P-B: END-USER APPENDIX; MULTIPURPOSE APPLICATION INSTRUCTIONS [Corrected]

■ 14. On page 22725, in the first column, in Block 5, "If you are submitting a License Exception STA eligibility request pursuant to § 740.20(g), mark the box labeled "Export" with an +X) and then proceed to Block 6 of this supplement for instructions specific to such requests." is corrected to read "If you are submitting a License Exception STA eligibility request pursuant to § 740.20(g), mark the box labeled "Export" with an (X) and then proceed

to Block 6 of this supplement for instructions specific to such requests."

§ 758.1—[Corrected]

■ 15. On page 22726, in the second column, § 758.1 The Automated Export System (AES) record, in paragraph (b)(3), "For all exports of "600 series" items enumerated in paragraphs .a through .x of a "600 series" ECCN regardless of value or destination, including exports to Canada;" is corrected to read "For all exports of "600 series" items enumerated or otherwise described in paragraphs .a through .x of a "600 series" ECCN regardless of value or destination, including exports to Canada;"

PART 772—[CORRECTED]

■ 16. On page 22727, in the second column, in § 772.1 Definitions of terms as used in the Export Administration Regulations (EAR), in amendment 65.b., the instruction "Adding, in alphabetical order, the following twelve definitions for the terms "600 series," "600 Series Major Defense Equipment" or "MDE," "accessories," "attachments," "build-to-print technology," "component," "end item," "equipment," "facilities," "material," "part," and "system"." is corrected to read "Adding, in alphabetical order, the following twelve definitions for the terms "600 series," "600 Series Major Defense Equipment or MDE," "accessories," "attachments," "build-to-print technology," "component," "end item," "equipment," "facilities," "material," "part," and "system".

■ 17. On page 22729, in the second column, in § 772.1 Definitions of terms as used in the Export Administration Regulations (EAR), the definition of the term "system", "System. This is a combination of "end items," "parts," "components," "accessories," "attachments," firmware, or "software" that are designed, modified or adapted to operate together to perform a specialized "function." is corrected to read "System. This is a combination of "end items," "equipment," "parts," "components," "accessories," "attachments," firmware, or "software" that operate together to perform a specialized function."

PART 774—[CORRECTED]

■ 18. On page 22730, in the first column, in Supplement No. 1 to part 774 (the Commerce Control List), ECCN 0A919, in "items" paragraph a.2.c in the List of Items Controlled section, "Are direct products of U.S.-origin "600 series" technology (see § 736.2(b)(3) of the EAR)." is corrected to read "Are

direct products of U.S.-origin “600 series” technology or software (see § 736.2(b)(3) of the EAR).”

■ 19. On page 22730, in the first column, in Supplement No. 1 to part 774 (the Commerce Control List), in ECCN 9A018 heading, is corrected to add the phrase “(see List of Items Controlled)” at the end of the heading before the period.

■ 20. On page 22730, in the second column, in Supplement No. 1 to part 774 (the Commerce Control List), the ECCN 9A610 heading, “9A610 Military aircraft and related commodities.” is corrected to read “9A610 Military aircraft and related commodities, other than those enumerated in 9A991.a (see List of Items Controlled).”

■ 21. On page 22730, in the third column, in Supplement No. 1 to part 774 (the Commerce Control List), in ECCN 9A610, under “Related Controls” paragraph (1) in the List of Items Controlled section, “Technical data directly related to articles enumerated in USML Category XIX are subject to the control of USML Category XIX(g).” is corrected to read “Technical data directly related to articles enumerated or otherwise described in USML Category XIX are subject to the control of USML Category XIX(g).”

■ 22. On page 22730, in the third column, in Supplement No. 1 to part 774 (the Commerce Control List), in ECCN 9A610, under Note 2 to 9A610.a in the “items” paragraph in the List of Items Controlled section,

“Note 2: 9A610.a does not control ‘military aircraft’ that:

a. Were first manufactured before 1946;

b. Do not incorporate defense articles enumerated on the U.S. Munitions List, unless the items are required to meet safety or airworthiness standards of a Wassenaar Arrangement Participating State; and

c. Do not incorporate weapons enumerated on the U.S. Munitions List, unless inoperable and incapable of being returned to operation.” is corrected to read “Note 2: 9A610.a does not control ‘military aircraft’ that:

a. Were first manufactured before 1946;

b. Do not incorporate defense articles enumerated or otherwise described on the U.S. Munitions List, unless the items are required to meet safety or airworthiness standards of a Wassenaar Arrangement Participating State; and

c. Do not incorporate weapons enumerated or otherwise described on the U.S. Munitions List, unless inoperable and incapable of being returned to operation.”

■ 23. On page 22731, in the first column, in Supplement No. 1 to part 774 (the Commerce Control List), in ECCN 9A610, under “items” paragraph x in the List of Items Controlled section, “‘Parts,’ ‘components,’ ‘accessories,’ and ‘attachments’ that are ‘specially designed’ for a commodity subject to control in this ECCN or a defense article in USML Category VIII and not elsewhere specified on the USML or the CCL.” is corrected to read “‘Parts,’ ‘components,’ ‘accessories,’ and ‘attachments’ that are ‘specially designed’ for a commodity subject to control in this ECCN or a defense article in USML Category VIII and not elsewhere specified on the USML or in ECCN 9A610.y.”

■ 24. On page 22731, in the second column, in Supplement No. 1 to part 774 (the Commerce Control List), ECCN 9A610, in “items” paragraph y.10 in the List of Items Controlled section, “Hydraulic and fuel hoses, straight and unbent lines, fittings, clips, couplings, nutplates, and brackets;” is corrected to read “Hydraulic and fuel hoses, straight and unbent lines, fittings, couplings, and brackets;”

■ 25. On page 22731, in the second column, in Supplement No. 1 to part 774 (the Commerce Control List), ECCN 9A610, in “items” paragraph y.29 in the List of Items Controlled section, “‘Military Aircraft’ that were first manufactured from 1946 to 1955 that do not incorporate defense articles enumerated on the U.S. Munitions List, unless the items are required to meet safety or airworthiness standards of a Wassenaar Arrangement Participating State; and do not incorporate weapons enumerated on the U.S. Munitions List, unless inoperable and incapable of being returned to operation.” is corrected to read “‘Military Aircraft’ that were first manufactured from 1946 to 1955 that do not incorporate defense articles enumerated or otherwise described on the U.S. Munitions List, unless the items are required to meet safety or airworthiness standards of a Wassenaar Arrangement Participating State; and do not incorporate weapons enumerated or otherwise described on the U.S. Munitions List, unless inoperable and incapable of being returned to operation.”

■ 26. On page 22731, in the second column, in Supplement No. 1 to part 774 (the Commerce Control List), in ECCN 9A619 heading, is corrected to add the phrase “(see List of Items Controlled)” at the end of the heading before the period.

■ 27. On page 22731, in the third column, in Supplement No. 1 to part 774 (the Commerce Control List), in

ECCN 9A619, under “Related Controls” paragraph (1) in the List of Items Controlled section, “Military gas turbine engines and related articles that are enumerated in USML Category XIX, and technical data (including software) directly related thereto, are subject to the jurisdiction of the International Traffic in Arms Regulations (ITAR).” is corrected to read “Military gas turbine engines and related articles that are enumerated or otherwise described in USML Category XIX, and technical data (including software) directly related thereto, are subject to the jurisdiction of the International Traffic in Arms Regulations (ITAR).”

■ 28. On page 22732, in the first column, in Supplement No. 1 to part 774 (the Commerce Control List), in ECCN 9A619, under “items” paragraph y.5 in the List of Items Controlled section, “V-Band, cushion, ‘broomstick,’ hinged, and loop clamps;” is corrected to read “V-Band, cushion, broomstick, hinged, and loop clamps;”

■ 29. On page 22732, in the first column, in Supplement No. 1 to part 774 (the Commerce Control List), in ECCN 9A619, under “items” paragraph x in the List of Items Controlled section, “‘Parts,’ ‘components,’ ‘accessories,’ and ‘attachments’ that are ‘specially designed’ for a commodity controlled by this ECCN 9A619 (other than ECCN 9A619.c) or for a defense article enumerated in USML Category XIX and not specified elsewhere in the CCL or on the USML” is corrected to read “‘Parts,’ ‘components,’ ‘accessories,’ and ‘attachments’ that are ‘specially designed’ for a commodity controlled by this ECCN 9A619 (other than ECCN 9A619.c) or for a defense article enumerated in USML Category XIX and not specified elsewhere on the USML or in ECCN 9A619.y.”

■ 30. On page 22732, in the first column, in Supplement No. 1 to part 774 (the Commerce Control List), the ECCN 9B610 heading, “9B610 Test, inspection, and production ‘equipment’ and related commodities ‘specially designed’ for the ‘development’ or ‘production’ of commodities enumerated in ECCN 9A610 or USML Category VIII.” is corrected to read “9B610 Test, inspection, and production ‘equipment’ and related commodities ‘specially designed’ for the ‘development’ or ‘production’ of commodities enumerated or otherwise described in ECCN 9A610 or USML Category VIII (see List of Items Controlled).”

■ 31. On page 22732, in the second column, in Supplement No. 1 to part

774 (the Commerce Control List), the ECCN 9B610, under “items” paragraph a in the List of Items Controlled section, “Test, inspection, and production “equipment” “specially designed” for the “production,” “development,” repair, overhaul, or refurbishment of commodities enumerated in ECCN 9A610 (except 9A610.y) or USML Category VIII, and “parts,” “components,” “accessories,” and “attachments” “specially designed” therefor.” is corrected to read “Test, inspection, and production “equipment” “specially designed” for the “production,” “development,” operation, installation, maintenance, repair, overhaul, or refurbishing of commodities enumerated or otherwise described in ECCN 9A610 (except 9A610.y) or USML Category VIII, and “parts,” “components,” “accessories,” and “attachments” “specially designed” therefor.”

■ 32. On page 22732, in the second column, in Supplement No. 1 to part 774 (the Commerce Control List), the ECCN 9B610, under “items” paragraph b in the List of Items Controlled section, “Environmental test facilities “specially designed” for the certification, qualification, or testing of commodities enumerated in ECCN 9A610 (except for 9A610.y) or USML Category VIII and “parts,” “components,” “accessories,” and “attachments” “specially designed” therefor.” is corrected to read “Environmental test facilities “specially designed” for the certification, qualification, or testing of commodities enumerated or otherwise described in ECCN 9A610 (except for 9A610.y) or USML Category VIII and “parts,” “components,” “accessories,” and “attachments” “specially designed” therefor.”

■ 33. On page 22732, in the second column, in Supplement No. 1 to part 774 (the Commerce Control List), the ECCN 9B619 heading, “9B619 Test, inspection, and production “equipment” and related commodities “specially designed” for the “development” or “production” of commodities enumerated in ECCN 9A619 or USML Category XIX.” is corrected to read “9B619 Test, inspection, and production “equipment” and related commodities “specially designed” for the “development” or “production” of commodities enumerated or otherwise described in ECCN 9A619 or USML Category XIX.”

■ 34. On page 22732, in the second column, in Supplement No. 1 to part 774 (the Commerce Control List), the ECCN 9B619, under “items” paragraph a in the List of Items Controlled section,

“Test, inspection, and production “equipment” “specially designed” for the “production,” “development,” repair, overhaul, or refurbishment of commodities enumerated in ECCN 9A619 (except for 9A619.y) or in USML Category XIX, and “parts,” “components,” “accessories,” and “attachments” “specially designed” therefor.” is corrected to read “Test, inspection, and production “equipment” “specially designed” for the “production,” “development,” operation, installation, maintenance, repair, overhaul, or refurbishing of commodities enumerated or otherwise described in ECCN 9A619 (except for 9A619.y) or in USML Category XIX, and “parts,” “components,” “accessories,” and “attachments” “specially designed” therefor.”

■ 35. On page 22732, in the second column, in Supplement No. 1 to part 774 (the Commerce Control List), the ECCN 9B619, under “items” paragraph b in the List of Items Controlled section, “Equipment, cells, or stands “specially designed” for testing, analysis and fault isolation of engines, “systems,” “components,” “parts,” “accessories,” and “attachments” specified in ECCN 9A619 on the CCL or in Category XIX on the USML.” is corrected to read “Equipment, cells, or stands “specially designed” for testing, analysis and fault isolation of engines, “systems,” “components,” “parts,” “accessories,” and “attachments” enumerated or otherwise described in ECCN 9A619 (except for 9A619.y) on the CCL or in Category XIX on the USML.”

■ 36. On page 22732, in the third column, in Supplement No. 1 to part 774 (the Commerce Control List), the ECCN 9B619, under “items” paragraph y in the List of Items Controlled section, “Bearing pullers “specially designed” for the “production” or “development” of commodities enumerated in ECCN 9A619 (except for 9A619.y) or USML Category XIX and “parts,” “components,” “accessories,” and “attachments” “specially designed” therefor.” is corrected to read “Bearing pullers “specially designed” for the “production” or “development” of commodities enumerated or otherwise described in ECCN 9A619 (except for 9A619.y) or USML Category XIX and “parts,” “components,” “accessories,” and “attachments” “specially designed” therefor.”

■ 37. On page 22732, in the third column, in Supplement No. 1 to part 774 (the Commerce Control List), the ECCN 9C610 heading is corrected to add the phrase “(see List of Items Controlled)” at the end of the heading before the period.

■ 38. On page 22732, in the third column, in Supplement No. 1 to part 774 (the Commerce Control List), the ECCN 9C610, under “items” paragraph a in the List of Items Controlled section, “Materials not elsewhere specified in the USML or the CCL and “specially designed” for commodities enumerated in ECCN 9A610 (except 9A610.y).” is corrected to read “Materials not elsewhere specified in the USML or the CCL and “specially designed” for commodities enumerated or otherwise described in ECCN 9A610 (except 9A610.y).”

■ 39. On page 22732, in the third column, in Supplement No. 1 to part 774 (the Commerce Control List), the ECCN 9C619 heading is corrected to add the phrase “(see List of Items Controlled)” at the end of the heading before the period.

■ 40. On page 22733, in the first column, in Supplement No. 1 to part 774 (the Commerce Control List), the ECCN 9C619, under “items” paragraph a in the List of Items Controlled section, “Materials not elsewhere specified in the CCL or on the USML and “specially designed” for commodities enumerated in ECCN 9A619 (except for 9A619.y).” is corrected to read “Materials not elsewhere specified in the CCL or on the USML and “specially designed” for commodities enumerated or otherwise described in ECCN 9A619 (except for 9A619.y).”

■ 41. On page 22733, in the first column, in Supplement No. 1 to part 774 (the Commerce Control List), the ECCN 9D610 heading is corrected to add the phrase “(see List of Items Controlled)” at the end of the heading before the period and to make the entire heading bold.

■ 42. On page 22733, in the first column, in Supplement No. 1 to part 774 (the Commerce Control List), in ECCN 9D610, the “Related Controls” paragraph in the List of Items Controlled section, “Software directly related to articles enumerated in USML Category VIII is subject to the control of USML paragraph VIII(i).” is corrected to read “Software directly related to articles enumerated or otherwise described in USML Category VIII is subject to the control of USML paragraph VIII(i).”

■ 43. On page 22733, in the third column, in Supplement No. 1 to part 774 (the Commerce Control List), the ECCN 9D619 heading is corrected to add the phrase “(see List of Items Controlled)” at the end of the heading before the period.

■ 44. On page 22733, in the third column, in Supplement No. 1 to part 774 (the Commerce Control List), in ECCN 9D619, the “Related Controls”

paragraph in the List of Items Controlled section, “Software directly related to articles enumerated in USML Category XIX is subject to the control of USML paragraph XIX(g).” is corrected to read “Software directly related to articles enumerated or otherwise described in USML Category XIX is subject to the control of USML paragraph XIX(g).”

■ 45. On page 22734, in the first column, in Supplement No. 1 to part 774 (the Commerce Control List), in ECCN 9D619, in “items” paragraph b.8 in the List of Items Controlled section, “Mechanical “components” and “parts” as follows: fuel metering units and fuel pump metering units, valves (fuel throttle, main metering, oil flow management), heat exchangers (air/air, fuel/air, fuel/oil), debris monitoring (inlet and exhaust), seals (carbon, labyrinth, brush, balance piston, and “knife-edge”), permanent magnetic alternator and generator, eddy current sensors;” is corrected to read “Mechanical “components” and “parts” as follows: fuel metering units and fuel pump metering units, valves (fuel throttle, main metering, oil flow

management), heat exchangers (air/air, fuel/air, fuel/oil), debris monitoring (inlet and exhaust), seals (carbon, labyrinth, brush, balance piston, and knife-edge), permanent magnetic alternator and generator, eddy current sensors;”

■ 46. On page 22734, in the first column, in Supplement No. 1 to part 774 (the Commerce Control List), the ECCN 9E610 heading is corrected to add the phrase “(see List of Items Controlled)” at the end of the heading before the period.

■ 47. On page 22734, in the first and second column, in Supplement No. 1 to part 774 (the Commerce Control List), in ECCN 9E610, the “Related Controls” paragraph in the List of Items Controlled section, “Technical data directly related to articles enumerated in USML Category VIII are subject to the control of USML paragraph VIII(i).” is corrected to read “Technical data directly related to articles enumerated or otherwise described in USML Category VIII are subject to the control of USML paragraph VIII(i).”

■ 48. On page 22734, in the third column, in Supplement No. 1 to part

774 (the Commerce Control List), the ECCN 9E619 heading is corrected to remove “refurbishment” and add in its place “refurbishing” and is corrected to add the phrase “(see List of Items Controlled)” at the end of the heading before the period.

■ 49. On page 22734, in the third column, in Supplement No. 1 to part 774 (the Commerce Control List), in ECCN 9E619, under “Related Controls” paragraph (1) in the List of Items Controlled section, “Technical data directly related to articles enumerated in USML Category XIX are subject to the control of USML Category XIX(g).” is corrected to read “Technical data directly related to articles enumerated or otherwise described in USML Category XIX are subject to the control of USML Category XIX(g).”

Dated: September 23, 2013.

Kevin J. Wolf,

Assistant Secretary of Commerce for Export Administration.

[FR Doc. 2013–23498 Filed 10–2–13; 8:45 am]

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Part VIII

Department of State

22 CFR Parts 120, 121, 123, et al.

Amendment to the International Traffic in Arms Regulations: Initial
Implementation of Export Control Reform; Correction; Final Rule

DEPARTMENT OF STATE

22 CFR Parts 120, 121, 123, and 126

RIN 1400-AD37

[Public Notice 8493]

Amendment to the International Traffic in Arms Regulations: Initial Implementation of Export Control Reform; Correction

AGENCY: Department of State.

ACTION: Final rule; correction.

SUMMARY: The Department of State is correcting a final rule that appeared in the *Federal Register* of April 16, 2013.

DATES: This rule is effective October 15, 2013.

FOR FURTHER INFORMATION CONTACT: Mr. C. Edward Peartree, Director, Office of Defense Trade Controls Policy, Department of State, telephone (202) 663-2792; email DDTCResponseTeam@state.gov. ATTN: Regulatory Change, Corrections to First ECR Final Rule.

SUPPLEMENTARY INFORMATION: The Department provides the following corrections to the rule, "Amendment to the International Traffic in Arms Regulations: Initial Implementation of Export Control Reform," published on April 16, 2013 and effective on October 15, 2013 (78 FR 22740). As part of the President's Export Control Reform (ECR) effort, that rule amended the International Traffic in Arms Regulations (ITAR) to revise four U.S. Munitions List (USML) categories, provide new definitions, and provide policies and procedures regarding the licensing of items moving from the export jurisdiction of the Department of State to the Department of Commerce.

Most of the changes in this rule are meant to clarify the regulation by correcting grammatical and punctuation errors, providing references and more appropriate arrangement of the regulation, and in a few instances correcting unintended consequences of the regulation as published on April 16. In addition, certain errors and omissions in the Transition Plan included in that rule are corrected, and a revised Supplement No. 1 to part 126, which takes into account the changes made to the USML thus far, is provided.

Pursuant to ECR, the Department of Commerce has been publishing revisions to the Export Administration Regulations, including various revisions to the Commerce Control List. Revision of the USML and CCL are coordinated so there is uninterrupted regulatory coverage for items moving from the jurisdiction of the Department of State to that of the Department of Commerce.

The Department of Commerce's companion to the rule corrected in this notice (*see* "Revisions to the Export Administration Regulations: Initial Implementation of Export Control Reform," 78 FR 22660) is also corrected in this edition of the *Federal Register*.

The following corrections are made to FR Doc. No. 2013-8351, "Amendment to the International Traffic in Arms Regulations: Initial Implementation of Export Control Reform," published on April 16, 2013:

- 1. On page 22740, in the first column, in the heading, "22 CFR Parts 120, 121, and 123" is corrected to read "22 CFR Parts 120, 121, 123, and 126."
- 2. On page 22740, in the third column, in the "Changes in This Rule" paragraph, "(v)" is changed to "(vi)," and a new "(v)" section is added as follows: "(v) updating of Supplement No. 1 to part 126 to reflect the changes to the USML in this rule;"
- 3. Starting on page 22747, in the third column, through page 22751, in the first column, "Transition Plan" is revised to read as follows:

Transition Plan

With the intention of establishing certain necessary licensing procedures stemming from ECR implementation and mitigating the impact of the changes involved in the revision of the USML and the CCL on U.S. license holders and the defense export industry, the Department implements the following "Transition Plan," which will describe (1) timelines for implementation of changes, (2) certain temporary licensing procedures for items transitioning from the USML to the CCL, and (3) certain permanent licensing procedures pertaining to the export of any item "subject to the EAR" (*see* definition of this term in this rule) to be used in or with defense articles controlled on the USML.

The Department notes the following main points regarding licensing procedure during the transition and thereafter:

- There will generally be a 180-day transition period between the publication of the final rule for each revised USML category and its effective date. This period will allow U.S. license holders time to review their current authorizations and prepare for the transition to the new Export Control Classification Numbers (ECCNs).
- A license application or other request for authorization containing only transitioning items or both USML and transitioning items will be accepted by the Department up until the effective date of the relevant revised USML category.

- A license or authorization issued by the Department will be effective for up to two years from the effective date of the revised USML category if all the items listed on the license or authorization have transitioned to the export jurisdiction of the Department of Commerce.

- A license or authorization issued by the Department will be valid until its expiration if some of the items listed on the license or authorization have transitioned to the export jurisdiction of the Department of Commerce.

- USML categories will have a new (x) paragraph, the purpose of which is to allow for Department of State licensing for commodities, software, and technical data subject to the EAR, provided those commodities, software, and technical data are to be used in or with defense articles controlled on the USML and are described in the purchase documentation submitted with the application.

The Department first presented for public comment its plan for licensing policies and procedures regarding items moving from the export jurisdiction of the Department of State to the Department of Commerce on June 21, 2012 (*see* "Export Control Reform Transition Plan," 77 FR 37346). The comment period ended August 6, 2012. Seventeen parties filed comments during the established comment period recommending changes. The Department's evaluation of the written comments and recommendations follows.

Eight commenting parties stated that the proposed 45-day transition period was insufficient time to accomplish all that was necessary to adapt company systems to the changes and recommended longer transition periods of varying lengths. The Department has accepted the recommendation for a longer transition period, and has changed the effective date of revised USML categories to 180 days from the date of publication.

In response to the recommendation of several commenting parties for shared licensing authority for items changing export jurisdiction, the Department's transition guidance will provide that, for 180 days following the publication date of a revised USML category, licenses for items moving from the USML to the CCL will be accepted by both DDTC and BIS. In addition, DDTC authorizations that pertain wholly to transitioned items will expire two years after the effective date of the relevant final rule moving the items to the CCL, and licenses that have some items remaining on the USML will be valid until expiration for all items covered by

the license at the time it was issued. Applicants should refer to the Department of Commerce's companion to this rule, which is published elsewhere in this issue of the **Federal Register**, for information related to BIS licenses during the transition period.

Two commenting parties stated that dual jurisdiction/licensing will create a heavy compliance burden for USML end-item manufacturers with international supply chains, as each of the export authorities has different compliance obligations. The commenting parties also stated that it will create confusion as foreign parties may be party to a USML technical assistance agreement and receive items for the project under a Department of Commerce license or Strategic Trade Authorization (STA) license exception. The Department acknowledges this complexity, but notes that ECR will not create a new context in this regard, as current projects routinely require both defense articles and commercial items for completion. Dual compliance requirements already exist and the Department believes the benefits derived from changes implemented under ECR outweigh these concerns.

One commenting party requested clarification of whether sending to a foreign supplier technical data on a USML end-item to allow installation of a 600 series component is both a USML technical data export and CCL installation technology export, creating dual licensing for most foreign sourced commodities. If the technical data is directly related to a defense article, the technical data will be ITAR controlled. If the technical data is for the production, development, etc., of a 600 series or CCL item to be installed in a defense article, the technical data remains EAR controlled. The jurisdiction of the technical data follows the jurisdiction of the related commodity or item.

Five commenting parties recommended that amendments to licenses and authorizations that contain transitioning and non-transitioning items or solely transitioning items should be allowed during the transition period. The Department accepted this recommendation and revised the guidance to provide that such submissions will be accepted up until the effective date of the relevant revised USML category.

Three commenting parties recommended allowing temporary import and export authorizations to last until expired or returned. As the items temporarily imported or exported are to return to their point of origin, pursuant to the requirements of the

authorizations, there is no national security risk in maintaining the original authorizations. The Department accepted this recommendation and revised the guidance accordingly.

One commenting party noted that currently approved agreements covering dual/third country national employees of the foreign party will be affected by the need to obtain deemed export licenses, and that two years may not be sufficient time to fulfill this requirement. The Department notes that as long as the currently approved agreement has been amended to provide authority for the transitioned items in accordance with the guidance in this notice, the dual/third country national authority would still apply.

Five commenting parties recommended that existing reexport/retransfer authorizations should be grandfathered without expiration. Foreign parties who purchased transitioned items under authorizations that allowed perpetual foreign sales should not have to reauthorize those sales and the U.S. Government should not re-review the authorizations. The Department accepted this recommendation and revised the guidance accordingly. The three scenarios for which this applies are: (1) Reexport/retransfer authority granted through a program status DSP-5; (2) the sales territory of a manufacturing license or warehouse and distribution agreement if the agreement continues to be the export authority; and (3) any stand-alone reexport/retransfer authorization received pursuant to ITAR § 123.9(c).

Two commenting parties recommended requiring U.S. exporters to identify ECCNs and prior USML classifications on export documentation for two years following the effective date of transitioned items and mandate prompt responses to requests for ECCNs for legacy items. The Department accepted this recommendation in part. The Department has revised ITAR § 123.9(b) to require identification of the license or other approval to the foreign party.

Seven commenting parties recommended that previously issued commodity jurisdiction (CJ) determinations designating items as not subject to the export jurisdiction of the Department remain valid. This will preserve EAR99 status for items previously so designated and would relieve exporters who have obtained CJ determinations from having to reclassify items. The Department accepted this recommendation and revised the guidance accordingly.

One commenting party inquired what Automated Export System (AES) entry would be required for items that have transitioned to control under the CCL but are to be exported under a legacy DDTC authorization. The AES entry for such exports will remain the same as is required now for a DDTC authorization.

In response to one commenting party's inquiry on what effect the transition will have on recordkeeping requirements, the Department notes records must be maintained for five years following the last transaction, regardless of jurisdiction.

After consideration of the comments received, and in furtherance of the principles of ECR, the Department has decided to institute a new permanent licensing procedure that will allow DDTC licensing for commodities, software, and technical data subject to the EAR, provided those commodities, software, and technical data are to be used in or with defense articles controlled on the USML and are described in the purchase documentation submitted with the application. This procedure is to be effected by the exporter by use of "(x) paragraph," added to USML Categories VIII and XIX in this rule, and to be added to other USML categories as they are revised. The Department will begin accepting licenses citing a (x) paragraph entry following the effective date of the relevant revised USML category. The President has provided for this delegation of authority from the Secretary of Commerce to the Secretary of State, and Executive Order 13222 has been amended accordingly (*see* 78 FR 16129). The Department has revised various sections of, and added certain sections to, the ITAR to accommodate this delegation of authority: ITAR § 120.5 to add a new paragraph (b) to address the delegation; the addition of ITAR § 120.42 to provide a definition of "subject to the EAR"; ITAR § 123.1 to provide guidance on how to use the (x) paragraph; and ITAR § 123.9(b) to identify additional requirements when using the (x) paragraph. The Department of Commerce has the authority to review "pre-positioned" license applications during the 180-day transition period for items transitioning to EAR jurisdiction. This means the Department of Commerce will be able to review and process license applications for transitioning items. However, these Department of Commerce licenses would not be issued until the effective date of the relevant final rule moving items from the USML to the CCL. Further guidance is provided in the Department of Commerce's companion to this rule (*see* "Revision to the Export

Administration Regulations: Initial Implementation of Export Control Reform,” elsewhere in this edition of the **Federal Register**).

Transition Plan

Transition Period—General Policy

There will generally be a 180-day transition period between the publication of the final rule for each revised U.S. Munitions List (USML) category and its effective date. This period will allow U.S. license holders time to review their current authorizations and prepare for the transition to the new ECCNs. A license application or other request for authorization containing only transitioning items or both USML and transitioning items will be accepted by the Department up until the effective date of the relevant revised USML category. A license or authorization issued by the Department will be effective for up to two years from the effective date of the revised USML category if all the items listed on the license or authorization have transitioned to the export jurisdiction of the Department of Commerce. A license or authorization issued by the Department will be valid until its expiration if some of the items listed on the license or authorization have transitioned to the export jurisdiction of the Department of Commerce. During this period, BIS will accept license applications for items moving from the USML to the CCL, but it will not issue licenses for such items until the applicable effective date.

DSP-5 Licenses

Approvals issued for licenses submitted prior to the effective date of the relevant revised USML category that do not include any items that will remain on the USML will remain valid until expired, returned by the license holder, or for a period of two years from the effective date of the final rule, whichever occurs first, unless otherwise revoked, suspended, or terminated. Licenses containing both transitioning and non-transitioning items (mixed authorizations) will remain valid until expired or returned by the license holder, unless otherwise revoked, suspended, or terminated. Any limitation, proviso, or other requirement imposed on the DDTC authorization will remain in effect if the DDTC authorization is relied upon for export. License amendment requests (DSP-6) received by DDTC during the transition period amending licenses affected by the transition will be adjudicated on a

case-by-case basis up until the effective date of the relevant rule.

DSP-61 and DSP-73 Licenses

All temporary licenses that are issued in the period prior to the effective date of the final rule for each revised USML category will remain valid until expired or returned by the license holder, unless otherwise revoked, suspended, or terminated. Any limitation, proviso, or other requirement imposed on the DDTC authorization will remain in effect if the DDTC authorization is relied upon for export. License amendment requests (DSP-62 and DSP-74) received by DDTC during the transition period amending licenses affected by the transition will be adjudicated on a case-by-case basis until the effective date of the relevant rule.

License Applications Received After the Transition Period

All license applications, including amendments, received after the effective date for items that have transitioned to the CCL that are not identified in a (x) paragraph entry will be Returned Without Action with instructions to contact the Department of Commerce.

Technical Assistance Agreements, Manufacturing License Agreements, Warehouse and Distribution Agreements, and Related Reporting Requirements

Approvals issued for agreements submitted prior to the effective date of the relevant revised USML category that contain transitioning and non-transitioning items will remain valid until expired, unless they require an amendment, or for a period of two years from the effective date of the relevant final rule, whichever occurs first, unless otherwise revoked, suspended, or terminated. In order for an agreement to remain valid beyond two years, an amendment must be submitted to authorize the CCL items using the new (x) paragraph from the relevant USML category. Any activity conducted under an agreement will remain subject to all limitations, provisos, and other requirements stipulated in the agreement.

Approvals issued for agreements submitted prior to the effective date of the relevant revised USML category that contain solely transitioning items will remain valid for a period of two years from the effective date of the relevant USML category, unless revoked, suspended, or terminated. After the two year period ends, any on-going activity must be conducted under the appropriate Department of Commerce authorization. Agreements and

agreement amendments solely for items moving to the CCL which are received after the effective date will be Returned Without Action with instructions to contact the Department of Commerce.

All reporting requirements for Manufacturing License Agreements under ITAR § 124.9(a)(6) and Warehouse and Distribution Agreements under ITAR § 124.14(c)(6) must be complied with and such reports must be submitted to the Department of State while the agreement is relied upon as an export authorization by the exporter.

ITAR Licensing of Items Subject to the EAR

USML categories will have a new (x) paragraph, to be a permanent feature of ITAR licensing. The purpose of this procedure is to allow for ITAR licensing for commodities, software, and technical data subject to the Export Administration Regulations (EAR) provided those commodities, software, and technical data are to be used in or with defense articles controlled on the USML and are described in the purchase documentation submitted with the application.

Commodity Jurisdiction Determinations

Previously issued commodity jurisdiction (CJ) determinations for items deemed to be subject to the EAR shall remain valid. Previously issued CJ determinations for items deemed to be USML but that are subsequently transitioning to the CCL pursuant to a published final rule will be superseded by the newly revised lists. Exporters are encouraged to review each revised USML category along with its companion CCL category to determine whether the items subject to a CJ have transitioned to the jurisdiction of the Department of Commerce. These CJs are limited to the specific commodity identified in the final determination letter. Consistent with the recordkeeping requirements of the ITAR and the EAR, licensees and foreign persons subject to licenses must maintain records reflecting their assessments of the proper regulatory jurisdiction over their items. License holders unable to ascertain the proper jurisdiction of their items may request a CJ determination from DDTC through the established procedure.

License holders who are certain their items have transitioned to the CCL are encouraged to review the appropriate ECCN to determine the classification of their item. License holders who are unsure of the proper ECCN designation may submit a Commodity Classification Automated Tracking System request

(CCATS) to the Department of Commerce. See 15 CFR 748.3.

As described in EAR § 748.3(b)(3), parties making classification self-determinations or submitting CCATS requests are reminded that such determinations may not be relied upon or cited as evidence that the U.S. Government has determined that the item is not subject to the ITAR. As described in ITAR § 120.5, an item that is described on the USML is ITAR controlled regardless of whether it also within the scope of an ECCN or referred to in a CCATS.

Reexport/Retransfer of USML Items That Have Transitioned to the CCL

Following the effective date of transition, foreign persons (*i.e.*, end-users, foreign consignees, and foreign intermediate consignees) who receive, via a Department of State authorization, an item that they are certain has transitioned to the CCL (*e.g.*, confirmed in writing by manufacturer or supplier), should treat the item as such and submit requests for post-transition reexports or retransfers outside the scope of the original ITAR authorization to the Department of Commerce, as may be required by the EAR.

If reexport or retransfer was previously authorized under a DDTC authorization, then that reexport or retransfer authority remains valid. The three scenarios for which this applies are: (1) Reexport/retransfer authority granted through a program status DSP-5; (2) the sales/distribution territory of a manufacturing license or warehouse and distribution agreement if the agreement continues to provide the export authority; or (3) any stand-alone reexport/retransfer authorization received pursuant to ITAR § 123.9.

Foreign persons or U.S. persons abroad that have USML items in their inventory at the effective date of transition should review both the USML and the CCL to determine the proper jurisdiction. If the item is controlled by the Department of Commerce, any reexport or retransfer must comply with the requirements of the EAR. If doubt exists on jurisdiction of the items, the foreign person should contact the original exporter or manufacturer.

Regulatory Oversight Responsibilities

For those items transitioning from the USML to the CCL, the Department of Commerce will exercise regulatory oversight, as of the effective date, for the purposes of licensing and enforcement of exports from the United States where no Department of State authorization is being used. The Department of State will continue to exercise regulatory

oversight concerning all Department of State licenses, agreements, and other authorizations, including those where exporters, temporary importers, manufacturers, and brokers continue to use previously issued Department of State licenses and agreements, until the activity is covered by a Department of Commerce authorization.

License holders may decide to apply for and use Department of Commerce authorizations for export of the newly transitioned CCL items rather than continue to use previously issued Department of State authorizations. In such cases, license holders must return the Department of State licenses in accordance with ITAR § 123.22 after they have obtained the required Department of Commerce authorizations.

Violations and Voluntary Disclosures of Possible Violations

Exporters, temporary importers, manufacturers, and brokers are cautioned to closely monitor ITAR and EAR compliance concerning Department of State licenses and agreements for items transitioning from the USML to the CCL.

On the effective date of each rule that adds an item to the CCL that was previously subject to the ITAR, that item will be subject to the EAR. Approvals issued by DDTC for license applications and other authorization requests may continue to be used as described above by exporters, temporary importers, manufacturers, and brokers. The violation of a previously issued DDTC authorization (including any condition of a DDTC authorization) that is continued to be used as described above is a violation of the ITAR.

With respect to a transitioned item, persons who discover a possible violation of the ITAR, the EAR, or any license or authorization issued thereunder, are strongly encouraged to disclose this violation to DDTC, BIS, or both offices, as appropriate, pursuant to established procedures for submitting voluntary disclosures.

License holders and foreign persons must obtain Department of State authorization before disposing, reselling, transshipping, or otherwise transferring any item in their possession that remains on the USML.

Registration

With few exceptions, manufacturers, exporters, and brokers are required to register with the Department of State if their activities involve USML defense articles or defense services.

Registered manufacturers, exporters, temporary importers, defense service

providers and brokers ("registrants") are reminded of the requirement to notify DDTC in writing when they are no longer in the business of manufacturing, exporting, or brokering USML defense articles or defense services. Registrants who determine that all of their activities involve articles or services that will transition from the USML to the CCL and therefore are no longer required to register with the Department of State must provide such written notification to the Department of State. Instructions for providing such notification are accessible on the DDTC Web site (www.pmddtc.state.gov). Note that DDTC will not cancel or revoke those registrations, but will allow the registrations to expire. Registrants who determine that all of their activities will be subject to Department of Commerce jurisdiction as a result of the transition from the USML to the CCL must nevertheless maintain registration with the Department of State until the effective date of the applicable final rule transitioning the registrant's items to the CCL.

Registrants who determine they will no longer be required to register with the Department of State after the effective date of the final rule transitioning the registrant's items to the CCL, and who have registration renewal dates that occur after publication of the final rule but before its effective date, may request to have their registration expiration date extended to the effective date of transition and not be charged a registration fee. In those cases, registrants must insert the following statement as the first paragraph in the written notification previously mentioned: *"(insert company name) requests DDTC extend our registration expiration date to the effective date of transition to CCL for USML Category (insert Category number) items and waive the registration fee. (insert company name) certifies that no changes in our eligibility from what is represented in our previously submitted DS-2032 Statement of Registration has occurred (otherwise specify change in eligibility status)."* If a registrant subsequently determines that its registration with the Department of State must instead be renewed, the registration renewal fee will be recalculated to include any Department of State licenses the registrant received during the period when the registration expiration date was extended.

Registrants that avail themselves of the opportunity to continue using previously issued Department of State authorizations (licenses and agreements) for items that have transitioned to the CCL must maintain current registration

with the Department of State, which includes payment of registration fees.

■ 4. On page 22751, in the second column, as a new last paragraph to the “Additional Required Changes” section, the following is added: “Supplement No. 1 to part 126 is revised in conformance with the revisions of USML Categories VIII, XVII, and XXI and addition of USML Category XIX.”

■ 5. On page 22752, in the third column, the list of subjects and the words of issuance are corrected to read as follows:

List of Subjects

22 CFR Parts 120 and 121

Arms and munitions, Classified information, Exports.

22 CFR Part 123

Arms and munitions, Exports, Reporting and recordkeeping requirements.

22 CFR Part 126

Arms and munitions, Exports.

“Accordingly, for the reasons set forth above, Title 22, Chapter I, Subchapter M, parts 120, 121, 123, and 126 are amended as follows.”

PART 120 [CORRECTED]

§ 120.5 [Corrected]

■ 6. On page 22753, in the third column, in paragraph (a), in the sentence beginning, “In carrying out the functions delegated to the Attorney General . . .,” the comma after “security” is removed. In the sentence beginning, “The Department of Commerce regulates the export . . .,” “(CCL)” is removed.

§ 120.10 [Corrected]

■ 7. On page 22754, in the first column, in paragraph (b), commas are placed after “mathematical” and “colleges,” and “of this subchapter” is placed after “§ 120.11.”

§ 120.29 [Corrected]

■ 8. On page 22754, in the first column, in paragraph (a), “among” replaces “between.”

§ 120.41 [Corrected]

■ 9. On page 22754, in the second column, in paragraph (a) introductory text, the quotations are removed from “specially designed.” Paragraph (b) introductory text is removed and replaced with, “For purposes of this subchapter, a part, component, accessory, attachment, or software is not specially designed if it:” “Note 1 to paragraph (a)” is removed. “Note 2 to paragraph (a)” is re-titled, “Note to

paragraphs (a) and (b).” In the third column, in “Note to paragraph (b),” the following is added as a first sentence: “The term “enumerated” refers to any article on the U.S. Munitions List or the Commerce Control List and not in a “catch-all” paragraph.” The last sentence in the note is replaced with the following: “For the purposes of the U.S. Munitions List, a “catch-all” paragraph includes the phrases “and specially designed parts and components therefor,” or “(parts, components, accessories, attachments, and associated equipment) specially designed for/to/with.” The text for “Note 4 to paragraph (b)(3)” is removed and replaced with the following text: “The *form* of a commodity is defined by its configuration (including the geometrically measured configuration), material, and material properties that uniquely characterize it. The *fit* of a commodity is defined by its ability to physically interface or connect with or become an integral part of another commodity. The *function* of a commodity is the action or actions it is designed to perform. *Performance capability* is the measure of a commodity’s effectiveness to perform a designated function in a given environment (e.g., measured in terms of speed, durability, reliability, pressure, accuracy, efficiency). For software, the *form* means the design, logic flow, and algorithms. The *fit* is defined by its ability to interface or connect with a defense article. The *function* means the action or actions the software performs directly related to a defense article or as a standalone application. *Performance capability* means the measure of the software’s effectiveness to perform a designated function.” After “Note 4 to paragraph (b)(3),” the following new note is added: “*Note 5 to paragraph (b)(3)*: With respect to a commodity, “equivalent” means its form has been modified solely for fit purposes.”

PART 121 [CORRECTED]

§ 121.1 [Corrected]

■ 10. On page 22755, in the second column, in paragraph (b)(3), the following is removed: “The asterisk is placed as a convenience to help identify such defense articles.”

In the third column, in Category VIII,” in paragraphs (a)(5), (6), (10), and (13), the quotation marks are removed from “range.” “Note 1 to paragraph (a)” is re-titled, “Note to paragraph (a).” In the note, the quotation marks are removed from the second, third, and fourth occurrences of “range.” On page 22756, in the first column, in paragraph (d), the quotation marks are removed from

“range.” The following is added as a second sentence in “Note to paragraph d”: “For the definition of “range,” see note to paragraph (a) of this category.” The text of paragraph (f) is removed and replaced with the following text: “Developmental aircraft funded by the Department of Defense via contract or other funding authorization, and specially designed parts, components, accessories, and attachments therefor.” “Note 1 to paragraph VIII(f)” is re-titled, “Note 1 to paragraph (f).” In the note text, “VIII” and “developmental” are removed from the introductory sentence, “in production; (b)” is placed between “(a)” and “determined,” a comma is placed after “(see § 120.4 of this subchapter),” “(b)” is replaced by “(c),” and “or other funding authorization” is placed between “contract” and “as.” “Note 2 to paragraph VIII(f)” is re-titled, “Note 2 to paragraph (f).” A new note is added after “Note 2 to paragraph (f),” as follows: “*Note 3 to paragraph (f)*: This provision is applicable to those contracts or other funding authorizations that are dated April 16, 2014, or later.” A new note is added after paragraph (h)(1), as follows: “*Note to paragraph (h)(1)*: Specially designed (see § 120.4(b)(3)(ii) of this subchapter) does not control parts, components, accessories, and attachments that are common to aircraft enumerated in paragraph (a) of this category but not identified in paragraph (h)(1), and those identified in paragraph (h)(1). For example, a part common to only the F-14 and F-35 is not specially designed for purposes of the ITAR. A part common to only the F-22 and F-35—two aircraft models identified in paragraph (h)(1)—is specially designed.” In the second column, in paragraph (h)(2), a comma is placed after “lubrication.” In paragraph (h)(3), a comma is placed after “systems.” In paragraph (h)(5), a comma is placed after “gear.” In paragraph (h)(11), a comma is placed after the second occurrence of “systems.” In the third column, in paragraph (h)(20)(ii), “directly related to defense articles in this subchapter or 600 series items subject to the EAR” is placed after “software.” In paragraph (h)(20)(iii), “(see § 120.10(a)(2) of this subchapter)” is placed after “information.”

On page 22757, in the second column, in Category XIX, paragraph (e), the quotation marks are removed from “range.” In “Note to paragraph (e), the following is added as a second sentence: “For the definition of “range,” see note to paragraph (a) of USML Category VIII.” In the third column, in paragraph

(f)(6)(ii), “directly related to defense articles in this subchapter or 600 series items subject to the EAR” is added after “software.” In paragraph (f)(6)(iii), “(see § 120.10(a)(2) of this subchapter)” is added after “information.”

§ 121.2 [Corrected]

■ 11. On page 22758, in the first column, a period is placed after the section header.

§ 121.3 [Corrected]

■ 12. On page 22758, in the first column, in paragraph (a) introductory text, “USML” is added in between “In” and “Category.” In paragraph (a)(6), the quotation marks are removed from the first occurrence of “mission system” and from “system.”

PART 123 [CORRECTED]

■ 13. On page 22758, in the second column, “The authority citation for part 123 is revised to read as follows” is corrected to read “The authority citation for part 123 continues to read as follows.” “Sec. 520, Pub. L. 112–55” is placed between “Sec. 1205(a), Pub. L. 107–228;” and “Section 1261, Pub. L. 112–239.”

§ 123.9 [Corrected]

■ 14. On page 22759, in the third column, in paragraph (b)(2), “(see §§ 120.42 and 123.1(b))” is corrected to read “(see §§ 120.42 and 123.1(b) of this subchapter),” and “submitted with the Department of State license or other approval request” is added between “support documentation” and “the appropriate EAR classification.”

PART 126 [CORRECTED]

■ 15. On page 22759, at the end of column three, before the signature, add the following amendments:

PART 126—GENERAL POLICIES AND PROVISIONS

■ 20. The authority citation for part 126 continues to read as follows:

Authority: Secs. 2, 38, 40, 42, and 71, Pub. L. 90–629, 90 Stat. 744 (22 U.S.C. 2752, 2778, 2780, 2791, and 2797); 22 U.S.C. 2651a; 22 U.S.C. 287c; E.O. 12918, 59 FR 28205; 3 CFR, 1994 Comp., p. 899; Sec. 1225, Pub. L. 108–375; Sec. 7089, Pub. L. 111–117; Pub. L. 111–266; Sections 7045 and 7046, Pub. L. 112–74; E.O. 13637, 78 FR 16129.

■ 21. Supplement No. 1 to part 126 is revised to read as follows:

SUPPLEMENT NO. 1*

USML Category	Exclusion	(CA) § 126.5	(AS) § 126.16	(UK) § 126.17
I–XXI	Classified defense articles and services. <i>See</i> Note 1	X	X	X
I–XXI	Defense articles listed in the Missile Technology Control Regime (MTCR) Annex.	X	X	X
I–XXI	U.S. origin defense articles and services used for marketing purposes and not previously licensed for export in accordance with this subchapter.		X	X
I–XXI	Defense services for or technical data related to defense articles identified in this supplement as excluded from the Canadian exemption.	X		
I–XXI	Any transaction involving the export of defense articles and services for which congressional notification is required in accordance with § 123.15 and § 124.11 of this subchapter.	X		
I–XXI	U.S. origin defense articles and services specific to developmental systems that have not obtained written Milestone B approval from the U.S. Department of Defense milestone approval authority, unless such export is pursuant to a written solicitation or contract issued or awarded by the U.S. Department of Defense for an end-use identified in paragraph (e)(1), (e)(2), or (e)(4) of § 126.16 or § 126.17 of this subchapter and is consistent with other exclusions of this supplement.		X	X
I–XXI	Nuclear weapons strategic delivery systems and all components, parts, accessories, and attachments specifically designed for such systems and associated equipment.	X		
I–XXI	Defense articles and services specific to the existence or method of compliance with anti-tamper measures, where such measures are readily identifiable, made at originating Government direction.		X	X
I–XXI	Defense articles and services specific to reduced observables or counter low observables in any part of the spectrum. <i>See</i> Note 2.		X	X
I–XXI	Defense articles and services specific to sensor fusion beyond that required for display or identification correlation. <i>See</i> Note 3.		X	X
I–XXI	Defense articles and services specific to the automatic target acquisition or recognition and cueing of multiple autonomous unmanned systems.		X	X
I–XXI	Nuclear power generating equipment or propulsion equipment (e.g., nuclear reactors), specifically designed for military use and components therefore, specifically designed for military use. <i>See</i> also § 123.20 of this subchapter.			X
I–XXI	Libraries (parametric technical databases) specially designed for military use with equipment controlled on the USML. <i>See</i> Note 13.			X
I–XXI	Defense services or technical data specific to applied research as defined in § 125.4(c)(3) of this subchapter, design methodology as defined in § 125.4(c)(4) of this subchapter, engineering analysis as defined in § 125.4(c)(5) of this subchapter, or manufacturing know-how as defined in § 125.4(c)(6) of this subchapter. <i>See</i> Note 12.	X		

SUPPLEMENT NO. 1*—Continued

USML Category	Exclusion	(CA) § 126.5	(AS) § 126.16	(UK) § 126.17
I–XXI	Defense services other than those required to prepare a quote or bid proposal in response to a written request from a department or agency of the United States Federal Government or from a Canadian Federal, Provincial, or Territorial Government; or defense services other than those required to produce, design, assemble, maintain or service a defense article for use by a registered U.S. company, or a U.S. Federal Government Program, or for end-use in a Canadian Federal, Provincial, or Territorial Government Program. <i>See</i> Note 14.	X	.....	.....
I	Firearms, close assault weapons, and combat shotguns	X	.....	.....
II(k)	Software source code related to USML Category II(c), II(d), or II(i). <i>See</i> Note 4.	.....	X	X
II(k)	Manufacturing know-how related to USML Category II(d). <i>See</i> Note 5	X	X	X
III	Ammunition for firearms, close assault weapons, and combat shotguns listed in USML Category I.	X	.....	.....
III	Defense articles and services specific to ammunition and fuse setting devices for guns and armament controlled in USML Category II.	.....	.....	X
III(e)	Manufacturing know-how related to USML Category III(d)(1) or III(d)(2) and their specially designed components. <i>See</i> Note 5.	X	X	X
III(e)	Software source code related to USML Category III(d)(1) or III(d)(2). <i>See</i> Note 4.	.....	X	X
IV	Defense articles and services specific to man-portable air defense systems (MANPADS). <i>See</i> Note 6.	X	X	X
IV	Defense articles and services specific to rockets, designed or modified for non-military applications that do not have a range of 300 km (<i>i.e.</i> , not controlled on the MTCR Annex).	.....	.....	X
IV	Defense articles and services specific to torpedoes .....	.....	X	X
IV	Defense articles and services specific to anti-personnel landmines. <i>See</i> Note 15.	X	X	X
IV	Defense articles and services specific to cluster munitions. <i>See</i> Note 16	X	X	X
IV(i)	Software source code related to USML Category IV(a), IV(b), IV(c), or IV(g). <i>See</i> Note 4.	.....	X	X
IV(i)	Manufacturing know-how related to USML Category IV(a), IV(b), IV(d), or IV(g) and their specially designed components. <i>See</i> Note 5.	X	X	X
V	The following energetic materials and related substances: .....	.....	.....	X
	a. TATB (triaminotrinitrobenzene) (CAS 3058–38–6);			
	b. Explosives controlled in USML Category V(a)(32) or V(a)(33);			
	c. Iron powder (CAS 7439–89–6) with particle size of 3 micrometers or less produced by reduction of iron oxide with hydrogen;			
	d. BOBBA–8 (bis(2-methylaziridinyl)2-(2-hydroxypropanoxy) propylamino phosphine oxide), and other MAPO derivatives;			
	e. N-methyl-p-nitroaniline (CAS 100–15–2); or			
	f. Trinitrophenylmethyl-nitramine (tetryl) (CAS 479–45–8).			
V(c)(7)	Pyrotechnics and pyrophorics specifically formulated for military purposes to enhance or control radiated energy in any part of the IR spectrum.	.....	.....	X
V(d)(3)	Bis-2, 2-dinitropropyl nitrate (BDNPN) .....	.....	.....	X
VI	Defense articles specific to cryogenic equipment, and specially designed components or accessories therefor, specially designed or configured to be installed in a vehicle for military ground, marine, airborne or space applications, capable of operating while in motion and of producing or maintaining temperatures below 103 K (–170 °C).	.....	.....	X
VI	Defense Articles specific to superconductive electrical equipment (rotating machinery and transformers) specially designed or configured to be installed in a vehicle for military ground, marine, airborne, or space applications and capable of operating while in motion. This, however, does not include direct current hybrid homopolar generators that have single-pole normal metal armatures which rotate in a magnetic field produced by superconducting windings, provided those windings are the only superconducting component in the generator.	.....	.....	X
VI	Defense articles and services specific to naval technology and systems relating to acoustic spectrum control and awareness. <i>See</i> Note 10.	.....	X	X
VI(a)	Nuclear powered vessels	X	X	X
VI(c)	Defense articles and services specific to submarine combat control systems .....	.....	X	X
VI(d)	Harbor entrance detection devices .....	.....	.....	X
VI(e)	Defense articles and services specific to naval nuclear propulsion equipment. <i>See</i> Note 7.	X	X	X
VI(g)	Software source code related to USML Category VI(a) or VI(c). <i>See</i> Note 4 .....	.....	X	X
VII	Defense articles specific to cryogenic equipment, and specially designed components or accessories therefor, specially designed or configured to be installed in a vehicle for military ground, marine, airborne or space applications, capable of operating while in motion and of producing or maintaining temperatures below 103 K (–170 °C).	.....	.....	X

SUPPLEMENT NO. 1*—Continued

USML Category	Exclusion	(CA) § 126.5	(AS) § 126.16	(UK) § 126.17
VII	Defense articles specific to superconductive electrical equipment (rotating machinery and transformers) specially designed or configured to be installed in a vehicle for military ground, marine, airborne, or space applications and capable of operating while in motion. This, however, does not include direct current hybrid homopolar generators that have single-pole normal metal armatures which rotate in a magnetic field produced by superconducting windings, provided those windings are the only superconducting component in the generator.	.....	.....	X
VII	Armored all wheel drive vehicles fitted with, or designed or modified to be fitted with, a plough or flail for the purpose of land mine clearance, other than vehicles specifically designed or modified for military use.	.....	.....	X
VII(e)	Amphibious vehicles .....	.....	.....	X
VII(f)	Technical data and defense services for gas turbine engine hot sections. See Note 8.	X	X	X
VIII	Defense articles specific to cryogenic equipment, and specially designed components and accessories therefor, specially designed or configured to be installed in a vehicle for military ground, marine, airborne or space applications, capable of operating while in motion and of producing or maintaining temperatures below 103 K (-170 °C).	.....	.....	X
VIII	Defense articles specific to superconductive electrical equipment (rotating machinery and transformers) specially designed or configured to be installed in a vehicle for military ground, marine, airborne, or space applications and capable of operating while in motion. This, however, does not include direct current hybrid homopolar generators that have single-pole normal metal armatures which rotate in a magnetic field produced by superconducting windings, provided those windings are the only superconducting component in the generator.	.....	.....	X
VIII(a)	All USML Category VIII(a) items	X	.....	.....
VIII(f)	Developmental aircraft parts, components, accessories, and attachments identified in USML Category VIII(f).	X	.....	.....
VIII(i)	Manufacturing know-how related to USML Category VIII(a) or VIII(e), and specially designed parts or components therefor. See Note 5.	X	X	X
VIII(i)	Software source code related to USML Category VIII(a) or VIII(e). See Note 4.	.....	X	X
IX	Training or simulation equipment for Man Portable Air Defense Systems (MANPADS). See Note 6.	.....	X	X
IX(e)	Software source code related to USML Category IX(a) or IX(b). See Note 4	.....	X	X
IX(e)	Software that is both specifically designed or modified for military use and specifically designed or modified for modeling or simulating military operational scenarios.	.....	.....	X
X(e)	Manufacturing know-how related to USML Category X(a)(1) or X(a)(2), and specially designed components therefor. See Note 5.	X	X	X
XI(a)	Defense articles and services specific to countermeasures and counter-countermeasures See Note 9.	.....	X	X
XI(a)	High Frequency and Phased Array Microwave Radar systems, with capabilities such as search, acquisition, tracking, moving target indication, and imaging radar systems. See Note 17.	.....	X	.....
XI	Defense articles and services specific to naval technology and systems relating to acoustic spectrum control and awareness. See Note 10.	.....	X	X
XI(b), XI(c), XI(d)	Defense articles and services specific to USML Category XI (b) (e.g., communications security (COMSEC) and TEMPEST).	.....	X	X
XI(d)	Software source code related to USML Category XI(a). See Note 4 .....	.....	X	X
XI(d)	Manufacturing know-how related to USML Category XI(a)(3) or XI(a)(4), and specially designed components therefor. See Note 5.	X	X	X
XII	Defense articles and services specific to countermeasures and counter-countermeasures. See Note 9.	.....	X	X
XII	Defense articles and services specific to USML Category XII(c) articles, except any 1st- and 2nd-generation image intensification tubes and 1st- and 2nd-generation image intensification night sighting equipment. End-items in USML Category XII(c) and related technical data limited to basic operations, maintenance, and training information as authorized under the exemption in § 125.4(b)(5) of this subchapter may be exported directly to a Canadian Government entity (i.e., federal, provincial, territorial, or municipal) consistent with § 126.5, other exclusions, and the provisions of this subchapter.	X	.....	.....

SUPPLEMENT NO. 1*—Continued

USML Category	Exclusion	(CA) § 126.5	(AS) § 126.16	(UK) § 126.17
XII	Technical data or defense services for night vision equipment beyond basic operations, maintenance, and training data. However, the AS and UK Treaty exemptions apply when such export is pursuant to a written solicitation or contract issued or awarded by the U.S. Department of Defense for an end-use identified in paragraph (e)(1), (e)(2), or (e)(4) of § 126.16 or § 126.17 of this subchapter and is consistent with other exclusions of this supplement.	X	X	X
XII(f)	Manufacturing know-how related to USML Category XII(d) and specially designed components therefor. <i>See</i> Note 5.	X	X	X
XII(f)	Software source code related to USML Category XII(a), XII(b), XII(c), or XII(d). <i>See</i> Note 4.	.....	X	X
XIII(b)	Defense articles and services specific to USML Category XIII(b) (Military Information Security Assurance Systems).	.....	X	X
XIII(d)	Carbon/carbon billets and preforms which are reinforced in three or more dimensional planes, specifically designed, developed, modified, configured or adapted for defense articles.	.....	.....	X
XIII(e)	Defense articles and services specific to armored plate manufactured to comply with a military standard or specification or suitable for military use. <i>See</i> Note 11.	.....	.....	X
XIII(f)	Structural materials specifically designed, developed, modified, configured or adapted for defense articles.	.....	.....	X
XIII(g)	Defense articles and services related to concealment and deception equipment and materials.	.....	.....	X
XIII(h)	Energy conversion devices other than fuel cells .....	.....	.....	X
XIII(i)	Metal embrittling agents .....	.....	.....	X
XIII(j)	Defense articles and services related to hardware associated with the measurement or modification of system signatures for detection of defense articles as described in Note 2.	.....	X	X
XIII(k)	Defense articles and services related to tooling and equipment specifically designed or modified for the production of defense articles identified in USML Category XIII(b).	.....	X	X
XIII(l)	Software source code related to USML Category XIII(a). <i>See</i> Note 4 .....	.....	X	X
XIV	Defense articles and services related to toxicological agents, including chemical agents, biological agents, and associated equipment.	.....	X	X
XIV(a), XIV(b), XIV(d), XIV(e), XIV(f).	Chemical agents listed in USML Category XIV(a), (d) and (e), biological agents and biologically derived substances in USML Category XIV(b), and equipment listed in USML Category XIV(f) for dissemination of the chemical agents and biological agents listed in USML Category XIV(a), (b), (d), and (e).	X	.....	.....
XV(a)	Defense articles and services specific to spacecraft/satellites. However, the Canadian exemption may be used for commercial communications satellites that have no other type of payload.	X	X	X
XV(b)	Defense articles and services specific to ground control stations for spacecraft telemetry, tracking, and control. Defense articles and services are not excluded under this entry if they do not control the spacecraft. Receivers for receiving satellite transmissions are also not excluded under this entry.	.....	X	X
XV(c)	Defense articles and services specific to GPS/PPS security modules .....	.....	X	X
XV(c)	Defense articles controlled in USML Category XV(c) except end-items for end-use by the Federal Government of Canada exported directly or indirectly through a Canadian-registered person.	X	.....	.....
XV(d)	Defense articles and services specific to radiation-hardened microelectronic circuits.	X	X	X
XV(e)	Anti-jam systems with the ability to respond to incoming interference by adaptively reducing antenna gain (nulling) in the direction of the interference.	X	.....	.....
XV(e)	Antennas having any of the following:	X	.....	.....
	a. Aperture (overall dimension of the radiating portions of the antenna) greater than 30 feet;.			
	b. All sidelobes less than or equal to –35 dB relative to the peak of the main beam; or.			
	c. Designed, modified, or configured to provide coverage area on the surface of the earth less than 200 nautical miles in diameter, where “coverage area” is defined as that area on the surface of the earth that is illuminated by the main beam width of the antenna (which is the angular distance between half power points of the beam).			
XV(e)	Optical intersatellite data links (cross links) and optical ground satellite terminals.	X	.....	.....
XV(e)	Spaceborne regenerative baseband processing (direct up and down conversion to and from baseband) equipment.	X	.....	.....

SUPPLEMENT NO. 1*—Continued

USML Category	Exclusion	(CA) § 126.5	(AS) § 126.16	(UK) § 126.17
XV(e)	Propulsion systems which permit acceleration of the satellite on-orbit (<i>i.e.</i> , after mission orbit injection) at rates greater than 0.1 g.	X	.....	.....
XV(e)	Attitude control and determination systems designed to provide spacecraft pointing determination and control or payload pointing system control better than 0.02 degrees per axis.	X	.....	.....
XV(e)	All specifically designed or modified systems, components, parts, accessories, attachments, and associated equipment for all USML Category XV(a) items, except when specifically designed or modified for use in commercial communications satellites.	X	.....	.....
XV(e)	Defense articles and services specific to spacecraft and ground control station systems (only for telemetry, tracking and control as controlled in USML Category XV(b)), subsystems, components, parts, accessories, attachments, and associated equipment.	.....	X	X
XV(f)	Technical data and defense services directly related to the other defense articles excluded from the exemptions for USML Category XV.	X	X	X
XVI	Defense articles and services specific to design and testing of nuclear weapons.	X	X	X
XVI(c)	Nuclear radiation measuring devices manufactured to military specifications	X	.....	.....
XVI(e)	Software source code related to USML Category XVI(c). See Note 4 .....	.....	X	X
XVII	Classified articles, and technical data and defense services relating thereto, not elsewhere enumerated. See Note 1.	X	X	X
XVIII	Defense articles and services specific to directed energy weapon systems	.....	X	X
XIX(e), XIX(f)(1), XIX(f)(2), XIX(g).	Defense articles and services specific to gas turbine engine hot section components and to Full Authority Digital Engine Control Systems (FADEC) or Digital Electronic Engine Controls (DEEC). See Note 8.	.....	X	X
XIX(g)	Technical data and defense services for gas turbine engine hot sections. (This does not include hardware). See Note 8.	X	X	X
XX	Defense articles and services related to submersible vessels, oceanographic, and associated equipment.	X	X	X
XXI	Articles, and technical data and defense services relating thereto, not otherwise enumerated on the USML, but placed in this category by the Director, Office of Defense Trade Controls Policy.	X	X	X

NOTE 1: Classified defense articles and services are not eligible for export under the Canadian exemptions. U.S. origin articles, technical data, and services controlled in USML Category XVII are not eligible for export under the UK Treaty exemption. U.S. origin classified defense articles and services are not eligible for export under either the UK or AS Treaty exemptions except when being released pursuant to a U.S. Department of Defense written request, directive, or contract that provides for the export of the defense article or service.

NOTE 2: The phrase "any part of the spectrum" includes radio frequency (RF), infrared (IR), electro-optical, visual, ultraviolet (UV), acoustic, and magnetic. Defense articles related to reduced observables or counter reduced observables are defined as:

(a) Signature reduction (radio frequency (RF), infrared (IR), Electro-Optical, visual, ultraviolet (UV), acoustic, magnetic, RF emissions) of defense platforms, including systems, subsystems, components, materials (including dual-purpose materials used for Electromagnetic Interference (EM) reduction), technologies, and signature prediction, test and measurement equipment and software and material transmissivity/reflectivity prediction codes and optimization software.

(b) Electronically scanned array radar, high power radars, radar processing algorithms, periscope-mounted radar systems (PATRIOT), LADAR, multistatic and IR focal plane array-based sensors, to include systems, subsystems, components, materials, and technologies.

NOTE 3: Defense Articles related to sensor fusion beyond that required for display or identification correlation is defined as techniques designed to automatically combine information from two or more sensors/sources for the purpose of target identification, tracking, designation, or passing of data in support of surveillance or weapons engagement. Sensor fusion involves sensors such as acoustic, infrared, electro optical, frequency, etc. Display or identification correlation refers to the combination of target detections from multiple sources for assignment of common target track designation.

NOTE 4: Software source code beyond that source code required for basic operation, maintenance, and training for programs, systems, and/or subsystems is not eligible for use of the UK or AS Treaty exemptions, unless such export is pursuant to a written solicitation or contract issued or awarded by the U.S. Department of Defense for an end-use identified in paragraph (e)(1), (e)(2), or (e)(4) of § 126.16 or § 126.17 of this subchapter and is consistent with other exclusions of this supplement.

NOTE 5: Manufacturing know-how, as defined in § 125.4(c)(6) of this subchapter, is not eligible for use of the UK or AS Treaty exemptions, unless such export is pursuant to a written solicitation or contract issued or awarded by the U.S. Department of Defense for an end-use identified in paragraph (e)(1), (e)(2), or (e)(4) of § 126.16 or § 126.17 of this subchapter and is consistent with other exclusions of this supplement.

NOTE 6: Defense Articles specific to Man Portable Air Defense Systems (MANPADS) includes missiles which can be used without modification in other applications. It also includes production and test equipment and components specifically designed or modified for MANPAD systems, as well as training equipment specifically designed or modified for MANPAD systems.

NOTE 7: Naval nuclear propulsion plants includes all of USML Category VI(e). Naval nuclear propulsion information is technical data that concerns the design, arrangement, development, manufacture, testing, operation, administration, training, maintenance, and repair of the propulsion plants of naval nuclear-powered ships and prototypes, including the associated shipboard and shore-based nuclear support facilities. Examples of defense articles covered by this exclusion include nuclear propulsion plants and nuclear submarine technologies or systems; nuclear powered vessels (see USML Categories VI and XX).

NOTE 8: A complete gas turbine engine with embedded hot section components or digital engine controls is eligible for export or transfer under the Treaties. Technical data, other than required for routine external maintenance and operation, related to the hot section is not eligible for export under the Canadian exemption. Technical data, other than required for routine external maintenance and operation, related to the hot section or digital engine controls, as well as individual hot section parts or components are not eligible for the Treaty exemption whether shipped separately or accompanying a complete engine. Gas turbine engine hot section exempted defense article components and technology are combustion chambers and liners; high pressure turbine blades, vanes, disks and related cooled structure; cooled low pressure turbine blades, vanes, disks and related cooled structure; cooled augmenters; and cooled nozzles. Examples of gas turbine engine hot section developmental technologies are Integrated High Performance Turbine Engine Technology (IHPTET), Versatile, Affordable Advanced Turbine Engine (VAATE), and Ultra-Efficient Engine Technology (UEET), which are also excluded from export under the exemptions.

NOTE 9: Examples of countermeasures and counter-countermeasures related to defense articles not exportable under the AS or UK Treaty exemptions are:

- (a) IR countermeasures;
- (b) Classified techniques and capabilities;
- (c) Exports for precision radio frequency location that directly or indirectly supports fire control and is used for situation awareness, target identification, target acquisition, and weapons targeting and Radio Direction Finding (RDF) capabilities. Precision RF location is defined as angle of arrival accuracy of less than five degrees (RMS) and RF emitter location of less than ten percent range error;
- (d) Providing the capability to reprogram; and
- (e) Acoustics (including underwater), active and passive countermeasures, and counter-countermeasures.

NOTE 10: Examples of defense articles covered by this exclusion include underwater acoustic vector sensors; acoustic reduction; off-board, underwater, active and passive sensing, propeller/propulsor technologies; fixed mobile/floating/powered detection systems which include in-buoy signal processing for target detection and classification; autonomous underwater vehicles capable of long endurance in ocean environments (manned submarines excluded); automated control algorithms embedded in on-board autonomous platforms which enable (a) group behaviors for target detection and classification, (b) adaptation to the environment or tactical situation for enhancing target detection and classification; "intelligent autonomy" algorithms which define the status, group (greater than 2) behaviors, and responses to detection stimuli by autonomous, underwater vehicles; and low frequency, broad-band "acoustic color," active acoustic "fingerprint" sensing for the purpose of long range, single pass identification of ocean bottom objects, buried or otherwise (controlled under Category USML XI(a)(1), (a)(2), (b), (c), and (d)).

NOTE 11: This exclusion does not apply to the platforms (e.g., vehicles) for which the armored plates are applied. For exclusions related to the platforms, reference should be made to the other exclusions in this list, particularly for the category in which the platform is controlled.

The excluded defense articles include constructions of metallic or non-metallic materials or combinations thereof specially designed to provide protection for military systems. The phrase "suitable for military use" applies to any articles or materials which have been tested to level IIIA or above IAW NIJ standard 0108.01 or comparable national standard. This exclusion does not include military helmets, body armor, or other protective garments which may be exported IAW the terms of the AS or UK Treaty.

NOTE 12: Defense services or technical data specific to applied research (§ 125.4(c)(3) of this subchapter), design methodology (§ 125.4(c)(4) of this subchapter), engineering analysis (§ 125.4(c)(5) of this subchapter), or manufacturing know-how (§ 125.4(c)(6) of this subchapter) are not eligible for export under the Canadian exemptions. However, this exclusion does not include defense services or technical data specific to build-to-print as defined in § 125.4(c)(1) of this subchapter, build/design-to-specification as defined in § 125.4(c)(2) of this subchapter, or basic research as defined in § 125.4(c)(3) of this subchapter, or maintenance (i.e., inspection, testing, calibration or repair, including overhaul, reconditioning and one-to-one replacement of any defective items parts or components, but excluding any modification, enhancement, upgrade or other form of alteration or improvement that changes the basic performance of the item) of non-excluded defense articles which may be exported subject to other exclusions or terms of the Canadian exemptions.

NOTE 13: The term "libraries" (parametric technical databases) means a collection of technical information of a military nature, reference to which may enhance the performance of military equipment or systems.

NOTE 14: In order to utilize the authorized defense services under the Canadian exemption, the following must be complied with:

(a) The Canadian contractor and subcontractor must certify, in writing, to the U.S. exporter that the technical data and defense services being exported will be used only for an activity identified in Supplement No. 1 to part 126 of this subchapter and in accordance with § 126.5 of this subchapter; and

(b) A written arrangement between the U.S. exporter and the Canadian recipient must:

(1) Limit delivery of the defense articles being produced directly to an identified manufacturer in the United States registered in accordance with part 122 of this subchapter; a department or agency of the United States Federal Government; a Canadian-registered person authorized in writing to manufacture defense articles by and for the Government of Canada; a Canadian Federal, Provincial, or Territorial Government;

(2) Prohibit the disclosure of the technical data to any other contractor or subcontractor who is not a Canadian-registered person;

(3) Provide that any subcontract contain all the limitations of § 126.5 of this subchapter;

(4) Require that the Canadian contractor, including subcontractors, destroy or return to the U.S. exporter in the United States all of the technical data exported pursuant to the contract or purchase order upon fulfillment of the contract, unless for use by a Canadian or United States Government entity that requires in writing the technical data be maintained. The U.S. exporter must be provided written certification that the technical data is being retained or destroyed; and

(5) Include a clause requiring that all documentation created from U.S. origin technical data contain the statement that, "This document contains technical data, the use of which is restricted by the U.S. Arms Export Control Act. This data has been provided in accordance with, and is subject to, the limitations specified in § 126.5 of the International Traffic in Arms Regulations (ITAR). By accepting this data, the consignee agrees to honor the requirements of the ITAR."

(c) The U.S. exporter must provide the Directorate of Defense Trade Controls a semi-annual report of all their on-going activities authorized under § 126.5 of this subchapter. The report shall include the article(s) being produced; the end-user(s); the end-item into which the product is to be incorporated; the intended end-use of the product; the name and address of all the Canadian contractors and subcontractors.

NOTE 15: This exclusion does not apply to demining equipment in support of the clearance of landmines and unexploded ordnance for humanitarian purposes. As used in this exclusion, "anti-personnel landmine" means any mine placed under, on, or near the ground or other surface area, or delivered by artillery, rocket, mortar, or similar means or dropped from an aircraft and which is designed to be detonated or exploded by the presence, proximity, or contact of a person; any device or material which is designed, constructed, or adapted to kill or injure and which functions unexpectedly when a person disturbs or approaches an apparently harmless object or performs an apparently safe act; any manually-emplaced munition or device designed to kill, injure, or damage and which is actuated by remote control or automatically after a lapse of time.

NOTE 16: The cluster munitions that are subject to this exclusion are set forth below:

The Convention on Cluster Munitions, signed December 3, 2008, and entered into force on August 1, 2010, defines a "cluster munition" as:

A conventional munition that is designed to disperse or release explosive submunitions each weighing less than 20 kilograms, and includes those explosive submunitions. Under the Convention, a "cluster munition" does not include the following munitions:

(a) A munition or submunition designed to dispense flares, smoke, pyrotechnics or chaff; or a munition designed exclusively for an air defense role;

(b) A munition or submunition designed to produce electrical or electronic effects;

(c) A munition that, in order to avoid indiscriminate area effects and the risks posed by unexploded submunitions, has all of the following characteristics:

(1) Each munition contains fewer than ten explosive submunitions;

(2) Each explosive submunition weighs more than four kilograms;

(3) Each explosive submunition is designed to detect and engage a single target object;

(4) Each explosive submunition is equipped with an electronic self-destruction mechanism; and

(5) Each explosive submunition is equipped with an electronic self-deactivating feature.

Pursuant to U.S. law (Pub. L. 111-117, section 7055(b)), no military assistance shall be furnished for cluster munitions, no defense export license for cluster munitions may be issued, and no cluster munitions or cluster munitions technology shall be sold or transferred, unless:

(a) The submunitions of the cluster munitions, after arming, do not result in more than 1 percent unexploded ordnance across the range of intended operational environments; and

(b) The agreement applicable to the assistance, transfer or sale of such cluster munitions or cluster munitions technology specifies that the cluster munitions will only be used against clearly defined military targets and will not be used where civilians are known to be present or in areas normally inhabited by civilians.

NOTE 17: The radar systems described are controlled in USML Category XI(a)(3)(i) through (v). As used in this entry, the term "systems" includes equipment, devices, software, assemblies, modules, components, practices, processes, methods, approaches, schema, frameworks, and models.

* An "X" in the chart indicates that the item is excluded from use under the exemption referenced in the top of the column. An item excluded in any one row is excluded regardless of whether other rows may contain a description that would include the item.

Rose E. Gottemoeller,

*Acting Under Secretary, Arms Control and
International Security, Department of State.*

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Part IX

Department of the Interior

Fish and Wildlife Service

50 CFR Part 17

Endangered and Threatened Wildlife and Plants; 12-Month Finding on a Petition To List Kittlitz's Murrelet as an Endangered or Threatened Species; Proposed Rule

DEPARTMENT OF THE INTERIOR**Fish and Wildlife Service****50 CFR Part 17**

[Docket No. FWS-R7-ES-2013-0099;
4500030113]

**Endangered and Threatened Wildlife
and Plants; 12-Month Finding on a
Petition To List Kittlitz's Murrelet as an
Endangered or Threatened Species**

AGENCY: Fish and Wildlife Service,
Interior.

ACTION: Notice of 12-month petition
finding.

SUMMARY: We, the U.S. Fish and Wildlife Service (Service), announce a 12-month finding on a petition to list the Kittlitz's murrelet (*Brachyramphus brevirostris*) as an endangered or threatened species and to designate critical habitat under the Endangered Species Act of 1973, as amended (Act). After a review of the best available scientific and commercial information, we find that listing the Kittlitz's murrelet is not warranted at this time. However, we ask the public to submit to us any new information that becomes available concerning threats to the Kittlitz's murrelet or its habitat at any time.

DATES: The finding announced in this document was made on October 3, 2013.

ADDRESSES: This finding is available on the Internet at <http://www.regulations.gov> at Docket Number FWS-R7-ES-2013-0099. Supporting documentation we used in preparing this finding is available for public inspection, by appointment, during normal business hours at the U.S. Fish and Wildlife Service, Juneau Fish and Wildlife Field Office, 3000 Vintage Blvd., Suite 201, Juneau, AK 99801. Please submit any new information, materials, comments, or questions concerning this finding to the above street address.

FOR FURTHER INFORMATION CONTACT: Bill Hanson, Field Supervisor, Juneau Fish and Wildlife Field Office (see **ADDRESSES**); by telephone at 907-780-1160; or by facsimile at 907-586-7099 *mailto:*. If you use a telecommunications device for the deaf (TDD), please call the Federal Information Relay Service (FIRS) at 800-877-8339.

SUPPLEMENTARY INFORMATION:**Background**

Section 4(b)(3)(B) of the Act (16 U.S.C. 1531 *et seq.*), requires that, for any petition to revise the Federal Lists of Endangered and Threatened Wildlife

and Plants that contains substantial scientific or commercial information that listing the species may be warranted, we make a finding within 12 months of the date of receipt of the petition. In this finding, we will determine that the petitioned action is: (1) Not warranted, (2) warranted, or (3) warranted, but the immediate proposal of a regulation implementing the petitioned action is precluded by other pending proposals to determine whether species are endangered or threatened, and expeditious progress is being made to add or remove qualified species from the Federal Lists of Endangered and Threatened Wildlife and Plants. Section 4(b)(3)(C) of the Act requires that we treat a petition for which the requested action is found to be warranted but precluded as though resubmitted on the date of such finding, that is, requiring a subsequent finding to be made within 12 months. We must publish these 12-month findings in the **Federal Register**.

Previous Federal Actions

We received a petition dated May 9, 2001, from the Center for Biological Diversity, Coastal Coalition, Eyak Preservation Council, Lynn Canal Conservation, Inc., and Sitka Conservation Society, requesting that the Kittlitz's murrelet be listed as an endangered or threatened species and critical habitat be designated. Included in the petition was supporting information regarding the species' taxonomy and ecology, historical and current distribution, status, and potential causes of decline. We acknowledged receipt of the petition in a letter to the Center for Biological Diversity, dated June 7, 2001. In that letter we stated that, due to funding constraints in Fiscal Year 2001, we would not be able to begin processing the petition at that time, but would request the appropriate funding for Fiscal Year 2002. We also stated that emergency listing of the Kittlitz's murrelet was not warranted at that time.

On June 13, 2002, we received a 60-day notice of intent to sue from the Center for Biological Diversity alleging a violation of section 4 of the Act for failure to complete 90-day and 12-month findings on the petition.

On May 4, 2004, we published a candidate notice of review (CNOR) in the **Federal Register** (69 FR 24876) in which the Kittlitz's murrelet was included in the *Summary of New Candidates*. In this document, we indicated that listing of the Kittlitz's murrelet under the Act was warranted but precluded rangewide, and we assigned a listing priority number (LPN) of 5 to this species. The LPN of 5

reflected non-imminent threats of high magnitude for this species. On May 11, 2005 (70 FR 24870) and September 12, 2006 (71 FR 53756), we retained Kittlitz's murrelet in our CNORs with a LPN of 5.

On December 6, 2007, we published an annual CNOR in the **Federal Register** (72 FR 69034) that included a notice of change in LPN for the Kittlitz's murrelet, elevating it from a 5 to a 2 to acknowledge that threats facing this species were of high magnitude and imminent. The CNORs in 2008 (73 FR 75176, December 10, 2008), 2009 (74 FR 57804, November 9, 2009), and 2010 (75 FR 69222, November 10, 2010) continued to assign a LPN of 2 to Kittlitz's murrelet.

On July 12, 2011, the Service reached a multi-district litigation settlement agreement with the Center for Biological Diversity that requires the Service to review and address the needs of over 250 species, including the Kittlitz's murrelet, included in a CNOR published in the **Federal Register** on November 10, 2010 (75 FR 69222). The Kittlitz's murrelet was included in the settlement, requiring the Service to submit a proposed rule or not-warranted finding to the **Federal Register** by September 30, 2013.

On October 26, 2011, the CNOR (76 FR 66370) included a notice of change in listing priority for the Kittlitz's murrelet, downgrading the LPN from a 2 to an 8 because we determined through a reassessment of the threats that their magnitude was moderate (not high) and threats were imminent.

In Fiscal Year 2012, the Service initiated work on the listing evaluation of the Kittlitz's murrelet, as stated in the November 21, 2012 CNOR (77 FR 69994).

This document addresses our requirements under the multi-district litigation settlement agreement.

Species Information

This document constitutes a 12-month finding on the May 9, 2001 petition to list the Kittlitz's murrelet as an endangered or threatened species.

The petitioners requested the Kittlitz's murrelet be listed as an endangered or threatened species and we confirm that this species is a listable entity under the Act. Because we find that listing the Kittlitz's murrelet rangewide is not warranted, as explained below in the Finding section, we conducted further analysis to evaluate any potential distinct population segments (DPS) or significant portion(s) of the range (SPR) within the range of the Kittlitz's murrelet exist that may require listing. However, we did not identify any

populations of the Kittlitz's murrelet that meet the definition of DPS or SPR (see appropriate sections below).

Taxonomy and Species Description

Kittlitz's murrelet (*Brachyramphus brevirostris*; Vigors 1829) is a member of the Alcidae or auk family.

Brachyramphus murrelets are unusual because unlike the rest of this diverse family of seabirds that nest in colonies, they nest solitarily. There are two additional species within the genus, the marbled murrelet (*B. marmoratus*; Gmelin 1789) and the long-billed murrelet (*B. perdix*; Pallas 1811; Friesen *et al.* 1996a, p. 360). The distributions of marbled murrelet and Kittlitz's murrelet overlap in Alaska and the distribution of the long-billed murrelet overlaps with the Kittlitz's murrelet in portions of eastern Russia (Friesen *et al.* 1996b, p. 682). All three species generally are similar in appearance, but physical and genetic differences among them are well documented (Pitocchelli *et al.* 1995, pp. 239–248; Friesen *et al.* 1996a, pp. 363–365; Friesen *et al.* 1996b, pp. 681, 685–687; Day *et al.* 1999, p. 2). Kittlitz's murrelets are heavier (8.3 ounces [oz] (236 grams [g])) (Kissling, Service, 2007–2012, unpublished data), and have larger heads, longer wings and tails, and smaller bills than do marbled murrelets (7.7 oz [219 g]) (Pitocchelli *et al.* 1995, pp. 241–245; Kuletz *et al.* 2008, pp. 91–95; Kissling, unpublished data). Long-billed murrelets are distinctly larger than both Kittlitz's and marbled murrelets, have a longer bill than them, and have a white eye ring (Friesen *et al.* 1996b, p. 681).

Mitochondrial DNA (mtDNA) sequences and restriction fragment analysis show significant differentiation among the three species (Pitocchelli *et al.* 1995, pp. 244–247; Friesen *et al.* 1996a, pp. 364–366; Friesen *et al.* 1996b, pp. 683–687). Analysis of allozymes further strengthens the evidence that these murrelets are separate species (Friesen *et al.* 1996a, pp. 361–365). In addition, nuclear introns and cytochrome *b* gene sequencing showed no evidence of recent hybridization between marbled and Kittlitz's murrelets (Pacheco *et al.* 2002, pp. 179–180).

The Kittlitz's murrelet has been considered a single panmictic population (with random mating of individuals within a breeding population) for lack of any evidence to suggest otherwise, but several recent studies suggest that there is strong population genetic structure in this species (MacKinnon 2005, pp. 18, 24–25; Birt *et al.* 2011, pp. 47–49; Friesen

and Birt 2012, pp. 6–9). Intra-specific analyses of genetic data (allozymes, cytochrome *b* gene, control region of mtDNA, and nuclear DNA) indicate that there are two strongly differentiated genetic groups: one in the western Aleutian Islands and the other in the Gulf of Alaska (Friesen *et al.* 1996b, p. 686; MacKinnon 2005, pp. 18, 24–25; Birt *et al.* 2011, pp. 47–49; Friesen and Birt 2012, pp. 6–9). Birt *et al.* (2011, pp. 46, 49) concluded that gene flow between these two groups has been very limited for an extended period of time and that the genetic structure probably is due to historical fragmentation of populations; however, this study was based on limited sample sizes within and among populations of Kittlitz's murrelet (53 individuals from three study sites; $n=15$ from Attu, $n=18$ from Kachemak Bay, $n=20$ from Glacier Bay).

Friesen and Birt (2012, pp. 9, 16) expanded the study to include 301 individuals from nine study sites in coastal Alaska ranging from Glacier Bay in the south to Barrow in the north; results supported the previous findings of strong genetic structure in the Kittlitz's murrelet, resulting in an eastern group (Glacier Bay to Kodiak Island) and a western one (Adak, Agattu and Attu islands) that probably diverged from one another a long time ago (547,428 years ago; 95 percent confidence interval [CI]=131,000 to 896,000; confidence intervals are a range of values defined so that there is a specified probability that the value of a parameter lies within it) (Friesen 2013, in litt.). In addition, there are two contact zones where Kittlitz's murrelets have mixed ancestry from both groups; those contact zones are located between Atka and Unalaska islands in the eastern and central Aleutian Islands and in northern Alaska, although the sample size from this latter area was small ($n=9$) (Friesen and Birt 2012, pp. 10, 16).

Importantly, results from the expanded genetic study suggest that there are low levels of contemporary movement between the two groups and that Kittlitz's murrelets from the two groups can and do interbreed and that offspring are viable and fertile (Friesen and Birt 2012, p. 10). Therefore, birds within the two groupings (eastern and western) do not constitute separate species because genetic connectivity still exists (Friesen and Birt 2012, p. 10). Further, although a comprehensive, comparative study has not occurred yet, there are no documented differences in morphology (e.g., plumage, size) or behavior of Kittlitz's murrelets from the eastern and western genetic groups or across their range (Day *et al.* 1999, pp. 2, 20; Day 2013, in litt.). Both groups

have sufficient levels of intra-specific genetic variation and do not have evidence of a genetic bottleneck (Friesen and Birt 2012, pp. 17–18; Kissling 2012, in litt.). To date, there have been no genetic analyses comparing Kittlitz's murrelets from Russia with those from North America (preliminary laboratory work has been initiated but was not completed at the time of writing of this finding). We recognize the two genetic groupings (eastern and western), but do not consider these groups to meet the definition of a DPS (see below).

Distribution

The range of the Kittlitz's murrelet encompasses a vast area from the Russian Far East (northern Okhotsk Sea, Bering Sea coast, and coast of the Chukchi Sea in northern Chukotka as far to the northwest as Cape Schmidt) across to the Aleutian Islands and southeastern Alaska, and north to northwestern Alaska (Day *et al.* 1999, pp. 3–6; Artukhin *et al.* 2011, p. 29). Nests have been recorded throughout nearly the entire at-sea range. Seasonal shifts in distribution are discussed below. There is no reliable information to suggest that the historical range of the Kittlitz's murrelet is substantially different than the current range.

Habitat and Life History

In this section, we describe seasonal shifts in distribution and habitats used, molting cycles, foraging and nesting characteristics, and the demography of the Kittlitz's murrelet.

The Kittlitz's murrelet typically spends its entire annual cycle in marine waters within and adjacent to Alaska and eastern Russia, generally moving offshore (maximum observed 106 miles [mi] (170 kilometers [km]) from shore) during the non-breeding months (August–March or April) and nearshore (within 3.4 mi [5.5 km] from shore) during the breeding season (April–August) with some latitudinal variation. Low numbers of adult Kittlitz's murrelets also have been observed during the breeding season on freshwater lakes (Savage 2013, in litt.; Walsh 2013, in litt.). The seasonal appearance, increase, and disappearance of Kittlitz's murrelets during systematic surveys at sea during the breeding season (Klosiewski and Laing 1994, pp. 55, 83; Kendall and Agler 1998, p. 55; Kuletz *et al.* 2003a, pp. 17–20; Robards *et al.* 2003, pp. 92, 100, 104; Kissling *et al.* 2007, pp. 2167–2168; Kuletz *et al.* 2008, pp. 21–22, 53–54) demonstrate that murrelets move inshore near to known breeding areas in south-coastal Alaska beginning in March or April, peak in densities in late

June and early July, and leave these areas rapidly, but asynchronously in late July to mid August. Post-breeding movements of murrelets in late July and August are westward to nearshore waters of Kodiak Island and along the Alaska Peninsula and Bristol Bay, then northward to the Bering and Chukchi seas and even extending, in a few cases, into the Beaufort Sea, where birds may remain until about late October when their pre-basic molt is complete (Day *et al.* 2011, pp. 57–59; Madison *et al.* 2012, p. 1). At-sea surveys have documented the regular occurrence of Kittlitz's murrelets from August through October in offshore waters between Cape Peirce and north of Nunivak Island, and north of the Bering Strait from Cape Lisburne to the western Beaufort Sea (Kuletz, Service, 2006–2012, unpublished data). In November, as sea ice builds in the Chukchi and Beaufort seas, Kittlitz's murrelets begin to move south into the Bering Sea where they probably winter until late February or early March (Day *et al.* 1999, p. 7; Kuletz and Lang 2010, pp. 39–43; Day *et al.* 2011, p. 59). However, records of winter sightings in southeastern, south-central, and western Alaska (Klosiewski and Laing 1994, p. 83; Kendall and Agler 1998, pp. 55–56; Day *et al.* 1999, pp. 4–5; Day 2006, pp. 208–209; Stenhouse *et al.* 2008, p. 61) indicate that some individuals are year-round residents in these areas. Annual movements of Kittlitz's murrelets in eastern Russia, the Aleutian Islands, and northern Alaska remain poorly known, although limited satellite-tag data indicate that Kittlitz's murrelets in the central Aleutians follow the same northward post-breeding migration to the Bering and Chukchi seas as those birds tagged in the Gulf of Alaska do (Madison *et al.* 2012, p. 1).

The winter range of the Kittlitz's murrelet is poorly known (Day *et al.* 1999, pp. 4–5). Recent information from icebreaker-based at-sea surveys indicates that open water leads (fractures in sea ice caused by wind drift or ocean currents) and polynyas (a large area of open water surrounded by sea ice), primarily south of St. Lawrence Island, between Nunivak and St. Matthew islands, and east of the Pribilof Islands, may be important wintering areas (Kuletz and Lang 2010, pp. 40–43; Kuletz, unpublished data). Most Kittlitz's murrelets encountered during early spring surveys in the sea ice were in pairs (Kuletz and Lang 2010, p. 40). The exact winter distribution of Kittlitz's murrelets in the Bering Sea probably shifts with respect to dynamic changes in open leads and polynyas (Kuletz, unpublished data), which tend

to form consistently near the large Bering Sea islands and some coastal areas (Niebauer *et al.* 1999, p. 34). The winter range of the species in eastern Russia is largely unknown, but observations have been reported from the Kamchatka Peninsula and the Kuril Islands in the Russian Far East south to northern Japan (Flint *et al.* 1984, pp. 156–157; Brazil 1991, p. 164; but see Carter *et al.* 2011, p. 8). A few birds also have been observed during late winter in the Sireniki polynya of southern Chukotka and the western Bering Sea in Russia (Konyukhov *et al.* 1998, p. 325; Shuntov 2000, pp. 97–98).

During the summer breeding season, Kittlitz's murrelets usually, but not exclusively, are associated with glacially influenced waters, especially those with floating ice, in south-coastal Alaska, where large numbers aggregate (Isleib and Kessel 1973, p. 100; Kendall and Agler 1998, p. 58; Day *et al.* 2000, p. 109; Arimitsu *et al.* 2011, p. 18; Hoekman *et al.* 2011, p. 40; Kissling *et al.* 2011, p. 7; Kuletz *et al.* 2011a, pp. 102–103; Kuletz *et al.* 2011b, pp. 90–92; Piatt *et al.* 2011, p. 70; Arimitsu *et al.* 2012, p. 18). The exact reasons for this association are unclear, but hypothetical explanations exist. This pattern of at-sea distribution simply may reflect an adaptation for nesting on unvegetated scree slopes or nunataks (isolated peaks of rock projecting above the surface of inland snow or ice) often associated with tidewater glaciers, which are selected because these areas are thought to be predator-free (Piatt *et al.* 1999, p. 12; Kissling *et al.* 2012, p. 1; Lawonn 2012, pp. 21, 94–95). Their association with tidewater glaciers also may reflect foraging preference and efficiency in glacial-affected water (Day *et al.* 2003, pp. 681, 686; Kuletz *et al.* 2003b, p. 138; Allyn *et al.* 2012, pp. 244–245; Arimitsu *et al.* 2012, pp. 14, 18). In addition, strong nest area and site fidelity may cause these birds to return to the same area (Piatt *et al.* 1999, p. 11; Kaler *et al.* 2010, p. 18; Lawonn 2012, pp. 82, 88; Kenney and Kaler 2013, p. 73; Kissling, unpublished data), but it is unknown if the same birds are using a particular area annually or if site characteristics make the area suitable to breeding pairs.

The Kittlitz's murrelet has two distinct plumages in its annual cycle and therefore undergoes two molts per year: a full, pre-basic molt in fall (September–October) and a partial, pre-alternate molt in spring (April–May) (Day *et al.* 1999, pp. 18–19). During the pre-basic molt, individuals transition from their mottled, cryptic plumage of the breeding season to the sharply contrasting black and white plumage of the non-breeding season. The pre-basic

molt replaces of the wing, tail, and body feathers, whereas the pre-alternate molt replaces only the body feathers.

Although Sealy (1977, p. 467) reported that in the pre-basic molt wing feathers grow synchronously rendering a flightless period (2–4 weeks) for the bird, Pyle (2009, p. 222) found that Kittlitz's murrelets undergo a non-synchronous molt, either sequentially or in blocks, perhaps to avoid an extended flightless period, and probably prolonging the pre-basic molt period.

Foraging

Because little research on the Kittlitz's murrelet has occurred during the winter, information about foraging and other life-history characteristics are based primarily on observations made during the spring, summer, and fall. Kittlitz's murrelets tend to forage as single birds or in small groups, but seldom in mixed-species feeding flocks (Day and Nigro 2000, pp. 8–10, 12). Most foraging occurs during the day (Day *et al.* 1999, p. 9; Madison *et al.* 2010, p. 1), especially in the morning (Day and Nigro 2000, p. 5). They pursue and capture prey underwater by using wing-propelled “flight” and consume prey either at the surface or underwater (Day *et al.* 1999, p. 9; Day and Nigro 2000, p. 9).

The Kittlitz's murrelet appears to be a flexible forager with a diet that varies considerably among seasons but is fairly specialized within a season (Hatch 2011, pp. 25–26, 35; Allyn 2012, p. 102). Although Kittlitz's murrelets are considered to be piscivorous, they also eat zooplankton throughout the entire annual cycle (Day *et al.* 1999, p. 9), more so than for the closely related marbled murrelet (Hobson *et al.* 1994, p. 795; but see Day *et al.* 1999, p. 10). In the pre-breeding season, Kittlitz's murrelets feed on low-trophic-level prey such as macrozooplankton and larval fishes and gradually transition to consuming larger proportions of higher-trophic-level prey (planktivorous fishes) as the breeding season commences (Hatch 2011, pp. 24–25; Allyn 2012, p. 102). During the breeding season, Kittlitz's murrelets feed on a combination of macrozooplankton (36–44 percent of their diet) and schooling fishes such as Pacific capelin (*Mallotus villosus*), Pacific sand lance (*Ammodytes hexapterus*), juvenile Pacific herring (*Clupea pallasii*), and juvenile walleye pollock (*Theragra chalcogramma*) (Sanger 1983, p. 692; Hobson *et al.* 1994, p. 795; Day *et al.* 1999, p. 9; Day and Nigro 2000, pp. 11–13; Kuletz *et al.* 2003a, pp. 23, 28; Agness 2006, p. 119; Kuletz *et al.* 2008, p. 26; Hatch 2011, p. 47; Kaler *et al.*

2011, p. 15; Allyn 2012, p. 102; Lawonn 2012, pp. 27–28). By the post-breeding period they feed almost exclusively on these high-lipid fish, consuming only small proportions (4–9 percent) of zooplankton (Hatch 2011, p. 47; Allyn 2012, pp. 100–101). In the northern Bering and Chukchi seas, a variety of small arctic fishes and large zooplankton are abundant (Eisner *et al.* 2013, pp. 97–102) and presumably are consumed by Kittlitz's murrelets in the fall and winter. Based on a comparison of stable isotopes (carbon and nitrogen) from recently captured murrelets and museum specimens, these seasonal foraging patterns have been consistent over the past century (1911–2009) (Hatch 2011, p. 27).

During nesting, Kittlitz's murrelets carry a single whole fish at a time to their chick. Adult fish-holding murrelets often stage on the water before returning to their nest to deliver the fish to the chick; therefore, chick diet has been inferred by identifying these fishes held in the bill of adults on the water and by directly monitoring food deliveries to chicks at nest sites. The proportion of fish held in bill by adults on the water that is identified to species is low (21–23 percent) (Agness 2006, p. 116; Kuletz *et al.* 2008, p. 26) because of the difficulty for the observer to do so at a distance and under at-sea conditions. This method is useful, however, in areas where it is difficult to monitor nests directly such as in glacial-dominated landscapes, where Kittlitz's murrelets have been observed on the water holding primarily sand lance and capelin, and to a lesser extent Pacific herring and Pacific salmon (*Oncorhynchus* spp.) (Agness 2006, p. 124; Kuletz *et al.* 2008, p. 26). In contrast to the low identification rate of fish held by murrelets on the water, most fish (70–85 percent) delivered to chicks at monitored nests have been identified to species (Naslund *et al.* 1994, p. 46; Lawonn 2012, p. 27–28; Kaler 2012, in litt.; Kissling, unpublished data). Pacific sand lance is the fish species delivered most commonly to chicks (57 percent of identified deliveries) and occurs in chick diet in all areas where nests have been monitored (n=33 nests; western Aleutians and Kodiak islands and Kachemak and Icy bays) (Naslund *et al.* 1994, p. 46; Lawonn 2011, pp. 27–28; Kaler 2012, in litt.; Kissling, unpublished data). Although significant geographic variation exists (see *Nesting*, below), the remainder of chick diet is composed of hexagrammids (23 percent; kelp greenling [*Hexagrammos decagrammus*] and Atka mackerel

[*Pleurogrammus monopterygius*]), capelin (10 percent), gadids (5 percent; Pacific cod [*Gadus macrocephalus*]) and rockfish (*Sebastes* spp.), smelt (2 percent; Osmeridae family) and Pacific herring (1 percent) (Naslund *et al.* 1994, p. 46; Lawonn 2011, pp. 27–28; Kaler 2012, in litt.; Kissling, unpublished data). In both methods used to determine chick diet, it is not known if there is bias associated with fish identification due to size of the prey item, but this is certainly possible.

Small schooling fishes that are oily, such as sand lance and capelin, are thought to be favored for chick meals because of their high lipid, and therefore energy, content (van Pelt *et al.* 1997, p. 1395; Anthony *et al.* 2000, p. 75; Litzow *et al.* 2004, p. 1150). Capelin, in particular, is hypothesized to be an important prey species for Kittlitz's murrelets in glacially-affected waters because this fish species occurs in cold, turbid marine waters close to tidewater glaciers (Arimitsu *et al.* 2008, p. 137). Chicks eating oily fishes receive more calories and grow faster (Ostrand *et al.* 2004, p. 69), resulting in fewer foraging trips for parents, when high-energy fishes are fed to chicks than when lower-energy fishes such as walleye pollock or rockfishes, are fed to chicks (Hatch 2011, pp. 74–77, 103–104). Therefore, a change in the availability of high-energy forage fishes during the breeding season could affect the reproductive success of Kittlitz's murrelets (van Pelt *et al.* 1997, p. 1393; Anderson and Piatt 1999, p. 117; Becker *et al.* 2007, pp. 276–278; Osterblom *et al.* 2008, pp. 967–974).

Several studies have described marine habitat use of Kittlitz's murrelets in the breeding season by associating murrelet distribution with marine biotic and abiotic factors in areas where glaciers exist (Day and Nigro 2000, pp. 8–9; Day *et al.* 2003, pp. 685–694; Kissling *et al.* 2007, p. 2168; Kuletz *et al.* 2008, p. 24–27; Allyn *et al.* 2012, pp. 240–242; Arimitsu *et al.* 2012, pp. 12–14; Renner *et al.* 2012, pp. 2035–2039). Generally, Kittlitz's murrelets prefer to forage in shallow (less than 196 feet [ft] [60 meters [m]]), glacially affected waters (Kuletz *et al.* 2008, p. 37) often with some floating ice (Day and Nigro 2000, pp. 6, 8; Day *et al.* 2003, pp. 686, 694; Kuletz *et al.* 2003b, pp. 136, 139), but it is not known whether ice occurrence is biologically meaningful to murrelets. Arimitsu *et al.* (2012, p. 18) postulated that the presence of ice may instead serve as a proxy to other factor(s), such as outflow of sediment-laden freshwater from glacial streams and a downstream increase in the availability of certain near-surface prey (e.g., euphausiids).

Kuletz *et al.* (2003b, p. 139) hypothesized that the undersides of icebergs and pack ice may increase prey abundance and availability to murrelets, perhaps due to the presence of sea ice algae and its role in primary production (Grebmeier *et al.* 2006, p. 339). Other studies have positively associated Kittlitz's murrelets with highly turbid waters (Day *et al.* 2003, p. 685; Renner *et al.* 2012, pp. 2038–2039), often with a clear, cold freshwater lens at the surface less than 32 ft (10 m) in depth (Kuletz *et al.* 2008, p. 37; Allyn *et al.* 2012, p. 233); in fact, Day *et al.* (2003, p. 695) suggest that the eyes of Kittlitz's murrelets are large to increase their ability to forage in highly turbid water. This species prefers marine waters with sea surface temperatures of 37–48 degrees Fahrenheit (F) (3–6 degrees Celsius) (Day *et al.* 2003, p. 685; Day *et al.* 2011, p. 59; Allyn *et al.* 2012, p. 242). Kittlitz's murrelets are often associated with areas of localized upwelling that are generally created by the interaction of landscape features, such as submerged marine sills, shoreline, hanging and tidewater glaciers, and strong tidal currents (Day and Nigro 2000, p. 5; Kuletz *et al.* 2003b, p. 139; Kissling *et al.* 2007, p. 2171; Allyn *et al.* 2012, pp. 244–245; Arimitsu *et al.* 2012, p. 10), but not tidal height (Allyn 2012, p. 101). It is not known to what extent the distribution of Kittlitz's murrelet depends on these marine habitat conditions for foraging efficiency or prey availability in a given year. However, it is logical to assume that daily, weekly, monthly and annual variability in Kittlitz's murrelet population density at a location may be due, at least in part, to corresponding variability in prey abundance.

Kittlitz's murrelets probably switch among prey types between seasons or years depending on availability, as do marbled murrelets (Ostrand *et al.* 2004, p. 73; Becker *et al.* 2007, p. 274). High-lipid forage fishes are expected to represent higher-quality prey for seabirds than are zooplankton because the fishes' larger size should result in more energy gained per unit of effort spent foraging (Norris *et al.* 2007, p. 876), although macrozooplankton are not necessarily of lower caloric value than fishes (Vermeer and Cullen 1982, p. 35; Davis *et al.* 1998, p. 151; Hedd *et al.* 2002, pp. 229–230). Janssen *et al.* (2009, p. 36) reported that in some years female marbled murrelets producing eggs early in the breeding period had a higher proportion of low-trophic-level prey in the pre-breeding diet than did murrelets not producing eggs, signifying that low-trophic-level prey may not

necessarily equate to low-quality prey. Thus, the substantial amount of marine invertebrates in the Kittlitz's murrelet diet coupled with their prey-switching abilities, may buffer self-feeding adults from annual and seasonal variation in the availability or quality of high-energy forage fishes (Anderson and Piatt 1999, p. 117; Robards *et al.* 2003, p. 2; Litzow *et al.* 2004, p. 1149; Arimitsu 2009, pp. 33–36, 45).

Nesting

The Kittlitz's murrelet is a dispersed-nesting seabird (i.e., does not nest in colonies like most marine foragers) that often nests in remote, rugged areas and therefore little information on their nesting ecology existed until recently. Until 1999, only 19 confirmed Kittlitz's murrelet nests had been described, 17 in Alaska and 2 in Russia (Day *et al.* 1999, pp. 25–26). In 2005, a nest was opportunistically discovered on Agattu Island, at the western end of the Aleutian Islands (Kaler 2006, p. 3). Since that time, a number of different studies have been initiated, owing to increasing interest in their conservation status, that have greatly added to our knowledge about the nesting and breeding behavior of this species. On Agattu Island, an additional 86 active nests have been found and monitored (Kaler, Service, 2008–2011, unpublished data), 9 nests have been found on Adak Island (Kenney 2012, in litt.; Kenney and Kaler 2013, p. 74), 75 have been found on Kodiak Island (Corcoran and Mackey, 2012, p. 1; Lawonn 2012, p. 10), and 35 have been found in the glaciated landscape around Icy Bay (Kissling, unpublished data). To date, 234 Kittlitz's murrelet nests have been found in Alaska (n=230; 98 percent) and Russia (n=4; 2 percent) (Felis, U.S. Geological Survey, 2013, unpublished data).

Based on these recent efforts, some generalities can be made about nesting habitat and nest site selection of the Kittlitz's murrelet. Their nesting habitat is characterized by sparsely vegetated or unvegetated scree-fields, talus slopes, barren ground, and cliff and rock ledges in the coastal uplands and mountains, often in the vicinity of glaciers or in historically-glaciated areas (Day *et al.* 1983, pp. 267–269; Day 1995, pp. 271–273; Konyukhov *et al.* 1998, p. 322; Piatt *et al.* 1999, p. 8; Kaler *et al.* 2009, p. 366; Lawonn 2012, pp. 83–87; Kissling, unpublished data). Rangewide, barren areas, which are characterized by bare rock, gravel, sand, silt or clay with little or no “green” vegetation present appear to be the preferred nesting habitat the Kittlitz's murrelet owing to disproportionate use relative to

availability (Kaler *et al.* 2009, p. 366; Lawonn 2012, pp. 90, 101–102; Felis, unpublished data; Kissling, unpublished data). In parts of this species' range, such as Kodiak Island, where mammalian predators exist, the Kittlitz's murrelet appears to avoid nesting near vegetated edges (Lawonn 2012, pp. 90, 101). Dwarf shrub and herbaceous habitats occasionally are used by nesting Kittlitz's murrelets, especially in the Aleutian Islands where nests are positively associated with orange crustose lichens (*Xanthoria* spp.) (Kaler *et al.* 2009, p. 366; Kenney and Kaler 2013, pp. 73–74), and where this habitat type is abundant. Nesting habitat of the Kittlitz's murrelet is located adjacent to or associated with glaciers and persistent snow only in south-coastal Alaska where these land cover classes currently exist. Generally, the amount of vegetative cover within a 25-m radius of nest sites is least in glaciated areas of south-coastal Alaska (3 percent) (Kissling, unpublished data), moderate on Kodiak Island (9 percent) (Lawonn, p. 102) and northern Alaska (14 percent) (Felis, unpublished data) and greatest in the Aleutian Islands (51 percent) (Kaler *et al.* 2009, p. 366). Despite variation in percent of vegetative cover near nests among these study sites, Kittlitz's murrelets consistently nest in the least vegetated areas available on the landscape within a particular area (Lawonn 2012, p. 90; Kaler, unpublished data; Kissling, unpublished data), presumably to maximize the safety of the nest from predators.

Although the amount of vegetative cover appears to drive nest site selection for the Kittlitz's murrelet both within areas and across their range, other characteristics may also be important. Many of these factors, such as elevation, slope, distance to ocean, aspect, substrate, and local climate, however, often are correlated with low vegetative cover. For example, unvegetated or sparsely vegetated areas tend to occur at higher elevations and on steeper, windward-facing slopes. Moreover, the variation in these attributes across the species' range makes it difficult to draw generalizations about their importance. For example, nests have been found from 0.1 to 45.7 mi (0.2 to 73.5 km) from the ocean, on slopes 0–66 degrees, and at elevations between 419 and 7,378 ft (128 and 2,249 m) above sea level. In general, nests located on the steepest slopes and at the highest elevations occur in south-coastal Alaska, whereas those farthest from the ocean are located in northern Alaska (Felis, unpublished data), but this may reflect overall

differences in habitat available. Nest orientation is similarly uninformative at the rangewide scale; based on 196 nests with documented aspect, 50 (26 percent) faced north, 56 (29 percent) faced east, 40 (20 percent) faced south and 50 (26 percent) faced west (Day *et al.* 1999, 25–26; Lawonn 2012, p. 84; Kaler, unpublished data; Kissling, unpublished data; summarized by Felis, unpublished data), suggesting that nest site aspect is not relevant (Kaler *et al.* 2009, p. 366) or is locally driven (e.g., on Kodiak Island) (Lawonn 2012, pp. 83–84). The importance of small- and medium-sized rocks (roughly 2.0–11.8 inches [in.] (5–30 centimeters [cm])) at and near nests has been reported at several study sites (Day *et al.* 1983, p. 267; Kaler *et al.* 2009, p. 366; Lawonn 2012, p. 89; Kissling, unpublished data).

Similar to that of the marbled murrelet, much of the behavior and life history of the Kittlitz's murrelet appears to have evolved around predator avoidance, particularly during nesting (Nelson and Hamer 1995, p. 66). While most alcids avoid predators by nesting in inaccessible areas (burrows, crevices) or on open rock ledges and protect their young by nesting in large colonies or by guarding them, the Kittlitz's murrelet places its nest in habitats expected to support low numbers of predators, disperses nests across the landscape, and relies on cryptic coloration and behavior to avoid predator detection. On the mainland in south-coastal Alaska, nunataks appear to be favorable habitats presumably because of their isolation from terrestrial predators (Kissling, unpublished data). On Kodiak Island, the median within-year nearest neighbor distance was found to be 1,128 ft (range=42–5,085 ft) (344 m; range=13–1,550 m) (Lawonn 2012, p. 83). In addition to site selection, murrelets have a variety of morphological and behavioral characteristics to minimize detection by potential predators (summarized by Nelson and Hamer 1995, p. 66).

A single egg is laid in a nest scrape composed of sand- and pebble-sized rocks (more typical in northern Gulf of Alaska) or plant matter (moss and lichens; common in western Aleutian Islands) at the base of a large rock or on a cliff ledge (Day *et al.* 1983, p. 267; Piatt *et al.* 1994, p. 55; Piatt *et al.* 1999, p. 11; Day 1995, pp. 271–273; Kaler *et al.* 2009, p. 366; Lawonn 2012, pp. 81–82; Kaler 2012, in litt.; Kenney and Kaler 2013, p. 73; Kissling, unpublished data). The egg is colored pale-green, olive-green, or blue-green with brown mottling, ranging from speckling to streaking (Day *et al.* 1983, pp. 265–266; Piatt *et al.* 1994, p. 55; Kaler *et al.* 2009,

p. 367). Across their range and within areas, egg laying is highly asynchronous, with records ranging from 6 May through 17 July (Day 1996, p. 435; Kaler *et al.* 2009, pp. 366–367; Corcoran and Mackey 2012, p. 10; Lawonn 2012, p. 21; Kissling, unpublished data). There is some evidence that Kittlitz's murrelets attempt to renest when a nest fails (Kaler and Kenney 2008, p. 16; Kenney and Kaler 2013, p. 73; Kissling, unpublished data).

The duration of incubation is approximately 30 days (Day *et al.* 1999, p. 14; Kaler *et al.* 2009, p. 365). Both parents incubate the egg, and loss of a parent can mean failure of the nest (Kissling, unpublished data). Mean hatching dates range from 6 July in Icy Bay (Kissling, unpublished data), to 8 July on Kodiak Island (Corcoran and Mackey 2012, pp. 10–11; Lawonn 2012, pp. 21, 47), and to 17 July on Agattu Island (Kaler, unpublished data); these are consistent with the known or expected hatching dates by geographic region presented by Day *et al.* (1996, p. 435), which range from 14 June in southeastern Alaska to 28 July in the Chukchi Sea. Like the marbled murrelet, Kittlitz's murrelet chicks are semiprecocial and are brooded for approximately 48 hours (Nelson and Hamer 1995, p. 66; Lawonn 2012, pp. 23–24). This short period of brooding requires that thermoregulatory capability be developed quickly after hatching so that the chick can remain unattended and have minimal parental care other than food deliveries.

The chick is fed fish for 21–40 days post-hatch at a rate of 1–12 times per day with considerable variation among individual nests, study areas, and years (Day *et al.* 1999, p. 15; Kaler *et al.* 2011, p. 15; Lawonn 2012, p. 51; Kissling, unpublished data). Both adults feed the chick throughout the day and night (Day *et al.* 1999, p. 15; Kaler *et al.* 2011, p. 16; Kissling, unpublished data), but most meal deliveries occur in the early morning within a 4-hour period around sunrise (Lawonn 2012, p. 26). Similar to those of the marbled murrelet, Kittlitz's murrelet chicks maintain their camouflaging down until just prior to fledging (Nelson and Hamer 1995, p. 60; Kaler *et al.* 2009, p. 367). When they fledge, chicks are 40–60 percent of adult body mass, but their wing length is nearly adult-sized (Day *et al.* 1983, p. 272; Kaler *et al.* 2009, pp. 368–369; Lawonn 2012, p. 60). Their initial flight from the nest to the ocean can be short from island nests (Kaler *et al.* 2009, p. 371; Lawonn 2012, p. 101), or much longer from mainland nests that have been recorded as far as 46 mi (74 km)

from the ocean (Day *et al.* 1983, p. 272). Russian scientists have speculated that newly-fledged Kittlitz's murrelets stage on upland glacial lakes before departing for the ocean, but this hypothesis has not been substantiated (Kuletz *et al.* 2008, p. 13), although low numbers of adult Kittlitz's murrelets have been observed on freshwater lakes during the breeding season (Savage 2013, in litt.; Walsh 2013, in litt.). There also is the possibility that fledglings fly downslope to the nearest river from an inland site and use the river as transportation or orientation to the ocean, but this behavior has not been documented (Day *et al.* 1983, p. 272).

Demography

Although demographic data are sparse, Kittlitz's murrelets exhibit life-history characteristics that are similar to other alcids, such as fairly long lifespan (assumed to be approximately 15 years), delayed reproductive maturity (assumed to be approximately 3 years of age), intermittent breeding (i.e., they do not appear to breed annually), and low rates of reproduction (Bessinger 1995, p. 385; De Santo and Nelson 1995, pp. 36–37; Begon *et al.* 1996, pp. 494–496; Day *et al.* 1999, p. 16; Gaston 2004, pp. 164–167). This life-history strategy depends on the survival of at least a few offspring and recruitment of those offspring into the adult breeding population to maintain population stability. Generally, for a species with this life history strategy, changes in mortality rates of reproductively capable adults have greater population-level effects compared to those of juvenile or sub-adult birds and to changes in reproductive rates; in contrast, for a species that is shorter lived, produces more offspring, and matures at an earlier age, changes in reproductive rates tend to drive population-level effects (Ricklefs 1977, p. 467–468; Roff 1992, p. 45; Beissinger 1995, p. 390).

Reproductive Performance. Assessing reproductive effort and performance of the Kittlitz's murrelet is particularly challenging because of their non-colonial and purposefully cryptic nesting behavior. Low reproductive success has been both suggested (Day and Nigro 2004, pp. 91–94) and documented in Kittlitz's murrelets (Kaler *et al.* 2009, p. 369; Lawonn 2012, pp. 29–30; Kaler, unpublished data; Kissling, unpublished data). Because nesting behavior and nesting success have been monitored for only a few years (since 2006) and only in a few locations, it is unclear whether this low rate of nesting success is typical for the Kittlitz's murrelet, a species in which a breeding pair needs to produce offspring

only infrequently, or whether one or more environmental parameters have changed, causing decreased breeding effort or increased egg and chick mortality.

In total, 206 active nests of the Kittlitz's murrelet have been monitored, nearly all of which were discovered as part of studies initiated since 2006 on Agattu and Kodiak islands and Icy Bay (south-coastal Alaska) (Naslund *et al.* 1994, p. 46; Kaler *et al.* 2009, p. 363; Lawonn 2012, p. 10; Corcoran and Mackey 2012, p. 1; Kenney 2012, in litt.; Kaler, unpublished data; Kissling, unpublished data). The majority of these nests (74 percent) failed; only 23 percent successfully fledging a chick; the nest fate was not able to be determined at 3 percent of the nests. Overall, most of the nest failures were attributed to depredation of the egg or chick (31 percent) and death of the chick (starvation, exposure or disease; 29 percent), followed by unknown cause (21 percent), abandonment (14 percent), accident (3 percent), and parent mortality (2 percent). When analyzed collectively, estimates of daily nest survival ($\pm$ standard error [SE]; standard error is a measure of variability in the data) at the three locations where nests were regularly monitored were slightly higher in Icy Bay (0.979 ± 0.005) than at Kodiak and the Aleutian islands (0.968 ± 0.003) (see *Factor A* discussion for more details on this analysis). Across the 55-day nesting period, these daily nest-survival rates extrapolate to estimates of nesting success of 0.307 and 0.166, respectively. Nest observations from the three locations where nests were regularly monitored are summarized below, as well as observations of juveniles at sea.

Aleutian Islands—Since 2005, 96 active Kittlitz's murrelet nests have been found in the Aleutian Islands (Agattu=87 and Adak=9) (Kaler *et al.* 2009, p. 366; Kenney 2012, in litt.; Kenney and Kaler 2013, p. 74; Kaler, unpublished data). Nests were found using searches conducted on foot owing to the low, scrubby vegetation and rolling hills (Kenney and Kaler 2013, pp. 73–74). From 95 nests of known fate, 18 chicks successfully fledged (19 percent apparent nesting success; range among years=6–44 percent) (Kenney 2012, in litt.; Kaler, unpublished data), and the fate of one chick was unknown because researchers left the island before its fate was determined (Kaler *et al.* 2009, p. 369). Of the 77 failed nests, the apparent cause of nest failure was chick death due to starvation and exposure (40 percent), depredation of egg or chick (25 percent), unknown cause (21 percent), failure of eggs to

hatch followed by abandonment (12 percent), or accident (2 percent). Kaler *et al.* (2011, p. 17) could not definitively assign the causes of chick mortality to either exposure or starvation because multiple factors including diet, weather, and provisioning rates by adults were likely contributors. Fledglings in the Aleutian Islands were approximately 50 percent of the adult body mass (Kaler *et al.* 2009, pp. 368, 370–371). This percentage is lower than that calculated for marbled murrelets (58–70 percent) (Kuletz and Marks 1997, p. 423; Nelson and Hamer 1995, p. 60; Kissling, unpublished data) and for Kittlitz's murrelets that fledged from Kodiak Island (58 percent) (Lawonn 2012, p. 60) and Icy Bay (63 percent) (Kissling, unpublished data), but is greater than a Kittlitz's murrelet fledgling found on the Kenai Peninsula (40 percent) (Day *et al.* 1983, p. 272). The low fledging weight in the Aleutian Islands was most likely due to the poor quality (i.e., low lipid content) of prey delivered to chicks, which included mostly hexagrammids (40 percent of deliveries at 10 nests monitored), sand lance (36 percent), and gadids and rockfish (24 percent), and was reflected in the high prey delivery rates at nests in the Aleutians (9.8 fish per day) (Kaler, unpublished data), which was nearly double the rates observed in the northern Gulf of Alaska (Lawonn 2012, pp. 27, 55; Kissling, unpublished data).

South-central Alaska—In 1994, one active Kittlitz's murrelet nest was opportunistically found and monitored using a remote video camera on Red Mountain near Kachemak Bay (Naslund *et al.* 1994, p. 46; Piatt *et al.* 1994, p. 55). The chick fledged and the nest was deemed to be successful (Naslund *et al.* 1994, p. 46).

In 2006, an active nest that contained a live Kittlitz's murrelet nestling was found opportunistically on Kodiak Island, although the fate of this nest was not confirmed (Stenhouse *et al.* 2008, p. 59). Since then, 74 additional nests have been found by systematically searching areas of apparently suitable habitat on foot in a pre-defined study area (Corcoran and Mackey 2012, p. 1; Lawonn 2012, p. 21). Of these 74 nests, 16 chicks fledged from 71 nests (23 percent apparent nesting success) and nest fate of 3 nests was unknown. The overall annual nest survival rate (number of chicks fledged per nesting pair) was 0.0933 (95 percent CI = 0.0067 to 0.2991) between 2008 and 2011, almost certainly below 30 percent nesting success (Lawonn 2012, p. 30). Nest failures were most commonly caused by depredation (54 percent), followed by chick death (25 percent)

and abandonment (20 percent); one nest failed for unknown reasons (Corcoran and Mackey 2012, p. 3; Lawonn 2012, p. 59). The red fox (*Vulpes vulpes*) was the only identified nest predator (13 of 15 predation events recorded; two unidentified predators) (Corcoran and Mackey 2012, p. 3; Lawonn 2012, pp. 30–31). In 2011 and 2012, nine dead chicks found in nest scrapes of monitored nests were necropsied, and all were in fair to good body condition, suggesting that nutritional health was not responsible for their death (Shearn-Bochsler *et al.* 2013, p. 1). However, at least six of these chicks had high levels of saxitoxin, a neurotoxin produced by certain species of dinoflagellates, in their gut and/or liver, which is believed to have caused the death of these chicks immediately after consuming sand lance (Shearn-Bochsler *et al.* 2013, p. 1). Chick meal delivery rates (± 1 standard deviation [SD]; standard deviation is a measure of variability in the data) averaged 4.6 (± 0.8) fish per day or 117 (± 37) fish from hatching to fledging of the chicks with sand lance being the most common prey delivered (92 percent of deliveries), followed by capelin (8 percent) and a few herring and salmonids (*Oncorhynchus* spp.) (Lawonn 2012, pp. 27–28, 55). On Kodiak Island, the mean number of days to fledging ($\pm$ SD) was 24.8 (± 2.3) days (Lawonn 2012, p. 55), or lower than that for nests monitored at Agattu Island (30.6 $\pm$ 5.6 days) (Kaler, unpublished data), despite comparable apparent nesting success at these study sites where similar methods were used to locate and monitor Kittlitz's murrelet nests.

Southeastern Alaska—In contrast to Kodiak, Adak, and Agattu islands, the terrain in southeastern Alaska is characterized by steep mountains, icefields, and glacial fjords usually with thick vegetation along the near shore areas precluding nest searching efforts by foot. Thus, from 2007 to 2012, 35 Kittlitz's murrelet nests have been located in Icy Bay by tracking 24–44 radio-marked birds throughout each of the six breeding seasons (Kissling, unpublished data). Thus, this is the only study site where some reproductive measures, such as breeding propensity and adult body condition prior to breeding, are available and where nest locations are seemingly unbiased because all habitats within the study area were available to the marked birds for nesting (as opposed to searching a specified area that consists of presumably suitable nesting habitat). The mean proportion of radio-marked murrelets that attempted to nest

annually was 0.18 (range=0.03–0.43 across all years), but because weather and logistics precluded daily aerial tracking, it is possible that early failed breeders were not detected and that this estimate of breeding propensity is biased low. Therefore, Kissling (unpublished data) used a combination approach to estimate breeding propensity that includes quantifying levels of vitellogenin (an egg-yolk precursor protein expressed only in females), brood patch development (necessary for incubation in both sexes), and radio-telemetry (following Peery and Henry 2010, p. 2417). Using the combination method, the proportion of murrelets attempting to breed was 0.87 (range=0.75–1.00), which is probably biased high because brood patches can be an unreliable indicator of reproductive status (McFarlane Tranquilla *et al.* 2003, p. 112). It is difficult to reconcile the range in estimates of breeding propensity (0.18–0.87; mean=0.52; breeding propensity is defined as the probability that an after-second-year murrelet will breed in a given year), and it is impossible to determine the accuracy of either method because in glacial-dominated landscapes such as Icy Bay, alternative field methods to locate nests do not currently exist. Many adult Kittlitz's murrelets arrive in Icy Bay paired with a mate and in apparently good body condition, suggesting perhaps that certain environmental cues may be required for breeding to proceed. Another possible explanation for the variable breeding-propensity rate is that there is a capture, handling, or radio-transmitter effect on individual Kittlitz's murrelets; however, several lines of evidence, including few juveniles observed at sea and good reproductive performance of radio-marked marbled murrelets (see below), suggest that this possible issue is not significant.

Because most (86 percent) nests in Icy Bay were not accessible due to the dangerous terrain, nest fate often was inferred (following Bradley *et al.* 2004, pp. 321–322), but nests occasionally (n=5) could be monitored with video or still cameras. Apparent nesting success across all years combined was 40 percent (14 of 35 nests). Causes of failure were largely unknown (71 percent of failed nests) because most of the nests were inaccessible, but of those where cause of failure could be determined or inferred, three failed due to parent mortality (predation) during incubation, two failed due to unstable terrain (i.e., a rockfall), and one egg was abandoned. Despite the small sample sizes, successful nests (n=14) were

located closer to the ocean (median distance=5.6 mi [9.0 km]) than failed nests ($n=21$; median distance=15.0 mi [24.1 km]); the elevation of nests did not affect nest fate (4,226 ft [1,288 m] for successful nests and 4,718 ft [1,435 m] for unsuccessful nests). Prey deliveries averaged 3.0 fish per day ($n=2$ nests) and consisted primarily of sand lance (58 percent) and capelin (21 percent) with smaller amounts of smelt (9 percent), herring (6 percent) and snake prickleback (*Lumpenus sagitta*; 6 percent). The mean number of days to fledging (± 1 SD) at 9 nests was 23.7 (± 3.5) days, or comparable to nests monitored at Kodiak Island.

In addition to Kittlitz's murrelets, researchers captured and radio-marked marbled murrelets in 2011 ($n=7$) and 2012 ($n=9$) in Icy Bay to compare reproductive performance between the two closely related species (Kissling, unpublished data). Across both years, 11 of 16 (69 percent) radio-marked marbled murrelets attempted to nest (two actually re-nested successfully), and 9 of 13 nests were successful (69 percent apparent nesting success). Marbled murrelet nests were located at lower elevations (median elevation=1,368 ft [417 m]) and closer to the ocean (median distance=2.9 mi [4.7 km]) than were Kittlitz's murrelet nests (4,291 ft [1,308 m] and 8.8 mi [14.2 km], respectively). Both breeding propensity and nest success of marbled murrelets were far greater than that for Kittlitz's murrelets using the same techniques in the same study area. Although the sample sizes are small, these results are important for two reasons: (1) It is unlikely that there was a capture, handling or radio-transmitter effect negatively biasing the poor reproductive measures of Kittlitz's murrelets, assuming that Kittlitz's and marbled murrelets would respond similarly; and (2) despite their similar life histories, Kittlitz's murrelets were consistently outperformed reproductively by marbled murrelets in Icy Bay, suggesting perhaps that forage-fish abundance was not limiting the nesting success of Kittlitz's murrelets. Possible reasons for the differences in reproduction of the two species are reduced foraging efficiency of Kittlitz's murrelets, availability of suitable nest sites, carry-over effects from the non-breeding period (Sorensen *et al.* 2009, p. 464), or increased energetic costs of Kittlitz's murrelets to access nests at higher elevations and farther from the ocean (Hatch 2011, pp. 86–87).

Juveniles at sea—Juvenile and adult Kittlitz's murrelets are readily distinguishable in hand owing to plumage characteristics, and usually,

the presence of an egg-tooth in juveniles (Kissling, unpublished data); however, these identification markers are not easily observed at a distance at sea, especially in August when fledglings arrive on the water and adults begin their concurrent pre-basic molt (Kuletz *et al.* 2008, p. 34). This complication may prevent the accurate estimation of juvenile abundance and ratios of juveniles to adults, both of which have been used as indices to annual reproductive success of marbled murrelets (Beissinger 1995, pp. 391–392; Kuletz and Kendall 1998, pp. 450–455; Beissinger and Peery 2007, pp. 297–298; Kuletz *et al.* 2008, p. 85).

Day and Nigro (2004, pp. 91–93) suggested that reproductive success in Kittlitz's murrelets may be very low based on the near absence of juvenile birds in late summer surveys in Prince William Sound. In 3 combined years of at-sea surveys conducted between 15 July and 15 August in 1996, 1997, and 1998, in the fjords of Prince William Sound, only a single hatch-year bird was sighted (Day and Nigro 2004, p. 91). During similar late summer surveys in Kachemak Bay from 2004 to 2007, densities of juvenile Kittlitz's murrelets varied among years (range=0.01–0.05 birds per square mile (mi^2) [0.03–0.12 birds per square kilometer (km^2)] and were much lower than those of marbled murrelets (range=0.10–0.31 birds per mi^2 [0.27–0.79 birds per km^2]); however, juvenile to adult ratios were comparable between species ranging from 0.01 to 0.28 for Kittlitz's murrelets and from 0.02 to 0.13 for marbled murrelets, albeit with less intra-annual variation for the latter species (Kuletz *et al.* 2008, pp. 59, 85). To provide perspective, the total number of juvenile Kittlitz's murrelets recorded in the 4 years of surveys was 37 among 1,445 sub-adults and adults (Kuletz *et al.* 2008, pp. 104–107). Similarly, during surveys of nearshore waters around Kodiak Island in August 2011 and 2012, 16 juvenile and only 6 sub-adults and adult Kittlitz's murrelets were observed compared to 187 juvenile and 5,779 sub-adults and adult marbled murrelets (Corcoran 2012, p. 5). Between 2008 and 2011, only 5 juvenile to 380 adult Kittlitz's murrelets were captured in late summer in Icy Bay (Kissling, unpublished data). Thus, results of all of these studies are difficult to interpret without information on the behavior and timing of movements of both age classes of Kittlitz's murrelets in late summer and some estimates of detection errors. Fairly high ratios of juveniles to adults in Kachemak Bay and Kodiak Island suggest good reproductive

performance in these areas, yet nest monitoring data on Kodiak Island indicate differently; therefore, the high ratios may reflect rapid and synchronous departure of adult Kittlitz's murrelets from these areas or post-fledging dispersal of juvenile Kittlitz's murrelets into these areas.

In Icy Bay, six juvenile Kittlitz's murrelets (1 immediately prior to fledging, 3 newly fledged, and 2 approximately 2–3 weeks post-fledging) were captured and radio-marked in 2008–2010 (Kissling, unpublished data). All juveniles still had their egg-tooth at the time of capture. The 3 newly fledged birds were located within Icy Bay for approximately 24 hours before departing; 2 of them were not detected again, but 1 returned to Icy Bay 8 days later. The older fledglings, which were significantly heavier than the newly fledged birds, were relocated in Icy Bay for 1–3 weeks post-marking. All juveniles were relocated visually and appeared to be good swimmers and divers, although the newly fledged birds were not readily capable of flight, in contrast to the older fledglings that were excellent flyers and were indistinguishable from flying adults both in terms of flight ability and plumage. The small sample size precludes drawing definitive conclusions; however, these results suggest that most newly fledged Kittlitz's murrelets immediately depart their breeding area. After becoming proficient at foraging on their own, gaining weight and improving flight capability to avoid predators, they may return to their breeding area where they remain until the post-breeding migration begins. This possible scenario explains the differences in behavior between the newly fledged and post-fledged Kittlitz's murrelets. A better understanding of juvenile behavior after fledging would help to determine the reliability of juvenile surveys in late summer, which may be the most realistic and cost-efficient method for long-term monitoring of reproductive performance across many different study sites, as it is for marbled murrelets.

Survival. The only estimates of survival of Kittlitz's murrelets were derived from data collected in Icy Bay. Using radio-marked Kittlitz's murrelets ($n=197$), Kissling (unpublished data) estimated breeding season survival (60 days post-marking; approximately mid-May through mid-July) of adults greater than 1 year old to be 0.89 ($\text{SE}=0.04$) with little inter-annual variation ($n=6$ years). The primary cause of adult mortality in the breeding season in Icy Bay was predation by peregrine falcons

(*Falco peregrinus*) and bald eagles (*Haliaeetus leucocephalus*). Based on mark-recapture banding methods, annual survival (1 July to 30 June) of adult Kittlitz's murrelets was estimated to be 0.80 (SE=0.33). Although this estimate is imprecise, primarily because of low recapture rates across years (less than 8 percent), it is comparable to annual survival of marbled murrelets (0.83–0.88) estimated using similar methods (Cam *et al.* 2003, p. 1122; Peery *et al.* 2006, p. 83). There are no estimates of juvenile survival of Kittlitz's murrelets, but estimates of annual survival of juvenile marbled murrelets range from 0.51 based on radio-telemetry (Parker *et al.* 2003, p. 207) to a proportion of adult survival (70 percent) by comparing with other alcids (Nur 1993 in Piatt *et al.* 2007, p. 55).

Population Status and Trends

In this section, we summarize information on status and trends of the Kittlitz's murrelet at the local population scale (i.e., by individual study areas) and at a broad scale across multiple populations. We also describe difficulties in estimating population size and trends of the Kittlitz's murrelet.

Estimating abundance and population trends for most alcids is simpler than for the Kittlitz's murrelet because the majority of alcids nest in colonies where birds concentrate and can be monitored in large numbers during the breeding season. In contrast, the solitary, remote, and secretive nesting behavior of the Kittlitz's murrelet makes terrestrial monitoring impractical for the purposes of estimating abundance and population trends (Drew and Piatt 2008, p. 179). Therefore, estimating abundance and the rate of change in populations of Kittlitz's murrelets has relied entirely on at-sea surveys (Day 2011, p. 2).

A handful of ornithological surveys and expeditions primarily aimed at documenting the distribution of marine birds occurred prior to 1972 (Isleib and Kessel 1973, p. 1), when systematic at-sea surveys were conducted in a few select locations in Alaska (Bailey 1977, p. 60; Klosiewski and Laing 1994, p. 5) and along discontinuous sections of shoreline in Russia (summarized in Artukhin *et al.* 2011, pp. 25–26). Since then, many surveys for marine birds, including a number of efforts specifically for the Kittlitz's murrelet, covering a wider geographic area have been conducted and, in some areas, repeated in subsequent but not necessarily continuous years. These historical and recent survey efforts have provided a tremendous amount of information on the distribution and

abundance of the Kittlitz's murrelet within the areas surveyed. Nonetheless, inherent, methodological, and analytical difficulties in estimating population size and trend of this species remain, many of which are not mutually exclusive and some of which can be resolved as new information becomes available.

First, present-day populations of Kittlitz's murrelet occupy a large range and are geographically clustered, usually in remote areas that are difficult to reach and survey. Many areas of their range have not yet been systematically surveyed or are under-represented by existing survey efforts.

Second, the high at-sea spatial and temporal variation of Kittlitz's murrelets often results in wide variances associated with population estimates and therefore little power to detect trend (Kissling *et al.* 2007, p. 2168; Kirchhoff 2011, pp. 79–80; but see Drew *et al.* 2008, pp. 18, 41). Each surveyed area differs in size, which has implications for estimating abundance. Surveys attempting to encompass larger areas, such as Prince William Sound, may encompass the spatial variability of murrelets that use this area during the summer; that is, surveys may be sufficiently large to encompass the spatial variation in areas used by murrelets during a survey effort owing to daily or weekly movements by murrelets within that area. However, larger areas take longer to survey and thus must capture the temporal variability in murrelet abundance. None of the survey areas, except Icy Bay (see *Nesting and Demography*, above), has been accompanied by related studies of daily (or longer) movements by murrelets to help understand whether the at-sea surveys are encompassing the range of habitats used by murrelets in that area during the survey period.

Third, the Kittlitz's murrelet can be difficult to distinguish from the more common marbled murrelet during surveys, resulting in varying proportions of *Brachyramphus* murrelets identified to genus only. This issue was particularly problematic during earlier surveys (pre-2000), when there was less emphasis and training on distinguishing between the two species during surveys of all marine birds, occasionally leading to high proportions (greater than 50 percent) of unidentified murrelets (Piatt *et al.* 2011, p. 66; Day 2011, pp. 22–27; Kuletz *et al.* 2011a, p. 99; Kuletz *et al.* 2011b, pp. 87, 90) and possibly unknown proportions of misidentified murrelets (Kirchhoff 2011, pp. 80–81; Hodges and Kirchhoff 2012, p. 117; Kuletz *et al.* 2013, p. 69).

Fourth, owing to their asynchronous arrival at breeding sites, unknown

fidelity to breeding areas, and movements during the breeding season, it is difficult to define both a statistical or biological population of Kittlitz's murrelets. Therefore, apparent trend in local population size of the Kittlitz's murrelet is confounded by intra- and inter-annual movements of individuals among study sites. Most Kittlitz's murrelets apparently do not breed annually (Day and Nigro 2004, p. 91; Kissling, unpublished data) and, therefore, are not restricted to a particular breeding site or at-sea areas near a breeding site every year, allowing non-breeding individuals and failed breeders to move freely to locate food during the breeding season when most surveys are conducted. While breeding birds may not be counted on surveys because they are incubating or tending to young at nests, this probably is minor because breeding propensity typically appears to be low in this species (see *Reproductive Performance*, above).

In Icy Bay, the daily emigration rate of radio-marked Kittlitz's murrelets ($\pm$ SE) over a 60-day period during the breeding season was low (0.008 ± 0.002) (Kissling, unpublished data), but no estimate of the rate of immigration exists. Similarly, the annual recapture probability of uniquely banded Kittlitz's murrelets ($\pm$ SE) was low (0.08 ± 0.03), suggesting that individuals do return to the area, but perhaps not annually (Kissling, unpublished data). These intra- and inter-annual movements complicate reliable trend estimation of local population size, especially because the timing of at-sea surveys for the Kittlitz's murrelet has not been synchronized among study sites. To illustrate an extreme example, the local population of Kittlitz's murrelet in Kachemak Bay was estimated to be 1,776 birds (SE=1,051) in 2005, but 3,277 birds (SE=1,582) in 2006, followed by a drastic reduction in 2007 to 1,086 birds (SE=931) (Kuletz *et al.* 2011b, p. 96). The documented fluctuations in local population size over the 3-year period cannot be demographically explained and therefore probably are related to intra- or inter-annual movements into or out of Kachemak Bay.

Fifth, there is not a consistent survey protocol or design used to count Kittlitz's murrelets at sea across locations and occasionally at the same location (Day 2011, pp. 6–39). Key survey and analytical procedures such as time of year and synchrony of counts across range, level of surveyor expertise and training, limitations of oceanic and climatic conditions, varying survey platforms, estimation of detection probabilities, inclusion of flying

murrelets, survey objectives (single-species versus multi-species surveys), and treatment of unidentified murrelets in population-size estimation have varied among locations and years (Hoekman *et al.* 2011, p. 35; Kirchhoff 2011, p. 78; see Day 2011 for complete review). Within a study site, many methodological issues have been addressed in recent years, but across sites, inconsistencies will remain until a comprehensive monitoring protocol is developed, accepted and implemented by researchers. Until then, our ability to detect population trend of Kittlitz's murrelet reliably, especially beyond individual study sites, is limited (Day 2011, pp. 52–57).

Recognizing all of these challenges and differences in methods across study sites, the rangewide population of Kittlitz's murrelet currently is estimated to be 33,583 birds (95 percent CI=25,620–41,546). Because some areas remain unsurveyed or have not been surveyed in many years, this estimate should be considered a minimum. The rangewide estimate was derived by summing the most recent local population estimate in all surveyed areas during the breeding season, which includes all known concentrations of Kittlitz's murrelet. These areas (and most recent survey year) include the mainland fjords of southeastern Alaska (2002) (Kissling *et al.* 2011, p. 7), Glacier Bay (2010–2012, averaged) (Hoekman *et al.* 2013, p. 15), the outer coast of southeastern Alaska from Cross Sound to Yakutat (2003–2004) (Kissling *et al.* 2011, p. 7), Yakutat Bay (2009) (Kissling *et al.* 2011, p. 7), Lost Coast extending from Manby Point (2002) to Duktoth River (2008–2009) (Kissling *et al.* 2011, p. 7), Icy Bay (2012) (Kissling, unpublished data), Kenai Fjords (2008) (Arimitsu *et al.* 2011, p. 18), Prince William Sound (2012) (Cushing, Oregon State University, 2010–2012, unpublished data), Kachemak Bay (2011) (Kuletz, Service, 2011, unpublished data), Lower Cook Inlet (1996) (Kuletz *et al.* 2011b, p. 96), Kodiak (2012) (Corcoran 2012, p. 5), southern coast of the Alaska Peninsula (2003) (Madison *et al.* 2011, p. 118), select Aleutian Islands (2004–2009) (Madison *et al.* 2011, p. 118), northern Alaska including Chukchi and Beaufort seas and Arctic Ocean (2000–2009) (Day *et al.* 2011, p. 58), eastern coast of Russia extending from the Chukotka Peninsula in the north to the southern tip of the Kamchatka Peninsula (1991–2005) (Artukhin *et al.* 2011, pp. 26–28) and the northern Sea of Okhotsk (2005–2008) (Artukhin *et al.* 2011, p. 30). Hence, this population estimate does

not include numbers from Kodiak Island, most of the Aleutian Islands, and the Bering Sea, plus non-breeding birds that may be living at sea across the open northern Gulf of Alaska.

We examined trends of the Kittlitz's murrelet at the local population scale and across multiple populations. We defined a population as the birds using pre-defined study area boundaries, although there is no evidence that these individual populations are biologically separated from one another. Below, we briefly summarize available information about local population trends of the Kittlitz's murrelet in areas for which a sufficient number of years of data were available. In many cases, we were unable to draw inferences on the trend of Kittlitz's murrelet at the local population scale because of the difficulties described above and, in some cases, conflicting information within a study area. However, we did not consider this to be a limitation to our assessment because our primary interest was to determine, to the best of our ability, the status and trend of the Kittlitz's murrelet at a broad scale, as opposed to the local population scale. Therefore, we analyzed trend across multiple populations of Kittlitz's murrelet using all of the available information on local populations with at least 3 years of at-sea survey data and developed a population model that also incorporated information on reproduction and survival; these two efforts to assess the status and trend of Kittlitz's murrelet across multiple populations are also summarized below.

Local Populations

Only 7 areas have been surveyed for Kittlitz's murrelets at sea in a somewhat consistent manner in 3 or more different years between 1989 and 2012: Glacier Bay (13 surveys of 3 different designs between 1991 and 2012), Malaspina Forelands (4 surveys of one continuous transect, 1992–2009), Icy Bay (2002–2012), Prince William Sound (13 years, 1972 and 1989–2012, with a different design in 1972), Kenai Fjords (3 years, 2006–2008), Kachemak Bay (4 years, 2005–2011), and Lower Cook Inlet (5 years, 1993–1999 using two different designs). Few surveys were conducted prior to 2000, and the reliability of some of those survey data is compromised due to the methodological challenges presented above. Therefore, rates of change in local population size in the few areas where early surveys were completed (i.e., Glacier Bay, Malaspina Forelands, Prince William Sound, and Lower Cook Inlet) often rely heavily on 1–2 historical years of data.

Glacier Bay (37 percent of rangewide population estimate). Three different research teams have conducted systematic at-sea surveys for marine birds in Glacier Bay and all have employed their own survey design and protocol (Kirchhoff 2011, p. 78). Piatt *et al.* (2011, p. 71) conducted surveys in 1991, 1999–2003, and 2008 and reported a local population decline of 89 percent (negative 10.7 percent per year) over this time period, but the decline was not statistically significant due to high inter- and intra-annual variance. During the 1991 surveys, a different sampling design was used that did not sample the offshore habitat randomly nor systematically, raising concern that the 1991 survey results were not comparable to data collected in 1999–2008 (Drew and Piatt 2008, p. 179; Day 2011, p. 39; Kirchhoff 2011, p. 78). However, the authors believed that they had adequately addressed discrepancies between the two designs in their analysis and that Kittlitz's murrelets, in fact, did decline in Glacier Bay between 1991 and 2008, although the decline appeared to level off after 2002 (Piatt *et al.* 2011, p. 72). Further, Drew and Piatt (2008, p. 178) tested for potential survey-based bias in both sampling designs by using spatially matched transects and concluded that the Kittlitz's murrelet population in Glacier Bay had declined by 83 percent between 1991 and 2000. During a similar time period, Lindell (2005, p. 5) conducted surveys in 1993 in Glacier Bay that were replicated in 2009 and 2010 (Kirchhoff *et al.* 2013, p. 6). When analyzed collectively with survey results completed by Piatt *et al.* (2011, p. 7), the annual rate of change was negative 2.3 percent between 1991 and 2010 and was not statistically significant (Kirchhoff *et al.* 2013, p. 10). Most recently, Hoekman *et al.* (2011, p. 35; 2013, p. 15) developed and tested a new, sophisticated survey design and protocol specifically for Kittlitz's murrelets in Glacier Bay and completed annual surveys accordingly in 2010–2012; this protocol currently is under review. The field and analytical techniques employed by Hoekman *et al.* (2013, p. 15) have resulted in much larger population estimates (2–3 times greater) of Kittlitz's murrelet compared to the more standard approaches used by other researchers (Lindell 2005, p. 5; Piatt *et al.* 2011, p. 71; Kirchhoff *et al.* 2013, p. 6). There is notable disagreement among researchers about the current population size and trend of Kittlitz's murrelets in Glacier Bay, with the disagreement about trends primarily

due to differences in survey design and protocol of the 1991 survey.

Malaspina Forelands (less than 1 percent of rangewide population estimate). The Malaspina Forelands, an area extending between Manby Point near Yakutat and Point Riou at the entrance to Icy Bay, was surveyed initially in 1992 by paralleling the coastline roughly 0.6 mi (1 km) offshore for 51 mi (82 km) (Kozie 1993, pp. 1–2). Kissling *et al.* (2011, p. 4) repeated this survey in 2002, 2008, and 2009. Results of these surveys are useful to document distribution and qualitative rates of change, but the survey design of one linear transect lacks rigor and does not lend itself to estimation of population size or trend at the scale of a study area. In the four surveys, however, the number of Kittlitz's murrelets varied dramatically ranging from 641 in 1992 to 10 (2002), 39 (2008) and 165 (2009) (Kissling *et al.* 2011, p. 7).

Icy Bay (3 percent of rangewide population estimate). Since 2002, eight at-sea surveys for marine birds targeting Kittlitz's murrelet and using the same study design and sampling methods have been conducted in Icy Bay (2002, 2005, 2007–2012; Kissling *et al.* 2011, p. 7; Kissling, unpublished data). Between 2002 and 2012, the annual rate of change of the local population was estimated to be negative 10.0 percent; this rate of decline was statistically significant (slope estimate=negative 0.10 [SE=0.03]) (Kissling, unpublished data). A population model that incorporates demographic characteristics including reproduction, survival, and abundance of Kittlitz's murrelets in Icy Bay substantiated the results of the at-sea surveys by indicating an 8 percent decline annually between 2002 and 2012, but the variance surrounding this estimate is large (Kissling, unpublished data).

Prince William Sound (4 percent of rangewide population estimate). While Prince William Sound has the longest history of survey effort (13 years), it is also subject to reliability concerns related to historical data, especially in regards to varying proportions of unidentified *Brachyramphus* murrelets, as well as impacts of the Exxon Valdez oil spill that occurred in March 1989. Several authors determined that there had been declines in some marine bird populations, including *Brachyramphus* murrelets, before the spill occurred (Klosiewski and Laing 1994, p. 28; Agler *et al.* 1999, p. 101). Kuletz *et al.* (2011a, p. 103) reported a decline in Kittlitz's murrelets in Prince William Sound of 18.1 percent per year between 1972 and 2007. However, interpretation of

population trend in this area was complicated by three primary concerns:

(1) The 1972 survey used a different survey design than the 1989–2012 surveys; (2) the 1972 survey was temporally removed from the remainder of the surveys (17 years between the 1972 survey and the next survey in 1989); and (3) the earlier surveys in 1989–1991 and 1993 had high proportions of unidentified murrelets (39–89 percent). Kuletz *et al.* (2011a, pp. 99–101) developed a population model that included the unidentified murrelets to overcome these challenges and tested the sensitivity of the model to inclusion and exclusion of the problematic years; after acknowledging the many assumptions and limitations of the analysis, the authors found negative trends for populations of Kittlitz's murrelets in Prince William Sound regardless of which years were included (p. 104). In fact, even after removing the 1972 survey, the annual rate of population change of Kittlitz's murrelets was greater (negative 30.0 percent; Kuletz *et al.* 2011a, p. 103).

Hodges and Kirchhoff (2012, pp. 118–119), however, postulated that misidentification of murrelets in 1989 and 1993 was probable. Based on a reanalysis excluding those years and including 2 additional survey years (2001 and 2009; not included by Kuletz *et al.* (2011a, p. 101) because only select fjords within Prince William Sound representing different statistical populations of murrelets were surveyed in these years), Hodges and Kirchhoff (2012, p. 119) concluded that population trend of Kittlitz's murrelet in Prince William Sound between 1989 and 2009 was not significantly different from a stable population. Kuletz *et al.* (2013, pp. 69–71) disputed the case presented by Hodges and Kirchhoff (2012, pp. 118–119), contending that the authors erred in their assumption of Kittlitz's murrelet distribution, and in including the 2001 and 2009 survey data, concluding that there was in fact a decline in the Kittlitz's murrelet in Prince William Sound between 1989 and 2007.

Cushing *et al.* (2013, p. 1) took a different approach to address the high and varying proportions of unidentified and possibly misidentified murrelets by simply reporting populations trends of *Brachyramphus* murrelets (genus level) in Prince William Sound between 1989 and 2012. There was strong evidence of an overall decline in abundance of murrelets with a mean annual rate of change of negative 5.2 percent or a 70.8 percent cumulative decrease in abundance of *Brachyramphus* murrelets over the 23-year period. This estimate of

decline applies to both Kittlitz's and marbled murrelets, however, so it is difficult to draw firm conclusions about the status of Kittlitz's murrelets in Prince William Sound from this analysis. Kuletz *et al.* (2013, pp. 69–71) argued that, given the undisputed decline in *Brachyramphus* murrelets in Prince William Sound, the proportion of identified Kittlitz's murrelets to marbled murrelets should have increased if the Kittlitz's murrelet population was stable, but instead the proportion of identified Kittlitz's murrelets has declined between 1989 and 2012. However, this argument hinges on comparable identification rates of both murrelet species within and among years.

Kenai Fjords (2 percent of rangewide population estimate). Seven surveys using five different survey designs or protocols have been conducted in Kenai Fjords, prohibiting reliable estimation of local population trends of Kittlitz's murrelet. Arimitsu *et al.* (2011, p. 17) summarized earlier survey efforts for marine birds in the greater Kenai Fjords area (1976, 1986, 1989, 2002), most of which concentrated survey effort along the shoreline and did not follow a consistent survey protocol with previous surveys. Acknowledging many methodological issues associated with these surveys, density estimates of Kittlitz's murrelet increased by 55 percent between 1986 and 1989 and decreased by 90 percent between 1989 and 2002 (Arimitsu *et al.* 2011, p. 18). In 2006–2008, annual surveys for Kittlitz's murrelets were conducted while following a systematic study design and sampling protocol similar to those employed in other areas, but with only 3 years of data over a short time frame, Arimistu *et al.* (2011, p. 17) appropriately refrained from estimating local population trend and instead assessed variability of the Kittlitz's murrelet population during the 3-year period.

Lower Cook Inlet and Kachemak Bay (9 percent of rangewide population estimate). Of all areas with multiple years of surveys, Lower Cook Inlet and adjacent Kachemak Bay in the southeastern part of the inlet, are the most complex and confounding. In June 1993, Agler *et al.* (1998, pp. 255–256) completed a comprehensive, systematic survey for marine birds and mammals covering all of Lower Cook Inlet. A portion (roughly one-third) of this area was surveyed in July and August 1996–1999, but while using a different systematic sampling design (described in Kuletz *et al.* 2011b, p. 86). Kuletz *et al.* (2011b, p. 86) reanalyzed data from a 'core area' of Cook Inlet that had been

covered during both earlier survey efforts. Within the core area, numbers of Kittlitz's murrelet declined significantly by 26.2 percent per annum between 1993 and 1999, a total decline of 84 percent over the 7-year period (Kuletz *et al.* 2011b, p. 91); however, there are two primary concerns related to these surveys. First, in 1993, 82 percent of the murrelets observed were not identified to species (Kuletz *et al.* 2011b, p. 91), and second, the timing of the four surveys varied dramatically, especially between the 1993 survey (7–23 June) and the 1996–1999 surveys (14 July–16 August; p. 87), severely reducing the comparability of these surveys across years. Removing the 1993 survey from the trend analysis, numbers of Kittlitz's murrelet declined by 32 percent annually between 1996 and 1999 in the core area (Kuletz *et al.* 2011b, p. 91), although these surveys started and ended later each consecutive year (p. 87). These results may be questionable, however, given recent information that Kittlitz's murrelets from other parts of the northern Gulf of Alaska are known to move into Lower Cook Inlet in the post-breeding season (late July–August; Madison *et al.* 2012, p. 1).

Similarly, several late-summer surveys of varying sampling designs and protocols were conducted between 1988 and 2011 in Kachemak Bay (Kuletz *et al.* 2011b, p. 90; Kuletz, unpublished data), but many of these survey efforts lacked a rigorous or systematic survey design, and there are concerns about the timing of the surveys. Therefore it is difficult to draw statistical inference from their results. Between 2005 and 2007, systematic surveys of Kachemak Bay were conducted from 18 to 26 July using standard protocols (Kuletz *et al.* 2011b, p. 90), resulting in annual local population estimates ranging from 1068 to 3287 Kittlitz's murrelets, depending on the year. Based on these surveys, as well as the historical efforts, Kuletz *et al.* (2011b, p. 93) concluded that the population of Kittlitz's murrelet in Kachemak Bay was statistically stable. In 2011, the same systematic survey of Kachemak Bay was repeated, resulting in a considerably lower estimated population size of Kittlitz's murrelet (424 birds) than the previous 3 surveys completed in 2005–2007 (Kuletz, unpublished data). However, we cannot draw reliable conclusions from these data for two reasons. First, the variance associated with these local population estimates is too high to detect a trend between 2005 and 2011 (coefficient of variation [a measure of variability in the data]=52–86 percent) (Kuletz *et al.* 2011b, p. 96; Kuletz, unpublished data).

Second, the rate of change in population size was not linear across the 6-year period and the range in estimates (424 to 3,287 Kittlitz's murrelets) cannot be demographically explained (Kuletz *et al.* 2011b, p. 96; Kuletz, unpublished data).

Multiple Populations

Trend analysis. We assessed change in Kittlitz's murrelet populations at a broad scale by conducting a comprehensive trend analysis that used survey data collected at multiple individual study sites (hereafter referred to as the multiple-populations trend analysis) (Lukacs and Kissling 2013, p. 27). We limited our analysis to those areas with at least 3 different years of survey data, and within a study area, we only grouped surveys that sampled similar statistical populations; no datasets were combined. We included 9 statistically-independent populations with datasets spanning from 1989 to 2012 in the multiple-populations trend analysis: Glacier Bay–A (1991, 1999–2003, 2008) (Piatt *et al.* 2011, p. 70), Glacier Bay–B (1993, 2009–2010) (Lindell 2005, p. 5; Kirchhoff *et al.* 2012, pp. 6, 10), Glacier Bay–C (2010–2012) (Hoekman *et al.* 2013, p. 15), Malaspina Forelands (1992, 2002, 2008–2009) (Kissling *et al.* 2011, p. 7), Icy Bay (2002, 2005, 2007–2012) (Kissling *et al.* 2011, p. 7; Kissling, unpublished data), Prince William Sound (1989–1991, 1993, 1996, 1998, 2000, 2004–2005, 2007, 2010, 2012) (Cushing, unpublished data), Kenai Fjords (2006, 2007, 2008) (Arimitsu *et al.* 2011, p. 18), Kachemak Bay (2005–2007, 2011) (Kuletz *et al.* 2011b, p. 96; Kuletz, unpublished data), and Lower Cook Inlet (1993, 1996–1999) (Kuletz *et al.* 2011b, p. 96).

We considered four model forms to describe and estimate population trend of Kittlitz's murrelets across multiple local populations between 1989 and 2012: constant (no change over time), linear (straight line), quadratic (line that displays concavity with a single bend either upward or downward), and linear with a change in slope (statistically referred to as a 'knot') at 2000 (Lukacs and Kissling, p. 27). We tested the last model form (linear with a knot at 2000) because around this time climate regime shifts occurred in the northern Gulf of Alaska (1998–1999) and in the Arctic (2000) (Litzow 2006, p. 1386; Overland *et al.* 2008, p. 92) (see *Factor A* below for more detailed discussion on climate regime shifts) and researchers reported that Kittlitz's murrelet numbers may have stabilized in some areas shortly thereafter (Kuletz *et al.* 2011a, p. 105; Piatt *et al.* 2011, p. 73). Of the four

model forms considered in the multiple-populations trend analysis, the linear model form with a knot at 2000 was the most strongly supported model (delta Akaike Information Criterion [AIC]=19.2 units; AIC is a measure of the relative quality of a statistical model for a given set of data and contending model forms; a small delta AIC [e.g., less than 2] indicates model uncertainty).

Results of the multiple-populations trend analysis demonstrated that the population of Kittlitz's murrelet declined significantly by 30.6 percent per annum between 1989 and 2000 (slope estimate=negative 0.31 [SE=0.09]), at which time a statistically significant change in the rate of change occurred and populations stabilized between 2000 and 2012 (slope estimate=0.38 [SE=0.13]; this slope estimate represents the positive change from negative 0.31, or a positive slope of 0.07). We then removed 3 problematic years of data due to high proportions of unidentified murrelets (1993 in Prince William Sound and 1993 in Lower Cook Inlet) and to differences in study design (1991 in Glacier Bay) and reran the analysis. Although model fit with the problematic data points removed gave a poorer fit (delta AIC=12.2), the same model (linear with a knot at 2000) was selected and estimated similar trends across all populations between 1989 and 2000 (slope estimate=negative 0.30 [SE=0.10]) and between 2000 and 2012 (slope estimate=0.38 [SE=0.14]). We conclude from this analysis that Kittlitz's murrelets declined by roughly 30 percent per annum on average across multiple populations between 1989 and 2000, after which abundance stabilized. For comparison, the same analysis for the population of marbled murrelet across multiple populations indicated a stable trend from 1989 to 2012 with no change in slope at year 2000; the constant model for marbled murrelet was selected as the best model (delta AIC=3.3) when we ran the analysis with and without the three questionable data points.

For assessing status of the Kittlitz's murrelet across their range, we found that the multiple-populations trend analysis described above is more useful and rigorous than trend estimates of individual local populations; however, several drawbacks to our approach exist. First, the trend analysis included populations of Kittlitz's murrelets only from Glacier Bay in the south to Lower Cook Inlet in the north, an area that contains most of the known larger populations of the Kittlitz's murrelet (see *Local Populations*, above), but covers a small portion of their overall

range. Second, we only considered linear and quadratic shapes to the trend of multiple populations combined. Third, demographic parameters such as reproduction and survival are not considered in the trend analysis, even though these vital rates drive current and future abundance. Fourth, the trend analysis does not allow population projections into the future or estimation of extinction probabilities. To address some of these drawbacks, we developed a population model as a tool to assessing population status of the Kittlitz's murrelet at a broad scale.

Population model. Owing to the limitations of the multiple-populations trend analysis, we developed a population model to help evaluate the status of the Kittlitz's murrelet across all populations with sufficient demographic information (hereafter referred to as the multiple-populations model) (Brooks *et al.* 2004, p. 515; Johnson *et al.* 2010, p. 1084; Lukacs and Kissling 2013, p. 5). Population models are a well-established tool for evaluating population dynamics for species with limited and variable datasets, such as the Kittlitz's murrelet, by linking population size with stage-specific vital rates. A single comprehensive population model like the one we developed integrates all of the available data on abundance, survival, and reproduction; shares information from data-rich areas with data-poor areas; and predicts population size given the demographic data each year and into the future. One advantage to using this approach for the Kittlitz's murrelet is that it allowed us to include data on reproduction at Agattu and Kodiak islands and Icy Bay (see *Nesting and Reproductive Performance*, above) and on survival from Icy Bay (see *Survival*, above), thereby nearly doubling the spatial scope of inference compared to that of the multiple-populations trend analysis. Another advantage is that it is not purely a statistical test such as the multiple-populations trend analysis, but instead incorporates aspects of the biology of the Kittlitz's murrelet.

We included 7 local populations in the multiple-populations model: Glacier Bay, Icy Bay, Prince William Sound, Kenai Fjords, Kachemak Bay, Kodiak Island, and Agattu Island. In Glacier Bay, where multiple datasets on abundance exist, we used the dataset (Glacier Bay-A) with the most number of years of abundance estimates (Piatt *et al.* 2011, p. 70). We modeled data collected from 2000 to 2012 because only abundance was available prior to 2000, and without concurrent data on reproduction or survival, we were unable to achieve a good model fit

(Lukacs and Kissling 2013, p. 6). Because our primary interest was to determine the current and future status and population dynamics of the Kittlitz's murrelet at a broad scale and few demographic data were collected prior to 2000, we did not consider the exclusion of pre-2000 data to be a major constraint to the model development or results. Reproduction was estimated as the product of breeding propensity (the proportion of birds attempting to nest in a given year) and nesting success. Following Peery and Henry (2010, p. 2417), we considered a range of values for breeding propensity (low=0.181, medium=0.526, high=0.817; see *Reproductive Performance*, above, for details) (Kissling, unpublished data) and estimated daily nest survival at Agattu and Kodiak islands (0.968) (Kaler, unpublished data; Lawonn, Oregon State University, 2008–2011, unpublished data) and Icy Bay (0.979) (Kissling, unpublished data). For areas without nesting information, we applied the estimate of nesting success from the study site most similar in landscape (e.g., glacial, non-glacial). We considered a range of values for annual adult survival (low=0.79, medium=0.89, high=0.95) (Kissling, unpublished data) and used a proportion (0.70) of adult survival as juvenile survival following Peery and Henry (2010, p. 2415) and others (McShane *et al.* 2004, p. 3–41; Piatt *et al.* 2007, p. 58).

The best-fit model for the multiple-populations model included the medium-level breeding propensity (0.526) and medium-level annual survival (0.89) and predicted an annual rate of change in multiple populations to be negative 1.7 percent but with large variance that included both a stable population and a quasi-extinction scenario (Lukacs and Kissling 2013, p. 10). The probability of extinction, with a quasi-extinction threshold defined for the purposes of this modeling exercise as less than 100 individuals per population, at 2032 (i.e., 20 years from present) was zero and at 2037 (i.e., 25 years from present) was less than 0.01 (Lukacs and Kissling 2013, p. 10; Lukacs, University of Montana, unpublished data). We were unable to model population size accurately or precisely beyond 25 years into the future because the variance increased rapidly and the model became unstable. Given the paucity of data available for the Kittlitz's murrelet, predicting future population size is challenging for any number of years and becomes more difficult with increased time, but after examining model fit and diagnostics, we determined that model predictions of

population size of this species between 2000 and 2037 were informative in our assessment of the current and future status of this species.

As with all modeling exercises, there are numerous limitations and assumptions related to model structure and inputs that need to be met or evaluated to assess reliability and usefulness of the model results. Key assumptions for this type of modeling (not a comprehensive list) include: (1) The model structure accurately represented Kittlitz's murrelet population biology; (2) populations were sampled independently; (3) populations are not under density-dependent regulation; (4) estimates of reproduction and survival were appropriately applied to and representative of populations lacking those data; (5) the populations for which sufficient data exist to include in the model were representative of all Kittlitz's murrelet populations; (6) immigration and emigration rates within a population were equal; and (7) estimates of vital rates and their associated variances between 2000 and 2012 that were used in the model to predict future population size will be comparable on average to those experienced by Kittlitz's murrelets between the present time and 2037. These are reasonable assumptions to make for the purposes of this modeling exercise in the absence of more complete data on the Kittlitz's murrelet or a similar species that would allow explicit testing of each assumption.

We acknowledge that the available information on the demography of the Kittlitz's murrelet is both spatially and temporally limited and therefore, attempted to account for these data limitations in the multiple-populations model in three ways. First, we chose to use a type of model (Bayesian Integrated Population Model) that is specifically aimed to serve as a powerful statistical tool for evaluating the dynamics of populations with messy or incomplete datasets (Brooks *et al.* 2004, p. 515; Johnson *et al.* 2010, p. 1084). Second, we considered a range of values for key demographic parameters such as breeding propensity and adult survival, placing weight on empirical data derived from that population and reducing weight for data borrowed from a different population. This approach allowed the empirical data available for a specific population to have a strong influence on the model results for that population. Third, we drew on previous population modeling efforts for the congeneric marbled murrelet, recognizing that all of these efforts, including our effort for the Kittlitz's

murrelet, had different objectives and therefore used a different type of population model (Beissinger 1995, pp. 385–393; McShane *et al.* 2004, pp. 3–27–3–58; Piatt *et al.* 2007, pp. 54–67; Peery and Henry 2010, pp. 2414–2424). We also used the marbled murrelet as a proxy for some unknown or less-defined demographic parameters of the Kittlitz's murrelet. We recognize all of these limitations and assumptions of the multiple-populations model and believe that the high variance associated with most of the model input parameters and the results accurately reflects our current state of knowledge of the status of the Kittlitz's murrelet at a broad scale.

Summary of Population Status and Trends

We estimate the minimum rangewide population of Kittlitz's murrelet to be 33,583 birds (95 percent CI=25,620–41,546). In evaluating population status and trends of the Kittlitz's murrelet, we collectively considered all of the available information across all time periods, at the local population scale, and at a broad scale across multiple populations. We determined that some local populations of the Kittlitz's murrelet may have declined at some point over the last few decades (e.g., Glacier Bay, Prince William Sound, Lower Cook Inlet) and some may still be in decline (e.g., Icy Bay, Kachemak Bay). Across all populations, we conclude that there was a decline of approximately 30 percent per annum in Kittlitz's murrelets between 1989 and 2000, but since then populations appear to have stabilized or, when coupled with information on reproduction and survival, may be declining and are projected to continue to decline at a much slower rate.

Summary of Information Pertaining to the Five Factors

Section 4 of the Act (16 U.S.C. 1533) and implementing regulations (50 CFR 424) set forth procedures for adding species to, removing species from, or reclassifying species on the Federal Lists of Endangered and Threatened Wildlife and Plants. Under section 4(a)(1) of the Act, a species may be determined to be endangered or threatened based on any of the following five factors:

(A) The present or threatened destruction, modification, or curtailment of its habitat or range;

(B) Overutilization for commercial, recreational, scientific, or educational purposes;

(C) Disease or predation;

(D) The inadequacy of existing regulatory mechanisms; or

(E) Other natural or manmade factors affecting its continued existence.

In making this finding, information pertaining to the Kittlitz's murrelet in relation to the five factors provided in section 4(a)(1) of the Act is discussed below. In considering what factors might constitute threats, we must look beyond the mere exposure of the species to the factor to determine whether the species responds to the factor in a way that causes actual impacts to the species. If there is exposure to a factor, but no response, or only a positive response, that factor is not a threat. If there is exposure and the species responds negatively, the factor may be a threat and we then attempt to determine how significant a threat it is. If the threat is significant, it may drive or contribute to the risk of extinction of the species such that the species warrants listing as endangered or threatened as those terms are defined by the Act. This does not necessarily require empirical proof of a threat. The combination of exposure and some corroborating evidence of how the species is likely impacted could suffice. The mere identification of factors that could impact a species negatively is not sufficient to compel a finding that listing is appropriate; we require evidence that these factors are operative threats that act on the species to the point that the species meets the definition of an endangered or threatened species under the Act.

In making our 12-month finding on the petition we considered and evaluated the best available scientific and commercial information.

Factor A. The Present or Threatened Destruction, Modification, or Curtailment of Its Habitat or Range

The Kittlitz's murrelet is primarily a subarctic species with a broad distribution that encompasses a diversity of marine and terrestrial habitats along most of coastal Alaska and eastern Russia. This species exhibits variable habitat affinities throughout its range and its annual cycle, which makes it difficult to identify necessary habitats and potential threats to those habitats. For example, in the breeding season, the greatest densities of Kittlitz's murrelet typically are observed in glacially-influenced marine waters of south-coastal Alaska (Kuletz *et al.* 2003b, p. 136; Arimitsu *et al.* 2011, p. 18; Kissling *et al.* 2011, p. 7; Kuletz *et al.* 2011a, pp. 102–103; Kuletz *et al.* 2011b, pp. 90–92; Piatt *et al.* 2011, p. 70). There are a handful of glacially-influenced areas in southeastern Alaska, such as Le Conte, Thomas, Dundas, and Taylor bays, where no Kittlitz's

murrelets have been observed in the breeding season in recent years, although several individuals were collected historically in Le Conte Bay (Kissling *et al.* 2011, pp. 7, 9). Lower densities of this species also occur in non-glacially-influenced marine waters of the Alaska Peninsula, Aleutian Islands (Madison *et al.* 2011, pp. 118–119), western and northern Alaska (Day *et al.* 2011, pp. 58–59) and Russia (Artukhin *et al.* 2011, pp. 26–30). Low numbers of Kittlitz's murrelet also have been observed annually during the breeding season on freshwater lakes in southwestern Alaska (Savage 2013, in litt.; Walsh 2013, in litt.). In the non-breeding season, Kittlitz's murrelets migrate to the Bering and Chukchi seas where they occupy offshore marine waters, or occur in polynyas or in open water leads within the sea ice (Madison *et al.* 2012, p. 1; Kuletz, unpublished data), but they also are observed in ice-free waters of the northern Gulf of Alaska during this period (Day *et al.* 1999, pp. 4–5; Kuletz, unpublished data). The reason for the apparent, but irregular, association with sea ice or glacial ice during specific periods in the annual cycle is not clear, nor is it known if it is biologically meaningful or is simply a proxy for an unidentified habitat feature of importance (Arimitsu *et al.* 2012, p. 18). Furthermore, it is not known whether the explanatory factor(s) occur in the marine or terrestrial habitat of the Kittlitz's murrelet, or both.

Without an understanding of the habitat requirements of the Kittlitz's murrelet, we identified, deconstructed, and assessed possible threats to the marine and terrestrial habitats currently used by this species. We then evaluated potential impacts by considering the exposure and response of Kittlitz's murrelet at the individual level and population level to each possible threat. Because the underlying mechanisms driving habitat use of the Kittlitz's murrelet are not defined, we attempted to establish links between possible threats to marine and terrestrial habitats and demographic change of Kittlitz's murrelet at the population level. Our analysis focused on possible threats to habitats occupied by Kittlitz's murrelets in the summer months because this was the time period for which the most data were available, along with the greatest number of possible identified threats and demographic bottlenecks (e.g., poor reproduction; see *Reproductive Performance*, above). We considered potential threats during the non-breeding period if sufficient information was available. Under *Factor A*, we considered climate change and

environmental contaminants as potential threats to the habitats used by the Kittlitz's murrelet.

Climate Change

Our analyses under the Act include consideration of ongoing and projected changes in climate. The terms “climate” and “climate change” are defined by the Intergovernmental Panel on Climate Change (IPCC). “Climate” refers to the mean and variability of different types of weather conditions over time, with 30 years being a typical period for such measurements, although shorter or longer periods also may be used (IPCC 2007, p. 78). The term “climate change” thus refers to a change in the mean or variability of one or more measures of climate (e.g., temperature or precipitation) that persists for an extended period, typically decades or longer, whether the change is due to natural variability, human activity, or both (IPCC 2007, p. 78). Various types of changes in climate can have direct or indirect effects on species. These effects may be positive, neutral, or negative, and they may change over time, depending on the species and other relevant considerations, such as the effects of interactions of climate with other variables (e.g., habitat fragmentation) (IPCC 2007, pp. 8–14, 18–19). Identifying likely effects often involves aspects of climate change vulnerability analysis. Vulnerability refers to the degree to which a species (or system) is susceptible to, and unable to cope with, adverse effects of climate change, including climate variability and extremes. Vulnerability is a function of the type, magnitude, and rate of climate change and variation to which a species is exposed, its sensitivity, and its adaptive capacity (IPCC 2007, p. 89; see also Glick *et al.* 2011, pp. 19–22). There is no single method for conducting such analyses that applies to all situations (Glick *et al.* 2011, p. 3). We use our expert judgment and appropriate analytical approaches to weigh relevant information, including uncertainty, in our consideration of various aspects of climate change.

Within the range of the Kittlitz's murrelet, climate change is occurring and is likely altering marine and terrestrial habitats used by this species. In Alaska, average annual Statewide air temperatures have increased by nearly 4.0 degrees F between 1949 and 2005, but decreased by 2.3 degrees F in the last decade (2000–2010) with most of the change occurring over winter (Markon *et al.* 2012, p. 11; Wendler *et al.* 2012, pp. 111–112). The recent cooling trend suggests a shift from the long-term warming trend (Wendler *et al.*

2012, p. 111), even though climate models project warming to continue in Alaska over the next century (Markon *et al.* 2012, pp. 14–21). Precipitation also increased over the last few decades, but it is more difficult to quantify (Arendt *et al.* 2009, p. 4132; Markon *et al.* 2012, p. 12). In addition, subsurface and surface waters of the North Pacific Ocean, including the Gulf of Alaska, and Bering and Chukchi seas, have warmed over the last few decades (Bograd *et al.* 2005, p. 244; Overland and Wang 2007, p. 178; Stabeno *et al.* 2007, pp. 2607–2608; Steele *et al.* 2008, p. 2; Mueter *et al.* 2009, p. 96; Hazen *et al.* 2012, p. 2). A significant part of the observed warming in Alaska occurred as a sudden, step-like change in the mid-1970s, which coincided with a major shift in atmospheric circulation patterns across a large portion of the Pacific basin, called the Pacific Decadal Oscillation (PDO) (Mantua *et al.* 1997, p. 1070). It is likely that some portion of the observed warming over the last century and recent cooling in Alaska is attributed to inherent decadal-scale variability in regional climate, like the PDO (Markon *et al.* 2012, p. 11; Wendler *et al.* 2012, p. 113), making it difficult to ascertain any amplified or accelerated impacts of natural variability or cycles from underlying long-term warming trends in Alaska. Regardless, marine and terrestrial habitats of the Kittlitz's murrelet are changing in response to climate change, and we anticipate that these changes will continue. Available information suggests that the changes may affect the Kittlitz's murrelet; however, the specific response or sensitivity of the species to these current and forecasted changes is uncertain at this time.

Loss of Glaciers

Loss of glacial volume is a phenomenon occurring on a global scale and, during the recent decades, at rates that cannot be explained by historical trends alone (Dyrurgerov and Meier 2000, pp. 1406, 1410; Lemke *et al.* 2007, pp. 356–359). The primary driver of glacier change is climate (Markon *et al.* 2012, p. 45), especially temperature (Oerlemans 2005, p. 677; Arendt *et al.* 2009, p. 4132). Maritime glaciers terminating in tidewater are particularly sensitive to temperature change (Berthier *et al.* 2010, p. 93), including sea surface temperatures (Post *et al.* 2011, p. 306), and therefore have the potential to shed ice more rapidly than land-locked glaciers (Markon *et al.* 2012, p. 46). Yet, changes in individual tidewater glaciers are dominated by dynamic, complex cycles, with low-order effects occurring due to climate

(Arendt *et al.* 2009, p. 4132; Post *et al.* 2011, p. 306).

At the beginning of the 20th century, many of Alaska's tidewater glaciers began to retreat (Barclay *et al.* 2006, p. 160) and in less than 100 years, major ocean inlets, such as Glacier and Icy bays, were formed by glacial recession (Molnia 2008, p. K7). The Kittlitz's murrelet presumably adjusted its distribution in order to take advantage of these newly-created habitats where they now occur in large numbers in the breeding season (Kissling *et al.* 2011, p. 7; Piatt *et al.* 2011, p. 66). Currently, within the range of the Kittlitz's murrelet, 59 major tidewater glaciers exist, all along the southern coast of Alaska (Molnia 2008, pp. K57–59), and a few very small isolated mountain glaciers or permanent snow occur on the Alaska Peninsula, select Aleutian Islands, Koryak Highlands and Kamchatka Peninsula (Artukhin *et al.* 2011, p. 31; Arendt *et al.* 2012). The majority (68 percent) of these tidewater glaciers are in retreat, grounded (resting on the ocean floor) or at the shoal (shallow water area) (Molnia 2008, pp. K57–59). Over the last few decades, glacial ice loss has been greatest for the glaciers along the southern coast of Alaska compared to the mountain glaciers of central Alaska, Brooks Range, and Alaska Peninsula (Larsen *et al.* 2005, p. 548; Berthier *et al.* 2010, pp. 92–93; Arendt *et al.* 2009, pp. 4127–4128; Le Bris *et al.* 2011, p. 141).

Approximately 66 percent of the minimum global population of Kittlitz's murrelet is associated with glacially affected marine waters in the breeding season. Within these areas, Kittlitz's murrelets prefer highly stratified, cool, turbid marine waters near tidewater glaciers and glacial outflows, especially in the vicinity of submerged marine sills where localized upwelling occurs (Day and Nigro 2000, pp. 5, 8; Kissling *et al.* 2007, pp. 2171–2172; Allyn *et al.* 2012, p. 244; Arimitsu *et al.* 2012, p. 18). The reason that Kittlitz's murrelets use these areas is not clear, but several hypotheses have been proposed. For example, marine waters with these characteristics may provide increased abundance of high-energy forage fish, such as sand lance or capelin (Robards *et al.* 2003, p. 71; Arimitsu *et al.* 2008, p. 137; Arimitsu *et al.* 2011, pp. 15, 17–18; Renner *et al.* 2012, pp. 2037–2038), or promote greater foraging efficiency for Kittlitz's murrelets (Day *et al.* 2003, pp. 695–696; Arimitsu *et al.* 2011, p. 14; Allyn *et al.* 2012, pp. 244–245). Nutrient-rich glacial meltwater (Crusius *et al.* 2011, p. 1) forms a turbid, stratified surface layer that limits light penetration, reducing phytoplankton

growth at depth (Hood *et al.* 2009, p. 1046; Piwosz *et al.* 2009, pp. 552–554, 556) and possibly affecting vertical diel (24 hour) migration of zooplankton and fish (Abookire *et al.* 2002, p. 378; Frank and Widder 2002, p. 1189). Owing to their proportionately larger-diameter eye compared to the marbled murrelet (Day *et al.* 2003, p. 695), the Kittlitz's murrelet may specialize at foraging in these low light conditions, taking advantage of underutilized ocean space and prey. In the northern Gulf of Alaska, freshwater streams and rivers fed by glaciers and snow melt drain into the coastal ocean and create large plumes of highly turbid water (Crusius *et al.* 2011, pp. 1–2), where both zooplankton and juvenile fish abundance is greater compared to outside the plumes (McFadden *et al.* 2012, p. 1). Juvenile fish may occupy these areas to take advantage of concentrated zooplankton populations or to evade predation (McFadden *et al.* 2012, p. 1). Several studies have also suggested that the physical features and landforms (e.g., underwater sills and moraines) within glacial fjords interact with tides to concentrate prey of the Kittlitz's murrelet (Kissling *et al.* 2007, p. 2171; Allyn *et al.* 2012, pp. 244–245; Arimitsu *et al.* 2012, pp. 10–15). Yet no studies have reported greater foraging success, or subsequent productivity or survival, in glacially affected waters compared to those without glacial influence, or in fjord versus non-fjord habitats (e.g., outer coast of the Gulf of Alaska).

Any foraging advantages in glacially affected waters should be readily apparent in the breeding season when Kittlitz's murrelets concentrate in these areas and deliver whole fish singly to chicks at nests. However, nests have been found throughout this species' range, including many areas without tidewater glaciers or glacially influenced marine waters (e.g., Kodiak and Aleutian islands, northern Alaska, and Russia), and, although highly variable, chick meal delivery rates at nests monitored at glacial sites (Naslund *et al.* 1994, p. 46; Kissling, unpublished data) are not substantially different from those at non-glacial sites (Lawonn 2012, pp. 27–28, 55; Kaler, unpublished data), with one exception. Delivery rates for Agattu Island are much higher than those for all other sites, but the lack of glacial influence in the marine system alone cannot explain the unusually high rate of 10.2 fish per day, especially when compared to the moderate rate of 6.3 fish per day at nearby Adak Island (Kaler, unpublished data). Agattu Island is the only study site where rockfish and Pacific cod, low-energy-density fishes

(Anthony *et al.* 2000, p. 75), have been delivered as chick meals at monitored nests (Kaler, unpublished data), likely explaining the higher delivery rates and lower fledging mass of chicks. However, there is no information to suggest that the absence of high-quality fishes in the chick diet of Kittlitz's murrelets on Agattu Island is associated with the absence of glaciers in this region. On nearby Buldir Island in the western Aleutians, chick diets of tufted puffin (*Fratercula cirrhata*) and horned puffin (*F. corniculata*) between 1988 and 2012 were consistently composed of low-quality fish (i.e., hexagrammids) with intermittent years of relatively high percentages of high-quality Pacific sand lance (Warzybok *et al.* 2013, pp. 162, 180). Therefore, although poor quality forage fish may be affecting nesting success of Kittlitz's murrelets on Agattu Island, it appears to be related to natural and regional fluctuations in forage fish abundance that cannot be attributed to the lack of glacial influence. Similarly, on non-glaciated Kodiak Island, the chick meal delivery rate (4.6 fish per day) is comparable to that estimated at glaciated sites (3–5 fish per day) (Naslund *et al.* 1994, p. 46; Kissling, unpublished data). It is possible, but extremely unlikely, that Kittlitz's murrelets nesting on Kodiak Island make the lengthy round-trip flight to forage in the glacially-affected waters of Kenai Fjords (488 mi round-trip [784 km]), Kachemak Bay (374 mi [602 km]), Lower Cook Inlet (250 mi [402 km]), or perhaps to the far less-glaciated waters of the Alaska Peninsula (31 mi [50 km]) and then return to their nests with fish. For all of these reasons, we cannot determine whether glacially affected waters are a required or advantageous (in terms of fitness) element of breeding habitat for the Kittlitz's murrelet.

In addition to chick diet, trophic level and stomach contents of adult Kittlitz's murrelets sampled in the breeding season did not differ between glaciated and non-glaciated areas (Day *et al.* 1999, p. 9). In glacial fjords of southeastern Alaska, adult Kittlitz's murrelets captured in the early breeding season (May) were heavier compared to those captured in the late breeding season (late July–August) (Kissling, unpublished data). Reduced body mass of Kittlitz's murrelets during the breeding season may be aimed at increasing flight efficiency and reducing energetic costs of transiting to and from nest sites (Hatch 2011, p. 82), but too few murrelets appear to attempt to breed annually (18 percent; see *Reproductive Performance*, above) (Kissling, unpublished data) to explain the overall

change in body mass between early and late breeding periods. Furthermore, the rapid departure from breeding sites (Robards *et al.* 2003, pp. 92, 100, 104; Kissling *et al.* 2007, pp. 2167–2168; Madison *et al.* 2012, p. 1) suggest that the foraging conditions and resources in glacially-affected waters are suitable and sufficient for breeding only for a short period. Otherwise, it is reasonable to assume that murrelets would remain in the area to take advantage of locally abundant and available food prior to fall migration. Available information at this time does not suggest that foraging conditions in glacially affected waters are superior to those in marine waters without glacial influence. However, we do not conclude that a change in such conditions would lead to a population- or species-level effect on the Kittlitz's murrelet.

Another reason that the Kittlitz's murrelet occurs disproportionately in glacially influenced areas in the breeding season may be because they are seeking suitable nesting habitat on historically-glaciated scree slopes or on cliff and rock ledges of glacial cirques (steep, bowl-shaped hollow at the head of a mountain valley) or nunataks (Day *et al.* 1999, pp. 13, 25–26; Piatt *et al.* 1999, pp. 8, 12; Kissling, unpublished data). Because this species nests on the ground and chicks are mostly left unattended for 24–31 days except for periodic feeding visits by parents (Lawonn 2012, p. 55; Kaler, unpublished data; Kissling, unpublished data), these remote, barren, unproductive areas are likely selected because terrestrial predators are largely absent. The presumably forage-rich marine waters are beneficial, but may not be the primary driver concentrating Kittlitz's murrelets in these areas in the breeding season; in fact, low numbers of Kittlitz's murrelets have been observed regularly on freshwater lakes adjacent to mountainous terrain in southwestern Alaska (Savage 2013, in litt.; Walsh 2013, in litt.), suggesting that perhaps some individuals may not require marine waters solely during the breeding season. Nelson and Hamer (1995, p. 66) argue that for the marbled murrelet, and most likely the Kittlitz's murrelet, strategies to avoid predation determine much of their nesting behavior, including nest site selection. However, as mentioned above, Kittlitz's murrelets nest successfully throughout their range, and there is no conclusive evidence to suggest that nest sites near glaciers are safer than those not near glaciers.

Between 2007 and 2012, active nests of Kittlitz's murrelet were regularly monitored at three sites ranging from

heavily glaciated southeastern Alaska (Icy Bay) to the non-glaciated Aleutian Islands (Agattu and Adak islands), with Kodiak Island serving as a geographic midpoint. Apparent nest success was lowest in the Aleutian Islands (19 percent; $n=95$) (Kaler, unpublished data), followed by Kodiak (23 percent; $n=71$) (Lawonn, unpublished data) and Icy Bay (40 percent; $n=35$) (Kissling, unpublished data), but apparent nest success may be severely biased because unsuccessful nests are less likely to be found than are successful nests (Johnson and Shaffer 1990, p. 595). Therefore, we estimated daily nest survival using nest data collected at these three sites. We developed 10 a priori candidate models that included a combination of study area, year, nest age, nest stage, glacial group (Icy Bay=glacial, Kodiak and Agattu islands=non-glacial), and genetic group (Icy Bay and Kodiak Island=eastern, Agattu Island=western; see *Taxonomy and Species Description*, above). The best-fit model included “glacial group,” but model fit was poor, and the difference in daily nest survival in glacial ($0.979 \pm \text{SE}=0.005$) and non-glacial ($0.968 \pm \text{SE}=0.003$) sites was not statistically significant. This analysis did not specifically address nest safety or consider cause of failure, but the results do indicate that daily nest survival in glaciated areas is not statistically different when compared to non-glaciated areas.

Not only have nests of the Kittlitz’s murrelet been found throughout their range, but also suitable nest habitat exists rangewide with significant portions available in areas with and without glaciers. Barren areas characterized by bare rock, gravel, sand, silt, or clay with little or no “green” vegetation present are used in greater proportion to their availability and appear to be the preferred nesting habitat of the Kittlitz’s murrelet rangewide, although preferences vary regionally and with availability (Kaler *et al.* 2009, p. 366; Lawonn 2012, pp. 90, 101–102; Felis, unpublished data; Kissling, unpublished data). We mapped nest habitat of the Kittlitz’s murrelet rangewide by using known nest locations to define regional thresholds and criteria for elevation, distance to ocean, slope, and landcover. Despite variability in suitability factors, the greatest amount of suitable nesting habitat for Kittlitz’s murrelets was located in northern Alaska (10,538 mi^2 [27,292 km^2]; 8.6 percent of total land), followed by south-coastal Alaska (9,160 mi^2 [23,723 km^2]; 7.8 percent), Alaska Peninsula including Kodiak Island (6,004 mi^2 [15,511 km^2]; 18.5 percent)

and the Aleutian Islands (1,715 mi^2 [4,441 km^2]; 36.8 percent) (Felis, unpublished data). The results for Russia are not comparable to the values presented here because of differences in methodology, but it appears that there may be a significant amount of suitable nest habitat for Kittlitz’s murrelet in Russia (Felis, unpublished data). We did not detect a positive relationship between the amount of suitable nesting habitat and glacial extent or persistent snow. We were unable to estimate future changes in amount of suitable nest habitat as a result of climate change because the necessary land cover predictions at the appropriate spatial scale do not currently exist. We do anticipate primary succession in previously barren, ice- and snow-covered areas, as well as northward and elevational shifts in forest biomes (Beck *et al.* 2011, pp. 5–6). In addition, our mapping effort of suitable nest habitat did not take into account proximity to foraging areas (e.g., submerged marine sill), although we did consider distance to the ocean. Nonetheless, given the diversity of habitats used by this species for nesting and the seemingly large amounts of suitable nest habitat throughout its range, we conclude that the Kittlitz’s murrelet is not limited by the current amount of suitable nest habitat.

For a short period following glacial retreat, thinning or subsequent isostatic rebound (uplift in ground released from the weight of glaciers), additional barren, isolated habitat is created that may be suitable for nesting Kittlitz’s murrelets. However, any habitat gained probably lasts only 5–20 years before primary succession ensues, provided that the substrate is sufficiently stable, usually beginning with dwarf fireweed (*Epilobium* spp.), *Dryas drummondii* (a mat-forming dwarf shrub), and willow (*Salix* spp.), followed by alder (*Alnus sinuata*) and then Sitka spruce (*Picea sitchensis*) (Chapin *et al.* 1994, pp. 149, 151). As plants colonize the landscape, the habitat rapidly becomes unsuitable for nesting Kittlitz’s murrelets, but does begin to support increasingly greater diversity and abundance of other wildlife species, such as small mammals and birds, which in turn attracts predators. Eventually, previously isolated areas of barren habitat, such as nunataks, are accessible to predators through vegetated corridors, reducing their suitability for nesting. Consequently, distance between suitable nesting and foraging habitat for Kittlitz’s murrelet is expected to increase, and murrelets will likely need to nest at higher elevations where the rate of

change in habitat should be slower. In contrast, the transition from barren to vegetated habitat in deglaciated areas may benefit the marbled murrelet, a species that typically nests on the mossy limbs of large trees or on cliff ledges surrounded by vegetation (Barbaree 2011, pp. 65, 71–74).

In Icy Bay, successful nests ($n=14$) of radio-marked Kittlitz’s murrelet were located closer to the ocean (median distance=5.6 mi [9.0 km]) than failed nests ($n=21$; median distance=15.0 mi [24.1 km]), although elevation did not affect nest fate (4,226 ft [1,288 m] and 4,718 ft [1,435 m], respectively) (Kissling, unpublished data). Comparatively, radio-marked marbled murrelets nested ($n=13$ nests) at lower elevations (median elevation=1,368 ft [417 m]) and closer to the ocean (median distance=2.9 mi [4.7 km]) than Kittlitz’s murrelets (4,291 ft [1,308 m] and 8.8 mi [14.2 km], respectively), and exhibited both higher breeding propensity and nest success (Kissling, unpublished data). These results suggest that in this glaciated area there is an advantage to nesting closer to the ocean and at lower elevations, most likely due to reduced energetic costs associated with delivering prey to chicks and predator avoidance (Hatch 2011, pp. 86–87). Marbled murrelets also nested in a greater diversity of habitat types in Icy Bay, including barren, shrubland, and conifer sites, compared to Kittlitz’s murrelets that were restricted to barren sites. Although glacial recession and subsequent primary succession will likely reduce access to high-quality nesting habitat of the Kittlitz’s murrelet in part of its range, we do not know that these ecological processes will have a population- or species-level impact on the Kittlitz’s murrelet for two reasons. First, nests of this species have been found throughout its range, some in areas with considerable amounts of vegetation (e.g., average 51 percent at nest sites in Aleutian Islands) (Kaler *et al.* 2009, p. 366; Kaler and Kenney 2013, pp. 73–74), suggesting some level of adaptability to variable terrestrial conditions. Second, the Kittlitz’s murrelet population has been presumably stable since 2000 despite continued loss of glaciers in south-coastal Alaska (see *Population Status and Trends*, above).

Changes in Ocean Conditions

Ocean temperatures in Alaska have increased (Bograd *et al.* 2005, p. 244; Overland and Wang 2007, p. 178; Stabeno *et al.* 2007, pp. 2607–2608; Steele *et al.* 2008, p. 2; Mueter *et al.* 2009, p. 96) and are predicted to continue to increase (IPCC 2007, pp. 45–

46; Haufler *et al.* 2010, p. 10; Hazen *et al.* 2012, p. 2). Consequently, physical and biological changes in the marine environment are expected, but the scope and magnitude of these are unknown and difficult to project. Although we do not expect direct effects to the Kittlitz's murrelet, we may observe indirect effects such as changes to their prey base, which in turn, would likely affect their survival, reproduction, and perhaps distribution.

The Kittlitz's murrelet appears to be a flexible forager with a diet that varies considerably among seasons, but is more specialized within a season. For example, nesting Kittlitz's murrelets need high-energy forage fish to deliver to chicks at nests, requiring access to both foraging areas where these prey occur and nesting habitat. Generally, however, the diet of the Kittlitz's murrelet ranges from mostly zooplankton in the winter months to predominantly fish in the summer months, although zooplankton is part of their diet throughout the entire annual cycle (Hobson *et al.* 1994, p. 795; Day *et al.* 1999, p. 9; Hatch 2011, pp. 25–26, 35; Allyn 2012, p. 102). A comprehensive diet study of the Kittlitz's murrelet has not been completed, but based on stable isotope analysis (Hobson *et al.* 1994, p. 795; Hatch 2011, p. 47; Allyn 2012, p. 102), stomach contents (Sanger 1983, p. 692; summarized in Day *et al.* 1999, p. 9), fish-holding observations (Agness 2006, p. 119; Kuletz *et al.* 2008, p. 26), fish netted below foraging Kittlitz's murrelets (Kuletz *et al.* 2003a, pp. 23, 28), and chick meal deliveries (Naslund *et al.* 1994, p. 46; Kaler *et al.* 2011, p. 15; Lawonn 2012, pp. 27–28; Kaler, unpublished data; Kissling, unpublished data), this species is known to feed on neritic macrozooplankton, such as copepods, amphipods, and euphysiids, and forage fishes, primarily Pacific sand lance, but also capelin, Pacific herring, Pacific sandfish (*Trichodon trichodon*), walleye pollock, kelp greenling, Atka mackerel, Pacific cod, and rockfish and smelt species (see *Foraging*, above, for a more complete description of diet and foraging preferences). Given the diverse diet of the Kittlitz's murrelet and its ability to forage successfully in a variety of marine habitats, and perhaps freshwater, we assume that this species has the ability to switch prey based on local availability when self-feeding, like many other seabird species, including the marbled murrelet (Litzow *et al.* 2002, p. 292; Ostrand *et al.* 2004, p. 73; Becker *et al.* 2007, p. 274; Ito *et al.* 2009, p. 282).

The collective, complex process of ocean acidification is a global problem that will intensify with continued carbon dioxide emissions and may significantly affect marine ecosystems. Oceans absorb carbon dioxide from the atmosphere and store it as carbonic acid. Since the beginning of the industrial revolution, the pH of ocean surface waters has decreased from 8.2 to 8.1 (0.1 units) (Markon *et al.* 2012, p. 40). Although this change in pH seems small, it equates to a 20 percent increase in acidity and a subsequent decrease in carbonate compounds (primarily aragonite and calcite) necessary for calcifying organisms to construct tissues such as skeletons and shells (Markon *et al.* 2012, p. 40). By 2100, ocean surface pH is expected to decrease another 0.3–0.5 units (Caldeira and Wickett 2005, p. 1). High-latitude regions are particularly vulnerable to ocean acidification because cold ocean temperatures increase the solubility of carbon dioxide and precondition the seawater to have lower calcium carbonate concentrations and saturation states compared to more temperate ocean environments (Fabry *et al.* 2009, p. 161; Mathis *et al.* 2011, p. 2; Markon *et al.* 2012, p. 40). Furthermore, in the Arctic Ocean, the carbonate mineral saturation state is expected to decrease with increasing sea ice melt (Bates and Mathis 2009, p. 2433). Although the biological effects of ocean acidification are far from clear, the ability to tolerate its apparent impacts is species-specific and varies within phyla and between closely related species (Whiteley 2011, pp. 257–258), making it difficult to generalize potential impacts to a single species, like the Kittlitz's murrelet. High-latitude planktonic and benthic calcifiers, especially pteropod snails, a common prey item for various zooplankton and fish (e.g., pollock, salmon, cod), are expected to be most affected by ocean acidification (Fabry *et al.* 2009, p. 164). Consequently, as a top predator in the marine ecosystem, the Kittlitz's murrelet may experience alterations to underlying food webs. However, this species has a diverse diet (except when nesting), appears to have the ability to switch prey when necessary, and can forage successfully in a variety of marine habitats (see *Foraging*, above). We acknowledge that ocean acidification is occurring and is expected to continue, but, based on the best available information, we conclude that projected ecosystem changes as a result of ocean acidification are not having or will not have population- or species-level impacts on the Kittlitz's murrelet.

Variability in ocean temperatures alone can disrupt complex marine food webs by affecting the productivity or abundance of lower trophic levels, thereby influencing higher trophic levels and the balance in predator-prey relationships (Hazen *et al.* 2012, p. 2). As ocean temperatures change, we anticipate poleward shifts in distribution of species that have limited temperature ranges (Overland and Stabeno 2004, p. 309; Perry *et al.* 2005, p. 1914; Stabeno *et al.* 2007, p. 2605; Mueter and Litzow 2008, pp. 316–317; Mueter *et al.* 2009, p. 106), changes to the thermohaline circulation (part of the large-scale ocean circulation that is driven by global density gradients) (Haufler *et al.* 2010, p. 10) thereby influencing nutrient input and mixing (Mueter *et al.* 2009, pp. 99, 107), variability in the timing and magnitude of spring phytoplankton blooms (Stabeno *et al.* 2007, p. 2612; Janout *et al.* 2010, p. 13), and changes in the local abundance of forage fish (Hunt *et al.* 2002, pp. 5835–5842; Abookire and Piatt 2005, pp. 236–238; Becker *et al.* 2007, pp. 267–269). However, available information does not allow us to project the magnitude or direction of possible impacts to the Kittlitz's murrelet or its prey as a result of increased ocean temperatures, especially given additional natural processes, such as inter-annual to decadal-scale ocean variability and large-scale regime shifts.

Several climate regime shifts and subsequent community or taxonomic reorganizations have occurred in the North Pacific and Arctic oceans over the last few decades (Anderson and Piatt 1999, p. 120; Hare and Mantua 2000, p. 103; Litzow 2006, p. 1387; Brodeur *et al.* 2008, p. 108; Flint 2013, p. 59). These regime shifts often, but not always, corresponded to a change in the PDO index between a cold (negative) phase and a warm (positive) phase (Mantua *et al.* 1997, pp. 1076–1077; Litzow 2006, p. 1387). It is well-recognized that there were major atmospheric, oceanographic and ecological changes near 1976–1977 with a shift from the negative to the positive phase of the PDO (Anderson and Piatt, 1999, pp. 119–120), followed by weaker, less defined shifts in 1989 and 1998 (Litzow 2006, pp. 1390–1393; Overland *et al.* 2008, p. 92; Flint 2013, p. 61); retrospective analyses indicate that there were also North Pacific regime shifts in 1925 and 1947 (Mantua *et al.* 1997, p. 1075). It is difficult to assess impacts of these climatic regime shifts (or project them into the future) on the Kittlitz's murrelet, specifically, because we lack sufficient and reliable data (see *Population Status and Trends*,

above). In California, annual survival of marbled murrelet was positively associated with positive values (warm phase) of the PDO (Peery *et al.* 2006, p. 82). In contrast, declines in populations of marine birds, especially piscivorous (fish-eating) species, and fishes occurred in the Gulf of Alaska between 1972 and 1993, in response to a shift to a warm water regime in 1976–1977 (Piatt and Anderson 1996, pp. 725, 731; Anderson and Piatt 1999, pp. 119–120; Agler *et al.* 1999, p. 100; Litzow *et al.* 2002, p. 286). The impact of the regime shift was probably exacerbated in Prince William Sound by the *Exxon Valdez* oil spill in 1989. For some marine species, however, declines halted shortly following the 1989 regime shift (Flint 2013, pp. 61–62). Similarly, our multiple-populations trend analysis indicated that Kittlitz's murrelets declined at an average annual rate of about 30 percent across multiple populations in the Gulf of Alaska between 1989 and 2000, after which abundance appeared to have stabilized, possibly due to the minor regime shift in 1998 (see *Population Status and Trends*, above).

Undoubtedly, the Kittlitz's murrelet will respond to changes in ocean conditions, including temperature, circulation, salinity, chemistry, and other physical characteristics. Evidence suggests that this species has been resilient (able to persist), adaptable (able to adapt), or both to previous and ongoing changes in its marine habitat, or has undergone a population shift in response to environmental change, as suggested by Day (2011, p. 52). Between 1907 and 2009, mean isotopic signatures of nitrogen, an indicator of dietary trophic level, declined in feathers of Kittlitz's murrelets in the Gulf of Alaska during the pre-breeding season, but not in the post-breeding season (Hatch 2011, pp. 27, 49). These results suggest that perhaps decreased prey resources over the last century have forced Kittlitz's murrelets to fish further down the food chain, but we do not have reliable information to demonstrate a rangewide effect to this species during a similar time period. In addition, stomach contents of 48 adult Kittlitz's murrelets collected at sea between 1969 and 1996 in the North Pacific Ocean do not indicate any major shift in diet or trophic level compared to more recent information on chick and adult diet (Day *et al.* 1999, p. 9; Allyn 2012, p. 100; Kissling 2013, in litt.). So, while we fully recognize that changes in ocean conditions as a consequence of climate change play a significant role in the population regulation and abundance of

prey species to the Kittlitz's murrelet, available information does not suggest that these changes are a threat to the persistence of this species for two primary reasons. First, the Kittlitz's murrelet has a diverse diet throughout the year, indicating that it can successfully forage on many different taxa, can switch prey types presumably based on local availability, and can adapt to a variety of foraging conditions across its broad range. Only nesting Kittlitz's murrelets experience prey restrictions, but there is no evidence to suggest that changes in ocean conditions as a result of climate change are limiting or will limit high-quality chick meal deliveries, thereby affecting fledging rates, in the future. Second, we do not have sufficient evidence that would allow us to determine if Kittlitz's murrelet populations or the diet of this species have fluctuated concurrently with regime shifts or ocean warming and acidification. Therefore, the weight of evidence suggests that this species can respond to changing ocean conditions by switching prey, adjusting its behavior, or potentially shifting its distribution.

Contaminated Meltwater

Climate warming and associated glacial melt may be increasing contamination of fresh and marine waters. This phenomenon has been studied most extensively in alpine freshwater catchments in Europe. Bogdal *et al.* (2009, pp. 8173–8175) used lake sediment core results to track fluxes of organochlorine contaminants (industrial chemicals and pesticides) beginning in the 1950s and found an initial peak in the 1960s–1970s corresponding to peak air emissions in Europe, decreased levels in the 1980s–1990s that were attributed to emission reductions, and a second peak since the late 1990s that the authors attributed to glacial melt. Recent organochlorine inputs to the lake are similar to, or higher than, those observed in the 1960s–1970s, with recent fluxes of the pesticide dichlorodiphenyl-trichloroethane (DDT) and its metabolites exceeding past fluxes by a factor of five (Bogdal *et al.* 2009, p. 8176). In a follow-up study, Schmid *et al.* (2011, pp. 205–207) compared polychlorinated biphenyls (PCBs) and the pesticide DDT and its metabolites (DDTs) in the sediments of a glacial-fed lake to sediments in a nearby lake that lacked glacial inputs. During the past two decades, total PCB and DDT levels in the non-glacial lake sediments decreased, while those in the glacial-affected lake sediments increased, supporting the hypothesis that glaciers

represent a secondary source of these pollutants (Schmid *et al.* 2011, p. 207). Similarly, in Alberta, Canada, a substantial percentage of current glacial melt originated from ice that was deposited between 1950 and 1970, when organochlorines were more concentrated in the atmosphere than they are now, or were before 1950 (Blais *et al.* 2001, pp. 410, 414–415) and the concentrations of persistent organic pollutants (POPs) were, on average, 29 times higher in the glacial stream, relative to a nearby non-glacial valley stream (Blais *et al.* 2001, p. 414).

Results of contaminant studies conducted in alpine freshwater lake systems may not be relevant or directly comparable to the physical and chemical processes associated with coastal and tide-water glaciers. In the polar coastal environment of Antarctica, cesium-137, a ubiquitous radionuclide contaminant associated with historical nuclear weapons testing, exhibited an abrupt concentration increase in recent sediments relative to older sediments (Sanders *et al.* 2010, pp. 422–423). While results are limited to a single sediment core (so extrapolation should be conducted with caution), the authors hypothesized that increased snow and ice melt from the uplands and enhanced sediment transport have resulted in net movement of cesium-137 from the coast into the marine environment. We are unaware of comparable contaminant studies from coastal ice fields or alpine glaciers in Alaska; therefore, we have no basis from which to determine the significance of glacial meltwater as a potential source of contamination to the Kittlitz's murrelet (see *Environmental Contaminants*, below).

Loss of Winter Sea Ice

Until recently, there was little information about the movements and distribution of the Kittlitz's murrelet outside of the breeding season, which is when most surveys are completed. Within the last few years, research demonstrated that individuals depart breeding sites in the Gulf of Alaska and Aleutian Islands in July and August and migrate offshore to areas in the Bering, Chukchi and western Beaufort seas, where they apparently remain until late October (Day *et al.* 2011, pp. 57–59; Madison *et al.* 2012, p. 1; Kuletz, unpublished data) (see *Habitat and Life History*, above). In November, as sea ice builds in the Chukchi and Beaufort seas, Kittlitz's murrelets begin to move south into open water of the Bering Sea where at least some individuals winter in open water leads and polynyas of the annual sea ice (Day *et al.* 1999, p. 7; Kuletz and Lang 2010, pp. 39–43; Day *et al.* 2011,

p. 59). These observations suggest that the Kittlitz's murrelet's winter distribution may be associated with winter sea ice in the Bering and Chukchi seas, which is declining rapidly and projected to continue declining (Douglas 2010, p. 1). However, to date, there has been little survey effort in the Gulf of Alaska where winter sightings indicate that some individuals are year-round residents or over winter in the ice-free waters of south-coastal Alaska (Klosiewski and Laing 1994, p. 83; Kendall and Agler 1998, pp. 55–56; Day *et al.* 1999, pp. 4–5; Stenhouse *et al.* 2008, p. 61; Kissling, personal observation). We recognize the post-breeding northward migration and the occurrence of the Kittlitz's murrelet in open leads and polynas of the Bering and Chukchi seas in the winter and spring, but the data are limited and preliminary. In addition, the variable patterns of distribution and types of habitat used make it difficult to draw conclusions about the Kittlitz's murrelet's use of non-breeding habitat. Therefore, we have no basis from which to determine whether or not the loss of winter sea ice would negatively affect the habitat of the Kittlitz's murrelet.

Summary of Climate Change

To summarize, climate change is modifying the marine and terrestrial habitats of the Kittlitz's murrelet. Although we can hypothesize about the various mechanisms by which Kittlitz's murrelets could be affected by these changes, we have not identified a causal link that is or will be causing a population- or species-level effect. Among the stressors evaluated, there are two that raise concern because they could negatively affect reproductive success of Kittlitz's murrelets, which was found to be consistently poor at sites where it was studied (see *Reproductive Performance*, above). These stressors are (1) The increasing distance between nesting and foraging habitats as a result of glacial recession and subsequent primary succession; and (2) changes in the foraging habitats due to glacial recession that could affect foraging efficiency or access to high-quality prey during chick rearing. However, the underlying mechanisms of these stressors are only working hypotheses; there is little information available to evaluate the significance of these stressors or potential implications to the Kittlitz's murrelet at the population or species level now or in the future.

Although the Kittlitz's murrelet is generally associated with glacial-influenced habitats during the breeding season, this species is broadly

distributed across many areas that have been deglaciated for thousands of years, and it nests and forages successfully in a variety of habitats. There is too much spatial and temporal variation in the species' habitat use to conclude that ice is an essential part of its life history and there is no evidence to suggest that Kittlitz's murrelets in glacial-affected areas outperform those in non-glaciated areas. Their seasonally varied and diverse diet at multiple trophic levels and apparent ability to switch prey types demonstrate adaptability to interannual and decadal-scale ocean variability and changes in ocean conditions that are likely to influence prey of the Kittlitz's murrelet. Furthermore, changes in forage quality, quantity, or distribution is uncertain at this time. Although contaminated meltwater from glaciers and the loss of winter sea ice may be altering marine habitats within this species' range, we have little information to evaluate these potential threats to the Kittlitz's murrelet. Thus, available information does not suggest that possible projected changes to the marine and terrestrial habitats used by the Kittlitz's murrelet as a result of climate change will be so great as to pose a threat to the persistence of this species at the population or species level now or in the future.

Environmental Contaminants

Persistent Organic Pollutants

Kittlitz's murrelets may be exposed to contaminants from site-specific sources, including former military sites, and from global atmospheric transport, so specific sources may be distant from the location of measurement. Within the range of the Kittlitz's murrelet, we tallied 2,537 contaminated sites and spills within 62 mi (100 km) of the shoreline that occurred between 1995 and 2012, most of which primarily affected land resources (n=2,077), not marine resources (n=460) (Alaska Department of Environmental Conservation 2013a). The majority of these spills was small in volume, localized and generally associated with villages, small towns, or urban areas (e.g., heating oil tanks and lines), primarily near Anchorage and Barrow (see *Marine Oil Pollution*, below, for more detailed discussion on marine-related spills). We also reviewed mining exploration, development, and production sites in Alaska to evaluate future potential contamination (or disturbance) sites near nesting habitat of the Kittlitz's murrelet (Szumigala *et al.* 2010, pp. 10, 39, 43). Generally, spatial overlap of contaminated sites with

suitable nesting habitat or known areas of marine concentrations of the Kittlitz's murrelet was low, indicating that exposure to any point-source contamination would also be low.

Nonetheless, sympatric waterbird species to the Kittlitz's murrelet are exposed to contaminants, especially POPs, including PCBs, other organochlorines, and mercury. Pelagic cormorants (*Phalacrocorax pelagicus*) and red-faced cormorants (*P. urile*) throughout the Aleutian Archipelago had greater levels of PCB, hexachlorobenzene (HCB), DDE (a DDT metabolite), and *trans*-nonachlor, all of which are persistent organochlorine contaminants, in the western Aleutian Islands compared to the eastern islands (Rocque and Winker 2004, pp. 761–762), with identified sources including former military installations (p. 764). Similarly, total PCBs were proportionally the most abundant persistent organochlorines in glaucous-winged gulls (*Larus glaucescens*), northern fulmars (*Fulmarus glacialis*), and tufted puffins at several locations within the Aleutian Islands (Ricca *et al.* 2008, pp. 314–315), again with military sites the proposed sources. Concentrations of organochlorine contaminants in tufted puffins were generally lower than other species, with the exception of one sample from East Adak near Sweeper Cove, a site of known PCB contamination (Ricca *et al.* 2008, p. 316). Collectively, these results suggest significant point sources of contamination at sites such as Adak, Amchitka, and to a lesser extent Kiska islands, all in the Aleutian Archipelago and within the range of the Kittlitz's murrelet. High concentrations of PCBs, DDE, and chlordanes in seabirds from Buldir Island, the most westerly site sampled and which lacks a point source for military pollution, suggest that atmospheric transport from Eurasian sources may also be important. For example, tufted puffins, black-legged kittiwakes (*Rissa tridactyla*), and short-tailed shearwaters (*Puffinus tenuirostris*) were exposed to recently applied DDT obtained from a distant source (Ricca *et al.* 2008, p. 320).

These persistent contaminants were also detected in Kittlitz's murrelets from Icy Bay, Alaska (Matz, Service, 2012, unpublished data), but at concentrations that are not of concern for adult mortality or reproduction. In 10 composited adult plasma samples, total PCBs were at concentrations below those associated with reduced hatching success and hatchling mass in glaucous gulls (*L. hyperboreus*), abnormal male reproductive behaviors in American kestrels (*Falco sparverius*) and glaucous

gulls (Harris and Elliott 2011, pp. 486–487), or poor adult return-to-colony in Caspian terns (*Hydroprogne caspia*, formerly *Sterna caspia*) from the Great Lakes (Mora *et al.* 1993, p. 328). On a congener basis (related chemicals), PCB congeners common in marine environments or that are environmentally persistent due to a high percentage of chlorine were detected in the majority of samples, but at very low concentrations, and the four most toxic (“dioxin-like”) individual PCB congeners were not detected. Other congeners detected in the majority of samples were also at very low concentrations. Although the best sample in which to measure DDE is eggs, plasma concentrations of Kittlitz’s murrelets were very low compared to lethal levels in liver and brain concentrations in a variety of birds (summarized by Blus 2011, pp. 428–430). Similarly, concentrations of these persistent contaminants in one composite sample of livers taken from four Kittlitz’s murrelet chicks found dead at nests on Agattu Island were low and not of concern (Lance, Service, 2013, unpublished data). Other POPs of emerging concern, such as polybrominated diphenyl ethers that are used as flame retardants, were not detected in Kittlitz’s murrelet blood from Icy Bay, Alaska (Matz, unpublished data). In conclusion, PCBs, DDE, and other organochlorine contaminants were not detected at deleterious concentrations in plasma (n=10) or liver (n=1) of Kittlitz’s murrelets from Alaska, so, with the caveat that few data are available, we find that these contaminants are currently not considered to have population- or species-level effects now or in the future.

Mercury

Mercury is a global contaminant of concern for aquatic species, including numerous seabirds (e.g., black-footed albatross [*Phoebastria nigripes*]) (Vo *et al.* 2011, p. 1). However, the toxicological significance of actual mercury concentrations in marine birds and animals is not clear, as they appear to tolerate much greater mercury concentrations than freshwater organisms due to different selenium-related detoxification abilities (Burger *et al.* 1997, p. 167; Ikemoto *et al.* 2004, pp. 402, 404). For species with high or variable selenium exposure, such as marine birds like the Kittlitz’s murrelet, it is necessary to evaluate selenium concentrations and their effect on mercury toxicity to generate reliable tissue-specific mercury effect thresholds (Spalding *et al.* 2000, pp. 419–420).

However, because there are too few studies that document mercury concentrations and effects in marine birds, we cautiously relied on established toxic effect levels from other, mostly freshwater, birds to assess mercury concentrations in feathers, whole blood, and eggshells of the Kittlitz’s murrelet.

Threshold feather concentrations for adverse reproductive effects (including reproductive behavioral changes, reduced reproductive output and sterility; Eisler 1987, pp. 62–63) in various species’ range from 5–65 parts per million (ppm) dry weight (dw), depending on the species (Burger and Gochfeld 1997, p. 164). For feather mercury concentrations, the most commonly used toxicity threshold level for potential adverse effects is 5 ppm dw, but it is highly dependent on species (Blevin *et al.* 2013, p. 6). For example, adult great skuas (*Stercorarius skua*) in the Shetland Islands had adult feather mean mercury concentrations of 7.0 ppm, with no apparent effects on survival or reproduction (Thompson *et al.* 1991, p. 678), and for the common loon (*Gavia immer*) the adverse effect threshold for adults is 40.0 ppm in feathers (Evers *et al.* 2008, p. 69). Mean feather mercury concentrations of adult Kittlitz’s murrelets varied significantly with no obvious pattern among geographic areas in Alaska. In the Aleutian Islands, feather mercury concentrations averaged 2.06 ppm dw on Agattu Island, but were significantly higher at Adak Island (9.15 ppm dw) (Kenney, Service, 2007–2012, unpublished data). Similarly, in southeastern Alaska, mean feather mercury concentrations in 301 adult Kittlitz’s murrelets from Icy Bay were 1.22–1.58 ppm dw (Folsom *et al.* 2009, p. 44; Kenney, unpublished data; Matz, unpublished data), but were much higher in Glacier Bay (9.00 ppm dw) (Kenney, unpublished data). Although accumulated mercury in feathers of some individual Kittlitz’s murrelets, especially those at Adak Island and Glacier Bay, was relatively high, it is difficult to reconcile and interpret the large variation among individuals and study sites.

Whole blood mercury values in Kittlitz’s murrelets from Icy Bay are equally inconclusive at the population level, but may raise concern for some individuals. Mean blood concentrations of Kittlitz’s murrelets from Icy Bay were variable among years; in 2008–2009, concentrations averaged 0.32 ppm wet weight (ww) (Folsom *et al.* 2009, p. 44; Kenney, unpublished data), and in 2011, concentrations were 4.5 ppm ww (Matz, unpublished data), perhaps

reflecting differences in prey consumed across years. For comparison, whole blood mercury concentrations of marbled murrelets in Port Snettisham, southeastern Alaska, in 2008 were 0.22 ppm ww (Folsom *et al.* 2009, p. 44). Threshold concentrations in blood for reproductive effects in adult common loons and bald eagles (*Haliaeetus leucocephalus*) were 3.00 and 6.54 ppm ww, respectively (Weech *et al.* 2006, p. 1438; Evers *et al.* 2008, p. 79). However, given the variation in whole blood concentrations of Kittlitz’s murrelets among years (range across all years=0.04–15.1 ppm ww) and lack of information on selenium levels of this species, we can only tentatively conclude that blood mercury concentrations in some individual Kittlitz’s murrelets from Icy Bay in some years may be at the low end of reproductive effect levels or below effect levels based on their marine status.

Adverse effect thresholds of mercury concentrations in eggshells have yet to be established, but mercury concentrations of 0.90–18.0 ppm ww in whole eggs have been associated with poor hatching success and increased chick mortality in some avian species (Eisler 1987, p. 2; Burger and Gochfeld 1997, p. 163–164). Mean mercury concentrations in eggshells collected from 20 Kittlitz’s murrelet nests on Agattu Island appear to be low (0.016 ppm dw) (Kenney, unpublished data). For comparison, mercury concentrations in eggshells of Audouin’s gulls (*L. audouinii*) ranged from 0.13–0.18 ppm dw and were not correlated with reproductive impairment (Sanpera *et al.* 2000, pp. 120–121).

Since the preindustrial period, human activities have increased the amount of mercury cycling in the environment by about a factor of three (Selin 2009, p. 55). If emissions of mercury into the atmosphere continue, ocean concentrations will continue to increase (Selin 2009, p. 55), possibly causing adverse effects for marine species, such as the Kittlitz’s murrelet. Yet, substantial variability exists among bird species in their sensitivity to mercury, and no information exists for Kittlitz’s murrelet mercury thresholds or selenium levels. Current data on mercury concentrations in feathers, blood, and eggshells of Kittlitz’s murrelets are both spatially and temporally limited, but suggest that perhaps some individuals in some years may exceed commonly used adverse effects thresholds established for other bird species. However, owing to the high variability in concentration values and the apparent higher tolerance of marine species to mercury toxicity, we

find that mercury does not pose a population- or species-level threat to the Kittlitz's murrelet now or in the future.

Marine Oil Pollution

Petroleum hydrocarbons in marine waters are considered among the most potentially harmful contaminants to marine birds and their prey (Martin and Richardson 1991, p. 533). Acute and chronic exposure to oil pollution can have both direct and indirect impacts to marine birds (Yamato *et al.* 1996, p. 381; Esler *et al.* 2000, pp. 839, 844). Oiling of feathers causes loss of insulating capacity and can lead to death from hypothermia, smothering, drowning and ingestion of toxic hydrocarbons (Peterson *et al.* 2003, p. 2082). Marine birds ingest oil by preening their oiled feathers or by consuming oiled prey. Long-term or chronic effects of oiling are more difficult to document, but certainly exist, and are most likely to impact those species that are intimately associated with sediment for egg-laying or foraging (Peterson *et al.* 2003, p. 2083), such as sand lance, herring, and many prey species of the Kittlitz's murrelet. However, it is often challenging to demonstrate a population- or species-level impact to a species because pre-event baseline data are rarely available (Carter and Kuletz 1995, p. 261).

The Kittlitz's murrelet is considered highly vulnerable to marine oil pollution because this species spends most of its annual cycle at sea, forages by diving and pursuing prey, and is typically found nearshore (King and Sanger 1979, p. 234; Day *et al.* 1999, p. 9; Day and Nigro 2000, p. 5). At least 19 major oil spills have occurred within the range of the Kittlitz's murrelet since 1976 (Alaska Department of Environmental Conservation, 2013b) and some have resulted in direct mortality of individuals (Kuletz 1996, p. 781; Piatt *et al.* 2007, pp. 72–77). However, estimating total mortality of Kittlitz's murrelet is complicated by their similar morphology to the typically more common marbled murrelet, which results in a large proportion of unidentified murrelets, and their small size relative to other marine birds and mammals. In addition, due to the remoteness and exposed marine waters of Alaska and Russia, response to oil spills within the range of the Kittlitz's murrelet is often hampered by weather and lack of infrastructure.

In March 1989, the commercial oil tanker *Exxon Valdez* spilled nearly 11.6 million gallons of crude oil into the marine environment of Prince William Sound, resulting in roughly 30,000 oiled seabird carcasses found on the beaches

and an estimate of hundreds of thousands of seabird mortalities in total (Piatt and Anderson 1996, p. 720). A minimum estimate of direct mortality was 8,400 *Brachyramphus* murrelets, including a minimum of 255 Kittlitz's murrelets (not including unidentified murrelets) and at least 51 definitively identified Kittlitz's murrelet carcasses (Kuletz 1996, p. 781; Piatt *et al.* 2007, p. 74). Mortality estimates of over 1,000 Kittlitz's murrelets from this spill have been reported (van Vleet and McAllister 1994, p. 5). Since the *Exxon Valdez* oil spill, 11 other major spills have occurred in the coastal waters of Alaska, but data on Kittlitz's murrelet mortalities are limited. In August 2001, the fishing tender *F/V Windy Bay* struck a reef and sank in northern Prince William Sound, creating an oil slick from hydrocarbons on board (35,000 gallons of diesel and hydraulic fuel and lube oil) (Kuletz *et al.* 2003a, pp. 57–61; Piatt *et al.* 2007, pp. 73–74). Only 7 bird carcasses were retrieved, but 6 were marbled murrelets and 4 of those were newly fledged juveniles, extrapolating to a mortality estimate of roughly 100 murrelets (Piatt *et al.* 2007, p. 74); no Kittlitz's murrelets were retrieved, but they were present in the area and could have died without being recovered (Kuletz *et al.* 2003a, pp. 57–61). In December 2004, the *M/V Selendang Ayu* spilled 500,000 gallons of fuel oil (bunker C and diesel) into Makushin Bay, Unalaska Island, in the eastern Aleutians. Only five *Brachyramphus* murrelet carcasses (two marbled and three unidentified murrelets) were recovered after this oil spill (Byrd, Service, 2004, unpublished data), although this area is frequented by Kittlitz's murrelets in the breeding season (Madison *et al.* 2011, p. 116). We are aware of only four major oil spills within the range of the Kittlitz's murrelet in Russia (Sakhalin Island, Sea of Okhotsk), and we lack any information about possible murrelet mortality as a result of those spills, all of which occurred between September and January, a period in which Kittlitz's murrelets initiated post-breeding migration or settled into their winter habitats. Oil spills in Russia are not well-documented, but probably occur frequently (Blokov 2012, p. 3). Kittlitz's murrelet mortality from fuel spills and petroleum contamination may go largely unobserved in the vast and remote waters of Alaska and eastern Russia, but lack of observed mortality from marine oil pollution does not confirm its absence. However, it is difficult to assess the impacts from these spills and others on the Kittlitz's murrelet

population. An additional aspect of oil spills is the large, but temporary increase in vessel traffic in the spill area during response activities, as documented during large (e.g., *Exxon Valdez*) and small (e.g., *Windy Bay*) spills and vessel groundings alike (Kuletz *et al.* 2003a, pp. 30–31).

We examined the spatial and temporal overlap of 460 oil spills and contaminated sites that primarily impacted marine resources in coastal Alaska between 1995 and 2012, and distribution and abundance of Kittlitz's murrelet (Alaska Department of Environmental Conservation, 2013a). We identified four biologically-meaningful periods within the annual cycle of the Kittlitz's murrelet: Breeding (May–July), post-breeding (August–October), winter (November–February), and pre-breeding (March–April). We estimated relative densities of Kittlitz's murrelets at sea by marine ecoregion (n=30 in Alaska; Piatt and Springer 2007, pp. 524–525) and period (Kuletz, unpublished data; see *Population Status and Trends*, above, for information on abundance estimates). Most spills occurred during the post-breeding period (43 spills per month), followed by the winter and breeding (38 spills per month each), and pre-breeding (33 spills per month) periods. Across all periods, most (83 percent) of the spills were small, releasing less than 1,000 gallons of substance, and 78 percent consisted of non-crude oil (diesel), which is lighter and disperses more quickly than crude oil. However, there is no evidence to suggest that the immediate impact to marine birds from non-crude oil is less problematic than crude oil (Piatt *et al.* 2007, p. 73). There were 12 large spills (greater than 10,000 gallons); 8 of these consisted of non-crude oil, and 7 occurred due to grounding or sinking vessels. We concluded that there was low spatial overlap between these spills and Kittlitz's murrelet distribution in the post-breeding, winter, and pre-breeding periods, but low-moderate overlap during the breeding period, primarily in Prince William Sound and, to a lesser extent, Adak Island in the central Aleutian Archipelago.

Marine traffic within the range of the Kittlitz's murrelet is forecasted to increase in the next 25 years (Det Norske Veritas and ERM West 2010, pp. 60–61). The vessel fleet in or passing through marine waters of Alaska and eastern Russia is comprised of container vessels, bulk carriers, cargo vessels, gas and car carriers, cruise and tank ships, tugs and barges, fishing vessels, and government vessels. Cruise ships and recreational boating activity have increased and continue to increase in

the glaciated fjords of Glacier Bay (federally managed waters requiring an entry permit), Yakutat Bay, Prince William Sound and Kenai Fjords in south-coastal Alaska (Day *et al.* 1999, pp. 20–21; Jansen *et al.* 2006, p. 1186; Hoover-Miller *et al.* 2013, p. 3), where large numbers of the Kittlitz's murrelet are found in the breeding season (Arimitsu *et al.* 2011, p. 18; Kissling *et al.* 2011, pp. 7–8; Kuletz *et al.* 2011a, pp. 99–101; Piatt *et al.* 2011, pp. 68–70).

Trans-Pacific shipping routes that connect North America and Asia overlap with Kittlitz's murrelet distribution in the northern Gulf of Alaska and throughout the Aleutian Islands, most of which are part of the Alaska Maritime National Wildlife Refuge. Within a 1-year period, a minimum of 2,219 large commercial ships transited along this route, known as the North Pacific Great Circle route, with most vessels traveling offshore across the Gulf of Alaska, but nearshore along the Aleutian Islands, where most vessels cross the island chain twice during each transit (Det Norske Veritas and ERM West 2010, pp. 5–6; Kuletz, unpublished data). The nearshore portion of this popular shipping route likely presents the greatest oil exposure risk to the Kittlitz's murrelet. In the next 25 years, both westbound and eastbound traffic along the North Pacific Great Circle route are expected to increase, but the rate of increase is dependent on economic activity (gross domestic products) (Det Norske Veritas and ERM West 2010, pp. 60–61, 65). However, based on the certainty that oil spills will continue to occur in this region where high volumes of ships traverse dangerous waters, the Alaska Maritime National Wildlife Refuge is considered among the most vulnerable refuges in the country (National Wildlife Refuge Association 2005, p. 10).

Projections of shipping traffic from the Bering Sea into the Chukchi and Beaufort seas along the Northwest Passage route are highly dependent on the future of natural resource development, regional trade growth, and future commodity prices for the natural resources being developed in and around these regions (Det Norske Veritas and ERM West 2010, p. 67). A key choke point is the Bering Strait, the migratory channel between the Bering and Chukchi seas, where vessel traffic has increased in the past decade and is projected to increase as extent and duration of seasonal sea ice decreases. The marine waters near Point Barrow, which separates the Chukchi and Beaufort seas, will likely experience increased traffic, and this is an area where Kittlitz's murrelets have been

observed in late summer and fall (Madison *et al.* 2012, p. 1; Kuletz, unpublished data).

Offshore oil and gas development within the range of the Kittlitz's murrelet is also projected to increase in the future. In 2012, Royal Dutch Shell Oil (Shell) initiated offshore exploration in the Beaufort and Chukchi seas with a plan to drill up to 2 and 3 wells per year in each location, respectively, but after the drilling unit *Kulluk* was driven aground near Kodiak Island in a severe storm in December 2012, Shell paused exploration in 2013, to prepare equipment and emergency plans (Shell 2013). No Kittlitz's murrelet mortalities or injuries were reported as a consequence of the *Kulluk* grounding, but Kittlitz's murrelets have been observed in the vicinity of the accident in the winter months (Stenhouse *et al.* 2008, p. 60). In Cook Inlet, oil and gas activity is also increasing, but most lease sales have occurred in the upper portion of the inlet where Kittlitz's murrelets are less abundant compared to the lower portion (Kuletz *et al.* 2011b, p. 88; Alaska Department of Natural Resources 2013a). Recently, a lease sale for geothermal energy on western Augustine Island in Lower Cook Inlet was completed (Alaska Department of Natural Resources 2013b); this is an area frequented by individual Kittlitz's murrelets during post-breeding migration (Madison *et al.* 2012, p. 1).

It is reasonable to assume that as marine traffic and oil and gas development increase, so does the risk of petroleum contamination from both accidental spills and routine vessel operation. Because the Kittlitz's murrelet distribution varies considerably among seasons, it is difficult to assess the future risk from marine oil pollution to this species, but its broad distribution and relatively low densities on the water throughout most of the year reduce the risk of population-level impacts from any single event. Spill prevention is likely the best approach to reducing acute and chronic impacts of hydrocarbon contamination to the Kittlitz's murrelet. Baseline information on seasonal distribution and abundance of the Kittlitz's murrelet has improved significantly since 2000, which should help to inform future risk and spill response planning. Worldwide, oil tankers now under construction require double hulls and older tankers will be phased out of use. In the United States, single-hulled tankers should be completely phased out and replaced with double-hulled tankers by 2015 (see *Oil Pollution Act [OPA] of 1990*, below) (Det Norske Veritas and ERM West

2010, p. 54). While we recognize that hydrocarbon exposure is a possible acute and chronic source of mortality of individual Kittlitz's murrelets throughout their range and it will likely increase in the future, we conclude that marine oil pollution alone does not threaten the persistence of the Kittlitz's murrelet at the population or species level now nor is it likely to do so in the future.

Conservation Efforts To Reduce Habitat Destruction, Modification, or Curtailment of Its Range

We are not aware of any non-regulatory conservation efforts, such as habitat conservation plans, or other voluntary actions that may help to ameliorate any potential threats to the marine or terrestrial habitats used by the Kittlitz's murrelet.

Summary of Factor A

In summary, marine and terrestrial habitats of the Kittlitz's murrelet within select parts of its range are currently being modified by climate change, including loss of glaciers and changes in ocean conditions, and environmental contaminants, but we cannot predict the response of Kittlitz's murrelet to future changes in habitat conditions. This species uses a variety of habitats across a broad range, does not have a highly specialized diet, and appears to be a flexible forager. We are not aware of habitat characteristics required by or significantly advantageous to the Kittlitz's murrelet that are currently limited or may become limited in the future. Although sites that include tidewater glaciers apparently support greater densities of Kittlitz's murrelets during the breeding season compared to non-glaciated sites, there is little evidence to support the hypothesis that glaciers (or ice) are a required feature of nesting or foraging habitat or lead to better reproductive performance or survival of the Kittlitz's murrelet. Therefore, with limited data and assumptions, we conclude at this time that there is not likely to be a population- or species-level response of the Kittlitz's murrelet to the forecasted loss of glaciers, especially given that this species currently occurs in areas without glacial influence and that population trend has been stable since 2000, despite continued loss of glaciers.

Because this species spends most of its life at sea, possible threats to the marine habitat of the Kittlitz's murrelet, especially those that reduce prey availability or foraging efficiency, are more pervasive and therefore more likely to impact the species at the population level. However, we did not

identify any measurable threats affecting the marine habitats used by this species that could have a population- or species-level impact. The Kittlitz's murrelet, like many marine species, is probably sensitive to oceanic regime shifts that occur on interannual to decadal time scales. However, we do not have sufficient years of demographic data to evaluate population-level response of the Kittlitz's murrelet to past regime shifts, nor are we able to project the frequency or magnitude of future regime shifts. We do know, however, that this species has persisted through several large-scale regime shifts in the last century, coupled with loss of glaciers, subsequent vegetation succession, ocean warming, increased environmental contaminants, and marine oil pollution. For all of these reasons, we consider the Kittlitz's murrelet to be resilient or adaptable, or both, to changes in its marine and terrestrial habitats. Thus, in the absence of an identified mechanistic link between Kittlitz's murrelet and glaciers, available information does not lead us to conclude that modifications to habitats used by the Kittlitz's murrelet as a consequence of climate change or environmental contaminants will negatively impact the viability of this species in the future.

We conclude, based on the best scientific and commercial information available, that the present or threatened destruction, modification or curtailment of its habitat or range does not currently pose a threat to the Kittlitz's murrelet, nor is it likely to become a threat to this species in the future.

Factor B. Overutilization for Commercial, Recreational, Scientific, or Educational Purposes

The Kittlitz's murrelet was not historically, and is not currently a bird targeted by commercial or recreational interests (Day *et al.* 1999, p. 17); overutilization from these sources is not a threat. In addition, overutilization for educational purposes has not been documented and is not considered a threat.

During the last decade, a handful of research projects on Kittlitz's murrelet were initiated in several locations, some of which involved capturing and handling juvenile and adult live birds, collecting biological data and samples, attaching transmitters, and searching for and monitoring active nests. These methods, other than nest searching, are commonly used to study marbled murrelets in British Columbia (e.g., Loughheed *et al.* 2002, p. 309; Cam *et al.* 2003, p. 1120), Washington (e.g., Bloxton and Raphael 2009, pp. 1–3),

and California (e.g., Hebert and Golightly 2006, pp. 7–8; Peery *et al.* 2006, p. 78), and, in some cases, have affected survival. For example, Peery *et al.* (2006, p. 85) found that radio-marked marbled murrelets had a lower probability of surviving the year after they were marked than non-radio-marked, but banded, murrelets, suggesting a radio-transmitter effect. Radio-transmitters are known to affect other alcids by lowering reproductive success (Whidden *et al.* 2007, p. 206) and performance (Ackerman *et al.* 2004, p. 1229; summarized for all birds by Barron *et al.* 2010, p. 180), but not influencing diving behavior (Jodice and Collopy 1999, p. 1414). There is no evidence to suggest that capture and handling, radio-marking, or nest searching and monitoring has affected the reproductive performance or survival of the Kittlitz's murrelet.

Few radio-telemetry studies of the Kittlitz's murrelet have been attempted. Pilot efforts in 2004 in Glacier Bay (Romano *et al.* 2007, pp. 120–121) and in 2006 in Kenai Fjords (Arimitsu *et al.* 2010, pp. 5–6, 14–15) were successful, but transmitter retention was poor and sample sizes were limited; no capture-related injuries or mortalities were reported. In Icy Bay, 940 Kittlitz's murrelets were captured on the water (74 were later recaptured), and 271 individuals were fitted with radio-transmitters between 2005 and 2012 (Kissling, unpublished data). In 8 years of research, 2 capture-related mortalities and 12 minor injuries (e.g., bent primary) were reported (Kissling *et al.* 2010, p. 1; Kissling, unpublished data). Based on the large number of birds captured in Icy Bay, there was no relationship between lactate (a metabolite used as an index of muscle fatigue or stress) and handling or transport time, sex, capture attempt, time of year, body condition, age, or reproductive status (Kissling *et al.* 2010, p. 1). A comparison of three radio-transmitter attachment techniques (subcutaneous anchor, suture only, and waterproof tape) did not indicate differences in behavior at sea or breeding propensity of Kittlitz's murrelets (Kissling, unpublished data). In 2011 and 2012, radio-marked marbled murrelets reproductively outperformed radio-marked Kittlitz's murrelets (see *Reproductive Performance*, above), suggesting that the radio-transmitter and marking were not responsible for the poor reproductive performance of Kittlitz's murrelets observed in those 2 years; these data are further supported by the low ratio of juvenile to adult Kittlitz's murrelets

captured at sea in late summer (5 juveniles to 380 adults) (Kissling, unpublished data). Unfortunately, too few radio-marked Kittlitz's murrelets were recaptured across years to compare differences in annual survival rates, as done by Peery *et al.* (2006, p. 85), but there was no acute survival effect to Kittlitz's murrelets detected 1, 3, and 5 days post-radio-marking, and a chronic effect is unlikely because transmitter retention is low (80–90 days) (Kissling, unpublished data). Similarly, radio-marked Kittlitz's murrelets were delivered to predator nests in proportion to their availability on the water and in comparable proportion to non-radio-marked murrelets, suggesting that the radio-transmitter did not increase predation rates, thereby decreasing survival of individual Kittlitz's murrelets (Lewis, Service, 2007–2012, unpublished data). In 2009 and 2011, similar radio-marking efforts to study Kittlitz's murrelets in Prince William Sound (39 captured and 12 radio-marked birds) (Allyn 2012, pp. 95–96) and Glacier Bay (47 captured and 20 radio-marked birds) (Marcella *et al.* 2012, p. 3) reported no capture-related injuries or mortalities.

Between 2009 and 2012, 35 Kittlitz's murrelets were marked with a solar-powered satellite transmitter using two techniques (double prong and suture only) in 5 different locations across coastal Alaska (Madison *et al.* 2012, p. 1). No capture-related injuries or mortalities were reported in association with this effort, and there is no evidence to suggest that the satellite transmitters affected vital rates of individual Kittlitz's murrelets, although this has not been tested explicitly.

Three research projects aimed to locate nests of Kittlitz's murrelets by searching on foot on Agattu (2006, 2008–2011) (Kaler *et al.* 2009, p. 365; Kaler, unpublished data), Adak (2010–2012) (Kenney and Kaler 2013, p. 74; Kenney, unpublished data), and Kodiak islands (2008–2012) (Corcoran and Mackey 2012, p. 1; Lawonn 2012, p. 16). After active nests were discovered, they were monitored by visiting every 3–10 days (Kaler *et al.* 2009, p. 365), in stages (Corcoran and Mackey, 2012, p. 1; Lawonn 2012, p. 19) or using remote still cameras with motion detection (Kaler *et al.* 2011, p. 4; Lawonn 2012, pp. 17–18). Five active nests were located and accessible in Icy Bay, and all were monitored using remote video cameras (Kissling, unpublished data). On Agattu and Kodiak islands, an experimental approach to test for possible adverse effects of researcher visits to active nests was employed; discovered nests were categorized as

either a control or disturbed nest (Kaler *et al.* 2011, p. 4; Lawonn 2012, p. 17). Both studies concluded that nest visitation by researchers had a negligible, if any, effect on nest success (Kaler *et al.* 2011, p. 17; Lawonn 2012, pp. 30, 38).

Conservation Efforts To Reduce Overutilization for Commercial, Recreational, Scientific, or Educational Purposes

We are not aware of any conservation efforts or other voluntary actions that may help to reduce overutilization for commercial, recreational, scientific, or educational purposes of the Kittlitz's murrelet.

Summary of Factor B

In summary, we conclude that overutilization has not led to the loss of populations or a significant reduction in numbers of individuals of Kittlitz's murrelet. Given the relatively small number of Kittlitz's murrelets that are potentially directly affected by research activities, the lack of evidence to suggest that a measurable impact exists, and the relatively small portion of their range that is affected by researchers, we conclude that overutilization for commercial, recreational, scientific, or educational purposes is not a threat to the population of Kittlitz's murrelet, nor is it likely to become a threat in the future.

Factor C. Disease or Predation

Disease

The recent emergence of bacterial, fungal, parasitic, and viral diseases, and biotoxins has affected populations of wild birds (summarized by Friend *et al.* 2001, pp. 294–295), including many seabirds (McShane *et al.* 2004, p. 3–66). Yet, available information on disease or parasites in the Kittlitz's murrelet is limited both spatially and temporally. Until recently, the only known parasite was a cestode (*Alcataenia* spp.) in two Kittlitz's murrelets from Kodiak Island (Hoberg 1984, p. 2297). Within the last few years, four adult and nine nestling Kittlitz's murrelets were necropsied. All nine nestlings were found dead at nest sites that were being actively monitored on Kodiak Island in 2011 and 2012, and all were in fair to good body condition and nutritional status (Lawonn 2012, p. 31; Shearn-Bochsler *et al.* 2013, p. 1). Two adults were found dead from suspected raptor predation attempts in Glacier Bay (Kissling, unpublished data), one adult died during a capture-related incident in Icy Bay (Kissling, unpublished data), and one adult was found alive near Chignik with an

apparent wing injury, but eventually died at a rehabilitation facility in Anchorage (Lance, unpublished data).

Because of the varying condition and preservation method of the carcasses, not all of the 13 birds were tested equally for disease or parasites, but of those tested, no viruses, infectious diseases, or pathogenic bacteria were detected. These include negative tests for West Nile virus, avian influenza viruses, and avian paramyxoviruses, including Newcastle disease (Shearn-Bochsler *et al.* 2013, p. 1; Kissling, unpublished data; National Wildlife Health Center 2012a, b, c). All 13 birds were examined for parasites, and 8 of them had evidence of parasite infections; 6 of the juveniles contained an unknown species of nematode, and 2 of the adults contained both nematodes (*Stegophorus* spp. and *Contracaecum* spp.) and cestodes (presumably *Alcataenia* spp.) (Shearn-Bochsler *et al.* 2013, p. 1; Kissling, unpublished data). These parasites are widespread and relatively common in fish-eating birds (Muzaffar and Jones 2004, pp. 130, 132–133). None of the individual parasite loads were substantial enough to have caused death, although parasites may potentially affect seabird population dynamics by selectively reducing fitness and reproductive success of individuals (Bried and Jouventin 2002, p. 284; Schreiber 2002, p. 193; Muzaffar and Jones 2004, p. 139).

A subset of the carcasses was tested for presence of biotoxins, toxic substances produced by living organisms that are a consequence of algal blooms. Specifically, eight of the nestlings collected at Kodiak Island in 2011 and 2012 were tested for saxitoxin, a neurotoxin that is naturally produced by some species of dinoflagellates (*Alexandrium* spp.) and is the cause of paralytic shellfish poisoning (PSP), and domoic acid, a neurotoxin secreted by microscopic diatoms (*Pseudonitzschia* spp.) and is responsible for amnesic shellfish poisoning (ASP) (Horner *et al.* 1997, p. 1076; Shumway *et al.* 2003, p. 2). Clinically, PSP can result in respiratory distress, muscular paralysis, and death, while ASP can lead to amnesia, coma, and death (Shumway *et al.* 2003, p. 2). Both of these biotoxins are known to kill or reduce survival of marine organisms (Nisbet 1983, p. 338; Beltran *et al.* 1997, p. 447; Lefebvre *et al.* 2000, p. 485; Shumway *et al.* 2003, pp. 5–6; Muzaffar and Jones 2004, p. 126), including the marbled murrelet (MacBean 1989, p. 134; Peery *et al.* 2006, pp. 83–84). The majority of the Kittlitz's murrelet nestlings (88 percent) tested positive for saxitoxin, but not for

domoic acid (Shearn-Bochsler *et al.* 2013, p. 1). High concentrations of saxitoxin were detected in the upper gastrointestinal contents and livers of the nestlings and were likely the cause of their deaths (Shearn-Bochsler *et al.* 2013, p. 1). Based on still images taken by remote cameras at their nest sites, the nestlings were fed sand lance shortly before their deaths, and chick death occurred within 3 hours of the meal delivery (Shearn-Bochsler *et al.* 2013, p. 1). All *Brachyramphus* murrelets reported to have died from PSP were juveniles (MacBean 1989, p. 134; Shearn-Bochsler *et al.* 2013, p. 1), suggesting perhaps lower toxicity thresholds for young murrelets, although only one adult was tested (negative) to determine saxitoxin concentrations for comparison to juveniles.

Harmful algal blooms can be natural phenomena, but globally they appear to be increasing in frequency and severity in coastal areas, or at least reports of events have increased (Anderson *et al.* 2002, p. 704; Sellner *et al.* 2003, p. 383). Blooms occur when environmental conditions change to be more favorable to phytoplankton growth and are generally attributed to two factors: (1) Natural processes, such as circulation, upwelling relaxation, and river flow; or (2) anthropogenic nutrient loading (Horner *et al.* 1997, p. 1084; Sellner *et al.* 2003, p. 383). Human activities that can enhance nutrient input and stimulate harmful algal blooms in coastal waters can include aquaculture farming, agricultural and other fertilizer runoff, fossil fuel combustion, sewage and animal waste, and ballast water discharge (Anderson *et al.* 2002, pp. 706–707; Sellner *et al.* 2003, pp. 384–385; Smayda 2007, p. 602). Increased water temperatures as a result of climate change have also been identified as a possible contributor to increased frequency and intensity of toxic blooms (Horner *et al.* 1997, p. 1084; Moore *et al.* 2008, p. 3; Lewitus *et al.* 2012, p. 142).

Saxitoxin and domoic acid toxicity have been present on the western coast of North America for hundreds of years, perhaps longer (Horner *et al.* 1997, p. 1083; RaLonde and Wright 2011, pp. 5–7; Lewitus *et al.* 2012, p. 134). In Alaska, 183 incidences from 68 outbreaks of PSP on Kodiak Island, the Aleutian Peninsula, Prince William Sound, and southeastern Alaska were reported between 1973 and 2010 (RaLonde and Wright 2011, p. 5; Shearn-Bochsler *et al.* 2013, p. 1). There is less known about ASP in Alaska, but from the early 1990s to 2010, a number of incidences of domoic acid toxicity have been documented in shellfish, forage fish,

and marine mammals along the southern coast (RaLonde and Wright 2011, pp. 6–7). There is no evidence to suggest an increase in PSP or domoic acid concentrations in Alaska over the last few decades (Lewitus *et al.* 2012, pp. 141, 145–146), nor is there evidence to support anthropogenic factors as promoters of *Alexandrium* or *Pseudonitzschia* blooms or toxic events in Alaska (Lewitus *et al.* 2012, pp. 142, 148).

It is difficult to evaluate harmful algal blooms as a potential population- or species-level threat to the Kittlitz's murrelet because occurrences are unpredictable, are episodic, and appear to be localized. Furthermore, PSP-related deaths have only been documented in juveniles and the actual incidence and impacts, especially to adults at sea, may not be adequately reported. However, the results from Kodiak Island confirm that individual Kittlitz's murrelets are at risk for saxitoxin poisoning during harmful algal blooms. Because this is the only area for which Kittlitz's murrelets are known to die from PSP, it is worth noting that the greatest number of shellfish species affected and the highest concentrations of PSP across Alaska were reported from Kodiak Island (Lewitus *et al.* 2012, p. 135). For all of these reasons, based on the best available information, we conclude that harmful algal blooms are not a current threat to this species at the population or species level, nor will these blooms pose a threat in the future. There are insufficient data to assess fully the potential effects of diseases or parasites to the Kittlitz's murrelet, but based on available information, we conclude that these factors are currently not a threat to the species now or in the future.

Predation

Predation can act as a strong selective force in the evolution of prey behavior (Lima and Dill 1990, p. 619) and was likely a major factor contributing to the development of Kittlitz's murrelet behavior. Secretive nesting habits, cryptic plumage, erratic and evasive flight, and fast and deep dives help this species to avoid aerial and mammalian predators at their nests or on the water. Because this species apparently has evolved a variety of behavioral strategies to evade their predators, few apparent situations may arise that could alter predation rates and result in a population- or species-level impact to the Kittlitz's murrelet. However, this is a complex issue that involves both direct and indirect relationships (Hipfner *et al.* 2011, p. 41) and therefore it can be difficult to quantify impacts beyond the

individual level. For example, increases in predator abundance could result in increased predation rates on Kittlitz's murrelets, but only if those predators were specializing on or targeting Kittlitz's murrelet as prey and not taking advantage of other suitable prey species. Such increases in predator abundance may be possible if predators were able to colonize previously unoccupied space, although at some threshold, density-dependent factors would likely prevail and predator numbers would stabilize. Predator-prey relationships are multi-faceted; increases in predators do not necessarily translate to decreases in prey.

We assessed two types of predation that affect individual adult and juvenile Kittlitz's murrelets, but are often executed by a different suite of predators. We considered nest predation as an event that results in an egg or nestling being killed by a predator at the nest, and active predation to be an event that results in an adult or juvenile being killed away from the nest, but perhaps in transit to or from the nest. Likely nest predators include birds and mammals that occur or forage near the remote nest sites of the Kittlitz's murrelet (Day *et al.* 1999, p. 12); confirmed nest predators of Kittlitz's murrelet eggs and nestlings are red fox (Lawonn 2012, p. 31), snowy owl (*Bubo scandiacus*) (Kaler, unpublished data), and common raven (*Corvus corax*) (Kenney 2012, in litt.). Likely active predators include raptors that have the ability to capture Kittlitz's murrelets in flight or on the water (Day *et al.* 1999, p. 12); confirmed active predators are bald eagle and peregrine falcon (*Falco peregrinus*) (Arimitsu *et al.* 2010, p. 15; Allyn 2012, p. 101; Kissling, unpublished data).

Of the areas where Kittlitz's murrelet nests have been monitored regularly, nest predation appears to be a significant cause of nest failure at Kodiak Island and, to a lesser extent, the Aleutian Islands, but not in Icy Bay (see *Reproductive Performance*, above, for a full description). On Kodiak Island between 2008 and 2012, 53 percent of nest failures (29 of 55 failed nests) were attributed to depredation of egg or nestling, and red fox was identified as the nest predator at 87 percent (13 of 15 nests) of the nests monitored with cameras (Corcoran and Mackey 2012, p. 3; Lawonn 2012, pp. 30–31, 59). On Agattu Island between 2006 and 2011, only 25 percent of the nest failures (18 of 72 failed nests) was caused by depredation with the only identified predator at one nest being a snowy owl (Kaler, unpublished data), but common raven and glaucous-winged gull were implicated as the most likely nest

predators because no terrestrial mammals occur on the island and these two species were commonly observed near Kittlitz's murrelet nests (Kaler and Kenney 2008, p. 15; Kaler *et al.* 2009, p. 365). In 2012, on Adak Island, depredation was confirmed at only one nest (four nests failed due to unknown causes) when a common raven removed the egg from the nest (Kenney 2012, in litt.). In Icy Bay, most of the discovered nests were not accessible to humans due to dangerous, heavily glaciated terrain and therefore were monitored remotely. Only five nests were monitored directly in this area, and no predation events were observed, but it is very unlikely that nest predation commonly occurs in Icy Bay because the majority of suitable nesting habitat is remote and isolated from most potential nest predators, perhaps contributing to nest site selection by Kittlitz's murrelets (Kissling, unpublished data). As described under *Factor B* above, possible researcher impacts did not influence predation rates observed at monitored nests. Thus, it appears that in some parts of this species' range, nest predation is a substantial factor contributing to the poor reproductive performance of the Kittlitz's murrelet, but it is difficult to put this result into broader spatial and temporal context because the available data are too limited.

Active predation on Kittlitz's murrelets is more challenging to document and quantify compared to nest predation because it is rarely observed, and, therefore, most information comes from studying the diet of probable or confirmed active predators. The diet of coastal breeding peregrine falcons is overwhelmingly dominated by alcids (e.g., auklets and murrelets), which comprise 75 percent of their diet (Beebe 1960, p. 168; White *et al.* 1973, p. 307; Nelson and Myers 1976, p. 290), and procellariids (e.g., storm-petrels and shearwaters) similar in size to the Kittlitz's murrelet (White *et al.* 2002, p. 11). In contrast, the bald eagle is a generalist predator that consumes a high proportion of fish, but supplements its diet with other types of prey (e.g., birds), especially during times of the year when fish are not locally available (Buehler 2000, pp. 9–10); in some areas, however, birds can comprise a large proportion of eagle diet (Anthony *et al.* 2008, p. 2730; summarized in Hipfner *et al.* 2011, p. 42). In Russia, probable active predators include peregrine falcon, white-tailed eagle (*H. albicilla*) and Steller's sea eagle (*H. pelagicus*) (E. Potapov, Bryn Athyn College, 2012, personal

communication), but likely only peregrine falcons prey on Kittlitz's murrelet with any frequency.

In the rapidly changing, glaciated landscape of Icy Bay, Lewis (Service, 2007–2012, unpublished data) studied the diet and movements of nesting peregrine falcons and bald eagles with the goal of quantifying the scope and magnitude of active predation on the Kittlitz's murrelet. Movements of both predators overlapped considerably with areas frequently used by Kittlitz's murrelets. Individual peregrine falcons had large foraging ranges, including somewhat regular trips into upland areas of high suitability nesting habitat of the Kittlitz's murrelet; in fact, two radio-marked Kittlitz's murrelets were found dead at great distance from the water and were likely killed while in transit to and from their nest (Kissling, unpublished data). On the other hand, bald eagle movements were relatively constricted to the coast near their nesting areas; longer movements appeared to be driven by access to salmon spawning streams. Based on 544 prey remains (i.e., parts of prey removed before or left after consumption, such as feathers, bones, hair) collected at 5 peregrine falcon nests over 6 years, Kittlitz's murrelet was the most commonly delivered prey species based on both frequency of occurrence (23 percent of prey remains) and biomass (26 percent). The biomass of Kittlitz's murrelet in peregrine falcon diet varied considerably among years (6–80 percent), which is likely partially related to sampling effort across years, but undoubtedly is also associated with annual changes in the availability of Kittlitz's murrelet, as well as differences in individual falcon hunting preferences. Conversely, bald eagles delivered very few Kittlitz's murrelets to their nests ($n=6$ nests between 2007 and 2012); only 3 percent of prey remains ($n=56$) and 1 percent of prey deliveries recorded using still cameras mounted above active nests were documented. These results are not surprising because the main seabird prey of bald eagles in Icy Bay and elsewhere includes species larger than the Kittlitz's murrelet (Hipfner *et al.* 2011, p. 42; Lewis, unpublished data). Nonetheless, within Icy Bay, it appears that peregrine falcons are the primary active predator of Kittlitz's murrelets, and, at least in some years, falcons prey on this species at rates that could have an impact to the local population, especially because the predation results in adult mortality.

The prevalence of Kittlitz's murrelet in the diet of peregrine falcons in Icy Bay may be due in part to the lack of alternative, appropriately-sized prey

available to foraging falcons. In other coastal areas of Alaska, the marbled murrelet far outnumbers the Kittlitz's murrelet, and peregrine falcons likely prey on both species in proportion to their availability. Additionally, in areas where large seabird colonies exist (e.g., Kenai Fjords), peregrine falcons can select from seabirds similar in size to the Kittlitz's murrelet, such as ancient murrelet (*Synthliboramphus antiquus*), Cassin's auklet (*Ptychoramphus aleuticus*), and fork-tailed storm-petrel (*Oceanodroma furcata*). For example, in Kenai Fjords, peregrine falcon diet consisted of only 8 percent *Brachyramphus* murrelets (Phillips, National Park Service, 2012, unpublished data). In these areas, the impact to the local population of Kittlitz's murrelet from peregrine falcons would likely be much lower compared to an area like Icy Bay where few alternative prey are available. As glaciers recede, suitable cliff nesting and foraging habitat for peregrine falcons will become exposed, and falcons will likely colonize this newly created habitat, potentially having an impact on Kittlitz's murrelets that occupy the upper reaches of these fjords, but we anticipate any impact to be temporary, as alternative prey to falcons are also expected to colonize these areas (see *Factor A* discussion, above).

The peregrine falcon is a far more efficient active predator compared to the bald eagle, and therefore, in areas where they coexist, bald eagles may alter predation rates of peregrine falcons by stealing captured prey items (i.e., kleptoparasitism) (Buehler 2000, p. 9), potentially increasing the number of Kittlitz's murrelets killed. Dekker and Bogaert (1997, pp. 381–383) observed 73 peregrine falcon foraging flights from Langara Island, British Columbia; only 22 percent of those flights resulted in the falcon returning to the island with prey, and on 13 percent of those flights, a bald eagle was actively pursuing the peregrine falcon. This behavior by bald eagles appeared to result in greater kill rates of peregrine falcons in order to compensate for prey lost to theft (Dekker *et al.* 2012, p. 293). There are observations and anecdotal evidence of similar interactions between peregrine falcons and bald eagles in glacial fjords of Alaska, suggesting that kleptoparasitism may be altering peregrine kill rates in these areas as well, potentially having an effect on Kittlitz's murrelets.

We know little about predation risk to Kittlitz's murrelets outside of the breeding season when at least some proportion of the global population occupies open leads and polynyas in the

Bering and Chukchi seas (see *Habitat and Life History*, above). Recently, satellite tracking studies of gyrfalcons (*F. rusticolus*) and snowy owls found that these species spend considerable time during the winter months on sea ice, near polynyas, presumably preying on seabirds (Burnham and Newton 2011, p. 478; Therrien *et al.* 2011, p. 364). Because no data exist, we have no way of evaluating this potential threat to the Kittlitz's murrelet, but we assume that Kittlitz's murrelets likely experience risk of predation outside of the breeding season in addition to the actual predation during the breeding season described above.

Because predation is a natural process, it is difficult to evaluate it as a population- or species-level threat to the Kittlitz's murrelet. We considered possible changes in distribution and abundance of nest and active predators and factors potentially contributing to those changes. We focused our evaluation on bald eagles and peregrine falcons because active predation often results in adult mortality of Kittlitz's murrelets, which can have a greater immediate influence on local population stability than failed reproductive attempts (Kissling, unpublished data).

Populations of bald eagle have fluctuated over the last century due to human-caused influences (Buehler 2000, p. 1). In Alaska and British Columbia, bald eagles were targeted through an official bounty program because of their competition with fisheries (Hodges 2011, p. 7). In Alaska alone, 128,273 bounties were paid to hunters between 1917 and 1953 (Robards and King 2004, p. 158), undoubtedly reducing the population of bald eagles, but persecution of this species ended with Statehood in 1959 (Hodges 2011, p. 7). By the 1980s, eagle populations began to recover and have increased or continue to increase since then, probably reaching carrying capacity throughout much of their range that overlaps with the Kittlitz's murrelet (Zwiefelhofer 2007, p. 8; Hodges 2011, p. 10). Current distribution of bald eagles and Kittlitz's murrelets overlaps along most of south-coastal Alaska and the Aleutian Islands (Buehler 2000, p. 1). Bald eagles rarely occur along the coast north of the Alaska Peninsula, but do occur inland along rivers, where Kittlitz's murrelets are absent. There are no data to document bald eagle colonization rates of glacial fjords following glacial recession, but the best available information suggests that bald eagles inhabit these areas as suitable trees for large eagle nests become available and often nest at the leading

edge of tree line within the glacial fjord system (Lewis, unpublished data).

Peregrine falcons nest throughout the range of the Kittlitz's murrelet (White *et al.* 2002, p. 1). Since severe population declines in the mid-1900s across North America (Kiff 1988, p.126; Enderson *et al.* 1995, p.144), including some populations in Alaska (Ambrose *et al.* 1988, p. 81), peregrine falcons have recovered to what is believed to be pre-decline numbers (White *et al.* 2002, p. 2). The cause of the decline was exposure to persistent chemicals that were commonly used in parts of the winter range of the peregrine falcon (White *et al.* 2002, p. 1). Because coastal peregrine falcons in Alaska were considered to be residents, it was generally assumed that the coastal population was not impacted and did not decline; however, recent evidence indicates that at least some coastal peregrine falcons overwinter in Central or South America (Lewis, unpublished data) and therefore may have experienced the same population declines and recovery. Nonetheless, information about peregrine populations within the range of the Kittlitz's murrelet is sparse and inconsistent. Recent surveys have found peregrines nesting in many areas where Kittlitz's murrelets occur and often in close association with seabird colonies (Hughes and Sanger 1999, pp. 1–2; Shook and Ritchie 2011, p. 12). The only information available on changes in peregrine falcon numbers within the range of the Kittlitz's murrelet was collected in the glacial fjords of Icy Bay; in 1992 and 1995, despite considerable effort, no nesting peregrine falcons were located (Kozie 1993, pp. 5–6; Kozie *et al.* 1996, pp. 4–5), but between 2007 and 2012, five peregrine falcon nesting areas were occupied regularly (Lewis, unpublished data). This apparent increase may reflect overall recovery of peregrine falcons, as well as expansion into formerly unsuitable nesting and foraging habitat (e.g., recently deglaciated cliffs above open water). Regardless, we cannot project the possible implications of this anecdotal observation in Icy Bay to the Kittlitz's murrelet at the population or species level.

The distribution and abundance of nest predators may have changed locally as the result of human actions and habitat conditions. We collated data on accidental introductions and game transplants across the range of the Kittlitz's murrelet using a variety of sources (Paul 2009; Threatened Island Biodiversity Database 2013 [online]; Ebbert, Service, pers. comm.). Potential impacts to the Kittlitz's murrelet from

nonnative introductions or transplants include direct predation at nests and availability of alternate prey for nest predators. Since the early 1900s, 174 introductions and transplants have occurred within the range of the Kittlitz's murrelet and most of these were fox (n=48; *Vulpes* spp.), rat (n=20; *Rattus* spp.), and rabbit (n=17; *Lepus* spp.) with the latter primarily introduced for fox food. Eradication efforts have been successful, especially on many of the Aleutian Islands, but may have had some impact on nesting Kittlitz's murrelets prior to eradication, especially fox. We overlaid remaining nonnative species distributions with the Kittlitz's murrelet nest habitat suitability map (described in *Nesting*, above) and identified nine islands (Afognak, Kodiak, Attu, Amchitka, Adak, Great Sitkin, Atka, Unalaska, and Akutan islands) where introduced or transplanted species may be having an indirect impact to Kittlitz's murrelet, primarily by enhancing prey abundance for native species that are nest predators. For example, while red fox, a known nest predator to the Kittlitz's murrelet (Lawonn 2012, p. 31), is native to Kodiak Island, several species that it can prey upon or scavenge have been introduced, including Sitka black-tailed deer (*Odocoileus hemionus sitkensis*), red squirrel (*Tamiasciurus hudsonicus*), snowshoe hare (*Lepus americanus*), American marten (*Martes americana*), mountain goat (*Oreamnos americanus*), Roosevelt elk (*Cervus canadensis roosevelti*), reindeer (*Rangifer tarandus*), and beaver (*Castor canadensis*). Although historical and current fox population abundance are not known, it seems likely that introductions increased the carrying capacity of fox on Kodiak Island by providing additional sources of food, and this increased carrying capacity potentially has negative effects on nesting Kittlitz's murrelets. We have no data to support this hypothesis or to assess potential impacts to the local population of Kittlitz's murrelet. Unfortunately, there is no at-sea population trend information for the Kittlitz's murrelet near Kodiak Island (Madison *et al.* 2011, p. 118) or in the vicinity of other islands with relatively large number of introductions or transplants. Similarly, other human activities may have cascading consequences that can impact the Kittlitz's murrelet, such as refuse from seafood processing, which is known to attract several gull species (Yorio and Caille 2004, p. 778; Gibson and Byrd 2007, pp. 136–137; Carniel and Krul 2012, p. 61), and bald eagles (Lewis, unpublished data), but we have

no information to suggest that these artificial increases in local populations of nest predators actually translate into increased predation of Kittlitz's murrelet.

Conservation Efforts To Reduce Disease or Predation

We are not aware of any conservation efforts or other voluntary actions that may help to reduce disease or predation of the Kittlitz's murrelet.

Summary of Factor C

In summary, based on the available information, we find that disease is not a threat to the Kittlitz's murrelet now or is likely to be one in the future. Biotoxins, or harmful algal blooms, are likely the cause of small numbers of mortalities of individual Kittlitz's murrelets, but we do not have information to suggest that biotoxins are having a population- or species-level impact on the Kittlitz's murrelet.

Predation is a source of mortality of Kittlitz's murrelet eggs, nestlings, and adults. Although behavioral or morphological strategies against predation have been identified for all life-history stages of this species, it is clear that predation and risk of predation is a regular occurrence. It appears that predation rates may be elevated in certain locations as a result of human actions or consequences of climate change, but negative impacts to the Kittlitz's murrelet seem to be localized. Thus, based on the information available, we find that predation in and of itself is not a threat to this species, nor is it likely to become a threat in the future.

Factor D. The Inadequacy of Existing Regulatory Mechanisms

Several laws have been passed that help maintain the quality of habitat that Kittlitz's murrelets occupy and reduce threats to those habitats. We determined that the existing regulatory mechanisms authorized by these laws are adequate for the Kittlitz's murrelet. These laws are discussed briefly below.

Oil Pollution Act (OPA) of 1990

The Oil Pollution Act of 1990 (OPA) (33 U.S.C. 2701 *et seq.*) provides enhanced capabilities for oil spill response and natural resource damage assessment by the Service. The OPA and implementing regulations require the Service to consult on developing a fish and wildlife response plan for the National Contingency Plan, provide input to Area Contingency Plans, review Facility and Tank Vessel Contingency Plans, and conduct damage assessments for the purpose of obtaining damages for

the restoration of natural resources injured from oil spills. In addition, the OPA includes provisions for the double-hulling of oil tankers; all new tankers are required to be double-hulled, and single-hulled tankers will be phased out completely and replaced with double-hulled tankers by 2015. The double-hulling provision within the OPA should reduce the likelihood of marine hydrocarbon contamination due to accidents within the range of the Kittlitz's murrelet.

Coastal Zone Management Act (CZMA)

The Coastal Zone Management Act of 1972 (CZMA) (16 U.S.C. 1451 *et seq.*) was enacted to preserve, protect, develop, and where possible, restore or enhance the resources of the Nation's coastal zone. The CZMA provides for the submission of a State program subject to Federal approval. The CZMA requires that Federal actions be conducted in a manner consistent with the State's Coastal Zone Management Plan (CZMP) to the maximum extent practicable. In 2011, the Alaska Legislature did not renew the State of Alaska's program, and it was phased out by the Alaska Department of Natural Resources. Thus, Alaska has not had an active Coastal Management Program since 2011.

Marine Protection, Research and Sanctuaries Act (MPRSA)

The Marine Protection, Research and Sanctuaries Act of 1972 (MPRSA) (33 U.S.C. 1401 *et seq.*) was enacted in part to prevent or strictly limit the dumping into ocean waters of any material that would adversely affect human health, welfare, or amenities, or the marine environment, ecological systems, or economic potentialities. The MPRSA was designed to protect the quality of marine habitats that the Kittlitz's murrelet and its prey utilize.

Migratory Bird Treaty Act

Although the Migratory Bird Treaty Act (16 U.S.C. 703 *et seq.*) prohibits, unless permitted by regulation, any take of any migratory bird, including Kittlitz's murrelet, such incidental take does occur in commercial fisheries in Alaska (Wynne *et al.* 1991, pp. 25–31; Wynne *et al.* 1992, pp. 18–19; Stehn *et al.* 2001, pp. 68–70; Manly 2007, p. 90; Manly 2009, p. 66). Murrelets do not appear to be taken by longliners, by trawlers, or within pot fisheries (Stehn *et al.* 2001, p. 71; Phillips *et al.* 2010, p. 113). However, where studies have examined seabird bycatch in nearshore gillnet fisheries in the range of Kittlitz's murrelets, *Brachyramphus* murrelets (marbled and Kittlitz's combined)

comprise between 11 and 70 percent of seabird mortality from gillnets (Wynne *et al.* 1991, p. 33; Wynne *et al.* 1992, p. 49; Carter *et al.* 1995, pp. 271–275; Manly 2006 p. 31; Manly 2007, pp. 34–35; Manly 2009, pp. 31–32). Gillnet bycatch is an ongoing source of mortality to Kittlitz's murrelets (see *Incidental Take in Fisheries*, below), but Blejwas and Wright (2012, p. 14) concluded that fine scale spatial overlap of Kittlitz's murrelet distribution and commercial gillnet fishing effort was low. Gillnet fisheries in Alaska generally occur in State territorial waters. Melvin *et al.* (1999, pp. 1389–1396) reported on gear types and fishing methods that reduce such bycatch, but regulations requiring the use of bycatch reduction techniques are not currently in place.

State Regulations

In 2013, the Alaska State Legislature passed a bill to allow cruise ships to meet water quality standards at the ends of a mixing zone, as opposed to the point of discharge, relaxing water quality standards within the marine environment. However, it is unlikely that this will have a negative impact on the Kittlitz's murrelet because, considering the broad range of the species, the spatial and temporal overlap between the Kittlitz's murrelet and cruise ships is low, except in Glacier Bay National Park where the marine waters are federally managed and discharge is not allowed.

The Kittlitz's murrelet receives no special protection by the State of Alaska. On March 5, 2009, the Center for Biological Diversity (CBD) petitioned the State of Alaska to list the Kittlitz's murrelet as endangered under the Alaska Endangered Species Act (A.S. 16.20.180 *et seq.*). The petition specified that because of the species' small population size, precipitous population declines, and multiple, ongoing threats to its continued existence, the Kittlitz's murrelet should receive State-level regulatory protection. On April 9, 2009, the State rejected CBD's petition to list the Kittlitz's murrelet as endangered under the Alaska Endangered Species Act, claiming insufficient evidence to indicate that their numbers have decreased to the extent to cause endangerment.

Summary of Factor D

The laws described above reduce the likelihood of oil spills, help protect water quality in marine habitats, and prohibit take of Kittlitz's murrelet unless permitted by regulation. Through such actions, these laws provide some protection to the Kittlitz's murrelet and

its habitats. As discussed in *Factors A, B, C, and E*, although we recognize that some of the potential stressors addressed may result in mortality of individual Kittlitz's murrelets, we have not identified any threat that would affect the species at the population or range-wide level. Therefore, we find that the existing regulatory mechanisms authorized by the laws described above are adequate for the Kittlitz's murrelet now and into the future.

Factor E. Other Natural or Manmade Factors Affecting Its Continued Existence

Recreational Effects

The Kittlitz's murrelet is rarely pursued by commercial tour boat operators or recreational vessels, but the scenic tidewater glacier habitat in which this species occurs in parts of its range is often the ultimate destination for these users. Marine and coastal tourism has increased substantially over the last few decades in many areas that have relatively dense populations of the Kittlitz's murrelet during the breeding season (see *Habitat and Life History*, above), including Glacier Bay, Yakutat Bay, Prince William Sound, and Kenai Fjords (Day *et al.* 1999, pp. 20–21; Jansen *et al.* 2006, p. 1186; Payne *et al.* 2010, p. 7; Hoover-Miller *et al.* 2013, p. 3). Motorized and non-motorized vessels can impact marine wildlife directly (e.g., injury or mortality due to collision) (Jensen and Silber 2003, p. 2; Neilsen *et al.* 2012, p. 1) or indirectly (e.g., disturbance) (Jansen *et al.* 2010, p. 1186; Schwemmer *et al.* 2011, pp. 1855–1857; Hoover-Miller 2012, pp. 8–9). It is extremely unlikely that Kittlitz's murrelets are directly impacted by vessel activity owing to their ability to flush from the water if within a vessel pathway and their skillful maneuverability during flight. In the fjords of northwestern Prince William Sound, jet-propulsion tour catamarans can travel at speeds up to 42 mi per hour (68 km per hour), ingesting water and debris down to 20 ft (6 m) below the water surface, and murrelets diving in the path of these boats may not be able to escape injury (Kuletz, pers. obs.), although it has never been documented. Indirect impacts to individuals may include increased energetic costs (Speckman *et al.* 2004, p. 33; Agness *et al.* 2013, p. 13), increased predation risk (Whittington 2008, in litt.), temporary changes to foraging habitat characteristics (Kuletz *et al.* 2003a, pp. 23, 29; Stephensen 2009, p. 22), displacement of murrelets (Kuletz 1996, pp. 777–778; Stephensen 2009, pp. 22–23; Agness *et al.* 2008, p. 352), and

reduced ability to feed (Day *et al.* 2003, p. 697).

Several studies in Alaska have attempted to understand the scope and magnitude of possible effects to Kittlitz's murrelets from vessel activity and to develop guidelines to minimize any impacts. In all areas studied, Kittlitz's murrelets and vessel traffic overlap spatially (typically within the glacial fjords) and temporally (May–July). In Prince William Sound, the number of murrelets observed on the water was negatively correlated with the number of boats in the area (Kuletz 1996, pp. 777–778; Kuletz *et al.* 2003a, pp. 23, 25) and densities of murrelets decreased between the initial and return boat transits in one of the glacial fjords of the area (Stephensen 2009, pp. 22–23). During a pilot study using focal-animal observations in two fjords of Prince William Sound, birds conducted fewer forage dives and flew away more often in the presence of boats, and flushing distance was estimated at 82–1,640 ft (25–500 m) (Kuletz *et al.* 2003a, pp. 23, 29). Because Kittlitz's murrelets tended to occupy the mid-water channels where boat traffic was greatest, there was potential for vessel disturbance during the summer months (Kuletz *et al.* 2003a, pp. 29–30). There may be a vessel density threshold beyond which murrelets may not occupy an area, as reported by Day *et al.* (2003, p. 697), but this theory has not been tested. Schoen *et al.* (2013, pp. 56–57) took a different approach and quantified spatial overlap of Kittlitz's murrelets and vessels in Yakutat Bay. The average probability of an individual Kittlitz's murrelet encountering a vessel at least once per day was extremely low (0.0097; SE=0.0031), and the proportion of the local population disturbed daily was 0.98 percent (roughly 23 individuals); for comparison, the same values for marbled murrelet were 0.0083 (SE=0.0013) and 0.83 percent (roughly 76 individuals) (Schoen *et al.* 2013, p. 59). Although all of these studies document encounters and temporary displacement of individual Kittlitz's murrelets in response to vessel activity, none provides evidence of a measurable demographic response at the individual, population, or species level. Marbled murrelets showed a tendency to swallow fish held at the surface (presumably for their chicks) when disrupted by boat traffic (Speckman *et al.* 2004, p. 33), which may have unmeasurable implications for birds raising chicks, but there is no evidence to support this supposition.

The most comprehensive and targeted studies to evaluate effects of vessel activity on Kittlitz's murrelets were

conducted in Glacier Bay. Agness *et al.* (2008, p. 352) reported that nearshore densities of murrelets decreased temporally following vessel passage, but recovered within the day, concluding that vessel activity does not constitute a loss of suitable habitat for the Kittlitz's murrelet. Environmental and biological factors had more influence on density, group size, and behavior of Kittlitz's murrelets than vessel activity (Agness *et al.* 2008, p. 351). However, vessel passage, especially large, fast-moving vessels, did cause a 30-fold increase in flight behavior of Kittlitz's murrelets observed nearshore (Agness *et al.* 2008, p. 346), which resulted in a 10–50 percent increase in daily energy expenditure of individual murrelets (Agness *et al.* 2013, p. 13). Bioenergetic modeling suggested that, in the absence of vessel disturbance, Kittlitz's murrelets need to consume about 76 percent of their body mass daily, but with vessel disturbance, this increased to 83–107 percent depending on breeding status and rate of vessel passage; presumed non-breeding Kittlitz's murrelets were more likely to experience chronic increases in energy expense compared to breeding birds because they have more flexible activity budgets (Agness *et al.* 2013, p. 18). The authors concluded that Kittlitz's murrelets may have a relatively small capacity to buffer extra energy demands because they may already be functioning at their physiological limits (Agness *et al.* 2013, p. 18). A follow-up study to refine time activity budgets of Kittlitz's murrelets, especially those found offshore and in the direct path of large vessels, is currently being conducted (Marcella *et al.* 2012, p. 1). Preliminary results indicate that roughly half of all murrelets observed within 0.5 mi (0.8 km) of a vessel path were disturbed, and the proportion of birds to take flight in response to the vessel was greater than 50 percent within 656 ft (200 m) of the vessel, but declined thereafter (Marcella *et al.* 2012, pp. 7, 15). In both years of the study, mean flushing distance of Kittlitz's murrelet (2011=830 ft [253 m], 2012=1,027 ft [313 m]) was smaller than that of marbled murrelet (2011=1,158 ft [353 m], 2012=1,266 ft [386 m]), but this result could be related to species-specific identification rates (Marcella *et al.* 2012, p. 11). Neither of these studies evaluated potential energetic effects to individual Kittlitz's murrelets that are displaced by vessels multiple times per day or continually throughout the season.

Among all core areas that support Kittlitz's murrelets in the breeding

season, Icy Bay is the only glacial fjord system that remains relatively free of commercial and recreational boat traffic. Perhaps coincidentally, this is the only area where Kittlitz's murrelet outnumbered marbled murrelet by a factor of at least two across all years (Kissling *et al.* 2011, p. 7; Kissling, unpublished data). This unique composition of *Brachyramphus* murrelets is very likely due to site-specific environmental conditions, not the absence of anthropogenic effects, but we cannot disregard it, especially because in nearby Yakutat Bay with moderate levels of boat traffic (Schoen *et al.* 2013, p. 59), marbled murrelet abundance is more than double Kittlitz's murrelet abundance (Kissling *et al.* 2011, p. 7).

Incidental Take in Fisheries

Globally, seabird bycatch is one of the most pervasive and immediate threats to many pelagic species, affecting 41 percent of all seabirds species listed as threatened by the International Union for the Conservation of Nature (Croxall *et al.* 2012, p. 10). Commercial, recreational, and subsistence fisheries occur in coastal Alaska and Russia within the range of the Kittlitz's murrelet. Owing to their nearshore feeding and pursuit-diving behavior to forage, murrelets are particularly susceptible to mortality in gillnet fisheries. Incidental take of Kittlitz's murrelets has been documented in the salmon gillnet fisheries in Alaska (Wynne *et al.* 1991, p. 33; Wynne *et al.* 1992, p. 49; Manly 2007, p. 33; Manly 2009, p. 4), subsistence gillnet fisheries in Russia (Artukhin 2011, p. 7; Artukhin *et al.* 2011, p. 28), and in offshore Japanese salmon drift nets (Artukhin *et al.* 2011, p. 31). No studies have aimed specifically to quantify gillnet mortality rates of Kittlitz's murrelet, so data are limited to existing observer programs, most of which are implemented to record interactions and take of marine mammals in gillnet fisheries, and consist of questionnaires distributed to fishermen and local villagers.

In Alaska, data have been collected on incidental take of marine mammals and birds in gillnet fisheries in 4 areas for 2 years each: Prince William Sound and Copper River Delta (1990, 1991), Cook Inlet (1999, 2000), Kodiak Island (2002, 2005), and Yakutat Bay (2007, 2008). Not accounting for observer effort and number of boats monitored, nine adult Kittlitz's murrelets and three unidentified murrelets were killed in Prince William Sound and Copper River Delta (Wynne *et al.* 1991, p. 33; Wynne *et al.* 1992, p. 49), zero Kittlitz's or unidentified murrelets in Cook Inlet

Inlet (Manly 2006, p. 73), one juvenile Kittlitz's murrelet near Kodiak Island (Manly 2007, pp. 27, 33), and one adult Kittlitz's murrelet and one unidentified murrelet near Yakutat (Manly 2009, pp. 29–30). Although these numbers appear to be small, only about 5 percent of the total fishing effort is typically sampled (Manly 2009, p. 3), which is likely insufficient to estimate bycatch rates of rare species. Recognizing the limitations of these data due to low sampling effort, estimated per annum incidental catch of Kittlitz's murrelets was 133 birds in Prince William Sound (Wynne *et al.* 1992, p. 48), zero in Cook Inlet (Manly 2006, p. 73), 18.1 birds (SE=16.8) near Kodiak Island (Manly 2007, p. 36), and 13.7 birds (SE=12.9) in Yakutat Bay (Manly 2009, p. 34). The high variances around the estimates for Kodiak Island and Yakutat Bay reflect both low sampling effort and the relatively low densities of Kittlitz's murrelets at sea.

In some areas, *Brachyramphus* murrelets appear to be disproportionately caught in nets of these fisheries compared to other marine birds (Wynne *et al.* 1991, p. 33; Wynne *et al.* 1992, p. 49; Manly 2009, pp. 31–32), as suggested by Day *et al.* (1999, p. 17). Combining the limited bycatch data described above with information on murrelet and fishing vessel distribution, Blejwas and Wright (2012, p. 2) completed a qualitative risk assessment by determining spatial and temporal overlap of Kittlitz's murrelets and gillnet fishing effort. Temporal overlap between Kittlitz's murrelets and gillnet fisheries was high, but the degree of spatial overlap varied by scale (Blejwas and Wright 2012, p. 14). At a coarse scale, generally within a bay, inlet, or defined set of coastline, there was moderate overlap, but at a finer scale, Kittlitz's murrelets were spatially separated from gillnet fisheries with a few exceptions (e.g., Alitak Bay near Kodiak Island, Manby Point near Yakutat) (Blejwas and Wright 2012, pp. 14–15). While this approach provided the first assessment of the potential magnitude of gillnet fishery impacts to Kittlitz's murrelets, it clearly has some limitations such as the inability to account for intra- and inter-annual variation in murrelet and vessel distribution (Blejwas and Wright 2012, p. 16), and the scope of inference is restricted to daytime hours only when surveys for murrelets were completed (Blejwas and Wright 2012, pp. 17–18). Despite these limitations and the reported low overlap of Kittlitz's murrelets and gillnet fishing effort, bycatch mortalities did occur, and, therefore, gillnets are a source of direct

mortality to some individual Kittlitz's murrelets. Carter (2012, p. 3) clarified previous reports of *Brachyramphus* murrelet mortalities in gillnet fisheries in Alaska and concluded that Kittlitz's murrelets were spatially separated from concentrations of fishing boats and appeared to have greater net avoidance compared to marbled murrelets.

There are comparatively fewer data on incidental take of Kittlitz's murrelet in Russian fisheries, but mortalities have been documented (Artukhin 2011, p. 7; Artukhin *et al.* 2011, p. 28). In the Kamchatka region, marine trap nets are the primary method used in the commercial coastal salmon fishery, constituting 95 percent of the total harvest (Artukhin 2011, p. 7). Owing to the design and operation of these nets, risk of entanglement of birds is low, and, in fact, no bycatch mortality of Kittlitz's murrelets was documented during the observer program and is not considered to be a concern in this area (Artukhin 2011, p. 7). However, along the Chukotka Peninsula, different fishing gear and methods are used in the subsistence fishery near coastal villages, resulting in three Kittlitz's murrelets being caught in fishnets used by native people in 1971 (Artukhin *et al.* 2011, p. 28). It is unknown if this is a continuing occurrence in this region, but it seems likely.

In some areas, gillnet fishing can occur at all times of day and may interact with individual Kittlitz's murrelets during the night (Allyn 2012, p. 104). However, within glacial fjords and bays, Kittlitz's murrelets rapidly exit daytime locations at dusk and shift to deeper waters farther from shore where they remain throughout the night (Kissling, unpublished data). Furthermore, Kittlitz's murrelets typically forage during the day (Day *et al.* 1999, p. 9; Madison *et al.* 2010, p. 1), especially in the morning (Day and Nigro 2000, p. 5), which reduces potential for interactions between Kittlitz's murrelets and gillnets at night. Nonetheless, Carter (2012, p. 2) reported an observation from a fisherman suggesting that most *Brachyramphus* mortalities (80 percent) in gillnets occurred at night, but there is no evidence to substantiate this statement.

We know little about potential overlap of the Kittlitz's murrelet and the North Pacific high-seas driftnet fishery. Artukhin *et al.* (2011, p. 31) reported that bycatch of Kittlitz's murrelet in Japanese salmon drift nets was estimated to be about 1 bird per year (95 percent CI=0–2). Generally, offshore mortality of *Brachyramphus* murrelets is not recognized as a significant problem (Ainley *et al.* 1981, p. 803;

DeGange and Day 1991, p. 253; Johnson *et al.* 1993, p. 473; Carter *et al.* 1995, p. 275), but does occasionally occur.

Conservation Efforts To Reduce Other Natural or Manmade Factors Affecting Its Continued Existence

The Service and the National Marine Fisheries Service entered into a memorandum of understanding (MOU) in June 2012 with the overall purpose to conserve migratory birds (per Executive Order 13186, "Responsibilities of Federal Agencies to Protect Migratory Birds") (National Marine Fisheries Service 2012, [http://www.alaskafisheries.noaa.gov/protectedresources/seabirds/mou/eo13186_nmfs_fws_mou2012.pdf, accessed on July 11, 2013]). Specifically, the MOU promotes a partnership between the two agencies to minimize the unintentional take of seabirds in commercial fisheries nationally and internationally. Although the primary focus is reducing bycatch of seabirds in longline gear, other gear types (e.g., gillnet fisheries) more likely to impact the Kittlitz's murrelet are also included.

We are not aware of any other conservation efforts or other voluntary actions that may help to reduce or ameliorate other natural or manmade factors that may be a threat to the continued existence of the Kittlitz's murrelet.

Summary of Factor E

To summarize, collectively, results of the vessel disturbance studies demonstrate that Kittlitz's murrelets do respond to vessels, including those at great distances from them, and that there may be increased energetic costs to individuals as a consequence, but displacement is temporary and encounter rates are low. It is challenging to assess vessel activity and disturbance as a possible threat to the Kittlitz's murrelet because there is no evidence to suggest that there are fitness impacts, such as reduced nest success or survival, affecting population(s) or even individual Kittlitz's murrelets. In addition, vessel activity is relatively limited in scope geographically and seasonally, and some individual murrelets may habituate to boat traffic (Speckman *et al.* 2004, pp. 32–33). Therefore, we conclude that vessel disturbance may be an additive stressor to some individual Kittlitz's murrelets, but we conclude that it currently does not pose a population- or species-level threat to the Kittlitz's murrelet, nor is it likely to become a threat in the future.

Commercial and subsistence gillnets are a known source of mortality of individual Kittlitz's murrelets. Although

temporal overlap of gillnet fishing and distribution of this species is high, spatial overlap is currently low (Blejwas and Wright 2012, pp. 14–15). At a coarse scale, gillnet fishing effort overlaps significantly with Kittlitz's murrelet distribution (Blejwas and Wright 2012, p. 14), but the opposite is not necessarily true; the Kittlitz's murrelet is distributed across some nearshore marine waters where gillnet fishing does not occur, including Glacier Bay (Piatt *et al.* 2011, pp. 68–69), Alaska Peninsula (Madison *et al.* 2011, p. 115), and Aleutian Islands (Madison *et al.* 2011, pp. 116–117). Furthermore, fine scale overlap of gillnet fishing and Kittlitz's murrelet distribution within a specific area is minimal (Blejwas and Wright 2012, pp. 14–15). As pursuit-divers that capture their prey underwater, Kittlitz's murrelets are susceptible to being caught in gillnets, but some aspects of their behavior and habitat use, such as moving to deeper water at night and perhaps net avoidance, may minimize their overall risk to gillnet mortality. Thus, although bycatch mortality of Kittlitz's murrelets does occur, we conclude that incidental take of individuals in commercial, recreational, or subsistence fisheries is not a population- or species-level threat to the Kittlitz's murrelet, nor do we anticipate that it will become a threat in the future.

Cumulative Effects From Factors A through E

The Kittlitz's murrelet is faced with numerous potential stressors throughout its range and its annual cycle, but none of these individually constitutes a threat to the species now or in the future. However, more than one stressor may interact synergistically or compound with one another to impact the Kittlitz's murrelet negatively at the population or species level. Not all of the identified possible threats described above are present or are equally present across this species' range or its annual cycle (e.g., incidental take in fisheries, vessel disturbance), and, in some cases, we were not able to determine the response of this species to the stressor because we lack a mechanistic link (e.g., loss of glaciers). For some of the identified stressors, we were unable to conclude that there would be a negative response of Kittlitz's murrelet at the population or species level to those stressors or changes in the frequency and intensity of them. Yet, if multiple factors are working together to impact the Kittlitz's murrelet negatively, the cumulative effects should be manifested in a measurable and consistent demographic change at the population or species

level, but we did not determine this to be the case.

Based on our analyses of population status and trend (see *Population Status and Trends*, above, for detailed summary), we concluded that Kittlitz's murrelet populations declined at about 30 percent per annum prior to 2000 and since then, the populations appear to have stabilized or may be declining and are projected to continue to decline at a gradual, slow rate. In specific areas, such as Prince William Sound and Glacier Bay, declines in the Kittlitz's murrelet have been documented (Kuletz *et al.* 2011a, p. 104; Kuletz *et al.* 2011b, p. 91; Piatt *et al.* 2011, p. 70) and disputed (Hodges and Kirchhoff 2012, p. 117; Kirchhoff *et al.* 2013, p. 10) or the reliability of data has been questioned (Day 2011, p. 51). We acknowledge that these local population declines likely occurred, but when evaluated as a whole, there is no credible evidence of a rangewide population decline in Kittlitz's murrelet since 2000, despite multiple stressors facing this species in all or parts of its range and annual cycle. Thus, the best available information suggests that cumulative effects from possible stressors described under *Factors A* through *E* above are not so great so as to pose a threat to the persistence of this species now or in the future.

Finding

As required by the Act, we considered the five factors in assessing whether the Kittlitz's murrelet is an endangered or threatened species throughout all of its range. We examined the best scientific and commercial information available regarding the past, present, and future threats faced by the Kittlitz's murrelet. We reviewed the petition, information available in our files, other available published and unpublished information, and we consulted with recognized Kittlitz's murrelet experts and other Federal, State, and tribal agencies. We also requested comments and information from all interested parties in each of our CNORs from 2004 to 2011, and in preparation for this finding. In response to our request, we received formal comments from the Alaska Department of Fish and Game and CBD. We also convened a 1-day workshop to review the methods and interpretation of results of the multiple-populations model described above (see *Population Status and Trends*, above). As part of our review, we brought together researchers with experience and expertise in Kittlitz's murrelet biology from across the Service to review and evaluate the best available scientific and commercial information

thoroughly at several meetings in Anchorage, Alaska.

We considered a variety of potential threats facing the Kittlitz's murrelet and its marine and terrestrial habitats, including climate change, exposure to environmental contaminants and marine pollution, disease, changes in predation, disturbance from vessel traffic, and incidental take in fisheries. To determine if these risk factors individually or collectively put the species in danger of extinction throughout its range, or are likely to do so in the foreseeable future, we first considered if the identified risk factors were causing a population decline or other demographic changes, or were likely to do so in the foreseeable future.

Boat-based surveys for Kittlitz's murrelets on the water during the breeding season are the most efficient method for estimating population size and trend of this species. Using the most current survey data available for each study site, we estimated the current global population of Kittlitz's murrelet to be 33,583 birds (95 percent CI=25,620–41,546), which is a minimum estimate because many areas within the range of this species remain unsurveyed. Estimating population trend of Kittlitz's murrelet is difficult because populations are geographically clustered, most individuals do not breed annually and therefore can be highly mobile during the breeding season when surveys are conducted, and the species looks similar to the more common marbled murrelet. These issues, coupled with inconsistencies in survey design and analysis, have complicated the use of historical data in trend estimation of local population size. Furthermore, there are few study sites that have been surveyed regularly enough to estimate local population trends reliably. Without accounting for intra- and inter-annual movements, apparent declines have been documented in local population size of Kittlitz's murrelet in some study sites over the last two decades. When all populations with sufficient years of data are evaluated collectively, Kittlitz's murrelet abundance declined by roughly 30 percent annually between 1989 and 2000, but populations appear to have stabilized since then.

Although surveys indicate that the population of Kittlitz's murrelet stabilized between 2000 and 2012, several lines of evidence across a similar time frame suggest that reproduction of this species is poor. Both the number of birds that attempt to breed annually and the number that breed successfully are low with some variation among study sites and years. Only a few studies on

the Kittlitz's murrelet have estimated demographic parameters (e.g., breeding propensity, nest success, survival) necessary to identify key factors that may be influencing population stability and to predict future population size. We combined all demographic information available since 2000 for the Kittlitz's murrelet and concluded that populations will likely undergo a slow decline in the future of less than 2 percent annually, provided that environmental conditions and stressors remain the same on average. Using the multiple-populations model, we estimated that the probability of extinction in 25 years is less than 1 percent, but we are unable to project population size reliably beyond this timeframe. The model predictions of population size informed our assessment of the current and future status of this species along with the local populations information and our trend analysis. Therefore, based on the best available information, we find that population trend of Kittlitz's murrelet is currently either stable or possibly slightly declining.

We then identified and evaluated existing and potential stressors on the Kittlitz's murrelet. We aimed to determine if these stressors are affecting this species currently or are likely to do so in the foreseeable future, are likely to increase or decrease, and may rise to the level of a threat to the species, rangewide or at the population level. Because this species is broadly distributed across Alaska and Russia, occupying numerous habitats throughout its annual cycle, we evaluated both exposure and response of Kittlitz's murrelets to each identified stressor.

We examined several stressors that were temporally episodic, spatially localized, or both, relative to the seasonal distribution of the Kittlitz's murrelet. For some of these stressors, we have little information to assess their frequency or intensity now or in the foreseeable future or to indicate that the stressor is likely to increase in the foreseeable future. We found that disease, harmful algal blooms, incidental take in fisheries, disturbance from vessel activity, impacts from scientific research, or exposure to environmental contaminants are not threats to the Kittlitz's murrelet (see discussions under *Factors A, B, C, and E*, above). Although some of these stressors do result in mortality, risk, or increased energetic costs to small numbers of Kittlitz's murrelets, the best available information indicates that none of these stressors is currently having a population- or species-level

effect, or is likely to do so in the foreseeable future.

Climate change is occurring and is predicted to continue, but there is substantial uncertainty in the response of the Kittlitz's murrelet to possible environmental changes as a consequence of climate change. We considered loss of glaciers and winter sea ice, increased contaminated meltwater, and changes in ocean conditions as climate change stressors that may affect the persistence of the Kittlitz's murrelet and its habitats. Of these stressors, we were unable to evaluate the significance of glacial meltwater as a source of contamination and loss of winter sea ice to the Kittlitz's murrelet because few data exist. We are unaware of any contaminant studies from coastal ice fields or alpine glaciers within the range of the Kittlitz's murrelet, and information on winter distribution and habitat use of this species is too limited and preliminary to assess potential impacts of the loss of winter sea ice on the Kittlitz's murrelet. We therefore focused our evaluation of climate change stressors to this species on the loss of glaciers and changes in ocean conditions.

Approximately 66 percent of the minimum global population of Kittlitz's murrelet occupy glacially affected marine waters during the breeding season, but we did not identify a causal link between the tidewater glaciers and persistence of the Kittlitz's murrelet. Several studies report associations between Kittlitz's murrelet marine distribution and tidewater glaciers in areas where glaciers exist, but this species is broadly distributed and occurs in areas that have been deglaciated for thousands of years. These rangewide inconsistencies in marine habitat use make it difficult to predict response of the Kittlitz's murrelet to the loss of glaciers without an identified, underlying mechanism explaining the association. We identified and evaluated many hypothetical consequences to this species and its viability due to loss of glaciers, such as changes in foraging efficiency, changes in marine productivity, and increasing distance between foraging and nesting sites, but none was supported with sufficient evidence, or the scope of inference and the available data were too limited to draw conclusions at the population or species level (see *Factor A* discussion for further details). We did not find information to indicate that Kittlitz's murrelets experience greater foraging success, or subsequent productivity or survival, in glacially affected waters compared to those without glacial

influence. Thus, although most glaciers within the range of this species are currently in retreat or thinning, at this time we conclude that this change in its habitat is not likely to negatively impact the Kittlitz's murrelet at the population- or species-level because available data do not suggest that glaciers are an essential habitat feature to their life history. We concluded that this species has the ability to adapt or is resilient to changing environmental conditions, and therefore changes in glaciers should not directly threaten the viability of the Kittlitz's murrelet population.

The Kittlitz's murrelet spends most of its life at sea and therefore is subject to ongoing and forecasted changes in ocean conditions that may affect its prey base, which in turn, would likely affect its survival and reproduction. We considered potential consequences to the Kittlitz's murrelet and its prey as a result of ocean warming and acidification and decadal-scale ocean variability, or climatic regime shifts. We relied on information about the species' diet and foraging preferences, as well as population trend, to assess potential impacts to this species from changes in ocean conditions (see *Factor A* discussion).

We expect changes in ocean conditions within the range of the Kittlitz's murrelet to occur, but we cannot determine the demographic response of this species or its prey to these changes, largely owing to sparse information on diet and demographics of the Kittlitz's murrelet. Ocean warming and acidification is a global problem that will intensify with continued carbon dioxide emissions and may significantly affect marine ecosystems, especially those in high-latitude regions. As ocean temperatures change, we anticipate poleward shifts in distribution of marine species that have limited temperature ranges, changes to the thermohaline circulation, variability in the timing and magnitude of phytoplankton blooms, and changes in the local abundance of forage fish (see *Factor A* discussion for details). In addition, calcifying marine organisms, particularly pteropod snails, a common prey item for various zooplankton and fish, are expected to be most affected by increased ocean acidity and subsequent decreases in carbonate compounds. Although the frequency and intensity is unpredictable, we also assume that oceanic regime shifts will continue to occur in the North Pacific Ocean and Bering and Chukchi seas, as they have over the last century, causing subsequent community or taxonomic reorganizations. Consequently, as a top predator in the marine ecosystem, the

Kittlitz's murrelet may experience alterations to underlying food webs in the future. However, the Kittlitz's murrelet has a diverse diet, appears to have the ability to switch prey when necessary, and can forage successfully in a variety of marine and perhaps freshwater habitats (see *Foraging*, above). These are all characteristics that should facilitate adaptation and resiliency in diet and foraging preferences to changes in ocean conditions as a result of warming, acidification, and regime shifts. Nesting Kittlitz's murrelets will continue to require access to high-quality forage fish for delivery to chicks at nests, but we have little information to suggest that changes in ocean conditions in response to climate change are limiting or will limit nest success at the population or species level in the foreseeable future. Furthermore, we do not have evidence that the Kittlitz's murrelet or its diet have fluctuated concurrently with previous regime shifts or ocean warming and acidification. Thus, the best available information suggests that changes in ocean conditions do not currently put the species at risk of extinction, nor are they likely to do so in the foreseeable future.

The Kittlitz's murrelet is considered to be vulnerable to marine oil pollution because it spends most of its annual cycle at sea, forages by diving and pursuing prey, and is typically found nearshore. We anticipate marine traffic within the range of the Kittlitz's murrelet to increase, but the rate of increase is dependent on economic activity and natural resource development. As marine traffic increases, the risk of petroleum contamination from both accidental spills and routine vessel operation is also expected to increase. We assessed the spatial and temporal overlap of marine oil spills and contaminated sites since 1995, and the seasonal distribution and abundance of the Kittlitz's murrelet in order to determine the magnitude of the risk to this species from marine pollution (see *Factor A* discussion). We found that overlap was generally low, with most spills releasing small amounts of substance in localized areas at times of the year when Kittlitz's murrelet densities were relatively low. Although few in number, larger spills did occur and overlap with the distribution of the Kittlitz's murrelet, primarily during the breeding season in Prince William Sound and near Adak Island. However, the broad distribution and relatively low densities of the Kittlitz's murrelet on the water throughout most of the year reduce the

risk of population-level impacts from any single event, with the exception being the 1989 *Exxon Valdez* oil spill. In addition, technological and regulatory improvements, such as the Oil Pollution Act of 1990, are likely to reduce the risk of contamination and to improve response and cleanup in the event of a spill. We conclude that exposure to hydrocarbon contamination is an acute and chronic source of mortality of low numbers of individual Kittlitz's murrelets that does not rise to the level of a threat to the persistence of this species now, nor is it likely to do so in the future.

Many life-history traits of the Kittlitz's murrelet developed to avoid predation at the nest, on the water, or in transit. We assessed predation of nestling and adult Kittlitz's murrelets by native, introduced, and transplanted predators to identify possible factors that may have resulted in changes to predation rates of the Kittlitz's murrelet. We first identified known predators and their distribution and diet across the range of the Kittlitz's murrelet, and then we evaluated local or population trend of those predators and possible factors contributing to the trend. We categorized predation events into two types: nest predation and active predation (see *Factor C* discussion).

In some parts of this species' range, nest predation by fox appears to be a significant cause of nest failure, but we have no information to indicate that fox abundance or predation rates on Kittlitz's murrelet eggs or nestlings has increased or is likely to increase in the future. Fox and their prey were introduced to many islands of coastal Alaska and likely had an effect on local populations of Kittlitz's murrelets, but over the last few decades, eradication efforts have nearly eliminated all introduced fox, thereby removing the impact to Kittlitz's murrelets. In some areas, introduced species may have had and continue to have an indirect impact to the Kittlitz's murrelet by enhancing prey abundance for native species that are nest predators such as fox. Similarly, nest sites that are currently inaccessible by terrestrial predators, may be reachable as glaciers recede and primary succession follows. While we can postulate about possible changes in rates and patterns of nest predation of the Kittlitz's murrelet, we have no credible information to support the proposition that these changes actually occurred, are occurring, or have had a population- or species-level impact to the Kittlitz's murrelet.

Active predation, when adults or juveniles are killed away from the nest site, is more difficult to quantify, but

has potential to have a greater population-level impact than nest predation because it can result in adult mortality and likely occurs rangewide and year-round. Peregrine falcons and bald eagles are the only known active predators of the Kittlitz's murrelet, but the latter species likely kills far fewer individual murrelets compared to the peregrine falcon, which along the coast feeds primarily on small alclids. Populations of both of these raptor species have fluctuated over the last century due to human-caused influences (e.g., persecution, exposure to contaminants) and may be benefitting from glacial recession, although credible evidence is lacking. We found information to suggest that in at least one glacial fjord system, peregrine falcons can prey on Kittlitz's murrelets at rates that could have an impact to the local population, but any impact is likely to be localized and temporary until other alternate prey species colonize these newly created habitats. Thus, we found that predation, in and of itself, is not a population- or species-level threat to the Kittlitz's murrelet, nor is it likely to become a threat in the future.

In summary, we found that the Kittlitz's murrelet experiences stressors in its marine and terrestrial habitats throughout its annual cycle and range, but based on our consideration of the best available scientific and commercial data information we determined that the identified stressors, individually or collectively, do not pose a threat to the species at the population- or range-wide level now or in the foreseeable future. Some local populations of the Kittlitz's murrelet likely declined, but there is no identified causal link between demographic change in this species and the stressors evaluated in our assessment. Furthermore, when analyzed collectively, we found that populations of Kittlitz's murrelet are currently stable or possibly slightly declining. We acknowledge that many of the stressors facing this species are occurring, and some will likely increase in the future, but we cannot predict the demographic response of the Kittlitz's murrelet to changes in these stressors. We identified some known sources of mortality to small numbers of Kittlitz's murrelet, but most were temporally episodic, spatially localized, or both. We postulated that some life-history traits and behaviors of the Kittlitz's murrelet, such as their broad distribution and variable diet, will counterbalance or mitigate possible effects of the identified stressors, including those associated with climate

change. Based on our review of the best available scientific and commercial information pertaining to the five factors, we find that the stressors are not of sufficient imminence, intensity, or magnitude to indicate that the Kittlitz's murrelet is in danger of extinction (endangered), or likely to become endangered within the foreseeable future (threatened), throughout all of its range.

Distinct Vertebrate Population Segment

After assessing whether the species is endangered or threatened throughout its range, we next consider whether a distinct vertebrate population segment (DPS) of the Kittlitz's murrelet meets the definition of an endangered or threatened species.

Under the Service's Policy Regarding the Recognition of Distinct Vertebrate Population Segments Under the Endangered Species Act (61 FR 4722, February 7, 1996), three elements are considered in the decision concerning the establishment and classification of a possible DPS. These are applied similarly for addition to or removal from the Federal List of Endangered and Threatened Wildlife. These elements include:

(1) The discreteness of a population in relation to the remainder of the species to which it belongs;

(2) The significance of the population segment to the species to which it belongs; and

(3) The population segment's conservation status in relation to the Act's standards for listing, delisting, or reclassification (i.e., is the population segment endangered or threatened).

Discreteness

Under the DPS policy, a population segment of a vertebrate taxon may be considered discrete if it satisfies either one of the following conditions:

(1) It is markedly separated from other populations of the same taxon as a consequence of physical, physiological, ecological, or behavioral factors.

Quantitative measures of genetic or morphological discontinuity may provide evidence of this separation.

(2) It is delimited by international governmental boundaries within which differences in control of exploitation, management of habitat, conservation status, or regulatory mechanisms exist that are significant in light of section 4(a)(1)(D) of the Act.

The Kittlitz's murrelet is considered a single panmictic population, but recent studies suggest that there is strong population genetic structure in this species, resulting in at least two genetic groups. A comprehensive and targeted

genetic study that adequately samples individual Kittlitz's murrelets from across their range, including Russia, at a specified time of year has not been completed. However, based on the most recent genetic analysis, there is an eastern group of the Kittlitz's murrelet, ranging from Glacier Bay to Kodiak Island in the Gulf of Alaska during the breeding season, and a western group that occupies Adak, Agattu, and Attu islands in the central and western Aleutian Archipelago during the breeding season (see *Taxonomy and Species Description*, above, for more details). There are low levels of contemporary movement among the two groups, suggesting that connectivity still exists with at least some individual Kittlitz's murrelets interbreeding and producing viable offspring. The area between Atka and Unalaska islands in the eastern Aleutians and in northern Alaska appear to be contact zones where Kittlitz's murrelets have mixed ancestry of both groups. We accept the genetic basis of the eastern and western groups of the Kittlitz's murrelet and therefore evaluated whether either group meets the definition of discreteness as described in the 1996 DPS policy.

We assessed physical, physiological, ecological, and behavioral factors of Kittlitz's murrelets in the eastern and western groups to determine the level of separation between the two genetic groups. There are no known morphological or physical differences, such as egg characteristics, plumage coloration, size, wing or tail length, bill measurements, or molt patterns, between the eastern and western groups of the Kittlitz's murrelet. Similarly, we have no information to suggest that flight, swimming and diving, sexual behavior (mate attraction, pair bonding), vocalizations, degree of socialization, or interspecific behavior is different between the two groups. Breeding phenology is slightly later in the western group compared to the eastern group, but this difference is most certainly due to the persistence of sea ice and terrestrial ice and snow in the Aleutian Islands compared to the Gulf of Alaska; in fact, phenology is most delayed in northern Alaska, where mixed ancestry of the Kittlitz's murrelet occurs. Incubation length and post-hatching parental care are similar, but length of the chick-rearing period is greater at nests monitored in the Aleutian Islands compared to nests in the Gulf of Alaska. The difference in average number of days between hatching and fledging is presumably due to quality of chick diet (see *Reproductive Performance and Factor A*

discussion), not an ecological or behavioral difference between Kittlitz's murrelets in the western and eastern groups. Post-breeding migration timing and routes of Kittlitz's murrelets in the eastern and western groups are similar with individuals moving into the Bering and Chukchi seas in August and September. Individual Kittlitz's murrelets have not been tracked between October and May, and, therefore, we cannot evaluate possible overwinter separation of Kittlitz's murrelets by group.

The only possible ecological difference in Kittlitz's murrelets belonging to the eastern and western genetic groups is associated with nesting habitat. In the central and western Aleutian Islands, Kittlitz's murrelets nest in areas with greater amounts of vegetative cover (51 percent) compared to nests in the Gulf of Alaska (3–12 percent) and northern Alaska (14 percent). However, regardless of the region, Kittlitz's murrelets consistently nest in the least vegetated areas available on the landscape, presumably to maximize camouflage and nest safety from predators (see *Nesting* for more details). Thus, we do not know whether or not the difference in percent vegetative cover near nest sites serves as ecological separation of Kittlitz's murrelets in the western and eastern groups. Although the distribution of the genetic groups may be partially explained by the distribution of glaciers, there are several regions of genetic introgression, including the eastern Aleutian Islands and northern Alaska, as well as areas in the eastern group, like Kodiak Island, that lack glaciers. Furthermore, as mentioned above, there are low levels of contemporary movement between these two genetic groups, suggesting that genetic continuity exists.

The Kittlitz's murrelet is broadly distributed across coastal Alaska and eastern Russia where it spends its entire annual cycle, but only less than 5 percent of the minimum global population of the Kittlitz's murrelet resides in Russian waters during the breeding season. Despite the international governmental boundary essentially bisecting the distribution of this species, we have no reason to conclude that differences in control of exploitation, management of the habitat, conservation status of the species, or regulatory mechanisms exist that are significant to the listing status of the Kittlitz's murrelet.

Determination of Distinct Population Segment

We determine, based on a review of the best available information, that the western and eastern populations of the Kittlitz's murrelet do not meet the discreteness conditions of the 1996 DPS policy. Therefore, neither of these population segments qualifies as a DPS under our policy and is not a listable entity under the Act.

The DPS policy is clear that significance is analyzed only when a population segment has been identified as discrete. Since we found that the population segment did not meet the discreteness element, we will not conduct an evaluation of significance.

Significant Portion of the Range

Under the Act and our implementing regulations, a species may warrant listing if it is endangered or threatened throughout all or a significant portion of its range. The Act defines "endangered species" as any species which is "in danger of extinction throughout all or a significant portion of its range," and "threatened species" as any species which is "likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range." The definition of "species" is also relevant to this discussion. The Act defines "species" as follows: "The term 'species' includes any subspecies of fish or wildlife or plants, and any distinct population segment [DPS] of any species of vertebrate fish or wildlife which interbreeds when mature." The phrase "significant portion of its range" (SPR) is not defined by the statute, and we have never addressed in our regulations: (1) The consequences of a determination that a species is either endangered or likely to become so throughout a significant portion of its range, but not throughout all of its range; or (2) what qualifies a portion of a range as "significant."

Two recent district court decisions have addressed whether the SPR language allows the Service to list or protect less than all members of a defined "species": *Defenders of Wildlife v. Salazar*, 729 F. Supp. 2d 1207 (D. Mont. 2010), concerning the Service's delisting of the Northern Rocky Mountain gray wolf (74 FR 15123, April 2, 2009); and *WildEarth Guardians v. Salazar*, 2010 U.S. Dist. LEXIS 105253 (D. Ariz. September 30, 2010), concerning the Service's 2008 finding on a petition to list the Gunnison's prairie dog (73 FR 6660, February 5, 2008). The Service had asserted in both of these determinations that it had

authority, in effect, to protect only some members of a "species," as defined by the Act (i.e., species, subspecies, or DPS), under the Act. Both courts ruled that the determinations were arbitrary and capricious on the grounds that this approach violated the plain and unambiguous language of the Act. The courts concluded that reading the SPR language to allow protecting only a portion of a species' range is inconsistent with the Act's definition of "species." The courts concluded that once a determination is made that a species (i.e., species, subspecies, or DPS) meets the definition of "endangered species" or "threatened species," it must be placed on the list in its entirety and the Act's protections applied consistently to all members of that species (subject to modification of protections through special rules under sections 4(d) and 10(j) of the Act).

Consistent with that interpretation, and for the purposes of this finding, we interpret the phrase "significant portion of its range" in the Act's definitions of "endangered species" and "threatened species" to provide an independent basis for listing; thus there are two situations (or factual bases) under which a species would qualify for listing: a species may be endangered or threatened throughout all of its range; or a species may be endangered or threatened in only a significant portion of its range. If a species is in danger of extinction throughout a significant portion of its range, the species is an "endangered species." The same analysis applies to "threatened species." Based on this interpretation and supported by existing case law, the consequence of finding that a species is endangered or threatened in only a significant portion of its range is that the entire species shall be listed as endangered or threatened, respectively, and the Act's protections shall be applied across the species' entire range.

We conclude, for the purposes of this finding, that interpreting the significant portion of its range phrase as providing an independent basis for listing is the best interpretation of the Act because it is consistent with the purposes and the plain meaning of the key definitions of the Act; it does not conflict with established past agency practice (i.e., prior to the 2007 Solicitor's Opinion, as no consistent, long-term agency practice has been established; and it is consistent with the judicial opinions that have most closely examined this issue. Having concluded that the phrase "significant portion of its range" provides an independent basis for listing and protecting the entire species, we next turn to the meaning of

"significant" to determine the threshold for when such an independent basis for listing exists.

Although there are potentially many ways to determine whether a portion of a species' range is "significant," we conclude, for the purposes of this finding, that the significance of the portion of the range should be determined based on its biological contribution to the conservation of the species. For this reason, we describe the threshold for "significant" in terms of an increase in the risk of extinction for the species. We conclude that a biologically based definition of "significant" best conforms to the purposes of the Act, is consistent with judicial interpretations, and best ensures species' conservation. Thus, for the purposes of this finding, and as explained further below, a portion of the range of a species is "significant" if its contribution to the viability of the species is so important that without that portion, the species would be in danger of extinction.

We evaluate biological significance based on the principles of conservation biology using the concepts of redundancy, resiliency, and representation. *Resiliency* describes the characteristics of a species and its habitat that allow it to recover from periodic disturbance. *Redundancy* (having multiple populations distributed across the landscape) may be needed to provide a margin of safety for the species to withstand catastrophic events. *Representation* (the range of variation found in a species) ensures that the species' adaptive capabilities are conserved. Redundancy, resiliency, and representation are not independent of each other, and some characteristic of a species or area may contribute to all three. For example, distribution across a wide variety of habitat types is an indicator of representation, but it may also indicate a broad geographic distribution contributing to redundancy (decreasing the chance that any one event affects the entire species), and the likelihood that some habitat types are less susceptible to certain threats, contributing to resiliency (the ability of the species to recover from disturbance). None of these concepts is intended to be mutually exclusive, and a portion of a species' range may be determined to be "significant" due to its contributions under any one or more of these concepts.

For the purposes of this finding, we determine if a portion's biological contribution is so important that the portion qualifies as "significant" by asking whether *without that portion*, the representation, redundancy, or

resiliency of the species would be so impaired that the species would have an increased vulnerability to threats to the point that the overall species would be in danger of extinction (i.e., would be “endangered”). Conversely, we would not consider the portion of the range at issue to be “significant” if there is sufficient resiliency, redundancy, and representation elsewhere in the species’ range that the species would not be in danger of extinction throughout its range if the population in that portion of the range in question became extirpated (extinct locally).

We recognize that this definition of “significant” (a portion of the range of a species is “significant” if its contribution to the viability of the species is so important that without that portion, the species would be in danger of extinction) establishes a threshold that is relatively high. On the one hand, given that the consequences of finding a species to be endangered or threatened in an significant portion of its range would be listing the species throughout its entire range, it is important to use a threshold for “significant” that is robust. It would not be meaningful or appropriate to establish a very low threshold whereby a portion of the range can be considered “significant” even if only a negligible increase in extinction risk would result from its loss. Because nearly any portion of a species’ range can be said to contribute some increment to a species’ viability, use of such a low threshold would require us to impose restrictions and expend conservation resources disproportionately to conservation benefit: listing would be rangewide, even if only a portion of the range of minor conservation importance to the species is imperiled. On the other hand, it would be inappropriate to establish a threshold for “significant” that is too high. This would be the case if the standard were, for example, that a portion of the range can be considered “significant” only if threats in that portion result in the entire species’ being currently endangered or threatened. Such a high bar would not give the significant portion of its range phrase independent meaning, as the Ninth Circuit held in *Defenders of Wildlife v. Norton*, 258 F.3d 1136 (9th Cir. 2001).

The definition of “significant” used in this finding carefully balances these concerns. By setting a relatively high threshold, we minimize the degree to which restrictions will be imposed or resources expended that do not contribute substantially to species conservation. But we have not set the threshold so high that the phrase “in a

significant portion of its range” loses independent meaning. Specifically, we have not set the threshold as high as it was under the interpretation presented by the Service in the *Defenders* litigation. Under that interpretation, the portion of the range would have to be so important that current imperilment there would mean that the species would be *currently* imperiled everywhere. Under the definition of “significant” used in this finding, the portion of the range need not rise to such an exceptionally high level of biological significance. (We recognize that if the species is imperiled in a portion that rises to that level of biological significance, then we should conclude that the species is in fact imperiled throughout all of its range, and that we would not need to rely on the significant portion of its range language for such a listing.) Rather, under this interpretation we ask whether the species would be endangered everywhere without that portion, i.e., if that portion were completely extirpated. In other words, the portion of the range need not be so important that even the species being in danger of extinction in that portion would be sufficient to cause the species in the remainder of the range to be endangered; rather, the *complete* extirpation (in a hypothetical future) of the species in that portion would be required to cause the species in the remainder of the range to be endangered.

The range of a species can theoretically be divided into portions in an infinite number of ways. However, there is no purpose to analyzing portions of the range that have no reasonable potential to be significant or to analyzing portions of the range in which there is no reasonable potential for the species to be endangered or threatened. To identify only those portions that warrant further consideration, we determine whether there is substantial information indicating that: (1) The portions may be “significant,” and (2) the species may be in danger of extinction there or likely to become so within the foreseeable future. Depending on the biology of the species, its range, and the threats it faces, it might be more efficient for us to address the significance question first or the status question first. Thus, if we determine that a portion of the range is not “significant,” we do not need to determine whether the species is endangered or threatened there; if we determine that the species is not endangered or threatened in a portion of its range, we do not need to determine

if that portion is “significant.” In practice, a key part of the determination that a species is in danger of extinction in a significant portion of its range is whether the threats are geographically concentrated in some way. If the threats to the species are essentially uniform throughout its range, no portion is likely to warrant further consideration. Moreover, if any concentration of threats to the species occurs only in portions of the species’ range that clearly would not meet the biologically based definition of “significant,” such portions will not warrant further consideration.

We evaluated the current range of the Kittlitz’s murrelet to determine if there is any apparent geographic concentration of potential threats to this species. We examined potential threats from climate change, exposure to environmental contaminants and marine pollution, disease, changes in predation, disturbance from vessel traffic, and incidental take in fisheries. We found no concentration of threats that suggest the Kittlitz’s murrelet may be in danger of extinction in a portion of its range. We found no portion of its range where threats are significantly concentrated or substantially greater than in other portions of its range. Therefore, we find that known factors affecting the Kittlitz’s murrelet are essentially uniform throughout its range, indicating no portion of the range of the Kittlitz’s murrelet warrants further consideration of possible endangered or threatened status under the Act. The best available information does not suggest that there has been a notable range contraction of the Kittlitz’s murrelet, and therefore we find that lost historical range does not constitute an important component of our analysis of whether any particular area is a significant portion of the range for the Kittlitz’s murrelet.

Conclusion of 12-Month Finding

Our review of the best available scientific and commercial information indicates that the Kittlitz’s murrelet is not in danger of extinction (endangered) nor likely to become endangered within the foreseeable future (threatened), throughout all or a significant portion of its range. Therefore, we find that listing the Kittlitz’s murrelet as an endangered or threatened species under the Act is not warranted at this time.

We request that you submit any new information concerning the status of, or threats to, the Kittlitz’s murrelet to our Juneau Fish and Wildlife Field Office (see ADDRESSES) whenever it becomes available. New information will help us monitor the Kittlitz’s murrelet and

encourage its conservation. If an emergency situation develops for the Kittlitz's murrelet, we will act to provide immediate protection.

References Cited

A complete list of references cited is available on the Internet at <http://www.regulations.gov> at Docket No. FWS-R7-ES-2013-0099 and upon

request from the Juneau Fish and Wildlife Field Office (see **ADDRESSES**).

Authors

The primary authors of this notice are the staff members of the Juneau Fish and Wildlife Field Office.

Authority

The authority for this section is section 4 of the Endangered Species Act

of 1973, as amended (16 U.S.C. 1531 *et seq.*).

Dated: September 23, 2013.

Rowan W. Gould,

Acting Director, U.S. Fish and Wildlife Service.

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