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

**WHERE:** Office of the Federal Register  
Conference Room, Suite 700  
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Washington, DC 20002

**RESERVATIONS:** (202) 741-6008



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Federal Register

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This section of the FEDERAL REGISTER contains regulatory documents having general applicability and legal effect, most of which are keyed to and codified in the Code of Federal Regulations, which is published under 50 titles pursuant to 44 U.S.C. 1510.

The Code of Federal Regulations is sold by the Superintendent of Documents. Prices of new books are listed in the first FEDERAL REGISTER issue of each week.

## DEPARTMENT OF TRANSPORTATION

### Federal Aviation Administration

#### 14 CFR Part 25

[Docket No. FAA-2012-0984; Special Conditions No. 25-468-SC]

#### Special Conditions: Embraer S.A., Models EMB-135 and EMB-145 Series; Airplane Seats with Non-Traditional, Large, Non-Metallic Panels

**AGENCY:** Federal Aviation Administration (FAA), DOT.

**ACTION:** Final special conditions; request for comments.

**SUMMARY:** These special conditions are issued for the Embraer S.A. Models EMB-135 and EMB-145 series airplanes. These airplanes will have a novel or unusual design feature associated with the airplane seats that have non-traditional, large, non-metallic panels that would affect survivability during a post-crash fire event. The applicable airworthiness regulations do not contain adequate or appropriate safety standards for this design feature. These special conditions contain the additional safety standards that the Administrator considers necessary to establish a level of safety equivalent to that established by the existing airworthiness standards.

**DATES:** The effective date of these special conditions is September 11, 2012. We must receive your comments by November 2, 2012.

**ADDRESSES:** Send comments identified by docket number [FAA-2012-0984] using any of the following methods:

- *Federal eRegulations Portal:* Go to <http://www.regulations.gov/> and follow the online instructions for sending your comments electronically.

*Mail:* Send comments to Docket Operations, M-30, U.S. Department of Transportation (DOT), 1200 New Jersey Avenue SE, Room W12-140, West

Building Ground Floor, 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 8 a.m. and 5 p.m., Monday through Friday, except federal holidays.

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**FOR FURTHER INFORMATION CONTACT:** Jayson Claar, FAA, Airframe and Cabin Safety Branch, ANM-115, Transport Airplane Directorate, Aircraft Certification Service, 1601 Lind Avenue SW., Renton, Washington 98057-3356; telephone 425-227-2194; facsimile 425-227-1232.

**SUPPLEMENTARY INFORMATION:** The FAA has determined that notice of, and opportunity for prior public comment on, these special conditions are impracticable because these procedures would significantly delay issuance of the design approval and thus delivery of the affected aircraft. In addition, the substance of these special conditions has been subject to the public comment process in several prior instances with no substantive comments received. The FAA therefore finds that good cause exists for making these special conditions effective upon issuance.

We anticipate that seats with non-traditional, large, non-metallic panels will be installed in other makes and models of airplanes. We have made the determination to require special conditions for all applications requesting the installation of seats with non-traditional, large, non-metallic panels until the airworthiness requirements can be revised to address this issue. Having the same standards across the range of airplane makes and models will ensure consistent ruling for the aviation industry.

#### Comments Invited

We invite interested people to take part in this rulemaking by sending written comments, data, or views. The most helpful comments reference a specific portion of the special conditions, explain the reason for any recommended change, and include supporting data.

We will consider all comments we receive by the closing date for comments. We may change these special conditions based on the comments we receive.

#### Background

On April 17, 2012, Embraer S.A. applied for a change to Type Certificate No. T00011AT to offer a new passenger seat type that, according to the applicant, is lightweight, comfortable, and slim in profile, maximizing passenger space in the Models EMB-135 and EMB-145 series airplanes. The Embraer S.A. Models EMB-135 and EMB-145 series airplanes are pressurized, low-wing, "T" tail, transport category airplanes with tricycle landing gear. They are powered by two Rolls Royce model AE3007A series engines, and carry a maximum of 50 passengers.

The applicable regulations, Title 14, Code of Federal Regulations (14 CFR) part 25, do not require seats to meet the more stringent flammability standards required of large, non-metallic panels in the cabin interior. At the time the applicable rules were written, seats were designed with a metal frame covered by fabric, not with large, non-metallic panels. Seats also met the then-recently adopted standards for flammability of seat cushions. With the seat design being mostly fabric and metal, the contribution to a fire in the cabin had been minimized and was not considered a threat. For these reasons,

seats did not need to be tested to heat-release and smoke-emission requirements.

Seat designs have now evolved to occasionally include non-traditional, large, non-metallic panels. Taken in total, the surface area of these panels is on the same order as the sidewall and overhead stowage bin interior panels. To provide the level of passenger protection intended by the airworthiness standards, these non-traditional, large, non-metallic panels in the cabin must meet the standards of part 25, Appendix F, parts IV and V, heat-release and smoke-emission requirements.

#### Type Certification Basis

Under the provisions of 14 CFR 21.101, Embraer S.A. must show that the Model EMB-135 and EMB145 series airplanes, as changed, continue to meet the applicable provisions of the regulations incorporated by reference in Type Certificate No. T00011AT or the applicable regulations in effect on the date of application for the change. The regulations incorporated by reference in the type certificate are commonly referred to as the "original type certification basis." Refer to Type Certificate No. T00011AT for the certification basis.

Only airplanes associated with new seat certification programs approved after the effective date of these special conditions will be affected by the requirements in these special conditions. Previously certificated interiors on the existing airplane fleet and follow-on deliveries of airplanes with previously certificated interiors are not affected.

If the Administrator finds that the applicable airworthiness regulations (i.e., 14 CFR part 25) do not contain adequate or appropriate safety standards for the Embraer S.A. Models EMB-135 and EMB-145 series airplanes because of a novel or unusual design feature, special conditions are prescribed under the provisions of § 21.16.

Special conditions are initially applicable to the model for which they are issued. Should the type certificate for that model be amended later to include any other model that incorporates the same novel or unusual design feature, or should any other model already included on the same type certificate be modified to incorporate the same novel or unusual design feature, the special conditions would also apply to the other model under § 21.101.

In addition to the applicable airworthiness regulations and special conditions, the Embraer S.A. Models

EMB-135 and EMB-145 series airplanes must comply with the fuel vent and exhaust emission requirements of 14 CFR part 34 and the noise certification requirements of 14 CFR part 36.

The FAA issues special conditions, as defined in 14 CFR 11.19, in accordance with § 11.38, and they become part of the type-certification basis under § 21.101.

#### Novel or Unusual Design Features

The Embraer S.A. Models EMB-135 and EMB-145 series airplanes will incorporate the following novel or unusual design feature: These models offer interior arrangements that include passenger seats that incorporate non-traditional, large, non-metallic panels in lieu of the traditional metal frame covered by fabric. The flammability properties of these panels have been shown to significantly affect the survivability of the cabin in the case of fire. These seats are considered a novel design for transport-category airplanes that include Amendment 25-61 and Amendment 25-98 in the certification basis, and were not considered when those airworthiness standards were established.

The existing regulations do not provide adequate or appropriate safety standards for seat designs that incorporate non-traditional, large, non-metallic panels in their designs. To provide a level of safety that is equivalent to that afforded to the balance of the cabin, additional airworthiness standards, in the form of special conditions, are necessary. These special conditions supplement § 25.853. The requirements contained in these special conditions consist of applying the identical test conditions, required of all other large panels in the cabin, to seats with non-traditional, large, non-metallic panels.

A non-traditional, large, non-metallic panel, in this case, is defined as a panel with exposed surface areas greater than 1.5 square feet installed per seat place. The panel may consist of either a single component or multiple components in a concentrated area. Examples of parts of the seat where these non-traditional panels are installed include, but are not limited to: seat backs, bottoms and leg/foot rests, kick panels, back shells, credenzas, and associated furniture. Examples of traditional exempted parts of the seat include: Arm caps, armrest close-outs such as end bays and armrest-styled center consoles, food trays, video monitors, and shrouds.

#### Clarification of "Exposed"

"Exposed" is considered to include panels that are directly exposed to the

passenger cabin in the traditional sense, and panels that are enveloped, such as by a dress cover. Traditional fabrics or leathers currently used on seats are excluded from these special conditions. These materials must still comply with §§ 25.853(a) and 25.853(c) if used as a covering for a seat cushion, or § 25.853(a) if installed elsewhere on the seat. Non-traditional, large, non-metallic panels covered with traditional fabrics or leathers will be tested without their coverings or covering attachments.

#### Discussion

In the early 1980s, the FAA extensively researched the effects of post-crash flammability in the passenger cabin. As a result of this research and service experience, the FAA adopted new rules for interior surfaces associated with large surface area parts. Specifically, the rules require measurement of heat release and smoke emission (part 25, Appendix F, parts IV and V) for the affected parts. Heat release has been shown to have a direct correlation with post-crash fire survival time. The materials that comply with the standards (i.e., § 25.853 titled "Compartment interiors" as amended by Amendments 25-61 and 25-66) extend survival time by approximately two minutes over materials that do not comply.

When Amendment 25-61 was written, the potential application of the requirement to seats was explored. The seat frame itself was not a concern because it was made primarily of aluminum, and there were only small amounts of non-metallic materials (e.g., a food tray table and armrest closeout, approximate total surface area of 1.5 square feet). The overall effect on survivability was negligible if these panels met the heat release and smoke requirements. Therefore the requirements did not address seats, and the preambles to both Notice of Proposed Rule Making (NPRM) 85-10 and the final rule (Amendment 25-61) specifically note that they were excluded because the recently-adopted standards for flammability of seat cushions will greatly inhibit involvement of the seats.

In the late 1990s, when seat designs were evolving to include large non-metallic panels with surface areas that would impact survivability during a cabin fire event comparable to partitions or galleys, the FAA issued Policy Memorandum 97-112-39, "Guidance for Flammability Testing of Seat/Console Installations," dated October 17, 1997. The memo noted that large surface area panels must comply with heat release and smoke emission

requirements, even if they were attached to a seat. If the FAA had not issued such policy, seat designs could have been viewed as a loophole to the airworthiness standards that would result in an unacceptable decrease in survivability during a cabin fire event.

The following paragraphs are the pertinent regulatory information involving § 25.853.

NPRM 85–10 (50 FR 15038, April 16, 1985): “Seats would not be tested [to heat release and smoke emission] because the recently-adopted standards for flammability of seat cushions will greatly inhibit involvement of the seats.”

Final Rule at Amendment 25–61 (51 FR 26206, August 20, 1986): “The primary purpose of the new flammability standards [heat release and smoke emission] is to ensure that interior materials with large outer surface areas will not become involved rapidly and contribute to a fire when exposed to flames.”

Final Rule at Amendment 25–66 (53 FR 32584, September 26, 1988): “Two commentators suggest editorial changes for clarity. One believes that a new [section] should be added to state that, ‘smaller items, such as windows, window shades, or curtains, as well as floor coverings, floor structure, seats, and service items, are not included and do not have to meet the requirements in (a–1) [heat release and smoke emission]. All of such materials have to meet the flammability requirements prescribed in paragraph (a) [Bunsen burner] of this part.’ As discussed in the preamble to Notice 85–10, these would be correct statements. It does not appear, however, that clarity would be enhanced by their addition. These items are clearly not required to comply with the new standards [heat release and smoke emission] due to their absence in Sec. 25.853(a–1).”

14 CFR 25.853, *Compartment interiors*, at Amendment 25–72 (55 FR 29774, July 20, 1990):

(c) For airplanes with passenger capacities of 20 or more, interior ceiling and wall panels (other than lighting lenses), partitions, and the outer surfaces of galleys, large cabinets and stowage compartments (other than under seat stowage compartments and compartments for stowing small items, such as magazines and maps) must also meet the test requirements of parts IV [heat release] and V [smoke emission] of Appendix F of this part, or other approved equivalent method, in addition to the flammability requirements prescribed in paragraph (a) [Bunsen burner] of this section.

Final Rule at Amendment 25–83 (March 6, 1995):

“The distinction between parts with large surface areas, which must meet the new standards [heat release and smoke emission], and those with smaller surface areas is very difficult \* \* \* It is not possible to cite a specific size that will apply in all installations; however, as a general rule, components with exposed-surface areas of one square foot or less may be considered small enough that they do not have to meet the new standards. Components with exposed-surface areas greater than two square feet may be considered large enough that they do have to meet the new standards. Those with exposed-surface areas greater than one square foot, but less than two square feet, must be considered in conjunction with the areas of the cabin in which they are installed before a determination could be made.”

The intent of the heat release and smoke emission standards is to include minimum panel sizes on the order of one to two square feet. This panel size sets the acceptable level of safety in the cabin. Traditional seat designs have approximately 1.5 square feet of nonmetallic panel material per seat place (a food tray table and armrest closeout) and previously have been excluded from the heat release and smoke standards. For example, for a traditional economy class triple place seat assembly, the exclusion is 4.5 square feet. The intent of the Special Conditions is to maintain this accepted level of safety and be consistent with the average minimum panel size in the balance of the cabin interior. Therefore, we are allowing up to 1.5 square feet of nonmetallic panel material per seat place to be excluded from the heat release and smoke emission standards. However, this exclusion from heat release and smoke emission does not provide the material additional relief from the other standards such as 14 CFR part 25 Appendix F, parts I and II. There are no changes to how those standards are applied.

The FAA recognizes that different manufacturing techniques have associated cost differences and therefore are allowing the applicant to designate which nonmetallic panels comprise the 1.5 square foot exclusion. This determination will allow for flexibility in design and a manufacturing cost savings.

#### Applicability

As discussed above, these special conditions are applicable to the Embraer S.A. Models EMB–135 and EMB–145 series airplanes. Should Embraer S.A.

apply at a later date for a change to the type certificate to include another model on the same type certificate incorporating the same novel or unusual design feature, the special conditions would apply to that model as well.

Under standard practice, the effective date of final special conditions would be 30 days after the date of publication in the **Federal Register**; however, as the certification date for the Embraer S.A. Models EMB–135 and EMB–145 series airplanes is imminent, the FAA finds that good cause exists to make these special conditions effective upon issuance.

#### Conclusion

This action affects only certain novel or unusual design features on the Embraer S.A. Models EMB–135 and EMB–145 series airplanes. It is not a rule of general applicability.

#### List of Subjects in 14 CFR Part 25

Aircraft, Aviation safety, Reporting and recordkeeping requirements.

The authority citation for these special conditions is as follows:

**Authority:** 49 U.S.C. 106(g), 40113, 44701, 44702, 44704.

#### The Special Conditions

Accordingly, pursuant to the authority delegated to me by the Administrator, the following special conditions are issued as part of the type certification basis for Embraer S.A. Models EMB–135 and EMB–145 series airplanes.

1. Compliance with 14 CFR part 25 Appendix F, parts IV and V, heat release and smoke emission, is required for seats that incorporate non-traditional, large, nonmetallic panels that may either be a single component or multiple components in a concentrated area in their design.

2. The applicant may designate up to and including 1.5 square feet of non-traditional, nonmetallic panel material per seat place that does not have to comply with No. 1. A triple seat assembly may have a total of 4.5 square feet excluded on any portion of the assembly (e.g., outboard seat place 1 sq. ft., middle 1 sq. ft., and inboard 2.5 sq. ft.)

3. Seats need not meet the test requirements of 14 CFR part 25 Appendix F, parts IV and V when installed in compartments that are not otherwise required to meet these requirements. Examples include:

- a. Airplanes with passenger capacities of 19 or less,
- b. Airplanes that do not have smoke and heat release in their certification

basis and do not need to comply with the requirements per 14 CFR 121.312, c. Airplanes exempted from smoke and heat release requirements.

Definition of “non-traditional, large, nonmetallic panel”—A non-traditional, large, nonmetallic panel, in this case, is defined as a panel with exposed surface areas greater than 1.5 square feet installed per seat place. The panel may consist of either a single component or multiple components in a concentrated area. Examples of parts of the seat where these non-traditional areas are installed include, but are not limited to, seat backs, bottoms and leg/foot rests, kick panels, back shells, credenzas, and associated furniture. Examples of traditional exempted areas are: arm caps, armrest close-outs such as end bays and armrest-styled center consoles, food trays, video monitors and shrouds.

Clarification of “exposed”—Exposed is considered to include panels that are directly exposed to the passenger cabin in the traditional sense, plus those panels enveloped, such as by a dress cover. Traditional fabrics or leathers currently used on seats are excluded from these special conditions. These materials must still comply with §§ 25.853(a) and 25.853(c) if used as a covering for a seat cushion, or § 25.853(a) if installed elsewhere on the seat. Non-traditional large, nonmetallic panels covered with traditional fabrics or leathers will be tested without their coverings or covering attachments.

Issued in Renton, Washington, on September 11, 2012.

Ali Bahrami,

Manager, Transport Airplane Directorate, Aircraft Certification Service.

[FR Doc. 2012-22831 Filed 9-17-12; 8:45 am]

BILLING CODE 4910-13-P

## DEPARTMENT OF TRANSPORTATION

### Federal Aviation Administration

#### 14 CFR Part 39

[Docket No. FAA-2012-0671; Directorate Identifier 2011-NM-096-AD; Amendment 39-17197; AD 2012-19-02]

RIN 2120-AA64

#### Airworthiness Directives; Airbus Airplanes

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

**ACTION:** Final rule.

**SUMMARY:** We are superseding an existing airworthiness directive (AD) for all Airbus Model A330-243, -341, -342

and -343 airplanes. That AD currently requires modifying certain cowl assemblies of the left- and right-hand thrust reversers. This new AD requires removing certain C-duct assemblies of the left- and right-hand thrust reversers from service at certain designated life limits, and also adds airplanes to the applicability. This AD was prompted by new life limits on certain thrust reverser C-duct assemblies. We are issuing this AD to prevent fatigue cracking of the hinges integrated into the 12 o'clock beam of the thrust reversers, which could result in separation of a thrust reverser from the airplane, and consequent reduced controllability of the airplane.

**DATES:** This AD becomes effective October 23, 2012.

**ADDRESSES:** You may examine the AD docket on the Internet at <http://www.regulations.gov> or in person at the U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE., Washington, DC.

**FOR FURTHER INFORMATION CONTACT:** Vladimir Ulyanov, Aerospace Engineer, International Branch, ANM-116, Transport Airplane Directorate, FAA, 1601 Lind Avenue SW., Renton, WA 98057-3356; telephone (425) 227-1138; fax (425) 227-1149.

#### 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. That NPRM was published in the **Federal Register** on June 25, 2012 (77 FR 37829), and proposed to supersede AD 2005-25-21, Amendment 39-14414 (70 FR 73919, December 14, 2005). That NPRM proposed to correct an unsafe condition for the specified products. The MCAI states:

The life limits of the thrust reversers C-Ducts are not addressed by the definition of the structural life limits of Safe Life items as defined in the A330 Airworthiness Limitations Section—ALS Part 1. As a result, these life limits are covered by an Airworthiness Directive (AD).

These life limits are due to unexpected high fatigue loads (measured during certification tests) on the hinges integrated into the 12 o'clock beam, which forms the upper extreme edge of the thrust reverser C-Duct of Rolls Royce Trent 700 engines.

The aim of the [Direction Générale de l'Aviation Civile] (DGAC) France AD F-2001-528 was to mandate the life limits, depending of the modifications applied to the C-Duct.

Revision 1 of the DGAC France AD F-2001-528 deferred the accomplishment

threshold of the modification to be applied in-service from 6,000 flight cycles (FC) to 6,500 FC.

Revision 2 of DGAC France AD F-2001-528 [which corresponds to FAA AD 2005-25-21, Amendment 39-14414 (70 FR 73919, December 14, 2005)] was issued to update again the accomplishment threshold from 6,500 FC to 7,200 FC.

This [European Aviation Safety Agency (EASA)] AD retains the requirements of DGAC France AD F-2001-528 R2, which is superseded, and adds [certain] life limits.

The action required in this AD is removing certain C-duct assemblies of the left- and right-hand thrust reversers from service at certain designated life limits. This AD also adds Model A330-243F airplanes to the applicability, and revises the applicability to include all airplanes of the affected models. The unsafe condition is fatigue cracking of the hinges integrated into the 12 o'clock beam of the thrust reversers, which could result in separation of a thrust reverser from the airplane, and consequent reduced controllability of the airplane. You may obtain further information by examining the MCAI in the AD docket.

#### Comments

We gave the public the opportunity to participate in developing this AD. We received no comments on the NPRM (77 FR, 37829, June 25, 2012), or on the determination of the cost to the public.

#### Conclusion

We reviewed the available data and determined that air safety and the public interest require adopting the AD as proposed, except for minor editorial changes. We have determined that these minor changes:

- Are consistent with the intent that was proposed in the NPRM (77 FR 37829, June 25, 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 37829, June 25, 2012).

#### Costs of Compliance

We estimate that this AD will affect about 17 products of U.S. registry.

We estimate that it will take about 48 work-hours per product to comply with the new basic requirements of this AD. The average labor rate is \$85 per work-hour. Based on these figures, we estimate the cost of this AD to the U.S. operators to be \$69,360, or \$4,080 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.

**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 the NPRM (77 FR 37829, June 25, 2012), 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.

**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 removing airworthiness directive (AD) 2005-25-21, Amendment 39-14414 (70 FR 73919, December 14, 2005), and adding the following new AD:

**2012-19-02 Airbus:** Amendment 39-17197. Docket No. FAA-2012-0671; Directorate Identifier 2011-NM-096-AD.

**(a) Effective Date**

This airworthiness directive (AD) becomes effective October 23, 2012.

**(b) Affected ADs**

This AD supersedes AD 2005-25-21, Amendment 39-14414 (70 FR 73919, December 14, 2005).

**(c) Applicability**

This AD applies to all Airbus Model A330-243, -243F, -341, -342 and -343 airplanes, certificated in any category.

**(d) Subject**

Air Transport Association (ATA) of America Code 78, Engine Exhaust.

**(e) Reason**

This AD was prompted by new life limits on certain thrust reverser C-duct assemblies. We are issuing this AD to prevent fatigue cracking of the hinges integrated into the 12 o'clock beam of the thrust reversers, which could result in separation of a thrust reverser from the airplane, 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) C-duct Assembly Removal**

At the applicable compliance time specified in table 1 to paragraph (g) of this AD: Remove the applicable C-duct assemblies of the left- and right-hand thrust reversers, in accordance with a method approved by either the Manager, International Branch, ANM-116, Transport Airplane Directorate, FAA; or the European Aviation Safety Agency (EASA) (or its delegated agent). Thereafter, for any C-duct assembly of the left- and right-hand thrust reversers installed after the effective date of this AD, before the accumulation of the applicable total flight cycles specified in table 1 to paragraph (g) of this AD: Remove the C-duct assembly, in accordance with a method approved by either the Manager, International Branch, ANM-116; or the EASA (or its delegated agent).

TABLE 1 TO PARAGRAPH (G) OF THIS AD—PART REMOVAL THRESHOLDS

Part No.—	Compliance times at the later of the times specified—	
HDTR3410L, HDTR3410R, HDTR3411L, HDTR3411R, HDTR3412R, HDTR3413R.	Before the accumulation of 10,000 total flight cycles since the first installation of C-duct on the airplane.	Within 3 months after the effective date of this AD.
HDTR3414L, HDTR3416R, HDTR3417R that have been modified in service as specified in Airbus Mandatory Service Bulletin A330-78-3010 or Rolls-Royce Service Bulletin RB.211-78-C899 at 7,200 total flight cycles or more since first installation on an airplane.	Before the accumulation of 10,000 total flight cycles since the first installation of C-duct on the airplane.	Within 3 months after the effective date of this AD.
HDTR3414L, HDTR3416R, HDTR3417R that have been modified in production by Airbus Modification 47316 or that have been modified in service as specified in Airbus Mandatory Service Bulletin A330-78-3010 or Rolls-Royce Service Bulletin RB.211-78-C899, before the accumulation of 7,200 total flight cycles since first installation on an airplane.	Before the accumulation of 25,000 total flight cycles since the first installation of C-duct on the airplane.	Within 3 months after the effective date of this AD.

TABLE 1 TO PARAGRAPH (G) OF THIS AD—PART REMOVAL THRESHOLDS—Continued

HDTR3412L, HDTR3416L, HDTR3417L, HDTR3414R, HDTR3419R, HDTR3420R.	Before the accumulation of 25,000 total flight cycles since the first installation of C-duct on the airplane.	Within 3 months after the effective date of this AD.
HDTR3413L, HDTR3415R, HDTR3415L, HDTR3418R.	Before the accumulation of 40,000 total flight cycles since the C-duct was new.	Within 3 months after the effective date 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, 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: Vladimir Ulyanov, Aerospace Engineer, International Branch, ANM-116, Transport Airplane Directorate, FAA, 1601 Lind Avenue SW., Renton, WA 98057-3356; telephone (425) 227-1138; 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 MCAI EASA Airworthiness Directive 2011-0018, dated February 3, 2011; for related information.

**(j) Material Incorporated by Reference**

None.

Issued in Renton, Washington, on September 6, 2012.

**Ali Bahrami,**

Manager, Transport Airplane Directorate, Aircraft Certification Service.

[FR Doc. 2012-22954 Filed 9-17-12; 8:45 am]

**BILLING CODE 4910-13-P**

**DEPARTMENT OF DEFENSE**

**Office of the Secretary**

**32 CFR Part 233**

[DOD-2008-OS-0049]

RIN 0790-AI27

**Federal Voting Assistance Program**

**AGENCY:** Office of the Under Secretary of Defense for Personnel and Readiness/ Federal Voting Assistance Program, DoD.

**ACTION:** Interim final rule

**SUMMARY:** This rule concerns the Federal Voting Assistance Program (FVAP). It provides direction and guidance to the Department of Defense and other Federal departments and agencies in establishing voting assistance programs for citizens covered by the Uniformed and Overseas Citizens Absentee Voting Act (UOCAVA) as modified by the Military and Overseas Voter Empowerment Act. The 2012 election cycle starts with the January 10, 2012 New Hampshire Presidential Preference Primary and continues through the November 6, 2012 General Election. This 2012 election schedule requires that the policies and procedures set forth in the rule must be in place to ensure that citizens voting under UOCAVA are fully guided and supported through established voting assistance programs within the Federal departments and agencies. Therefore, this rule is being established as an interim final rule to allow promulgation of appropriate direction and guidance prior to completion of a public comment period.

**DATES:** *Effective date:* September 18, 2012.

*Comment date:* Comments must be received by November 19, 2012.

**ADDRESSES:** You may submit comments, identified by docket number and or Regulatory Information Number (RIN) 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, 2nd floor, East Tower, Suite 02G09, Alexandria, VA 22350-3100.

*Instructions:* All submissions received must include the agency name and docket number or RIN 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:** John B. Godley, (703) 588-8108.

**SUPPLEMENTARY INFORMATION:**

**Background**

Part 233 establishes policy and assigns responsibilities for the Federal Voting Assistance Program. It establishes policy and assigns responsibilities for the development and implementation of installation voter assistance (IVA) offices. This part establishes policy for the development and implementation, jointly with each State, of procedures for persons to apply to register to vote at recruitment offices of the Military Services.

**Executive Order 12866, “Regulatory Planning and Review” and Executive Order 13563, “Improving Regulation and Regulatory Review”**

It has been certified that 32 CFR part 233 does not:

- (1) Have an annual effect on the economy of \$100 million or more or adversely affect in a material way the economy; a section of the economy; productivity; competition; jobs; the environment; public health or safety; or State, local, or tribal governments or communities;
- (2) Create a serious inconsistency or otherwise interfere with an action taken or planned by another Agency;
- (3) Materially alter the budgetary impact of entitlements, grants, user fees, or loan programs, or the rights and obligations of recipients thereof; or
- (4) Raise novel legal or policy issues arising out of legal mandates, the President’s priorities, or the principles set forth in these Executive Orders.

**Sec. 202, Public Law 104-4, “Unfunded Mandates Reform Act”**

It has been certified that 32 CFR part 233 does not contain a Federal mandate

that may result in expenditure by State, local and tribal governments, in aggregate, or by the private sector, of \$100 million or more in any one year.

**Public Law 96–354, “Regulatory Flexibility Act” (5 U.S.C. 601)**

It has been certified that 32 CFR part 233 is not subject to the Regulatory Flexibility Act (5 U.S.C. 601) because it would not, if promulgated, have a significant economic impact on a substantial number of small entities.

**Public Law 96–511, “Paperwork Reduction Act” (44 U.S.C. Chapter 35)**

It has been certified that 32 CFR part 233 does impose reporting or recordkeeping requirements under the Paperwork Reduction Act of 1995. Two surveys are conducted after the election cycle. OMB has approved these surveys under the following OMB Control Numbers: 0704–0125, “Post-Election Survey of Local Election Officials,” and 0704–0476, “Post-Election Survey of Overseas Citizens.” A 60-day notice requesting comments on the revised collections will be published in January 2012 and the revised collections should be ready for submission to OMB in the May/June 2012 timeframe.

**Executive Order 13132, “Federalism”**

It has been certified that 32 CFR part 233 does not have federalism implications, as set forth in Executive Order 13132. This rule does not have substantial direct effects on:

- (1) The States;
- (2) The relationship between the National Government and the States; or
- (3) The distribution of power and responsibilities among the various levels of Government.

**List of Subjects in 32 CFR Part 233**

Voting rights, civil rights, elections, voter registration, voting.

■ Accordingly 32 CFR part 233 is added to read as follows:

**PART 233—FEDERAL VOTING ASSISTANCE PROGRAM (FVAP)**

- Sec.
- 233.1 Purpose
  - 233.2 Applicability
  - 233.3 Definitions
  - 233.4 Policy
  - 233.5 Responsibilities
  - 233.6 Procedures

**Authority:** EO 12642; 10 U.S.C. 1566a; 42 U.S.C 1973gg–5; 42 U.S.C. 1973ff—1973ff–6

**§ 233.1 Purpose.**

This part:  
(a) Establishes policy and assigns responsibilities for the FVAP in accordance with Executive Order 12642

and the Uniformed and Overseas Citizens Absentee Voting Act (UOCAVA), 42 U.S.C. 1973ff–6.

(b) Establishes policy and assigns responsibilities for the development and implementation of installation voter assistance (IVA) offices in accordance with 10 U.S.C. 1566a.

(c) Establishes policy and assigns responsibilities for the development and implementation, jointly with each State, of procedures for persons to apply to register to vote at recruitment offices of the Military Services in accordance with 42 U.S.C. 1973gg–5.

**§ 233.2 Applicability.**

This part applies to:

(a) The Office of the Secretary of Defense, the Military Departments (including the Coast Guard at all times, including when it is a Service in the Department of Homeland Security by agreement with that Department), the Office of the Chairman of the Joint Chiefs of Staff and the Joint Staff, the Combatant Commands, the Office of the Inspector General of the Department of Defense (IG DoD), the Defense Agencies, the DoD Field Activities, and all other organizational entities within the DoD (hereinafter referred to collectively as the “DoD Components”).

(b) The Commissioned Corps of the Public Health Service (PHS), under agreement with the Department of Health and Human Services, and the Commissioned Corps of the National Oceanic and Atmospheric Administration (NOAA), under agreement with the Department of Commerce. The term “uniformed services” refers to the Army, the Navy, the Air Force, the Marine Corps, the Coast Guard, and their Reserve Components, as well as the Commissioned Corps of the PHS and the NOAA.

(c) Other Federal Executive departments and agencies with employees assigned outside the United States that provide assistance to the FVAP under 42 U.S.C. 1973ff(c). Recommended procedures for these departments and agencies are contained in § 233.6(c) of this part.

**§ 233.3 Definitions.**

Terms used in this part are defined in Joint Publication 1–02 (available at [http://www.dtic.mil/doctrine/dod\\_dictionary/](http://www.dtic.mil/doctrine/dod_dictionary/)) and this section. These terms and their definitions are for the purpose of this part.

*Eligible voter.* Any of the following:

- (1) *Absent uniformed services voter:*
  - (i) A member of a uniformed service on active duty who, by reason of such active duty, is absent from the place of

residence where the member is otherwise qualified to vote.

(ii) A member of the merchant marine who, by reason of service in the merchant marine, is absent from the place of residence where the member is otherwise qualified to vote.

(iii) A spouse or dependent of a member referred to in the first two sentences of this definition who, by reason of the active duty or service of the member, is absent from the place of residence where the spouse or dependent is otherwise qualified to vote.

(2) *Overseas voter:*

(i) An absent uniformed services voter who, by reason of active duty or service, is absent from the United States on the date of the election involved;

(ii) A person who resides outside of the United States and is qualified to vote in the last place in which the person was domiciled before leaving the United States; or

(iii) A person who resides outside of the United States and (but for such residence) would be qualified to vote in the last place in which the person was domiciled before leaving the United States.

*Federal office.* The offices of President or Vice President; Presidential Elector; or of Senator or Representative in; or Delegate or Resident Commissioner to Congress.

*Installation voter assistance (IVA) offices.* The office designated by the installation commander to provide voter assistance to military personnel, voting-age military dependents, Government employees, contractors, and other civilian U.S. citizens with access to the installation. IVA offices also serve as voter registration agencies pursuant to 42 U.S.C. 1973gg–5(a)(2).

*Installation voter assistance officer (IVAO).* An individual responsible for voting assistance coordination at the installation level.

*Metrics.* A systematic means of measuring essential management information for reporting, control, and process improvement.

*Recruitment offices of the Military Services.* Any office of a military service open to the public and engaged in the recruitment of persons for appointment or enlistment in an Active Component of the Military Services. This does not include Army National Guard and Air National Guard recruiting offices.

*Senior service voting representative (SSVR).* A uniformed member at the 0–7 grade, or higher, or a member of the Senior Executive Service responsible for implementing the FVAP in his or her respective component.

*Service voting action officer (SVAO).* An individual at a uniformed service headquarters level responsible for voting assistance operations for his or her respective component.

*State.* As defined in 42 U.S.C. 1973ff-6.

*State election.* Any non-Federal election held solely, or in part, for selecting, nominating, or electing any candidate for any State office, such as Governor, Lieutenant Governor, State Attorney General, or State Legislator, or on issues of Statewide interest.

*Uniformed services.* As defined in 42 U.S.C. 1973ff-6(7).

*Unit voting assistance officer (UVAO).* An individual responsible for voting assistance at the unit level.

*Voter registration agency.* An office designated pursuant to 42 U.S.C. 1973gg-5 to perform voter registration activities. Pursuant to 42 U.S.C. 1973gg-5(c), a recruitment office of the Military Services is considered to be a voter registration agency. All IVA offices are also designated as voter registration agencies pursuant to 42 U.S.C. 1973gg-5(a)(2).

#### **§ 233.4 Policy.**

It is DoD policy that:

(a) The FVAP shall ensure that eligible voters receive, pursuant to 42 U.S.C. 1973ff(b)(5), information about registration and voting procedures and materials pertaining to scheduled elections, including dates, offices, constitutional amendments, and other ballot proposals.

(b) The right of U.S. citizens to vote is a fundamental right that is afforded protection by the U.S. Constitution. Every eligible voter shall:

(1) Be given an opportunity to register and vote in any election for which he or she is eligible.

(2) Be able to vote in person or by absentee.

(c) All persons assisting in the voting process shall take all necessary steps to prevent discrimination, fraud, intimidation or coercion, and unfair registration and voting assistance procedures. This includes, but is not limited to, preventing actions such as:

(1) Using military authority to influence the vote of any other member of the uniformed services or to require any member to march to any polling place or place of voting as proscribed by 18 U.S.C. 592, 18 U.S.C. 593, and 18 U.S.C. 609. This subsection does not, in any way, prohibit free discussion about political issues or candidates for public office as stated in 18 U.S.C. 609.

(2) Polling any member of the uniformed services before or after he or she votes, as proscribed in 18 U.S.C. 596.

(d) The FVAP shall conduct official surveys authorized by 42 U.S.C. 1973ff to report to the President and the Congress on the effectiveness of the assistance provided to eligible voters (including a separate statistical analysis of voter participation and a description of Federal-State cooperation).

(e) DoD personnel involved in assisting in the voter registration or absentee voting process shall use the names of persons applying or declining to register to vote only for voter registration purposes and shall not release such information for any other purpose.

(f) Military or civilian personnel employed in recruitment offices of the Military Services shall be subject to the restrictions outlined in § 233.6(b) of this part.

(g) An installation commander may permit non-partisan voter registration activities on an installation by State and county officials, or groups recognized in accordance with section 501(c)(19) of the Internal Revenue Code, subject to all applicable military installation rules and regulations governing such activities on military installations.

#### **§ 233.5 Responsibilities.**

(a) The Under Secretary of Defense for Personnel and Readiness (USD(P&R)) shall:

(1) Execute the responsibilities of the Presidential designee in accordance with DoD Directive 5124.02 (available at <http://www.dtic.mil/whs/directives/corres/pdf/512402p.pdf>).

(2) Administer the FVAP in accordance with Executive Order 12642, 10 U.S.C. 1566a, 42 U.S.C. 1973gg-5, and 42 U.S.C. 1973ff-1973ff-6.

(3) Coordinate and implement actions that may be necessary to discharge Federal responsibilities assigned in DoD Directive 5124.02, Executive Order 12642, 10 U.S.C. 1566, 42 U.S.C. 1973gg-5, 42 U.S.C. 1973ff-1973ff-6, Section 1604 of Public Law 107-107, "The National Defense Authorization Act for Fiscal Year 2002," and Section 567 of Public Law 108-375, "The National Defense Authorization Act for Fiscal Year 2005".

(4) Develop policy and procedures to implement DoD responsibilities under 42 U.S.C. 1973gg-5 (also known as the "National Voter Registration Act (NVRA)").

(5) Grant or deny any hardship exemption waivers submitted by a State pursuant to 42 U.S.C. 1973ff-1(g) (after consultation with the Attorney General's designee) and inform the State of the results of the waiver request.

(6) Ensure that the Director, Department of Defense Human

Resources Activity (DoDHRA) designates a civilian Director of the FVAP, who shall be responsible for all aspects of the FVAP, and shall have the necessary authority to administer that responsibility, as described in § 233.6(a) of this part.

(b) The Director, DoDHRA, under the authority, direction, and control of the USD(P&R), shall:

(1) In coordination with the USD(P&R), designate an office by name for the execution of the FVAP.

(2) Ensure that the Director, FVAP carries out the responsibilities identified in Procedures.

(c) The IG DoD, in addition to the responsibilities in paragraph (d) of this section, shall:

(1) Provide to Congress an independent analysis of and report on the utilization and effectiveness of voting assistance programs, and the level of compliance with voting assistance programs of the Military Departments, in accordance with 10 U.S.C. 1566.

(2) Provide the Director, FVAP, along with the respective senior service representative, with copies of supporting data collected during the reviews and analyses conducted under paragraphs (b)(1) and (2) of this section.

(d) The Chief, National Guard Bureau, in addition to the responsibilities in paragraph (d) of this section shall:

(1) Designate in writing a uniformed officer or a civilian employee of the appropriate grade as the SSVR to manage the voting assistance program within the National Guard.

(2) Designate a SVAO, preferably a civilian employee (GS-12 or higher), to assist the SSVR and who shall be responsible for voting assistance operations within the National Guard.

(3) The Adjutants General of the National Guard of the States and Territories shall inform the State or territory chief election official when National Guard units are mobilized or placed in a Federal status.

(e) The Heads of the DoD Components and the Uniformed Services shall disseminate voting information and assist eligible voters, as required, in their respective organization, following the procedures in § 233.6(b) of this part.

(f) The Combatant Commanders, in addition to the responsibilities in paragraph (d) of this section, shall:

(1) Ensure that deployed forces have access to Federal voting information and assistance, particularly in remote locations. To the extent practicable, provide uniformed services members under their command with access to computers with Internet capability and other necessary resources including, but

not limited to, printers and scanners for absentee voting purposes.

(2) Emphasize, within the operational chain of command, the importance that they and the DoD attach to participation by uniformed service members in the Federal, State, and local election process and make every reasonable effort to assist the Military Services in discharging the responsibilities outlined elsewhere in this part.

### § 233.6 Procedures.

(a) *FVAP Procedures*. The Director, FVAP, shall:

(1) Manage, coordinate, and perform the Presidential designee's responsibilities pursuant to 42 U.S.C. 1973ff.

(3) Encourage and assist States and other U.S. jurisdictions to adopt the mandatory and recommended provisions of 42 U.S.C. 1973ff-1 and ensure they are aware of the requirements of 42 U.S.C. 1973ff.

(4) Establish and maintain contact with State election officials, State legislators, and with other State and local government officials to improve the absentee voting process for the Uniformed and Overseas Citizens Absentee Voting Act (UOCAVA) citizens. Consult with the Defense State Liaison Office which is the DoD office for contact and coordination with Federal, State, and local government entities for legislative and other policy matters involving voting assistance and elections pursuant to 42 U.S.C. 1973ff *et seq.*

(5) Obtain, from each State, current voter registration and absentee voting information and disseminate it to other Federal Executive departments, agencies, DoD Components and voters qualified to vote, pursuant to 42 U.S.C. 1973ff(b)(5).

(6) Establish and maintain a voting assistance program to assist all eligible voters as covered by 42 U.S.C. 1973ff *et seq.*, and to assist those persons to vote.

(7) Establish and maintain an FVAP Web site that provides:

(i) Information to citizens on the voter registration and absentee voting process.

(ii) Information on the means of electronic transmission of election materials allowed by each State.

(iii) A method to assist citizens in the voter registration process and how to request an absentee ballot.

(iv) A list of State contact information in accordance with 42 U.S.C. 1973ff-1(e)(4).

(v) The ability to print a Standard Form (SF) 186, "Federal Write-In Absentee Ballot," and a list of all candidates in a Federal election.

(vi) A portal that hosts Service-specific information regarding voting

assistance programs, including links to IVA offices; the contact information for voting assistance officers (installation, major command and commissioned units) within the DoD Component; procedures to order voting materials; and links to other Federal and State voting Web sites.

(vii) Absentee ballot data reported under 42 U.S.C. 1973ff(b)(6) and (b)(11) and 42 U.S.C. 1973ff-4A.

(viii) Other information as deemed necessary by Director, FVAP.

(8) Survey U.S. citizens including, but not limited to uniformed services and their dependents as well as overseas U.S. civilians covered by 42 U.S.C. 1973ff *et seq.*, voting assistance officers (VAOs), and election officials to gather necessary statistical information and prepare the reports to the President and the Congress required by 42 U.S.C. 1973ff(6) and 42 U.S.C. 1973ff-4A.

(9) Prescribe the standard oath to be used with any document pursuant to 42 U.S.C. 1973ff(7).

(10) Coordinate with the Military Postal Service Agency, as addressed in DoD 4525.6-M (available at <http://www.dtic.mil/whs/directives/corres/pdf/452506m.pdf>), to implement measures to ensure a postmark or other proof of mailing date is provided on each absentee ballot collected at any overseas location or vessel at sea, and that voting materials are moved expeditiously to the maximum extent practicable by military postal authorities.

(11) As a component of a comprehensive marketing and voter education initiative, establish a means to inform absent uniformed services members of absentee voting information and resources 90, 60, and 30 days before each Federal election pursuant to 42 U.S.C. 1973ff-2B(a)(2).

(12) Develop standards, working with the U.S. Election Assistance Commission and the Chief State election official of each State, for the States to report data on the number of absentee ballots transmitted and received during a regularly scheduled general election for Federal office pursuant to 42 U.S.C. 1973ff(b)(11). Provide a means to store the collected data and make the data available to the public.

(13) Establish procedures, in consultation with the Attorney General, regarding hardship exemption waivers submitted by a State pursuant to 42 U.S.C. 1973ff-1(g).

(14) Prescribe the required voting program metrics to be used by the DoD Components and uniformed services to be used in evaluating their individual voting assistance programs, and report on compliance with those metrics. To the extent practicable, establish and

maintain an online portal to collect and consolidate voting program metrics.

(15) Provide technology programs to assist uniformed service and overseas voters in registering to vote, applying for an absentee ballot, receiving an absentee ballot, and to the extent required by section 1604 of Public Law (Pub. L.) 107-107, as amended by section 567 of Public Law 108-375, returning a voted ballot.

(16) Develop and coordinate with the States the implementation and operational procedures for persons to apply to register to vote at recruitment offices of the Military Services. Assist the Deputy Assistant Secretary of Defense for Military Personnel Policy with the implementation of section 42 U.S.C. 1973gg-5(c) as it applies to recruitment offices within the DoD.

(17) In coordination with the Services, develop multiple types of training materials for use by IVA offices, IVAOs, UVAOs, and recruiters to provide voter registration and absentee ballot assistance and at recruitment offices of the Military Services to provide voter registration assistance. Conduct voting assistance training during even-numbered years worldwide.

(18) Analyze the impact of providing voter registration assistance and make recommendations for improvements in Federal and State procedures, forms, and laws affected by 42 U.S.C. 1973ff *et seq.*

(19) Maintain multiple lines of support for use by uniformed services and overseas voters, personnel assigned to recruitment offices of the Military Services and State election officials to provide assistance outlined pursuant to 42 U.S.C. 1973ff.

(b) DoD Component and Uniformed Services Procedures. The DoD Components and the uniformed services shall:

(1) Develop written voting-related policies to support all eligible uniformed services personnel and their family members including those in deployed, dispersed, and tenant organizations. Establish the ratio and maximum number of voters who may be represented by a VAO.

(2) Ensure command support at all levels for the FVAP.

(3) Designate in writing a uniformed officer of flag grade or a civilian employee in the Senior Executive Service in each uniformed service as the SSVR to manage the respective Service voting programs.

(4) Designate a SVAO, preferably a civilian employee (General Schedule (GS)-12 or higher), to assist the SSVR and who shall be responsible for voting

assistance operations within his or her Service.

(i) If the SVAO is a military member, he or she should be at least of pay grade O-4 (if an officer) or E-8 (if enlisted) and shall be a permanently assigned member within the SSVR's organization.

(ii) The chief or director of each Reserve Component shall designate an SVAO to coordinate with the SSVR and the Director, FVAP to maintain a contingency absentee voting program for the National Guard and Reserve units and personnel who have been activated and deployed.

(5) Establish IVA offices on each military installation and maintain an updated list of IVA offices, including location, address, hours of operation, phone number and email address, published on the Service voting assistance Web site. At the discretion of the installation commander, satellite offices may be established under the primary IVA office.

(i) The IVA office will provide voter assistance to military personnel, their dependents, civilian Federal employees, and all qualified voters who have access to such installation offices. IVA offices shall also serve as voter registration agencies under 42 U.S.C. 1973gg-5(a)(2).

(ii) The IVA office shall be established within the installation headquarters organization reporting directly to the installation commander, even if geographically located in another office.

(iii) The IVA office should be located in a well-advertised, fixed location, consistent throughout the Service, and should be physically co-located with an existing office that receives extensive visits by Service personnel, family members, and DoD civilians. The IVA office shall be staffed during the hours the installation office is open with trained personnel to provide direct assistance in registration and voting procedures, including the assistance required under 42 U.S.C. 1973gg-5(a)(4).

(iv) The IVA office shall:

(A) Be included in the administrative in-processing and out-processing activities required of reporting and detaching personnel.

(B) Ensure that uniformed services members, their voting-age dependents, and overseas DoD civilians are provided proper voting assistance at the IVA office, including the opportunity to update their voter registration information through the submission of a revised SF 76, "Federal Post Card Application (FPCA)" or National Mail Voter Registration Form.

(C) Ensure that voting assistance is provided to all personnel, military and

civilian, reporting for duty on the installation, detaching from duty, deploying, and returning from deployment of 6 months or longer.

(1) SF 76s shall be used to notify local election officials of the change of mailing address for absentee ballot delivery purposes.

(2) Uniformed services members who are being released from active duty shall be advised to notify their local election office that they are no longer covered under 42 U.S.C. 1973ff and shall be provided the opportunity to submit a National Mail Voter Registration Form.

(D) Ensure that all small and geographically separated units are provided voting assistance.

(E) Provide written information on voter registration and absentee ballot procedures. This can be met by providing the applicant with the SF 76, SF 186, (if applicable), or the National Mail Voter Registration Form, the attached instructions for those forms, and the State-specific instructions from the Voting Assistance Guide (available at <http://www.fvap.gov>) for absent uniformed services voters, voting-age dependent voters, and overseas civilians. Citizens may also be provided with all of the necessary resources including, but not limited to, access to a computer system connected to the Internet, a printer, and a scanner to use the FPCA wizard available at the FVAP Web site, [www.fvap.gov](http://www.fvap.gov).

(1) SF 76 and SF 186 (if applicable) shall be provided to absent uniformed services personnel and their family members (within and outside of the United States) and to Federal civilian employees and other U.S. citizens who have access to an IVA office outside the United States.

(2) The National Mail Voter Registration Form shall be provided to Federal civilian employees and other U.S. citizens who have access to the IVA office within the United States, and to uniformed services voters who currently reside in their voting districts.

(F) Provide direct assistance to individuals in completing the forms necessary to register to vote, update their voter registration information, and request absentee ballots.

(G) Collect from the voter and transmit the completed SF 76 or National Mail Voter Registration Form for the applicant, within 5 calendar days, to the appropriate local election office.

(H) Maintain voting program metrics as coordinated with and prescribed by the Director, FVAP and furnish a report, via their SVAO, to the Director, FVAP each calendar quarter or as requested.

(6) Designate VAOs, in writing, at every level of command; assign one VAO on each installation and in each major command to coordinate the programs conducted by subordinate units and tenant commands.

(i) For continuity, individuals assigned as IVAOs should serve for 18 months beginning in October of the year immediately prior to a regularly scheduled general election for Federal offices and concluding in March of the year immediately following a regularly scheduled general election for Federal offices.

(ii) Ensure that VAOs are available and equipped to assist voters for all elections. VAOs shall be provided the time and resources needed to perform their voting assistance duties.

(iii) When uniformed services personnel (including noncommissioned officers) are designated as VAOs this part authorizes them to administer oaths in connection with voter registration and voting.

(7) Designate IVAOs, preferably civilians (GS-12 or higher) with access to the installation commander. If a uniformed services member is assigned as the IVAO, that officer should hold the pay grade of O-4 or higher; however, it is preferable to assign an enthusiastic volunteer who is outside this rank and grade guidance rather than assign a less enthusiastic member who meets the criterion.

(i) The IVAO shall complete FVAP training before assuming the duties of the IVAO.

(ii) The IVAO shall work closely with the IVA office to coordinate the unit-level voting assistance programs implemented on that installation.

(iii) Each IVAO shall notify installation personnel of the last date before a general election for Federal offices by which absentee ballots must be mailed to reasonably be delivered in time to State and local election officials and of general mail delivery deadlines recommended by the Military Postal Service Agency.

(8) Designate and assign, in writing, a UVAO, at the O-2/E-7 level or above, within each unit of 25 or more permanently assigned members. It is preferable to assign an enthusiastic volunteer who is outside this rank and grade guidance rather than assign a less enthusiastic member who meets the criterion.

(i) A UVAO shall complete FVAP training prior to assuming the duties of the UVAO as specified in this rule. Unit commanders shall, to the extent practicable, provide funding to enable their UVAOs to attend in-person training.

(ii) An additional UVAO should be assigned for each additional 50 members above the 25-member base.

(iii) UVAOs shall ensure that all small and geographically separated units are assisted.

(iv) UVAOs may advise and assist the IVA office in fulfilling the voter assistance functions for deploying personnel, personnel returning from deployment, and personnel recording a change of address. However, the individual in charge of the IVA office is responsible to require that UVAOs have fully complied with the voter assistance responsibilities as described in 42 U.S.C. 1973ff.

(9) Require that uniformed services members and their voting-age dependents have ready access to absentee voter registration, ballot request and absentee ballot submission information, deadlines, and recommended mailing dates to meet those deadlines. This information must be available online and in written format for those citizens who do not have access to online documents.

(10) Expediently obtain and disseminate to eligible voters, voting information and related materials, such as the Voting Assistance Guide, SF 76, and SF 186.

(11) Provide sufficient registration and ballot request materials to support all elections.

(12) Establish within each military installation and major command a VAO network and communications capability to quickly disseminate voting information throughout the installation or major command. Establish a DoD Component-wide means to communicate effectively with and expeditiously disseminate voting information to Commanders, VAOs, and uniformed services and overseas DoD civilian members of the DoD Component and their voting age dependents. This communication effort should be coordinated with the FVAP.

(13) Develop a DoD Component-wide communications plan to provide information on the absentee voting process (including State registration and absentee ballot deadlines and the effective deadlines for mailing from overseas and remote locations to meet those State deadlines), encourage voting participation, schedule voting communications from Component leaders, and program the distribution of voting materials.

(14) Develop a distribution system to deliver SF 76s directly to all eligible voters either through in-hand delivery or through electronic means.

(15) The delivery of SF 76s shall be accomplished:

(i) By January 15 of each calendar year to eligible voters and, to the extent practicable, their voting-age dependents.

(ii) By July 15 of even-numbered years to eligible voters and, to the extent practicable, voting-age dependents.

(iii) Before graduation and detachment from recruit training. These SF 76s shall be used to notify local election officials of the change of mailing address for absentee ballot delivery purposes.

(16) Require the Inspectors General of the Military Departments to review their voting assistance program annually, and at every level of command, to ensure compliance with 10 U.S.C. 1566a, 42 U.S.C. 1973gg-5, 42 U.S.C. 1973ff-1973ff-6, 18 U.S.C. 592, 18 U.S.C. 609, DoD 8910.1-M (available at <http://www.dtic.mil/whs/directives/corres/pdf/891001m.pdf>), and DoD 4525.6-M. A copy of this report shall be submitted to the IG DoD along with supporting statistical information to the Director, FVAP, by January 31 of the following year pursuant to 10 U.S.C.

(17) Continually evaluate command voting assistance programs. Program metrics shall be reported to the Director, FVAP, as prescribed by paragraph n. in Enclosure 3.

(18) Establish and maintain a direct link from the DoD Component's Web site to the Web site designated by the Director, FVAP.

(19) Develop comprehensive command-wide voting awareness, assistance programs, and activities in accordance with the requirement of paragraph (15)(i) of this section to annually deliver SF76s by January 15. "Armed Forces Voters Week" will be advertised to encourage voter registration drives.

(20) Establish and maintain a standard email address of the form `Vote@(unit).(Service).mil`, `Vote.(unit)@(Service).mil` or similar format to contact all UVAOs within that Service.

(21) Annually train all uniformed service members (including activated National Guard and Reserve personnel) on absentee registration and voting procedures.

(i) All basic training and command courses shall emphasize and advertise voting assistance programs to encourage service members to register and subsequently vote by offering instruction on voting rights and responsibilities and procedures on absentee registration and voting.

(ii) Provide training and voting assistance for units preparing for deployment where voting materials and accessibility to register may be limited due to at-sea or remote area deployment.

(iii) Retain records of training conducted, including dates and attendees, at the unit level for at least 1 calendar year.

(22) Require that all major command, installation, and UVAOs attend an FVAP voting assistance workshop during even-numbered years with elections for Federal offices. If the installation is not scheduled to receive FVAP workshop training, installation and UVAOs should attend training at a nearby installation. VAOs at remote locations can access the FVAP Web site for training. Documentation of VAO training at the installation or base level shall be stored within local personnel records.

(23) To the greatest extent practicable, ensure voters who are eligible to cast absentee ballots on DoD facilities are able to do so in a private and independent manner.

(24) Protect the privacy of the contents of absentee ballots while under DoD control. Voters who vote locally at polling sites should be provided time to vote during working hours.

(25) File an annual after-action report to the Director, FVAP, in the format and manner specified by the Director, FVAP.

(26) Assist the FVAP in conducting official surveys in the manner specified by the Director, FVAP.

(27) Refrain from contacting State and local government officials about voting policy matters. The Director, Defense State Liaison Office, in consultation with the Director, FVAP, shall be the DoD representative for coordination with Federal, State, and local government entities for legislative and other policy matters involving voting assistance and elections pursuant to 42 U.S.C. 1973ff *et seq.*

(i) IVAOs, major command voting assistance officers, and SVAOs are encouraged to discuss voting policy concerns with FVAP, and may work with FVAP on such issues at the Director, FVAP's request.

(ii) IVAOs, major command voting assistance officers, and SVAOs may contact local election officials to help resolve any specific problem involving voter registration or absentee voting on behalf of the voter, or to engage appropriate local election official assistance for a voter registration drive or similar event on an installation.

(28) Consolidate and provide quarterly statistical information and records on voter registration assistance provided by the UVAOs and the IVA offices in a format prescribed by the Director, FVAP.

(29) Ensure all personnel assigned to transition assistance program offices are informed of the policies in this part and

are trained to provide materials educating transitioning personnel on their civilian voting rights and responsibilities. Transition assistance program offices shall work with the Director, FVAP, to provide pre-printed notices that transitioning personnel may use to inform their election offices that they no longer will vote absentee in accordance with the provisions of 42 U.S.C. 1973ff.

(30) Ensure all personnel assigned to recruitment offices are informed of the policies in this part and are trained to provide voter registration assistance. Ensure the recruitment offices of the Military Services:

(i) Provide each prospective enlistee with the National Mail Voter Registration Form, available at [http://www.eac.gov/voter/Register\\_to\\_Vote](http://www.eac.gov/voter/Register_to_Vote), and DD Form 2645, Voter Registration Information Form, available at <http://www.dtic.mil/whs/directives/infomgt/forms/forminfo/forminfo2084.html>, unless the applicant, in writing, declines to register to vote.

(ii) Distribute the National Mail Voter Registration Form to each eligible citizen and provide assistance in completing the form unless the applicant refuses such assistance.

(iii) Provide each eligible citizen or prospective enlistee who does not decline to register to vote the same degree of assistance for the completion of the National Mail Voter Registration Form as is provided by the office for the completion of its own forms, e.g., the application for enlistment, unless the person refuses such assistance.

(iv) Transmit all completed registration applications within 5 calendar days to the appropriate State election officials.

(v) Maintain statistical information and records on voter registration assistance provided by recruitment offices in the format prescribed by the Director, FVAP, for a period of two years, in accordance with 42 U.S.C. 1973gg(6)(i).

(31) Ensure that inspections of recruitment offices of the Military Services by the Service Inspectors General are in compliance with this part.

(32) As discussed in DoD 4525.6–M, the Director, Military Postal Service Agency shall:

(i) Implement measures in consultation with the FVAP, to the maximum extent practicable, to ensure that a postmark or other proof of mailing date is provided on each absentee ballot collected at any overseas location or vessel at sea and that voting materials are moved expeditiously, to the

maximum extent practicable, by military postal authorities.

(ii) Develop an outreach plan to inform overseas uniformed services voters regarding the ballot collection and delivery service to be implemented prior to each general election for Federal office.

(iii) Establish alternative deadlines for collecting and forwarding absentee ballots from overseas locations as required by 42 U.S.C. 1973ff.

(33) Revise all voting assistance program instructions and procedures to incorporate the provisions of this part.

(c) *Executive Department and Agency Procedures.* (1) Federal Executive departments and agencies, including, but not limited to, the Department of State, the Department of Commerce, and the Department of Health and Human Services, are encouraged to adopt regulations and procedures that conform to this part to the maximum extent practicable, consistent with their organizational missions. By doing so, the FVAP will be able to assist the Executive departments, agencies, and their voting constituencies to the maximum extent.

(2) The head of each Government department, agency, or other entity shall distribute balloting materials and develop a non-partisan program of information and education for all employees and family members pursuant to 42 U.S.C. 1973ff(c).

(i) The department or agency is responsible for providing voter assistance with assistance available from the FVAP.

(ii) Each department or agency with employees or family members covered by 42 U.S.C. 1973ff shall designate an individual to coordinate and administer a voting assistance program for the department or agency to include, where practicable, the responsibilities in this part. The name, address, and telephone number of this individual shall be provided to the Director, FVAP.

(iii) The Secretary of State shall designate a voting action officer at the Department of State headquarters to oversee the Department's program as well as a U.S. citizen at each U.S. embassy or consulate to assist, to the fullest extent practicable, other U.S. citizens residing outside of the United States who are eligible to vote. The Secretary of State shall provide annually, or as requested by the Director, FVAP, estimates of the numbers of U.S. citizens currently residing in each country with an established embassy.

(iv) Each embassy and consulate should have sufficient quantities of materials to include SF 76s, and SF

186s, needed by U.S. citizens to register and vote. Embassies and consulates will also inform and educate U.S. citizens regarding their right to register and vote, and will publicize voter assistance programs.

(v) The Department of State's voting action officer shall coordinate with the Director, FVAP, in the development and conduct of voting events, programs to inform and educate U.S. citizens outside of the United States, and provision of voting information and resources for assistance.

(vi) Department of State and the Military Service voting action officers shall assist, as requested, embassy and consulate VAOs with post-election surveys of civilians outside of the United States.

Dated: September 12, 2012.

**Patricia L. Toppings,**  
*OSD Federal Register Liaison Officer,*  
*Department of Defense.*

[FR Doc. 2012–22950 Filed 9–17–12; 8:45 am]

**BILLING CODE 5001–06–P**

## DEPARTMENT OF HOMELAND SECURITY

### Coast Guard

#### 33 CFR Part 117

[Docket No. USCG–2012–0115]

RIN 1625–AA09

#### Drawbridge Operation Regulation; Grosse Tete Bayou, Iberville Parish, LA

**AGENCY:** Coast Guard, DHS.

**ACTION:** Final rule.

**SUMMARY:** The Coast Guard is removing the existing drawbridge operation regulation for the Union Pacific railroad swing bridge over Grosse Tete Bayou, mile 14.7, Iberville Parish, Louisiana. This bridge has been modified from a swing bridge to a fixed bridge and the current special operating regulation is no longer applicable or necessary.

**DATES:** This rule is effective September 18, 2012.

**ADDRESSES:** Documents indicated in this preamble as being available in the docket, are part of docket USCG–2012–0115 and are available by going to <http://www.regulations.gov>, inserting USCG–2012–0115 in the “Keyword” box, and then clicking “Search.” This material is also available for inspection or copying at the Docket Management Facility (M–30), U.S. Department of Transportation, West Building Ground Floor, Room W12–140, 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 Mr. Jim Wetherington, Bridge Specialist, Coast Guard; telephone 504-671-2128, email

[james.r.wetherington@uscg.mil](mailto:james.r.wetherington@uscg.mil). If you have questions on viewing the docket, call Renee V. Wright, Program Manager, Docket Operations, telephone 202-366-9826.

#### SUPPLEMENTARY INFORMATION:

##### Table of Acronyms

CFR Code of Federal Regulations  
DHS Department of Homeland Security  
FR Federal Register  
NPRM Notice of Proposed Rulemaking  
§ Section Symbol  
U.S.C. United States Code

#### A. Regulatory History and Information

The Coast Guard is issuing this 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), the Coast Guard finds that good cause exists for not publishing a notice of proposed rulemaking (NPRM) with respect to this rule because the Union Pacific railroad swing bridge requiring the draw operations in 33 CFR 117.449 (a) was modified to be a fixed span bridge in May of 2012.

The bridge operator and those transiting in the vicinity of this bridge have not executed any draw operations since the regulation that governs the bridge was changed to state that “the draw \* \* \* need not be opened for the passage of vessels” on February 23, 1976. At that time, all of the internal workings of the bridge were removed.

The Coast Guard has also determined that the waterway is non-tidal and not susceptible to interstate or foreign commerce thus making the bridge exempt from bridge permit requirements under Section 107 of the Coast Guard Authorization Act of 1982 (33 U.S.C. 530). That determination allowed the bridge owner to modify the existing bridge to permanently remove the machinery from the bridge and make modification to the swing span portion of the bridge to render it as a fixed bridge without a permit. Because of the modification from a swing bridge to a fixed bridge, the current regulation is no longer applicable and should be

removed from publication. For these reasons, good cause exists for not publishing a NPRM with respect to this rule because it is unnecessary.

For similar reasons, under 5 U.S.C. 553(d)(3), the Coast Guard finds that good cause exists for making this rule effective in less than 30 days after publication in the **Federal Register** (FR). The railroad bridge has had no openings in 61 years. It has effectively been a fixed bridge for 36 years due to the lack of internal machinery. This bridge has now been modified to a fixed bridge. As such, the bridge is not required to have an operating regulation. This rule only makes a minor change to the Code of Federal Regulations (CFR), omitting a regulatory requirement that is no longer applicable or necessary. Therefore, providing a 30 day notice before making this rule effective is unnecessary.

#### B. Basis and Purpose

The Union Pacific railroad swing bridge across Grosse Tette Bayou, mile 14.7, was modified into a fixed bridge in May of 2012. The modification of this bridge from a drawbridge to a fixed bridge necessitates the removal of the drawbridge operation regulation pertaining to this bridge.

The regulation governing the operation of this bridge is found in 33 CFR 117.449(a). The purpose of this rule is to remove the existing regulation from the CFR since it governs a bridge that no longer requires a drawbridge regulation.

#### C. Discussion of Final Rule

The Coast Guard is changing the regulation in 33 CFR 117.449 by removing restrictions and the regulatory burden related to the draw operations for the Union Pacific railroad swing bridge, which has been modified from a moveable to a fixed bridge, without publishing an NPRM. The change removes the section of the regulation governing the bridge since the bridge will no longer be required to comply with 33 CFR part 117. This change does not affect vessel operators using the waterway as this bridge has not opened since 1951 and has not had the ability to open since 1976.

#### 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 bridge has been unable to open since 1976. The removal of the drawbridge regulation does not impact vessel traffic because the current conditions have been in place for decades. Additionally, the bridge has been modified to be a fixed bridge so it cannot accommodate vessel traffic.

##### 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 rule will not have a significant economic impact on a substantial number of small entities.

Since the drawbridge across the Grosse Tete Bayou, mile 14.7, in Iberia Parish, LA has been modified to a fixed bridge; the regulation governing draw operations for this bridge is no longer needed. There is no new restriction or regulation being imposed by this rule; therefore, the Coast Guard certifies under 5 U.S.C. 605(b) that this final rule will not have a significant economic impact on a substantial number of small entities.

##### 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 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 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

We have analyzed this rule under Executive Order 13211, Actions Concerning Regulations That Significantly Affect Energy Supply, Distribution, or Use. We have determined that it is not a "significant energy action" under that order because it is not a "significant regulatory action" under Executive Order 12866 and is not likely to have a significant adverse effect on the supply, distribution, or use of energy. The Administrator of the Office of Information and Regulatory Affairs has not designated it as a significant energy action. Therefore, it does not require a Statement of Energy Effects under Executive Order 13211.

#### 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 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. Section 117.449 is revised to read as follows:

#### § 117.449 Grosse Tete Bayou.

The removable span of the S377 Bridge, mile 15.3 near Rosedale, shall be opened for the passage of vessels if at least 48 hours notice is given.

Dated: August 25, 2012.

**Roy A. Nash,**

*Rear Admiral, U.S. Coast Guard, Commander, Eighth Coast Guard District.*

[FR Doc. 2012-22921 Filed 9-17-12; 8:45 am]

**BILLING CODE 9110-04-P**

#### DEPARTMENT OF HOMELAND SECURITY

#### Coast Guard

#### 33 CFR Part 165

[Docket No. USCG-2012-0787]

#### Safety Zone; Fleet Week Fireworks, San Francisco Bay, San Francisco, CA

**AGENCY:** Coast Guard, DHS.

**ACTION:** Notice of enforcement of regulation.

**SUMMARY:** The Coast Guard will enforce the safety zone for the Fleet Week Fireworks in the Captain of the Port, San Francisco area of responsibility during the dates and times noted below. This action is necessary to protect life and property of the maritime public from the hazards associated with the fireworks display. During the enforcement period, unauthorized persons or vessels are prohibited from entering into, transiting through, or anchoring in the safety zone, unless authorized by the Patrol Commander (PATCOM).

**DATES:** The regulations in 33 CFR 165.1191, Table 1, Item number 25, will be enforced from 11 a.m. to 9:50 p.m. on October 6, 2012.

**FOR FURTHER INFORMATION CONTACT:** If you have questions on this notice, call or email Ensigh William Hawn, U.S.

Coast Guard Sector San Francisco; telephone (415) 399-7442 or email at [D11-PF-MarineEvents@uscg.mil](mailto:D11-PF-MarineEvents@uscg.mil).

**SUPPLEMENTARY INFORMATION:** The Coast Guard will enforce a 100 foot safety zone around a fireworks barge during the loading, transit, and arrival of the fireworks barge to the display location and until the start of the fireworks display. From 11 a.m. until 8 p.m. on October 6, 2012, the fireworks barge will be loading pyrotechnics off of Pier 50 in position 37°46'28" N, 122°23'06" W (NAD 83). From 8 p.m. to 8:30 p.m. on October 6, 2012, the loaded barge will transit from Pier 50 to the launch site near Pier 3 in approximate position 37°48'00" N, 122°23'27" W (NAD83). Upon the commencement of the fireworks display, scheduled to take place from 9:30 p.m. to 9:40 p.m. on October 6, 2012, the safety zone will increase in size and encompass the navigable waters around and under the fireworks barge within a radius 1,000 feet at the launch site near Pier 3 in approximate position 37°48'00" N, 122°23'27" W (NAD83) for the Fleet Week Fireworks in 33 CFR 165.1191, Table 1, item number 25. This safety zone will be in effect from 11 a.m. to 9:50 p.m. on October 6, 2012. Under the provisions of 33 CFR 165.1191, unauthorized persons or vessels are prohibited from entering into, transiting through, or anchoring in the safety zone during all applicable effective dates and times, unless authorized to do so by the PATCOM. Additionally, each person who receives notice of a lawful order or direction issued by an official patrol vessel shall obey the order or direction. The PATCOM is empowered to forbid entry into and control the regulated area. The PATCOM shall be designated by the Commander, Coast Guard Sector San Francisco. The PATCOM may, upon request, allow the transit of commercial vessels through regulated areas when it is safe to do so. This notice is issued under authority of 33 CFR 165.1191 and 5 U.S.C. 552(a). In addition to this notice in the **Federal Register**, the Coast Guard will provide the maritime community with extensive advance notification of the safety zone and its enforcement period via the Local Notice to Mariners.

If the Captain of the Port determines that the regulated area need not be enforced for the full duration stated in this notice, a Broadcast Notice to Mariners may be used to grant general permission to enter the regulated area.

Dated: August 24, 2012.

**Cynthia L. Stowe,**

*Captain, U.S. Coast Guard, Captain of the Port San Francisco.*

[FR Doc. 2012-22922 Filed 9-17-12; 8:45 am]

**BILLING CODE 9110-04-P**

## ENVIRONMENTAL PROTECTION AGENCY

### 40 CFR Part 300

[EPA-HQ-SFUND-2000-0002, EPA-HQ-SFUND-2003-0010, EPA-HQ-SFUND-2011-0647, 0653, EPA-HQ-SFUND-2012-0146, 0147, 0062, 0063, 0065, 0066, 0067, 0068, 0070 and 0071; FRL-9722-6]

### National Priorities List, Final Rule No. 55

**AGENCY:** Environmental Protection Agency.

**ACTION:** Final rule.

**SUMMARY:** The Comprehensive Environmental Response, Compensation, and Liability Act of 1980 ("CERCLA" or "the Act"), as amended, requires that the National Oil and Hazardous Substances Pollution Contingency Plan ("NCP") include a list of national priorities among the known releases or threatened releases of hazardous substances, pollutants or contaminants throughout the United States. The National Priorities List ("NPL") constitutes this list. The NPL is intended primarily to guide the Environmental Protection Agency ("the EPA" or "the agency") in determining which sites warrant further investigation. These further investigations will allow the EPA to assess the nature and extent of public health and environmental risks associated with the site and to determine what CERCLA-financed remedial action(s), if any, may be appropriate. This rule adds 12 sites to the General Superfund Section of the NPL.

**DATES:** The effective date for this amendment to the NCP is October 18, 2012.

**ADDRESSES:** Contact information for the EPA Headquarters:

- Docket Coordinator, Headquarters; U.S. Environmental Protection Agency; CERCLA Docket Office; 1301 Constitution Avenue NW.; EPA West, Room 3334, Washington, DC 20004, 202/566-0276.

The contact information for the relevant Regional Dockets is as follows:

- Joan Berggren, Region 1 (CT, ME, MA, NH, RI, VT), U.S. EPA, Superfund Records and Information Center, 5 Post

Office Square, Suite 100; Boston, MA 02109-3912; 617/918-1417.

- Ildefonso Acosta, Region 2 (NJ, NY, PR, VI), U.S. EPA, 290 Broadway, New York, NY 10007-1866; 212/637-4344.

- Debbie Jourdan, Region 4 (AL, FL, GA, KY, MS, NC, SC, TN), U.S. EPA, 61 Forsyth Street SW., Mailcode 9T25, Atlanta, GA 30303; 404/562-8862.

- Todd Quesada, Region 5 (IL, IN, MI, MN, OH, WI), U.S. EPA Superfund Division Librarian/SFD Records Manager SRC-7J, Metcalfe Federal Building, 77 West Jackson Boulevard, Chicago, IL 60604; 312/886-4465.

- Brenda Cook, Region 6 (AR, LA, NM, OK, TX), U.S. EPA, 1445 Ross Avenue, Suite 1200, Mailcode 6SFTS, Dallas, TX 75202-2733; 214/665-7436.

### FOR FURTHER INFORMATION CONTACT:

Terry Jeng, phone: (703) 603-8852, email: [jeng.terry@epa.gov](mailto:jeng.terry@epa.gov), Site Assessment and Remedy Decisions Branch, Assessment and Remediation Division, Office of Superfund Remediation and Technology Innovation (Mailcode 5204P), U.S. Environmental Protection Agency; 1200 Pennsylvania Avenue NW., Washington, DC 20460; or the Superfund Hotline, phone (800) 424-9346 or (703) 412-9810 in the Washington, DC, metropolitan area.

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## I. Background

## A. What are CERCLA and SARA?

In 1980, Congress enacted the Comprehensive Environmental Response, Compensation, and Liability Act, 42 U.S.C. 9601–9675 (“CERCLA” or “the Act”), in response to the dangers of uncontrolled releases or threatened releases of hazardous substances, and releases or substantial threats of releases into the environment of any pollutant or

contaminant that may present an imminent or substantial danger to the public health or welfare. CERCLA was amended on October 17, 1986, by the Superfund Amendments and Reauthorization Act (“SARA”), Public Law 99–499, 100 Stat. 1613 *et seq.*

## B. What is the NCP?

To implement CERCLA, the EPA promulgated the revised National Oil and Hazardous Substances Pollution Contingency Plan (“NCP”), 40 CFR Part 300, on July 16, 1982 (47 FR 31180), pursuant to CERCLA section 105 and Executive Order 12316 (46 FR 42237, August 20, 1981). The NCP sets guidelines and procedures for responding to releases and threatened releases of hazardous substances, or releases or substantial threats of releases into the environment of any pollutant or contaminant that may present an imminent or substantial danger to the public health or welfare. The EPA has revised the NCP on several occasions. The most recent comprehensive revision was on March 8, 1990 (55 FR 8666).

As required under section 105(a)(8)(A) of CERCLA, the NCP also includes “criteria for determining priorities among releases or threatened releases throughout the United States for the purpose of taking remedial action and, to the extent practicable, taking into account the potential urgency of such action, for the purpose of taking removal action.” “Removal” actions are defined broadly and include a wide range of actions taken to study, clean up, prevent or otherwise address releases and threatened releases of hazardous substances, pollutants or contaminants (42 U.S.C. 9601(23)).

## C. What is the National Priorities List (NPL)?

The NPL is a list of national priorities among the known or threatened releases of hazardous substances, pollutants or contaminants throughout the United States. The list, which is appendix B of the NCP (40 CFR Part 300), was required under section 105(a)(8)(B) of CERCLA, as amended. Section 105(a)(8)(B) defines the NPL as a list of “releases” and the highest priority “facilities” and requires that the NPL be revised at least annually. The NPL is intended primarily to guide the EPA in determining which sites warrant further investigation to assess the nature and extent of public health and environmental risks associated with a release of hazardous substances, pollutants or contaminants. The NPL is of only limited significance, however, as it does not assign liability to any party or to the owner of any specific property.

Also, placing a site on the NPL does not mean that any remedial or removal action necessarily need be taken.

For purposes of listing, the NPL includes two sections, one of sites that are generally evaluated and cleaned up by the EPA (the “General Superfund Section”) and one of sites that are owned or operated by other federal agencies (the “Federal Facilities Section”). With respect to sites in the Federal Facilities Section, these sites are generally being addressed by other federal agencies. Under Executive Order 12580 (52 FR 2923, January 29, 1987) and CERCLA section 120, each federal agency is responsible for carrying out most response actions at facilities under its own jurisdiction, custody or control, although the EPA is responsible for preparing a Hazard Ranking System (“HRS”) score and determining whether the facility is placed on the NPL.

## D. How are sites listed on the NPL?

There are three mechanisms for placing sites on the NPL for possible remedial action (see 40 CFR 300.425(c) of the NCP): (1) A site may be included on the NPL if it scores sufficiently high on the HRS, which the EPA promulgated as appendix A of the NCP (40 CFR Part 300). The HRS serves as a screening tool to evaluate the relative potential of uncontrolled hazardous substances, pollutants or contaminants to pose a threat to human health or the environment. On December 14, 1990 (55 FR 51532), the EPA promulgated revisions to the HRS partly in response to CERCLA section 105(c), added by SARA. The revised HRS evaluates four pathways: ground water, surface water, soil exposure and air. As a matter of agency policy, those sites that score 28.50 or greater on the HRS are eligible for the NPL. (2) Pursuant to 42 U.S.C. 9605(a)(8)(B), each state may designate a single site as its top priority to be listed on the NPL, without any HRS score. This provision of CERCLA requires that, to the extent practicable, the NPL include one facility designated by each state as the greatest danger to public health, welfare or the environment among known facilities in the state. This mechanism for listing is set out in the NCP at 40 CFR 300.425(c)(2). (3) The third mechanism for listing, included in the NCP at 40 CFR 300.425(c)(3), allows certain sites to be listed without any HRS score, if all of the following conditions are met:

- The Agency for Toxic Substances and Disease Registry (ATSDR) of the U.S. Public Health Service has issued a health advisory that recommends dissociation of individuals from the release.

- The EPA determines that the release poses a significant threat to public health.

- The EPA anticipates that it will be more cost-effective to use its remedial authority than to use its removal authority to respond to the release.

The EPA promulgated an original NPL of 406 sites on September 8, 1983 (48 FR 40658) and generally has updated it at least annually.

#### E. What happens to sites on the NPL?

A site may undergo remedial action financed by the Trust Fund established under CERCLA (commonly referred to as the "Superfund") only after it is placed on the NPL, as provided in the NCP at 40 CFR 300.425(b)(1).

("Remedial actions" are those "consistent with a permanent remedy, taken instead of or in addition to removal actions. \* \* \*" 42 U.S.C. 9601(24).) However, under 40 CFR 300.425(b)(2), placing a site on the NPL "does not imply that monies will be expended." The EPA may pursue other appropriate authorities to respond to the releases, including enforcement action under CERCLA and other laws.

#### F. Does the NPL define the boundaries of sites?

The NPL does not describe releases in precise geographical terms; it would be neither feasible nor consistent with the limited purpose of the NPL (to identify releases that are priorities for further evaluation), for it to do so. Indeed, the precise nature and extent of the site are typically not known at the time of listing.

Although a CERCLA "facility" is broadly defined to include any area where a hazardous substance has "come to be located" (CERCLA section 101(9)), the listing process itself is not intended to define or reflect the boundaries of such facilities or releases. Of course, HRS data (if the HRS is used to list a site) upon which the NPL placement was based will, to some extent, describe the release(s) at issue. That is, the NPL site would include all releases evaluated as part of that HRS analysis.

When a site is listed, the approach generally used to describe the relevant release(s) is to delineate a geographical area (usually the area within an installation or plant boundaries) and identify the site by reference to that area. However, the NPL site is not necessarily coextensive with the boundaries of the installation or plant, and the boundaries of the installation or plant are not necessarily the "boundaries" of the site. Rather, the site consists of all contaminated areas within the area used to identify the site,

as well as any other location where that contamination has come to be located, or from where that contamination came.

In other words, while geographic terms are often used to designate the site (e.g., the "Jones Co. plant site") in terms of the property owned by a particular party, the site, properly understood, is not limited to that property (e.g., it may extend beyond the property due to contaminant migration), and conversely may not occupy the full extent of the property (e.g., where there are uncontaminated parts of the identified property, they may not be, strictly speaking, part of the "site"). The "site" is thus neither equal to, nor confined by, the boundaries of any specific property that may give the site its name, and the name itself should not be read to imply that this site is coextensive with the entire area within the property boundary of the installation or plant. In addition, the site name is merely used to help identify the geographic location of the contamination, and is not meant to constitute any determination of liability at a site. For example, the name "Jones Co. plant site," does not imply that the Jones company is responsible for the contamination located on the plant site.

EPA regulations provide that the Remedial Investigation ("RI") "is a process undertaken \* \* \* to determine the nature and extent of the problem presented by the release" as more information is developed on site contamination, and which is generally performed in an interactive fashion with the Feasibility Study ("FS") (40 CFR 300.5). During the RI/FS process, the release may be found to be larger or smaller than was originally thought, as more is learned about the source(s) and the migration of the contamination. However, the HRS inquiry focuses on an evaluation of the threat posed and therefore the boundaries of the release need not be exactly defined. Moreover, it generally is impossible to discover the full extent of where the contamination "has come to be located" before all necessary studies and remedial work are completed at a site. Indeed, the known boundaries of the contamination can be expected to change over time. Thus, in most cases, it may be impossible to describe the boundaries of a release with absolute certainty.

Further, as noted above, NPL listing does not assign liability to any party or to the owner of any specific property. Thus, if a party does not believe it is liable for releases on discrete parcels of property, it can submit supporting information to the agency at any time after it receives notice it is a potentially responsible party.

For these reasons, the NPL need not be amended as further research reveals more information about the location of the contamination or release.

#### G. How are sites removed from the NPL?

The EPA may delete sites from the NPL where no further response is appropriate under Superfund, as explained in the NCP at 40 CFR 300.425(e). This section also provides that the EPA shall consult with states on proposed deletions and shall consider whether any of the following criteria have been met:

(i) Responsible parties or other persons have implemented all appropriate response actions required;

(ii) All appropriate Superfund-financed response has been implemented and no further response action is required; or

(iii) The remedial investigation has shown the release poses no significant threat to public health or the environment, and taking of remedial measures is not appropriate.

#### H. May the EPA delete portions of sites from the NPL as they are cleaned up?

In November 1995, the EPA initiated a policy to delete portions of NPL sites where cleanup is complete (60 FR 55465, November 1, 1995). Total site cleanup may take many years, while portions of the site may have been cleaned up and made available for productive use.

#### I. What is the construction completion list (CCL)?

The EPA also has developed an NPL construction completion list ("CCL") to simplify its system of categorizing sites and to better communicate the successful completion of cleanup activities (58 FR 12142, March 2, 1993). Inclusion of a site on the CCL has no legal significance.

Sites qualify for the CCL when: (1) Any necessary physical construction is complete, whether or not final cleanup levels or other requirements have been achieved; (2) the EPA has determined that the response action should be limited to measures that do not involve construction (e.g., institutional controls); or (3) the site qualifies for deletion from the NPL. For the most up-to-date information on the CCL, see the EPA's Internet site at <http://www.epa.gov/superfund/cleanup/ccl.htm>.

#### J. What is the sitewide ready for anticipated use measure?

The Sitewide Ready for Anticipated Use measure represents important Superfund accomplishments and the

measure reflects the high priority the EPA places on considering anticipated future land use as part of the remedy selection process. See Guidance for Implementing the Sitewide Ready-for-Reuse Measure, May 24, 2006, OSWER 9365.0-36. This measure applies to final and deleted sites where construction is complete, all cleanup goals have been achieved, and all institutional or other controls are in place. The EPA has been successful on many occasions in carrying out remedial actions that ensure protectiveness of human health and the environment for current and future land uses, in a manner that allows contaminated properties to be restored to environmental and economic vitality. For further information, please go to [http://www.epa.gov/superfund/programs/recycle/pdf/sitewide\\_a.pdf](http://www.epa.gov/superfund/programs/recycle/pdf/sitewide_a.pdf).

**K. What is state/tribal correspondence concerning NPL listing?**

In order to maintain close coordination with states and tribes in

the NPL listing decision process, the EPA's policy is to determine the position of the states and tribes regarding sites that the EPA is considering for listing. This consultation process is outlined in two memoranda that can be found at the following Web site: <http://www.epa.gov/superfund/sites/npl/hrsres/policy/govlet.pdf>. The EPA is improving the transparency of the process by which state and tribal input is solicited. The EPA will be using the web and where appropriate more structured state and tribal correspondence that (1) explains the concerns at the site and the EPA's rationale for proceeding; (2) requests an explanation of how the state intends to address the site if placement on the NPL is not favored; and (3) emphasizes the transparent nature of the process by informing states that information on their responses will be publicly available.

A model letter and correspondence from this point forward between the

EPA and states and tribes where applicable, will be added to the EPA's Web site at <http://www.epa.gov/superfund/sites/query/queryhtm/nplstcor.htm>.

**II. Availability of Information to the Public**

**A. May I review the documents relevant to this final rule?**

Yes, documents relating to the evaluation and scoring of the sites in this final rule are contained in dockets located both at the EPA Headquarters and in the Regional offices.

An electronic version of the public docket is available through [www.regulations.gov](http://www.regulations.gov) (see table below for Docket Identification numbers). Although not all Docket materials may be available electronically, you may still access any of the publicly available Docket materials through the Docket facilities identified below in section II D.

**DOCKET IDENTIFICATION NUMBERS BY SITE**

Site name	City/county, state	Docket ID No.
Alabama Plating Company, Inc. ....	Vincent, AL .....	EPA-HQ-SFUND-2000-0002
Cedar Chemical Corporation .....	West Helena, AR .....	EPA-HQ-SFUND-2012-0062
Fairfax St. Wood Treaters .....	Jacksonville, FL .....	EPA-HQ-SFUND-2012-0063
Bautsch-Gray Mine .....	Galena, IL .....	EPA-HQ-SFUND-2012-0065
EVR-Wood Treating/Evangeline Refining Company .....	Jennings, LA .....	EPA-HQ-SFUND-2012-0066
Leeds Metal .....	Leeds, ME .....	EPA-HQ-SFUND-2011-0647
Holcomb Creosote Co .....	Yadkinville, NC .....	EPA-HQ-SFUND-2012-0067
Orange Valley Regional Ground Water Contamination .....	West Orange/Orange, NJ .....	EPA-HQ-SFUND-2012-0068
Peters Cartridge Factory .....	Kings Mills, OH .....	EPA-HQ-SFUND-2003-0010
West Troy Contaminated Aquifer .....	Troy, OH .....	EPA-HQ-SFUND-2012-0070
Circle Court Ground Water Plume .....	Willow Park, TX .....	EPA-HQ-SFUND-2012-0071
US Oil Recovery .....	Pasadena, TX .....	EPA-HQ-SFUND-2011-0653

**B. What documents are available for review at the Headquarters Docket?**

The Headquarters Docket for this rule contains, for each site, the HRS score sheets, the Documentation Record describing the information used to compute the score, pertinent information regarding statutory requirements or the EPA listing policies that affect the site and a list of documents referenced in the Documentation Record. For sites that received comments during the comment period, the Headquarters Docket also contains a Support Document that includes the EPA's responses to comments.

**C. What documents are available for review at the Regional Dockets?**

The Regional Dockets contain all the information in the Headquarters Docket, plus the actual reference documents containing the data principally relied

upon by the EPA in calculating or evaluating the HRS score for the sites located in their Region. These reference documents are available only in the Regional Dockets. For sites that received comments during the comment period, the Regional Docket also contains a Support Document that includes the EPA's responses to comments.

**D. How do I access the documents?**

You may view the documents, by appointment only, after the publication of this rule. The hours of operation for the Headquarters Docket are from 8:30 a.m. to 4:30 p.m., Monday through Friday, excluding federal holidays. Please contact the Regional Dockets for hours. For addresses for the Headquarters and Regional Dockets, see **ADDRESSES** section in the beginning portion of this preamble.

**E. How may I obtain a current list of NPL sites?**

You may obtain a current list of NPL sites via the Internet at <http://www.epa.gov/superfund/sites/npl/index.htm> or by contacting the Superfund Docket (see contact information in the beginning portion of this notice).

**III. Contents of This Final Rule**

**A. Additions to the NPL**

This final rule adds the following 12 sites to the NPL, all to the General Superfund Section. All of the sites included in this final rulemaking are being added to the NPL based on HRS scores of 28.50 or above with the exception of Cedar Chemical Corporation, which has been designated as the state's one-time top priority site. The sites are presented in the table below:

State	Site name	City/county
AL .....	Alabama Plating Company, Inc. ....	Vincent
AR .....	Cedar Chemical Corporation .....	West Helena
FL .....	Fairfax St. Wood Treaters .....	Jacksonville
IL .....	Bautsch-Gray Mine .....	Galena
LA .....	EVR-Wood Treating/Evangeline Refining Company .....	Jennings
ME .....	Leeds Metal .....	Leeds
NC .....	Holcomb Creosote Co .....	Yadkinville
NJ .....	Orange Valley Regional Ground Water Contamination .....	West Orange/Orange
OH .....	Peters Cartridge Factory .....	Kings Mills
OH .....	West Troy Contaminated Aquifer .....	Troy
TX .....	Circle Court Ground Water Plume .....	Willow Park
TX .....	US Oil Recovery .....	Pasadena

*B. What did the EPA do with the public comments it received?*

The EPA reviewed all comments received on the sites in this rule and responded to all relevant comments. This rule adds 12 sites to the NPL.

The EPA received two comments relating to all sites proposed for NPL addition in the March 2012 NPL proposed rule (77 FR 15344, March 15, 2012). One commenter approved of listing sites on the NPL but urged the EPA to develop a more reasoned and significant HRS score threshold for listing sites (see docket number EPA-HQ-SFUND-2012-0071-0005). The commenter questioned whether the EPA can protect human health and the environment without a “reasoned threshold for remediation” and whether 28.50 is the “exact point where risk becomes too great for the government to allow the contamination to continue.” The commenter expressed that she was unable to locate any resource indicating the rationale of the 28.50 threshold, then cited in part the EPA’s rationale from the 1990 revisions to the HRS at 55 FR 51569. The commenter questioned whether the rationale is still valid given that 220 sites currently on the Superfund list (16.9% of the total listed sites) fall within 5 points of the 28.50 cutoff.

In response, the commenter is incorrect that the 28.50 cutoff score is intended as a “reasoned threshold for remediation” and is incorrect in stating that the 28.50 cutoff score is intended as “the exact point where risk becomes too great to allow contamination to continue.” It is neither. The EPA’s rationale for retaining the 28.50 cutoff score is addressed in the preamble to the 1990 revisions to the HRS (55 FR 51569, December 14, 1990). There, after requesting public comments on the issue, the Agency stated:

EPA believes that the cutoff score has been, and should continue to be, a mechanism that allows it to make objective decisions on

national priorities. Because the HRS is intended to be a screening system, the Agency has never attached significance to the cutoff score as an indicator of a specific level of risk from a site, nor has the Agency intended the cutoff to reflect a point below which no risk was present. The score of 28.50 is not meant to imply that risky and non-risky sites can be precisely distinguished. Nevertheless, the cutoff score has been a useful screening tool that has allowed the Agency to set priorities and to move forward with studying and, where appropriate, cleaning up hazardous waste sites. The vast majority of sites scoring above 28.50 in the past have been shown to present risks. EPA believes that a cutoff score of 28.50 will continue to serve this crucial function.

An HRS evaluation is not a risk assessment and is not a decision to remediate a specific site. Remediation decisions are made later in the Superfund process after additional investigation. The HRS is intended to be a “rough list” of prioritized hazardous sites; a “first step in a process—nothing more, nothing less” *Eagle Picher Indus. v. EPA*, 759 F.2d 922, 932 (D.C. Cir. 1985) (*Eagle Picher II*). The EPA would like to investigate each possible site completely and thoroughly prior to evaluating them for proposal for NPL, but it must reconcile the need for certainty before action with the need for inexpensive, expeditious procedures to identify potentially hazardous sites. The courts have found the EPA’s approach to solving this conundrum to be “reasonable and fully in accord with Congressional intent” *Eagle Picher Industries, Inc. v. EPA*, (759 F.2d 905 (D.C. Cir. 1985) *Eagle Picher I*). When scoring sites during an HRS evaluation, the EPA does not score multiple pathways when scoring an additional pathway will not affect the listing decision, even though it might add to a site score. Therefore, the HRS score represents a threshold score—sites that score within 5 points could actually score significantly higher if additional pathways were investigated; thus, the

commenter’s basis for claiming that the rationale is no longer valid is flawed.

This rulemaking adds specific sites to the NPL and does not propose to change the process for determining the eligibility of sites for the NPL. This comment, which supports the placement of the sites to the NPL, results in no change to the HRS scores of the sites at issue and no change in the decision to place them on the NPL.

The second commenter stated that the EPA should have provided additional information as to why these sites were being listed, and that this lack of information was inconsistent with the Administrative Procedure Act (“APA”) (see docket number EPA-HQ-SFUND-2012-0071-0006). In particular, the commenter questions the adequacy of the Narrative Summary for each proposed site. The commenter states that the Narrative Summaries should provide more discussion of the rationale and purpose of listing a site; more discussion of alternatives to listing; and more opportunity for notice and comment as required by the APA. The commenter requests re-proposal of the sites in accordance with their request for additional information.

In response, the Agency notes that the commenter submitted similar comments to a NPL rulemaking in 2008 (see document number EPA-HQ-SFUND-2008-0081-0005). The Agency reaffirms its response to those comments in 2008 and continues to hold that its process for adding sites to the NPL complies with the APA and CERCLA. As stated in 2008, for prospective sites under consideration for listing on the NPL, the EPA follows NCP procedures by conducting a preliminary assessment (PA) report of the site. Depending on the results, that may be followed up by a site inspection report (SI), which involves gathering more information about the site by contacting the state and interested parties on and around the site. When a site is proposed to the NPL, the EPA provides its detailed rationale

in documents (*i.e.*, the HRS documentation record and supporting materials) publicly available at the EPA Headquarters in Washington, DC, in the Regional offices, and by electronic access at <http://www.regulations.gov>. If the site is affected by any particular statutory requirements or the EPA listing policies, such requirements or policies are discussed and included in the docket materials for each site, which are made available for public review and comment. Commenters have the opportunity to raise any comments they may have on the proposed listing, supporting documentation, and rationale (typically over a 60-day comment period). In kind, the EPA responds to such comments in writing before making a final decision to place a site on the NPL.

Section 553 of the APA authorizes “informal” rulemaking, which encourages and relies on the participation of the public, including potentially responsible parties. The process outlined in the paragraph above clearly complies with informal rulemaking under the APA. The commenter mistakenly argues that the EPA should put the basis or rationale for its listing decision in the Narrative Summary in the **Federal Register**. The detailed rationale and additional information the commenter seeks, however, is in the HRS documentation record itself. The EPA believes that the **Federal Register** notice and the documentation record give the notice required by the APA. The commenter does not explain why the APA requires the Narrative Summary to be published in the **Federal Register**. The HRS codifies or implements the criteria the EPA considers pursuant to CERCLA § 105(a)(8)(A) when placing a site on the NPL. As discussed above, courts have found the EPA’s approach reasonable and consistent with congressional intent.

Finally, while the commenter has made general assertions that the information presented at proposal for the sites was inadequate, the commenter has not explained why the information provided was not adequate to list the sites or any specific site. The commenter requests re-proposal of the sites but fails to specify or explain the inadequacies of the HRS documentation record of each site, and fails to provide any information the Agency should consider. As the commenter itself states: “Notice-and-Comment Rulemaking Must Be a Dialogue.” Courts, however, have held that the “dialogue between administrative agencies and the public is a two-way street.” *Northside Sanitary Landfill, Inc. v. Thomas*, 849 F.2d 1516,

1520 (D.C. Cir. 1988) (citing *Home Box Office, Inc. v. FCC*, 567 F.2d 9 (D.C. Cir. 1977)). The commenter “cannot merely state that a particular mistake was made,” rather it must show “why the mistake was of possible significance in the result the agency reaches.” See *id.* at 1519. In this case, the commenter has not explained what other information the Agency needs to consider or why the information the Agency has considered is not sufficient to place the sites on the NPL.

This rulemaking adds specific sites to the NPL and does not propose to change the process for determining the eligibility of sites for the NPL. This comment results in no change to the HRS scores of the sites presented and no change in the decision to place them on the NPL.

Other than these two general comments, the EPA received no additional comments on seven sites included in the March 2012 proposal and so the EPA is including them in this final rule. Those sites are Fairfax St. Wood Treaters (Jacksonville, FL), Holcomb Creosote Co (Yadkinville, NC), Bautsch-Gray Mine (Galena, IL), West Troy Contaminated Aquifer (Troy, OH), Cedar Chemical Corporation (West Helena, AR), EVR-Wood Treating/Evangeline Refining Company (Jennings, LA) and Circle Court Ground Water Plume (Willow Park, TX).

For the Orange Valley Regional Ground Water Contamination site (West Orange/Orange, NJ), the EPA also received a comment supporting listing of the site, and providing additional sampling data which the commenter stated demonstrated an even greater risk at the site than indicated by the proposed score. In response, the EPA is adding the site to the NPL, as the commenter advocates, and will consider the data provided as it performs the RI/FS to more fully assess the contamination and develop cleanup options, if deemed necessary.

Four sites in this rule received site-specific comments that are addressed in response to comments support documents placed in the docket and accompanying the release of this rule. These four sites are Leeds Metal (Leeds, ME), Alabama Plating Company, Inc. (Vincent, AL), Peters Cartridge Factory (Kings Mills, OH) and US Oil Recovery (Pasadena, TX).

#### *C. Removal of Construction Completion List Column Note and Footnote Description*

The EPA received no comments on its March 15, 2012 proposal to remove the Construction Completion List column note and footnote description (77 FR

15344, Docket # EPA-HQ-SFUND-2012-0146). This final rule amends the notes column and footnote description of Appendix B to 40 CFR Part 300 to remove the note that references “sites on the construction completion list.” The EPA developed the Construction Completion List (CCL) (58 FR 12142, March 2, 1993) “to simplify its system of categorizing sites and to better communicate the successful completion of cleanup activities.” Notes were added to Table 1 (General Superfund Section) and Table 2 (Federal Facilities Section) of the NPL to identify those sites on the CCL. With today’s easy public accessibility to the Internet and the availability of the most current data on the EPA’s Web site, the EPA is removing the construction completion list note. For information on the construction completion list, please visit the EPA’s Web site at <http://www.epa.gov/superfund/cleanup/ccl.htm>.

#### *D. Correction of Partial Deletion Notation in Table 1*

The EPA received no comments on its March 15, 2012 proposal to correct the partial deletion notation in Table 1 (77 FR 15344, Docket # EPA-HQ-SFUND-2012-0147). Therefore, this final rule corrects an error in the column note symbol used to designate sites with partial deletions in Appendix B to CFR Part 300. The correct column note symbol for a site with a partial deletion is “P”. The Mouat Industries site in Montana has its partial deletion incorrectly designated by a column note symbol of “\* \* \*P”. In addition, this incorrect symbol was erroneously added to the footnote descriptions at the end of Table 1 as “\* \* \*P = Sites with deletion(s)”. The EPA is correcting the column note for the Mouat Industries site by changing it to “P” and is removing the erroneous footnote description.

### **IV. Statutory and Executive Order Reviews**

#### *A. Executive Order 12866: Regulatory Planning and Review*

##### 1. What Is Executive Order 12866?

Under Executive Order 12866 (58 FR 51735 (October 4, 1993)), the agency must determine whether a regulatory action is “significant” and therefore subject to Office of Management and Budget (OMB) review and the requirements of the Executive Order. The Order defines “significant regulatory action” as one that is likely to result in a rule that may: (1) Have an annual effect on the economy of \$100 million or more or adversely affect in a material way the economy, a sector of

the economy, productivity, competition, jobs, the environment, public health or safety, or state, local or tribal governments or communities; (2) create a serious inconsistency or otherwise interfere with an action taken or planned by another agency; (3) materially alter the budgetary impact of entitlements, grants, user fees, or loan programs or the rights and obligations of recipients thereof; or (4) raise novel legal or policy issues arising out of legal mandates, the President's priorities or the principles set forth in the Executive Order.

2. Is this Final Rule subject to Executive Order 12866 review?

No. The listing of sites on the NPL does not impose any obligations on any entities. The listing does not set standards or a regulatory regime and imposes no liability or costs. Any liability under CERCLA exists irrespective of whether a site is listed. It has been determined that this action is not a "significant regulatory action" under the terms of Executive Order 12866 and is therefore not subject to OMB review.

#### B. Paperwork Reduction Act

1. What is the Paperwork Reduction Act?

According to the Paperwork Reduction Act (PRA), 44 U.S.C. 3501 *et seq.*, an agency may not conduct or sponsor, and a person is not required to respond to, a collection of information that requires OMB approval under the PRA, unless it has been approved by OMB and displays a currently valid OMB control number. The OMB control numbers for the EPA's regulations, after initial display in the preamble of the final rules, are listed in 40 CFR Part 9.

2. Does the Paperwork Reduction Act apply to this Final Rule?

This action does not impose an information collection burden under the provisions of the Paperwork Reduction Act, 44 U.S.C. 3501 *et seq.* The EPA has determined that the PRA does not apply because this rule does not contain any information collection requirements that require approval of the OMB.

Burden means the total time, effort or financial resources expended by persons to generate, maintain, retain or disclose or provide information to or for a federal agency. This includes the time needed to review instructions; develop, acquire, install and utilize technology and systems for the purposes of collecting, validating and verifying information, processing and maintaining information and disclosing and providing

information; adjust the existing ways to comply with any previously applicable instructions and requirements; train personnel to be able to respond to a collection of information; search data sources; complete and review the collection of information; and transmit or otherwise disclose the information.

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. The OMB control numbers for the EPA's regulations in 40 CFR are listed in 40 CFR Part 9.

#### C. Regulatory Flexibility Act

1. What is the Regulatory Flexibility Act?

Pursuant to the Regulatory Flexibility Act (5 U.S.C. 601 *et seq.*, as amended by the Small Business Regulatory Enforcement Fairness Act (SBREFA) of 1996) 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 effect of the rule on small entities (*i.e.*, small businesses, small organizations and small governmental 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. SBREFA amended the Regulatory Flexibility Act to require federal agencies to provide a statement of the factual basis for certifying that a rule will not have a significant economic impact on a substantial number of small entities.

2. How has the EPA complied with the Regulatory Flexibility Act?

This rule listing sites on the NPL does not impose any obligations on any group, including small entities. This rule also does not establish standards or requirements that any small entity must meet, and imposes no direct costs on any small entity. Whether an entity, small or otherwise, is liable for response costs for a release of hazardous substances depends on whether that entity is liable under CERCLA 107(a). Any such liability exists regardless of whether the site is listed on the NPL through this rulemaking. Thus, this rule does not impose any requirements on any small entities. For the foregoing reasons, I certify that this rule will not have a significant economic impact on a substantial number of small entities.

#### D. Unfunded Mandates Reform Act

1. What is the Unfunded Mandates Reform Act (UMRA)?

Title II of the Unfunded Mandates Reform Act of 1995 (UMRA), Public Law 104-4, establishes requirements for federal agencies to assess the effects of their regulatory actions on state, local and tribal governments and the private sector. Under section 202 of the UMRA, the EPA generally must prepare a written statement, including a cost-benefit analysis, for proposed and final rules with "federal mandates" that may result in expenditures by state, local and tribal governments, in the aggregate, or by the private sector, of \$100 million or more in any one year. Before the EPA promulgates a rule where a written statement is needed, section 205 of the UMRA generally requires the EPA to identify and consider a reasonable number of regulatory alternatives and adopt the least costly, most cost-effective, or least burdensome alternative that achieves the objectives of the rule. The provisions of section 205 do not apply when they are inconsistent with applicable law. Moreover, section 205 allows the EPA to adopt an alternative other than the least costly, most cost-effective, or least burdensome alternative if the Administrator publishes with the final rule an explanation why that alternative was not adopted. Before the EPA establishes any regulatory requirements that may significantly or uniquely affect small governments, including tribal governments, it must have developed under section 203 of the UMRA a small government agency plan. The plan must provide for notifying potentially affected small governments, enabling officials of affected small governments to have meaningful and timely input in the development of the EPA regulatory proposals with significant federal intergovernmental mandates and informing, educating and advising small governments on compliance with the regulatory requirements.

2. Does UMRA apply to this Final Rule?

This final rule does not contain a federal mandate that may result in expenditures of \$100 million or more for state, local and tribal governments, in the aggregate, or the private sector in any one year. Listing a site on the NPL does not itself impose any costs. Listing does not mean that the EPA necessarily will undertake remedial action. Nor does listing require any action by a private party or determine liability for response costs. Costs that arise out of site responses result from site-specific decisions regarding what actions to take,

not directly from the act of placing a site on the NPL. Thus, this rule is not subject to the requirements of section 202 and 205 of UMRA.

This rule is also not subject to the requirements of section 203 of UMRA because it contains no regulatory requirements that might significantly or uniquely affect small governments. As is mentioned above, site listing does not impose any costs and would not require any action of a small government.

#### *E. Executive Order 13132: Federalism*

##### 1. What is Executive Order 13132?

Executive Order 13132, entitled “Federalism” (64 FR 43255, August 10, 1999), requires the EPA to develop an accountable process to ensure “meaningful and timely input by state and local officials in the development of regulatory policies that have federalism implications.” “Policies that have federalism implications” are defined in the Executive Order to include 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.”

##### 2. Does Executive Order 13132 apply to this Final Rule?

This final rule does not have federalism implications. It will not 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, as specified in Executive Order 13132, because it does not contain any requirements applicable to states or other levels of government. Thus, the requirements of the Executive Order do not apply to this final rule.

The EPA believes, however, that this final rule may be of significant interest to state governments. In the spirit of Executive Order 13132, and consistent with the EPA policy to promote communications between the EPA and state and local governments, the EPA therefore consulted with state officials and/or representatives of state governments early in the process of developing the rule to permit them to have meaningful and timely input into its development. All sites included in this final rule were referred to the EPA by states for listing. For all sites in this rule, the EPA received letters of support either from the governor or a state official who was delegated the authority by the governor to speak on their behalf regarding NPL listing decisions.

#### *F. Executive Order 13175: Consultation and Coordination With Indian Tribal Governments*

##### 1. What is Executive Order 13175?

Executive Order 13175, entitled “Consultation and Coordination with Indian Tribal Governments” (65 FR 67249, November 6, 2000), requires the EPA to develop an accountable process to ensure “meaningful and timely input by tribal officials in the development of regulatory policies that have tribal implications.” “Policies that have tribal implications” are defined in the Executive Order to include regulations that have “substantial direct effects on one or more Indian tribes, on the relationship between the federal government and the Indian tribes, or on the distribution of power and responsibilities between the federal government and Indian tribes.”

##### 2. Does Executive Order 13175 apply to this Final Rule?

This final rule does not have tribal implications, as specified in Executive Order 13175 (65 FR 67249, November 9, 2000). Listing a site on the NPL does not impose any costs on a tribe or require a tribe to take remedial action. Thus, Executive Order 13175 does not apply to this final rule.

#### *G. Executive Order 13045: Protection of Children from Environmental Health and Safety Risks*

##### 1. What is Executive Order 13045?

Executive Order 13045: “Protection of Children from Environmental Health Risks and Safety Risks” (62 FR 19885, April 23, 1997) applies to any rule that: (1) Is determined to be “economically significant” as defined under Executive Order 12866, and (2) concerns an environmental health or safety risk that the EPA has reason to believe may have a disproportionate effect on children. If the regulatory action meets both criteria, the agency must evaluate the environmental health or safety effects of the planned rule on children, and explain why the planned regulation is preferable to other potentially effective and reasonably feasible alternatives considered by the agency.

##### 2. Does Executive Order 13045 apply to this Final Rule?

This rule is not subject to Executive Order 13045 because it is not an economically significant rule as defined by Executive Order 12866, and because the agency does not have reason to believe the environmental health or safety risks addressed by this section present a disproportionate risk to children.

#### *H. Executive Order 13211: Actions That Significantly Affect Energy Supply, Distribution or Usage*

##### 1. What is Executive Order 13211?

Executive Order 13211, “Actions Concerning Regulations That Significantly Affect Energy Supply, Distribution or Use” (66 FR 28355, May 22, 2001), requires federal agencies to prepare a “Statement of Energy Effects” when undertaking certain regulatory actions. A Statement of Energy Effects describes the adverse effects of a “significant energy action” on energy supply, distribution and use, reasonable alternatives to the action and the expected effects of the alternatives on energy supply, distribution and use.

##### 2. Does Executive Order 13211 apply to this Final Rule?

This action is not a “significant energy action” as defined in Executive Order 13211, because it is not likely to have a significant adverse effect on the supply, distribution or use of energy. Further, the agency has concluded that this final rule is not likely to have any adverse energy impacts because adding a site to the NPL does not require an entity to conduct any action that would require energy use, let alone that which would significantly affect energy supply, distribution or usage. Thus, Executive Order 13211 does not apply to this action.

#### *I. National Technology Transfer and Advancement Act*

##### 1. What is the National Technology Transfer and Advancement Act?

Section 12(d) of the National Technology Transfer and Advancement Act of 1995 (NTTAA), Public Law 104–113, section 12(d) (15 U.S.C. 272 note), directs the EPA to use voluntary consensus standards in its regulatory activities unless to do so would be inconsistent with applicable law or otherwise impractical. Voluntary consensus standards are technical standards (e.g., materials specifications, test methods, sampling procedures and business practices) that are developed or adopted by voluntary consensus standards bodies. The NTTAA directs the EPA to provide Congress, through OMB, explanations when the agency decides not to use available and applicable voluntary consensus standards.

##### 2. Does the National Technology Transfer and Advancement Act apply to this Final Rule?

No. This rulemaking does not involve technical standards. Therefore, the EPA

did not consider the use of any voluntary consensus standards.

*J. Executive Order 12898: Federal Actions To Address Environmental Justice in Minority Populations and Low-Income Populations*

1. What is Executive Order 12898?

Executive Order (EO) 12898 (59 FR 7629, Feb. 16, 1994) establishes Federal executive policy on environmental justice. Its main provision directs Federal agencies, to the greatest extent practicable and permitted by law, to make environmental justice part of their mission by identifying and addressing, as appropriate, disproportionately high and adverse human health or environmental effects of their programs, policies and activities on minority populations and low-income populations in the United States.

2. Does Executive Order 12898 apply to this Final Rule?

The EPA has determined that this final rule will not have disproportionately high and adverse human health or environmental effects on minority or low-income populations because it does not affect the level of protection provided to human health or the environment. As this rule does not impose any enforceable duty upon state, tribal or local governments, this rule will neither increase nor decrease environmental protection.

*K. Congressional Review Act*

1. Has the EPA submitted this rule to Congress and the Government Accountability Office?

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. The EPA has submitted a report containing this rule 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 rule is not a “major rule” as defined by 5 U.S.C. 804(2).

2. Could the effective date of this Final Rule change?

Provisions of the Congressional Review Act (CRA) or section 305 of CERCLA may alter the effective date of this regulation.

The EPA has submitted a report under the CRA for this rule. The rule will take effect, as provided by law, within 30 days of publication of this document, since it is not a major rule. NPL listing is not a major rule because, by itself, imposes no monetary costs on any person. It establishes no enforceable duties, does not establish that the EPA necessarily will undertake remedial action, nor does it require any action by any party or determine liability for site response costs. Costs that arise out of site responses result from site-by-site decisions about what actions to take, not directly from the act of listing itself. Section 801(a)(3) provides for a delay in the effective date of major rules after this report is submitted.

3. What could cause a change in the effective date of this Rule?

Under 5 U.S.C. 801(b)(1), a rule shall not take effect, or continue in effect, if Congress enacts (and the President signs) a joint resolution of disapproval, described under section 802.

Another statutory provision that may affect this rule is CERCLA section 305, which provides for a legislative veto of regulations promulgated under CERCLA. Although *INS v. Chadha*, 462 U.S. 919, 103 S. Ct. 2764 (1983), and *Bd. of Regents of the University of Washington v. EPA*, 86 F.3d 1214, 1222 (DC Cir. 1996), cast the validity of the legislative veto into question, the EPA has transmitted a copy of this regulation to the Secretary of the Senate and the Clerk of the House of Representatives.

If action by Congress under either the CRA or CERCLA section 305 calls the effective date of this regulation into question, the EPA will publish a document of clarification in the **Federal Register**.

**List of Subjects in 40 CFR Part 300**

Environmental protection, Air pollution control, Chemicals, Hazardous substances, Hazardous waste, Intergovernmental relations, Natural resources, Oil pollution, Penalties, Reporting and recordkeeping requirements, Superfund, Water pollution control, Water supply.

Dated: September 10, 2012.

**Mathy Stanislaus,**

*Assistant Administrator, Office of Solid Waste and Emergency Response.*

40 CFR Part 300 is amended as follows:

**PART 300—[AMENDED]**

■ 1. The authority citation for Part 300 continues to read as follows:

**Authority:** 33 U.S.C. 1321(c)(2); 42 U.S.C. 9601–9657; E.O. 12777, 56 FR 54757, 3 CFR, 1991 Comp., p. 351; E.O. 12580, 52 FR 2923, 3 CFR, 1987 Comp., p. 193.

■ 2. Amend Appendix B of Part 300:

■ a. In Table 1 of Appendix B to Part 300 by:

■ 1. Adding entries for Alabama Plating Company, Inc., Cedar Chemical Corporation, Fairfax St. Wood Treaters, Bautsch-Gray Mine, EVR-Wood Treating/Evangeline Refining Company, Leeds Metal, Holcomb Creosote Co, Orange Valley Regional Ground Water Contamination, Peters Cartridge Factory, West Troy Contaminated Aquifer, Circle Court Ground Water Plume and US Oil Recovery in alphabetical order by state;

■ 2. Removing the column note symbol “\*\*\*P” in the Notes<sup>(a)</sup> column for the entry for the Mouat Industries site (MT) and adding a “P” symbol in its place;

■ 3. Removing the footnote “\*\*\*P = Sites with deletions(s)”;

■ 4. Removing “C” from the Notes<sup>(a)</sup> column wherever it appears (174 times).

■ b. In Tables 1 and 2 by removing the footnote “C= Sites on construction completion list.”

The revisions and additions read as follows:

**Appendix B to Part 300—National Priorities List**

TABLE 1—GENERAL SUPERFUND SECTION

State	Site name	City/county	Notes <sup>(a)</sup>
AL	Alabama Plating Company, Inc.	Vincent.	*
AR	Cedar Chemical Corporation	West Helena	*

TABLE 1—GENERAL SUPERFUND SECTION—Continued

State	Site name	City/county	Notes (a)
FL	Fairfax St. Wood Treaters	Jacksonville.	*
IL	Bautsch-Gray Mine	Galena.	*
LA	EVR-Wood Treating/Evangeline Refining Company	Jennings.	*
ME	Leeds Metal	Leeds.	*
NC	Holcomb Creosote Co	Yadkinville.	*
NJ	Orange Valley Regional Ground Water Contamination	West Orange/Orange.	*
OH	Peters Cartridge Factory	Kings Mills.	*
OH	West Troy Contaminated Aquifer	Troy.	*
TX	Circle Court Ground Water Plume	Willow Park.	*
TX	US Oil Recovery	Pasadena.	*

(a) A = Based on issuance of health advisory by Agency for Toxic Substances and Disease Registry (if scored, HRS score need not be ≤ 28.50).

S = State top priority (included among the 100 top priority sites regardless of score).

P = Sites with partial deletion(s).

\* \* \* \* \*  
 [FR Doc. 2012-22851 Filed 9-17-12; 8:45 am]  
 BILLING CODE 6560-50-P

**FEDERAL COMMUNICATIONS COMMISSION**

**47 CFR Part 1**

[WC Docket No. 05-25; RM-10593; FCC 12-92]

**Special Access for Price Cap Local Exchange Carriers; AT&T Corporation Petition for Rulemaking To Reform Regulation of Incumbent Local Exchange Carrier Rates for Interstate Special Access Services**

**AGENCY:** Federal Communications Commission.

**ACTION:** Final rule.

**SUMMARY:** In this Report and Order, the Commission suspends, on an interim basis, the Commission's rules allowing for automatic pricing flexibility grants for special access services, pending adoption of new rules. The Commission suspends its pricing flexibility rules in light of evidence that the proxies for measuring actual and potential special

access market competition, which are based on collocation by competitive carriers within a Metropolitan Statistical Area (MSA), do not accurately predict whether competition is sufficient to constrain special access prices and deter anticompetitive practices by price cap local exchange carriers. In the Report and Order, the Commission also initiates a process to obtain data needed to conduct a special access market analysis. Based on this forthcoming data collection, the Commission will undertake a robust special access market analysis to determine the extent to which the special access market is competitive and develop special access pricing flexibility rules to replace the collocation-based competitive showings.

**DATES:** Effective October 18, 2012,

**FOR FURTHER INFORMATION CONTACT:** Jamie Susskind, Wireline Competition Bureau, Pricing Policy Division, (202) 418-1520 or (202) 418-0484 (TTY), or via email at [Jamie.Susskind@fcc.gov](mailto:Jamie.Susskind@fcc.gov).

**SUPPLEMENTARY INFORMATION:** This is a summary of the Commission's Report and Order in WC Docket No. 05-25, RM-10593, FCC 12-92, adopted on August 15, 2012 and released on August 22, 2012. The summary is based on the

public redacted version of the document, the full text of which is available electronically via the Electronic Comment Filing System at <http://fjallfoss.fcc.gov/ecfs/> or may be downloaded at [http://transition.fcc.gov/Daily\\_Releases/Daily\\_Business/2012/db0823/FCC-12-92A1.pdf](http://transition.fcc.gov/Daily_Releases/Daily_Business/2012/db0823/FCC-12-92A1.pdf). The full text of this document is also available for public inspection during regular business hours in the Commission's Reference Center, 445 12th Street SW., Room CY-A257, Washington, DC 20554. The complete text may be purchased from Best Copy and Printing, Inc., 445 12th Street, SW., Room CY-B402, Washington, DC 20554. To request alternate formats for persons with disabilities (e.g. Braille, large print, electronic files, audio format, etc.) or reasonable accommodations for filing comments (e.g. accessible format documents, sign language interpreters, CARTS, etc.), send an email to [fcc504@fcc.gov](mailto:fcc504@fcc.gov) or call the Commission's Consumer and Governmental Affairs Bureau at (202) 418-0530 (voice) or (202) 418-0432 (TTY).

**I. Introduction**

1. In this Report and Order, we suspend, on an interim basis, our rules

allowing for automatic grants of pricing flexibility for special access services in light of significant evidence that these rules, adopted in 1999, are not working as predicted, and widespread agreement across industry sectors that these rules fail to accurately reflect competition in today's special access markets. We set forth a path to update our rules to better target regulatory relief to competitive areas, including extending relief to areas that are likely competitive but have been denied regulatory relief under our existing framework. We provide for targeted relief in the interim through the forbearance process set forth in sec. 10 of the 1996 Act, and will soon issue a comprehensive data collection order that will help craft permanent replacement rules.

2. Special access continues to play a critical role in our economy. Four of the largest incumbent LECs recently reported that their combined 2010 revenues from sales of DS1s and DS3s exceeded \$12 billion. Competitive carriers rely heavily on special access to reach customers; a large competitive local exchange carrier (LEC) that offers enterprise services to businesses using special access services as a critical input has reported that it purchases

**[REDACTED]** times as many special access as Ethernet circuits. Enterprise customers across the country rely on special access—directly or indirectly—to conduct their business. Schools, libraries, and other institutions of state and local government depend on special access to provide services to their constituents.

3. We continue to strongly believe, consistent with the goals set forth in the *Pricing Flexibility Order*, that regulation should be reduced wherever evidence demonstrates that actual or potential competition is acting as a constraint to ensure just and reasonable rates, terms and conditions for special access services. In the record of this proceeding, however, there is compelling evidence that our current pricing flexibility rules are not properly matching relief to such areas, combined with allegations that this mismatch is causing real harm to American consumers and businesses and hindering investment and innovation. Price cap carriers argue that they are still subject to burdensome regulation in areas where it is apparent that competition is thriving. The United States Small Business Administration asserts that “promoting competition in the business broadband market is essential in order to provide small businesses with affordable access and choice regarding the services they need to grow and create new jobs.” The

American Petroleum Institute expresses concern that, because its member companies' facilities are frequently located in isolated locations where facilities-based competition is scarce, they are highly sensitive to incumbent LECs extracting supra-competitive profits. Competitive carriers argue that the terms and conditions of special access contract tariffs “lock up” demand, preventing competitors from entering markets and investing in new facilities. Wireless providers argue that high special access prices hinder their ability to hire employees, invest in their networks, and conduct research and development. While we cannot yet evaluate these claims of competitive harm based on the evidence to date in the record, our finding that the competitive showings the Commission adopted as a proxy for competition are not working as predicted leads us to suspend the triggers and further evaluate the marketplace.

4. The approach we take is based on our evaluation of our 1999 rules, the predictive judgments upon which they were based, and market developments since their adoption. As discussed in greater detail below, the Commission decided in 1999 to use an administratively simple proxy for the presence of actual or potential competition in special access markets—the extent of collocation within broad geographic regions. The Commission predicted that certain levels of collocation within a Metropolitan Statistical Area (MSA) would serve as an accurate indicator of competitive pressure sufficient to constrain prices throughout that area.

5. Based on the evidence in the record and thirteen years of experience with this regime, we now conclude that the Commission's existing collocation triggers are a poor proxy for the presence of competition sufficient to constrain special access prices or deter anticompetitive practices throughout an MSA. We therefore suspend, on an interim basis, the operation of those rules pending adoption of a new framework that will allow us to ensure that special access prices are fair and competitive in all areas of the country.

6. Although we currently lack the necessary data to identify a permanent reliable replacement approach to measure the presence of competition for special access services, we emphasize that the forbearance process set forth by Congress in the 1996 Act provides an avenue for targeted relief based on a complete analysis of competitive conditions in a geographic area.

7. Going forward, in the absence at this time of clear evidence to establish

reasonable and reliable proxies to determine where regulatory relief is appropriate, we will collect necessary data and undertake a robust competition analysis that may identify reliable proxies for competition in the market for special access services going forward. We will issue a comprehensive data collection order within 60 days to facilitate this market analysis. We anticipate that during the pendency of the data request, we will continue to analyze the information submitted in the record, and may issue further decisions as warranted by the evidence. Nonetheless, the record in this proceeding demonstrates that a comprehensive evaluation of competition in the market for special access services is necessary, and that further data to assist us in that evaluation is needed with respect to establishing a new framework for pricing flexibility.

## II. Background

### A. History of Price Cap Regulation

8. Through the end of 1990, interstate access charges were governed by “rate-of-return” regulation, under which incumbent LECs calculated their access rates using projected costs and projected demand for access services. An incumbent LEC was limited to recovering its costs plus a prescribed return on investment. It also was potentially obligated to provide refunds if its interstate rate of return exceeded the authorized level. However, a rate of return regulatory structure bases a firm's allowable rates directly on the firm's reported costs and was thus subject to criticisms that it removed the incentive to reduce costs and improve productive efficiency.

9. Consequently, in 1991 the Commission implemented a system of price cap regulation that altered the manner in which the largest incumbent LECs (often referred to today as price cap LECs) established their interstate access charges. The Commission's price cap plan for LECs was intended to avoid the perverse incentives of rate-of-return regulation in part by divorcing the annual rate adjustments from the cost performance of each individual LEC, and provide for sharing efficiency gains with customers in part by adjusting the cap based on industry productivity experience.

10. In contrast to rate-of-return regulation, which focuses on an incumbent LEC's costs and fixes the profits an incumbent LEC may earn based on those costs, price cap regulation focuses primarily on the prices that an incumbent LEC may

charge. The access charges of price cap LECs originally were set at levels based on the rates that existed at the time the LECs entered the price cap regime. Increases in their rates have, however, been limited over the course of price cap regulation by price indices that are adjusted annually pursuant to formulae set forth in Part 61 of our rules. Price cap regulation is a form of incentive regulation that seeks to “harness the profit-making incentives common to all businesses to produce a set of outcomes that advance the public interest goals of just, reasonable, and nondiscriminatory rates, as well as a communications system that offers innovative, high quality services.” A core component of our price cap regulation is the Price Cap Index (PCI). As the Commission has explained previously, the PCI is designed to limit the prices LECs charge for service. The PCI provides a benchmark of LEC cost changes that encourages price cap LECs to become more productive and innovative by permitting them to retain reasonably higher earnings. The PCI has three basic components: (1) A measure of inflation, i.e., the Gross Domestic Product (chain weighted) Price Index (GDP-PI); (2) a productivity factor or “X-Factor,” that represents the amount by which LECs can be expected to outperform economy-wide productivity gains; and (3) adjustments to account for “exogenous” cost changes that are outside the LEC’s control and not otherwise reflected in the PCI.

#### B. Pricing Flexibility

11. Pursuant to the pro-competitive, deregulatory mandates of the 1996 Act, the Commission in 1996 began exploring whether and how to remove price cap LECs’ access services from price cap and tariff regulation once they are subject to substantial competition. Three years later, in 1999, the Commission adopted the *Pricing Flexibility Order* in an effort to ensure that the Commission’s interstate access charge regulations did not unduly interfere with the operation of interstate access markets as competition developed in those markets. The Commission developed competitive showings (also referred to as “triggers”) designed to measure the extent to which competitors had made irreversible, sunk investment in collocation and transport facilities. Price cap carriers that demonstrated the competitive showings were met in their serving areas could obtain so-called “pricing flexibility,” namely the ability to offer special access services at unregulated rates through generally available and individually negotiated tariffs (i.e., contract tariffs).

The operation of the pricing flexibility rules is discussed in greater detail in section 0 below.

#### C. The CALLS Order

12. In 2000, after a comprehensive examination of the interstate access charge and universal service regulatory regimes for price cap carriers, the Commission adopted the industry-proposed CALLS plan. This plan represented a five-year interim regime designed to phase down implicit subsidies and (as it pertained to switched and special access charges) to move towards a more market-based approach to rate setting. In adopting the CALLS plan, the Commission offered price cap carriers the choice of completing the forward-looking cost studies required by the *Access Charge Reform Order* or voluntarily making the rate reductions required under the five-year CALLS plan. The Commission permitted carriers to defer the planned forward-looking cost studies in favor of the CALLS plan because it found the plan to be “a transitional plan that move[d] the marketplace closer to economically rational competition, and it [would] enable [the Commission], once such competition develops, to adjust our rules in light of relevant marketplace developments.” All price cap carriers opted for the CALLS plan.

13. The CALLS plan separated special access services into their own basket and applied a separate X-factor to the special access basket. The X-factor under the CALLS plan, unlike under prior price cap regimes, is not a productivity factor. Rather, it represents “a transitional mechanism \* \* \* to lower rates for a specified period of time for special access.” The special access X-factor was 3.0 percent in 2000 and 6.5 percent in 2001, 2002, and 2003. In addition to the X-factor, access charges under CALLS are adjusted for inflation as measured by the GDP-PI. For the final year of the CALLS plan (July 1, 2004–June 30, 2005), the special access X-factor was set equal to inflation, thereby freezing rate levels. Thus, in the absence of a new price cap regime post-CALLS, price cap LECs’ special access rates have remained frozen at 2003 levels (excluding any necessary exogenous cost adjustments). The Commission hoped that, by the end of the five-year CALLS plan, competition would exist to such a degree that deregulation of access charges (switched and special) for price cap LECs would be the next logical step.

#### D. AT&T’s Petition for Rulemaking and 2005 Special Access NPRM

14. On October 15, 2002, AT&T Corp. filed a petition for rulemaking requesting that the Commission revoke the pricing flexibility rules and revisit the CALLS plan as it pertains to the rates that price cap LECs, and the BOCs in particular, charge for special access services. AT&T claimed that the competitive showings required to obtain pricing flexibility failed to predict price-constraining competitive entry and, rather, that significant competitive entry had not occurred. It further contended that, based on Automated Reporting Management Information System (ARMIS) data, the BOCs’ interstate special access revenues had more than tripled, from \$3.4 billion to \$12.0 billion, between 1996 and 2001 and that the BOCs’ returns on special access services were between 21 and 49 percent in 2001. Further, AT&T stated that, in every MSA for which pricing flexibility was granted, BOC special access rates either remained flat or increased. Thus, AT&T contended both that the predictive judgment at the core of the *Pricing Flexibility Order* had not been confirmed by marketplace developments, and that BOC special access rates exceeded competitive levels and hence were unjust and unreasonable in violation of § 201 of the Communications Act. Because the predictive judgment had proven wrong, AT&T asserted, the Commission was compelled to revisit its pricing flexibility rules in a rulemaking proceeding.

15. Price cap LECs generally opposed the *AT&T Petition for Rulemaking*. They claimed that their special access rates were reasonable and therefore lawful, that there was robust competition for special access services, that the collocation-based competitive showings were an accurate metric for competition, and that the data relied upon by AT&T were unreliable in the context used by AT&T. SBC noted that AT&T only provided (and could only provide) data from a single year (2001) that post-dated the initial implementation of Phase II pricing flexibility in 2001, and SBC and Verizon claimed that ARMIS data were not designed to evaluate the reasonableness of rates. The BOCs contended, moreover, that special access revenues per line declined between 1996 and 2001.

16. On January 31, 2005, the Commission released the *Special Access NPRM*. The *Special Access NPRM* initiated a broad examination of what regulatory framework to apply to price cap LECs’ interstate special access

services following the expiration of the CALLS plan, including whether to maintain or modify the Commission's pricing flexibility rules for special access services. As part of our review of the pricing flexibility rules, which were adopted, in part, based on the Commission's predictive judgment, the Commission sought to examine whether the available marketplace data supported maintaining, modifying, or repealing these rules. The Commission noted its commitment to re-examine periodically rules that were adopted on the basis of predictive judgments to evaluate whether those judgments are, in fact, corroborated by marketplace developments. Accordingly, the Commission sought data and comments on whether actual marketplace developments supported the predictive judgments used to support the special access pricing flexibility rules.

17. The *Special Access NPRM* also responded to AT&T's request for interim relief. AT&T asked, in addition to initiating a rulemaking, that the Commission reinitialize Phase II pricing flexibility special access rates at an 11.25 percent rate of return, and impose a temporary moratorium on further pricing flexibility applications. These requests were denied; however, the Commission sought comment on whether to adopt any interim requirements in the event that the Commission was unable to conclude the NPRM in time for any adopted rule changes to be implemented in the 2005 annual tariff filings.

#### *E. Recent Actions in the Proceeding*

##### 1. Refresh Record

18. In July 2007, the Commission invited interested parties to update the record in the special access rulemaking in light of a number of recent developments in the industry, including several "significant mergers and other industry consolidation," "the continued expansion of intermodal competition in the market for telecommunications services," and "the release by GAO [the Government Accountability Office] of a report summarizing its review of certain aspects of the market for special access services." While the special access rulemaking was pending, the Commission also addressed special access regulation for price cap carriers in several other proceedings. A petition for forbearance from dominant carrier regulation of enterprise broadband special access services (i.e., packet-based switched, high-speed telecommunications services for businesses) filed by Verizon was deemed granted in 2006. In orders

issued in October 2007 and August 2008, the agency granted petitions filed by AT&T, Embarq, Frontier, and Qwest under 47 U.S.C. § 160 seeking similar forbearance relief, and, in August 2008, granted Qwest's petition for similar relief from regulation of enterprise broadband special access.

##### 2. Analytical Framework

19. In November 2009, the Commission sought comment on the appropriate analytical framework for examining the issues that the *Special Access NPRM* raised. In July 2010, the Commission's Wireline Competition Bureau (Bureau) held a staff workshop on the economics of special access to gather further input from interested parties on the analytical framework the Commission should use—and the data it should collect—to evaluate whether the current special access rules are working as intended.

##### 3. Voluntary Data Requests

20. In October 2010, the Bureau issued a public notice inviting the public to submit data on the presence of competitive special access facilities to assist the Commission in evaluating the issues that the *Special Access NPRM* raised. Explaining that data "would need to be reviewed" before the Commission could address the issues raised by the proceeding, the Bureau asked that the requested data be submitted by January 27, 2011. The Bureau also noted that while it continued to develop an analytical framework, it would "ask for additional voluntary submissions of data in a second public notice."

21. On September 19, 2011, the Bureau issued a second public notice requesting the submission of special access data. In this request, the Bureau sought detailed data on special access prices, revenues, and expenditures, as well as the nature of terms and conditions for special access services. The Bureau requested that the data be submitted to the Commission by December 5, 2011.

#### **III. The "Competitive Showings" Adopted in 1999 Have Not Worked as Expected**

22. In the *Pricing Flexibility Order*, the Commission adopted rules intended to allow price cap LECs to show, in an administratively workable way, that certain parts of the country were sufficiently competitive to warrant pricing flexibility for special access services. As discussed in greater detail below, we find that the record indicates that the administratively simple competitive showings we adopted in

1999 have not worked as intended, likely resulting in both over- and under-regulation of special access in parts of the country. We therefore suspend the pricing flexibility competitive showings, on an interim basis, until we obtain the requisite data and conduct the market analysis required to craft replacement rules.

#### *A. Background*

##### 1. Rationale for Competitive Showings

23. In the *Pricing Flexibility Order*, the Commission adopted rules that allow price cap LECs to obtain relief from pricing regulations as competition for special access services increased. The Commission concluded that relief should be granted in two phases. Phase I relief permits price cap LECs the ability to lower their rates through contract tariffs and volume and term discounts, but requires that they maintain their generally available price cap-constrained tariff rates to "protect those customers that lack competitive alternatives." Phase II relief permits price cap LECs to raise or lower their rates throughout an area, unconstrained by the Commission's part 61 and part 69 rules.

24. The Commission found that different levels of collocation in an area would justify different levels of relief. Specifically, the Commission held that Phase I deregulatory relief would be appropriate in areas where the price cap LEC was able to show that competitors had made irreversible, sunk investment sufficient to "discourage[e] incumbent LECs from successfully pursuing exclusionary strategies," such as "locking up" large customers by offering them volume and term discounts."

25. The Commission held that Phase II deregulatory relief would be appropriate only in areas where a price cap LEC could show there was a higher level of collocation—specifically, that "competitors have established a significant market presence, i.e., that competition for a particular service within the [area] is sufficient to preclude the incumbent from exploiting any monopoly power over a sustained period." That is, competitors would have "sufficient market presence to constrain prices throughout the" area because "almost all special access customers have a competitive alternative" and "[i]f an incumbent LEC charges an unreasonably high rate for access to an area that lacks a competitive alternative, that rate will induce competitive entry, and that entry will in turn drive rates down."

## 2. How the Competitive Showings Work

26. *Geographic Area of Relief.* The Commission chose to grant pricing flexibility relief on an MSA basis, finding that, among the proposed alternatives “MSAs best reflect the scope of competitive entry, and therefore are a logical basis for measuring the extent of competition” and avoiding the “increased expenses and administrative burdens associated with” proposals to grant relief in smaller geographic areas, such as wire centers. The Office of Management and Budget (OMB) defines MSAs as geographic entities that contain a core urban area of 50,000 or more population, and often includes adjacent counties that have a high degree of social and economic integration with the urban core, as measured by commuting to work. MSAs were developed not for the purposes of competition policy, but to meet the Federal Government’s need to have “nationally consistent definitions for collecting, tabulating and publishing Federal statistics for a set of geographic areas.” OMB may add counties or principal cities to an MSA, remove them, or even create new MSAs if census and population estimates indicate changes in social and economic integration between outlying areas and the urban core.

27. In the *Pricing Flexibility Order*, the Commission adopted a list of 306 MSAs based largely on data compiled from the 1980 census, and froze that list for use in all pricing flexibility petitions. Therefore, even if OMB subsequently expanded the geographic area of an MSA, a price cap LEC’s grant of pricing flexibility remains within the borders of the applied-for MSA. The Commission also recognized that some price cap LEC study areas fall outside of MSA boundaries, and held that it would “grant price cap LECs pricing flexibility within the non-MSA parts of a study area if” they were able to make the required showings “throughout that area.”

28. MSAs can be geographically extensive and, in many cases, may encompass areas with vastly different business density within their borders. Some illustrative examples include the Pensacola, Florida MSA and the Atlanta, Georgia MSA.

29. *Proxies for Competitive Showings.* For the sake of administrative convenience, the Commission adopted proxies for competition designed to allow price cap LECs to make the required showings, “with a minimum of administrative burden for the industry and the Commission.” Specifically, the

Commission chose to “rely on collocation as a proxy for irreversible, sunk investment” in special access facilities and services. Collocation—as used in the competitive showing rules—is an offering by an incumbent LEC whereby a requesting telecommunications carrier’s transmission equipment is located, for a tariffed charge, at the incumbent LEC’s central office. The Commission predicted that collocation by competitors in incumbent LEC wire centers would be a reliable indicator of competition because collocation typically represented a financial investment by a competitor to establish facilities within a wire center. The Commission predicted that the collocation-based competitive showings would “provide a bright-line rule to guide the industry” and “an administratively simple and readily verifiable mechanism for determining whether competitive conditions warrant the grant of pricing flexibility.”

30. The Commission established bright line “triggers” based on the extent of collocation within an MSA that it expected would allow a price cap LEC to demonstrate that market conditions in a given MSA would warrant relief. Specifically, the Commission held that price cap LECs would need to demonstrate

either that (1) competitors unaffiliated with the incumbent LEC have established operational collocation arrangements in a certain percentage of the incumbent LEC’s wire centers in an MSA, or (2) unaffiliated competitors have established operational collocation arrangements in wire centers accounting for a certain percentage of the incumbent LEC’s revenues from the services in question in that MSA. In both cases, the incumbent also must show, with respect to each wire center, that at least one collocater is relying on transport facilities provided by a transport provider other than the incumbent LEC.

The specific level of collocation required varies depending on whether a price cap LEC is seeking Phase I or Phase II relief and whether it is seeking relief for channel terminations or other special access services.

31. On February 2, 2001, the U.S. Court of Appeals for the DC Circuit upheld the *Pricing Flexibility Order*, finding that the Commission made a reasonable policy determination and sufficiently explained its basis for adopting the competitive showing requirements.

*B. Subsequent Evidence Undermines the Commission’s Previous Decision To Measure Competitive Showings and Grant Relief on an MSA-Wide Basis and Justifies Suspension of Rules*

1. Original Rationale for Granting Pricing Flexibility in MSAs and Non-MSA Portions of Study Areas

32. The Commission’s 1999 *Pricing Flexibility Order* chose MSAs as the basis for competitive analysis because the record at the time indicated “that MSAs best reflect the scope of competitive entry, and therefore are a logical basis for measuring the extent of competition.” The Commission rejected larger geographic areas such as states and LATAs “[b]ecause competitive LECs generally do not enter new markets on a statewide basis.” Accordingly, “granting pricing flexibility over such a large geographic area would increase the likelihood of exclusionary behavior by incumbent LECs, by granting them flexibility in areas where competitors have not yet made irreversible investment in facilities.”

33. The Commission rejected concerns from some parties that “competition may exist in only a small part of an MSA,” finding that “[t]he triggers we establish \* \* \* are sufficient to ensure that competitors have made sufficient sunk investment within an MSA.” The Commission therefore rejected smaller geographies, such as wire centers, concluding that “the record does not suggest that this level of detail justifies the increased expenses and administrative burdens associated with these proposals.”

34. The Commission received little guidance from commenters on how to establish an appropriate geographic area for grants of pricing flexibility in areas that fall outside of MSAs. In the absence of such guidance, the Commission allowed price cap LECs to make a competitive showing for the entirety of the non-MSA portions of a study area for which they sought relief. It decided against requiring competitive showings at a more granular level—such as on a rural service area (RSA) basis, stating that

\* \* \* we expect competitors to enter MSA markets first and then to extend their networks into less densely populated areas. Because rural areas by definition do not have large concentrations of population comparable to urban areas, we expect that competitive entry into rural areas will be less concentrated than in urban areas. Therefore, we do not expect that pricing flexibility will enable an incumbent to engage successfully in exclusionary pricing behavior with respect to one RSA because competitive entry is limited to another RSA.

The Commission therefore placed more weight on administrative ease, and chose to allow price cap LECs to apply for pricing flexibility for the entirety of the non-MSA components of a study area.

## 2. The Record Now Suggests That Entry Occurs in Smaller Areas

35. The record in this proceeding suggests that, contrary to the Commission's prediction in 1999, MSAs have generally failed to reflect the scope of competitive entry. Rather, in many instances, the scope of competitive entry has apparently been far smaller than predicted.

36. In the sections that follow, we evaluate whether record evidence supports the Commission's prediction that MSAs and non-MSA sections of incumbent LEC study areas best reflect the scope of competitive entry. Entry is one of the many elements the Commission and antitrust agencies analyze when evaluating competition. As a general principle, firms are likely to enter a geographic area to compete "if the entrant generates sufficient revenue to cover all costs apart from the sunk costs of entry. Such entry succeeds in the sense that the entrant becomes and remains a viable competitor in the market." In order to gauge whether entry would be profitable, firms are more likely to focus on areas with high demand for their services, relative to the cost of providing those services. Our review of the evidence suggests that demand varies significantly within any MSA, with highly concentrated demand in areas far smaller than the MSA. This leads us to conclude that competitive entry is considerably less likely to be profitable and hence is unlikely to occur in areas of low demand throughout an MSA, regardless of whether the MSA also contains areas with demand at sufficient levels to warrant competitive entry. This conclusion is confirmed by

the available data, including the record of pricing flexibility grants since the Commission's 1999 Order, and data on subsequent competitive developments in these areas.

### a. Business Demand Varies Significantly Within MSAs

37. The Commission sought to define the geographic areas for which pricing flexibility requests would be considered "narrowly enough so that the competitive conditions within each area are reasonably similar, yet broadly enough to be administratively workable." Our analysis of business establishment density indicates that business demand can vary significantly across an MSA. This suggests that competitive conditions within an MSA are also likely to vary significantly, since areas with higher demand tend to be more capable of supporting competition and are more attractive to potential entrants than low demand areas. These data provide context for our analysis of evidence about grants of pricing flexibility petitions and how competitive entry has occurred since adoption of the *Pricing Flexibility Order*.

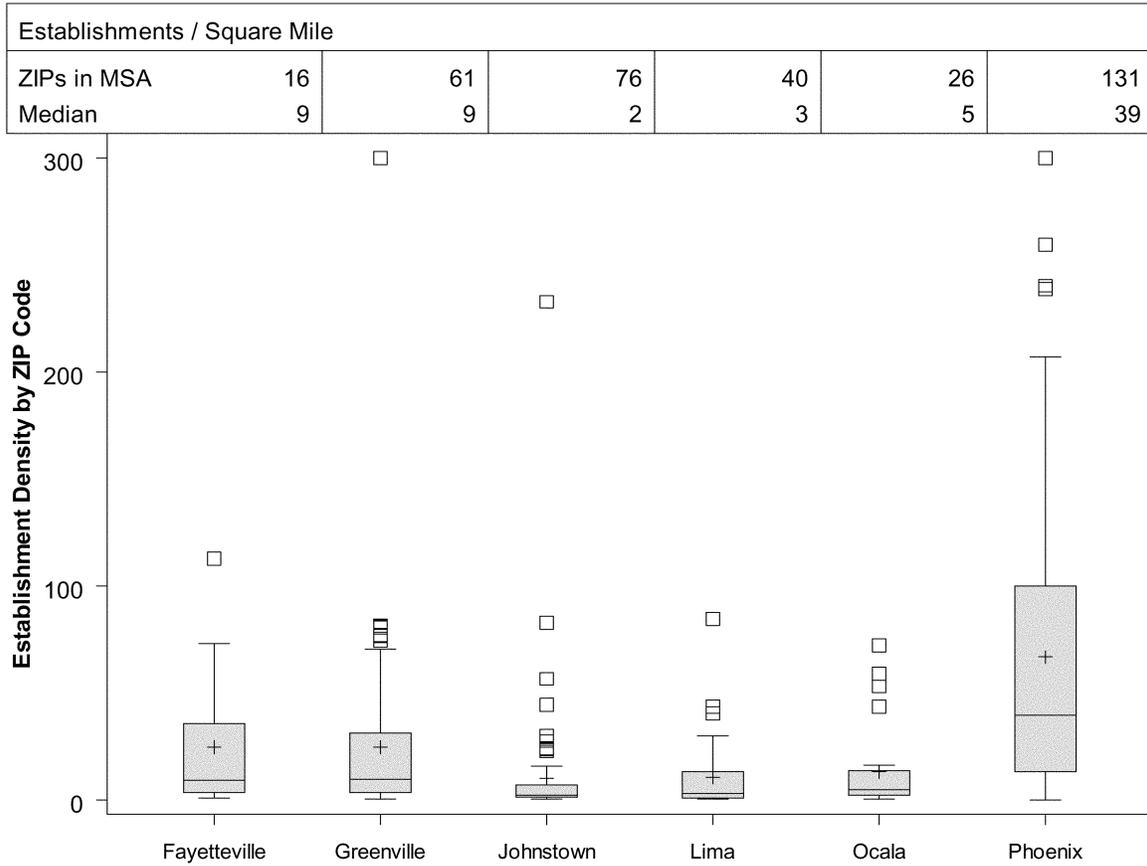
38. The plots in Figures 1 and 2 below illustrate that business demand varies significantly within MSAs. They show the distribution of business establishment density by ZIP code in 12 of the sample of 24 MSAs for which we sought data in our voluntary data requests. Figure 1 shows the six MSAs with the least variance in business establishment density across ZIP codes—Fayetteville, North Carolina; Johnstown, Pennsylvania; Phoenix, Arizona; Ocala, Florida; Greenville-Spartanburg, South Carolina; and Lima, Ohio. The distributions show that, even within these relatively homogeneous MSAs, dense pockets of business establishments exist, as well as areas in which business establishments are few and far between. Johnstown,

Pennsylvania is an extremely concentrated example. In Johnstown, seventy-five percent of the ZIP codes (from the minimum observation, represented by an upside-down "T" shape, to the top of the box) are clustered near the bottom of the scale with densities close to zero, while the remaining twenty-five percent (from the top of the box to the maximum observation, represented by a "T" shape) are scattered along the vertical axis between about five establishments per square mile and 230 establishments per square mile. The most dense ZIP code (15901), which covers the central business district of Johnstown, is 23 times more dense than the average zip code in the area. Phoenix is much larger and somewhat more uniform than Johnstown, but is nonetheless characterized by a few very dense ZIP codes amid a majority of less dense ZIP codes: while the Phoenix MSA has three ZIP codes with over 300 establishments per square mile, over half of the ZIP codes in the MSA have fewer than 40 establishments per square mile. Overall, these MSAs are similar in that a small number of ZIP codes are far more dense than the rest.

39. The distributions shown in Figure 2 demonstrate more extreme examples of intra-MSA variance of competitive conditions. Figure 2 depicts business establishment density variation for the six MSAs with the most business establishment density variation across ZIP codes: Chicago, Illinois; New Orleans, Louisiana; New York, New York; Seattle-Everett, Washington; Washington, DC; and Los Angeles, California. Except for New York, half of the ZIP codes in each MSA contain fewer than 100 establishments per square mile, whereas other areas within each MSA have upwards of 1,000 establishments per square mile.

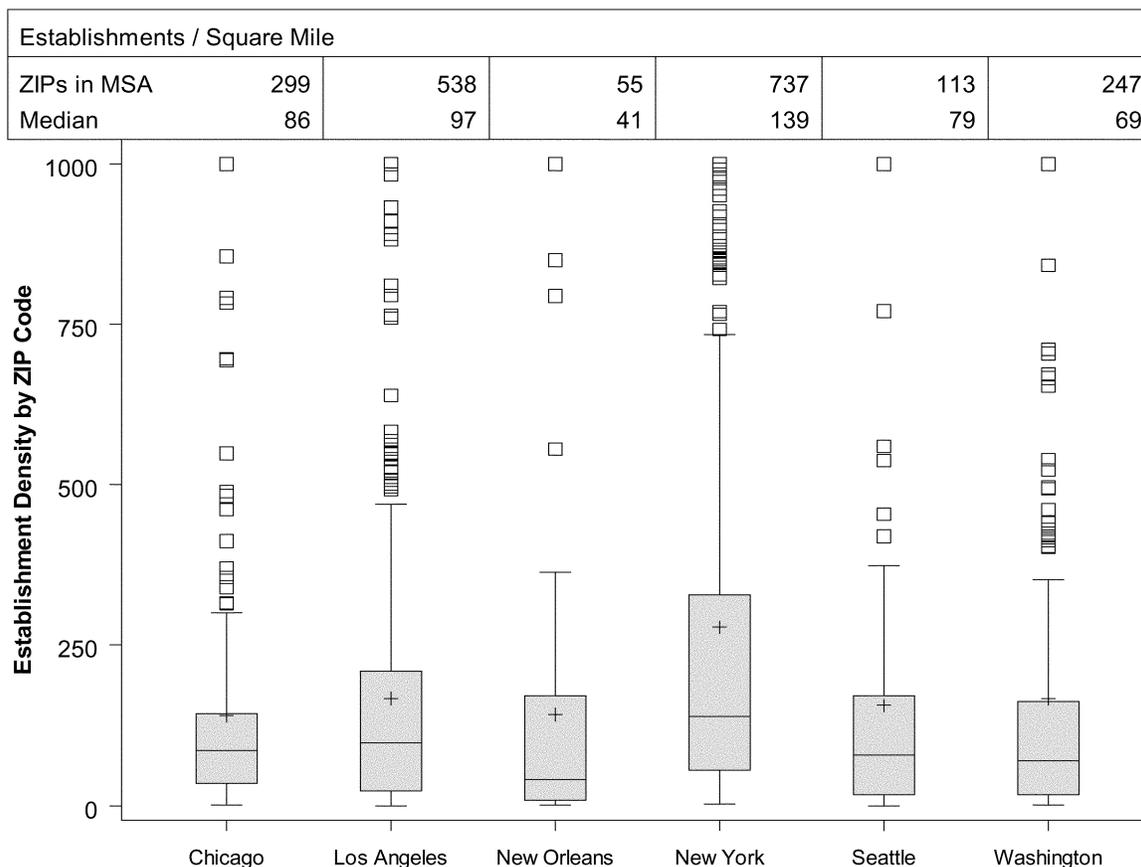
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**Figure 1**  
**Distribution of Business Establishment Densities by MSA and ZIP Code**  
**Sample Small Metropolitan Areas**



Note: Each box plot shows the distribution of establishment densities in ZIP codes within each Metropolitan Area. The + denotes the average establishment density taken across all ZIP codes in the MSA; ⊥ is the minimum observation above  $Q1-1.5(Q3-Q1)$ ; T is the maximum observation below  $Q3+1.5(Q3-Q1)$ ; and □ is a data point beyond  $Q1-1.5(Q3-Q1)$  or  $Q3+1.5(Q3-Q1)$ . Densities above 300 establishments per square mile were topcoded to 300.  
 Sources: U.S. Census Bureau, ZIP-Code Business Patterns: 2009; U.S. Census Bureau, ZIP Code Tabulation Areas, 2010.

**Figure 2**  
**Distribution of Business Establishment Densities by MSA and ZIP Code**  
**Sample Large Metropolitan Areas**



Note: Each box plot shows the distribution of establishment densities in ZIP codes within each Metropolitan Area. The + denotes the average establishment density taken across all ZIP codes in the MSA; ⊥ is the minimum observation above Q1-1.5(Q3-Q1); T is the maximum observation below Q3+1.5(Q3-Q1); and □ is a data point beyond Q1-1.5(Q3-Q1) or Q3+1.5(Q3-Q1). Densities above 1,000 establishments per square mile were topcoded to 1,000  
 Sources: U.S. Census Bureau, ZIP-Code Business Patterns: 2009; U.S. Census Bureau, ZIP Code Tabulation Areas, 2010.

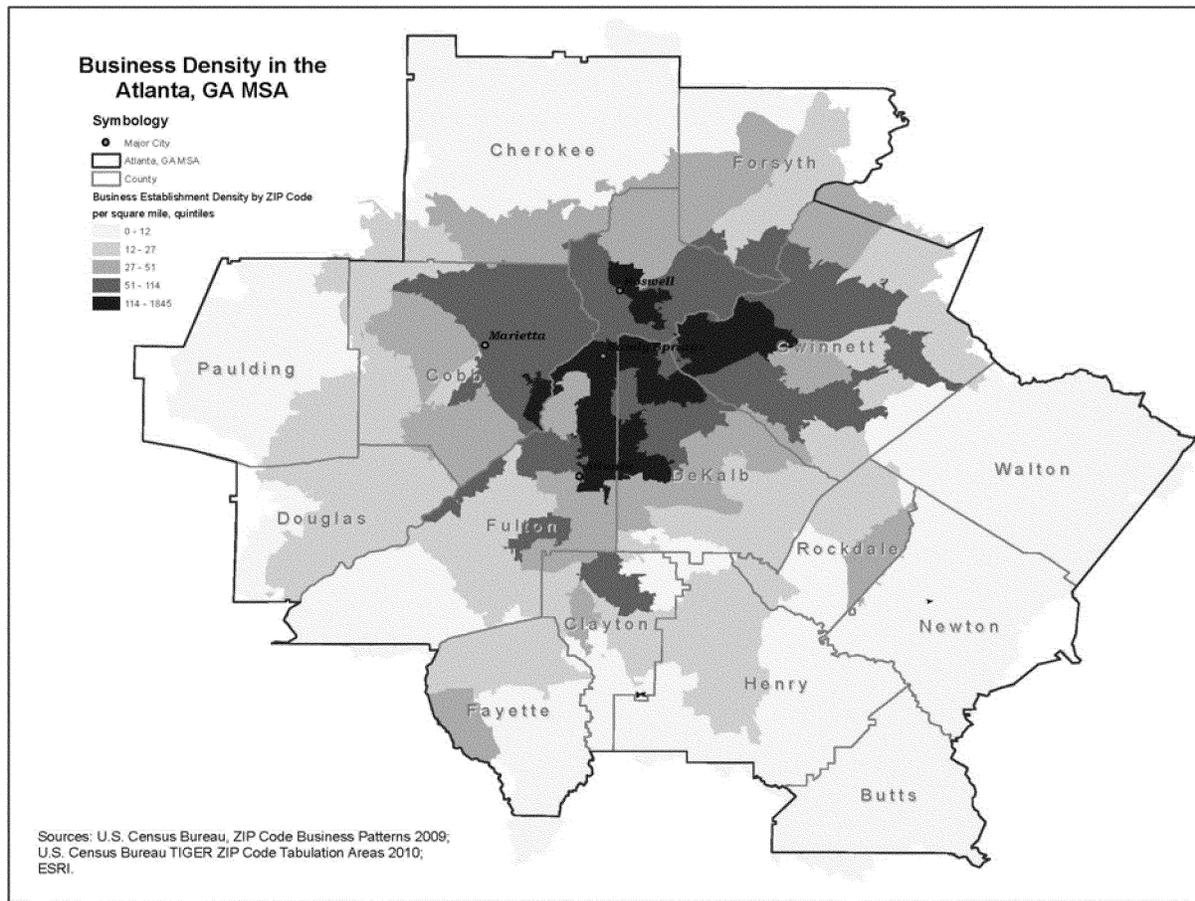
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40. This variance of competitive conditions within an MSA is an artifact of the way MSAs are defined. The resulting statistical entity can be large, including the entirety of distant counties if those counties contain exurban areas linked to the core by

commuting behavior. The Atlanta, Georgia MSA, for example, includes Butts County, Georgia (see Figure 3 below). Of the three ZIP codes within that county, the densest (Jackson, Georgia 30233) has on average about 2.3 business establishments per square

mile. This contrasts to the density level of the central business district of Atlanta's MSA, which contains thousands of business establishments per square mile. This kind of variation is common across the 12 MSAs we have examined for these purposes.

**Figure 3**  
**Business Density in the Atlanta, GA MSA**



41. Given the foregoing evidence that MSAs do not have “reasonably similar” competitive conditions across their geographic areas, and as discussed fully below, when such competitive conditions are considered together with the evidence of how relief has been granted and how some competitive entry has occurred, we can no longer conclude that MSAs “best reflect the scope of competitive entry” by LECs.

**b. Prior Grants of Relief Suggest That Competitive LEC Entry Occurred at a Smaller Geographic Level Than the MSA**

42. Though the Commission acknowledged that demand for special access services might be concentrated in certain areas, it designed the competitive showings with the intent of ensuring that price cap LECs could not obtain pricing flexibility throughout an MSA in instances of extremely concentrated demand. While recognizing that “a few wire centers may account for a disproportionate share of revenues for a particular service,” the Commission attempted to

set its revenue based collocation triggers at levels designed to “ensure that competitors have extended their networks beyond a few revenue-intensive wire centers.” Our analysis indicates that the 1999 rules have not effectively fulfilled this intent. This provides further evidence that MSAs likely do not reflect the actual scope of competitive entry.

43. As noted above, the Commission adopted two types of rules by which price cap LECs could make the competitive showings required to obtain relief. The first type of rule permitted price cap LECs to obtain relief by showing the presence of collocators in a certain percentage of its wire centers within an MSA. The second type, the revenue-based rule described above, reflected the Commission’s concession that demand for special access services is often concentrated. Despite this concession, however, the Commission cautioned that the revenue-based threshold for dedicated transport services would need to be set high enough “to ensure that competitors have extended their networks beyond a few

revenue-intensive wire centers.” With respect to channel terminations to end users, which the Commission noted were less competitive than dedicated transport, it doubled the revenue requirement for limited pricing flexibility and increased by almost a third the requirement for full relief. In short, the Commission made the revenue-based rule more difficult to meet specifically to protect against grants of pricing flexibility based on extremely concentrated demand.

44. We have analyzed the 217 incumbent LEC areas for which pricing flexibility relief for channel terminations to end users was granted by order of the Bureau, representing all such grants associated with pricing flexibility petitions available in the Commission’s Electronic Tariff Filing System. These grants cover 199 MSAs and five non-MSAs. The majority of those grants were based exclusively on the revenue-based rule. Because the revenue-based rule has different revenue thresholds for each type of special access service, the Commission restricted its analysis to one type,

channel terminations to end users, to keep the analysis consistent.  
 45. This analysis shows that our rules permitted MSA-wide relief on the basis of extremely concentrated demand in many instances. For example, as detailed in the chart below, 72 of the

212 grants for MSAs were based on revenues of no more than a quarter of the relevant wire centers within the MSA. For example, AT&T obtained Phase II pricing flexibility in the Pensacola MSA based on the revenues

of three out of 12 wire centers. Further, 30 of those 72 grants were based on the revenues of only one wire center, 12 were based on the revenues of only two, and 5 were based on the revenues of only three.

TABLE 4—MSA-WIDE GRANTS BASED ON EXTREMELY CONCENTRATED DEMAND

MSA	Carrier name		Competitive Showing		
	Current	At time of grant	WCs with collocation	Total WCs	Percent of wire centers with collocation
Alexandria, LA	AT&T	Bell South	1	10	10
Anderson, IN	AT&T	Ameritech	1	5	20
Anderson, SC	AT&T	Bell South	1	5	20
Asheville, NC	AT&T	Bell South	1	9	11
Bangor, ME	Fairpoint	Verizon	1	14	7
Burlington, NC	AT&T	Bell South	1	5	20
Columbus, GA-AL	AT&T	Bell South	1	7	14
Evansville, IN-KY	AT&T	Bell South	1	4	25
Evansville-Henderson, IN-KY	AT&T	Ameritech	1	13	8
Gainesville, FL	AT&T	Bell South	1	6	17
Harrisburg, PA	CenturyLink	Sprint	1	14	7
Jackson, MI	AT&T	Ameritech	1	6	17
Joplin, MO	AT&T	SWBT	1	6	17
Kalamazoo, MI	AT&T	Ameritech	1	8	13
Lawton, OK	AT&T	SWBT	1	4	25
Lima, OH	CenturyLink	Embarq	1	16	6
Medford, OR	CenturyLink	Qwest	1	7	14
Memphis, TN-AR-MS	AT&T	SWBT	1	5	20
Muncie, IN	AT&T	Ameritech	1	5	20
Ocala, FL	CenturyLink	Sprint	1	10	10
Owensboro, KY	AT&T	Bell South	1	9	11
Panama City, FL	AT&T	Bell South	1	5	20
Pittsburgh, PA	CenturyLink	Sprint	1	14	7
Pueblo, CO	CenturyLink	Qwest	1	5	20
Salem, OR	CenturyLink	Qwest	1	7	14
Sioux City, IA-NE	CenturyLink	Qwest	1	8	13
St. Cloud, MN	CenturyLink	Qwest	1	8	13
St. Joseph, MO	AT&T	SWBT	1	5	20
Waco, TX	AT&T	SWBT	1	14	7
Waterloo-Cedar Falls, IA	CenturyLink	Qwest	1	6	17
Battle Creek, MI	AT&T	Ameritech	2	8	25
Boise City, ID	CenturyLink	Qwest	2	8	25
Clarksville-Hopkinsville, TN/KY	AT&T	Bell South	2	12	17
Eugene-Springfield, OR	CenturyLink	Qwest	2	13	15
Fargo-Moorehead, ND-MN	CenturyLink	Qwest	2	8	25
Fort Smith, AR-OK	AT&T	SWBT	2	11	18
Manchester, NH	Frontier	Verizon	2	13	15
Oxnard-Simi Valley-Ventura, CA	AT&T	Pac Bell	2	9	22
Provo-Orem, UT	CenturyLink	Qwest	2	10	20
Springfield, IL	AT&T	Ameritech	2	11	18
Springfield, MO	AT&T	SWBT	2	12	17
Wilmington, NC	AT&T	Bell South	2	8	25
Augusta, GA	AT&T	Bell South	3	13	23
Bloomington-Normal, IL	Frontier	Verizon	3	20	15
Chattanooga, TN-GA	AT&T	Bell South	3	13	23
Pensacola, FL	AT&T	Bell South	3	12	25
Portland, ME	Fairpoint	Verizon	3	22	14

46. In sum, more than a third of the cases in which pricing flexibility was granted were premised on the existence of collocations where 65 percent or more of the special access revenue generated within the MSA came from 25 percent or fewer of the wire centers in the MSA. This is consistent with

extreme variations in business density. Qualitatively, this suggests that MSA-wide grants of pricing flexibility have encompassed areas in which little or no competitive entry would be expected.  
 47. Even with more relaxed standards for what constitutes extremely concentrated demand, the data shows

that 97 grants were based on revenues from less than a third of the wire centers, and 144 were based on revenues from less than half of the wire centers. Conversely, only 28 grants were based on revenues of two-thirds or more of the wire centers within the applied-for MSA.

c. Data Indicates That Competitive LEC Entry Occurs Only in Areas of High Business Demand

48. Whereas our bright-line competitive showings suggested that some MSAs would soon be, or already were, competitive more than a decade ago, recent data indicates that competitors have a strong tendency to enter in concentrated areas of high business demand, and have not expanded beyond those areas despite the passage of more than a decade since the grant of Phase II relief. This provides further evidence that an MSA is probably a much larger area than a competitor would typically choose to enter.

49. For example, data about the Atlanta MSA, where BellSouth was granted Phase II relief in 2000, demonstrates the importance of geographic business establishment density as a driver of competitive entry. In 2011, staff collected data, on a voluntary basis, about the presence of competitive special access facilities for

channel terminations to end users in 24 MSAs. The following providers submitted data indicating that they provide facilities-based competition in parts of the Atlanta MSA: [REDACTED]. The first of these carriers is [REDACTED], another is the [REDACTED], and three are among the nation's [REDACTED]. According to those data, only 40 percent of the ZIP codes in the Atlanta MSA had competitive access facilities supplied by even one of the [REDACTED] reporting competitors.

50. The ZIP codes in which the reporting carriers in Atlanta offered facilities-based competition were those with the highest average business establishment densities. This is reflected in Table 5, which compares average business establishment density between ZIP code areas in which reporting carriers compete and ZIP codes areas in which they do not (and includes similar data for the Miami and Norfolk MSAs). Because the data submissions that serve as the basis for Table 5 were voluntary, the reporting

competitors do not necessarily represent all competition in the three MSAs discussed above, and it is possible that competitors have higher market shares than our data show. However, Table 5 does not show market shares, but rather the geographic breadth of coverage by competitors within the MSA. Further analysis of these data indicates that the reporting carriers had a tendency to enter the same areas within the MSA. We have no reason to believe that the competitors' focus on high business establishment density indicated by these data would change if we were able to obtain data from any other competitive providers with access facilities in the Atlanta, Miami and Norfolk MSAs. Thus, despite the fact that our competitive showings rules were designed to predict competitive entry across an MSA, these data suggest a strong tendency for competitive LECs to deploy channel termination facilities to end users only in ZIP codes with the highest density of business establishments.

TABLE 5—AVERAGE BUSINESS ESTABLISHMENT DENSITY IN MSAS BY ZIP CODES WITH VS. WITHOUT FACILITIES-BASED COMPETITION FROM REPORTING CARRIERS

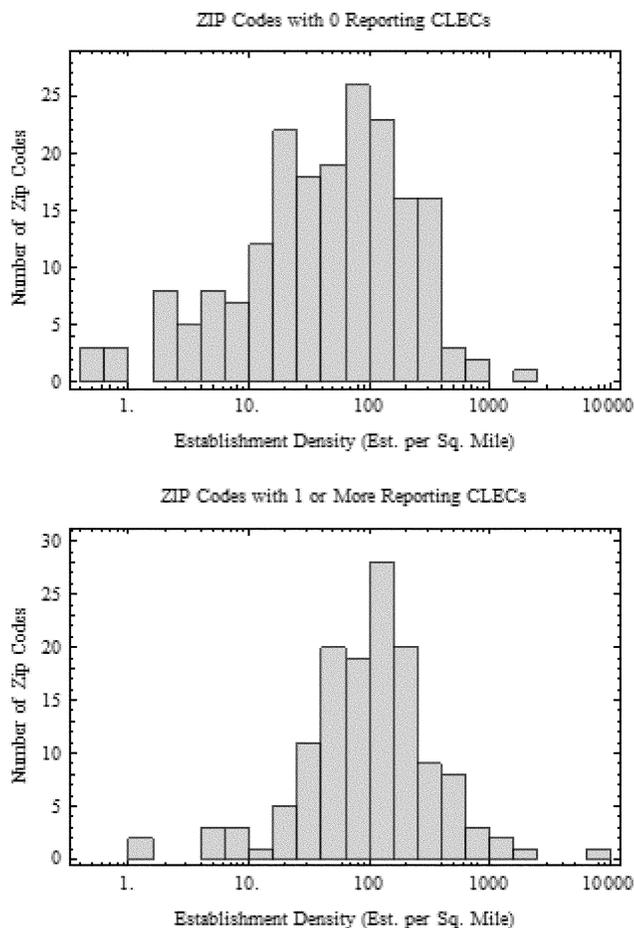
MSA and status of incumbent provider	Number of ZIP codes in MSA with reported facilities-based competition	Percent of ZIP codes in MSA with reported facilities-based competition	Average establishment density in ZIP codes with reported facilities-based competition (units: estab. per square mile)	Average of establishment density in ZIP codes without reported facilities-based competition (units: estab. per square mile)
Atlanta, GA (2000 AT&T/BellSouth Phase II Pricing Flexibility) .....	59	40	175	41
Miami, FL (2000 AT&T/BellSouth Phase II) .....	41	31	390	181
Norfolk, VA (2001 Verizon Phase II) .....	36	78	106	59

51. Chart 6 displays the distribution of establishment density for ZIP codes in the three MSAs of Table 5. The distribution at the top of Chart 6 is for ZIP codes in which no reporting carrier offered facilities-based competition for end-user channel terminations and the distribution at the bottom is for ZIP codes in which one or more reporting carriers did offer facilities-based

competition for end-user channel terminations. The chart indicates that the reporting carriers had a greater tendency to offer competition in ZIP codes with business establishment density greater than 100 establishments per square mile than they did in ZIP codes with lower establishment densities. Based on an analysis of the individual ZIP code areas, the

probability that the carriers' location decisions in these metropolitan areas were not tied to business establishment density is exceedingly small. The findings from this analysis are consistent with other evidence in the record.

**Chart 6: Distributions of Zip Code Business Establishment Densities By Competitive LEC Entry for Atlanta, Miami, and Norfolk MSAs**



52. The fact that there may be other competitors in these MSAs that are not reflected in our data, that more competitors may enter in the future, or that current competitors may build out to other parts of the MSA with high business density does not diminish our finding that competitors typically enter in areas of high business establishment density. Commenters rightly point out that we do not have comprehensive facilities data for the MSAs above. We recognize the limitations of our existing data set and, as described below, we intend to collect additional data in the coming months that will help inform our analysis. However, even this partial data provides insight into where competitors choose to enter within an MSA, and reinforces evidence we have received in this record.

53. Incumbent LECs generally concede that competitors have focused on areas in which demand for special access services is very concentrated. As SBC noted:

Demand for special access services is highly concentrated in a relatively small

number of dense urban wire centers and ex-urban wire centers containing office parks and other campus environments. Indeed, more than [REDACTED] percent of SBC's special access demand in Phase II MSAs is concentrated in [REDACTED] percent of its wire centers. To meet this demand, competitors have deployed myriad competitive facilities—including fiber connected directly to end-user premises—in markets across SBC's territory, particularly in dense, metropolitan areas and large campus environments.

Verizon states that more than 80 percent of demand is generated in 8 percent of its wire centers, “enabling competitors to address a large portion of demand through targeted investments.” This is consistent with the Commission’s earlier finding that communities within an MSA share a center of commerce, but not necessarily common economic characteristics relating to telecommunications deployment. This record also demonstrates that demand exists for special access services outside of these areas and it raises concerns regarding the availability of competitive alternatives to meet such demand.

54. Some commenters also allege that extending new facilities is sufficiently easy that competitors could reach all parts of an MSA if warranted even if they only have facilities in part of an MSA today. SBC, for example, states that a large percentage of its demand for DS1 and DS3 services runs within 1,000 feet, or about three city blocks, of existing alternative fiber. Thus, incumbent LECs argue that potential competition exists throughout an MSA even if competitive facilities are only present in a small area. In contrast, competitive carriers assert that entry is far more difficult than incumbents describe in the record. Such commenters state that, as compared to incumbent providers who have achieved economies of scope and scale in the provision of telecommunications services, it is not economical for competitors to deploy their own facilities to serve all special access demand. Competitive carriers note that construction costs, the costs of fiber and electronics, backhaul costs, transaction costs involved in negotiating with

suppliers, and other recurring costs such as rent, utilities, and maintenance are typically too large to justify provisioning a building with relatively low levels of demand. Covad and XO, for example, estimate the costs of deploying a building lateral to be [REDACTED], and tw telecom estimates that [REDACTED]. Commenters, including Covad, XO, BT Americas, and tw telecom, also point to important barriers to entry, including the delays in or impossibility of securing municipal franchise agreements, rights-of-way agreements, building access agreements, and building and zoning permits.

55. We need not resolve this controversy here, however, for data provided by incumbent LECs demonstrate that, even if competitors could easily deploy fiber to serve customer demand within 1,000 feet of incumbents' facilities, many parts of an MSA would still not be served by competitive fiber. For instance, a 2007 AT&T map depicting competitive fiber deployment in the Austin, Texas MSA appears to indicate that, out of the 24 AT&T wire centers in the MSA, competitive fiber does not extend to [REDACTED]. Maps submitted by SBC in 2005 provide similar data. For instance, SBC estimates that in the San Diego MSA, [REDACTED]. This cuts against assertions that the majority of special access demand could be easily and quickly served by proximate competitive alternatives.

#### d. Analysis of Multi-Incumbent LEC MSAs Also Suggests That MSAs Do Not Correspond to the Scope of Entry

56. As discussed above, the Commission selected the MSA because it decided the MSA best reflected the scope of competitive entry. If our rules operated in a manner consistent with our predictions, it should follow that uniform relief would generally be granted when two or more price cap LECs operate in the same MSA. That has not proven to be the case. For example, in the Evansville, Indiana MSA, BellSouth has 4 wire centers and Ameritech has 13. In 2001, Ameritech qualified for Phase I pricing flexibility. In contrast, BellSouth met the higher competitive showings requirements for Phase II pricing flexibility one year later. Likewise, in 2002, Verizon satisfied the requirements for Phase II pricing flexibility for its 2 wire centers in the Bridgeport-Stamford-Norwalk, Connecticut MSA. Two years later, SNET was only able to get Phase I pricing flexibility, based on revenue of 9 out of its 22 wire centers in the same MSA. In the total of 12 MSAs in which we granted pricing flexibility to more

than one provider within the MSA, our data shows instances of inconsistent grants of pricing flexibility in nine. These data reinforce our conclusion that competitive conditions can vary significantly across an MSA.

#### e. Billing Practices May Not Be Indicative of Competitive Entry

57. It is not clear, based on our existing record, that incumbent LEC billing practices lead to consistent pricing across an MSA. Commenters, in particular incumbent LECs, argue that special access pricing is generally not tied to a small geographic market, but rather pricing is uniform throughout an MSA or larger geographic region. Thus, because tariffs typically encompass an MSA or larger geographic region, incumbents assert that prices are constrained across that whole area, regardless of the presence of competition in any individual location. Such commenters also argue that it is administratively burdensome for the Commission to assess whether competition exists for granular geographic markets, and that it would be onerous for carriers to implement pricing flexibility for individual buildings or wire centers. Thus, AT&T, for example, states that the current pricing flexibility rules strike "a reasonable balance between the costs and benefits of identifying with greater granularity those geographic areas where LECs face competition from rivals with sunk investments and the administrative manageability of pricing flexibility rules."

58. There also is evidence, however, that incumbent LEC billing practices may not be uniform across MSAs. Price cap LECs have the authority to set prices in zones within an MSA or the non-MSA portions of a study area. In the *Pricing Flexibility Order*, the Commission amended § 69.123 of its rules to permit incumbent price cap LECs to deaverage geographically their rates for access services in the trunking basket, and to allow price cap incumbent LECs to define the scope and number of density zones. The Commission noted that "averaging across large geographic areas distorts the operation of markets in high-cost areas because it requires incumbent LECs to offer services in those areas at prices substantially lower than their costs of providing those services." However, by granting incumbent LECs the flexibility to "choose the number of zones and the criteria for establishing zone boundaries, they are more likely to establish reasonable and efficient pricing zones." The record indicates that price cap LECs do, in at least some

cases, take advantage of § 69.123's geographic deaveraging provisions. It is therefore possible for price cap LECs to charge different prices in, for example, rural and urban areas within an MSA or non-MSA portion of a study area, and the record indicates that carriers may engage in this practice.

59. Moreover, in Phase I and Phase II pricing flexibility areas, carriers can and do offer contract tariffs to special access customers on an individualized basis. The record indicates that such contract terms are rarely, if ever, adopted by other special access purchasers. Thus, whether special access pricing is, in fact, disciplined across a broad geographic area as claimed by incumbent LECs remains an open question.

#### f. Changes to MSAs Impact Non-MSA Rules

60. Price cap LECs seeking pricing flexibility under our rules in a non-MSA area must make competitive showings throughout the entire non-MSA portion of a study area, rather than a Rural Service Area or smaller geography. The Commission justified its adoption of the non-MSA as the appropriate geographic area because it predicted that "competitive entry into rural areas [would] be less concentrated than in urban areas." Embarq contends that our decision to use the non-MSA parts of a study area, instead of an RSA, has made it impossible for Embarq to obtain relief in Missouri despite the presence of competition. Though Embarq's situation may be indicative of a problem specific to our choice of adopting the non-MSA, any changes we find to be warranted with respect to the MSA, as discussed above, must be reflected by corresponding changes to non-MSA areas.

61. Moreover, the record in this proceeding suggests that the *Pricing Flexibility Order's* prediction that competition in rural areas would not be concentrated was incorrect. A review of our grants of pricing flexibility for channel terminations to end users in non-MSA areas highlights problems similar to what we found in MSA areas. Specifically, out of five of these types of grants, three were based on high concentrations of demand. Verizon's grant in non-MSA Idaho was based on the revenues of 3 out of 26 wire centers, and its grant for non-MSA West Virginia was based on revenues from 8 out of 97 wire centers. A third grant, from ACS, was based on revenues from only half of the wire centers in non-MSA Juneau, Alaska. This suggests that, at the time the grant of pricing flexibility was made, competitive conditions varied greatly

within the non-MSA areas. Even if new competitors subsequently entered the non-MSA, for the reasons discussed above with respect to MSAs, they are likely to locate only in areas of high demand. Thus, the evidence in this proceeding suggests highly concentrated competitive conditions at the time pricing flexibility was granted. This indicates that the *Pricing Flexibility Order's* prediction that competition in non-MSA areas would be less concentrated than in urban areas may have been incorrect.

### 3. The Competitive Showings Are Not as Administratively Simple as Expected

62. In addition to the issues identified above, our experience shows that our rules, which were intended first and foremost to be straightforward and simple to administer, are not. Specifically, in adopting the *Pricing Flexibility Order*, the Commission concluded that using MSA-based rules would be simpler and less expensive to administer than rules based on other geographies or regimes that might create a "more finely-tuned picture of competitive conditions." However, the rules have not been as administratively simple or easy to verify as the Commission anticipated, nor does it appear that they have provided bright-line guidance to industry. We therefore choose to redirect our efforts to conducting a more complete market analysis, as discussed in greater detail in Section 0 below.

63. Previous pricing flexibility petitions demonstrate that our rules have failed to provide a clear-cut guide to industry. For example, § 22.909(a) of our rules define MSAs for pricing flexibility, as "\* \* \* 306 areas \* \* \* defined by the Office of Management and Budget, as modified by the FCC." Because OMB changes the list of MSAs and component counties, as discussed above, § 22.909 of the Commission's rules refers to a static list, based on data from the 1980 Census. Nonetheless, the fact that our rules refer to areas in which to make a competitive showing as "MSAs" has apparently created some confusion among petitioners, resulting in petitions containing data calculated over different MSA definitions. For example, Pacific Bell submitted a petition for pricing flexibility in the San Diego and Sacramento MSAs based on the list referenced in § 22.909 of our rules. In contrast, Embarq and Cincinnati Bell based their 2007 pricing flexibility petitions on MSAs drawn in accordance with a "Metropolitan Areas (1993)" map, located on the Commission's Web site, that provides a detailed description of how the map

includes MSAs as defined by OMB. However, because the 1993 MSAs were more recently constructed and based on 1990 Census data, the component counties that make up each MSA are often different from those in the MSA list referenced in § 22.909 of our rules. Thus, our supposedly bright-line rules have failed to provide guidance to sophisticated firms such as Embarq and Cincinnati Bell.

64. Moreover, our competitive showings are ambiguous and require time-intensive review and policy decisions by Commission staff. In order to fulfill the requirements of the revenue-based competitive showings, a petitioner must: (a) Provide a list of wire centers within that MSA; and (b) calculate revenues based on that number. However, our rules do not specify how to determine whether a wire center belongs to a specific MSA, nor do they provide enough specifics as to what revenues should be included. Therefore, as applied, petitioners are making these determinations using different methodologies. For example, Southwestern Bell determined which wire centers belonged to the Amarillo and St. Louis MSAs based on "the Collocation Implementation, Collocation Point of Contact and Tracking Database," which includes wire center information for all MSAs. It excluded from its revenue calculations those revenues derived from Individual Case Basis (ICB) arrangements, i.e., "the carrier practice of providing a particular service in response to a specific request from a customer under individualized rates, terms, and conditions." An ICB arrangement may involve services directly related to the provision of special access services, such as special conditioning of a line. In contrast, in a 2008 petition, Windstream acknowledged that some of its wire centers located outside the applied-for MSA may serve locations inside the MSA boundary. Therefore, based on its own engineering maps, "Windstream calculated the exchange area that fell within the MSA. If the area calculated exceeded 50 percent of the total area of the wire center, the wire center was assigned to the MSA." In contrast to Southwestern Bell's system of calculating revenues, Windstream included ICB revenues in its revenue calculations. Thus, in order to properly evaluate whether these petitioners have fulfilled the requirements of our rules, which are silent on these issues, Commission staff would have to do a thorough review of the company's internal records, exercise an extensive amount of independent judgment, and

make some significant policy decisions as to whether each company's interpretation of our rules are consistent with the terms of the *Pricing Flexibility Order*.

### C. Shortcomings of Competitive Showings Based Exclusively on Collocation

65. Significant questions also exist about the reliability of collocation as a proxy for facilities-based competition in end user channel terminations. Charges for special access generally are divided into channel termination charges and channel mileage charges. Channel termination charges recover the costs of facilities between the customer's premises and the LEC end office and the costs of facilities between the IXC POP and the LEC serving wire center. Channel mileage charges recover the costs of facilities (also known as interoffice facilities) between the serving wire center and the LEC end office serving the end user. In the *Pricing Flexibility Order*, the Commission found that pricing flexibility for channel terminations between a LEC end office and a customer premises required a higher threshold showing than pricing flexibility for other dedicated transport and special access services. In reaching this determination, the Commission acknowledged that the economics of channel terminations between the LEC office and the customer premises make it more costly for new entrants to compete in that product market.

#### 1. Rationale for Adopting Collocation as the Sole Indicator of Competition

66. The competitive showings require price cap LECs to offer evidence of collocation by "competitors that use transport provided by a transport provider other than the incumbent LEC" for granting pricing flexibility for special access and dedicated transport. The Commission considered that the competitive showings reasonably balanced two goals: "(1) Having a clear picture of competitive conditions in the MSA, so that we can be certain that there is irreversible investment sufficient to discourage exclusionary pricing behavior; and (2) adopting an easily verifiable, bright-line test to avoid excessive administrative burdens." The Commission found that collocation was a "reliable indicator of sunk investment by competitors" in dedicated transport and special access services other than channel terminations because it demonstrated a financial investment by the competitor in establishing facilities in that wire center.

67. With respect to channel terminations, the Commission acknowledged that “collocation by competitors does not provide direct evidence of sunk investment by competitors in channel terminations between the end office and the customer premises.” Indeed, the Commission recognized that “a competitor collocating in a LEC end office continues to rely on the LEC’s facilities for the channel termination between the end office and the customer premises, at least initially, and thus is susceptible to exclusionary pricing behavior by the LEC.” The Commission predicted, however, that “that a new market entrant would provide channel terminations through collocation and leased LEC facilities only on a transitional basis and [would] eventually extend its own facilities to reach its customers.” It thus concluded that despite “the shortcomings of using collocation to measure competition for channel terminations, \* \* \* it appears to be the best option available to us at this time.”

## 2. More Recent Evidence Suggests That Collocation May Produce an Unreliable Picture of Competitive Conditions

68. Evidence submitted to the Commission since 1999 calls into question the Commission’s prediction that collocators would eventually build their own channel terminations to end users. By the end of 2005, six years after the adoption of the *Pricing Flexibility Order*, SBC Communications, Inc. (SBC) had obtained pricing flexibility for channel terminations to end users in 67 MSAs. That same year, it acquired AT&T Corporation. Both the Commission and the Antitrust Division of the U.S. Department of Justice (“the Division”) approved the transaction, subject to several concessions, including divestitures. Despite SBC’s success in obtaining pricing flexibility in many MSAs, the Division’s antitrust investigation concluded that “for the vast majority of commercial buildings in its territory, SBC is the only carrier that owns a last-mile connection to the building.” That same year, the Commission’s review of Qwest’s petition for forbearance in Omaha, Nebraska showed that some buildout to end users had occurred, but only in 9 out of 24 of Qwest’s wire centers in the Omaha MSA. This was three years after Qwest had obtained Phase II pricing flexibility in the Omaha MSA, based on the revenues of 11 wire centers (8 of which overlapped with the 9 wire centers with buildout to end users). In 2006, the U.S. Government Accountability Office (“GAO”) analyzed

16 metropolitan areas in which the Commission had granted pricing flexibility and found that facilities-based competitors served fewer than 6 percent of buildings with at least a DS1-level of demand. In 2010, Qwest noted in its transfer of control application with CenturyLink that “it is Qwest’s practice generally to use the facilities of other carriers when it sells services to enterprise customers in locations outside of its service territory.”

69. Commenters’ pleadings also suggest that collocation has not always developed into facilities-based competition. As evidence to support its assertion that our predictions about collocation were inaccurate, TW Telecom relied on data supplied by Verizon to assert that between 1996 and 2004, non-incumbent LEC channel termination buildout to commercial buildings increased from 24,000 buildings to approximately 31,467 buildings (a change of 7,467), in contrast to the “millions of buildings served by incumbent LEC fiber.” In 2005, WilTel estimated that competitors had deployed to 25,000 buildings, whereas Sprint asserted in 2007 that only 22,000 buildings had competing connections. Moreover, TW Telecom states that, as of a 2003 Commission finding, competitors serve only three to five percent of commercial buildings nationwide. It also submitted evidence that it contends shows that, four years after Verizon had obtained Phase I pricing flexibility in the New York MSA for channel terminations to end users, competitors served fewer than [REDACTED] of 220,000 buildings in New York City. Its evidence also showed that, in Chicago, where Ameritech had obtained pricing flexibility for channel terminations in 2003, competitors connected to only 429 out of 241,000 commercial buildings.

70. Commenters also argue that the mere installation of third party facilities within wire centers does not equate to competition by collocators because in some cases they are not being used to provide competitive service. For example, in its oppositions to two incumbent LEC petitions for pricing flexibility, AT&T argued that it never used the facilities it had installed in some of the wire centers listed in the petitions, and it was therefore erroneously identified as a competitive collocator. However, the competitive showing rules do not require incumbent LECs to show that collocation facilities are being used, but only that they exist in the wire center. Moreover, Sprint argues that collocation “is indicative not that the competitor has placed its own facilities into buildings but rather that it

has dependence upon the incumbent’s facility.”

71. We acknowledge that this evidence is limited. The Commission’s recent attempts to obtain more robust facilities data through voluntary production have provided useful, but incomplete, data. Nonetheless, the evidence we do have suggests our predictions were inaccurate and that the accuracy of the use of collocations as a proxy for actual or potential competition warrants further investigation. We therefore intend to issue a data request that will require carriers to submit the data we need to test the accuracy of the predictions we made about collocation in the *Pricing Flexibility Order*.

## 3. Existence of Non-Collocation Based Competition Does Not Undercut the Need To Suspend Grants of New Pricing Flexibility Petitions

72. Several commenters argue that relying exclusively on collocation is flawed because it undercounts entry by non-collocating firms who have built their own facilities. We agree, but because we lack reliable data on the extent or location of this competition, it does not change our conclusion that new pricing flexibility petitions should be suspended at this time.

73. Several commenters discuss growing competition from non-collocating competitors, such as cable. For example, Verizon claims that the competitive showings preclude it from obtaining pricing flexibility commensurate to the level of competition they claim exists in Los Angeles, Boston, New York, Philadelphia, and Washington, DC, because our rules do not account for several non-collocating firms that Verizon’s research indicates have operations in those areas. AT&T has similar complaints for its operations in Chicago, Dallas, Houston, Detroit, San Diego and St. Louis, contending that it has lost special access business to cable firms in many instances. Embarq asserts that it too has lost business to a competitive LEC, Cox Cable, that does not collocate in Las Vegas, Nevada, and Fort Walton Beach and Ocala, Florida. Price cap LECs also criticize the rules for excluding competitors that collocate at “collocation hotels,” as opposed to price cap LEC wire centers. Thus, the record indicates that at times the rules may prevent price cap LECs from obtaining partial or full pricing flexibility because they do not account for competition sufficient to discipline rates from facilities-based competitors.

74. We agree. As the Commission stated when it adopted its competitive

showings rules, it has “long recognized that it should allow incumbent LECs progressively greater pricing flexibility as they face increasing competition” and wanted to ensure that its “regulations do not unduly interfere with the development and operation of these markets as competition develops.” It would be inconsistent with this approach if we inappropriately subjected price cap LECs to unnecessary regulations, despite the emergence of competition that bright-line rules are unable to detect. We therefore agree to undertake a robust competition analysis that takes these factors into account, as described below.

75. Moreover, there is currently no evidence in the record addressing the relationship, if any, between collocation levels and the presence of non-collocated competitors. Such data would assist in testing incumbents’ claims that they have lost business to non-collocating competitors with their own fiber. We intend to obtain evidence on this point in order to conduct the robust competition analysis described below.

#### IV. Grants of Pricing Flexibility Are Suspended

76. As set forth in sections 0 and III.C above, there is compelling evidence that the competitive showings adopted in 1999 have not worked as intended, and that our pricing flexibility rules are simultaneously preventing grants of pricing flexibility in areas that likely are competitive and allowing grants of pricing flexibility in areas where it is not appropriate to do so. While we today initiate the process of developing a better way to identify areas where special access regulatory relief is appropriate, it would not serve the public interest to allow continued grants of pricing flexibility under our old rules. We therefore act in this section to temporarily suspend the operation of our competitive showing rules pending completion of our inquiry.

##### A. Suspension of Competitive Showing Rules for Channel Terminations

77. Based on the evidence in the record as discussed in subsections 0 and III.0 above, we suspend further grants of pricing flexibility on the basis of our existing pricing flexibility rules. Generally, the Commission’s rules may be suspended for good cause shown. In light of the significant problems identified with grants of regulatory relief at the MSA level, continuing to grant relief under the current framework would run precisely the risk that the Commission sought to avoid in the *Pricing Flexibility Order*: “Granting

pricing flexibility over such a large geographic area would increase the likelihood of exclusionary behavior by incumbent LECs by giving them flexibility in areas where competitors have not yet made irreversible investment in facilities.” Given our finding that the special access pricing flexibility triggers are not operating as predicted by the Commission, our action here suspending the application of those rules while we consider possible new regulatory approaches is necessary in the public interest. In addition, it is consistent with our “continuing obligation to practice reasoned decision making” under the APA. Indeed, this continuing obligation to practice reasoned decision making and revisit our rules is especially relevant where our predictive judgments do not materialize. The record indicates that the 1999 competitive showing rules are both over-inclusive and under-inclusive, thereby resulting in grants of pricing flexibility to broad geographic areas (*i.e.*, MSAs) based on small pockets of concentrated demand, or denials of pricing flexibility where competitive alternatives are not recognized by the existing rules. Moreover, there is evidence that collocations—while perhaps “the best option available” to the Commission at the time—are not a reliable indicator of the presence of actual or potential competition in the provision of channel terminations.

78. The Commission’s rules provide that petitions for pricing flexibility for special access services that are not denied within 90 days after the close of the pleading cycle are deemed granted. Given the significant problems identified with our existing pricing flexibility rules discussed above, we find that it would be inappropriate to allow new grants of flexibility under those rules. Thus, pursuant to rule § 1.3, we find good cause to suspend the 90 day deadline in rule § 1.774(f)(1) and do so on our own motion. We therefore amend our rules as set forth in Appendix A.

##### B. Suspension of Competitive Showing Rules for Non-Channel Termination Special Access

79. As noted above, the staff analysis of specific data highlighting problems with the MSA was restricted to channel terminations to end users. Nonetheless, the record also indicates a lack of “reasonably similar” competitive conditions within an MSA for dedicated transport. As discussed above, both Verizon and SBC concede that special access demand—for all categories of special access services—is extremely

concentrated. Fiber maps that they submitted throughout this proceeding, which include both dedicated transport and channel terminations, highlight that fact. In 2007, AT&T submitted detailed maps showing competitive deployment for Atlanta, Georgia; Miami, Florida; Columbus, Ohio; Austin, Texas and San Jose, California. In 2012, it submitted competitive deployment maps for three of those same MSAs (Atlanta, Miami and San Jose), as well as several other MSAs. Though each of those maps—whether they were produced in 2007 or 2012—display competitive fiber in the central portion of each MSA, none of those maps show that those competitive fibers reach throughout the MSAs. In addition, as discussed above with respect to our review of pricing flexibility grants for channel terminations for end users, in a significant number of the MSAs where price cap carriers have been granted relief, a large proportion of wire centers have either no collocations, no competitive transport, or both. This calls into question whether our transport bright-line tests, which if met lead to pricing flexibility being applied to the entire MSA, appropriately distinguish where competition exists and where it does not. Further, though the *Pricing Flexibility Order* noted competitive differences among special access services, it did not make any distinctions as to the appropriate geographic area of relief based on the type of service at issue. Instead, the Commission adopted bright-line competitive showings, with a uniform geographic area, for all categories of special access service. For these reasons, we find it appropriate to temporarily suspend our competitive showing rules for dedicated transport.

##### C. Arguments Against Suspension of Rules

80. *Broad Assertions Regarding Competition.* Commenters assert that the deregulatory approach of pricing flexibility, as well as the current competitive showing rules, has been sufficient to constrain exclusionary or predatory conduct by LECs to date. For example, Verizon, Qwest, AT&T, and CenturyLink assert that special access prices have fallen since the adoption of pricing flexibility, and that special access outputs have increased. CenturyLink states that special access must be considered in the broader context, as incumbent LECs have been facing substantial business challenges. Thus, absent evidence of a fundamental failure in the current pricing flexibility rules—which commenters believe has not been shown in the record—the

Commission should not substantially revise or eliminate those rules.

81. There is insufficient evidence in the record upon which to base general or categorical conclusions regarding the competitiveness of the special access market. As an initial matter, it is not clear how the Commission should consider arguments that market definitions are not relevant because the undefined market is highly competitive. Such arguments would have us presume the outcome at the heart of our inquiry prior to conducting any analysis of market conditions. Categorical assertions about competitiveness are not an adequate basis upon which we can base grants of pricing flexibility, particularly in light of the problems with the current competitive showing requirements, as well as the potentially conflicting evidence in the record about the changes in special access prices in Phase I and Phase II pricing flexibility areas. While incumbent LECs assert that special access prices have fallen in pricing flexibility areas, competitors state that prices, particularly in areas granted Phase II relief, have increased. This evidence is inconclusive; thus, we do not pass judgment on these assertions in this Report and Order. However, given the problems associated with the 1999 competitive showing rules, we do believe that the record contains sufficient disputed evidence to warrant further scrutiny by the Commission. The current competitive showing rules provide only a limited inquiry into the state of competition in a given market, a fact that commenters, including incumbent LECs, concede.

82. Moreover, we do not agree that *WorldCom* or the *Pricing Flexibility Order* compel us to maintain the collocation-based competitive showing rules or a similar standard. In *WorldCom*, the court explicitly affirmed the Commission's discretion to adopt new policy positions, provided that it provides a reasoned analysis to support its decisions. Further, the *WorldCom* court noted that, unless they are statutorily precluded from doing so, agencies have the discretion to make adjustments to their regulations in light of changed circumstances. The court also held that the Commission did not err in basing its policymaking on "predictive forecasts," because the Commission's adoption of the competitive showing rules was a reasonable prediction of how competition for special access might develop in the future. Throughout this Report and Order, we identify the problems associated with the current pricing flexibility rules and explain why suspending the current competitive

showings while we conduct a market analysis will enable us to identify a replacement for the competitive showing rules that will allow us to more effectively evaluate requests for pricing flexibility. Thus, we disagree with commenters who assert that precedent requires a different result.

83. *Data Collection Necessary.* We do not agree with commenters that it is necessary to collect additional data prior to suspending our rules. As discussed in section 0, above, the existing record contains sufficient evidence to call the continued viability of the collocation-based competitive showing rules into question. We therefore will not allow the inefficiencies resulting from those rules to go unaddressed until we are able to obtain a more extensive data set. In our view, it is appropriate to suspend the competitive showing rules adopted in the *Pricing Flexibility Order* while we undertake a competition analysis to assist us in determining how to assess the presence of actual and potential competition sufficient to discipline special access prices.

#### *D. Changes in Regulatory Relief During Development of New Rules*

84. We note that parties may still take steps to alter the regulatory status of special access services during the pendency of this proceeding. As commenters have noted, the Commission has the power to resolve allegations of unjust or unreasonable rates, terms and conditions through the complaint process in the Act, rather than through a rulemaking proceeding. Parties also may petition for forbearance from any regulation or provision of the Act pursuant to sec. 10 thereof, or seek a waiver of our rules. The availability of these forms of recourse provides additional support for suspension of our competitive showing rules pending development of an improved method for providing regulatory relief.

### **V. Undertaking a Market Analysis for Special Access Regulatory Relief**

#### *A. Future Steps to Analyze Competition for Special Access*

85. In this section, we commence a process that will enable us to more effectively determine where regulatory relief is appropriate. In the coming months, we will undertake a robust market analysis to assist us in determining how best to assess the presence of actual and potential competition for special access that is sufficient to discipline prices. Our analysis will follow the collection of additional data and an opportunity for

public comment. As described below, there is widespread accord in the record on the appropriateness of collecting additional data to inform our future actions.

86. The market analysis we will undertake in the coming months may identify reliable proxies for competition for special access services, which we could adopt in lieu of the 1999 competitive showings. Our analysis may also provide evidence that changes in our regulatory approach are warranted in particular geographic areas. At this time, we do not exhaustively specify the factors that will comprise our market analysis: these will be subject to comment by interested parties in an upcoming notice. We anticipate that the analysis will be a one-time assessment of the competitive conditions in the special access market; however, we do not foreclose the possibility that further analyses may be needed in the future. In any event, we will issue a comprehensive data collection order within 60 days to facilitate this market analysis.

#### *B. Benefits of a More Complete Market Analysis*

##### 1. A Market Analysis is Consistent With Agency and Court Precedent

87. We concur with commenters who point out that use of market analysis in the special access context is consistent with Commission precedent. The Commission historically has conducted an examination of market conditions in several instances to assess competition for telecommunications services. In a series of orders in the *Competitive Carrier* proceedings, the Commission established a framework to evaluate competition in telecommunications markets and determine whether deregulatory treatment of certain carriers is warranted. In those orders, the Commission performed a structural market analysis to distinguish between "dominant carriers," which "possess market power (*i.e.*, the power to control price)," and "non-dominant carriers," which "do not possess power over price." The Commission focused its inquiry on certain "clearly identifiable market features," including a carrier's market share, number and size distribution of competing firms, the nature of competitors' barriers to entry, the availability of reasonably substitutable services, the level of demand elasticity, and whether the firm controlled bottleneck facilities. This analysis was designed to identify when competition is sufficient to constrain carriers from imposing unjust, unreasonable, or unjustly or

unreasonably discriminatory rates, terms, and conditions, or from acting in an anticompetitive manner. The Commission subsequently applied the same framework to reclassify AT&T as non-dominant in the interstate interexchange service market, finding that AT&T no longer possessed individual market power with respect to those services.

88. In the 1997 *LEC Classification Order*, the Commission modified its framework for dominance/non-dominance analyses to bring the framework into accord with the antitrust analysis laid out in the 1992 Merger Guidelines, a precursor to the 2010 Horizontal Merger Guidelines that are in use today. In that order, the Commission stated that the assessment of competitive conditions requires a thorough analysis which begins with a delineation of the relevant product and geographic markets, and then considers market characteristics, including market shares, the potential for the exercise of market power, and whether potential entry would be timely, likely, and sufficient to counteract the exercise of market power.

89. More recently, the Commission has undertaken market analysis to assess the extent of competition in both merger proceedings and in the evaluation of forbearance petitions. For instance, in its analysis of the proposed AT&T/BellSouth and Verizon/MCI mergers, the Commission considered whether the mergers would reduce existing competition, as well as their likely effects on the market power of dominant firms in the relevant communications markets and the mergers' effects on future competition. Similarly, in the *Qwest Phoenix Forbearance Order* the Commission employed a structural market analysis akin to that of the *Competitive Carrier* cases to evaluate Qwest's petition for forbearance from certain wholesale and retail regulations in the Phoenix, Arizona, MSA. Additionally, a market analysis is consistent with the investigation performed by the DOJ and FTC to assess whether a horizontal merger could adversely impact competition in relevant markets.

90. In the *Pricing Flexibility Order*, the Commission declined to require incumbent LECs to perform a complete market analysis as part of the carrier's application for pricing flexibility and instead, without the benefit of a fulsome market analysis, adopted proxies for competition that were intended to measure whether actual or potential competition was sufficient to ensure just and reasonable rates, terms and conditions for special access services.

As discussed above and based on the record in this proceeding, we have suspended grants of pricing flexibility on the basis of these proxies because we find that the geographic market over which relief is granted, MSAs, do not correspond to the scope of competitive entry and serious question have been raised concerning whether the presence of collocation and competitive transport are reliable indicators of the presence of competitive channel termination services. The process we begin today may well assist in developing new proxies for special access competition, which could be employed going forward to evaluate petitions for pricing flexibility. Once we have had the opportunity to collect and analyze additional data, we will be better positioned to determine what specific showings price cap carriers must make in their petitions for pricing flexibility and what information they could submit to satisfy those showings.

## 2. A Market Analysis Will Provide Analytical Precision

91. Several commenters recommend that, prior to adopting a new analytical framework, we collect competitive data to assess whether the current competitive showing rules are a reasonably accurate proxy for the presence of competition. Undertaking a market analysis will allow the Commission to more precisely determine where competition exists, or could potentially exist, and to develop better tests for regulatory relief to replace the current collocation-based approach. For example, as described above, some commenters observe that the collocation-based competitive showings do not account for sources of intermodal and/or intramodal competition that do not collocate in incumbent LEC facilities. Other commenters raise concerns that the 1999 competitive showing rules overlook competitors who could potentially enter the market in the near term or in the more distant future. In contrast to our current approach, a market analysis would seek to identify significant current and potential market participants, and consider their impact when assessing the level of competition in a market.

92. Several commenters state that a single market characteristic (e.g., high special access rates or carrier revenues, large market share) is generally not sufficient on its own to signify whether a given market is competitive. For example, AT&T and Verizon both assert that the Commission should not rely on market share as the basis for concluding that a given market lacks competition,

because market share is a static measure that can understate the impact of competitive alternatives in dynamic markets. We agree that the Commission must conduct a more comprehensive analysis of the state of competition prior to adopting replacement competitive proxies or making other changes to the ways that incumbent LECs may obtain regulatory relief in the provision of special access services. A market analysis will enable us to make a multifaceted assessment of competition that considers a variety of factors, including both price and non-price effects. Additionally, this type of fact-specific analysis is in line with current approaches to competition policy.

## 3. A Market Analysis Will Foster Broadband Deployment and Competition

93. Finally, a comprehensive market analysis will help us to take future steps to support broadband deployment and competition. In the *Qwest Phoenix Forbearance Order*, the Commission found that, "by using the more comprehensive antitrust-based analysis that the Commission frequently has used in past proceedings, and that the [FTC and DOJ] regularly use to measure competition, we ensure that competition in downstream markets is not negatively affected by premature forbearance from regulatory obligations in upstream markets." Citing the National Broadband Plan, the Commission noted that "regulatory policies for wholesale access affect the competitiveness of markets for retail broadband services provided to small businesses, mobile customers and enterprise customers."

94. Special access circuits are a particularly important input for carriers' broadband service offerings. As the National Broadband Plan found, the costs associated with purchasing special access circuits can be a significant expense that impacts a carrier's ability to provide affordable broadband service, particularly to smaller, rural communities.

95. A market analysis will enable us to ensure that appropriate regulatory relief is granted in those markets where competitive conditions justify it. For example, we expect that our analysis will aid in determining whether purchasers can obtain special access circuits at just and reasonable prices. This inquiry could provide insight into challenges that carriers may face in deploying broadband and what actions, if any, are needed to respond to those challenges.

#### 4. Factors to be Considered in Market Analysis

96. Some commenters, in particular incumbent LECs, recommend specific factors or considerations they believe the Commission should include in a market analysis. We address several of these recommendations below.

##### a. Analysis Must Be Forward-Looking and Consider Various Sources of Competition

97. As detailed below, commenters state that any market analysis we conduct must be forward-looking and account for significant competitors in a market. We agree.

98. In our view, a comprehensive market analysis will best facilitate a complete inquiry into the existence of competition in a given market, including sources of intermodal and intramodal competition, potential market entrants, uncommitted entrants, carriers that self-supply their own special access, and non-facilities-based competitors. This analysis also will consider the impact of competitors that do not collocate in an incumbent's wire center.

99. For instance, the 2010 Horizontal Merger Guidelines contain a detailed process employed to identify participants in the relevant market. Pursuant to the 2010 Horizontal Merger Guidelines, an identification of market participants includes all firms that currently earn revenues in the relevant market. A firm may be considered to be a market participant even if it does not currently earn revenues, but it is "committed to entering the market in the near future," or if the firm is not a current producer in the relevant market, but "would very likely provide rapid supply responses with direct competitive impact in the event of a [small but significant and non-transitory increase in price (SSNIP)], without incurring significant sunk costs." Thus, in those instances where a competitor, such as a cable or fixed wireless provider, can quickly enter the market and respond to customer demand, a market analysis would enable us to consider the likely impact of that entry on competition.

100. Moreover, a market analysis allows for specific, economically rigorous, and factually specific inquiries regarding potential competition, a factor that price cap LECs such as Verizon and AT&T contend should be included in any framework we adopt. A market analysis of potential competition assesses whether a firm is perceived to be a potential competitor, exerting a price-constraining effect on firms

currently participating in the market, even though it is not currently participating in the market. We agree with commenters that our analysis of competitive conditions should incorporate an assessment of potential competition. We also agree that barriers to market entry should be considered. Entry is an important consideration in a structural analysis, as the exercise of market power is unlikely where entry barriers are low and incumbents cannot profitably raise price or otherwise reduce competition to a level below that of a competitive market. In the past, the Commission has considered potential competition and barriers to entry as part of its market analysis.

101. Further, we concur with commenters that the multi-faceted and forward-looking analysis of competition we will undertake would be inadequate if it focused solely on market share or building counts. By examining factors such as the potential for competitive effects, market entry, and potential competition, a market analysis is a forward-looking alternative to the current competitive showing rules or any like standard. That being said, we must carefully balance the benefits of relying on solid, if historical data, against the risks associated with placing too much weight on speculative data sources. We will continue to consider our future data collection needs with these points in mind.

##### b. Approach That Enhances Consumer Welfare

102. We agree with commenters who assert that the Commission must conduct its market analysis in light of its broader objectives for the telecommunications industry. For example, Verizon notes that pricing flexibility was among several deregulatory actions taken by the Commission in the 1990s with the goal of encouraging innovation, cost savings, and efficiencies.

103. The major purpose of the 1996 Act was to establish "a pro-competitive, deregulatory national policy framework." Indeed, among its primary goals were "opening the local exchange and exchange access markets to competitive entry" and "promoting increased competition in telecommunications markets that are already open to competition, including the long-distance services market." We undertake an analytical process to assess the level of competition in the special access market with these goals in mind. For example, our analysis may indicate that further regulatory relief is warranted in areas where competition exists, but is not captured by the current

competitive proxies. As detailed above, the competitive showings adopted in the *Pricing Flexibility Order* are both over- and under-inclusive, resulting in inaccurate assessments of whether actual and potential competition is sufficient to constrain special access prices in the areas granted relief. Indeed, given the unreliable nature of the competitive showing requirements adopted in 1999, we believe a market analysis will aid us in granting deregulation in areas where actual and potential competition is sufficient to constrain prices. A nuanced market analysis will also allow us to better balance the potential costs of regulating too heavily against the potential harms of failing to undertake appropriate regulation where it is needed.

##### c. Dominance/Non-Dominance Classification

104. Finally, incumbent LECs assert that special access pricing flexibility should not be treated as akin to the non-dominance analyses undertaken by the Commission in the *Competitive Carrier* proceeding. Further, AT&T argues that, under a non-dominance framework, upon a finding that an incumbent lacked market power, the Commission would have to reclassify the carrier as non-dominant and relieve its dominant carrier obligations. We agree with AT&T that, once we have performed a broader evaluation of competitive conditions, our analysis may show that a carrier classified as dominant does not possess market power as defined in the *Competitive Carrier* proceeding for a particular special access service in a geographic area. In that case, the Commission may ultimately conclude that it is appropriate to grant regulatory relief in the form of non-dominance treatment for the particular service and geographic area. We will determine at a future date what criteria the Commission will consider to assess whether a finding of non-dominance for special access service is warranted in a given area.

## VI. Procedural Matters

### A. Paperwork Reduction Act Analysis

105. This document does not contain new or modified information collection requirements subject to the Paperwork Reduction Act of 1995 (PRA), Public Law 104-13. In addition, therefore, it does not contain any new or modified 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).

### B. Final Regulatory Flexibility Certification

106. As required by the Regulatory Flexibility Act (RFA), an Initial Regulatory Flexibility Analysis (IRFA) was incorporated into the *2005 Special Access NPRM*. The Commission sought written public comment on the possible significant economic impact on small entities regarding the proposals addressed in the *2005 Special Access NPRM*, including comments on the IRFA.

107. As required by sec. 603 of the RFA, the Commission has prepared a Final Regulatory Flexibility Certification (FRFC) of the expected impact on small entities of the requirements adopted in the Report and Order, which is set forth in Appendix B of the Report and Order. The Commission will send a copy of the Report and Order, including the FRFC, to the Chief Counsel for Advocacy of the Small Business Administration.

### C. Congressional Review Act

108. The Commission will send a copy of this Report and Order to Congress and the Government Accountability Office pursuant to the Congressional Review Act.

## II. Ordering Clauses

109. Accordingly, *it is ordered* that pursuant to sections 1, 4(i), 4(j), and 201–205 of the Communications Act of 1934, as amended, 47 U.S.C. 151, 154(i), 154(j), 201, 202, 203, 204, 205, this Report and Order *is adopted*.

110. *It is further ordered* that part 1 of the Commission's rules *is amended* as set forth in the final rules, and such rule amendments shall be effective October 18, 2012.

111. *It is further ordered* that § 1.774(f)(1) of the Commission's rules, 47 CFR 1.774(f)(1), *is suspended* until the amendments set forth in the final rules are effective.

112. *It is further ordered* that, pursuant to §§ 1.4(b)(1) and 1.103(a) of the Commission's rules, 47 CFR 1.4(b)(1), 1.103(a), this Report and Order *is effective* upon release.

113. *It is further ordered* that the Commission will send a copy of this Report and Order to Congress and the Government Accountability Office pursuant to the Congressional Review Act, *see* 5 U.S.C. 801(a)(1)(A).

114. *It is further ordered* that the Commission's Consumer and Governmental Affairs Bureau, Reference Information Center, *shall send* a copy of this Report and Order, including the

Final Regulatory Flexibility Certification, to the Chief Counsel for Advocacy of the Small Business Administration.

### List of Subjects in 47 CFR Part 1

Administrative practice and procedure, Communications common carriers, Telecommunications.

Federal Communications Commission

**Marlene H. Dortch,**  
*Secretary.*

### Final Rule

For the reasons discussed in the preamble, the Federal Communications Commission amends 47 CFR Part 1 as follows:

### PART 1—PRACTICE AND PROCEDURE

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

**Authority:** 15 U.S.C. 79, *et seq.*, 47 U.S.C. 151, 154(i), 154(j), 155, 157, 225, 227, 303(r) and 309.

#### § 1.774 [Amended]

■ 2. In § 1.774, remove and reserve paragraph (f)(1).

[FR Doc. 2012–23020 Filed 9–17–12; 8:45 am]

**BILLING CODE 6712–01–P**

# Proposed Rules

Federal Register

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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 36

[Docket No.: FAA-2012-0948; Notice No. 12-06]

RIN 2120-AJ96

#### Stage 3 Helicopter Noise Certification Standards

**AGENCY:** Federal Aviation Administration (FAA), DOT.

**ACTION:** Notice of proposed rulemaking (NPRM).

**SUMMARY:** This rulemaking proposes to adopt more stringent noise certification standards for helicopters that are certificated in the United States (U.S.). This rule would apply to applications for a new helicopter type design and for a supplemental type certificate for those new type designs. A helicopter type certificated under this standard would be designated as a Stage 3 helicopter. This rule proposes to adopt the same noise certification standards for helicopters that exist in the standards of the International Civil Aviation Organization (ICAO). The proposal of these more stringent noise certification standards into U.S. regulations is consistent with the FAA's goal of harmonizing U.S. regulations with international standards.

**DATES:** Send comments on or before November 19, 2012.

**ADDRESSES:** Send comments identified by docket number FAA-2012-0948 using any of the following methods:

- *Federal eRulemaking Portal:* Go to <http://www.regulations.gov> and follow the online instructions for sending your comments electronically.

- *Mail:* Send comments to Docket Operations, M-30; U.S. Department of Transportation (DOT), 1200 New Jersey Avenue SE., Room W12-140, West Building Ground Floor, 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 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

- *Fax:* Fax comments to Docket Operations at 202-493-2251.

*Privacy:* The FAA will post all comments it receives, without change, to <http://www.regulations.gov>, including any personal information the commenter provides. Using the search function of the docket web site, anyone can find and read the electronic form of all comments received into any FAA docket, including the name of the individual sending the comment (or signing the comment for an association, business, labor union, etc.). DOT's complete Privacy Act Statement can be found in the **Federal Register** published on April 11, 2000 (65 FR 19477-19478), as well as at <http://DocketsInfo.dot.gov>.

*Docket:* Background documents or comments received may be read at <http://www.regulations.gov> at any time. Follow the online instructions for accessing the docket or go to the Docket Operations in Room W12-140 of the West Building Ground Floor at 1200 New Jersey Avenue SE., Washington, DC, between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

**FOR FURTHER INFORMATION CONTACT:** For technical questions concerning this proposed rule contact Sandy Liu, AEE-100, Office of Environment and Energy, Federal Aviation Administration, 800 Independence Avenue SW., Washington, DC 20591; telephone: (202) 493-4864; facsimile (202) 267-5594; email: [sandy.liu@faa.gov](mailto:sandy.liu@faa.gov). For legal questions concerning this proposed rule contact Karen Petronis, AGC-200, Office of the Chief Counsel, Regulations Division, Federal Aviation Administration, 800 Independence Avenue SW., Washington, DC 20591; telephone: (202) 267-3073; email: [karen.petronis@faa.gov](mailto:karen.petronis@faa.gov).

#### SUPPLEMENTARY INFORMATION:

##### Authority for This Rulemaking

The FAA's authority to issue rules on aviation safety is found in Title 49 of the United States Code. 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.

This rulemaking is promulgated under the authority described in

Subtitle VII, Part A, Subpart III, Section 44715, Controlling aircraft noise and sonic boom. Under that section, the FAA is charged with prescribing regulations to measure and abate aircraft noise. This proposed regulation is within the scope of that authority since it would establish new noise certification standards for helicopters that would be applicable to new type designs.

#### Background

##### ICAO Noise Certification Standards

The International Civil Aviation Organization (ICAO) is the international body with the responsibility for the development of international standards under the Convention on International Civil Aviation (the Chicago Convention). Consistent with their obligations under the Chicago Convention, Contracting States agree to implement ICAO standards in their national regulations to the extent practicable. The United States is a Contracting State to the ICAO. The standards for aircraft noise are contained in ICAO Annex 16, Environmental Protection, Volume 1, Aircraft Noise.

In 1997, ICAO's Committee on Aviation Environmental Protection (CAEP) chartered the Rotorcraft Task Group (RTG) to study potential increases in the stringency of noise certification standards for helicopters. The FAA participated in the RTG from 1997 to 2000. By the fifth session of CAEP in 2001, more stringent noise standards for helicopters were defined. These standards prescribe the lowering of noise limits for new helicopter types while using the same helicopter noise certification test procedures that the United States had incorporated into part 36, Appendices H (1988) and J (1992).

On June 29, 2001, CAEP's proposed noise stringency increases were adopted by the ICAO Council for incorporation into Annex 16, Volume 1, Chapter 8 and Chapter 11 (Amendment 7). ICAO guidelines became effective on October 29, 2001, with an applicability date of March 21, 2002.

##### Statement of the Problem

Although ICAO adopted increased noise stringency standards for helicopters in 2002, the United States has yet to adopt these standards into part 36. There has been heightened

public awareness of helicopter noise in the United States, and the FAA has determined that the public would benefit from adoption of these more stringent standards. The FAA's adoption of these more stringent certification standards into part 36, including in Appendices H and J, would also satisfy the goal of harmonizing U.S. regulations with international standards. This rulemaking proposes to adopt the same noise certification standards for helicopters that exist in ICAO Annex 16, Volume 1, Chapter 8 and Chapter 11 (Amendment 7).

#### *History of U.S. Helicopter Noise Regulations*

In 1973, the FAA published an advanced notice of proposed rulemaking (ANPRM) (38 FR 35487, December 28, 1973) that proposed standards for aircraft with efficient short stage length operations. This class of aircraft, referred to as "short-haul", included aircraft with short, reduced, vertical, or near vertical takeoff and landing capabilities. Subsequently, the FAA sought further study of appropriate noise technologies. At the time of the ANPRM, U.S. noise regulations in part 36 did not include regulations applicable to short-haul aircraft, including helicopters.

The ANPRM invited public participation in the identification and development of standards for additional relief and protection to the public health and welfare from aircraft noise. Comments from the ANPRM caused the FAA to focus on appropriate noise limits consistent with the current technology in drafting an NPRM. In 1979, the FAA issued an NPRM (44 FR 42410, July 9, 1979) that proposed first ever helicopter noise certification standards that included noise limits. Comments to the NPRM indicated that there was no noise abatement technology available at the time that could meet the proposed noise levels. The FAA subsequently withdrew the NPRM (Notice No. 79-13, 46 FR 61486, December 17, 1981).

In 1982, the National Aeronautics and Space Administration (NASA), the FAA, and American helicopter manufacturers set up an accelerated joint research program to develop helicopter noise abatement technology. This cooperative, 20-million dollar, multi-year program was established to reduce helicopter external noise, and develop noise prediction tools that could significantly lower the costs of applying the technology. The FAA continued to study the issues of noise certification of helicopters in collaboration with ICAO's noise working group. On March 6, 1986,

the FAA issued an NPRM (Notice No. 86-3, 51 FR 7878) that proposed helicopter certification standards that were more consistent with then-current technology, and followed procedures similar to ICAO Annex 16.

On February 5, 1988, the FAA amended part 36 to include the first U.S. helicopter noise certification regulations. These regulations set limits on noise emissions for new helicopter type designs. The regulations designated Stage 1 helicopters as those that did not meet the newly established limits or had never been tested. Stage 2 helicopters were those that met the new certification standards as defined by the noise limits and test procedures designated in the regulations. The new certification standards applied to the issuance of original and amended type certificates for helicopters. In addition, the regulations prohibited changes in the type design of helicopters that might increase their noise levels beyond certain limits. These regulations followed the standards adopted in ICAO Annex 16 and included additional corrective conditions for engine thrust or power.

This rulemaking proposes the adoption of the most recent international noise standards for helicopters and would allow compliant designs to be designated Stage 3. These standards would apply to any person submitting an application for a new helicopter type design on and after the effective date of the final rule. This proposal is consistent with the effort of the fifth session of CAEP and its approval of the ICAO standards for helicopter noise that were developed internationally.

#### **General Discussion of the Proposal**

This rulemaking proposes more stringent noise limits for helicopters to be type certificated in the United States. The standards would apply to the issuance of a new type certificate, and subsequent changes to a type certificate for which application is made after the effective date of this rule. This rule proposes to incorporate the same standards for helicopters adopted in ICAO Annex 16, Volume 1, Chapter 8 and Chapter 11 (Amendment 7), consistent with the FAA goal of harmonization of regulations with international standards.

These proposed regulations would:

- Amend § 36.1 noise certification standards for the issuance of type and airworthiness certificates for helicopters, including new definitions and an applicability date for the standards;

- Revise § 36.11 acoustical change requirements to include Stage 3 helicopters;
- Amend § 36.805 to add dates of applicability for the new Stage 3 noise limits prescribed in appendices H and J of part 36;
- Amend Appendix H to part 36 to include new noise certification limits for Stage 3 helicopters of all helicopter weights; and
- Amend Appendix J to part 36 to include a new noise certification limit for Stage 3 helicopters of 7,000 pounds or less.

#### **Regulatory Evaluation, Regulatory Flexibility Determination, International Trade Impact Assessment, and Unfunded Mandates Assessment**

Changes to Federal regulations must undergo several economic analyses. First, Executive Orders 12866 and 13563 direct that each Federal agency shall propose or adopt a regulation only upon a reasoned determination that the benefits of the intended regulation justify its costs. Second, the Regulatory Flexibility Act of 1980 (Pub. L. 96-354) requires agencies to analyze the economic impact of regulatory changes on small entities. Third, the Trade Agreements Act (Pub. L. 96-39) prohibits agencies from setting standards that create unnecessary obstacles to the foreign commerce of the United States. In developing U.S. standards, this Trade Act requires agencies to consider international standards and, where appropriate, that they be the basis of U.S. standards. Fourth, the Unfunded Mandates Reform Act of 1995 (Pub. L. 104-4) requires agencies to prepare a written assessment of the costs, benefits, and other effects of proposed or final rules that include a Federal mandate likely to result in the expenditure by State, local, or tribal governments, in the aggregate, or by the private sector, of \$100 million or more annually (adjusted for inflation with base year of 1995). This portion of the preamble summarizes the FAA's analysis of the economic impacts of this proposed rule.

Department of Transportation Order DOT 2100.5 prescribes policies and procedures for simplification, analysis, and review of regulations. If the expected cost impact is so minimal that a proposed or final rule does not warrant a full evaluation, this order permits that a statement to that effect and the basis for it be included in the preamble if a full regulatory evaluation of the cost and benefits is not prepared. Such a determination has been made for this proposed rule. The reasoning for this determination follows,

The proposed rule:

(1) Imposes no incremental costs and provides benefits,

(2) Is not an economically “significant regulatory action” as defined in section 3(f) of Executive Order 12866,

(3) Is not significant as defined in DOT’s Regulatory Policies and Procedures;

(4) Would not have a significant economic impact on a substantial number of small entities;

(5) Would not create unnecessary obstacles to the foreign commerce of the United States; and

(6) Would not impose an unfunded mandate on state, local, or tribal governments, or on the private sector by exceeding the monetary threshold identified.

These analyses are summarized below.

Currently, there is no U.S. noise certification standard for Stage 3 helicopters in part 36. Part 36 includes only noise certification standards for Stage 1 and Stage 2 helicopters. There are more stringent international noise standards for helicopters in ICAO Annex 16, Environmental Protection, Volume 1, Aircraft Noise, Chapter 8 and Chapter 11 (Amendment 7). This proposed rule includes the amendments to part 36 certification requirements that would require more stringent noise limits and allow new helicopter type designs to be designated Stage 3. This proposed rule would allow a helicopter that meets the ICAO standards to be classified as a Stage 3 helicopter in the United States and would also apply to new helicopter type certification applications dated after the effective date of this proposed rule.

This proposed rule has two major benefits. This proposed rule may result in quieter helicopter operations for those models type certificated under these proposed standards. This proposed rule also would make it easier to sell U.S. Stage 3 helicopters outside the United States because the noise standards will be the same as those of ICAO Annex 16, Volume 1, Chapter 8 and 11 standards.

Given the complexity and expense in developing new helicopter models, the FAA estimates that applications for two new helicopter type designs will be submitted in the next 10 year period; this would mirror the development of helicopter type designs in the last decade.

This proposed rule is not expected to result in additional costs. The U.S. testing procedures for helicopter noise certification already exist and require no changes when certificating a helicopter to Stage 3 standards. Further, these proposed standards are not retroactive.

The proposed rule does not include any requirement to modify existing Stage 1 and Stage 2 helicopters. Therefore, there would be no incremental costs for certificating a helicopter to Stage 3 standards.

Although the FAA cannot quantify the benefits of the proposed rule, the rule would provide for quieter future helicopter models, would be consistent with international standards, and would not increase the cost of certification or noise testing. Thus the FAA finds that the benefits exceed the costs of the proposed rule.

#### *Regulatory Flexibility Determination*

The Regulatory Flexibility Act of 1980 (RFA) establishes “as a principle of regulatory issuance that agencies shall endeavor, consistent with the objective of the rule and of applicable statutes, to fit regulatory and informational requirements to the scale of the business, organizations, and governmental jurisdictions subject to regulation.” To achieve that principle, the RFA requires agencies to solicit and consider flexible regulatory proposals and to explain the rationale for their actions. The RFA covers a wide-range of small entities, including small businesses, not-for-profit organizations and small governmental jurisdictions.

Agencies must perform a review to determine whether a proposed or final rule will have a significant economic impact on a substantial number of small entities. If the agency determines that it will, the agency must prepare a regulatory flexibility analysis as described in the Act.

However, if an agency determines that a proposed or final rule is not expected to have a significant economic impact on a substantial number of small entities, section 605(b) of the 1980 RFA provides that the head of the agency may so certify and a regulatory flexibility analysis is not required. The certification must include a statement providing the factual basis for this determination, and the reasoning should be clear.

#### *Helicopter Manufacturers*

Size standards for small entities are published by the Small Business Administration (SBA) on their Web site at <http://www.sba.gov/size>. The size standards used herein are from “SBA U.S. Small Business Administration, Table of Small Business Size Standards, Matched to North American Industry Classification System Codes”.

Aircraft manufacturer size standards are listed in the above Table of small business size standards under Sector 31–33-Manufacturing; Subsector 336-

Transportation Equipment Manufacturing; NAICS Code 336411-Aircraft Manufacturing. The small entity size standard for aircraft manufacturing is 1,500 employees.

American helicopter manufacturers range in size from several hundred employees to many thousands of employees. Therefore, some American helicopter manufacturers are small entities. However, this proposed rule would not have a significant economic impact on any small entity because the proposed rule imposes no incremental costs.

Consequently, the FAA certifies that this proposed rule would not have a significant economic impact on a substantial number of small helicopter manufacturers.

#### *International Trade Impact Assessment*

The Trade Agreements Act of 1979 (Pub. L. 96–39), as amended by the Uruguay Round Agreements Act (Pub. L. 103–465), prohibits Federal agencies from establishing standards or engaging in related activities that create unnecessary obstacles to the foreign commerce of the United States. Pursuant to these Acts, the establishment of standards is not considered an unnecessary obstacle to the foreign commerce of the United States, so long as the standard has a legitimate domestic objective, such as the protection of safety, and does not operate in a manner that excludes imports that meet this objective. The statute also requires consideration of international standards and, where appropriate, that they be the basis for U.S. standards.

The FAA has assessed the potential effect of this proposed rule and determined that it would encourage international trade by using international standards as the basis for a rule for the United States noise certification of Stage 3 helicopters.

#### *Unfunded Mandates Assessment*

Title II of the Unfunded Mandates Reform Act of 1995 (Pub. L. 104–4) requires each Federal agency to prepare a written statement assessing the effects of any Federal mandate in a proposed or final agency rule that may result in an expenditure of \$100 million or more (adjusted annually for inflation) in any 1 year by State, local, and tribal governments, in the aggregate, or by the private sector; such a mandate is deemed to be a “significant regulatory action.” The FAA currently uses an inflation-adjusted value of \$143.1 million in lieu of \$100 million. This proposed rule does not contain such a

mandate; therefore the requirements of Title II do not apply.

#### *Paperwork Reduction Act*

The Paperwork Reduction Act of 1995 (44 U.S.C. 3507(d)) requires that the FAA consider the impact of paperwork and other information collection burdens imposed on the public. The FAA has determined that there would be no new requirement for information collection associated with this proposed rule.

#### *International Compatibility and Coordination*

In keeping with U.S. obligations under the Convention on International Civil Aviation, it is FAA policy to conform our regulations to ICAO Standards and Recommended Practices to the maximum extent practicable. In 2001, ICAO adopted stringent helicopter noise standards. This proposed regulation will harmonize U.S. noise standards with the international standards by adopting the same requirements, adapted for U.S. regulatory format.

Executive Order (EO) 13609, Promoting International Regulatory Cooperation, (77 FR 26413, May 4, 2012) promotes international regulatory cooperation to meet shared challenges involving health, safety, labor, security, environmental, and other issues and reduce, eliminate, or prevent unnecessary differences in regulatory requirements. The FAA has analyzed this action under the policy and agency responsibilities of Executive Order 13609, Promoting International Regulatory Cooperation. The agency has determined that this action would eliminate differences between U.S. aviation standards and those of other civil aviation authorities by adopting international standards, adapted for U.S. regulatory format.

#### *Environmental Analysis*

FAA Order 1050.1E identifies FAA actions that are categorically excluded from preparation of an environmental assessment or environmental impact statement under the National Environmental Policy Act (NEPA) in the absence of extraordinary circumstances. This rule proposes to adopt the same noise certification standards for helicopters adopted by ICAO. This rule proposes these noise limits to control the maximum noise levels of newly certificated helicopters. The FAA finds the applicability of these stricter noise standards to be environmentally consistent with available technology. The adoption of more stringent noise standards will require new type

certificated helicopters in the U.S. to comply with lower noise levels, thus offering increased environmental protection.

The FAA has determined this rulemaking action qualifies for the categorical exclusion identified in paragraph 312f of NEPA and involves no extraordinary circumstances.

#### **Executive Order Determinations**

##### *Executive Order 13132, Federalism*

The FAA has analyzed this proposed rule under the principles and criteria of Executive Order 13132, Federalism. The agency has determined that this action would not have a substantial direct effect on the States, or the relationship between the Federal Government and the States, or on the distribution of power and responsibilities among the various levels of government, and, therefore, would not have Federalism implications.

##### *Executive Order 13211, Regulations That Significantly Affect Energy Supply, Distribution, or Use*

The FAA analyzed this proposed rule under Executive Order 13211, Actions Concerning Regulations that Significantly Affect Energy Supply, Distribution, or Use (May 18, 2001). The agency has determined that it would not be a “significant energy action” under the executive order and would not be likely to have a significant adverse effect on the supply, distribution, or use of energy.

#### **Additional Information**

##### *Comments Invited*

The FAA invites interested persons to participate in this rulemaking by submitting written comments, data, or views. The agency also invites comments relating to the economic, environmental, energy, or federalism impacts that might result from adopting the proposals in this document. The most helpful comments reference a specific portion of the proposal, explain the reason for any recommended change, and include supporting data. To ensure the docket does not contain duplicate comments, commenters should send only one copy of written comments, or if comments are filed electronically, commenters should submit this only once.

The FAA will file in the docket all comments it receives, as well as a report summarizing each substantive public contact with FAA personnel concerning this proposed rulemaking. Before acting on this proposal, the FAA will consider all comments it receives on or before the closing date for comments. The FAA

will consider comments filed after the comment period has closed if it is possible to do so without incurring expense or delay. The agency may change this proposal in light of the comments it receives.

#### *Availability of Rulemaking Documents*

An electronic copy of rulemaking documents may be obtained from the Internet by—

1. Searching the Federal eRulemaking Portal (<http://www.regulations.gov>);
2. Visiting the FAA’s Regulations and Policies Web page at [http://www.faa.gov/regulations\\_policies](http://www.faa.gov/regulations_policies) or
3. Accessing the Government Printing Office’s Web page at <http://www.gpo.gov/fdsys/>.

Copies may also be obtained by sending a request to the Federal Aviation Administration, Office of Rulemaking, ARM–1, 800 Independence Avenue SW., Washington, DC 20591, or by calling (202) 267–9680. Commenters must identify the docket or notice number of this rulemaking.

All documents the FAA considered in developing this proposed rule, including economic analyses and technical reports, may be accessed from the Internet through the Federal eRulemaking Portal referenced in item (1) above.

#### **List of Subjects in 14 CFR Part 36**

Aircraft, Noise Control.

#### **The Proposed Amendment**

In consideration of the foregoing, the Federal Aviation Administration proposes to amend chapter I of title 14, Code of Federal Regulations as follows:

#### **PART 36—NOISE STANDARDS: AIRCRAFT TYPE AND AIRWORTHINESS CERTIFICATION**

1. The authority citation for part 36 continues to read as follows:

**Authority:** 42 U.S.C. 4321 *et seq.*; 49 U.S.C. 106(g), 40113, 44701–44702, 44704, 44715; sec. 305, Pub. L. 96–193, 94 Stat. 50, 57; E.O. 11514, 35 FR 4247, 3 CFR, 1966–1970 Comp., p. 902.

2. Amend § 36.1 by redesignating paragraph (h)(5) as (h)(7); adding new paragraph (h)(5); and adding new paragraph (h)(6) to read as follows:

##### **§ 36.1 Applicability and definitions.**

\* \* \* \* \*

(h) \* \* \*

(5) A “Stage 3 noise level” means a takeoff, flyover, or approach noise level at or below the Stage 3 noise limit prescribed in section H36.305 of appendix H of this part, or a flyover noise level at or below the Stage 3 noise

limit prescribed in section J36.305 of appendix J of this part.

(6) A "Stage 3 helicopter" means a helicopter that has been shown under this part to comply with the Stage 3 noise limits (including applicable tradeoffs) prescribed in section H36.305 of appendix H of this part, or a helicopter that has been shown under this part to comply with Stage 3 noise limits prescribed in section J36.305 of appendix J of this part.

(7) Maximum normal operating RPM means the highest rotor speed corresponding to the airworthiness limit imposed by the manufacturer and approved by the FAA. Where a tolerance on the highest rotor speed is specified, the maximum normal operating rotor speed is the highest rotor speed for which that tolerance is given. If the rotor speed is automatically linked with flight condition, the maximum normal operating rotor speed corresponding with reference conditions must be used during the noise certification procedure. If rotor speed can be changed by pilot action, the highest normal operating rotor speed specified in the flight manual limitation section for reference conditions must be used during the noise certification procedure.

3. Amend § 36.11 by revising paragraph (c) and adding paragraph (d) to read as follows:

**§ 36.11 Acoustical change: Helicopters.**

\* \* \* \* \*

(c) *Stage 2 helicopters.* For a helicopter that is a Stage 2 helicopter prior to a change in type design, the following apply:

(1) A helicopter must be a Stage 2 helicopter after a change in type design, or

(2) A helicopter must meet Stage 3 requirements after the change in type design and must remain a Stage 3 helicopter.

(d) *Stage 3 helicopters.* For a helicopter that is a Stage 3 helicopter prior to a change in type design, the helicopter must remain a Stage 3 helicopter after a change in type design.

4. Amend § 36.805 by revising paragraphs (b)(1) and (2) to read as follows:

**§ 36.805 Noise limits.**

\* \* \* \* \*

(b) \* \* \*

(1) When an application for issuance of a type certificate in the primary, normal, transport, or restricted category is made between March 6, 1986 and [effective date of rule], that the noise levels of the helicopter are no greater than the Stage 2 noise limits prescribed

in either section H36.305 of appendix H of this part or section J36.305 of appendix J of this part, as applicable; or

(2) When an application for issuance of a type certificate in the primary, normal, transport, or restricted category is made after [effective date of rule], that the noise levels of the helicopter are no greater than the Stage 3 noise limits prescribed in either section H36.305 of appendix H of this part, or section J36.305 of appendix J of this part, as applicable.

\* \* \* \* \*

5. In Appendix H of part 36 in section H36.305:

A. Revise paragraph (a) introductory text;

B. Revise paragraph (a)(2);

C. Add paragraph (a)(3).

The additions and revisions read as follows:

**Appendix H to Part 36—Noise Requirements for Helicopters Under Subpart H**

\* \* \* \* \*

Section H36.305 \* \* \*

(a) *Limits.* For compliance with this appendix, the applicant must show by flight test that the calculated noise levels of the helicopter, at the measuring points described in section H36.305(a) of this appendix, do not exceed the following, (with appropriate interpolation between weights):

\* \* \* \* \*

(2) Stage 2 noise limits are as follows:

(i) For takeoff—For a helicopter having a maximum certificated takeoff weight of 176,370 pounds (80,000 kg) or more, the noise limit is 109 EPNdB, which decreases linearly with the logarithm of the helicopter weight (mass) at a rate of 3.01 EPNdB per halving of the weight (mass) down to 89 EPNdB, after which the limit is constant.

(ii) For flyover—For a helicopter having a maximum certificated takeoff weight of 176,370 pounds (80,000 kg) or more, the noise limit is 108 EPNdB, which decreases linearly with the logarithm of the helicopter weight (mass) at a rate of 3.01 EPNdB per halving of the weight (mass) down to 88 EPNdB, after which the limit is constant.

(iii) For approach—For a helicopter having a maximum certificated takeoff weight of 176,370 pounds (80,000 kg) or more, the noise limit is 110 EPNdB, which decreases linearly with the logarithm of the helicopter weight (mass) at a rate of 3.01 EPNdB per halving of the weight (mass) down to 90 EPNdB, after which the limit is constant.

(3) Stage 3 noise limits are as follows:

(i) For takeoff—For a helicopter having a maximum certificated takeoff weight of 176,370 pounds (80,000 kg) or more, the noise limit is 106 EPNdB, which decreases linearly with the logarithm of the helicopter weight (mass) at a rate of 3.01 EPNdB per halving of the weight (mass) down to 86 EPNdB, after which the limit is constant.

(ii) For flyover—For a helicopter having a maximum certificated takeoff weight of 176,370 pounds (80,000 kg) or more, the

noise limit is 104 EPNdB, which decreases linearly with the logarithm of the helicopter weight (mass) at a rate of 3.01 EPNdB per halving of the weight (mass) down to 84 EPNdB, after which the limit is constant.

(iii) For approach—For a helicopter having a maximum certificated takeoff weight of 176,370 pounds (80,000 kg) or more, the noise limit is 109 EPNdB, which decreases linearly with the logarithm of the helicopter weight (mass) at a rate of 3.01 EPNdB per halving of the weight (mass) down to 89 EPNdB, after which the limit is constant.

\* \* \* \* \*

6. Amend Appendix J of part 36 by revising the appendix heading and in section J36.305 by revising paragraph (a) to read as follows:

**Appendix J to Part 36—Alternative Noise Certification Procedure for Helicopters Having a Maximum Certificated Takeoff Weight of Not More Than 7,000 Pounds**

Section J36.305 \* \* \*

(a) For primary, normal, transport, and restricted category helicopters having a maximum certificated takeoff weight of not more than 7,000 pounds that are noise tested under this appendix:

(1) Stage 2 noise limit is constant at 82 decibels SEL for helicopters up to 1,737 pounds (787 kg) maximum certificated takeoff weight (mass) and increases linearly with the logarithm of the helicopter weight at a rate of 3.01 decibels SEL per the doubling of weight thereafter. The limit may be calculated using the equation:

$$L_{AE}(\text{limit}) = 82 + 3.01 [\log_{10}(\text{MTOW}/1737) / \log_{10}(2)] \text{ dB},$$

where MTOW is the maximum takeoff weight, in pounds.

(2) Stage 3 noise limit is constant at 82 decibels SEL for helicopters up to 3,125 pounds (1,417 kg) maximum certificated takeoff weight (mass) and increases linearly with the logarithm of the helicopter weight at a rate of 3.01 decibels SEL per the doubling of weight thereafter. The limit may be calculated using the equation:

$$L_{AE}(\text{limit}) = 82 + 3.01 [\log_{10}(\text{MTOW}/3125) / \log_{10}(2)] \text{ dB},$$

where MTOW is the maximum takeoff weight, in pounds.

\* \* \* \* \*

Issued in Washington, DC, on August 31, 2012.

**Lourdes Maurice,**

*Director, Office of Environment and Energy.*

[FR Doc. 2012–22714 Filed 9–17–12; 8:45 am]

**BILLING CODE 4910–13–P**

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

[Docket No. FAA-2012-0937; Directorate Identifier 2011-NM-270-AD]

RIN 2120-AA64

**Airworthiness Directives; The Boeing Company 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 The Boeing Company Model 737-800 series airplanes. This proposed AD was prompted by reports of early fatigue cracks at chem-mill areas on the crown skin panels. This proposed AD would require repetitive inspections for cracking of the fuselage skin along chem-mill steps at certain crown skin and shear wrinkle areas, and repair if necessary. We are proposing this AD to detect and correct fatigue cracking of the skin panel at the specified chem-mill step locations, which could result in rapid decompression of the airplane.

**DATES:** We must receive comments on this proposed AD by November 2, 2012.

**ADDRESSES:** You may send comments, using the procedures found in 14 CFR 11.43 and 11.45, 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:* Deliver to Mail address above between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

For service information identified in this proposed 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 proposed AD, the regulatory evaluation, any comments received, and other information. The street address for the Docket Office (phone: 800-647-5527) is in the **ADDRESSES** section. Comments will be available in the AD docket shortly after receipt.

**FOR FURTHER INFORMATION CONTACT:** Wayne Lockett, Aerospace Engineer, Airframe Branch, ANM-120S, FAA, Seattle Aircraft Certification Office, 1601 Lind Avenue SW., Renton, Washington 98057-3356; phone: (425) 917-6447; fax: (425) 917-6590; email: [Wayne.Lockett@faa.gov](mailto:Wayne.Lockett@faa.gov).

**SUPPLEMENTARY INFORMATION:****Comments Invited**

We invite you to send any written relevant data, views, or arguments about this proposal. Send your comments to an address listed under the **ADDRESSES** section. Include "Docket No. FAA-2012-0937; Directorate Identifier 2011-NM-270-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 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 proposed AD.

**Discussion**

We received reports of early fatigue cracks near chem-mill areas on the crown skin panels of Model 737-300, -400, and -500 series airplanes. The cracks resulted from high stresses in the areas where chem-mill pockets are adjacent to non-chem-mill areas. Although we have not received any reports of this type of fuselage fatigue cracks on Model 737-600, -700, -700C, -800, -900, or -900ER series airplanes, a full-scale fatigue test article was inspected for skin cracks at similar structural details and two chem-mill cracks were found that occurred late in the testing program. This condition, if not detected and corrected, could result in rapid decompression of the airplane.

**Relevant Service Information**

We reviewed Boeing Service Bulletin 737-53-1311, dated October 21, 2011, for Model 737-800 series airplanes. That service bulletin describes, among other things, procedures for doing repetitive external detailed inspections and external non-destructive inspections (medium frequency eddy current (MFEC), magneto optic imager (MOI), C-scan, or ultrasonic phased array (UTPA) inspections) of the fuselage skin at specified locations where chem-mill areas are adjacent to non-chem-mill areas at antenna and door bearstrap installations, and shear wrinkle areas at stringers 9 and 10 between stations 500E and 500G; and repairs if necessary.

Boeing Service Bulletin 737-53-1311, dated October 21, 2011, also describes procedures for installing modification doublers in certain locations, which involves an external detailed inspection and an external non-destructive (MFEC, MOI, C-scan, or UTPA) inspection for any cracking of the area to be modified prior to the doubler being placed on that area, a high frequency eddy current inspection of all existing holes for cracking as applicable, and contacting Boeing if necessary. That service bulletin also specifies that when a modification is accomplished, the repetitive inspection for the area under the modification is no longer necessary.

Boeing Service Bulletin 737-53-1311, dated October 21, 2011, specifies an initial compliance time of 43,000 total flight cycles, or 1,500 to 2,100 flight cycles (depending on group/configuration) after the original issue date of that service bulletin, whichever occurs later. That service bulletin specifies a repetitive interval not to exceed 1,500 flight cycles, 2,100 flight cycles, or 2,700 flight cycles depending on inspection method and group configuration.

For airplanes that have incorporated Boeing Business Jet (BBJ) lower cabin altitude supplemental type certificate (STC) ST010697SE, Boeing Service Bulletin 737-53-1311, dated October 21, 2011, specifies that all initial compliance times specified in flight cycles must be reduced to half of those specified in that service bulletin, and all repeat interval compliance times specified in flight cycles must be reduced to one-quarter of those specified in that service bulletin.

**FAA's Determination**

We are proposing this AD because we evaluated all the relevant information and determined the unsafe condition described previously is likely to exist or

develop in other products of the same type design.

**Proposed AD Requirements**

This proposed AD would require accomplishing the actions specified in the service information described previously, except as discussed under “Differences Between the Proposed AD and the Service Information.”

**Similar Rulemaking**

The crown skin panels on Model 737–800 series airplanes are of a similar design to those on Model 737–300, –400, –500, –600, –700, –700C, –900, and –900ER series airplanes. Therefore, all these models may be subject to the identified unsafe condition. We are considering similar rulemaking for these additional models.

**Differences Between the Proposed AD and the Service Information**

Boeing Service Bulletin 737–53–1311, dated October 21, 2011, specifies to contact the manufacturer for disposition of certain repair conditions, but this proposed AD would require repairing those conditions in one of the following ways:

- In accordance with a method that we approve; or
- Using data that meet the certification basis of the airplane, and that have been approved by the Boeing Commercial Airplanes Organization Designation Authorization (ODA) whom we have authorized to make those findings.

Tables 3 and 4 in paragraph 1.E., “Compliance,” of Boeing Service

Bulletin 737–53–1311, dated October 21, 2011, specify post-modification inspections at certain chem-mill step locations, which may be used in support of compliance with section 121.1109(c)(2) or 129.109(c)(2) of the Federal Aviation Regulations (14 CFR 121.1109(c)(2) or 129.109(c)(2)). However, this NPRM does not propose to require those post-modification inspections. This difference has been coordinated with Boeing.

**Costs of Compliance**

We estimate that this proposed AD affects 441 airplanes of U.S. registry.

We estimate the following costs to comply with this proposed AD:

**ESTIMATED COSTS**

Action	Labor cost	Parts cost	Cost per product	Cost on U.S. operators
Inspection of chem-mill step locations.	30 work-hours × \$85 per hour = \$2,550 per inspection cycle.	None .....	\$2,550 per inspection cycle ...	\$1,124,550 per inspection cycle.

We have received no definitive data that would enable us to provide cost estimates for the on-condition actions specified in this proposed 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**

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.

**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 airworthiness directive (AD):

**The Boeing Company:** Docket No. FAA–2012–0937; Directorate Identifier 2011–NM–270–AD.

**(a) Comments Due Date**

We must receive comments by November 2, 2012.

**(b) Affected ADs**

None.

**(c) Applicability**

This AD applies to The Boeing Company Model 737–800 series airplanes, certificated in any category, as identified in Boeing Service Bulletin 737–53–1311, dated October 21, 2011.

**(d) Subject**

Joint Aircraft System Component (JASC)/ Air Transport Association (ATA) of America Code 53; Fuselage.

**(e) Unsafe Condition**

This AD was prompted by reports of early fatigue cracks at chem-mill areas on the crown skin panels. We are issuing this AD to detect and correct fatigue cracking of the skin panel at the specified chem-mill step locations, which could result in rapid decompression of the airplane.

**(f) Compliance**

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

**(g) Inspections of Crown Skin Areas**

At the applicable time specified in paragraph 1.E., "Compliance," of Boeing Service Bulletin 737-53-1311, dated October 21, 2011, except as required by paragraph (k) of this AD: Do an external detailed inspection and an external non-destructive inspection (a medium frequency eddy current (MFEC), magneto optic imager (MOI), C-scan, or ultrasonic phased array (UTPA) inspection) for cracking in the fuselage skin along the chem-mill steps at certain locations specified in, and in accordance with, Boeing Service Bulletin 737-53-1311, dated October 21, 2011. Repeat the inspections thereafter at the applicable times specified in paragraph 1.E., "Compliance," of Boeing Service Bulletin 737-53-1311, dated October 21, 2011.

**(h) Inspections of Shear Wrinkle Areas**

For Groups 2, 5, and 6 airplanes as identified in Boeing Service Bulletin 737-53-1311, dated October 21, 2011: At the applicable time specified in paragraph 1.E., "Compliance," of Boeing Service Bulletin 737-53-1311, dated October 21, 2011, except as required by paragraph (k) of this AD, do an external detailed inspection and an external non-destructive inspection (MFEC, MOI, C-scan, or UTPA) for cracking in the fuselage skin along the chem-mill steps at certain shear wrinkle locations specified in, and in accordance with, Boeing Service Bulletin 737-53-1311, dated October 21, 2011. Repeat the inspections required by paragraph (h) of this AD thereafter at the applicable times specified in paragraph 1.E., "Compliance," of Boeing Service Bulletin 737-53-1311, dated October 21, 2011.

**(i) Repairs**

If any cracking is found during any inspection required by paragraphs (g) and (h) of this AD, before further flight, repair the cracking using a method approved in accordance with the procedures specified in paragraph (m) of this AD. Accomplishing the repair approved in accordance with the procedures specified in paragraph (m) of this AD terminates the repetitive inspection requirement for that area under the repair only.

**(j) Optional Terminating Modification**

Modification of an inspection area specified in paragraph (g) of this AD, including doing an external detailed inspection and an external non-destructive inspection (MFEC, MOI, C-scan, or UTPA) for cracking of the area to be modified, and a high frequency eddy current inspection of all existing holes for cracking as applicable, in accordance with the Accomplishment Instructions of Boeing Service Bulletin 737-53-1311, dated October 21, 2011, terminates the repetitive inspections required by paragraph (g) of this AD for that area only. If any cracking is found during any inspection described by this paragraph, before further flight, repair the cracking using a method approved in accordance with the procedures specified in paragraph (m) of this AD.

**(k) Service Bulletin Exception**

Boeing Service Bulletin 737-53-1311, dated October 21, 2011, specifies compliance

times "after the original issue date of this service bulletin." However, this AD requires compliance within the specified compliance times "after the effective date of this AD."

**(l) Post-Modification Inspections**

The post-modification inspections specified in Tables 3 and 4 of paragraph 1.E., "Compliance," of Boeing Service Bulletin 737-53-1311, dated October 21, 2011, are not required by this AD.

**Note 1 to paragraph (l) of this AD:** The damage tolerance inspections specified in Tables 3 and 4 of paragraph 1.E., "Compliance," of Boeing Service Bulletin 737-53-1311, dated October 21, 2011, may be used in support of compliance with section 121.1109(c)(2) or 129.109(c)(2) of the Federal Aviation Regulations (14 CFR 121.1109(c)(2) or 14 CFR 129.109(c)(2)). The actions specified in Part 5 of the Accomplishment Instructions and corresponding figures of Boeing Service Bulletin 737-53-1311, dated October 21, 2011, are not required by this AD.

**(m) 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 the Related Information section of this AD. Information may be emailed to: [9-ANM-Seattle-ACO-AMOC-Requests@faa.gov](mailto: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.

**(n) Related Information**

(1) For more information about this AD, contact Wayne Lockett, Aerospace Engineer, Airframe Branch, ANM-120S, FAA, Seattle Aircraft Certification Office, 1601 Lind Avenue SW., Renton, Washington 98057-3356; phone: (425) 917-6447; fax: (425) 917-6590; email: [Wayne.Lockett@faa.gov](mailto:Wayne.Lockett@faa.gov).

(2) 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.

Issued in Renton, Washington, on September 4, 2012.

**Ali Bahrami,**

*Manager, Transport Airplane Directorate, Aircraft Certification Service.*

[FR Doc. 2012-22890 Filed 9-17-12; 8:45 am]

**BILLING CODE 4910-13-P**

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

[Docket No. FAA-2012-0982; Directorate Identifier 2012-CE-035-AD]

**RIN 2120-AA64**

**Airworthiness Directives; Stemme GmbH & Co. KG Powered Sailplanes**

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

**ACTION:** Notice of proposed rulemaking (NPRM).

**SUMMARY:** We propose to adopt a new airworthiness directive (AD) for all Stemme GmbH & Co. KG Models S10, S10-V, and S10-VT powered sailplanes. This proposed AD results from mandatory continuing airworthiness information (MCAI) originated by an aviation authority of another country to identify and correct an unsafe condition on an aviation product. The MCAI describes the unsafe condition as unapproved rubber hoses installed in the engine fuel, oil, and cooling systems, which could lead to a system leak and result in an engine fire. We are issuing this proposed AD to require actions to address the unsafe condition on these products.

**DATES:** We must receive comments on this proposed AD by November 2, 2012.

**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 20590, between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

For service information identified in this proposed AD, contact STEMME AG,

Flugplatzstrasse F2, Nr. 7 15344 Strausberg, Germany; telephone: +49 (0) 3341 3612-0, fax: +49 (0) 3341 3612-30; Internet: <http://www.stemme.de/daten/e/index.html>. You may review copies of the referenced service information at the FAA, Small Airplane Directorate, 901 Locust, Kansas City, Missouri 64106. For information on the availability of this material at the FAA, call (816) 329-4148.

### 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 proposed AD, the regulatory evaluation, any comments received, and other information. The street address for the Docket 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:** Jim Rutherford, Aerospace Engineer, FAA, Small Airplane Directorate, 901 Locust, Room 301, Kansas City, Missouri 64106; telephone: (816) 329-4165; fax: (816) 329-4090; email: [jim.rutherford@faa.gov](mailto:jim.rutherford@faa.gov).

### 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-2012-0982; Directorate Identifier 2012-CE-035-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 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 proposed AD.

#### Discussion

The European Aviation Safety Agency (EASA), which is the Technical Agent for the Member States of the European Community, has issued AD No. 2012-0154, dated August 17, 2012 (referred to after this as "the MCAI"), to correct an unsafe condition for the specified products. The MCAI states:

An occurrence has been reported of an engine fire during ground run of a S10-VT powered sailplane. The investigation results indicated that an unapproved fuel hose was installed in the engine fuel system of that aeroplane. Subsequent survey of some N-registered S 10 aeroplanes revealed more cases of installation of unapproved fuel, oil and cooling hoses on sailplanes engine systems.

This condition, if not detected and corrected, could lead to a system leak with subsequent engine fire, possibly resulting in damage to the sailplane and/or injury of occupants.

Prompted by these findings, Stemme GmbH developed a procedure for identification of these hoses, to have them removed from service.

For the reasons described above, this AD requires a one-time review of the sailplane's maintenance records to determine whether a serviceable engine hose kit for fuel, oil and cooling systems has been installed and, depending on findings, replacement of the affected hoses with serviceable parts.

You may obtain further information by examining the MCAI in the AD docket.

#### Relevant Service Information

Stemme F & D has issued Installation Instruction A34-10-093-01, dated August 13, 2012; and Installation Instruction A34-10-093-02, dated August 13, 2012. The actions described in this service information are intended to correct the unsafe condition identified in the MCAI.

#### FAA's Determination and Requirements of the 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 this State of Design Authority, they have notified us of the unsafe condition described in the MCAI and service information referenced above. We are proposing this AD because we evaluated all information and determined the unsafe condition exists and is likely to exist or develop on other products of the same type design.

#### Costs of Compliance

We estimate that this proposed AD will affect 63 products of U.S. registry. We also estimate that it would take about .5 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 \$2,677.50, or \$42.50 per product.

In addition, we estimate that any necessary follow-on actions would take about 8 work-hours and require parts

costing \$1,957, for a cost of \$2,637 per product for Models S10 and S10-V. We also estimate that any necessary follow-on actions would take about 16 work-hours and require parts costing \$1,311, for a cost of \$2,671 per product for Model S10-VT. We have no way of determining the number of products that may need these actions.

#### 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.

#### 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:

**Stemme GmbH & Co. KG:** Docket No. FAA–2012–0982; Directorate Identifier 2012–CE–035–AD.

#### (a) Comments Due Date

We must receive comments by November 2, 2012.

#### (b) Affected ADs

None.

#### (c) Applicability

This AD applies to Stemme GmbH & Co. KG Models S10, S10–V, and S10–VT powered sailplanes, all serial numbers, certificated in any category.

#### (d) Subject

Air Transport Association of America (ATA) Code 71: Powerplant.

#### (e) Reason

This AD was prompted by mandatory continuing airworthiness information (MCAI) originated by an aviation authority of another country to identify and correct an unsafe condition on an aviation product. The MCAI describes the unsafe condition as unapproved rubber hoses installed in the engine fuel, oil, and cooling systems. We are issuing this proposed AD to prevent a system leak, which could lead to an engine fire.

#### (f) Actions and Compliance

Unless already done, do the following actions:

(1) If, on the effective date of this AD, the date of manufacture of the sailplane is less than five years old, before further flight after the effective date of this AD, review the sailplane's maintenance records/logbook for evidence as to whether the engine fuel, oil, and cooling systems rubber hoses have been replaced since new. Based on this review, if:

(i) There is no logbook evidence, i.e. logbook entry, that the engine fuel, oil, and cooling systems rubber hoses have been replaced since new, before further flight, make a logbook entry showing compliance with this AD.

(ii) There is logbook evidence, i.e. logbook entry, that the engine fuel, oil, and/or cooling systems rubber hoses have been replaced since new, before further flight, review the sailplane's maintenance records/logbook for current documentation of hose conformity through a Declaration of Conformity (DoC) or a European Aviation Safety Agency (EASA) Form 1.

(A) If you can find current documentation of a DoC or an EASA Form 1, before further flight, make a logbook entry showing compliance with this AD.

(B) If you cannot find current documentation of a DoC or an EASA Form 1, before further flight, replace the affected hose(s) with FAA-approved serviceable hoses following Stemme F & D Installation Instruction A34–10–093- 01, dated August 13, 2012; or Stemme F & D Installation Instruction A34–10–093- 02, dated August 13, 2012, as applicable.

(2) If, on the effective date of this AD, the date of manufacture of the sailplane is five years old or older, before further flight after the effective date of this AD, review the sailplane's maintenance records/logbook for evidence of the date the engine fuel, oil, and cooling systems rubber hoses were last replaced and for documentation of hose conformity through a DoC or a EASA Form 1. Based on this review, if:

(i) There is logbook evidence, i.e. logbook entry, that the installed engine fuel, oil, and cooling systems rubber hoses are less than five years old and there is current documentation of hose conformity with a DoC or an EASA Form 1, before further flight, make a logbook entry showing compliance with this AD.

(ii) There is logbook evidence, i.e. logbook entry, that the installed engine fuel, oil, and cooling systems rubber hoses are less than five years old, but there is no current documentation of hose conformity with a DoC or an EASA Form 1, before further flight, replace the affected hoses with FAA-approved serviceable hoses following Stemme F & D Installation Instruction A34–10–093- 01, dated August 13, 2012; or Stemme F & D Installation Instruction A34–10–093- 02, dated August 13, 2012, as applicable.

(iii) There is logbook evidence, i.e. logbook entry, that the installed engine fuel, oil, and cooling systems rubber hoses are over five years, before further flight, replace the hoses with FAA-approved serviceable hoses following Stemme F & D Installation Instruction A34–10–093- 01, dated August 13, 2012; or Stemme F & D Installation Instruction A34–10–093- 02, dated August 13, 2012, as applicable.

(3) As of the effective date of this AD, only install FAA-approved serviceable engine fuel, oil, and cooling systems rubber hoses following Stemme F & D Installation Instruction A34–10–093- 01, dated August 13, 2012; or Stemme F & D Installation Instruction A34–10–093- 02, dated August 13, 2012, as applicable, and that have a current documentation of hose conformity, i.e., DoC or EASA Form 1.

#### (g) Other FAA AD Provisions

The following provisions also apply to this AD:

(1) *Alternative Methods of Compliance (AMOCs):* The Manager, Standards Office, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. Send information to ATTN: Jim Rutherford, Aerospace Engineer, FAA, Small Airplane Directorate, 901 Locust, Room 301, Kansas City, Missouri 64106;

telephone: (816) 329–4165; fax: (816) 329–4090; email: [jim.rutherford@faa.gov](mailto:jim.rutherford@faa.gov). Before using any approved AMOC on any sailplane to which the AMOC applies, notify your appropriate principal inspector (PI) in the FAA Flight Standards District Office (FSDO), or lacking a PI, your local FSDO.

(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.

(3) *Reporting Requirements:* For any reporting requirement in this AD, 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.

#### (h) Related Information

Refer to MCAI EASA AD No. 2012–0154, dated August 17, 2012; Stemme F & D Installation Instruction A34–10–093- 01, dated August 13, 2012; and Stemme F & D Installation Instruction A34–10–093- 02, dated August 13, 2012, for related information. For service information related to this AD, contact STEMME AG, Flugplatzstrasse F2, Nr. 7 15344 Strausberg, Germany; telephone: +49 (0) 3341 3612–0, fax: +49 (0) 3341 3612–30; Internet: <http://www.stemme.de/daten/e/index.html>. You may review copies of the referenced service information at the FAA, Small Airplane Directorate, 901 Locust, Kansas City, Missouri 64106. For information on the availability of this material at the FAA, call (816) 329–4148.

Issued in Kansas City, Missouri, on September 11, 2012.

**Earl Lawrence,**

*Manager, Small Airplane Directorate, Aircraft Certification Service.*

[FR Doc. 2012–22941 Filed 9–17–12; 8:45 am]

**BILLING CODE 4910–13–P**

**DEPARTMENT OF TRANSPORTATION**

**Federal Aviation Administration**

**14 CFR Part 39**

[Docket No. FAA-2012-0983; Directorate Identifier 2012-CE-001-AD;]

RIN 2120-AA64

**Airworthiness Directives; Piper Aircraft, Inc. Airplanes**

**AGENCY:** Federal Aviation Administration (FAA), DOT.

**ACTION:** Notice of proposed rulemaking (NPRM).

**SUMMARY:** We propose to supersede an existing airworthiness directive (AD) that applies to all Piper Aircraft, Inc. Models PA-31, PA-31-325, and PA-31-350 airplanes. The existing AD currently requires a detailed repetitive inspection of the exhaust system downstream of the turbochargers and repair or replacement of parts as necessary. Since we issued that AD, forced landings of aircraft have occurred due to exhaust system failures upstream of aircraft turbochargers and between recurring detailed inspections. This proposed AD would require both visual and detailed repetitive inspections, expanding the inspection scope to include the entirety of each airplane exhaust system. We are proposing this AD to prevent the possibility of an inflight powerplant fire due to an exhaust system failure.

**DATES:** We must receive comments on this proposed AD by November 2, 2012.

**ADDRESSES:** You may send comments, using the procedures found in 14 CFR 11.43 and 11.45, 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:* Deliver to Mail address above between 9 a.m. and 5

p.m., Monday through Friday, except Federal holidays.

For service information identified in this proposed AD, contact Piper Aircraft, Inc., 2926 Piper Drive, Vero Beach, Florida 32960; telephone: (772) 567-4361; fax: (772) 978-6573; Internet: [www.piper.com/home/pages/Publications.cfm](http://www.piper.com/home/pages/Publications.cfm). You may review copies of the referenced service information at the FAA, Small Airplane Directorate, 901 Locust, Kansas City, Missouri 64106. For information on the availability of this material at the FAA, call (816) 329-4148.

**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 proposed AD, the regulatory evaluation, any comments received, and other information. The street address for the Docket Office (phone: 800-647-5527) is in the **ADDRESSES** section. Comments will be available in the AD docket shortly after receipt.

**FOR FURTHER INFORMATION CONTACT:** Gary Wechsler, Aerospace Engineer, Atlanta Aircraft Certification Office, FAA, 1701 Columbia Avenue, College Park, Georgia 30337; telephone: (404) 474-5575; fax: (404) 474-5606; email: [gary.wechsler@faa.gov](mailto:gary.wechsler@faa.gov).

**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-2012-0983; Directorate Identifier 2012-CE-001-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 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 proposed AD.

**Discussion**

On April 7, 1986, AD 82-16-05 R1, amendment 39-5278 (51 FR 11707-01, April 7, 1986), was published in the **Federal Register** for certain Piper Aircraft, Inc. Models PA-31, PA-31-325, and PA-31-350 airplanes. That AD requires a detailed repetitive inspection of the exhaust system downstream of the turbochargers and repair or replacement of parts as necessary. That AD resulted from exhaust system failures downstream from turbochargers. We issued that AD to prevent the possibility of an inflight powerplant fire due to an exhaust system failure.

**Actions Since Existing AD Was Issued**

Since we issued AD 82-16-05 R1 (51 FR 11707-01, April 7, 1986), forced landings of aircraft have occurred due to exhaust system failures upstream of aircraft turbochargers and between recurring detailed inspections.

**FAA's Determination**

We are proposing this AD because we evaluated all the relevant information and determined the unsafe condition described previously is likely to exist or develop in other products of these same type designs.

**Proposed AD Requirements**

This proposed AD would retain certain requirements of AD 82-16-05 R1 (51 FR 11707-01, April 7, 1986). This proposed AD would require a detailed repetitive inspection of the entire exhaust systems.

**Costs of Compliance**

We estimate that this proposed AD affects 1,016 airplanes of U.S. registry.

We estimate the following costs to comply with this proposed AD:

**ESTIMATED COSTS**

Action	Labor cost	Parts cost	Cost per product	Cost on U.S. operators
Visual inspection .....	2 work-hours × \$85 per hour = \$170 .....	Not applicable .....	\$170	\$172,720
Disassembled inspection ..	5 work-hours × \$85 per hour = \$425 .....	Not applicable .....	425	431,800

The on-condition costs of exhaust system part repairs and replacement cannot be predicted because the

multitude of manner and environments in which aircraft operate will result in

widely varying exhaust system conditions over time.

### 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 have 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 that the 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.

### 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 removing airworthiness directive (AD) 82–16–05 R1, Amendment 39–5278 (51 FR 11707–01, April 7, 1986), and adding the following new AD:

**Piper Aircraft, Inc.:** Docket No. FAA–2012–0983; Directorate Identifier 2012–CE–001–AD.

##### (a) Comments Due Date

The FAA must receive comments on this AD action by November 2, 2012.

##### (b) Affected ADs

This AD supersedes AD 82–16–05 R1, Amendment 39–5278.

##### (c) Applicability

This AD applies to turbocharged Piper Aircraft, Inc. Models PA–31, PA–31–325, and PA–31–350 airplanes, all serial numbers, certificated in any category.

##### (d) Subject

Joint Aircraft System Component (JASC)/ Air Transport Association (ATA) of America Code 78, Engine Exhaust.

##### (e) Unsafe Condition

This AD was prompted by the forced landings of aircraft due to exhaust system failures between recurring detailed inspections. We are issuing this AD to prevent the possibility of an inflight powerplant fire due to an exhaust system failure.

##### (f) Compliance

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

##### (g) Visual Inspection

Within the next 50 hours time-in-service (TIS) after the effective date of this AD or within the next 6 months after the effective date of this AD, whichever occurs first, and repetitively thereafter at intervals not to exceed 50 hours TIS or 6 months, whichever occurs first, inspect the entirety of each exhaust system by gaining access to (but not disassembling) each exhaust system. Using a flashlight and a mirror, visually inspect the entirety of each exhaust system for bulges, burned areas, corrosion, cracks, deformation, exhaust stains, and holes and pinholes. Riveted couplings should be checked for loose rivets and cracks emanating from rivet holes. Inspection procedure references can be found in FAA Advisory Circular 43.13–1B, Change 1, dated September 27, 2001, Acceptable Methods, Techniques, and Practices—Aircraft Inspection and Repair ([http://www.airweb.faa.gov/Regulatory\\_and\\_Guidance\\_Library/rgAdvisoryCircular.nsf/0/99C827DB9BAAC81B86256B4500596C4E?OpenDocument&Highlight=ac%2043.13-1b](http://www.airweb.faa.gov/Regulatory_and_Guidance_Library/rgAdvisoryCircular.nsf/0/99C827DB9BAAC81B86256B4500596C4E?OpenDocument&Highlight=ac%2043.13-1b)).

##### (h) Detailed Inspection

Within the next 100 hours TIS after the effective date of this AD or within the next 12 months after the effective date of this AD, whichever occurs first, and repetitively

thereafter at intervals not to exceed 100 hours TIS or 12 months, whichever occurs first, do the following:

(1) Gain access to each exhaust system and remove all exhaust system v-band couplings.

**Note 1 to paragraph (h) of this AD:** During removal, we recommend not opening the v-band couplings more than the MINIMUM diameter necessary to clear coupled flanges.

(2) Using either a dye-penetrant inspection method or a light and a 10-power magnifying glass (inspection procedure references can be found in FAA Advisory Circular 43.13–1B, Change 1, dated September 27, 2001, Acceptable Methods, Techniques, and Practices—Aircraft Inspection and Repair ([http://www.airweb.faa.gov/Regulatory\\_and\\_Guidance\\_Library/rgAdvisoryCircular.nsf/0/99C827DB9BAAC81B86256B4500596C4E?OpenDocument&Highlight=ac%2043.13-1b](http://www.airweb.faa.gov/Regulatory_and_Guidance_Library/rgAdvisoryCircular.nsf/0/99C827DB9BAAC81B86256B4500596C4E?OpenDocument&Highlight=ac%2043.13-1b)), accomplish the following:

(i) Inspect the tailpipe assembly for damage including bulges, burned areas, corrosion, cracks, deformation, exhaust stains, and holes and pinholes.

(ii) Inspect each v-band coupling for damage including bending, cracks (those emanating from rivets, too), failed spot welds, indications of exhaust flanges bottoming in couplings, loose rivets, overstress, and spreading of v-band segments. Inspect the bolt and nut of each coupling for thread damage.

(iii) Inspect the flanges of the exhaust system (which mate with the transition), the transition, the tail pipe, and the turbocharger (uncoupled) for cracks, distortion, and evidence indicative of improper surface mating.

(3) Inspect the three exhaust system slip joints between each turbocharger and its closest riser for seizure.

**Note 2 to paragraph (h) of this AD:** We established the repetitive inspection compliance times of this AD so they may coincide with scheduled oil changes and annual inspections.

##### (i) Corrective Actions

(1) If any damage is found as a result of the inspections required in paragraph (g) of this AD, before further flight, do the following corrective actions:

(i) Replace loose or damaged v-band couplings following the instructions in paragraph (k) of this AD.

(ii) Repair or replace loose fasteners and damaged exhaust system parts with airworthy parts.

(2) If any damage is found as a result of the inspections listed in paragraph (h) of this AD, before further flight, do the following corrective actions:

(i) Replace any loose or damaged v-band couplings following the instructions in paragraph (k) of this AD.

(ii) Repair or replace loose fasteners, seized slip joints, and damaged exhaust system parts with airworthy parts.

(iii) Replace any part exhibiting flange cracking or distortion, and remove any carbon deposits from mating flange surfaces.

##### (j) Mandatory Replacement

(1) Initially replace the v-band coupling following the procedures in paragraph (k) of

this AD at whichever of the following occurs later:

- (i) The v-band coupling reaches a total of 1,000 hours time-in-service (TIS); or
- (ii) 50 hours TIS after the effective date of this AD, or 6 months after the effective date of this AD, whichever occurs earlier.

(2) After the initial replacement required in paragraph (j)(1) of this AD, repetitively thereafter replace the v-band coupling every 1,000 hours TIS.

#### (k) Flange and V-Band Coupling

(1) Install serviceable and replacement v-band couplings following the applicable instructions contained in Piper Aircraft Corporation Service Bulletin No. 644E, dated May 9, 2012 and/or Lycoming Service Instruction No. 1238B, dated January 6, 2010.

(2) Use the applicable torque values specified within Piper Aircraft Corporation Service Bulletin No. 644E, dated May 9, 2012, for Piper v-band couplings; and within Lycoming Service Instruction No. 1238B, dated January 6, 2010, for Lycoming v-band couplings; making sure the torque indicator wrench socket is properly aligned to prevent side loads upon the (v-band coupling) bolt.

(3) Align each flange couple so that mating flange surfaces are flat against each other (do not use a v-band coupling to pull flanges into alignment).

(4) Verify that the locknuts exhibit a prevailing torque, and replace any locknuts and/or mating couplings with airworthy parts when locknuts are not exhibiting a prevailing torque.

**Note 1 to paragraph (k) of this AD:** During installation, we recommend not opening the v-band coupling more than the MINIMUM diameter necessary to clear coupled flanges.

#### (l) Alternative Methods of Compliance (AMOCs)

(1) The Manager, Atlanta 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 the Related Information section 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.

#### (m) Related Information

(1) For more information about this AD, contact Gary Wechsler, Aerospace Engineer, Atlanta ACO, FAA, 1701 Columbia Avenue, College Park, Georgia 30337; telephone: (404) 474-5575; fax: (404) 474-5606; email: [gary.wechsler@faa.gov](mailto:gary.wechsler@faa.gov).

(2) For service information identified in this AD, contact Piper Aircraft, Inc., 2926 Piper Drive, Vero Beach, Florida 32960; telephone: (772) 567-4361; fax: (772) 978-6573; Internet: [www.piper.com/home/pages/Publications.cfm](http://www.piper.com/home/pages/Publications.cfm). You may review copies of the referenced service information at the FAA, Small Airplane Directorate, 901 Locust,

Kansas City, Missouri 64106. For information on the availability of this material at the FAA, call (816) 329-4148.

Issued in Kansas City, Missouri, on September 11, 2012.

**Earl Lawrence,**

*Manager, Small Airplane Directorate, Aircraft Certification Service.*

[FR Doc. 2012-22953 Filed 9-17-12; 8:45 am]

**BILLING CODE 4910-13-P**

## DEPARTMENT OF TRANSPORTATION

### Federal Aviation Administration

#### 14 CFR Part 39

[Docket No. FAA-2012-0936; Directorate Identifier 2011-NM-269-AD]

RIN 2120-AA64

#### Airworthiness Directives; The Boeing Company 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 The Boeing Company Model 737-700 and -700C series airplanes. This proposed AD was prompted by reports of early fatigue cracks at chem-mill areas on the crown skin panels. This proposed AD would require repetitive inspections for cracking of the fuselage skin at certain locations at chem-mill areas, and repair if necessary. We are proposing this AD to detect and correct fatigue cracking of the skin panel at the specified chem-mill step locations, which could result in rapid decompression of the airplane.

**DATES:** We must receive comments on this proposed AD by November 2, 2012.

**ADDRESSES:** You may send comments, using the procedures found in 14 CFR 11.43 and 11.45, 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:* Deliver to Mail address above between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

For service information identified in this proposed 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 proposed AD, the regulatory evaluation, any comments received, and other information. The street address for the Docket Office (phone: 800-647-5527) is in the **ADDRESSES** section. Comments will be available in the AD docket shortly after receipt.

**FOR FURTHER INFORMATION CONTACT:** Wayne Lockett, Aerospace Engineer, Airframe Branch, ANM-120S, FAA, Seattle Aircraft Certification Office, 1601 Lind Avenue SW., Renton, Washington 98057-3356; phone: (425) 917-6447; fax: (425) 917-6590; email: [Wayne.Lockett@faa.gov](mailto:Wayne.Lockett@faa.gov).

#### SUPPLEMENTARY INFORMATION:

##### Comments Invited

We invite you to send any written relevant data, views, or arguments about this proposal. Send your comments to an address listed under the **ADDRESSES** section. Include "Docket No. FAA-2012-0936; Directorate Identifier 2011-NM-269-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 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 proposed AD.

#### Discussion

We received reports of early fatigue cracks near chem-mill areas on the crown skin panels of Model 737-300, -400, and -500 series airplanes. The cracks resulted from high stresses in the areas where chem-mill pockets are adjacent to non-chem-mill areas.

Although we have not received any reports of this type of fuselage fatigue cracks on Model 737–600, –700, –700C, –800, –900, or –900ER series airplanes, a full-scale fatigue test article was inspected for skin cracks at similar structural details and two chem-mill cracks were found that occurred late in the testing program. This condition, if not detected and corrected, could result in rapid decompression of the airplane.

**Relevant Service Information**

We reviewed Boeing Service Bulletin 737–53–1310, dated October 20, 2011, for Model 737–700 and –700C series airplanes. That service bulletin describes, among other things, procedures for doing repetitive external detailed inspections and external non-destructive inspections (medium frequency eddy current (MFEC), magneto optic imager (MOI), C-scan, or ultrasonic phased array (UTPA) inspections) of the fuselage skin at specified locations where chem-mill areas are adjacent to non-chem-mill areas at antenna and door bearstrap installations, and repairs if necessary.

Boeing Service Bulletin 737–53–1310, dated October 20, 2011, also describes procedures for installing modification doublers, which involves an external detailed inspection and an external non-destructive (MFEC, MOI, C-scan, or UTPA) inspection for any cracking of the area to be modified prior to the doubler being placed on that area, a high frequency eddy current inspection of all existing holes for cracking, and contacting Boeing if necessary. That service bulletin also specifies that when a modification is accomplished, the

repetitive inspection for the area under the modification is no longer necessary. Boeing Service Bulletin 737–53–1310, dated October 20, 2011, specifies an initial compliance time of 43,000 total flight cycles, or 1,500 flight cycles after the original issue date of that service bulletin, whichever occurs later. That service bulletin specifies a repetitive interval not to exceed 1,500 flight cycles or 2,100 flight cycles, depending on inspection method.

For airplanes that have incorporated Boeing Business Jet (BBJ) lower cabin altitude supplemental type certificate (STC) ST010697SE, all initial compliance times specified in flight cycles must be reduced to half of those specified in that service bulletin, and all repeat interval compliance times specified in flight cycles must be reduced to one-quarter of those specified in that service bulletin.+

**FAA’s Determination**

We are proposing this AD because we evaluated all the relevant information and determined the unsafe condition described previously is likely to exist or develop in other products of the same type design.

**Proposed AD Requirements**

This proposed AD would require accomplishing the actions specified in the service information described previously, except as discussed under “Differences Between the Proposed AD and the Service Information.”

**Similar Rulemaking**

The crown skin panels on Model 737–700 and –700C series airplanes are of a similar design to those on Model 737–300, –400, –500, –600, –800, –900, and

–900ER series airplanes. Therefore, all these models may be subject to the identified unsafe condition. We are considering similar rulemaking for these additional models.

**Differences Between the Proposed AD and the Service Information**

Boeing Service Bulletin 737–53–1310, dated October 20, 2011, specifies to contact the manufacturer for disposition of certain repair conditions, but this proposed AD would require repairing those conditions in one of the following ways:

- In accordance with a method that we approve; or
- Using data that meet the certification basis of the airplane, and that have been approved by the Boeing Commercial Airplanes Organization Designation Authorization (ODA) whom we have authorized to make those findings.

Tables 2 through 7 in paragraph 1.E., “Compliance,” of Boeing Service Bulletin 737–53–1310, dated October 20, 2011, specify post-modification inspections at certain chem-mill step locations, which may be used in support of compliance with section 121.1109(c)(2) or 129.109(c)(2) of the Federal Aviation Regulations (14 CFR 121.1109(c)(2) or 129.109(c)(2)). However, this NPRM does not propose to require those post-modification inspections. This difference has been coordinated with Boeing.

**Costs of Compliance**

We estimate that this proposed AD affects 545 airplanes of U.S. registry.

We estimate the following costs to comply with this proposed AD:

**ESTIMATED COSTS**

Action	Labor cost	Parts cost	Cost per product	Cost on U.S. operators
Inspection of chem-mill step locations.	37 work-hours × \$85 per hour = \$3,145 per inspection cycle.	None ...	\$3,145 per inspection cycle .....	\$1,714,025 per inspection cycle.

We have received no definitive data that would enable us to provide cost estimates for the on-condition actions specified in this proposed 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**

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.

#### 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 airworthiness directive (AD):

**The Boeing Company:** Docket No. FAA-2012-0936; Directorate Identifier 2011-NM-269-AD.

##### (a) Comments Due Date

We must receive comments by November 2, 2012.

##### (b) Affected ADs

None.

##### (c) Applicability

This AD applies to The Boeing Company Model 737-700 and -700C series airplanes, as identified in Boeing Service Bulletin 737-53-1310, dated October 20, 2011.

##### (d) Subject

Joint Aircraft System Component (JASC)/ Air Transport Association (ATA) of America Code 53, Fuselage.

##### (e) Unsafe Condition

This AD was prompted by reports of early fatigue cracks at chem-mill areas on the crown skin panels. We are issuing this AD to detect and correct fatigue cracking of the skin panel at the specified chem-mill step locations, which could result in rapid decompression of the airplane.

##### (f) Compliance

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

##### (g) Inspections

At the applicable time specified in paragraph 1.E., "Compliance," of Boeing Service Bulletin 737-53-1310, dated October 20, 2011, except as required by paragraph (j) of this AD: Do an external detailed inspection and an external non-destructive inspection (a medium frequency eddy current (MFEC), magneto optic imager (MOI), C-scan, or ultrasonic phased array (UTPA) inspection) for cracking in the fuselage skin along the chem-mill steps at certain locations specified in, and in accordance with, Boeing Service Bulletin 737-53-1310, dated October 20, 2011. Repeat the inspections required by paragraph (g) of this AD thereafter at the applicable times specified in paragraph 1.E., "Compliance," of Boeing Service Bulletin 737-53-1310, dated October 20, 2011.

##### (h) Repair

If any cracking is found during any inspection required by paragraph (g) of this AD, before further flight, repair the cracking using a method approved in accordance with the procedures specified in paragraph (l) of this AD. Accomplishing the repair approved in accordance with the procedures specified in paragraph (l) of this AD terminates the repetitive inspection requirement for that area under the repair only.

##### (i) Optional Terminating Modification

Modification of an inspection area, including an external detailed inspection and an external non-destructive inspection (MFEC, MOI, C-scan, or UTPA) for cracking of the area to be modified, and a high frequency eddy current inspection of all existing holes for cracking, in accordance with the Accomplishment Instructions of Boeing Service Bulletin 737-53-1310, dated October 20, 2011, terminates the repetitive inspections required by paragraph (g) of this AD for that area only. If any cracking is found during any inspection described by this paragraph, before further flight, repair the cracking using a method approved in accordance with the procedures specified in paragraph (l) of this AD.

##### (j) Service Bulletin Exception

Boeing Service Bulletin 737-53-1310, dated October 20, 2011, specifies compliance times "after the original issue date of this service bulletin." However, this AD requires compliance within the specified compliance times "after the effective date of this AD."

##### (k) Post-Modification Inspections

The post-modification inspections specified in Tables 2 through 7 of paragraph 1.E., "Compliance," of Boeing Service Bulletin 737-53-1310, dated October 20, 2011, are not required by this AD.

**Note 1 to paragraph (k) of this AD:** The damage tolerance inspections specified in Tables 2 through 7 of paragraph 1.E., "Compliance," of Boeing Service Bulletin 737-53-1310, dated October 20, 2011, may be used in support of compliance with section 121.1109(c)(2) or 129.109(c)(2) of the Federal Aviation Regulations (14 CFR 121.1109(c)(2) or 14 CFR 129.109(c)(2)). The actions specified in Part 5 of the Accomplishment Instructions and

corresponding figures of Boeing Service Bulletin 737-53-1310, dated October 20, 2011, are not required by this AD.

##### (l) 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 the Related Information section 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.

##### (m) Related Information

(1) For more information about this AD, contact Wayne Lockett, Aerospace Engineer, Airframe Branch, ANM-120S, FAA, Seattle Aircraft Certification Office, 1601 Lind Avenue SW., Renton, Washington 98057-3356; phone: (425) 917-6447; fax: (425) 917-6590; email: [Wayne.Lockett@faa.gov](mailto:Wayne.Lockett@faa.gov).

(2) 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.

Issued in Renton, Washington, on September 4, 2012.

**Ali Bahrami,**

Manager, Transport Airplane Directorate, Aircraft Certification Service.

[FR Doc. 2012-22891 Filed 9-17-12; 8:45 am]

**BILLING CODE 4910-13-P**

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

[Docket No. FAA-2012-0935; Directorate Identifier 2011-NM-256-AD]

RIN 2120-AA64

**Airworthiness Directives; The Boeing Company 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 The Boeing Company Model 737-900 and -900ER series airplanes. This proposed AD was prompted by reports of early fatigue cracks at chem-mill areas on the crown skin panels. This proposed AD would require repetitive inspections for cracking of the fuselage skin along chem-mill steps at certain crown skin and shear wrinkle areas, and repair if necessary. We are proposing this AD to detect and correct fatigue cracking of the skin panel at the specified chem-mill step locations, which could result in rapid decompression of the airplane.

**DATES:** We must receive comments on this proposed AD by November 2, 2012.

**ADDRESSES:** You may send comments, using the procedures found in 14 CFR 11.43 and 11.45, 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:* Deliver to Mail address above between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

For service information identified in this proposed 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 proposed AD, the regulatory evaluation, any comments received, and other information. The street address for the Docket Office (phone: 800-647-5527) is in the **ADDRESSES** section. Comments will be available in the AD docket shortly after receipt.

**FOR FURTHER INFORMATION CONTACT:** Wayne Lockett, Aerospace Engineer, Airframe Branch, ANM-120S, FAA, Seattle Aircraft Certification Office, 1601 Lind Avenue SW., Renton, Washington 98057-3356; phone: (425) 917-6447; fax: (425) 917-6590; email: [Wayne.Lockett@faa.gov](mailto:Wayne.Lockett@faa.gov).

**SUPPLEMENTARY INFORMATION:****Comments Invited**

We invite you to send any written relevant data, views, or arguments about this proposal. Send your comments to an address listed under the **ADDRESSES** section. Include "Docket No. FAA-2012-0935; Directorate Identifier 2011-NM-256-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 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 proposed AD.

**Discussion**

We received reports of early fatigue cracks near chem-mill areas on the crown skin panels of Model 737-300, -400, and -500 series airplanes. The cracks resulted from high stresses in the areas where chem-mill pockets are adjacent to non-chem-mill areas. Although we have not received any reports of this type of fuselage fatigue cracks on Model 737-600, -700, -700C, -800, -900, or -900ER series airplanes, a full-scale fatigue test article was inspected for skin cracks at similar structural details and two chem-mill cracks were found that occurred late in the testing program. This condition, if not detected and corrected, could result in rapid decompression of the airplane.

**Relevant Service Information**

We reviewed Boeing Service Bulletin 737-53-1312, dated October 21, 2011, as revised by Boeing Service Bulletin 737-53-1312, Revision 1, dated March 14, 2012, for Model 737-900 and -900ER series airplanes. That service bulletin describes, among other things, procedures for doing repetitive external detailed inspections and external non-destructive inspections (medium frequency eddy current (MFEC), magneto optic imager (MOI), C-scan, or ultrasonic phased array (UTPA) inspections) of the fuselage skin at specified locations where chem-mill areas are adjacent to non-chem-mill areas at antenna and door bearstrap installations, and shear wrinkle areas at stringers 9 and 10 between stations 500H and 500K; and repairs if necessary.

Boeing Service Bulletin 737-53-1312, dated October 21, 2011, as revised by Boeing Service Bulletin 737-53-1312, Revision 1, dated March 14, 2012, also describes procedures for installing modification doublers in certain locations, which involves an external detailed inspection and an external non-destructive (MFEC, MOI, C-Scan, or UTPA) inspection for any cracking of the area to be modified prior to the doubler being placed on that area, a high frequency eddy current inspection of all existing holes for cracking, and contacting Boeing if necessary. The service bulletin also specifies that when a modification is accomplished, the repetitive inspection for the area under the modification is no longer necessary.

Boeing Service Bulletin 737-53-1312, dated October 21, 2011, as revised by Boeing Service Bulletin 737-53-1312, Revision 1, dated March 14, 2012, specifies an initial compliance time of before 43,000 total flight cycles, or within 1,500 to 2,100 flight cycles (depending on inspection area) after the original issue date of that service bulletin, whichever occurs later. That service bulletin specifies a repetitive interval not to exceed 1,500 flight cycles, 2,100 flight cycles, or 2,700 flight cycles depending on inspection method and inspection area.

For airplanes that have incorporated Boeing Business Jet (BBJ) lower cabin altitude supplemental type certificate (STC) ST010697SE, all initial compliance times specified in flight cycles must be reduced to half of those specified in Boeing Service Bulletin 737-53-1312, dated October 21, 2011, as revised by Boeing Service Bulletin 737-53-1312, Revision 1, dated March 14, 2012, and all repeat interval compliance times specified in flight

cycles must be reduced to one-quarter of those specified in that service bulletin.

**FAA’s Determination**

We are proposing this AD because we evaluated all the relevant information and determined the unsafe condition described previously is likely to exist or develop in other products of the same type design.

**Proposed AD Requirements**

This proposed AD would require accomplishing the actions specified in the service information described previously, except as discussed under “Differences Between the Proposed AD and the Service Information.”

**Similar Rulemaking**

The crown skin panels on Model 737–900 and –900ER series airplanes are of a similar design to those on Model 737–300, –400, –500, –600, –700, –700C, and

–800 series airplanes. Therefore, all these models may be subject to the identified unsafe condition. We are considering similar rulemaking for these additional models.

**Differences Between the Proposed AD and the Service Information**

Boeing Service Bulletin 737–53–1312, dated October 21, 2011, as revised by Boeing Service Bulletin 737–53–1312, Revision 1, dated March 14, 2012, specifies to contact the manufacturer for disposition of certain repair conditions, but this proposed AD would require repairing those conditions in one of the following ways:

- In accordance with a method that we approve; or
- Using data that meet the certification basis of the airplane, and that have been approved by the Boeing Commercial Airplanes Organization Designation Authorization (ODA) whom

we have authorized to make those findings.

Tables 3 and 4 in paragraph 1.E., “Compliance,” of Boeing Service Bulletin 737–53–1312, dated October 21, 2011, as revised by Boeing Service Bulletin 737–53–1312, Revision 1, dated March 14, 2012, specify post-modification inspections at certain chem-mill step locations, which may be used in support of compliance with section 121.1109(c)(2) or 129.109(c)(2) of the Federal Aviation Regulations (14 CFR 121.1109(c)(2) or 129.109(c)(2)). However, this NPRM does not propose to require those post-modification inspections. This difference has been coordinated with Boeing.

**Costs of Compliance**

We estimate that this proposed AD affects 58 airplanes of U.S. registry.

We estimate the following costs to comply with this proposed AD:

**ESTIMATED COSTS**

Action	Labor cost	Parts cost	Cost per product	Cost on U.S. operators
Inspection of chem-mill step locations.	31 work-hours × \$85 per hour = \$2,635 per inspection cycle.	None .....	\$2,635 per inspection cycle.	\$152,830 per inspection cycle.

We have received no definitive data that would enable us to provide cost estimates for the on-condition actions specified in this proposed 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**

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.

**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 airworthiness directive (AD):

**The Boeing Company:** Docket No. FAA–2012–0935; Directorate Identifier 2011–NM–256–AD.

**(a) Comments Due Date**

We must receive comments by November 2, 2012.

**(b) Affected ADs**

None.

**(c) Applicability**

This AD applies to The Boeing Company Model 737–900 and –900ER series airplanes, certificated in any category, as identified in Boeing Service Bulletin 737–53–1312, dated October 21, 2011, as revised by Boeing Service Bulletin 737–53–1312, Revision 1, dated March 14, 2012.

**(d) Subject**

Joint Aircraft System Component (JASC)/ Air Transport Association (ATA) of America Code 53; Fuselage.

**(e) Unsafe Condition**

This AD was prompted by reports of early fatigue cracks at chem-mill areas on the crown skin panels. We are issuing this AD to detect and correct fatigue cracking of the skin panel at the specified chem-mill step locations, which could result in rapid decompression of the airplane.

**(f) Compliance**

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

**(g) Inspections of Crown Skin Areas**

At the applicable time specified in paragraph 1.E., "Compliance," of Boeing Service Bulletin 737-53-1312, dated October 21, 2011, as revised by Boeing Service Bulletin 737-53-1312, Revision 1, dated March 14, 2012, except as required by paragraph (k) of this AD: Do an external detailed inspection and an external non-destructive inspection (a medium frequency eddy current (MFEC), magneto optic imager (MOI), C-scan, or ultrasonic phased array (UTPA) inspection) for cracking in the fuselage skin along the chem-mill steps at certain locations specified in, and in accordance with, Boeing Service Bulletin 737-53-1312, dated October 21, 2011, as revised by Boeing Service Bulletin 737-53-1312, Revision 1, dated March 14, 2012. Repeat the inspections thereafter at the applicable times specified in paragraph 1.E., "Compliance," of Boeing Service Bulletin 737-53-1312, dated October 21, 2011, as revised by Boeing Service Bulletin 737-53-1312, Revision 1, dated March 14, 2012.

**(h) Inspections of Shear Wrinkle Areas**

For Group 1 airplanes as identified in Boeing Service Bulletin 737-53-1312, dated October 21, 2011, as revised by Boeing Service Bulletin 737-53-1312, Revision 1, dated March 14, 2012: At the applicable time specified in paragraph 1.E., "Compliance," of Boeing Service Bulletin 737-53-1312, dated October 21, 2011, as revised by Boeing Service Bulletin 737-53-1312, Revision 1, dated March 14, 2012, except as required by paragraph (k) of this AD, do an external detailed inspection and an external non-destructive inspection (MFEC, MOI, C-scan, or UTPA) for cracking in the fuselage skin along the chem-mill steps at certain shear wrinkle locations specified in, and in accordance with, Boeing Service Bulletin 737-53-1312, dated October 21, 2011, as revised by Boeing Service Bulletin 737-53-1312, Revision 1, dated March 14, 2012. Repeat the inspections required by paragraph (h) of this AD thereafter at the applicable times specified in paragraph 1.E., "Compliance," of Boeing Service Bulletin 737-53-1312, dated October 21, 2011, as revised by Boeing Service Bulletin 737-53-1312, Revision 1, dated March 14, 2012.

**(i) Repair**

If any cracking is found during any inspection required by paragraphs (g) and (h) of this AD, before further flight, repair the cracking using a method approved in accordance with the procedures specified in paragraph (m) of this AD. Accomplishing the repair approved in accordance with the procedures specified in paragraph (m) of this AD terminates the repetitive inspection requirement for that area under the repair only.

**(j) Optional Terminating Modification**

Modification of an inspection area specified in paragraph (g) of this AD,

including doing an external detailed inspection and an external non-destructive inspection (MFEC, MOI, C-scan, or UTPA) for cracking of the area to be modified, and a high frequency eddy current inspection of all existing holes for cracking, in accordance with the Accomplishment Instructions of Boeing Service Bulletin 737-53-1312, dated October 21, 2011, as revised by Boeing Service Bulletin 737-53-1312, Revision 1, dated March 14, 2012, terminates the repetitive inspections required by paragraph (g) of this AD for that area only. If any cracking is found during any inspection described by this paragraph, before further flight, repair the cracking using a method approved in accordance with the procedures specified in paragraph (m) of this AD.

**(k) Service Bulletin Exception**

Boeing Service Bulletin 737-53-1312, dated October 21, 2011, as revised by Boeing Service Bulletin 737-53-1312, Revision 1, dated March 14, 2012, specifies compliance times "after the original issue date of this service bulletin." However, this AD requires compliance within the specified compliance times "after the effective date of this AD."

**(l) Post-Modification Inspections**

The post-modification inspections specified in Tables 3 and 4 of paragraph 1.E., "Compliance," of Boeing Service Bulletin 737-53-1312, dated October 21, 2011, as revised by Boeing Service Bulletin 737-53-1312, Revision 1, dated March 14, 2012, are not required by this AD.

**Note 1 to paragraph (l) of this AD:** The damage tolerance inspections specified in Tables 3 and 4 of paragraph 1.E., "Compliance," of Boeing Service Bulletin 737-53-1312, dated October 21, 2011, as revised by Boeing Service Bulletin 737-53-1312, Revision 1, dated March 14, 2012, may be used in support of compliance with section 121.1109(c)(2) or 129.109(c)(2) of the Federal Aviation Regulations (14 CFR 121.1109(c)(2) or 14 CFR 129.109(c)(2)). The actions specified in Part 5 of the Accomplishment Instructions and corresponding figures of Boeing Service Bulletin 737-53-1312, dated October 21, 2011, as revised by Boeing Service Bulletin 737-53-1312, Revision 1, dated March 14, 2012, are not required by this AD.

**(m) 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 the Related Information section of this AD. Information may be emailed to: [9-ANM-Seattle-ACO-AMOC-Requests@faa.gov](mailto: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.

**(n) Related Information**

(1) For more information about this AD, contact Wayne Lockett, Aerospace Engineer, Airframe Branch, ANM-120S, FAA, Seattle Aircraft Certification Office, 1601 Lind Avenue SW., Renton, Washington 98057-3356; phone: (425) 917-6447; fax: (425) 917-6590; email: [Wayne.Lockett@faa.gov](mailto:Wayne.Lockett@faa.gov).

(2) 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.

Issued in Renton, Washington, on September 4, 2012.

**Ali Bahrami,**

*Manager, Transport Airplane Directorate, Aircraft Certification Service.*

[FR Doc. 2012-22887 Filed 9-17-12; 8:45 am]

**BILLING CODE 4910-13-P**

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

**[Docket No. FAA-2012-0938; Directorate Identifier 2011-NM-271-AD]**

**RIN 2120-AA64**

**Airworthiness Directives; The Boeing Company 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 The Boeing Company Model 737-600 series airplanes. This proposed AD was prompted by reports of early fatigue cracks at chem-mill areas on the crown skin panels. This proposed AD would require repetitive inspections for cracking of the fuselage skin at certain locations at chem-mill areas, and repair if necessary. We are proposing this AD to detect and correct fatigue cracking of the skin panel at the specified chem-

mill step locations, which could result in rapid decompression of the airplane.

**DATES:** We must receive comments on this proposed AD by November 2, 2012.

**ADDRESSES:** You may send comments, using the procedures found in 14 CFR 11.43 and 11.45, 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:* Deliver to Mail address above between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

For service information identified in this proposed 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, 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 proposed AD, the regulatory evaluation, any comments received, and other information. The street address for the Docket Office (phone: 800-647-5527) is in the **ADDRESSES** section. Comments will be available in the AD docket shortly after receipt.

**FOR FURTHER INFORMATION CONTACT:** Wayne Lockett, Aerospace Engineer, Airframe Branch, ANM-120S, FAA, Seattle Aircraft Certification Office, 1601 Lind Avenue SW., Renton, Washington 98057-3356; phone: (425) 917-6447; fax: (425) 917-6590; email: [Wayne.Lockett@faa.gov](mailto:Wayne.Lockett@faa.gov).

#### SUPPLEMENTARY INFORMATION:

##### Comments Invited

We invite you to send any written relevant data, views, or arguments about this proposal. Send your comments to an address listed under the **ADDRESSES** section. Include "Docket No. FAA-2012-0938; Directorate Identifier 2011-

NM-271-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 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 proposed AD.

#### Discussion

We received reports of early fatigue cracks near chem-mill areas on the crown skin panels of Model 737-300, -400, and -500 series airplanes. The cracks resulted from high stresses in the areas where chem-mill pockets are adjacent to non-chem-mill areas. Although we have not received any reports of this type of fuselage fatigue cracks on Model 737-600, -700, -700C, -800, -900, or -900ER series airplanes, a full-scale fatigue test article was inspected for skin cracks at similar structural details and two chem-mill cracks were found that occurred late in the testing program. This condition, if not detected and corrected, could result in rapid decompression of the airplane.

#### Relevant Service Information

We reviewed Boeing Service Bulletin 737-53-1309, dated October 20, 2011, for Model 737-600 series airplanes. That service bulletin describes, among other things, procedures for doing repetitive external detailed inspections and external non-destructive inspections (medium frequency eddy current (MFEC), magneto optic imager (MOI), C-scan, or ultrasonic phased array (UTPA) inspections) of the fuselage skin at specified locations where chem-mill areas are adjacent to non-chem-mill areas at antenna and door bearstrap installations, and repairs if necessary.

Boeing Service Bulletin 737-53-1309, dated October 20, 2011, also describes procedures for installing modification doublers, which involves an external detailed inspection and an external non-destructive (MFEC, MOI, C-scan, or UTPA) inspection for any cracking of the area to be modified prior to the doubler being placed on that area, a high frequency eddy current inspection of all existing holes for cracking, and contacting Boeing if necessary. The service bulletin also specifies that when a certain modification is accomplished, the repetitive inspection for the area

under the modification is no longer necessary.

Boeing Service Bulletin 737-53-1309, dated October 20, 2011, specifies an initial compliance time of 43,000 total flight cycles, or 1,500 flight cycles after the original issue date of that service bulletin, whichever occurs later. That service bulletin specifies a repetitive interval not to exceed 1,500 flight cycles or 2,100 flight cycles, depending on inspection method.

#### FAA's Determination

We are proposing this AD because we evaluated all the relevant information and determined the unsafe condition described previously is likely to exist or develop in other products of the same type design.

#### Proposed AD Requirements

This proposed AD would require accomplishing the actions specified in the service information described previously, except as discussed under "Differences Between the Proposed AD and the Service Information."

#### Similar Rulemaking

The crown skin panels on Model 737-600 series airplanes are of a similar design to those on Model 737-300, -400, -500, -700, -700C, -800, -900, and -900ER series airplanes. Therefore, all these models may be subject to the identified unsafe condition. We are considering similar rulemaking for these additional models.

#### Differences Between the Proposed AD and the Service Information

Boeing Service Bulletin 737-53-1309, dated October 20, 2011, specifies to contact the manufacturer for disposition of certain repair conditions, but this proposed AD would require repairing those conditions in one of the following ways:

- In accordance with a method that we approve; or

- Using data that meet the certification basis of the airplane, and that have been approved by the Boeing Commercial Airplanes Organization Designation Authorization (ODA) whom we have authorized to make those findings.

Tables 2 and 3 in paragraph 1.E., "Compliance," of Boeing Service Bulletin 737-53-1309, dated October 20, 2011, specify post-modification inspections at certain chem-mill step locations, which may be used in support of compliance with section 121.1109(c)(2) or 129.109(c)(2) of the Federal Aviation Regulations (14 CFR 121.1109(c)(2) or 129.109(c)(2)). However, this NPRM does not propose

to require those post-modification inspections. This difference has been coordinated with Boeing.

### Costs of Compliance

We estimate that this proposed AD affects 6 airplanes of U.S. registry.

We estimate the following costs to comply with this proposed AD:

#### ESTIMATED COSTS

Action	Labor cost	Parts cost	Cost per product	Cost on U.S. operators
Inspection of chem-mill step locations.	37 work-hours × \$85 per hour = \$3,145 per inspection cycle.	None .....	\$3,145 per inspection cycle.	\$18,870 per inspection cycle.

We have received no definitive data that would enable us to provide cost estimates for the on-condition actions specified in this proposed 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

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.

### 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 airworthiness directive (AD):

**The Boeing Company:** Docket No. FAA–2012–0938; Directorate Identifier 2011–NM–271–AD.

#### (a) Comments Due Date

We must receive comments by November 2, 2012.

#### (b) Affected ADs

None.

#### (c) Applicability

This AD applies to The Boeing Company Model 737–600 series airplanes, as identified in Boeing Service Bulletin 737–53–1309, dated October 20, 2011.

#### (d) Subject

Joint Aircraft System Component (JASC)/Air Transport Association (ATA) of America Code 53, Fuselage.

#### (e) Unsafe Condition

This AD was prompted by reports of early fatigue cracks at chem-mill areas on the crown skin panels. We are issuing this AD to detect and correct fatigue cracking of the skin panel at the specified chem-mill step locations, which could result in rapid decompression of the airplane.

#### (f) Compliance

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

#### (g) Inspections

At the applicable time specified in paragraph 1.E., "Compliance," of Boeing

Service Bulletin 737–53–1309, dated October 20, 2011, except as required by paragraph (j) of this AD: Do an external detailed inspection and an external non-destructive inspection (a medium frequency eddy current (MFEC), magneto optic imager (MOI), C-scan, or ultrasonic phased array (UTPA) inspection) for cracking in the fuselage skin along the chem-mill steps at certain locations specified in, and in accordance with, Boeing Service Bulletin 737–53–1309, dated October 20, 2011. Repeat the inspections required by paragraph (g) of this AD thereafter at the applicable times specified in paragraph 1.E., "Compliance," of Boeing Service Bulletin 737–53–1309, dated October 20, 2011.

#### (h) Repair

If any cracking is found during any inspection required by paragraph (g) of this AD, before further flight, repair the cracking using a method approved in accordance with the procedures specified in paragraph (l) of this AD. Accomplishing the repair approved in accordance with the procedures specified in paragraph (l) of this AD terminates the repetitive inspection requirement for that area under the repair only.

#### (i) Optional Terminating Modification

Modification of an inspection area, including an external detailed inspection and an external non-destructive inspection (MFEC, MOI, C-scan, or UTPA) for cracking of the area to be modified and a high frequency eddy current inspection of all existing holes for cracking, in accordance with the Accomplishment Instructions of Boeing Service Bulletin 737–53–1309, dated October 20, 2011, terminates the repetitive inspections required by paragraph (g) of this AD for that area only. If any cracking is found during any inspection described by this paragraph, before further flight, repair the cracking using a method approved in accordance with the procedures specified in paragraph (l) of this AD.

#### (j) Service Bulletin Exception

Boeing Service Bulletin 737–53–1309, dated October 20, 2011, specifies compliance times "after the original issue date of this service bulletin." However, this AD requires compliance within the specified compliance times "after the effective date of this AD."

#### (k) Post-Modification Inspections

The post-modification inspections specified in Tables 2 and 3 of paragraph 1.E., "Compliance," of Boeing Service Bulletin 737–53–1309, dated October 20, 2011, are not required by this AD.

**Note 1 to paragraph (k) of this AD:** The damage tolerance inspections specified in Tables 2 and 3 of paragraph 1.E., "Compliance," of Boeing Service Bulletin 737-53-1309, dated October 20, 2011, may be used in support of compliance with section 121.1109(c)(2) or 129.109(c)(2) of the Federal Aviation Regulations (14 CFR 121.1109(c)(2) or 14 CFR 129.109(c)(2)). The actions specified in Part 5 of the Accomplishment Instructions and corresponding figures of Boeing Service Bulletin 737-53-1309, dated October 20, 2011, are not required by this AD.

**(l) 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 the Related Information section of this AD. Information may be emailed to: [9-ANM-Seattle-ACO-AMOC-Requests@faa.gov](mailto: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.

**(m) Related Information**

(1) For more information about this AD, contact Wayne Lockett, Aerospace Engineer, Airframe Branch, ANM-120S, FAA, Seattle Aircraft Certification Office, 1601 Lind Avenue SW., Renton, Washington 98057-3356; phone: (425) 917-6447; fax: (425) 917-6590; email: [Wayne.Lockett@faa.gov](mailto:Wayne.Lockett@faa.gov).

(2) 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, WA. For information on the availability of this material at the FAA, call 425-227-1221.

Issued in Renton, Washington, on September 4, 2012.

**Ali Bahrami,**

Manager, Transport Airplane Directorate, Aircraft Certification Service.

[FR Doc. 2012-22889 Filed 9-17-12; 8:45 am]

**BILLING CODE 4910-13-P**

**DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT**

**24 CFR Part 1000**

[Docket No. FR-5650-N-02]

**Native American Housing Assistance and Self-Determination Reauthorization Act of 1996: Request for Nominations for Negotiated Rulemaking Committee Membership**

**AGENCY:** Office of Assistant Secretary for Public and Indian Housing, HUD.

**ACTION:** Notice of negotiated rulemaking.

**SUMMARY:** On July 3, 2012, HUD published a **Federal Register** notice announcing its intent to initiate negotiated rulemaking for the purpose of developing regulatory changes to the funding formula for the Indian Housing Block Grant program authorized by the Native American Housing Assistance and Self-Determination Act of 1996. This document explains how persons may be nominated to serve as members on the negotiated rulemaking committee.

**DATES:** Nominations for committee membership are due on or before: November 19, 2012.

**ADDRESSES:** Interested persons are invited to submit nominations for membership on the negotiated rulemaking committee. There are two methods for nominations to be included in the docket for this rule. All submissions must refer to the above docket number and title.

1. *Submission of Nominations by Mail.* Nominations may be submitted by mail to the Regulations Division, Office of the General Counsel, Department of Housing and Urban Development, 451 7th Street SW, Room 10276, Washington, DC 20410-0500.

2. *Electronic Submission of Nominations.* Interested persons may submit nominations electronically through the Federal eRulemaking Portal at [www.regulations.gov](http://www.regulations.gov). HUD strongly encourages the electronic submission of nominations. Electronic submission allows interested persons the maximum time to prepare and submit a nomination, ensures timely receipt by HUD, and enables HUD to immediately make nominations available to the public. Nominations submitted electronically through the [www.regulations.gov](http://www.regulations.gov) Web site can be viewed by interested members of the public. Individuals should follow the instructions provided on that site to submit nominations electronically.

**Note:** To receive consideration, nominations must be submitted through one

of the two methods specified above. All submissions must refer to the docket number and title of the rule.

*No Facsimile Nominations.* Facsimile (FAX) nominations are not acceptable.

*Public Inspection of Nominations.* All properly submitted nominations and communications submitted to HUD will be available for public inspection and copying between 8 a.m. and 5 p.m. weekdays at the above address. Due to security measures at the HUD Headquarters building, an advance appointment to review the submissions must be scheduled by calling the Regulations Division at 202-708-3055 (this is not a toll-free number). Individuals with speech or hearing impairments may access this number via TTY by calling the Federal Information Relay Service at 800-877-8339. Copies of all submissions are available for inspection and downloading at [www.regulations.gov](http://www.regulations.gov).

**FOR FURTHER INFORMATION CONTACT:**

Rodger J. Boyd, Deputy Assistant Secretary for Native American Programs, Office of Public and Indian Housing, Department of Housing and Urban Development, 451 7th Street SW., Room 4126, Washington, DC 20410-5000, telephone number, 202-401-7914 (this is not a toll-free number). Persons with hearing or speech impediments may access this number through TTY by calling the toll-free Federal Information Relay Service at 800-877-8339 (this is a toll-free number).

**SUPPLEMENTARY INFORMATION:**

**I. Background**

The Native American Housing Assistance and Self-Determination Act of 1996 (25 U.S.C. 4101 *et seq.*) (NAHASDA) changed the way that housing assistance is provided to Native Americans. NAHASDA eliminated several separate assistance programs and replaced them with a single block grant program, known as the Indian Housing Block Grant (IHBG) program. The regulations governing the IHBG formula allocation are codified in subpart D of part 1000 of HUD's regulations in title 24 of the Code of Federal Regulations. In accordance with section 106 of NAHASDA, HUD developed the regulations with active tribal participation using the procedures of the Negotiated Rulemaking Act of 1990 (5 U.S.C. 561-570).

Under the IHBG program, HUD makes assistance available to eligible Indian tribes for affordable housing activities. The amount of assistance made available to each Indian tribe is determined using a formula that was developed as part of the NAHASDA

negotiated rulemaking process. Based on the amount of funding appropriated for the IHBG program, HUD calculates the annual grant for each Indian tribe and provides this information to the Indian tribes. An Indian Housing Plan for the Indian tribe is then submitted to HUD. If the Indian Housing Plan is found to be in compliance with statutory and regulatory requirements, the grant is made.

On July 3, 2012 (77 FR 39452), HUD published a document in the **Federal Register** announcing its intent to initiate negotiated rulemaking required by Section 106 of NAHASDA and program regulations found at 24 CFR 1000.306. The July 3, 2012, **Federal Register** document provides additional information on the negotiated rulemaking process.

## II. This Document

This document is the next step in the process of establishing the negotiated rulemaking committee to review the IHBG funding formula. Specifically, the document solicits nominations for membership on the negotiated rulemaking committee and explains how persons may be nominated for committee membership. The committee will consist of representatives of the various interests that are potentially affected by the rulemaking. Members may include tribally designated housing entities, elected officials of tribal governments, and HUD representatives. Members will serve at HUD's discretion.

The Negotiated Rulemaking Act of 1990 (5 U.S.C. 561–570) provides, at 5 U.S.C. 565(b), that the membership of a negotiated rulemaking committee should generally be limited to 25 members. It is not required that each potentially affected organization or entity have its own representative. HUD must be satisfied, however, that the group as a whole reflects a geographically diverse cross-section of small, medium, and large Indian tribes.

## III. Requests for Representation

If you are interested in serving as a member of the committee or in nominating another person to serve as a member of the committee, you may submit a nomination to HUD in accordance with the **ADDRESSES** section of this notice. Your nomination for membership on the Committee must include:

1. The name of your nominee and a description of the interests the nominee would represent;
2. Evidence that your nominee is authorized to represent a tribal government, which may include a tribally designed housing entity of a

tribe with the interests the nominee would represent, so long as the tribe provides evidence that it authorizes such representation; and

3. A written commitment that the nominee will actively participate in good faith in the development of the rule.

HUD will determine whether a proposed member will serve on the committee. HUD will make its decision based on whether a proposed member would be significantly affected by the proposed rule, whether the interest of the proposed member could be represented adequately by other members, and whether space permits.

## IV. Additional Notice

In accordance with section 564 of the Negotiated Rulemaking Act of 1990, prior to the establishment of the negotiated rulemaking committee, HUD will publish a document in the **Federal Register** that will announce the proposed membership of the committee, solicit additional nominations for membership, and provide additional information required by the Negotiated Rulemaking Act.

Dated: September 10, 2012.

**Sandra B. Henriquez,**

*Assistant Secretary for Public and Indian Housing.*

[FR Doc. 2012–22986 Filed 9–17–12; 8:45 am]

**BILLING CODE 4210–67–P**

## ENVIRONMENTAL PROTECTION AGENCY

### 40 CFR Parts 141 and 142

[FRL–9727–9]

### Long Term 2 Enhanced Surface Water Treatment Rule: Public Meeting on Monitoring Data Analysis, Occurrence Forecasts, Binning, and the Microbial Toolbox

**AGENCY:** Environmental Protection Agency (EPA).

**ACTION:** Notice of public meeting.

**SUMMARY:** The U.S. Environmental Protection Agency (EPA) is hosting a public meeting on November 15, 2012, concerning monitoring, binning and microbial toolbox information as part of the regulatory review of the Long Term 2 Enhanced Surface Water Treatment Rule (LT2 rule). At this meeting, EPA plans to discuss and solicit public input on data and information related to several topics. The first topic is the results of the first round of LT2 *Cryptosporidium* monitoring that are used to determine which one of the four

categories (*i.e.*, bins) a public drinking water system (PWS) should be placed. The second topic is the implications of predicted occurrence and bin category placement that may result from a second round of *Cryptosporidium* monitoring using the existing or enhanced analytical methods. The third topic is the effectiveness of *Escherichia coli* as a screen to identify small filtered PWSs that need to perform *Cryptosporidium* monitoring for bin placement. The fourth topic is the determination of the potential credits assigned to different risk mitigation tools. EPA will also provide background information on the LT2 rule's monitoring and binning requirements, microbial toolbox options for risk management, and the agency's Six Year Review process. EPA will consider the data and/or information discussed at this meeting during the agency's review of the LT2 rule, which the agency has announced as part of both the Retrospective Review Plan under Executive Order (E.O.) 13563 and the third Six-Year Review under the Safe Drinking Water Act.

**Date and Location:** The public meeting will be held on Thursday, November 15, 2012 (8:00 a.m. to 5:00 p.m., Eastern Time). The public meeting will be held at the EPA East Building, Room 1153, 1201 Constitution Avenue NW., Washington, DC 20460.

**FOR FURTHER INFORMATION CONTACT:** For technical inquiries, contact César Cordero, Standards and Risk Management Division, Office of Ground Water and Drinking Water (MC 4607M), Environmental Protection Agency, 1200 Pennsylvania Ave. NW., Washington, DC 20460 at (202) 564–3716 or [cordero.cesar@epa.gov](mailto:cordero.cesar@epa.gov). For more information about the LT2 rule or the Six-Year Review process, visit: <http://water.epa.gov/lawsregs/rulesregs/sdwa/lt2/> or <http://water.epa.gov/lawsregs/rulesregs/regulatingcontaminants/sixyearreview/index.cfm>, respectively.

### SUPPLEMENTARY INFORMATION:

**Registration:** Individuals planning to participate in the public meeting must register at this Web site <https://www.surveymonkey.com/s/LT2NovemberRegistration> no later than November 9, 2012. Teleconferencing will be available for individuals unable to attend the meeting in person. EPA will do its best to include all those interested, but may have to limit attendance due to room and/or teleconference size limitations and therefore urges people to register early. Teleconference information will be emailed to registered participants in advance of the meeting. If you have any difficulty registering or have questions, please send an email to Morgan Hoenig

of Ross Strategic at [mhoenig@rossstrategic.com](mailto:mhoenig@rossstrategic.com).

**Special Accommodations:** For information on access or accommodations for individuals with disabilities, please contact Jini Mohanty at (202) 564-5269 or by email at [mohanty.jini@epa.gov](mailto:mohanty.jini@epa.gov). Please allow at least five business days prior to the meeting to give EPA time to process your request.

This meeting will be open to the public. EPA encourages public input and will allocate time on the agenda to receive verbal statements. EPA requests that participants limit statements to the topics described in the agenda and in the **SUMMARY** section of this notice. Participants will be provided with a set time frame for their statements. EPA also requests that only one person present a statement on behalf of a group or organization. Individuals or organizations interested in presenting a statement should notify Cesar Cordero by email at [cordero.cesar@epa.gov](mailto:cordero.cesar@epa.gov) no later than November 9, 2012. Individuals that have scientific data that they would like EPA to consider during the regulatory review of the LT2 rule are encouraged to email their data to Cesar Cordero at the email address listed in the **FOR FURTHER INFORMATION CONTACT** section by December 31, 2012.

**The LT2 Rule:** The purpose of the LT2 rule, promulgated in 2006 (71 FR 654; January 5, 2006), is to reduce disease incidence associated with *Cryptosporidium* and other disease-causing microorganisms in drinking water. The rule includes requirements for PWSs that provide filtration to be classified in one of four categories (bins) for additional *Cryptosporidium* treatment that may be needed based on the occurrence of *Cryptosporidium* or *E. coli* in their source waters. Systems that are placed into the first bin require no additional treatment, while systems that are placed into bins 2, 3 or 4 will need to conduct additional treatment but will be able to select from a range of treatment and management strategies (i.e. microbial toolbox options) to meet their treatment requirements.

**EPA Reviews:** The Safe Drinking Water Act (SDWA) requires EPA to review each existing national primary drinking water regulation (NPDWR) every six years and revise the regulation if appropriate (see SDWA Section 1412(b)(9)). Section 1412(b)(9) of SDWA specifies that any revision to a NPDWR “shall maintain, or provide for greater, protection of the health of persons.” In addition to reviewing the LT2 rule under the third Six-Year Review, EPA announced in the August 2011 document, *Improving Our Regulations: Final Plan for Periodic Review Retrospective Reviews of Existing Regulations*, that the agency would review the LT2 rule in response to E.O. 13563, which requires agencies to review regulations to determine where the agencies could streamline or eliminate ineffective, overly burdensome, and outdated rules. As part of these reviews, EPA plans to assess and analyze information and data regarding occurrence, analytical methods, and treatment to evaluate whether there are new or additional ways to manage risk.

The public meeting announced in this notice will be the third meeting hosted by the agency for the purpose of reviewing the LT2 rule in response to SDWA Section 1412(b)(9) and E.O. 13563. The first meeting occurred on December 7, 2011, and focused on the analytical methods for *Cryptosporidium* and the preliminary drinking water source monitoring results from samples collected under the LT2 rule. The second meeting occurred on April 24, 2012, and focused on the uncovered finished water reservoirs requirement of the LT2 rule.

Dated: September 6, 2012.

**Pamela Barr,**  
*Acting Director, Office of Ground Water and Drinking Water.*

[FR Doc. 2012-23014 Filed 9-17-12; 8:45 am]

**BILLING CODE 6560-50-P**

**ENVIRONMENTAL PROTECTION AGENCY**

**40 CFR Part 300**

[EPA-HQ-SFUND-1998-0010, EPA-HQ-SFUND-2012-0598, 0599, 0600, 0601, 0602, 0603, 0604, 0606, 0607 and 0647; FRL-9722-7]

**National Priorities List, Proposed Rule No. 57**

**AGENCY:** Environmental Protection Agency.

**ACTION:** Proposed rule.

**SUMMARY:** The Comprehensive Environmental Response, Compensation, and Liability Act (“CERCLA” or “the Act”), as amended, requires that the National Oil and Hazardous Substances Pollution Contingency Plan (“NCP”) include a list of national priorities among the known releases or threatened releases of hazardous substances, pollutants or contaminants throughout the United States. The National Priorities List (“NPL”) constitutes this list. The NPL is intended primarily to guide the Environmental Protection Agency (“EPA” or “the agency”) in determining which sites warrant further investigation. These further investigations will allow the EPA to assess the nature and extent of public health and environmental risks associated with the site and to determine what CERCLA-financed remedial action(s), if any, may be appropriate. This rule proposes to: (1) Add seven sites to the General Superfund section of the NPL; (2) add one site to the Federal Facilities section of the NPL; (3) correct an error in the Appendix B footnote description; and (4) correct an error in the state location for Five Points PCE Plume site. This rule also withdraws one site from proposal to the NPL.

**DATES:** Comments regarding any of these proposed listings must be submitted (postmarked) on or before November 19, 2012.

**ADDRESSES:** Identify the appropriate Docket Number from the table below.

**DOCKET IDENTIFICATION NUMBERS BY SITE**

Site name	City/county, state	Docket ID No.
Pike and Mulberry Streets PCE Plume .....	Martinsville, IN .....	EPA-HQ-SFUND-2012-0598.
Former United Zinc & Associated Smelters .....	Iola, KS .....	EPA-HQ-SFUND-2012-0599.
Creese & Cook Tannery (Former) .....	Danvers, MA .....	EPA-HQ-SFUND-2012-0600.
Walton & Lonsbury Inc .....	Attleboro, MA .....	EPA-HQ-SFUND-2012-0601.
Matlack, Inc .....	Woolwich Township, NJ .....	EPA-HQ-SFUND-2012-0602.
Riverside Industrial Park .....	Newark, NJ .....	EPA-HQ-SFUND-2012-0603.
Clinch River Corporation .....	Harriman, TN .....	EPA-HQ-SFUND-2012-0604.
700 South 1600 East PCE Plume .....	Salt Lake City, UT .....	EPA-HQ-SFUND-2012-0647.

## DOCKET IDENTIFICATION NUMBERS BY SITE—Continued

Site name	City/county, state	Docket ID No.
Evergreen Manor Ground Water Contamination .....	Winnebago County, IL .....	EPA-HQ-SFUND-1998-0010.

Submit your comments, identified by the appropriate Docket number, by one of the following methods:

- *www.regulations.gov*: Follow the online instructions for submitting comments.

- *Email: superfund.docket@epa.gov.*
- *Mail*: Mail comments (no facsimiles or tapes) to Docket Coordinator, Headquarters, U.S. Environmental Protection Agency, CERCLA Docket Office, (Mailcode 5305T), 1200 Pennsylvania Avenue NW., Washington, DC 20460.

- *Hand Delivery or Express Mail*: Send comments (no facsimiles or tapes) to Docket Coordinator, Headquarters, U.S. Environmental Protection Agency, CERCLA Docket Office, 1301 Constitution Avenue NW., EPA West, Room 3334, Washington, DC 20004. Such deliveries are accepted only during the Docket's normal hours of operation (8:30 a.m. to 4:30 p.m., Monday through Friday, excluding federal holidays).

*Instructions*: Direct your comments to the appropriate Docket number (see table above). The EPA's policy is that all comments received will be included in the public Docket without change and may be made available online at *www.regulations.gov*, including any personal information provided, unless the comment includes information claimed to be Confidential Business Information (CBI) or other information whose disclosure is restricted by statute. Do not submit information that you consider to be CBI or otherwise protected through *www.regulations.gov* or email. The *www.regulations.gov* Web site is an "anonymous access" system; that means the EPA will not know your identity or contact information unless you provide it in the body of your comment. If you send an email comment directly to the EPA without going through *www.regulations.gov*, your email address will be automatically captured and included as part of the comment that is placed in the public Docket and made available on the Internet. If you submit an electronic comment, the EPA recommends that you include your name and other contact information in the body of your comment and with any disk or CD-ROM you submit. If the EPA cannot read your comment due to technical difficulties and cannot contact you for clarification, the EPA may not be able to consider

your comment. Electronic files should avoid the use of special characters, any form of encryption, and be free of any defects or viruses. For additional Docket addresses and further details on their contents, see section II, "Public Review/Public Comment," of the **SUPPLEMENTARY INFORMATION** portion of this preamble.

**FOR FURTHER INFORMATION CONTACT:**

Terry Jeng, phone: (703) 603-8852, email: *jeng.terry@epa.gov*, Site Assessment and Remedy Decisions Branch, Assessment and Remediation Division, Office of Superfund Remediation and Technology Innovation (Mailcode 5204P), U.S. Environmental Protection Agency, 1200 Pennsylvania Avenue NW., Washington, DC 20460; or the Superfund Hotline, phone (800) 424-9346 or (703) 412-9810 in the Washington, DC metropolitan area.

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**I. Background****A. What are CERCLA and SARA?**

In 1980, Congress enacted the Comprehensive Environmental Response, Compensation, and Liability Act, 42 U.S.C. 9601-9675 ("CERCLA" or

“the Act”), in response to the dangers of uncontrolled releases or threatened releases of hazardous substances, and releases or substantial threats of releases into the environment of any pollutant or contaminant that may present an imminent or substantial danger to the public health or welfare. CERCLA was amended on October 17, 1986, by the Superfund Amendments and Reauthorization Act (“SARA”), Public Law 99–499, 100 Stat. 1613 *et seq.*

#### B. What is the NCP?

To implement CERCLA, the EPA promulgated the revised National Oil and Hazardous Substances Pollution Contingency Plan (“NCP”), 40 CFR Part 300, on July 16, 1982 (47 FR 31180), pursuant to CERCLA section 105 and Executive Order 12316 (46 FR 42237, August 20, 1981). The NCP sets guidelines and procedures for responding to releases and threatened releases of hazardous substances or releases or substantial threats of releases into the environment of any pollutant or contaminant that may present an imminent or substantial danger to the public health or welfare. The EPA has revised the NCP on several occasions. The most recent comprehensive revision was on March 8, 1990 (55 FR 8666).

As required under section 105(a)(8)(A) of CERCLA, the NCP also includes “criteria for determining priorities among releases or threatened releases throughout the United States for the purpose of taking remedial action and, to the extent practicable taking into account the potential urgency of such action, for the purpose of taking removal action.” “Removal” actions are defined broadly and include a wide range of actions taken to study, clean up, prevent or otherwise address releases and threatened releases of hazardous substances, pollutants or contaminants (42 U.S.C. 9601(23)).

#### C. What is the National Priorities List (NPL)?

The NPL is a list of national priorities among the known or threatened releases of hazardous substances, pollutants or contaminants throughout the United States. The list, which is appendix B of the NCP (40 CFR Part 300), was required under section 105(a)(8)(B) of CERCLA, as amended. Section 105(a)(8)(B) defines the NPL as a list of “releases” and the highest priority “facilities” and requires that the NPL be revised at least annually. The NPL is intended primarily to guide the EPA in determining which sites warrant further investigation to assess the nature and extent of public health and environmental risks associated with a

release of hazardous substances, pollutants or contaminants. The NPL is only of limited significance, however, as it does not assign liability to any party or to the owner of any specific property. Also, placing a site on the NPL does not mean that any remedial or removal action necessarily need be taken.

For purposes of listing, the NPL includes two sections, one of sites that are generally evaluated and cleaned up by the EPA (the “General Superfund Section”), and one of sites that are owned or operated by other federal agencies (the “Federal Facilities Section”). With respect to sites in the Federal Facilities Section, these sites are generally being addressed by other federal agencies. Under Executive Order 12580 (52 FR 2923, January 29, 1987) and CERCLA section 120, each federal agency is responsible for carrying out most response actions at facilities under its own jurisdiction, custody or control, although the EPA is responsible for preparing a Hazard Ranking System (“HRS”) score and determining whether the facility is placed on the NPL.

#### D. How are sites listed on the NPL?

There are three mechanisms for placing sites on the NPL for possible remedial action (see 40 CFR 300.425(c) of the NCP): (1) A site may be included on the NPL if it scores sufficiently high on the HRS, which the EPA promulgated as appendix A of the NCP (40 CFR Part 300). The HRS serves as a screening tool to evaluate the relative potential of uncontrolled hazardous substances, pollutants or contaminants to pose a threat to human health or the environment. On December 14, 1990 (55 FR 51532), the EPA promulgated revisions to the HRS partly in response to CERCLA section 105(c), added by SARA. The revised HRS evaluates four pathways: ground water, surface water, soil exposure and air. As a matter of agency policy, those sites that score 28.50 or greater on the HRS are eligible for the NPL. (2) Pursuant to 42 U.S.C. 9605(a)(8)(B), each state may designate a single site as its top priority to be listed on the NPL, without any HRS score. This provision of CERCLA requires that, to the extent practicable, the NPL include one facility designated by each state as the greatest danger to public health, welfare or the environment among known facilities in the state. This mechanism for listing is set out in the NCP at 40 CFR 300.425(c)(2). (3) The third mechanism for listing, included in the NCP at 40 CFR 300.425(c)(3), allows certain sites to be listed without any HRS score, if all of the following conditions are met:

- The Agency for Toxic Substances and Disease Registry (ATSDR) of the U.S. Public Health Service has issued a health advisory that recommends dissociation of individuals from the release.

- The EPA determines that the release poses a significant threat to public health.

- The EPA anticipates that it will be more cost-effective to use its remedial authority than to use its removal authority to respond to the release. The EPA promulgated an original NPL of 406 sites on September 8, 1983 (48 FR 40658) and generally has updated it at least annually.

#### E. What happens to sites on the NPL?

A site may undergo remedial action financed by the Trust Fund established under CERCLA (commonly referred to as the “Superfund”) only after it is placed on the NPL, as provided in the NCP at 40 CFR 300.425(b)(1). (“Remedial actions” are those “consistent with permanent remedy, taken instead of or in addition to removal actions. \* \* \*” 42 U.S.C. 9601(24).) However, under 40 CFR 300.425(b)(2) placing a site on the NPL “does not imply that monies will be expended.” The EPA may pursue other appropriate authorities to respond to the releases, including enforcement action under CERCLA and other laws.

#### F. Does the NPL Define the Boundaries of Sites?

The NPL does not describe releases in precise geographical terms; it would be neither feasible nor consistent with the limited purpose of the NPL (to identify releases that are priorities for further evaluation), for it to do so. Indeed, the precise nature and extent of the site are typically not known at the time of listing.

Although a CERCLA “facility” is broadly defined to include any area where a hazardous substance has “come to be located” (CERCLA section 101(9)), the listing process itself is not intended to define or reflect the boundaries of such facilities or releases. Of course, HRS data (if the HRS is used to list a site) upon which the NPL placement was based will, to some extent, describe the release(s) at issue. That is, the NPL site would include all releases evaluated as part of that HRS analysis.

When a site is listed, the approach generally used to describe the relevant release(s) is to delineate a geographical area (usually the area within an installation or plant boundaries) and identify the site by reference to that area. However, the NPL site is not necessarily coextensive with the

boundaries of the installation or plant, and the boundaries of the installation or plant are not necessarily the "boundaries" of the site. Rather, the site consists of all contaminated areas within the area used to identify the site, as well as any other location where that contamination has come to be located, or from where that contamination came.

In other words, while geographic terms are often used to designate the site (e.g., the "Jones Co. plant site") in terms of the property owned by a particular party, the site, properly understood, is not limited to that property (e.g., it may extend beyond the property due to contaminant migration), and conversely may not occupy the full extent of the property (e.g., where there are uncontaminated parts of the identified property, they may not be, strictly speaking, part of the "site"). The "site" is thus neither equal to, nor confined by, the boundaries of any specific property that may give the site its name, and the name itself should not be read to imply that this site is coextensive with the entire area within the property boundary of the installation or plant. In addition, the site name is merely used to help identify the geographic location of the contamination, and is not meant to constitute any determination of liability at a site. For example, the name "Jones Co. plant site," does not imply that the Jones company is responsible for the contamination located on the plant site.

The EPA regulations provide that the Remedial Investigation ("RI") "is a process undertaken \* \* \* to determine the nature and extent of the problem presented by the release" as more information is developed on site contamination, and which is generally performed in an interactive fashion with the Feasibility Study ("FS") (40 CFR 300.5). During the RI/FS process, the release may be found to be larger or smaller than was originally thought, as more is learned about the source(s) and the migration of the contamination. However, the HRS inquiry focuses on an evaluation of the threat posed and therefore the boundaries of the release need not be exactly defined. Moreover, it generally is impossible to discover the full extent of where the contamination "has come to be located" before all necessary studies and remedial work are completed at a site. Indeed, the known boundaries of the contamination can be expected to change over time. Thus, in most cases, it may be impossible to describe the boundaries of a release with absolute certainty.

Further, as noted above, NPL listing does not assign liability to any party or to the owner of any specific property.

Thus, if a party does not believe it is liable for releases on discrete parcels of property, it can submit supporting information to the agency at any time after it receives notice it is a potentially responsible party.

For these reasons, the NPL need not be amended as further research reveals more information about the location of the contamination or release.

#### *G. How are sites removed from the NPL?*

The EPA may delete sites from the NPL where no further response is appropriate under Superfund, as explained in the NCP at 40 CFR 300.425(e). This section also provides that the EPA shall consult with states on proposed deletions and shall consider whether any of the following criteria have been met:

- (i) Responsible parties or other persons have implemented all appropriate response actions required;
- (ii) All appropriate Superfund-financed response has been implemented and no further response action is required; or
- (iii) The remedial investigation has shown the release poses no significant threat to public health or the environment, and taking of remedial measures is not appropriate.

#### *H. May the EPA delete portions of sites from the NPL as they are cleaned up?*

In November 1995, the EPA initiated a policy to delete portions of NPL sites where cleanup is complete (60 FR 55465, November 1, 1995). Total site cleanup may take many years, while portions of the site may have been cleaned up and made available for productive use.

#### *I. What is the Construction completion List (CCL)?*

The EPA also has developed an NPL construction completion list ("CCL") to simplify its system of categorizing sites and to better communicate the successful completion of cleanup activities (58 FR 12142, March 2, 1993). Inclusion of a site on the CCL has no legal significance.

Sites qualify for the CCL when: (1) Any necessary physical construction is complete, whether or not final cleanup levels or other requirements have been achieved; (2) the EPA has determined that the response action should be limited to measures that do not involve construction (e.g., institutional controls); or (3) the site qualifies for deletion from the NPL. For the most up-to-date information on the CCL, see the EPA's Internet site at <http://www.epa.gov/superfund/cleanup/ccl.htm>

#### *J. What is the sitewide ready for anticipated use measure?*

The Sitewide Ready for Anticipated Use measure (formerly called Sitewide Ready-for-Reuse) represents important Superfund accomplishments and the measure reflects the high priority the EPA places on considering anticipated future land use as part of the remedy selection process. See Guidance for Implementing the Sitewide Ready-for-Reuse Measure, May 24, 2006, OSWER 9365.0-36. This measure applies to final and deleted sites where construction is complete, all cleanup goals have been achieved, and all institutional or other controls are in place. The EPA has been successful on many occasions in carrying out remedial actions that ensure protectiveness of human health and the environment for current and future land uses, in a manner that allows contaminated properties to be restored to environmental and economic vitality. For further information, please go to [http://www.epa.gov/superfund/programs/recycle/pdf/sitewide\\_a.pdf](http://www.epa.gov/superfund/programs/recycle/pdf/sitewide_a.pdf)

#### *K. What is State/tribal correspondence concerning NPL listing?*

In order to maintain close coordination with states and tribes in the NPL listing decision process, the EPA's policy is to determine the position of the states and tribes regarding sites that the EPA is considering for listing. This consultation process is outlined in two memoranda that can be found at the following web site: <http://www.epa.gov/superfund/sites/npl/hrsres/policy/govlet.pdf>. The EPA is improving the transparency of the process by which state and tribal input is solicited. The EPA will be using the web and where appropriate more structured state and tribal correspondence that (1) explains the concerns at the site and the EPA's rationale for proceeding; (2) requests an explanation of how the state intends to address the site if placement on the NPL is not favored; and (3) emphasizes the transparent nature of the process by informing states that information on their responses will be publicly available.

A model letter and correspondence from this point forward between the EPA and states and tribes where applicable, will be added to the EPA's web site at <http://www.epa.gov/superfund/sites/query/queryhtm/nplstcor.htm>

## II. Public Review/Public Comment

### A. May I review the documents relevant to this proposed rule?

Yes, documents that form the basis for the EPA's evaluation and scoring of the sites in this proposed rule are contained in public Dockets located both at the EPA Headquarters in Washington, DC, and in the Regional offices. These documents are also available by electronic access at [www.regulations.gov](http://www.regulations.gov) (see instructions in the **ADDRESSES** section above).

### B. How do I access the documents?

You may view the documents, by appointment only, in the Headquarters or the Regional Dockets after the publication of this proposed rule. The hours of operation for the Headquarters Docket are from 8:30 a.m. to 4:30 p.m., Monday through Friday excluding federal holidays. Please contact the Regional Dockets for hours.

The following is the contact information for the EPA Headquarters Docket: Docket Coordinator, Headquarters, U.S. Environmental Protection Agency, CERCLA Docket Office, 1301 Constitution Avenue NW., EPA West, Room 3334, Washington, DC 20004; 202/566-0276. (Please note this is a visiting address only. Mail comments to the EPA Headquarters as detailed at the beginning of this preamble.)

The contact information for the relevant Regional Dockets is as follows:

- Joan Berggren, Region 1 (CT, ME, MA, NH, RI, VT), U.S. EPA, Superfund Records and Information Center, 5 Post Office Square, Suite 100, Boston, MA 02109-3912; 617/918-1417.
- Ildefonso Acosta, Region 2 (NJ, NY, PR, VI), U.S. EPA, 290 Broadway, New York, NY 10007-1866; 212/637-4344.
- Debbie Jourdan, Region 4 (AL, FL, GA, KY, MS, NC, SC, TN), U.S. EPA, 61 Forsyth Street SW., Mailcode 9T25, Atlanta, GA 30303; 404/562-8862.
- Todd Quesada, Region 5 (IL, IN, MI, MN, OH, WI), U.S. EPA Superfund Division Librarian/SFD Records Manager SRC-7J, Metcalfe Federal Building, 77 West Jackson Boulevard, Chicago, IL 60604; 312/886-4465.
- Michelle Quick, Region 7 (IA, KS, MO, NE), U.S. EPA, 901 North 5th Street, Mailcode SUPRERNB, Kansas City, KS 66101; 913/551-7335.
- Sabrina Forrest, Region 8 (CO, MT, ND, SD, UT, WY), U.S. EPA, 1595 Wynkoop Street, Mailcode 8EPR-B, Denver, CO 80202-1129; 303/312-6484.

You may also request copies from the EPA Headquarters or the Regional Dockets. An informal request, rather than a formal written request under the

Freedom of Information Act, should be the ordinary procedure for obtaining copies of any of these documents. Please note that due to the difficulty of reproducing oversized maps, oversized maps may be viewed only in-person; since the EPA dockets are not equipped to either copy and mail out such maps or scan them and send them out electronically.

You may use the Docket at [www.regulations.gov](http://www.regulations.gov) to access documents in the Headquarters Docket (see instructions included in the **ADDRESSES** section above). Please note that there are differences between the Headquarters Docket and the Regional Dockets and those differences are outlined below.

### C. What documents are available for public review at the headquarters docket?

The Headquarters Docket for this proposed rule contains the following for the sites proposed in this rule: HRS score sheets; Documentation Records describing the information used to compute the score; information for any sites affected by particular statutory requirements or the EPA listing policies; and a list of documents referenced in the Documentation Record.

### D. What documents are available for public review at the Regional Dockets?

The Regional Dockets for this proposed rule contain all of the information in the Headquarters Docket plus the actual reference documents containing the data principally relied upon and cited by the EPA in calculating or evaluating the HRS score for the sites. These reference documents are available only in the Regional Dockets.

### E. How do I submit my comments?

Comments must be submitted to the EPA Headquarters as detailed at the beginning of this preamble in the "Addresses" section. Please note that the mailing addresses differ according to method of delivery. There are two different addresses that depend on whether comments are sent by express mail or by postal mail.

### F. What happens to my comments?

The EPA considers all comments received during the comment period. Significant comments are typically addressed in a support document that the EPA will publish concurrently with the **Federal Register** document if, and when, the site is listed on the NPL.

### G. What should I consider when preparing my comments?

Comments that include complex or voluminous reports, or materials prepared for purposes other than HRS scoring, should point out the specific information that the EPA should consider and how it affects individual HRS factor values or other listing criteria (*Northside Sanitary Landfill v. Thomas*, 849 F.2d 1516 (D.C. Cir. 1988)). The EPA will not address voluminous comments that are not referenced to the HRS or other listing criteria. The EPA will not address comments unless they indicate which component of the HRS documentation record or what particular point in the EPA's stated eligibility criteria is at issue.

### H. May I submit comments after the public comment period is over?

Generally, the EPA will not respond to late comments. The EPA can guarantee only that it will consider those comments postmarked by the close of the formal comment period. The EPA has a policy of generally not delaying a final listing decision solely to accommodate consideration of late comments.

### I. May I view public comments submitted by others?

During the comment period, comments are placed in the Headquarters Docket and are available to the public on an "as received" basis. A complete set of comments will be available for viewing in the Regional Dockets approximately one week after the formal comment period closes.

All public comments, whether submitted electronically or in paper form, will be made available for public viewing in the electronic public Docket at [www.regulations.gov](http://www.regulations.gov) <http://www.epa.gov/edocket> as the EPA receives them and without change, unless the comment contains copyrighted material, Confidential Business Information (CBI) or other information whose disclosure is restricted by statute. Once in the public Dockets system, select "search," then key in the appropriate Docket ID number.

### J. May I submit comments regarding sites not currently proposed to the NPL?

In certain instances, interested parties have written to the EPA concerning sites that were not at that time proposed to the NPL. If those sites are later proposed to the NPL, parties should review their earlier concerns and, if still appropriate, resubmit those concerns for consideration during the formal comment period. Site-specific

correspondence received prior to the period of formal proposal and comment will not generally be included in the Docket.

**III. Contents of This Proposed Rule**

*A. Proposed Additions to the NPL*

In today’s proposed rule, the EPA is proposing to add seven sites to the General Superfund section and one site to the Federal Facilities section of the

NPL. All of the sites in this proposed rulemaking are being proposed based on HRS scores of 28.50 or above.

The sites are presented in the table below.

General Superfund section:

State	Site name	City/county
IN .....	Pike and Mulberry Streets PCE Plume .....	Martinsville.
KS .....	Former United Zinc & Associated Smelters .....	Iola.
MA .....	Creese & Cook Tannery (Former) .....	Danvers.
MA .....	Walton & Lonsbury Inc. ....	Attleboro.
NJ .....	Matlack, Inc. ....	Woolwich Township.
NJ .....	Riverside Industrial Park .....	Newark.
TN .....	Clinch River Corporation .....	Harriman.

Federal Facilities section:

State	Site name	City/county
UT .....	700 South 1600 East PCE Plume .....	Salt Lake City.

*B. Withdrawal of Site From Proposal to the NPL*

The EPA is withdrawing its previous proposal to add the Evergreen Manor Ground Water Contamination site in Winnebago County, Illinois to the NPL because remedial action has been completed. Affected residences have been connected to the public water supply; a county ordinance is in place which restricts the installation of private wells in the affected area; and contaminants of concern have remained below cleanup standards since 2006. The proposed rule can be found at 63 FR 40247 (July 28, 1998). Refer to the Docket ID Number EPA–HQ–SFUND–1998–0010 for supporting documentation regarding this action.

*C. Proposed Correction of Appendix B Footnote “A” Description*

The EPA is proposing to correct an error in the footnote “A” description in Appendix B to CFR Part 300. In Table 1, the incorrect portion of the footnote currently reads “(if scored, HRS score need not be ≤ 28.50)”. In Table 2, the incorrect portion of the footnote currently reads “(if scored, HRS score need not be > 28.50)”. The EPA is proposing to correct both footnote “A” descriptions by changing them to “A = Based on issuance of health advisory by Agency for Toxic Substances and Disease Registry (if scored, HRS score need not be greater than or equal to 28.50)”. Comments may be submitted to Docket number EPA–HQ–SFUND–2012–0606.

*D. Proposed Correction of State Location for Five Points PCE Plume Site*

The EPA is proposing to correct an error in Table 1 of Appendix B to CFR Part 300 in which the location of the Five Points PCE Plume site is incorrectly listed as being in state of Washington. The correct location of the Five Points PCE Plume is the state of Utah. Comments may be submitted to Docket number EPA–HQ–SFUND–2012–0607.

**IV. Statutory and Executive Order Reviews**

*A. Executive Order 12866: Regulatory Planning and Review*

1. What is Executive Order 12866?

Under Executive Order 12866 (58 FR 51735 (October 4, 1993)), the agency must determine whether a regulatory action is “significant” and therefore subject to Office of Management and Budget (OMB) review and the requirements of the Executive Order. The Order defines “significant regulatory action” as one that is likely to result in a rule that may: (1) Have an annual effect on the economy of \$100 million or more or adversely affect in a material way the economy, a sector of the economy, productivity, competition, jobs, the environment, public health or safety or state, local or tribal governments or communities; (2) create a serious inconsistency or otherwise interfere with an action taken or planned by another agency; (3) materially alter the budgetary impact of entitlements, grants, user fees or loan programs or the rights and obligations of recipients thereof; or (4) raise novel

legal or policy issues arising out of legal mandates, the President’s priorities or the principles set forth in the Executive Order.

2. Is this proposed rule subject to Executive Order 12866 review?

No. The listing of sites on the NPL does not impose any obligations on any entities. The listing does not set standards or a regulatory regime and imposes no liability or costs. Any liability under CERCLA exists irrespective of whether a site is listed. It has been determined that this action is not a “significant regulatory action” under the terms of Executive Order 12866 and is therefore not subject to OMB review.

*B. Paperwork Reduction Act*

1. What is the Paperwork Reduction Act?

According to the Paperwork Reduction Act (PRA), 44 U.S.C. 3501 *et seq.*, an agency may not conduct or sponsor, and a person is not required to respond to a collection of information that requires OMB approval under the PRA, unless it has been approved by OMB and displays a currently valid OMB control number. The OMB control numbers for the EPA’s regulations, after initial display in the preamble of the final rules, are listed in 40 CFR Part 9.

2. Does the Paperwork Reduction Act apply to this proposed rule?

This action does not impose an information collection burden under the provisions of the Paperwork Reduction Act, 44 U.S.C. 3501 *et seq.* The EPA has determined that the PRA does not apply

because this rule does not contain any information collection requirements that require approval of the OMB.

Burden means the total time, effort or financial resources expended by persons to generate, maintain, retain or disclose or provide information to or for a federal agency. This includes the time needed to review instructions; develop, acquire, install and utilize technology and systems for the purposes of collecting, validating and verifying information, processing and maintaining information and disclosing and providing information; adjust the existing ways to comply with any previously applicable instructions and requirements; train personnel to be able to respond to a collection of information; search data sources; complete and review the collection of information; and transmit or otherwise disclose the information.

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. The OMB control numbers for the EPA's regulations in 40 CFR are listed in 40 CFR part 9.

### C. Regulatory Flexibility Act

#### 1. What is the Regulatory Flexibility Act?

Pursuant to the Regulatory Flexibility Act (5 U.S.C. 601 *et seq.*, as amended by the Small Business Regulatory Enforcement Fairness Act (SBREFA) of 1996) 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 effect of the rule on small entities (i.e., small businesses, small organizations and small governmental 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. SBREFA amended the Regulatory Flexibility Act to require federal agencies to provide a statement of the factual basis for certifying that a rule will not have a significant economic impact on a substantial number of small entities.

#### 2. How has the EPA complied with the Regulatory Flexibility Act?

This proposed rule listing sites on the NPL, if promulgated, would not impose any obligations on any group, including small entities. This proposed rule, if promulgated, also would establish no standards or requirements that any small entity must meet, and would impose no direct costs on any small

entity. Whether an entity, small or otherwise, is liable for response costs for a release of hazardous substances depends on whether that entity is liable under CERCLA 107(a). Any such liability exists regardless of whether the site is listed on the NPL through this rulemaking. Thus, this proposed rule, if promulgated, would not impose any requirements on any small entities. For the foregoing reasons, I certify that this proposed rule, if promulgated, will not have a significant economic impact on a substantial number of small entities.

### D. Unfunded Mandates Reform Act

#### 1. What is the Unfunded Mandates Reform Act (UMRA)?

Title II of the Unfunded Mandates Reform Act of 1995 (UMRA), Public Law 104-4, establishes requirements for federal agencies to assess the effects of their regulatory actions on state, local and tribal governments and the private sector. Under section 202 of the UMRA, the EPA generally must prepare a written statement, including a cost-benefit analysis, for proposed and final rules with "federal mandates" that may result in expenditures by state, local and tribal governments, in the aggregate, or by the private sector, of \$100 million or more in any one year. Before the EPA promulgates a rule where a written statement is needed, section 205 of the UMRA generally requires the EPA to identify and consider a reasonable number of regulatory alternatives and adopt the least costly, most cost-effective, or least burdensome alternative that achieves the objectives of the rule. The provisions of section 205 do not apply when they are inconsistent with applicable law. Moreover, section 205 allows the EPA to adopt an alternative other than the least costly, most cost-effective or least burdensome alternative if the Administrator publishes with the final rule an explanation why that alternative was not adopted. Before the EPA establishes any regulatory requirements that may significantly or uniquely affect small governments, including tribal governments, it must have developed under section 203 of the UMRA a small government agency plan. The plan must provide for notifying potentially affected small governments, enabling officials of affected small governments to have meaningful and timely input in the development of EPA regulatory proposals with significant federal intergovernmental mandates and informing, educating and advising small governments on compliance with the regulatory requirements.

#### 2. Does UMRA apply to this proposed rule?

This proposed rule does not contain a federal mandate that may result in expenditures of \$100 million or more for state, local and tribal governments, in the aggregate, or the private sector in any one year. Proposing a site on the NPL does not itself impose any costs. Proposal does not mean that the EPA necessarily will undertake remedial action. Nor does proposal require any action by a private party or determine liability for response costs. Costs that arise out of site responses result from site-specific decisions regarding what actions to take, not directly from the act of proposing a site to be placed on the NPL. Thus, this rule is not subject to the requirements of section 202 and 205 of UMRA.

This rule is also not subject to the requirements of section 203 of UMRA because it contains no regulatory requirements that might significantly or uniquely affect small governments. As is mentioned above, site proposal does not impose any costs and would not require any action of a small government.

### E. Executive Order 13132: Federalism

#### 1. What is Executive Order 13132?

Executive Order 13132, entitled "Federalism" (64 FR 43255, August 10, 1999), requires the EPA to develop an accountable process to ensure "meaningful and timely input by state and local officials in the development of regulatory policies that have federalism implications." "Policies that have federalism implications" are defined in the Executive Order to include 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."

#### 2. Does Executive Order 13132 apply to this proposed rule?

This proposed rule does not have federalism implications. It will not 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, as specified in Executive Order 13132, because it does not contain any requirements applicable to states or other levels of government. Thus, the requirements of the Executive Order do not apply to this proposed rule.

The EPA believes, however, that this proposed rule may be of significant interest to state governments. In the

spirit of Executive Order 13132, and consistent with the EPA policy to promote communications between the EPA and state and local governments, the EPA therefore consulted with state officials and/or representatives of state governments early in the process of developing the rule to permit them to have meaningful and timely input into its development. All sites included in this proposed rule were referred to the EPA by states for listing. For all sites in this rule, the EPA received letters of support either from the governor or a state official who was delegated the authority by the governor to speak on their behalf regarding NPL listing decisions.

*F. Executive Order 13175: Consultation and Coordination With Indian Tribal Governments*

1. What is Executive Order 13175?

Executive Order 13175, entitled "Consultation and Coordination with Indian Tribal Governments" (65 FR 67249, November 6, 2000), requires the EPA to develop an accountable process to ensure "meaningful and timely input by tribal officials in the development of regulatory policies that have tribal implications." "Policies that have tribal implications" are defined in the Executive Order to include regulations that have "substantial direct effects on one or more Indian tribes, on the relationship between the federal government and the Indian tribes, or on the distribution of power and responsibilities between the federal government and Indian tribes."

2. Does Executive Order 13175 apply to this proposed rule?

This action does not have tribal implications, as specified in Executive Order 13175. Proposing a site to the NPL does not impose any costs on a tribe or require a tribe to take remedial action. Thus, Executive Order 13175 does not apply to this proposed rule.

*G. Executive Order 13045: Protection of Children From Environmental Health and Safety Risks*

1. What is Executive Order 13045?

Executive Order 13045: "Protection of Children from Environmental Health Risks and Safety Risks" (62 FR 19885, April 23, 1997) applies to any rule that: (1) Is determined to be "economically significant" as defined under Executive Order 12866, and (2) concerns an environmental health or safety risk that the EPA has reason to believe may have a disproportionate effect on children. If the regulatory action meets both criteria, the agency must evaluate the

environmental health or safety effects of the planned rule on children, and explain why the planned regulation is preferable to other potentially effective and reasonably feasible alternatives considered by the agency.

2. Does Executive Order 13045 apply to this proposed rule?

This proposed rule is not subject to Executive Order 13045 because it is not an economically significant rule as defined by Executive Order 12866, and because the agency does not have reason to believe the environmental health or safety risks addressed by this proposed rule present a disproportionate risk to children.

*H. Executive Order 13211: Actions That Significantly Affect Energy Supply, Distribution or Use*

1. What is Executive Order 13211?

Executive Order 13211, "Actions Concerning Regulations That Significantly Affect Energy Supply, Distribution or Use," (66 FR 28355, May 22, 2001) requires federal agencies to prepare a "Statement of Energy Effects" when undertaking certain regulatory actions. A Statement of Energy Effects describes the adverse effects of a "significant energy action" on energy supply, distribution and use, reasonable alternatives to the action and the expected effects of the alternatives on energy supply, distribution and use.

2. Does Executive Order 13211 apply to this proposed rule?

This action is not a "significant energy action" as defined in Executive Order 13211, because it is not likely to have a significant adverse effect on the supply, distribution or use of energy. Further, the agency has concluded that this rule is not likely to have any adverse energy impacts because proposing a site to the NPL does not require an entity to conduct any action that would require energy use, let alone that which would significantly affect energy supply, distribution or usage. Thus, Executive Order 13211 does not apply to this action.

*I. National Technology Transfer and Advancement Act*

1. What is the National Technology Transfer and Advancement Act?

Section 12(d) of the National Technology Transfer and Advancement Act of 1995 (NTTAA), Public Law 104-113, section 12(d) (15 U.S.C. 272 note), directs the EPA to use voluntary consensus standards in its regulatory activities unless to do so would be inconsistent with applicable law or

otherwise impractical. Voluntary consensus standards are technical standards (e.g., materials specifications, test methods, sampling procedures and business practices) that are developed or adopted by voluntary consensus standards bodies. The NTTAA directs the EPA to provide Congress, through OMB, explanations when the agency decides not to use available and applicable voluntary consensus standards.

2. Does the National Technology Transfer and Advancement Act apply to this proposed rule?

No. This proposed rulemaking does not involve technical standards. Therefore, the EPA did not consider the use of any voluntary consensus standards.

*J. Executive Order 12898: Federal Actions To Address Environmental Justice in Minority Populations and Low-Income Populations*

1. What is Executive Order 12898?

Executive Order (EO) 12898 (59 FR 7629, Feb. 16, 1994) establishes federal executive policy on environmental justice. Its main provision directs federal agencies, to the greatest extent practicable and permitted by law, to make environmental justice part of their mission by identifying and addressing, as appropriate, disproportionately high and adverse human health or environmental effects of their programs, policies and activities on minority populations and low-income populations in the United States.

2. Does Executive Order 12898 apply to this proposed rule?

The EPA has determined that this proposed rule will not have disproportionately high and adverse human health or environmental effects on minority or low-income populations because it does not affect the level of protection provided to human health or the environment. As this rule does not impose any enforceable duty upon state, tribal or local governments, this rule will neither increase nor decrease environmental protection.

**List of Subjects in 40 CFR Part 300**

Environmental protection, Air pollution control, Chemicals, Hazardous substances, Hazardous waste, Intergovernmental relations, Natural resources, Oil pollution, Penalties, Reporting and recordkeeping requirements, Superfund, Water pollution control, Water supply.

**Authority:** 33 U.S.C. 1321(c)(2); 42 U.S.C. 9601-9657; E.O. 12777, 56 FR 54757, 3 CFR,

1991 Comp., p. 351; E.O. 12580, 52 FR 2923, 3 CFR, 1987 Comp., p. 193.

Dated: September 10, 2012.

**Mathy Stanislaus,**

*Assistant Administrator, Office of Solid Waste and Emergency Response.*

[FR Doc. 2012-22837 Filed 9-17-12; 8:45 am]

BILLING CODE 6560-50-P

## DEPARTMENT OF COMMERCE

### National Oceanic and Atmospheric Administration

#### 50 CFR Parts 223 and 224

RIN 0648-XT37

#### Endangered and Threatened Species; Reopening of Public Comment Period on Proposed Endangered Status for the Hawaiian Insular False Killer Whale Distinct Population Segment

**AGENCY:** National Marine Fisheries Service (NMFS), National Oceanic and Atmospheric Administration (NOAA), Commerce.

**ACTION:** Reopening of comment period; notice of availability of new information.

**SUMMARY:** We, NMFS, announce the availability of new information that may identify a previously unrecognized population of false killer whales in the Northwestern Hawaiian Islands (NWHI). This new information may be relevant to the final determination of whether the Hawaiian insular false killer whale (*Pseudorca crassidens*) is a distinct population segment (DPS) that qualifies for listing under the Endangered Species Act of 1973, as amended (ESA). We intend to take this new information into consideration as we make our final listing determination on the Hawaiian insular false killer whale. We are reopening the public comment period on the November 17, 2010, proposed rule to list the Hawaiian insular false killer whale DPS as endangered throughout its range under the ESA. We are reopening the comment period for an additional 15 days for the limited purpose of allowing interested parties to comment on the new information listed below and whether it affects the determination that the insular false killer whale is a DPS that is eligible for ESA listing. Please note that comments previously submitted should not be resubmitted.

**DATES:** We will accept public comments on the new information until October 3, 2012.

**ADDRESSES:** You may submit comments identified by NOAA-NMFS-2009-0272 by any one of the following methods:

- *Electronic Submissions:* Submit all electronic public comments via the Federal eRulemaking Portal: <http://www.regulations.gov>. Follow the instructions for submitting comments.

- *Mail or hand-delivery:* Submit written comments to Regulatory Branch Chief, Protected Resources Division, National Marine Fisheries Service, Pacific Islands Regional Office, 1601 Kapiolani Blvd., Suite 1110, Honolulu, HI, 96814, Attn: Hawaiian insular false killer whale proposed listing.

*Instructions:* All comments received are a part of the public record and will generally be posted to <http://www.regulations.gov> without change. Comments will be posted for public viewing after the comment period has closed. All Personal Identifying 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. We will accept anonymous comments (enter "N/A" in the required fields if you wish to remain anonymous). Attachments to electronic comments will be accepted in Microsoft Word, Excel, WordPerfect, or Adobe PDF file formats only. The petition, status review report, and other reference materials regarding the proposed listing determination can be obtained via the NMFS Pacific Islands Regional Office Web site: [http://www.fpir.noaa.gov/PRD/prd\\_false\\_killer\\_whale.html](http://www.fpir.noaa.gov/PRD/prd_false_killer_whale.html) or by submitting a request to the Regulatory Branch Chief, Protected Resources Division, National Marine Fisheries Service, Pacific Islands Regional Office, 1601 Kapiolani Blvd., Suite 1110, Honolulu, HI 96814, Attn: Hawaiian insular false killer whale proposed listing.

**FOR FURTHER INFORMATION CONTACT:** Krista Graham, NMFS, Pacific Islands Regional Office, 808-944-2238; Lance Smith, NMFS, Pacific Islands Regional Office, 808-944-2258; or Dwayne Meadows, NMFS, Office of Protected Resources, Silver Spring, MD, 301-427-8403.

**SUPPLEMENTARY INFORMATION:** On November 17, 2010 (75 FR 70169), we published a proposed rule to list the Hawaiian insular false killer whale DPS (*Pseudorca crassidens*) as endangered throughout its range under the ESA. The document announced a 90-day public comment period on the proposed rule, which closed on February 15, 2011. We also held a public hearing during the proposed rule's public comment period,

as announced in the November 17, 2011, **Federal Register** (75 FR 70169).

NMFS has received new information about a previously unrecognized NWHI population of false killer whales, as well as updated satellite tagging information of the insular population. In August 2012, the false killer whale biological review team was reconvened to consider this new information. All of this information may be relevant to the final determination of whether the Hawaiian insular false killer whale is a DPS that qualifies for listing as endangered under the ESA. These reports and journal articles are:

(1) Preliminary Results from Photo-identification and Satellite-tagging of False Killer Whales off the Island of Kauai, by Robin Baird (2012).

(2) Photo-identification and Satellite Tagging of False Killer Whales Provides Evidence of an Island-associated Population in the Northwestern Hawaiian Islands, by Robin Baird *et al.* (2012).

(3) Range and Primary Habitats of Hawaiian Insular False Killer Whales: Informing Determination of Critical Habitat, by Robin Baird *et al.* (2012).

(4) Line-transect Abundance Estimates of False Killer Whales in the Pelagic Region of the Hawaiian Exclusive Economic Zone and in the Insular Waters of the Northwestern Hawaiian Islands, by Amanda Bradford *et al.* (2012).

(5) Genetic Differentiation of Hawaii Insular False Killer Whales: Analyses Updated with New Samples from the Northwest Hawaiian Islands, by Susan Chivers *et al.* (2011).

(6) Population Structure and Mechanisms of Gene Flow within Island-associated False Killer Whales around the Hawaiian Archipelago, by Karen Martien *et al.* (2011).

We are notifying the public of the availability of these reports and our intent to consider them in making our final listing determination. We also are reopening the comment period for 15 days to provide the public the opportunity to provide comments or information on this new information. We are asking for public comments on this new information and a review of the extent to which they add to the knowledge base for making the final decision. This comment period is open only for comments on the documents listed above as they relate to the DPS and listing determination of the Hawaiian insular false killer whale. Comments submitted during the prior comment period have been incorporated into the public record and will be fully considered during preparation of our final determination. The issuance of a

final decision is currently the subject of litigation in *Natural Resources Defense Council v. Bryson et al.*, Case No. 12-00826 (D.D.C. 2012).

#### **Obtaining Copies of the New Information**

You may obtain copies of any of the documents:

- By mail from Regulatory Branch Chief, Protected Resources Division, National Marine Fisheries Service, Pacific Islands Regional Office, 1601 Kapiolani Blvd., Suite 1110, Honolulu, HI, 96814, Attn: Hawaiian insular false killer whale proposed listing; or

- By visiting the NMFS Pacific Islands Regional Office Web site at [http://www.fpir.noaa.gov/PRD/prd\\_false\\_killer\\_whale.html](http://www.fpir.noaa.gov/PRD/prd_false_killer_whale.html).

Copies of the documents are also available for public inspection, by appointment during normal business hours, at the NMFS Pacific Islands Regional Office (see **ADDRESSES**).

#### **Public Comments Solicited**

Comments and information submitted during the initial comment period on the November 17, 2010 (75 FR 70169), proposed rule should not be resubmitted, as this comment period is

open only for comments on the reports listed above. Our final determination of whether the Hawaiian insular false killer whale DPS qualifies as threatened or endangered under the ESA will take into consideration all comments and information we receive during both comment periods.

**Authority:** 16 U.S.C. 1531 *et seq.*

Dated: September 12, 2012.

**Helen M. Golde,**

*Acting Director, Office of Protected Resources,  
National Marine Fisheries Service.*

[FR Doc. 2012-23001 Filed 9-17-12; 8:45 am]

**BILLING CODE 3510-22-P**

# Notices

Federal Register

Vol. 77, No. 181

Tuesday, September 18, 2012

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.

## DEPARTMENT OF AGRICULTURE

### Forest Service

#### Lake Tahoe Basin Federal Advisory Committee (LTBFAC)

**AGENCY:** Forest Service, USDA.

**ACTION:** Notice of meeting.

**SUMMARY:** The Lake Tahoe Basin Federal Advisory Committee will meet in Incline Village, Nevada. This Committee, established by the Secretary of Agriculture on December 15, 1998 (64 FR 2876), is chartered to provide advice to the Secretary on implementing the terms of the Federal Interagency Partnership on the Lake Tahoe Region and other matters raised by the Secretary. The purpose of the meeting is to present updated information on Aquatic Invasive Species, fuels treatments, and biomass opportunities in the Lake Tahoe Basin. The meeting is open to the public.

**DATES:** The meeting will be held October 11, 2012, beginning at 9 a.m. and ending at 12 p.m.

**ADDRESSES:** The meeting will be held at the Tahoe Environmental Research Center, 291 Country Club Road, Incline Village, NV 89451. The public may access the meeting via teleconference by calling toll-free 1-888-858-2144, access code 4849484. Written comments may be submitted as described under

**SUPPLEMENTARY INFORMATION.** All comments, including names and addresses when provided, are placed in the record and are available for public inspection and copying. The public may inspect comments received at 35 College Drive, South Lake Tahoe, CA 96150. Please call ahead to 530-543-2773 to facilitate entry into the building to view comments.

**FOR FURTHER INFORMATION CONTACT:** Arla Hains, Lake Tahoe Basin Management Unit, Forest Service, 35 College Drive, South Lake Tahoe, CA 96150, (530) 543-2773, (530) 543-0956 (TTY),

*ashains@fs.fed.us*. Individuals who use telecommunication devices for the deaf (TDD) may call the Federal Information Relay Service (FIRS) at 1-800-877-8339 between 8 a.m. and 8 p.m., Eastern Standard Time, Monday through Friday.

**SUPPLEMENTARY INFORMATION:** The following business will be conducted: The LTBFAC will receive updated information on Aquatic Invasive Species, fuels treatments, and biomass opportunities in the Lake Tahoe Basin. The full agenda may be previewed at <http://www.fs.usda.gov/goto/ltbmu/LTFAC>. Anyone who would like to bring related matters to the attention of the committee may file written statements with the committee staff before the meeting. The agenda will include time for people to make oral statements of three minutes or less. Individuals wishing to make an oral statement should request in writing by October 4, 2012 to be scheduled on the agenda. Written comments must be sent to 35 College Drive, South Lake Tahoe, CA 96150, or by email to *ashains@fs.fed.us*, or via facsimile to (530) 543-2937 by October 4, 2012. A summary of the meeting will be posted at <http://www.fs.usda.gov/goto/ltbmu/LTFAC> where the minutes will be posted within 21 days of the meeting.

**Meeting Accommodations:** If you require sign language interpreting, assistive listening devices or other reasonable accommodation please request this in advance of the meeting by contacting the person listed in the section titled **FOR FURTHER INFORMATION CONTACT**. All reasonable accommodation requests are managed on a case by case basis.

Dated: September 12, 2012.

**Jeff Marsolais,**

*Deputy Forest Supervisor.*

[FR Doc. 2012-22928 Filed 9-17-12; 8:45 am]

**BILLING CODE 3410-11-P**

## DEPARTMENT OF AGRICULTURE

### Forest Service

#### Lake County Resource Advisory Committee

**AGENCY:** Forest Service, USDA.

**ACTION:** Notice of Meeting.

**SUMMARY:** The Lake County Resource Advisory Committee (RAC) will hold a meeting.

**DATES:** The meeting will be held on September 20, 2012 from 3 p.m. to 5 p.m.

**ADDRESSES:** The meeting will be held at the Lake County Board of Supervisor's Chambers at 255 North Forbes Street, Lakeport or Conference Room C.

**FOR FURTHER INFORMATION CONTACT:**

Debbie McIntosh, Committee Coordinator, USDA, Mendocino National Forest, Upper Lake Ranger District, 10025 Elk Mountain Road, Upper Lake, CA 95485.

(707) 275-1407; EMAIL *dmcintosh@fs.fed.us*.

**SUPPLEMENTARY INFORMATION:** Agenda items to be covered include:

(1) Roll Call/Establish Quorum; (2) Review Minutes from the April 14, 2012 Meeting; (3) Past Project Review and Discussion; (4) Discuss Project Cost Accounting USFS/County of Lake; (5) Public Comment Period; Public input opportunity will be provided and individuals will have the opportunity to address the Committee at that time. (6) Adjourn.

Dated: September 4, 2012.

**Lee D. Johnson,**

*Designated Federal Officer.*

[FR Doc. 2012-22548 Filed 9-17-12; 8:45 am]

**BILLING CODE 3410-11-M**

## 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:** Bottlenose Dolphin

Conservation Outreach Survey.

**OMB Control Number:** 0648-0594.

**Form Number(s):** NA.

**Type of Request:** Regular submission (revision of a current information collection).

**Number of Respondents:** 156.

**Average Hours Per Response:** 30 minutes.

**Burden Hours:** 79.

**Needs and Uses:** This request is for a revision of a current information collection.

The objective of these surveys is to assess the level of awareness on issues related to regulations preventing feeding/harassment of wild bottlenose dolphins, which are protected under the Marine Mammal Protection Act. In particular, the surveys are designed to determine what commercial businesses and the general public know about specific regulations prohibiting feeding and harassment of bottlenose dolphins, and how they gained their knowledge and/or perceptions on the topic. The first survey was conducted in Panama City, Florida, where numerous incidences of dolphin harassment and feeding are continually documented. Revision: The intent is to use this survey in one to two other geographic areas of the southeast region that are also "hot-spots" for dolphin harassment and feeding activities to gain a similar understanding and ensure outreach messages are appropriate for intended audiences.

National Marine Fisheries Service (NMFS) will request information from local residents, tourists, and commercial businesses through a one-time survey in the geographic location(s) identified in the revision supporting statement. This information, upon receipt, will be used to develop effective and better-targeted outreach efforts in order to enhance bottlenose dolphin conservation in the southeast United States.

*Affected Public:* Business or other for-profit organizations; individuals or households.

*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 13, 2012.

**Gwellnar Banks,**

*Management Analyst, Office of the Chief Information Officer.*

[FR Doc. 2012-22944 Filed 9-17-12; 8:45 am]

**BILLING CODE 3510-22-P**

**DEPARTMENT OF COMMERCE**

**National Oceanic and Atmospheric Administration**

**RIN 0648-XC169**

**Magnuson-Stevens Act Provisions; General Provisions for Domestic Fisheries; Application for Exempted Fishing Permit**

**AGENCY:** National Marine Fisheries Service (NMFS), National Oceanic and Atmospheric Administration (NOAA), Commerce.

**ACTION:** Notice; request for comments.

**SUMMARY:** The Assistant Regional Administrator for Sustainable Fisheries, Northeast Region, NMFS (Assistant Regional Administrator), has made a preliminary determination that an Exempted Fishing Permit (EFP) application submitted by the Nature Conservancy contains all of the required information and warrants further consideration. The EFP would exempt participating vessels from minimum fish size and possession limits of Atlantic halibut.

Regulations under the Magnuson-Stevens Fishery Conservation and Management Act require publication of this notification to provide interested parties the opportunity to comment on EFP applications.

**DATES:** Comments must be received on or before October 3, 2012.

**ADDRESSES:** You may submit written comments by any of the following methods:

- *Email:* [nero.efp@noaa.gov](mailto:nero.efp@noaa.gov). Include in the subject line "Comments on Nature Conservancy EFP."
- *Mail:* John K. Bullard, Regional Administrator, NMFS, NE Regional Office, 55 Great Republic Drive, Gloucester, MA 01930. Mark the outside of the envelope "Comments on Nature Conservancy EFP."
- *Fax:* (978) 281-9135.

**FOR FURTHER INFORMATION CONTACT:**

Brett Alger, Fisheries Management Specialist, 978-675-2153, [Brett.Alger@noaa.gov](mailto:Brett.Alger@noaa.gov).

**SUPPLEMENTARY INFORMATION:** The Nature Conservancy submitted a complete application for an EFP on August 6, 2012, to enable data collection activities that the regulations on commercial fishing would otherwise restrict. The EFP would exempt four federally permitted commercial fishing vessels from minimum halibut size and possession limits (41 inches and 1 halibut per trip) for the purpose of tagging and releasing Atlantic halibut during commercial fishing operations

while operating under a project managed by the Nature Conservancy and the Cape Cod Commercial Hook Fishermen's Association. The co-managed project is attempting to reduce halibut assessment uncertainties such as catchability in fishery-independent surveys, stock structure, and regional growth rates.

Fishing operations would occur within the Gulf of Maine and Georges Bank Regulated Mesh Areas. Vessels would use approximately 900 hooks per set, make an average trip of 6 to 12 sets per day, with an average soak time of 3 to 4 hr per set. Each vessel would record halibut size, time and location of capture, whether it was retained or released, gear used, depth fished, bait type, and condition upon release. Fish would be tagged with a wire "spaghetti" tag, each marked with a unique number and recorded; all participants would complete a training program in the tagging and release of halibut.

Participating vessels would expect to encounter a mix of groundfish species, skates, dogfish, and other non-commercial fish species as they target primarily haddock and cod. Any undersized Atlantic halibut caught would be tagged and released. In addition, all other undersized and non-commercial fish would be handled per normal fishing operations and returned to sea as quickly as possible. There would be no landing of non-compliant fish on board the vessels. All catch of stocks allocated to Sectors by vessels on a Sector trip would be deducted from the Sector's Annual Catch Entitlement for each Northeast multispecies stock, including halibut. Because the current commercial catch rates of halibut are relatively low, tagging would be done opportunistically, and there is no target number of halibut to tag for the project. The participating vessels would be required to comply with all other applicable requirements and restrictions specified at 50 CFR part 648, unless specifically exempted in this EFP.

If approved, the applicant may request minor modifications and extensions to the EFP throughout the year. EFP modifications and extensions may be granted without further notice if they are deemed essential to facilitate completion of the proposed research and have minimal impact that do not change the scope or impact of the initially approved EFP request. Any fishing activity conducted outside the scope of the exempted fishing activity would be prohibited.

**Authority:** 16 U.S.C. 1801 *et seq.*

Dated: September 13, 2012.

**Lindsay Fullenkamp,**

*Acting Deputy Director, Office of Sustainable Fisheries, National Marine Fisheries Service.*

[FR Doc. 2012-23003 Filed 9-17-12; 8:45 am]

**BILLING CODE 3510-22-P**

**DEPARTMENT OF COMMERCE**

**National Oceanic and Atmospheric Administration**

**RIN 0648-XC243**

**Pacific Fishery Management Council; Public Meeting**

**AGENCY:** National Marine Fisheries Service (NMFS), National Oceanic and Atmospheric Administration (NOAA), Commerce.

**ACTION:** Notice of a public meeting.

**SUMMARY:** The Pacific Fishery Management Council's (Pacific Council) Groundfish Management Team (GMT) will hold a working meeting, which is open to the public.

**DATES:** The GMT meeting will be held Tuesday, October 2, 2012 from 1 p.m. until business for the day is completed. The GMT meeting will reconvene Wednesday, October 3 through Thursday, October 4 from 8:30 a.m. until business for each day has been completed.

**ADDRESSES:** The meeting will be held at the Pacific Council Office, Large Conference Room, 7700 NE Ambassador Place, Suite 101, Portland, OR 97220-1384; telephone: (503) 820-2280.

*Council address:* Pacific Fishery Management Council, 7700 NE Ambassador Place, Suite 101, Portland, OR 97220-1384.

**FOR FURTHER INFORMATION CONTACT:** Mr. John DeVore, Staff Officer, Pacific Council; telephone: (503) 820-2280.

**SUPPLEMENTARY INFORMATION:** The primary purpose of the GMT working meeting is to develop recommendations on how to best integrate the use of descending devices to recompress rockfish encountered in west coast recreational fisheries. Further, the GMT will discuss potential survival estimates for cowcod and yelloweye rockfish that are descended. The GMT may also address other assignments relating to groundfish management. No management actions will be decided by the GMT. The GMT's task will be to develop recommendations for consideration by the Council at its November meeting in Orange County, CA.

Although non-emergency issues not contained in the meeting agenda may

come before the GMT for discussion, those issues may not be the subject of formal GMT action during this meeting. GMT action will be restricted to those issues specifically listed in this notice and any issues arising after publication of this notice that require emergency action under section 305(c) of the Magnuson-Stevens Fishery Conservation and Management Act, provided the public has been notified of the GMT's intent to take final action to address the emergency.

**Special Accommodations**

This meeting is physically accessible to people with disabilities. Requests for sign language interpretation or other auxiliary aids should be directed to Mr. Kris Kleinschmidt at (503) 820-2280 at least 5 days prior to the meeting date.

Dated: September 13, 2012.

**William D. Chappell,**

*Acting Deputy Director, Office of Sustainable Fisheries, National Marine Fisheries Service.*

[FR Doc. 2012-23002 Filed 9-17-12; 8:45 am]

**BILLING CODE 3510-22-P**

**DEPARTMENT OF COMMERCE**

**National Oceanic and Atmospheric Administration**

**Notice of Public Meeting**

**AGENCY:** National Oceanic and Atmospheric Administration, Commerce.

**ACTION:** Notice of public meeting.

**SUMMARY:** The Advisory Committee on Commercial Remote Sensing (ACCRES) will meet September 24, 2012.

**DATES:** The meeting is scheduled as follows: September 24, 2012, 1 p.m.-4 p.m. The meeting will be open to the public.

**ADDRESSES:** The meeting will be held in the Building SSMC-4 auditorium of the National Oceanic and Atmospheric Administration (NOAA), Silver Spring, MD 20910. The NOAA auditorium is located at 1301 East West Highway (SSMC-4 1301 auditorium on the right), Silver Spring, Maryland 20910.

**FOR FURTHER INFORMATION CONTACT:** Tahara Dawkins, NOAA/NESDIS/CRSRA, 1335 East West Highway, Room 8260, Silver Spring, Maryland 20910; telephone (301) 713-3385, fax (301) 713-1249, email [Tahara.Dawkins@noaa.gov](mailto:Tahara.Dawkins@noaa.gov), or Richard James at telephone (301) 713-0572, email [Richard.James@noaa.gov](mailto:Richard.James@noaa.gov).

**SUPPLEMENTARY INFORMATION:** As required by section 10(a) (2) of the Federal Advisory Committee Act, 5

U.S.C. App. (1982), notice is hereby given of the meeting of ACCRES. ACCRES was established by the Secretary of Commerce (Secretary) on May 21, 2002, to advise the Secretary through the Under Secretary of Commerce for Oceans and Atmosphere on long-range and short-range strategies for the licensing of commercial remote sensing satellite systems.

**Matters To Be Considered**

The meeting will be open to the public pursuant to Section 10(d) of the Federal Advisory Committee Act, 5 U.S.C. App. 2, as amended by Section 5(c) of the Government in Sunshine Act, Public Law 94-409 and in accordance with Section 552b(c)(1) of Title 5, United States Code.

All other portions of the meeting will be open to the public. The Committee will receive a presentation on updates of NOAA's licensing activities. The committee will also receive public comments on its activities.

**Special Accommodations**

These meetings are physically accessible to people with disabilities. Requests for special accommodations may be directed to ACCRES, NOAA/NESDIS/CRSRA, 1335 East West Highway, Room 8260, Silver Spring, Maryland 20910.

*Additional Information and Public Comments*

Any member of the public wishing further information concerning the meeting or who wishes to submit oral or written comments should contact Tahara Dawkins, Designated Federal Officer for ACCRES, NOAA/NESDIS/CRSRA, 1335 East West Highway, Room 8260, Silver Spring, Maryland 20910. Copies of the draft meeting agenda can be obtained from Richard James at (301) 713-0572, fax (301) 713-1249, or email [richard.james@noaa.gov](mailto:richard.james@noaa.gov).

The ACCRES expects that public statements presented at its meetings will not be repetitive of previously-submitted oral or written statements. In general, each individual or group making an oral presentation may be limited to a total time of five minutes. Written comments (please provide at least 15 copies) received in the NOAA/NESDIS/CRSRA on or before September 19, 2012, will be provided to Committee members in advance of the meeting. Comments received too close to the meeting date will normally be provided to Committee members at the meeting.

Dated: September 6, 2012.

**Mary E. Kicza,**

*Assistant Administrator for Satellite and Information Services.*

[FR Doc. 2012-22383 Filed 9-17-12; 8:45 am]

**BILLING CODE 3510-HR-P**

## DEPARTMENT OF COMMERCE

### National Oceanic and Atmospheric Administration

**RIN 0648-XB144**

#### Endangered Species; File No. 13330

**AGENCY:** National Marine Fisheries Service (NMFS), National Oceanic and Atmospheric Administration (NOAA), Commerce.

**ACTION:** Notice; issuance of permit modification.

**SUMMARY:** Notice is hereby given that NMFS Southeast Fisheries Center (SEFSC) (hereinafter "Permit Holder"); 75 Virginia Beach Drive, Miami, FL 33149 [Responsible Party: Bonnie Ponwith, Ph.D.], has been issued a modification to scientific research Permit No. 13330-01.

**ADDRESSES:** The modification and related documents are available for review upon written request or by appointment in the following offices:

Permits and Conservation Division, Office of Protected Resources, NMFS, 1315 East-West Highway, Room 13705, Silver Spring, MD 20910; phone (301) 427-8401; fax (301) 713-0376; and Southeast Region, NMFS, 263 13th Avenue South, St. Petersburg, FL 33701; phone (727) 824-5312; fax (727) 824-5309.

**FOR FURTHER INFORMATION CONTACT:** Colette Cairns or Malcolm Mohead, (301) 427-8401.

**SUPPLEMENTARY INFORMATION:** On April 2, 2012, notice was published in the *Federal Register* (77 FR 19648) that a modification of Permit No. 13330-01, issued March 17, 2011, (76 FR 14650), had been requested by the above-named organization. The requested modification has been granted under the authority of the Endangered Species Act of 1973, as amended (ESA; 16 U.S.C. 1531 *et seq.*) and the regulations governing the taking, importing, and exporting of endangered and threatened species (50 CFR 222-226).

Permit No. 13330-01 authorizes the permit holder to: Capture 45 smalltooth sawfish (15 from each of three life stages) annually by longline, gillnet, seine net, drum (set) lines, or rod and reel throughout Florida's coastal waters, primarily from Naples to Key West.

Sawfish are measured, tagged, sampled, and released. Current tagging methods include rototags (fin tags), dart tags, umbrella dart tags, Passive Integrated Transponder tags, acoustic transmitters, and Pop-Up Archival Transmitting tags. Tissue and blood samples are also taken. The permit holder is now authorized for an increase in take numbers to 50 individuals from the neonate life stage, and 20 each from the juvenile and adult life stages for a total of 90 smalltooth sawfish annually. All research objectives, capture methods, action areas, and activities remain unchanged. The modification is valid until the permit expires on October 31, 2013.

Issuance of this modification, as required by the ESA was based on a finding that such permit (1) was applied for in good faith, (2) will not operate to the disadvantage of such endangered or threatened species, and (3) is consistent with the purposes and policies set forth in section 2 of the ESA.

Dated: September 12, 2012.

**Tammy C. Adams,**

*Acting Chief, Permits and Conservation Division, Office of Protected Resources, National Marine Fisheries Service.*

[FR Doc. 2012-22998 Filed 9-17-12; 8:45 am]

**BILLING CODE 3510-22-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, October 26, 2012 from 9 a.m. to approximately 4:30 a.m.

**ADDRESSES:** The Advisory Board will be held in Room 115 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](mailto: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 in Fiscal Year 2012 and strategic direction in Fiscal Year 2012-2013. The afternoon session is expected to focus on project plans in Fiscal Year 2013. A final agenda and summary of the proceedings will be posted at 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](mailto:bookstore@ntis.gov), not later than October 10, 2012.

Dated: September 12, 2012.

**Bruce Borzino,**

*Director.*

[FR Doc. 2012-22942 Filed 9-17-12; 8:45 am]

**BILLING CODE 3510-04-P**

## DEPARTMENT OF COMMERCE

### United States Patent and Trademark Office

#### Submission for OMB Review; Comment Request

The United States Patent and Trademark Office (USPTO) 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:* United States Patent and Trademark Office (USPTO).

*Title:* Madrid Protocol.

*Form Number(s):* PTO-1663, PTO-1683, PTO-2131, PTO-2132, PTO-2133.

*Agency Approval Number:* 0651-0051.

*Type of Request:* Revision of a currently approved collection.

*Burden:* 1,711 hours annually.

*Number of Respondents:* 6,620 responses per year.

*Avg. Hours per Response:* The USPTO estimates that it will take the public approximately 15 minutes to one hour and 15 minutes (0.25 to 1.25 hours) to

complete the information in this collection, including the time to gather the necessary information, prepare the forms or documents, and submit the completed request to the USPTO.

*Needs and Uses:* The Protocol Relating to the Madrid Agreement Concerning the International Registration of Marks ("Madrid Protocol") is an international treaty that allows a trademark owner to seek registration in any of the participating countries by filing a single international application. An international application submitted through the USPTO must be based on an active U.S. application or registration and must be filed by the owner of the application or registration. The public uses this collection to submit applications for international registration and related requests to the USPTO under the Madrid Protocol.

*Affected Public:* Individuals or households; businesses or other for-profits; and not-for-profit institutions.

*Frequency:* On occasion.

*Respondent's Obligation:* Required to obtain or retain benefits.

*OMB Desk Officer:* Nicholas A. Fraser, email:

*Nicholas\_A.\_Fraser@omb.eop.gov.*

Once submitted, the request will be publicly available in electronic format through the Information Collection Review page at *www.reginfo.gov*.

Paper copies can be obtained by:

- *Email:*

*InformationCollection@uspto.gov.*

Include "0651-0051 copy request" in the subject line of the message.

- *Mail:* Susan K. Fawcett, Records Officer, Office of the Chief Information Officer, United States Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450.

Written comments and recommendations for the proposed information collection should be sent on or before October 18, 2012 to Nicholas A. Fraser, OMB Desk Officer, via email to *Nicholas\_A.\_Fraser@omb.eop.gov*, or by fax to 202-395-5167, marked to the attention of Nicholas A. Fraser.

Dated: September 12, 2012.

**Susan K. Fawcett,**

*Records Officer, USPTO, Office of the Chief Information Officer.*

[FR Doc. 2012-22854 Filed 9-17-12; 8:45 am]

**BILLING CODE 3510-16-P**

## BUREAU OF CONSUMER FINANCIAL PROTECTION

### Agency Information Collection Activities: Submission for OMB Review; Comment Request

**AGENCY:** Bureau of Consumer Financial Protection.

**ACTION:** Notice and request for comment.

**SUMMARY:** The Bureau of Consumer Financial Protection (Bureau), 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 a proposed information collection, as required by the Paperwork Reduction Act of 1995. The Bureau is soliciting comments concerning its proposed information collection titled, "Pentagon Federal Credit Card Agreement Simplification Survey." The proposed collection has been submitted to the Office of Management and Budget for review and approval. A copy of the submission, including copies of the proposed collection and supporting documentation, may be obtained by contacting the agency contact listed below.

**DATES:** Written comments are encouraged and must be received on or before October 18, 2012 to be assured of consideration.

**ADDRESSES:** You may submit comments, identified by agency name and collection title, "Pentagon Federal Credit Card Agreement Simplification Survey," to:

- *Agency:* Consumer Financial Protection Bureau (Attention: PRA Office), 1700 G Street NW., Washington, DC 20552; (202) 435-9011; and *CFPB\_Public\_PRA@cfpb.gov.*

- *OMB:* Shagufta Ahmed, Office of Management and Budget, New Executive Office Building, Room 10235, Washington, DC 20503; (202) 395-7873.

**FOR FURTHER INFORMATION CONTACT:**

Requests for additional information should be directed to Consumer Financial Protection Bureau (Attention: PRA Office), 1700 G Street NW., Washington, DC 20552, (202) 435-9011, or through the internet at *CFPB\_Public\_PRA@cfpb.gov*.

**SUPPLEMENTARY INFORMATION: Title:**

Pentagon Federal Credit Card Agreement Simplification Survey.

*OMB Control Number:* 3170-XXXX.

*Type of Review:* New.

*Abstract:* The Bureau of Consumer Financial Protection (Bureau) respectfully requests emergency processing and approval of the

collection of information discussed below because the proposed information collection is essential to the mission of the agency and the use of normal clearance procedures is reasonably likely to prevent collection. The Bureau of Consumer Financial Protection (Bureau) is requesting emergency approval from OMB to conduct qualitative research related to a short-form credit card agreement Pentagon Federal Credit Union (Pentagon Federal) is piloting this fall. The research is designed to result in recommendations for development of and revisions to the Bureau's approach to improving the readability of credit card agreements. The research activities will be conducted by phone surveys of consumers who will have received the agreements from Pentagon Federal. The feasibility and value of this approach has been demonstrated by other agencies in developing disclosures and other forms. The survey will provide illustrative qualitative information only, and does not constitute a quantitative information collection. Survey results will not be used to make statistically-valid assessments for the purposes of extrapolating to the broader US population. The planned research activities need to be conducted during calendar Q4 2012 and calendar Q1 2013, as Pentagon Federal will send the short-form credit card agreement to new credit card holders in calendar Q4 2012 and Q1 2013. As the survey includes questions that ask a consumer to recall their impression of the cardholder agreement, the survey must be administered shortly after initial receipt of the agreement, when those impressions remain fresh. The Bureau therefore requests emergency processing and approval of the information collection request as the normal clearance process would disrupt the collection.

*Affected Public:* Individuals.

*Estimated Number of Responses:* 500 affirmative responses, 500 negative responses.

*Estimated Time per Respondent:* 15 minutes per affirmative response, 1 minute per negative response.

*Estimated Total Annual Burden Hours:* 133.3 total burden hours.

An agency may not conduct or sponsor, and a respondent is not required to respond to, an information collection unless the information collection displays a currently valid OMB control number.

Comments are being solicited on: (a) Whether the collection of information is necessary for the proper performance of the functions of the Bureau, including whether the information shall have

practical utility; (b) the accuracy of the Bureau's estimate of the burden of the collection of information, including the validity of the methodology and the 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 respondents, including through the use of automated collection techniques or other forms of information technology.

Dated: September 13, 2012.

**Chris Willey,**

*Chief Information Officer, Bureau of Consumer Financial Protection.*

[FR Doc. 2012-22990 Filed 9-17-12; 8:45 am]

**BILLING CODE 4810-AM-P**

## DEPARTMENT OF DEFENSE

### Office of the Secretary

[Docket ID DoD-2012-OS-0095]

### Privacy Act of 1974; System of Records

**AGENCY:** Defense Threat Reduction Agency, DoD.

**ACTION:** Notice to amend three System of Records.

**SUMMARY:** The Defense Threat Reduction Agency is amending three systems of records notices in its existing inventory of record systems subject to the Privacy Act of 1974 (5 U.S.C. 552a), as amended.

**DATES:** This proposed action will be effective on October 19, 2012 unless comments are received which result in a contrary determination. Comments will be accepted on or before October 18, 2012.

**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. Juanita Gaines, Freedom of Information

and Privacy Office, Defense Threat Reduction Agency, 8725 John J. Kingman Road, Fort Belvoir, VA 22060-6201 or by phone at (703) 767-1771.

**SUPPLEMENTARY INFORMATION:** The Defense Threat Reduction Agency systems of records notices 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**.

The proposed changes to the records systems being amended are set forth below. The proposed amendment is not within the purview of subsection (r) of the Privacy Act of 1974 (5 U.S.C. 552a), as amended, which requires the submission of a new or altered system report.

Dated: September 12, 2012.

**Aaron Siegel,**

*Alternate OSD Federal Register Liaison Officer, Department of Defense.*

### HDTRA 011

#### SYSTEM NAME:

Inspector General Investigation Files (August 3, 2005, 70 FR 44571)

#### CHANGES:

\* \* \* \* \*

#### SYSTEM MANAGER(S) AND ADDRESS:

Delete entry and replace with "Chief, Freedom of Information and Privacy Office, Defense Threat Reduction Agency, 8725 John J. Kingman Road, Fort Belvoir, VA 22060-6201."

#### NOTIFICATION PROCEDURE:

Delete entry and replace with "Individuals seeking to determine whether information about themselves is contained in this system of records should address written inquiries to the Chief, Freedom of Information and Privacy Office, Defense Threat Reduction Agency, 8725 John J. Kingman Road, Fort Belvoir, VA 22060-6201.

Individuals should provide their name, address, and proof of identity (photo identification for in person access or an unsworn declaration in accordance with 28 U.S.C. 1746 or a notarized statement may be required for identity verification)."

#### RECORD ACCESS PROCEDURES:

Delete entry and replace with "Individuals seeking access to information about themselves contained in this system of records should address written inquiries to the Chief, Freedom of Information and Privacy Office, Defense Threat Reduction Agency, 8725 John J. Kingman Road, Fort Belvoir, VA 22060-6201.

Individuals should provide their name, address, and proof of identity (photo identification for in person access or an unsworn declaration in accordance with 28 U.S.C. 1746 or a notarized statement may be required for identity verification)."

#### CONTESTING RECORD PROCEDURES:

Delete entry and replace with "The DTRA rules for accessing records and for contesting contents and appealing initial agency determinations are published in DTRA Instruction 5400.11, DTRA Privacy Program; 32 CFR part 318; or may be obtained from the Chief, Freedom of Information and Privacy Office, Defense Threat Reduction Agency, 8725 John J. Kingman Road, Fort Belvoir, VA 22060-6201."

\* \* \* \* \*

#### EXEMPTIONS CLAIMED FOR THE SYSTEM:

Delete entry and replace with "Investigatory material compiled for law enforcement purposes may be exempt pursuant to 5 U.S.C. 552a(k)(2). However, if an individual is denied any right, privilege, or benefit for which he would otherwise be entitled by Federal law or for which he would otherwise be eligible, as a result of the maintenance of such information, the individual will be provided access to such information except to the extent that disclosure would reveal the identity of a confidential source.

An exemption rule for this system has been promulgated in accordance with requirements of 5 U.S.C. 553(b)(1), (2), and (3), (c), and (e) and published in 32 CFR part 318.

For additional information contact the Chief, Freedom of Information and Privacy Act Office, Defense Threat Reduction Agency, 8725 John J. Kingman Road, Fort Belvoir, VA 22060-6201."

### HDTRA 021

#### SYSTEM NAME:

Freedom of Information Act and Privacy Act Case Files (August 7, 2006, 71 FR 44668)

#### CHANGES:

\* \* \* \* \*

#### NOTIFICATION PROCEDURE:

Delete entry and replace with "Individuals seeking to determine whether information about themselves is contained in this system of records should submit a written request, to the Chief, Freedom of Information and Privacy Office, Defense Threat Reduction Agency, 8725 John J. Kingman Road, Fort Belvoir, VA 22060-6201.

Written requests should contain the full name, current address, telephone number, and date request was submitted.”

**RECORD ACCESS PROCEDURES:**

Delete entry and replace with “Individuals seeking access to records about themselves contained in this system of records should submit a written request, to the Chief, Freedom of Information and Privacy Office, Defense Threat Reduction Agency, 8725 John J. Kingman Road, Fort Belvoir, VA 22060–6201.

Written requests should contain the full name, current address, telephone number, and date request was submitted.”

\* \* \* \* \*

**EXEMPTIONS CLAIMED FOR THE SYSTEM:**

Delete entry and replace with “During the course of a FOIA and Privacy Act action, exempt materials from other systems of records may in turn become part of the case records in this system. To the extent that copies of exempt records from those other systems of records are entered into this FOIA or Privacy Act case record, DTRA hereby claims the same exemptions for the records from those other systems that are entered into this system, as claimed for the original primary systems of records which they are a part.

An exemption rule for this system has been promulgated in accordance with requirements of 5 U.S.C. 553 (b)(1), (2), and (3), (c) and (e) and published in 32 CFR part 318.

For additional information contact Chief, Freedom of Information and Privacy Act Office, Defense Threat Reduction Agency, 8725 John J. Kingman Road, Fort Belvoir, VA 22060–6201.”

**HDTRA 022****SYSTEM NAME:**

Learning Management System (LMS) (December 18, 2007, 72 FR 71663)

**CHANGES:**

\* \* \* \* \*

**SYSTEM LOCATION:**

Delete entry and replace with “Defense Threat Reduction Agency, Human Resources, 8725 John J. Kingman Road, Stop 6201, Fort Belvoir, VA 22060–6201.”

**CATEGORIES OF INDIVIDUALS COVERED BY THE SYSTEM:**

Delete entry and replace with “Defense Threat Reduction Agency employees and contractor personnel receiving training funded or sponsored

by DTRA. Department of Defense military personnel and non-appropriated fund personnel may be included in the system.”

\* \* \* \* \*

**SYSTEM MANAGER(S) AND ADDRESS:**

Delete entry and replace with “Chief, Freedom of Information and Privacy Act Office, Defense Threat Reduction Agency, Policy & Program Development Division, 8725 John J. Kingman Road, Stop 6201, Fort Belvoir, VA 22060–6201.”

**NOTIFICATION PROCEDURE:**

Delete entry and replace with “Individuals seeking to determine whether information about themselves is contained in this system of records should submit a written request to the Chief, Defense Threat Reduction Agency, Freedom of Information and Privacy Office, 8725 John J. Kingman Road, Fort Belvoir, VA 22060–6201.

Current DTRA employees may determine whether information about themselves is contained in subsets to the master file by accessing the system through their assigned DTRA computer or by contacting their immediate supervisor.”

**RECORD ACCESS PROCEDURES:**

Delete entry and replace with “Individuals seeking access to records about themselves contained in this system of records should submit a written request to the Chief, Defense Threat Reduction Agency, Freedom of Information and Privacy Office, 8725 John J. Kingman Road, Fort Belvoir, VA 22060–6201.

Current DTRA employees may determine whether information about themselves is contained in subsets to the master file by accessing the system through their assigned DTRA computer or by contacting their immediate supervisor.”

**CONTESTING RECORD PROCEDURES:**

Delete entry and replace with “The DTRA rules for accessing records, for contesting contents, and appealing initial agency determinations are contained in 32 CFR part 318, or may be obtained from the Chief, Freedom of Information and Privacy Act Office, Defense Threat Reduction Agency, 8725 John J. Kingman Road, Stop 6201, Fort Belvoir, VA 22060–6201.”

\* \* \* \* \*

[FR Doc. 2012–22849 Filed 9–17–12; 8:45 am]

**BILLING CODE 5001–06–P**

**DEPARTMENT OF DEFENSE****Department of the Navy****Meeting of the Board of Advisors to The Presidents of the Naval Postgraduate School and the Naval War College**

**AGENCY:** Department of the Navy, DoD.

**ACTION:** Notice of open meeting.

**SUMMARY:** Pursuant to the provisions of the Federal Advisory Committee Act (Pub. L. 92–463, as amended), notice is hereby given that the following meeting of the Board of Advisors (BOA) to the Presidents of the Naval Postgraduate School (NPS) and the Naval War College (NWC) and its subcommittees will be held. This meeting will be open to the public.

**DATES:** The meeting will be held on Wednesday, October 17, 2012, from 8 a.m. to 4 p.m. and on Thursday, October 18, 2012, from 8 a.m. to 3 p.m. Eastern Time Zone.

**ADDRESSES:** The meeting will be held at 900 N. Glebe Road, Arlington, VA.

**FOR FURTHER INFORMATION CONTACT:** Ms. Jaye Panza, Naval Postgraduate School, Monterey, CA, 93943–5001, telephone number 831–656–2514.

**SUPPLEMENTARY INFORMATION:** The agenda is as follows:

1. October 17, 2012: General deliberations and inquiry by the NPS BOA Subcommittee and its parent committee NPS/NWC BOA into the curricula; instruction; physical equipment; administration; state of morale of the student body, faculty, and staff; fiscal affairs; and any other matters relating to the operations of the NPS as the board considers pertinent. Discussions of the collaborative exchange and partnership between the NPS and the Air Force Institute of Technology.

2. October 18, 2012: General deliberations and inquiry by the NWC BOA Subcommittee and its parent committee NPS/NWC BOA into the curricula; instruction; physical equipment; administration; state of morale of the student body, faculty, and staff; fiscal affairs; and any other matters relating to the operations of the NWC as the board considers pertinent. Discussion of recently issued defense guidance and its implication for the military and Joint Professional Military Education; discussion of Leader Development Continuum, NWC’s response to Vice Chief of Naval Operations charge to develop and provide oversight for a leader development continuum from accession through the entire sailor’s career that

focuses on the attributes, behaviors, and ethos of the Naval profession.

Individuals without a DoD Government Common Access Card require an escort at the meeting location. For access, information, or to send written comments regarding the NPS/NWC BOA contact Ms. Jaye Panza, Naval Postgraduate School, 1 University Circle, Monterey, CA 93943-5001 or by fax 831-656-3145 by September 15, 2012.

Dated: September 11, 2012.

**D.G. Zimmerman,**

*Lieutenant Commander, Office of the Judge Advocate General, U.S. Navy, Alternate Federal Register Liaison Officer.*

[FR Doc. 2012-22932 Filed 9-17-12; 8:45 am]

**BILLING CODE 3810-FF-P**

## DEPARTMENT OF EDUCATION

### Notice of Submission for OMB Review; Office of Planning, Evaluation and Policy Development; Exploratory Study on the Identification of English Learners with Disabilities

**SUMMARY:** The purpose of this study is to learn more about current processes and personnel involved in the identification of English Learners (ELs) for special education services.

**DATES:** Interested persons are invited to submit comments on or before October 18, 2012.

**ADDRESSES:** Written comments regarding burden and/or the collection activity requirements should be electronically mailed to [ICDocketMgr@ed.gov](mailto:ICDocketMgr@ed.gov) or mailed to U.S. Department of Education, 400 Maryland Avenue SW., LBJ, Washington, DC 20202-4537. Copies of the proposed information collection request may be accessed from <http://edicsweb.ed.gov>, by selecting the "Browse Pending Collections" link and by clicking on link number 04831. When you access the information collection, click on "Download Attachments" to view. Written requests for information should be addressed to U.S. Department of Education, 400 Maryland Avenue SW., LBJ, Washington, DC 20202-4537. Requests may also be electronically mailed to [ICDocketMgr@ed.gov](mailto:ICDocketMgr@ed.gov) or faxed to 202-401-0920. Please specify the complete title of the information collection and OMB Control Number when making your request.

Individuals who use a telecommunications device for the deaf (TDD) may call the Federal Information Relay Service (FIRS) at 1-800-877-8339.

**SUPPLEMENTARY INFORMATION:** Section 3506 of the Paperwork Reduction Act of 1995 (44 U.S.C. Chapter 35) requires that Federal agencies provide interested parties an early opportunity to comment on information collection requests. The Director, Information Collection Clearance Division, Privacy, Information and Records Management Services, Office of Management, publishes this notice containing proposed information collection requests at the beginning of the Departmental review of the information collection. 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:* Exploratory Study on the Identification of English Learners with Disabilities.

*OMB Control Number:* Pending.

*Type of Review:* New.

*Total Estimated Number of Annual Responses:* 126.

*Total Estimated Number of Annual Burden Hours:* 258 .

*Abstract:* The study has two main components: (1) A review of recent research on the identification of ELs with special needs, and (2) case studies of six school districts and three schools in each district. Findings will be descriptive in nature. The study is not a program evaluation and does not purport to assess program outcomes; however, findings may be useful in informing a future, nationally representative study.

Dated: September 12, 2012.

**Darrin A. King,**

*Director, Information Collection Clearance Division, Privacy, Information and Records Management Services, Office of Management.*

[FR Doc. 2012-22967 Filed 9-17-12; 8:45 am]

**BILLING CODE 4000-01-P**

## DEPARTMENT OF ENERGY

### Federal Energy Regulatory Commission

#### Combined Notice Of Filings #1

Take notice that the Commission received the following electric rate filings:

*Docket Numbers:* ER12-2489-001.

*Applicants:* New York Independent System Operator, Inc., Niagara Mohawk Power Corporation.

*Description:* Amendment Interconnection Agreement no. 1913 Among NiMO and Village of Solvay to be effective 6/18/2012.

*Filed Date:* 9/11/12.

*Accession Number:* 20120911-5051.

*Comments Due:* 5 p.m. ET 10/2/12.

*Docket Numbers:* ER12-2608-000.

*Applicants:* Delmarva Power & Light Company.

*Description:* Choptank Construction Agreement to be effective 10/9/2012.

*Filed Date:* 9/10/12.

*Accession Number:* 20120910-5212.

*Comments Due:* 5 p.m. ET 10/1/12.

*Docket Numbers:* ER12-2609-000.

*Applicants:* Mesquite Power, LLC.

*Description:* Mesquite Power LLC Concurrence to SRSG Participation Agreement to be effective 12/28/2011.

*Filed Date:* 9/10/12.

*Accession Number:* 20120910-5213.

*Comments Due:* 5 p.m. ET 10/1/12.

*Docket Numbers:* ER12-2610-000.

*Applicants:* PJM Interconnection, L.L.C.

*Description:* Original Service Agreement No. 3393; Queue No. X4-043 to be effective 8/15/2012.

*Filed Date:* 9/11/12.

*Accession Number:* 20120911-5059.

*Comments Due:* 5 p.m. ET 10/2/12.

Take notice that the Commission received the following electric reliability filings:

*Docket Numbers:* RR12-13-000.

*Applicants:* North American Electric Reliability Corporation.

*Description:* Update to Request of the North American Electric Reliability Corporation for Acceptance of its 2013 Business Plan and Budget and the Business Plans and Budgets of Regional Entities and for Approval of Assessments to Fund Budgets.

*Filed Date:* 9/10/12.

*Accession Number:* 20120910-5225.

*Comments Due:* 5 p.m. ET 9/28/12.

The filings are accessible in the Commission's eLibrary system by clicking on the links or querying the docket number.

Any person desiring to intervene or protest in any of the above proceedings

must file in accordance with Rules 211 and 214 of the Commission's Regulations (18 CFR 385.211 and 385.214) on or before 5:00 p.m. Eastern time on the specified comment date. Protests may be considered, but intervention is necessary to become a party to the proceeding.

eFiling is encouraged. More detailed information relating to filing requirements, interventions, protests, service, and qualifying facilities filings can be found at: <http://www.ferc.gov/docs-filing/efiling/filing-req.pdf>. For other information, call (866) 208-3676 (toll free). For TTY, call (202) 502-8659.

Dated: September 11, 2012.

**Nathaniel J. Davis, Sr.,**

*Deputy Secretary.*

[FR Doc. 2012-22945 Filed 9-17-12; 8:45 am]

**BILLING CODE 6717-01-P**

## DEPARTMENT OF ENERGY

### Federal Energy Regulatory Commission

#### Combined Notice of Filings

Take notice that the Commission has received the following Natural Gas Pipeline Rate and Refund Report filings:

#### Filings Instituting Proceedings

*Docket Numbers:* RP12-1018-000.

*Applicants:* Wyoming Interstate Company, L.L.C.

*Description:* Request for Limited Waiver of Tariff Provisions of Wyoming Interstate Company, L.L.C. to allow Permanent Release of Off-System Capacity.

*Filed Date:* 9/4/12.

*Accession Number:* 20120904-5059.

*Comments Due:* 5 p.m. ET 9/17/12.

*Docket Numbers:* RP12-1030-000.

*Applicants:* Tennessee Gas Pipeline Company, L.L.C.

*Description:* Volume No. 2—

Northampton Expansion Project-NegRate/NonConform Agreements to be effective 11/1/2012.

*Filed Date:* 9/11/12.

*Accession Number:* 20120911-5049.

*Comments Due:* 5 p.m. ET 9/24/12.

*Docket Numbers:* RP12-1031-000.

*Applicants:* Tennessee Gas Pipeline Company, L.L.C.

*Description:* Northampton Expansion Project "Recourse Rate" to be effective 11/1/2012.

*Filed Date:* 9/11/12.

*Accession Number:* 20120911-5050.

*Comments Due:* 5 p.m. ET 9/24/12.

Any person desiring to intervene or protest in any of the above proceedings must file in accordance with Rules 211

and 214 of the Commission's Regulations (18 CFR 385.211 and 385.214) on or before 5 p.m. Eastern time on the specified comment date. Protests may be considered, but intervention is necessary to become a party to the proceeding.

The filings are accessible in the Commission's eLibrary system by clicking on the links or querying the docket number.

eFiling is encouraged. More detailed information relating to filing requirements, interventions, protests, and service can be found at: <http://www.ferc.gov/docs-filing/efiling/filing-req.pdf>. For other information, call (866) 208-3676 (toll free). For TTY, call (202) 502-8659.

Dated: September 12, 2012.

**Nathaniel J. Davis, Sr.,**

*Deputy Secretary.*

[FR Doc. 2012-22946 Filed 9-17-12; 8:45 am]

**BILLING CODE 6717-01-P**

## DEPARTMENT OF ENERGY

### Federal Energy Regulatory Commission

#### Combined Notice of Filings #1

Take notice that the Commission received the following electric rate filings:

*Docket Numbers:* ER12-162-004; ER11-3876-006; ER11-2044-007; ER10-2611-004.

*Applicants:* Bishop Hill Energy II LLC.

*Description:* Notice of Change in Status of Bishop Hill Energy II LLC, *et al.*

*Filed Date:* 9/10/12.

*Accession Number:* 20120910-5132.

*Comments Due:* 5 p.m. ET 10/1/12.

*Docket Numbers:* ER12-2600-000.

*Applicants:* American Illuminating Company, LLC.

*Description:* Application for Market-Based Rate Authorization to be effective 11/5/2012.

*Filed Date:* 9/7/12.

*Accession Number:* 20120907-5205.

*Comments Due:* 5 p.m. ET 9/28/12.

*Docket Numbers:* ER12-2601-000.

*Applicants:* Rayonier Performance Fibers, LLC.

*Description:* Application for Market-Based Rate Authorization to be effective 9/8/2012.

*Filed Date:* 9/7/12.

*Accession Number:* 20120907-5207.

*Comments Due:* 5 p.m. ET 9/28/12.

*Docket Numbers:* ER12-2602-000.

*Applicants:* Southwest Power Pool, Inc.

*Description:* Petition for Waiver of Tariff Provisions of Southwest Power Pool, Inc.

*Filed Date:* 9/7/12.

*Accession Number:* 20120907-5240.

*Comments Due:* 5 p.m. ET 9/28/12.

*Docket Numbers:* ER12-2603-000.

*Applicants:* Tucson Electric Power Company.

*Description:* TEP SRSG Agreement-Addition of Star West to be effective 5/17/2011.

*Filed Date:* 9/10/12.

*Accession Number:* 20120910-5108.

*Comments Due:* 5 p.m. ET 10/1/12.

*Docket Numbers:* ER12-2604-000.

*Applicants:* PJM Interconnection, L.L.C.

*Description:* NITSA among PJM and SEPA as PJM Service Agreement No. 3341 to be effective 9/17/2010.

*Filed Date:* 9/10/12.

*Accession Number:* 20120910-5113.

*Comments Due:* 5 p.m. ET 10/1/12.

*Docket Numbers:* ER12-2605-000.

*Applicants:* Tucson Electric Power Company.

*Description:* TEP SRSG Agreement—Addition of Mesquite Power to be effective 12/28/2011.

*Filed Date:* 9/10/12.

*Accession Number:* 20120910-5116.

*Comments Due:* 5 p.m. ET 10/1/12.

*Docket Numbers:* ER12-2606-000.

*Applicants:* PJM Interconnection, L.L.C.

*Description:* Compliance Filing per 7/11/2012 Order in EL12-50-000 to be effective 7/11/2012.

*Filed Date:* 9/10/12.

*Accession Number:* 20120910-5121.

*Comments Due:* 5 p.m. ET 10/1/12.

*Docket Numbers:* ER12-2606-001.

*Applicants:* PJM Interconnection, L.L.C.

*Description:* Compliance Filing per 7/11/2012 Order in EL12-50-000 (sections eff 7/18/2012) to be effective 7/18/2012.

*Filed Date:* 9/10/12.

*Accession Number:* 20120910-5140.

*Comments Due:* 5 p.m. ET 10/1/12.

*Docket Numbers:* ER12-2607-000.

*Applicants:* Southwest Power Pool, Inc..

*Description:* Submission of Notice of Cancellation—1906R1 MEAN NITSA NOA to be effective 7/1/2012.

*Filed Date:* 9/10/12.

*Accession Number:* 20120910-5122.

*Comments Due:* 5 p.m. ET 10/1/12.

The filings are accessible in the Commission's eLibrary system by clicking on the links or querying the docket number.

Any person desiring to intervene or protest in any of the above proceedings

must file in accordance with Rules 211 and 214 of the Commission's Regulations (18 CFR 385.211 and 385.214) on or before 5 p.m. Eastern time on the specified comment date. Protests may be considered, but intervention is necessary to become a party to the proceeding.

eFiling is encouraged. More detailed information relating to filing requirements, interventions, protests, service, and qualifying facilities filings can be found at: <http://www.ferc.gov/docs-filing/efiling/filing-req.pdf>. For other information, call (866) 208-3676 (toll free). For TTY, call (202) 502-8659.

Dated: September 10, 2012.

**Nathaniel J. Davis, Sr.,**

*Deputy Secretary.*

[FR Doc. 2012-22949 Filed 9-17-12; 8:45 am]

BILLING CODE 6717-01-P

## DEPARTMENT OF ENERGY

### Federal Energy Regulatory Commission

[Docket No. EL12-101-000]

#### New York Association of Public Power v. Niagara Mohawk Power Corporation; Notice of Complaint

Take notice that on September 11, 2012, pursuant to Rule 206 of the Federal Energy Regulatory Commission's (Commission) Rules of Practice and Procedure, 18 CFR 385.206 and section 206 of the Federal Power Act, 16 U.S.C. 824(e) and 825(e), New York Association of Public Power (Complainant) filed a formal complaint against Niagara Mohawk Power (Respondent) alleging that, the Respondent's return on common equity (ROE) currently reflected in the New York Independent System Operator, Inc's (NYISO) Open Access Transmission Tariff (OATT) rate is unjust and unreasonable. Complainant request that the Commission: (1) Institute paper hearing procedures to investigate the ROE and establish a just and reasonable equity return to be reflected in rates for transmission service provided over facilities owned by the Respondent under the NYISO OATT; (2) establish the earliest possible refund effective date (i.e., the date of this Complaint), consistent with Commission policy; and (3) direct the Respondent to make refunds reflecting the difference between transmission rates reflecting an 11.5 percent ROE and rates reflecting a just and reasonable ROE.

The Complainant certifies that copies of the complaint were served on the

contacts for the Respondent as listed in the Commission's list of Corporate Officials.

Any person desiring to intervene or to protest this filing must file in accordance with Rules 211 and 214 of the Commission's Rules of Practice and Procedure (18 CFR 385.211, 385.214). Protests will be considered by the Commission in determining the appropriate action to be taken, but will not serve to make protestants parties to the proceeding. Any person wishing to become a party must file a notice of intervention or motion to intervene, as appropriate. The Respondent's answer and all interventions, or protests must be filed on or before the comment date. The Respondent's answer, motions to intervene, and protests must be served on the Complainants.

The Commission encourages electronic submission of protests and interventions in lieu of paper using the "eFiling" link at <http://www.ferc.gov>. Persons unable to file electronically should submit an original and 14 copies of the protest or intervention to the Federal Energy Regulatory Commission, 888 First Street NE., Washington, DC 20426.

This filing is accessible on-line at <http://www.ferc.gov>, using the "eLibrary" link and is available for review in the Commission's Public Reference Room in Washington, DC. There is an "eSubscription" link on the Web site that enables subscribers to receive email notification when a document is added to a subscribed docket(s). For assistance with any FERC Online service, please email [FERCOnlineSupport@ferc.gov](mailto:FERCOnlineSupport@ferc.gov), or call (866) 208-3676 (toll free). For TTY, call (202) 502-8659.

*Comment Date:* 5 p.m. Eastern Time on October 1, 2012.

Dated: September 12, 2012.

**Nathaniel J. Davis, Sr.,**

*Deputy Secretary.*

[FR Doc. 2012-22947 Filed 9-17-12; 8:45 am]

BILLING CODE 6717-01-P

## DEPARTMENT OF ENERGY

### Federal Energy Regulatory Commission

[Docket No. PR12-35-000]

#### EasTrans, LLC; Notice of Filing

Take notice that on September 11, 2012, EasTrans, LLC filed to revise its Statement of Operating Conditions to correct, update, and or remove certain provisions and other housekeeping changes as more fully described in the filing.

Any person desiring to participate in this rate filing must file in accordance with Rules 211 and 214 of the Commission's Rules of Practice and Procedure (18 CFR 385.211 and 385.214). Protests will be considered by the Commission in determining the appropriate action to be taken, but will not serve to make protestants parties to the proceeding. Any person wishing to become a party must file a notice of intervention or motion to intervene, as appropriate. Such notices, motions, or protests must be filed on or before the date as indicated below. Anyone filing an intervention or protest must serve a copy of that document on the Applicant. Anyone filing an intervention or protest on or before the intervention or protest date need not serve motions to intervene or protests on persons other than the Applicant.

The Commission encourages electronic submission of protests and interventions in lieu of paper using the "eFiling" link at <http://www.ferc.gov>. Persons unable to file electronically should submit an original and 7 copies of the protest or intervention to the Federal Energy Regulatory Commission, 888 First Street NE., Washington, DC 20426.

This filing is accessible on-line at <http://www.ferc.gov>, using the "eLibrary" link and is available for review in the Commission's Public Reference Room in Washington, DC. There is an "eSubscription" link on the web site that enables subscribers to receive email notification when a document is added to a subscribed docket(s). For assistance with any FERC Online service, please email [FERCOnlineSupport@ferc.gov](mailto:FERCOnlineSupport@ferc.gov), or call (866) 208-3676 (toll free). For TTY, call (202) 502-8659.

*Comment Date:* 5 p.m. Eastern Time on Monday, September 24, 2012.

Dated: September 12, 2012.

**Nathaniel J. Davis, Sr.,**

*Deputy Secretary.*

[FR Doc. 2012-22948 Filed 9-17-12; 8:45 am]

BILLING CODE 6717-01-P

## ENVIRONMENTAL PROTECTION AGENCY

[EPA-HQ-OAR-2012-0632; FRL-9729-1]

#### Request for Comment on Letters Seeking a Waiver of the Renewable Fuel Standard; Extension of Comment Period

**AGENCY:** Environmental Protection Agency (EPA).

**ACTION:** Notice; extension of comment period regarding letters seeking a waiver of the renewable fuel standard.

**SUMMARY:** The U.S. Environmental Protection Agency (EPA) is announcing an extension of the public comment period associated with the Notice entitled "Request for Comment on Letters Seeking a Waiver of the Renewable Fuel Standard" that was published in the **Federal Register** on August 30, 2012. EPA has received several requests for an extension of the comment period and, in response, has decided to allow an additional fifteen days, to October 11, 2012, for the submission of public comment.

**DATES:** *Comments.* Written comments must be received on or before October 11, 2012.

**ADDRESSES:** Submit your comments, identified by Docket ID No. EPA-HQ-OAR-2012-0632, by one of the following methods:

- *www.regulations.gov:* Follow the on-line instructions for submitting comments.

- *Email:* [a-and-r-docket@epa.gov](mailto:a-and-r-docket@epa.gov).
- *Fax:* (202) 566-1741.

- *Mail:* Air and Radiation Docket, Docket ID No. EPA-HQ-OAR-2012-0632, Environmental Protection Agency, Mailcode: 6102T, 1200 Pennsylvania Avenue NW., Washington, DC 20460. Please include a total of two copies.

- *Hand Delivery:* EPA Docket Center, Public Reading Room, EPA West Building, Room 3334, 1301 Constitution Avenue NW., Washington, DC 20460. Such deliveries are only accepted during the Docket's normal hours of operation, and special arrangements should be made for deliveries of boxed information.

*Instructions:* Direct your comments to Docket ID No. EPA-HQ-OAR-2012-0632. EPA's policy is that all comments received will be included in the public docket without change and may be made available online at [www.regulations.gov](http://www.regulations.gov), including any personal information provided, unless the comment includes information claimed to be Confidential Business Information (CBI) or other information whose disclosure is restricted by statute. Do not submit information that you consider to be CBI or otherwise protected through [www.regulations.gov](http://www.regulations.gov) or email. The [www.regulations.gov](http://www.regulations.gov) Web site is an "anonymous access" system, which means EPA will not know your identity or contact information unless you provide it in the body of your comment. If you send an email comment directly to EPA without going through [www.regulations.gov](http://www.regulations.gov), your email address will be automatically

captured and included as part of the comment that is placed in the public docket and made available on the Internet. If you submit an electronic comment, EPA recommends that you include your name and other contact information in the body of your comment and with any disk or CD-ROM you submit. If EPA cannot read your comment due to technical difficulties and cannot contact you for clarification, EPA may not be able to consider your comment. Electronic files should avoid the use of special characters, any form of encryption, and be free of any defects or viruses. For additional information about EPA's public docket visit the EPA Docket Center homepage at <http://www.epa.gov/epahome/dockets.htm>.

**FOR FURTHER INFORMATION CONTACT:** Dallas Burkholder, Office of Transportation and Air Quality, Environmental Protection Agency, National Vehicle and Fuel Emissions Laboratory, 2565 Plymouth Road, Ann Arbor, MI 48105; telephone number: (734) 214-4766; fax number: (734) 214-4050; email address: [burkholder.dallas@epa.gov](mailto:burkholder.dallas@epa.gov).

**SUPPLEMENTARY INFORMATION:**

*Background:* In a **Federal Register** Notice dated August 30, 2012 (77 FR 52715), EPA provided notice of its receipt of requests for a waiver of required volumes of renewable fuel under the Renewable Fuel Standard ("RFS") program, and invited public comment on those requests. As more fully described in the August 30, 2012 Notice, Governors of several States have submitted separate requests for an RFS waiver. Section 211(o)(7)(A) of the Clean Air Act allows the Administrator of the EPA to waive the national volume requirements of the renewable fuel standard program in whole or in part if implementation of those requirements would severely harm the economy or environment of a State, a region, or the United States, or if the Administrator determines that there is inadequate domestic supply of renewable fuel.

*Extension of Comment Period:* EPA received requests for an extension of the comment period from various parties. After considering these comments, EPA has determined that an extension of the comment period would appropriately provide the public additional time to provide meaningful comment on the Renewable Fuel Standard waiver requests. Any such extension, however, must be balanced against the need to make a timely decision with respect to the waiver requests. EPA believes that an additional 15 days is an appropriate amount of time to balance these needs. Accordingly, the public comment

period on the RFS waiver requests is extended to October 11, 2012. EPA does not currently anticipate that it will provide any further extension of the comment period.

Dated: September 10, 2012.

**Gina McCarthy,**

*Assistant Administrator, Office of Air and Radiation.*

[FR Doc. 2012-22969 Filed 9-17-12; 8:45 am]

**BILLING CODE 6560-50-P**

**ENVIRONMENTAL PROTECTION AGENCY**

[EPA-HQ-OW-2012-0035; FRL-9730-7]

**Announcement of Public Meeting on the Consumer Confidence Report (CCR) Rule Retrospective Review and Request for Public Comment on Potential Approaches to Electronic Delivery of the CCR; Correction**

**AGENCY:** Environmental Protection Agency (EPA).

**ACTION:** Notice of a Public Meeting and Request for Public Comments; correction.

**SUMMARY:** The U.S. Environmental Protection Agency (EPA) published a document in the **Federal Register** of September 11, 2012, announcing a public meeting listening session and a request for public comments. The document contained an incorrect URL link for the public to use to register for the meeting.

**FOR FURTHER INFORMATION CONTACT:** Adrienne Harris, Drinking Water Protection Division, at (202) 250-8793.

*Correction*

In the **Federal Register** of September 11, 2012, in FR Doc. FRL-9726-8; on page 55833, in the third column, in the sixth paragraph, correct the first sentence of the paragraph to read as follows:

*Public Meeting Registration:* Individuals planning on participating in the public meeting must register for the meeting at <http://www.horsleywitten.com/ccrretroreview>.

Dated: September 12, 2012.

**Pamela S. Barr,**

*Acting Office Director, Office of Ground Water and Drinking Water.*

[FR Doc. 2012-22965 Filed 9-17-12; 8:45 am]

**BILLING CODE 6560-50-P**

## DEPARTMENT OF HEALTH AND HUMAN SERVICES

### HIT Policy Committee Advisory Meeting; Notice of Meeting

**AGENCY:** Office of the National Coordinator for Health Information Technology, HHS.

**ACTION:** Notice of meeting.

This notice announces a forthcoming meeting of a public advisory committee of the Office of the National Coordinator for Health Information Technology (ONC). The meeting will be open to the public.

*Name of Committee:* HIT Policy Committee.

*General Function of the Committee:* To provide recommendations to the National Coordinator on a policy framework for the development and adoption of a nationwide health information technology infrastructure that permits the electronic exchange and use of health information as is consistent with the Federal Health IT Strategic Plan and that includes recommendations on the areas in which standards, implementation specifications, and certification criteria are needed.

*Date and Time:* The meeting will be held on October 3, 2012, from 10 a.m. to 3 p.m./ Eastern Time.

*Location:* The Dupont Circle Hotel, 1500 New Hampshire Avenue NW., Washington DC 20036. For up-to-date information, go to the ONC Web site, <http://healthit.hhs.gov>

*Contact Person:* MacKenzie Robertson, Office of the National Coordinator, HHS, 355 E Street SW., Washington, DC 20201, 202-205-8089, Fax: 202-260-1276, email: [mackenzie.robertson@hhs.gov](mailto:mackenzie.robertson@hhs.gov). Please call the contact person for up-to-date information on this meeting. A notice in the **Federal Register** about last minute modifications that impact a previously announced advisory committee meeting cannot always be published quickly enough to provide timely notice.

*Agenda:* The committee will hear reports from its workgroups and updates from ONC and other Federal agencies. ONC intends to make background material available to the public no later than two (2) business days prior to the meeting. If ONC is unable to post the background material on its Web site prior to the meeting, it will be made publicly available at the location of the advisory committee meeting, and the background material will be posted on ONC's Web site after the meeting, at <http://healthit.hhs.gov>

*Procedure:* ONC is committed to the orderly conduct of its advisory committee meetings. Interested persons may present data, information, or views, orally or in writing, on issues pending before the Committee. Written submissions may be made to the contact person on or before two days prior to the Committee's meeting date. Oral comments from the public will be scheduled in the agenda. Time allotted for each presentation will be limited to three minutes. If the number of speakers requesting to comment is greater than can be reasonably accommodated during the scheduled public

comment period, ONC will take written comments after the meeting until close of business on that day.

Persons attending ONC's advisory committee meetings are advised that the agency is not responsible for providing access to electrical outlets.

ONC welcomes the attendance of the public at its advisory committee meetings. Seating is limited at the location, and ONC will make every effort to accommodate persons with physical disabilities or special needs. If you require special accommodations due to a disability, please contact MacKenzie Robertson at least seven (7) days in advance of the meeting.

Notice of this meeting is given under the Federal Advisory Committee Act (Pub. L. 92-463, 5 U.S.C., App. 2).

Dated: September 11, 2012.

#### MacKenzie Robertson,

*FACA Program Lead, Office of Policy and Planning, Office of the National Coordinator for Health Information Technology.*

[FR Doc. 2012-22988 Filed 9-17-12; 8:45 am]

**BILLING CODE 4150-45-P**

## DEPARTMENT OF HEALTH AND HUMAN SERVICES

### Single Source Cooperative Agreement Award for World Health Organization

**AGENCY:** Department of Health and Human Services (HHS), Assistant Secretary for Preparedness and Response (ASPR).

**ACTION:** Notification of Single Source Cooperative Agreement Award for World Health Organization for a grant titled: "Smallpox Research Oversight Activities: WHO Advisory Committee on Variola Virus Research".

*Statutory Authority:* Sections 301 and 319L of the Public Health Service Act, (42 U.S.C. 241 and 247d-7e).

*Estimated Amount of Award:* \$400,000.

*Project Period:* Sept. 30, 2012 to Sept. 29, 2013.

**SUMMARY:** A natural re-emergence of smallpox is not deemed possible, but if it were to occur as a result of a terrorist or deliberate event, it would be a potentially devastating threat to public health worldwide and would constitute a public health emergency of international concern (PHEIC) under the International Health Regulations (IHR) (2005). A case of smallpox detected by a member state requires notification to World Health Organization (WHO) as soon as possible, and any confirmed smallpox case would generate an immediate global public health response.

WHO must rely on fast and reliable laboratory diagnostic capacity worldwide to be able to identify a re-

emergence of smallpox, particularly in countries where systemic orthopoxvirus infections such as monkeypox, vaccinia virus infection or cowpox, and other non-pox viral rash illnesses, such as chicken pox, may cause clinical diagnostic confusion.

Over the past 10 years, clinical virology laboratory diagnostics has been evolving and increasingly rely on molecular techniques. This is also true with laboratory diagnoses of poxvirus infections. Precise and consistent identification of orthopoxviruses, in particular variola viruses, is now achievable using such molecular techniques as real-time Polymerase Chain Reaction (unlike earlier techniques that may have relied on direct virus isolation and identification).

WHO must be alerted when there is a potential or actual smallpox infection. Early detection and confirmation of smallpox cannot rely solely on the two WHO Collaborating Centres for smallpox and other poxvirus infections. In order to facilitate and support a prompt and effective response to mitigate the spread of the disease, these two Centres should be supported by a worldwide network of reliable laboratories able to perform PCR and real-time PCR diagnostics enabling initial detection and identification of smallpox events.

Additionally, the U.S. Government supports the development of other medical products, including vaccines and drugs, for use within the U.S. upon verification of a smallpox case. The U.S. government, through the Office of the Assistant Secretary for Preparedness and Response (ASPR), has successfully developed vaccine products, and is actively engaged in the development of several drug candidates for smallpox therapies, which require access to the Variola virus to satisfy regulatory requirements for product approvals.

#### Single Source Justification

WHO is the only eligible applicant; it is the only organization that is allowed by international agreements to address the issues outlined in this proposal. WHO is the directing and coordinating authority for health within the United Nations system. It is responsible for providing leadership on global health matters, shaping the health research agenda, setting norms and standards, articulating evidence-based policy options, providing technical support to countries, and monitoring and assessing health trends. In the 21st century, health is a shared responsibility, involving equitable access to essential care and collective defense against transnational threats. States Parties to the U.N. have

agreed to international standards on reporting public health incidents of concern under IHR (2005). Additionally, a majority of States Parties have also agreed to specific work-frames for pathogens such as smallpox under the Biological Weapons Convention.

Since May 1999, when the 52nd World Health Assembly (WHA) resolved to postpone the destruction of the Variola virus to allow for essential research (WHA 52.10), WHO has been charged with convening a group of experts to advise on the need for continuing such research, to review proposals for research involving viable Variola virus, to review the progress of such research, and to report to the WHA each year. The need to support the activities described in this project has not changed. In fact, WHO Member States continue to exert pressure for the WHO Secretariat to carry out this work.

The WHO Advisory Committee on Variola Virus Research (ACVVR) was established in 1999 to determine what essential research, if any, must be carried out with live Variola virus. The ACVVR monitored the research progress in order to reach global consensus on the timing for the destruction of existing Variola virus stocks. In 2007, the WHA requested the ACVVR undertake a thorough review of the approved research program with a report presented in 2010. The results were presented at the 64th WHA meeting in May of 2011. The ACVVR continues to serve a critically important function for global public health, and to oversee research requested specifically by the U.S. to complete its national strategic goals. This includes the development of new antiviral agents, safer vaccines, and better diagnostics, thus strengthening our national security.

*Additional Information:* The agency program contact is Richard J. Hatchett, MD, who can be contacted by phone at (202) 260-0150 or via email at [Richard.Hatchett@hhs.gov](mailto:Richard.Hatchett@hhs.gov).

Dated: September 12, 2012.

**Nicole Lurie,**

*Assistant Secretary for Preparedness and Response.*

[FR Doc. 2012-23017 Filed 9-17-12; 8:45 am]

BILLING CODE 4150-37-P

## DEPARTMENT OF HEALTH AND HUMAN SERVICES

### Food and Drug Administration

[Docket No. FDA-2012-N-0386]

#### Agency Information Collection Activities; Proposed Collection; Comment Request; Registration and Product Listing for Owners and Operators of Domestic Tobacco Product Establishments and Listing of Ingredients in Tobacco Products; Correction

**AGENCY:** Food and Drug Administration, HHS.

**ACTION:** Notice; correction.

**SUMMARY:** The Food and Drug Administration (FDA) is correcting a notice that appeared in the **Federal Register** of May 3, 2012 (77 FR 26281). The document announced an opportunity for public comment on the proposed extension of an existing collection of information by the Agency pertaining to registration and product listing for owners and operators of domestic tobacco product establishments and to listing of ingredients in tobacco products under the Family Smoking Prevention and Tobacco Control Act. The document published with incorrect FDA form numbers. This document corrects those errors.

**FOR FURTHER INFORMATION CONTACT:** Daniel Gittleston, Office of Information Management, Food and Drug Administration, 1350 Piccard Dr., PI50-400B, Rockville, MD 20850, 301-796-5156, [Daniel.Gittleston@fda.hhs.gov](mailto:Daniel.Gittleston@fda.hhs.gov).

**SUPPLEMENTARY INFORMATION:** In FR Doc. 2012-10645 appearing on page 26281 in the **Federal Register** of Thursday, May 3, 2012, the following corrections are made:

1. On page 26282, in the third column, in the first full paragraph, the fifth sentence "FDA also developed paper forms (Form FDA 3742—Registration and Listing for Owners and Operators of Domestic Tobacco Product Establishments and Form FDA 3743—Listing of Ingredients in Tobacco Products) as an alternative submission tool." is corrected to read "FDA also developed paper forms (Form FDA 3741—Registration and Listing for Owners and Operators of Domestic Tobacco Product Establishments and Form FDA 3742—Listing of Ingredients in Tobacco Products) as an alternative submission tool."

2. On page 26283, in the table, "Form FDA 3742" is corrected to read "Form FDA 3741" and "Form FDA 3743" is corrected to read "Form FDA 3742".

Dated: September 12, 2012.

**Leslie Kux,**

*Assistant Commissioner for Policy.*

[FR Doc. 2012-22919 Filed 9-17-12; 8:45 am]

BILLING CODE 4160-01-P

## DEPARTMENT OF HEALTH AND HUMAN SERVICES

### Food and Drug Administration

[Docket No. FDA-2012-N-0386]

#### Agency Information Collection Activities; Submission for Office of Management and Budget Review; Comment Request; Registration and Product Listing for Owners and Operators of Domestic Tobacco Product Establishments and Listing of Ingredients in Tobacco Products; Correction

**AGENCY:** Food and Drug Administration, HHS.

**ACTION:** Notice; correction.

**SUMMARY:** The Food and Drug Administration (FDA) is correcting a notice that appeared in the **Federal Register** of August 3, 2012 (77 FR 46441). The document announced that a proposed collection of information had been submitted to the Office of Management and Budget for review and clearance under the Paperwork Reduction Act of 1995. The document published with incorrect FDA form numbers. This document corrects those errors.

**FOR FURTHER INFORMATION CONTACT:** Daniel Gittleston, Office of Information Management, Food and Drug Administration, 1350 Piccard Dr., PI50-400B, Rockville, MD 20850, 301-796-5156, [Daniel.Gittleston@fda.hhs.gov](mailto:Daniel.Gittleston@fda.hhs.gov).

**SUPPLEMENTARY INFORMATION:** In FR Doc. 2012-18975 appearing on page 46441 in the **Federal Register** of Friday, August 3, 2012, the following corrections are made:

1. On page 46442, in the third column, in the first full paragraph, the fifth sentence "FDA also developed paper forms (Form FDA 3742—Registration and Listing for Owners and Operators of Domestic Tobacco Product Establishments and Form FDA 3743—Listing of Ingredients in Tobacco Products) as an alternative submission tool." is corrected to read "FDA also developed paper forms (Form FDA 3741—Registration and Listing for Owners and Operators of Domestic Tobacco Product Establishments and Form FDA 3742—Listing of Ingredients in Tobacco Products) as an alternative submission tool."

2. On page 46442, in table 1, "Form FDA 3742" is corrected to read "Form FDA 3741" and "Form FDA 3743" is corrected to read "Form FDA 3742".

Dated: September 12, 2012.

**Leslie Kux,**

*Assistant Commissioner for Policy.*

[FR Doc. 2012-22920 Filed 9-17-12; 8:45 am]

**BILLING CODE 4160-01-P**

## DEPARTMENT OF HEALTH AND HUMAN SERVICES

### Food and Drug Administration

[Docket No. FDA-2012-N-0001]

#### Science Advisory Board to the National Center for Toxicological Research; Notice of Meeting

**AGENCY:** Food and Drug Administration, HHS.

**ACTION:** Notice.

This notice announces a forthcoming meeting of a public advisory committee of the Food and Drug Administration (FDA). At least one portion of the meeting will be closed to the public.

*Name of Committee:* Science Advisory Board (SAB) to the National Center for Toxicological Research (NCTR).

*General Function of the Committee:* To provide advice and recommendations to the Agency on FDA's regulatory issues.

*Date and Time:* The meeting will be held on October 23, 2012, from 8:45 a.m. to 5 p.m. and on October 24, 2012, from 8 a.m. to 12 p.m.

*Location:* NCTR SAB Conference Room B-12, 3900 NCTR Rd., Jefferson, AR 72079.

*Contact Person For More Information:* Margaret Miller, Food and Drug Administration, 10903 New Hampshire Ave., Bldg. 32, Rm. 2208, Silver Spring, MD 20993-0002, 301-796-8890, or FDA Advisory Committee Information Line, 1-800-741-8138 (301-443-0572 in the Washington, DC area). A notice in the **Federal Register** about last minute modifications that impact a previously announced advisory committee meeting cannot always be published quickly enough to provide timely notice. Therefore, you should always check the Agency's Web site at <http://www.fda.gov/AdvisoryCommittees/default.htm> and scroll down to the appropriate advisory committee meeting link, or call the advisory committee information line to learn about possible modifications before coming to the meeting.

*Agenda:* On October 23, 2012, the NCTR Director will welcome the

participants and provide a Center-wide update on scientific initiatives and accomplishments during the past year. The SAB will then briefly review an update of research activities of the Division of Neurotoxicology. The SAB will be presented with the NanoCore Subcommittee report, and will provide a response to that report. The SAB will review and update of the research activities of the Division of Genetic and Molecular Toxicology.

Following the public session, the SAB will hear an update from the Office of Science Coordination, followed by a report from the National Toxicology Program on current and future collaboration.

The Center for Biological Evaluation and Research, Center for Drug Evaluation and Research, Center for Devices and Radiological Health, Center for Veterinary Medicine, Center for Tobacco Products, and the Center for Food Safety and Applied Nutrition will each briefly discuss their center-specific research strategic needs.

On October 24, 2012, the Director of the Center for Food Safety and Applied Nutrition will update the SAB on their research needs, and discuss opportunities for collaboration to help address these needs.

The SAB will discuss an overview of research activities from the NCTR Division of Bioinformatics and Computational Biology and the Division of Systems Biology. The SAB will also receive and update from the subcommittee on Immunotoxicology.

Following an open discussion of all the information presented, the open session of the meeting will close so that SAB members can discuss personnel issues at NCTR.

FDA intends to make background material available to the public no later than 2 business days before the meeting. If FDA is unable to post the background material on its Web site prior to the meeting, the background material will be made publicly available at the location of the advisory committee meeting, and the background material will be posted on FDA's Web site after the meeting. Background material is available at <http://www.fda.gov/AdvisoryCommittees/Calendar/default.htm>. Scroll down to the appropriate advisory committee meeting link.

*Procedure:* On October 23, 2012, from 8:45 a.m. to 12 p.m. and from 2 p.m. to 5 p.m., the meeting is open to the public. Interested persons may present data, information, or views, orally or in writing, on issues pending before the committee. Written submissions may be made to the contact person on or before

October 16, 2012. Oral presentations from the public will be scheduled between approximately 12 p.m. to 2 p.m. Those individuals interested in making formal oral presentations should notify the contact person and submit a brief statement of the general nature of the evidence or arguments they wish to present, the names and addresses of proposed participants, and an indication of the approximate time requested to make their presentation on or before October 9, 2012. Time allotted for each presentation may be limited. If the number of registrants requesting to speak is greater than can be reasonably accommodated during the scheduled open public hearing session, FDA may conduct a lottery to determine the speakers for the scheduled open public hearing session. The contact person will notify interested persons regarding their request to speak by October 10, 2012.

*Closed Committee Deliberations:* On October 24, 2012, from 12 p.m. to 2 p.m., the meeting will be closed to permit discussion where disclosure would constitute a clearly unwarranted invasion of personal privacy (5 U.S.C. 552b(c) (6)). This portion of the meeting will be closed to permit discussion of information concerning individuals associated with the research programs at NCTR.

Persons attending FDA's advisory committee meetings are advised that the Agency is not responsible for providing access to electrical outlets.

FDA welcomes the attendance of the public at its advisory committee meetings and will make every effort to accommodate persons with physical disabilities or special needs. If you require special accommodations due to a disability, please contact Margaret Miller at least 7 days in advance of the meeting.

FDA is committed to the orderly conduct of its advisory committee meetings. Please visit our Web site at <http://www.fda.gov/AdvisoryCommittees/AboutAdvisoryCommittees/ucm111462.htm> for procedures on public conduct during advisory committee meetings.

Notice of this meeting is given under the Federal Advisory Committee Act (5 U.S.C. app. 2).

Dated: September 12, 2012.

**Jill Hartzler Warner,**

*Acting Associate Commissioner for Special Medical Programs.*

[FR Doc. 2012-22918 Filed 9-17-12; 8:45 am]

**BILLING CODE 4160-01-P**

**DEPARTMENT OF HEALTH AND HUMAN SERVICES**

**Food and Drug Administration**

[Docket No. FDA-2012-N-0001]

**Request for Notification From Industry Organizations Interested in Participating in the Selection Process for Nonvoting Industry Representative on the Transmissible Spongiform Encephalopathies Advisory Committee, and Request for Nominations for Nonvoting Industry Representatives on the Transmissible Spongiform Encephalopathies Advisory Committee**

**AGENCY:** Food and Drug Administration, HHS.

**ACTION:** Notice.

**SUMMARY:** The Food and Drug Administration (FDA) is requesting that any industry organizations interested in participating in the selection of a nonvoting industry representative to serve on the Transmissible Spongiform Encephalopathies Advisory Committee for the Center for Biologics Evaluation and Research (CBER) notify FDA in writing. FDA is also requesting nominations for a nonvoting industry representative to serve on the Transmissible Spongiform Encephalopathies Advisory Committee. A nominee may either be self-nominated or nominated by an organization to serve as a nonvoting industry representative. Nominations will be accepted for current vacancies effective with this notice.

**DATES:** Any industry organization interested in participating in the selection of an appropriate nonvoting member to represent industry interests must send a letter stating that interest to FDA by *October 18, 2012*, for the vacancy listed in this notice. Concurrently, nomination materials for prospective candidates should be sent to FDA by *October 18, 2012*.

**ADDRESSES:** All letters of interest and nominations should be submitted in writing to Bryan Emery (see: **FOR FURTHER INFORMATION CONTACT**).

**FOR FURTHER INFORMATION CONTACT:** Bryan Emery, Center for Biologics Evaluation and Research, Food and Drug Administration, 1401 Rockville Pike (HFM-71), Rockville, MD 20852-1448, 301-827-1277, FAX: 301-827-0294, [bryan.emery@fda.hhs.gov](mailto:bryan.emery@fda.hhs.gov).

**SUPPLEMENTARY INFORMATION:** The Agency intends to add a nonvoting industry representative to the following advisory committee:

**I. CBER Advisory Committee**

*Transmissible Spongiform Encephalopathies Advisory Committee*

Members are selected by the Commissioner of Food and Drugs (the Commissioner) or designee from among authorities knowledgeable in the fields of clinical and administrative medicine, hematology, virology, neurovirology, neurology, infectious diseases, immunology, transfusion medicine, surgery, internal medicine, biochemistry, biostatistics, epidemiology, biological and physical sciences, sociology/ethics, and other related professions.

**II. Selection Procedure**

Any industry organization interested in participating in the selection of an appropriate nonvoting member to represent industry interests should send a letter stating that interest to the FDA contact (see **FOR FURTHER INFORMATION CONTACT**) within 30 days of publication of this document (see **DATES**). Within the subsequent 30 days, FDA will send a letter to each organization that has expressed an interest, attaching a complete list of all such organizations; and a list of all nominees along with their current résumés. The letter will also state that it is the responsibility of the interested organizations to confer with one another and to select a candidate, within 60 days after the receipt of the FDA letter, to serve as the nonvoting member to represent industry interests for the committee. The interested organizations are not bound by the list of nominees in selecting a candidate. However, if no individual is selected within 60 days, the Commissioner will select the nonvoting member to represent industry interests.

**III. Application Procedure**

Individuals may self nominate and/or an organization may nominate one or more individuals to serve as a nonvoting industry representative. Contact information, a current curriculum vitae, and the name of the committee of interest should be sent to the FDA contact person (see **FOR FURTHER INFORMATION CONTACT**) within 30 days of publication of this document (see **DATES**). FDA will forward all nominations to the organizations expressing interest in participating in the selection process for the committee. (Persons who nominate themselves as nonvoting industry representatives will not participate in the selection process).

FDA seeks to include the views of women and men, members of all racial and ethnic groups, and individuals with and without disabilities on its advisory

committees and, therefore encourages nominations of appropriately qualified candidates from these groups. Specifically, in this document, nominations for nonvoting representatives of industry interests are encouraged from the blood, epidemiology, and neurovirology manufacturing industry.

This notice is issued under the Federal Advisory Committee Act (5 U.S.C. app. 2) and 21 CFR part 14, relating to advisory committees.

Dated: September 12, 2012.

**Jill Hartzler Warner,**

*Acting Associate Commissioner for Special Medical Programs.*

[FR Doc. 2012-22866 Filed 9-17-12; 8:45 am]

**BILLING CODE 4160-01-P**

**DEPARTMENT OF HEALTH AND HUMAN SERVICES**

**National Institutes of Health**

**National Institute On Deafness and Other Communication Disorders; 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:* Communication Disorders Review Committee.

*Date:* October 18-19, 2012

*Time:* October 18, 2012, 8:00 a.m. to 5:00 p.m.

*Agenda:* To review and evaluate grant applications.

*Place:* Wyndham Riverfront New Orleans, 701 Convention Center Blvd., New Orleans, LA.

*Time:* October 19, 2012, 8:00 a.m. to 5:00 p.m.

*Agenda:* To review and evaluate grant applications.

*Place:* Wyndham Riverfront New Orleans, 701 Convention Center Blvd., New Orleans, LA.

*Contact Person:* Susan Sullivan, Ph.D., Scientific Review Branch, Division of Extramural Activities, NIDCD, NIH, 6120 Executive Blvd., Suite 400C, Bethesda, MD 20892, 301-496-8683, [sullivas@mail.nih.gov](mailto:sullivas@mail.nih.gov).

*Name of Committee:* National Institute on Deafness and Other Communication

Disorders Special Emphasis Panel; Hearing and Balance Fellowships.

*Date:* October 26, 2012.

*Time:* 11:30 a.m. to 4:00 p.m.

*Agenda:* To review and evaluate grant applications.

*Place:* National Institutes of Health, 6120 Executive Blvd., Rockville, MD 20852, (Telephone Conference Call).

*Contact Person:* Sheo Singh, Ph.D., Scientific Review Officer, Scientific Review Branch, Division of Extramural Activities, Executive Plaza South, Room 400C, 6120 Executive Blvd., Bethesda, MD 20892, 301-496-8683, [singhs@nidcd.nih.gov](mailto:singhs@nidcd.nih.gov).

*Name of Committee:* National Institute on Deafness and Other Communication Disorders Special Emphasis Panel; NIDCD Small Business (SBIR/STTR) Applications Review Meeting.

*Date:* October 30, 2012.

*Time:* 11:00 a.m. to 2:00 p.m.

*Agenda:* To review and evaluate grant applications.

*Place:* National Institutes of Health, 6120 Executive Blvd., Rockville, MD 20852.

*Contact Person:* Kausik Ray, Ph.D., Scientific Review Officer, National Institute on Deafness and Other Communication Disorders, National Institutes of Health, Rockville, MD 20850, 301-402-3587, [rayk@nidcd.nih.gov](mailto:rayk@nidcd.nih.gov).

(Catalogue of Federal Domestic Assistance Program Nos. 93.173, Biological Research Related to Deafness and Communicative Disorders, National Institutes of Health, HHS)

Dated: September 11, 2012.

**Melanie J. Gray,**

*Program Analyst, Office of Federal Advisory Committee Policy.*

[FR Doc. 2012-22926 Filed 9-17-12; 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 Program Project: DNA Replication, Repair, Recombination, Disease and Mutation.

*Date:* October 15, 2012.

*Time:* 3:00 p.m. to 6:00 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:* David J Remondini, Ph.D., Scientific Review Officer, Center for Scientific Review, National Institutes of Health, 6701 Rockledge Drive, Room 2210, MSC 7890, Bethesda, MD 20892, 301-435-1038, [remondid@csr.nih.gov](mailto:remondid@csr.nih.gov).

*Name of Committee:* Center for Scientific Review Special Emphasis Panel R15: Dermatology, Rheumatology, Dental, Bone, Muscle and Biomaterial Sciences.

*Date:* October 17-18, 2012.

*Time:* 7:00 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:* Aruna K Behera, Ph.D., Scientific Review Officer, Center for Scientific Review, National Institutes of Health, 6701 Rockledge Drive, Room 4211, MSC 7814, Bethesda, MD 20892, 301-435-6809, [beheraak@csr.nih.gov](mailto:beheraak@csr.nih.gov).

*Name of Committee:* Endocrinology, Metabolism, Nutrition and Reproductive Sciences Integrated Review Group; Integrative Physiology of Obesity and Diabetes Study Section.

*Date:* October 18-19, 2012.

*Time:* 8:00 a.m. to 6:00 p.m.

*Agenda:* To review and evaluate grant applications.

*Place:* The Allerton Hotel, 701 North Michigan Avenue, Chicago, IL 60611.

*Contact Person:* Reed A Graves, Ph.D., Scientific Review Officer, Center for Scientific Review, National Institutes of Health, 6701 Rockledge Drive, Room 6166, MSC 7892, Bethesda, MD 20892, (301) 402-6297, [gravesr@csr.nih.gov](mailto:gravesr@csr.nih.gov).

*Name of Committee:* Cardiovascular and Respiratory Sciences Integrated Review Group; Myocardial Ischemia and Metabolism Study Section.

*Date:* October 18, 2012.

*Time:* 8:00 a.m. to 7:00 p.m.

*Agenda:* To review and evaluate grant applications.

*Place:* Hyatt Regency Bethesda, One Bethesda Metro Center, 7400 Wisconsin Avenue, Bethesda, MD 20814.

*Contact Person:* Kimm Hamann, Ph.D., Scientific Review Officer, Center for Scientific Review, National Institutes of Health, 6701 Rockledge Drive, Room 4118A, MSC 7814, Bethesda, MD 20892, 301-435-5575, [hamannkj@csr.nih.gov](mailto:hamannkj@csr.nih.gov).

*Name of Committee:* Genes, Genomes, and Genetics Integrated Review Group; Genomics, Computational Biology and Technology Study Section.

*Date:* October 18-19, 2012.

*Time:* 8:00 a.m. to 6:00 p.m.

*Agenda:* To review and evaluate grant applications.

*Place:* Renaissance Washington DC, Dupont Circle, 1143 New Hampshire Avenue NW., Washington, DC 20037.

*Contact Person:* Barbara J Thomas, Ph.D., Scientific Review Officer, Center for Scientific Review, National Institutes of Health, 6701 Rockledge Drive, Room 2218, MSC 7890, Bethesda, MD 20892, 301-435-0603, [bthomas@csr.nih.gov](mailto:bthomas@csr.nih.gov).

*Name of Committee:* Cardiovascular and Respiratory Sciences Integrated Review Group; Cardiac Contractility, Hypertrophy, and Failure Study Section.

*Date:* October 18, 2012.

*Time:* 8:00 a.m. to 7:00 p.m.

*Agenda:* To review and evaluate grant applications.

*Place:* Renaissance Washington DC, Dupont Circle, 1143 New Hampshire Avenue NW., Washington, DC 20037.

*Contact Person:* Olga A Tjurmina, Ph.D., Scientific Review Officer, Center for Scientific Review, National Institutes of Health, 6701 Rockledge Drive, Room 4030B, MSC 7814, Bethesda, MD 20892, (301) 451-1375, [ot3d@nih.gov](mailto:ot3d@nih.gov).

*Name of Committee:* Cardiovascular and Respiratory Sciences Integrated Review Group; Clinical and Integrative Cardiovascular Sciences Study Section.

*Date:* October 18-19, 2012.

*Time:* 8:00 a.m. to 12:00 p.m.

*Agenda:* To review and evaluate grant applications.

*Place:* Courtyard by Marriott, 5520 Wisconsin Avenue, Chevy Chase, MD 20815.

*Contact Person:* Delvin R Knight, Ph.D., Scientific Review Officer, Center for Scientific Review, National Institutes of Health, 6701 Rockledge Drive Room 6194 MSC 4128, Bethesda, MD 20892-7814, 301-435-1850, [knightdr@csr.nih.gov](mailto:knightdr@csr.nih.gov).

*Name of Committee:* Endocrinology, Metabolism, Nutrition and Reproductive Sciences Integrated Review Group; Cellular, Molecular and Integrative Reproduction Study Section.

*Date:* October 18, 2012.

*Time:* 8:00 a.m. to 5:00 p.m.

*Agenda:* To review and evaluate grant applications.

*Place:* Sheraton Delfina Santa Monica Hotel 530 West Pico Boulevard, Santa Monica, CA 90405.

*Contact Person:* Gary Hunnicutt, Ph.D., Scientific Review Officer, Center for Scientific Review, National Institutes of Health, 6701 Rockledge Drive, Room 6164, MSC 7892, Bethesda, MD 20892, 301-435-0229, [gary.hunnicutt@nih.gov](mailto:gary.hunnicutt@nih.gov).

*Name of Committee:* Biobehavioral and Behavioral Processes Integrated Review Group; Child Psychopathology and Developmental Disabilities Study Section.

*Date:* October 18-19, 2012.

*Time:* 8:00 a.m. to 3:00 p.m.

*Agenda:* To review and evaluate grant applications.

*Place:* Courtyard Chicago Downtown/River North, 30 East Hubbard, Chicago, IL 60611.

*Contact Person:* Jane A Doussard-Roosevelt, Ph.D., Scientific Review Officer, Center for Scientific Review, National Institutes of Health, 6701 Rockledge Drive, Room 3184, MSC 7848, Bethesda, MD 20892, (301) 435-4445, [doussarj@csr.nih.gov](mailto:doussarj@csr.nih.gov).

*Name of Committee:* Immunology Integrated Review Group; Cellular and Molecular Immunology—B Study Section.

*Date:* October 18–19, 2012.

*Time:* 8:00 a.m. to 5:00 p.m.

*Agenda:* To review and evaluate grant applications.

*Place:* Avenue Crowne Plaza Chicago Hotel, 160 E. Huron Street, Chicago, IL 60611.

*Contact Person:* Betty Hayden, Ph.D., Scientific Review Officer, Center for Scientific Review, National Institutes of Health, 6701 Rockledge Drive, Room 4206, MSC 7812, Bethesda, MD 20892, 301-435-1223, haydenb@csr.nih.gov.

*Name of Committee:* Brain Disorders and Clinical Neuroscience Integrated Review Group; Clinical Neuroimmunology and Brain Tumors Study Section.

*Date:* October 18–19, 2012.

*Time:* 8:30 a.m. to 5:00 p.m.

*Agenda:* To review and evaluate grant applications.

*Place:* Melrose Hotel, 2430 Pennsylvania Ave. NW., Washington, DC 20037.

*Contact Person:* Jay Joshi, Ph.D., Scientific Review Officer, Center for Scientific Review, National Institutes of Health, 6701 Rockledge Drive, Room 5196, MSC 7846, Bethesda, MD 20892, (301) 408-9135, joshij@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 12, 2012.

**David Clary,**

*Program Analyst, Office of Federal Advisory Committee Policy.*

[FR Doc. 2012-22927 Filed 9-17-12; 8:45 am]

BILLING CODE 4140-01-P

## DEPARTMENT OF HOMELAND SECURITY

### Coast Guard

[Docket No. USCG-2008-1088]

### Notice of Arrival on the Outer Continental Shelf

**AGENCY:** Coast Guard, DHS.

**ACTION:** Notice of request for comments.

**SUMMARY:** The United States Coast Guard is soliciting public comment on proposed changes to the computer application for electronic Notice of Arrival (NOA) on the Outer Continental Shelf (OCS). The Coast Guard NOA-OCS program currently requires NOA information for those vessels, facilities, and Mobile Offshore Drilling Units (MODUs) operating on the OCS. This information is currently being collected via the National Vessel Movement Center (NVMC) electronic Notice of Arrival and Departure (e-NOAD) process. The Coast Guard is continually seeking to improve the e-NOAD process and form to make it as user friendly as

possible. Public comment is necessary in order to assist the Coast Guard with assessing which requirements may be addressed in future guidance or regulations to improve the e-NOAD application.

**DATES:** Comments and related material must either be submitted to our online docket via <http://www.regulations.gov> November 19, 2012 or reach the Docket Management Facility by that date.

**ADDRESSES:** You may submit comments identified by docket number USCG-2008-1088 using any one of the following methods:

(1) *Federal eRulemaking Portal:*

<http://www.regulations.gov>.

(2) *Fax:* 202-372-1925.

(3) *Mail:* Docket Management Facility (M-30), U.S. Department of Transportation, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE., Washington, DC 20590-0001.

(4) *Hand delivery:* Same as mail address above, between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The telephone number is 202-366-9329.

To avoid duplication, please use only one of these four methods. See the “Public Participation and Request for Comments” portion of the **SUPPLEMENTARY INFORMATION** section below for instructions on submitting comments.”

**FOR FURTHER INFORMATION CONTACT:** If you have questions on this notice, call or email LCDR Michael Lendvay, Commercial Vessel Compliance, Foreign and Offshore Vessel Compliance Division (CG-CVC-2), U.S. Coast Guard, 2100 2nd St. SW., Stop 7581, Washington DC 20593-7581, telephone 202-372-1218, email [Michael.D.Lendvay@uscg.mil](mailto:Michael.D.Lendvay@uscg.mil). If you have questions on viewing or submitting material to the docket, call Renee V. Wright, Program Manager, Docket Operations, telephone 202-366-9826.

#### SUPPLEMENTARY INFORMATION:

#### Public Participation and Request for Comments

We encourage you to submit comments and related material. All comments received will be posted, without change, to <http://www.regulations.gov> and will include any personal information you have provided.

Submitting comments: If you submit a comment, please include the docket number for this notice (USCG-2008-1088) and provide a reason for each comment or recommendation. You may submit your comments and material online, or by fax, mail or hand delivery,

but please use only one of these means. 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> and type “USCG-2008-1088” in the “Search” box. 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 them 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.

Viewing the comments and related material:

To view the comments go to <http://www.regulations.gov>. In the “Search” box insert “USCG-2008-1088.” Click the “Open Docket Folder” in the “Actions” column. If you do not have access to the Internet, you may view the docket online by visiting 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.

#### 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 system of records notice regarding our public dockets in the January 17, 2008, issue of the **Federal Register** (73 FR 3316).

#### Basis and Purpose

On January 13 2011, the Coast Guard, published the Notice of Arrival (NOA) on the Outer Continental Shelf (OCS) final rule [Docket No. USCG-2008-1088] (76 FR 2254), which required NOA information for those vessels, facilities and Mobile Drilling Units (MODUs) operating on the OCS. This rule was designed to enhance maritime domain awareness (MDA) over outer continental shelf activities. The final rule enhanced maritime security and safety by requiring U.S. and foreign vessels, floating facilities, and MODUs arriving on and/or engaging in outer continental shelf activities to report

their arrival times and locations and information regarding the vessels, voyage, cargo, and crew.

According to 43 U.S.C. 1331, the OCS includes all submerged lands lying seaward and outside of the area of lands beneath navigable waters and of which the subsoil and seabed are subject to the jurisdiction and control of the U.S. OCS activity is defined in U.S. regulations as any activity that occurs on the OCS and is associated with the exploration for, or development or production of, minerals, to include oil.

The final rule implements provisions of the Security and Accountability for Every (SAFE) Port Act of 2006, Public Law 109-347, and increases overall maritime domain awareness by requiring owners or operators of U. S. and foreign-flag vessels, floating facilities, and MODUs, to submit notice of arrival information to the Coast Guard's National Vessel Movement Center prior to engaging in OCS activities. Such information is critical to maritime safety and security and will enable the Coast Guard to more effectively prevent or respond to a safety or security concern on the OCS.

The final rule and related materials may be viewed online at <http://www.regulations.gov>, docket number: USCG-2008-1088.

Upon publication of the final rule, the U.S. domestic offshore industry indicated that compliance with the final rule was difficult because of the design of the e-NOAD system as it relates to vessels operating the OCS. Through our partnership with the Offshore Marine Service Association (OMSA), we established a working group to specifically address the design of an OCS-specific NOA reporting form.

Until design changes could be made to the OCS-specific NOA reporting form, we requested voluntary compliance with the revised e-NOAD-OCS application available for comment in this Notice so that we could ascertain the practicality of the revised application and the information requested. The e-NOAD-OCS is intended as a means of compliance with the final rule; however, other methods of reporting (such as by fax or email) will also be available as specified on the NVMC Web site [<http://www.nvmc.uscg.gov>]. See also 33 CFR 146.215(b) *Methods of Submission*. This voluntary compliance period allowed us to gather information as to what was needed to improve the process, not just on the domestic vessels, but also on the foreign-flag vessels operating on the OCS. In addition to reducing the reporting burden, we sought input as to how to make the e-NOA-OCS

application more user-friendly. As a result of these efforts, we are updating the e-NOAD-OCS application and soliciting additional input and comments from industry with regards to the revised data fields that are intended to eliminate duplicate reporting methods while providing us with the necessary information to maintain MDA. Therefore, the Coast Guard is inviting the public to comment on proposed changes to the e-NOAD-OCS electronic application described below. The e-NOAD-OCS application can be found at <http://www.nvmc.uscg.gov/NVMC/Default.aspx>. The comment period will begin September 18, 2012 and will end November 19, 2012.

#### e-NOAD OCS Process

To submit an e-NOAD OCS application, go to the U.S. Coast Guard National Vessel Movement Center Web page [<http://www.nvmc.uscg.gov/NVMC/Default.aspx>]. Once there, locate the "Submit NOA Online" button or login with your existing account using the login section directly below the "Submit NOA Online" button. If you do not have an account, there is a sign-up link located directly beneath the login section.

Once logged in, you will be connected to the e-NOAD application and have the option to view, update, or copy an existing notice. Users will select the "Add Notice" button. At this point, you will have the option to click on the "Import Notice" button to upload a current workbook 6.0 XLS file or compile XML file. Once you determine the method of submission, a sub-menu will appear that provides three options: (1) Arrival; (2) Import; and (3) OCS.

Select "OCS." An "OCS wizard" will appear. At this point, you will be prompted to submit the following information:

- Vessel/MODU details;
- Reporting party details;
- Free-from text block for additional information (new addition);
- Add arrivals, up to 5 (new addition);
- Crew, check boxes for what leg of the voyage they apply to;
- Passengers, check boxes for what leg of the voyage they apply to;
- Cargo, check boxes for what leg of the voyage they apply to;
- Previous ports details;
- Security details;

You may then submit the NOAD by clicking "Ok." After submitting the NOAD, you will have the following two options:

- Go back to the notice of arrival/ departure list screen
- Submit additional notices.

Please note that the system is capable of saving notices so that it is no longer necessary for the user to retype certain information that is associated with a particular vessel. Additionally, users will have the option to import crew and passenger lists to reduce the amount of time spent typing in names individually.

The Coast Guard is asking for public comment on the following proposed changes to the e-NOAD-OCS application.

(1) The addition of one data field to consist of a free-form block that will allow additional voluntary information (e.g., route information, day planning) to be collected;

(2) The ability to submit up to five consecutive ports or places on the OCS; and

(3) Ways to enhance the quality, utility, and clarity of information submitted through the e-NOAD-OCS application.

**Authority:** This notice is issued under authority of 5 U.S.C. 552(a); 33 CFR part 146.

Dated: September 4, 2012.

**Paul F. Thomas,**

*Director of Inspections and Compliance (CG-5PC).*

[FR Doc. 2012-22923 Filed 9-17-12; 8:45 am]

**BILLING CODE 9110-04-P**

## DEPARTMENT OF HOMELAND SECURITY

### Federal Emergency Management Agency

[Internal Agency Docket No. FEMA-3348-EM; Docket ID FEMA-2012-0002]

#### Mississippi; Amendment No. 2 to Notice of an Emergency Declaration

**AGENCY:** Federal Emergency Management Agency, DHS.

**ACTION:** Notice.

**SUMMARY:** This notice amends the notice of an emergency declaration for the State of Mississippi (FEMA-3348-EM), dated August 28, 2012, and related determinations.

**DATES:** *Effective Date:* September 11, 2012.

**FOR FURTHER INFORMATION CONTACT:** Peggy Miller, Office of Response and Recovery, Federal Emergency Management Agency, 500 C Street SW., Washington, DC 20472, (202) 646-3886.

**SUPPLEMENTARY INFORMATION:** Notice is hereby given that the incident period for this emergency is closed effective September 11, 2012.

The following Catalog of Federal Domestic Assistance Numbers (CFDA) are to be used

for reporting and drawing funds: 97.030, Community Disaster Loans; 97.031, Cora Brown Fund; 97.032, Crisis Counseling; 97.033, Disaster Legal Services; 97.034, Disaster Unemployment Assistance (DUA); 97.046, Fire Management Assistance Grant; 97.048, Disaster Housing Assistance to Individuals and Households In Presidentially Declared Disaster Areas; 97.049, Presidentially Declared Disaster Assistance—Disaster Housing Operations for Individuals and Households; 97.050, Presidentially Declared Disaster Assistance to Individuals and Households—Other Needs; 97.036, Disaster Grants—Public Assistance (Presidentially Declared Disasters); 97.039, Hazard Mitigation Grant.)

**W. Craig Fugate,**

*Administrator, Federal Emergency Management Agency.*

[FR Doc. 2012–22982 Filed 9–17–12; 8:45 am]

**BILLING CODE 9111–23–P**

**DEPARTMENT OF HOMELAND SECURITY**

**Federal Emergency Management Agency**

[Internal Agency Docket No. FEMA–3347–EM; Docket ID FEMA–2012–0002]

**Louisiana; Amendment No. 2 to Notice of an Emergency Declaration**

**AGENCY:** Federal Emergency Management Agency, DHS.

**ACTION:** Notice.

**SUMMARY:** This notice amends the notice of an emergency declaration for the State of Louisiana (FEMA–3347–EM), dated August 27, 2012, and related determinations.

**DATES:** *Effective Date:* September 10, 2012.

**FOR FURTHER INFORMATION CONTACT:** Peggy Miller, Office of Response and Recovery, Federal Emergency Management Agency, 500 C Street SW., Washington, DC 20472, (202) 646–3886.

**SUPPLEMENTARY INFORMATION:** Notice is hereby given that the incident period for this emergency is closed effective September 10, 2012.

The following Catalog of Federal Domestic Assistance Numbers (CFDA) are to be used for reporting and drawing funds: 97.030, Community Disaster Loans; 97.031, Cora Brown Fund; 97.032, Crisis Counseling; 97.033, Disaster Legal Services; 97.034, Disaster Unemployment Assistance (DUA); 97.046, Fire Management Assistance Grant; 97.048, Disaster Housing Assistance to Individuals and Households In Presidentially Declared Disaster Areas; 97.049, Presidentially Declared Disaster Assistance—Disaster Housing Operations for Individuals and Households; 97.050, Presidentially Declared Disaster Assistance to Individuals

and Households—Other Needs; 97.036, Disaster Grants—Public Assistance (Presidentially Declared Disasters); 97.039, Hazard Mitigation Grant.

**W. Craig Fugate,**

*Administrator, Federal Emergency Management Agency.*

[FR Doc. 2012–22981 Filed 9–17–12; 8:45 am]

**BILLING CODE 9111–23–P**

**DEPARTMENT OF HOMELAND SECURITY**

**Federal Emergency Management Agency**

[Internal Agency Docket No. FEMA–4081–DR; Docket ID FEMA–2012–0002]

**Mississippi; Amendment No. 4 to Notice of a Major Disaster Declaration**

**AGENCY:** Federal Emergency Management Agency, DHS.

**ACTION:** Notice.

**SUMMARY:** This notice amends the notice of a major disaster declaration for the State of Mississippi (FEMA–4081–DR), dated August 29, 2012, and related determinations.

**DATES:** *Effective Date:* September 11, 2012.

**FOR FURTHER INFORMATION CONTACT:** Peggy Miller, Office of Response and Recovery, Federal Emergency Management Agency, 500 C Street SW., Washington, DC 20472, (202) 646–3886.

**SUPPLEMENTARY INFORMATION:** The notice of a major disaster declaration for the State of Mississippi is hereby amended to include the following areas among those areas determined to have been adversely affected by the event declared a major disaster by the President in his declaration of August 29, 2012.

Adams, Amite, George, Hancock, Harrison, Jackson, Lincoln, Marion, Pearl River, Pike, Stone, Walthall, and Wilkinson Counties for Public Assistance [Categories C–G] (already designated for Individual Assistance and debris removal and emergency protective measures [Categories A and B], including direct federal assistance, under the Public Assistance program).

Claiborne, Copiah, Covington, Franklin, Greene, Jefferson, Jefferson Davis, Lamar, Lawrence, Newton, Perry, Smith, and Wayne Counties for Public Assistance [Categories C–G] (already designated for debris removal and emergency protective measures [Categories A and B], including direct federal assistance, under the Public Assistance program).

(The following Catalog of Federal Domestic Assistance Numbers (CFDA) are to be used for reporting and drawing funds: 97.030, Community Disaster Loans; 97.031, Cora Brown Fund; 97.032, Crisis Counseling; 97.033, Disaster Legal Services; 97.034, Disaster Unemployment Assistance (DUA);

97.046, Fire Management Assistance Grant; 97.048, Disaster Housing Assistance to Individuals and Households In Presidentially Declared Disaster Areas; 97.049, Presidentially Declared Disaster Assistance—Disaster Housing Operations for Individuals and Households; 97.050, Presidentially Declared Disaster Assistance to Individuals and Households—Other Needs; 97.036, Disaster Grants—Public Assistance (Presidentially Declared Disasters); 97.039, Hazard Mitigation Grant.)

**W. Craig Fugate,**

*Administrator, Federal Emergency Management Agency.*

[FR Doc. 2012–22987 Filed 9–17–12; 8:45 am]

**BILLING CODE 9111–23–P**

**DEPARTMENT OF HOMELAND SECURITY**

**Federal Emergency Management Agency**

[Internal Agency Docket No. FEMA–4080–DR; Docket ID FEMA–2012–0002]

**Louisiana; Amendment No. 9 to Notice of a Major Disaster Declaration**

**AGENCY:** Federal Emergency Management Agency, DHS.

**ACTION:** Notice.

**SUMMARY:** This notice amends the notice of a major disaster declaration for the State of Louisiana (FEMA–4080–DR), dated August 29, 2012, and related determinations.

**DATES:** *Effective Date:* September 10, 2012.

**FOR FURTHER INFORMATION CONTACT:** Peggy Miller, Office of Response and Recovery, Federal Emergency Management Agency, 500 C Street SW., Washington, DC 20472, (202) 646–3886.

**SUPPLEMENTARY INFORMATION:** Notice is hereby given that the incident period for this disaster is closed effective September 10, 2012.

The following Catalog of Federal Domestic Assistance Numbers (CFDA) are to be used for reporting and drawing funds: 97.030, Community Disaster Loans; 97.031, Cora Brown Fund; 97.032, Crisis Counseling; 97.033, Disaster Legal Services; 97.034, Disaster Unemployment Assistance (DUA); 97.046, Fire Management Assistance Grant; 97.048, Disaster Housing Assistance to Individuals and Households In Presidentially Declared Disaster Areas; 97.049, Presidentially Declared Disaster Assistance—Disaster Housing Operations for Individuals and Households; 97.050, Presidentially Declared Disaster Assistance to Individuals and Households—Other Needs; 97.036, Disaster Grants—Public Assistance

(Presidentially Declared Disasters); 97.039, Hazard Mitigation Grant.)

**W. Craig Fugate,**

*Administrator, Federal Emergency Management Agency.*

[FR Doc. 2012-22985 Filed 9-17-12; 8:45 am]

**BILLING CODE 9111-23-P**

(Presidentially Declared Disasters); 97.039, Hazard Mitigation Grant.)

**W. Craig Fugate,**

*Administrator, Federal Emergency Management Agency.*

[FR Doc. 2012-22983 Filed 9-17-12; 8:45 am]

**BILLING CODE 9111-23-P**

(Presidentially Declared Disasters); 97.039, Hazard Mitigation Grant.)

**W. Craig Fugate,**

*Administrator, Federal Emergency Management Agency.*

[FR Doc. 2012-22961 Filed 9-17-12; 8:45 am]

**BILLING CODE 9111-23-P**

**DEPARTMENT OF HOMELAND SECURITY**

**Federal Emergency Management Agency**

[Internal Agency Docket No. FEMA-4081-DR; Docket ID FEMA-2012-0002]

**Mississippi; Amendment No. 3 to Notice of a Major Disaster Declaration**

**AGENCY:** Federal Emergency Management Agency, DHS.

**ACTION:** Notice.

**SUMMARY:** This notice amends the notice of a major disaster declaration for the State of Mississippi (FEMA-4081-DR), dated August 29, 2012, and related determinations.

**DATES:** *Effective Date:* September 7, 2012.

**FOR FURTHER INFORMATION CONTACT:**

Peggy Miller, Office of Response and Recovery, Federal Emergency Management Agency, 500 C Street SW., Washington, DC 20472, (202) 646-3886.

**SUPPLEMENTARY INFORMATION:** The notice of a major disaster declaration for the State of Mississippi is hereby amended to include the following areas among those areas determined to have been adversely affected by the event declared a major disaster by the President in his declaration of August 29, 2012.

Adams, Amite, Clarke, Forrest, George, Hinds, Lincoln, Marion, Pike, Stone, Walthall, Warren, and Wilkinson Counties for Individual Assistance (already designated for debris removal and emergency protective measures [Categories A and B], including direct federal assistance, under the Public Assistance program).

(The following Catalog of Federal Domestic Assistance Numbers (CFDA) are to be used for reporting and drawing funds: 97.030, Community Disaster Loans; 97.031, Cora Brown Fund; 97.032, Crisis Counseling; 97.033, Disaster Legal Services; 97.034, Disaster Unemployment Assistance (DUA); 97.046, Fire Management Assistance Grant; 97.048, Disaster Housing Assistance to Individuals and Households in Presidentially Declared Disaster Areas; 97.049, Presidentially Declared Disaster Assistance—Disaster Housing Operations for Individuals and Households; 97.050 Presidentially Declared Disaster Assistance to Individuals and Households—Other Needs; 97.036, Disaster Grants—Public Assistance

**DEPARTMENT OF HOMELAND SECURITY**

**Federal Emergency Management Agency**

[Internal Agency Docket No. FEMA-4080-DR; Docket ID FEMA-2012-0002]

**Louisiana; Amendment No. 8 to Notice of a Major Disaster Declaration**

**AGENCY:** Federal Emergency Management Agency, DHS.

**ACTION:** Notice.

**SUMMARY:** This notice amends the notice of a major disaster declaration for the State of Louisiana (FEMA-4080-DR), dated August 29, 2012, and related determinations.

**DATES:** *Effective Date:* September 7, 2012.

**FOR FURTHER INFORMATION CONTACT:**

Peggy Miller, Office of Response and Recovery, Federal Emergency Management Agency, 500 C Street SW., Washington, DC 20472, (202) 646-3886.

**SUPPLEMENTARY INFORMATION:** The notice of a major disaster declaration for the State of Louisiana is hereby amended to include the following areas among those areas determined to have been adversely affected by the event declared a major disaster by the President in his declaration of August 29, 2012.

The parishes of Iberville and St. Mary for Individual Assistance (already designated for debris removal and emergency protective measures [Categories A and B], including direct federal assistance, under the Public Assistance program).

(The following Catalog of Federal Domestic Assistance Numbers (CFDA) are to be used for reporting and drawing funds: 97.030, Community Disaster Loans; 97.031, Cora Brown Fund; 97.032, Crisis Counseling; 97.033, Disaster Legal Services; 97.034, Disaster Unemployment Assistance (DUA); 97.046, Fire Management Assistance Grant; 97.048, Disaster Housing Assistance to Individuals and Households in Presidentially Declared Disaster Areas; 97.049, Presidentially Declared Disaster Assistance—Disaster Housing Operations for Individuals and Households; 97.050 Presidentially Declared Disaster Assistance to Individuals and Households—Other Needs; 97.036, Disaster Grants—Public Assistance

**DEPARTMENT OF HOMELAND SECURITY**

**Federal Emergency Management Agency**

[Internal Agency Docket No. FEMA-4080-DR; Docket ID FEMA-2012-0002]

**Louisiana; Amendment No. 10 to Notice of a Major Disaster Declaration**

**AGENCY:** Federal Emergency Management Agency, DHS.

**ACTION:** Notice.

**SUMMARY:** This notice amends the notice of a major disaster declaration for the State of Louisiana (FEMA-4080-DR), dated August 29, 2012, and related determinations.

**DATES:** *Effective Date:* September 12, 2012.

**FOR FURTHER INFORMATION CONTACT:**

Peggy Miller, Office of Response and Recovery, Federal Emergency Management Agency, 500 C Street SW., Washington, DC 20472, (202) 646-3886.

**SUPPLEMENTARY INFORMATION:** The notice of a major disaster declaration for the State of Louisiana is hereby amended to include the following areas among those areas determined to have been adversely affected by the event declared a major disaster by the President in his declaration of August 29, 2012.

The parishes of Assumption, Iberville, Lafourche, Orleans, St. Charles, St. Helena, St. James, St. Mary, St. Tammany, Tangipahoa, Terrebonne, and Washington for Public Assistance [Categories C-G] (already designated for Individual Assistance and debris removal and emergency protective measures [Categories A and B], including direct federal assistance, under the Public Assistance program).

The parishes of East Feliciana and Pointe Coupee for Public Assistance [Categories C-G] (already designated for debris removal and emergency protective measures [Categories A and B], including direct federal assistance, under the Public Assistance program).

The following Catalog of Federal Domestic Assistance Numbers (CFDA) are to be used for reporting and drawing funds: 97.030, Community Disaster Loans; 97.031, Cora Brown Fund; 97.032, Crisis Counseling; 97.033, Disaster Legal Services; 97.034, Disaster Unemployment Assistance (DUA); 97.046, Fire Management Assistance Grant; 97.048, Disaster Housing Assistance to Individuals and Households in Presidentially

Declared Disaster Areas; 97.049, Presidentially Declared Disaster Assistance—Disaster Housing Operations for Individuals and Households; 97.050 Presidentially Declared Disaster Assistance to Individuals and Households—Other Needs; 97.036, Disaster Grants—Public Assistance (Presidentially Declared Disasters); 97.039, Hazard Mitigation Grant.)

**W. Craig Fugate,**

*Administrator, Federal Emergency Management Agency.*

[FR Doc. 2012-22962 Filed 9-17-12; 8:45 am]

**BILLING CODE 9111-23-P**

## DEPARTMENT OF HOMELAND SECURITY

### Federal Emergency Management Agency

[Internal Agency Docket No. FEMA-4081-DR; Docket ID FEMA-2012-0002]

#### Mississippi; Amendment No. 5 to Notice of a Major Disaster Declaration

**AGENCY:** Federal Emergency Management Agency, DHS.

**ACTION:** Notice.

**SUMMARY:** This notice amends the notice of a major disaster declaration for the State of Mississippi (FEMA-4081-DR), dated August 29, 2012, and related determinations.

**DATES:** *Effective Date:* September 11, 2012.

**FOR FURTHER INFORMATION CONTACT:** Peggy Miller, Office of Response and Recovery, Federal Emergency Management Agency, 500 C Street SW., Washington, DC 20472, (202) 646-3886.

**SUPPLEMENTARY INFORMATION:** Notice is hereby given that the incident period for this disaster is closed effective September 11, 2012.

The following Catalog of Federal Domestic Assistance Numbers (CFDA) are to be used for reporting and drawing funds: 97.030, Community Disaster Loans; 97.031, Cora Brown Fund; 97.032, Crisis Counseling; 97.033, Disaster Legal Services; 97.034, Disaster Unemployment Assistance (DUA); 97.046, Fire Management Assistance Grant; 97.048, Disaster Housing Assistance to Individuals and Households In Presidentially Declared Disaster Areas; 97.049, Presidentially Declared Disaster Assistance—Disaster Housing Operations for Individuals and Households; 97.050, Presidentially Declared Disaster Assistance to Individuals and Households—Other Needs; 97.036, Disaster Grants—Public Assistance

(Presidentially Declared Disasters); 97.039, Hazard Mitigation Grant.

**W. Craig Fugate,**

*Administrator, Federal Emergency Management Agency.*

[FR Doc. 2012-22977 Filed 9-17-12; 8:45 am]

**BILLING CODE 9111-23-P**

## DEPARTMENT OF HOMELAND SECURITY

### Federal Emergency Management Agency

[Internal Agency Docket No. FEMA-4080-DR; Docket ID FEMA-2012-0002]

#### Louisiana; Amendment No. 7 to Notice of a Major Disaster Declaration

**AGENCY:** Federal Emergency Management Agency, DHS.

**ACTION:** Notice.

**SUMMARY:** This notice amends the notice of a major disaster declaration for the State of Louisiana (FEMA-4080-DR), dated August 29, 2012, and related determinations.

**DATES:** *Effective Date:* September 6, 2012.

**FOR FURTHER INFORMATION CONTACT:** Peggy Miller, Office of Response and Recovery, Federal Emergency Management Agency, 500 C Street SW., Washington, DC 20472, (202) 646-3886.

**SUPPLEMENTARY INFORMATION:** The notice of a major disaster declaration for the State of Louisiana is hereby amended to include the following areas among those areas determined to have been adversely affected by the event declared a major disaster by the President in his declaration of August 29, 2012.

Assumption, St. Helena, St. James, Terrebonne, and Washington Parishes for Individual Assistance (already designated for debris removal and emergency protective measures [Categories A and B], including direct federal assistance, under the Public Assistance program).

(The following Catalog of Federal Domestic Assistance Numbers (CFDA) are to be used for reporting and drawing funds: 97.030, Community Disaster Loans; 97.031, Cora Brown Fund; 97.032, Crisis Counseling; 97.033, Disaster Legal Services; 97.034, Disaster Unemployment Assistance (DUA); 97.046, Fire Management Assistance Grant; 97.048, Disaster Housing Assistance to Individuals and Households In Presidentially Declared Disaster Areas; 97.049, Presidentially Declared Disaster Assistance—Disaster Housing Operations for Individuals and Households; 97.050, Presidentially Declared Disaster Assistance to Individuals and Households—Other Needs; 97.036, Disaster Grants—Public Assistance

(Presidentially Declared Disasters); 97.039, Hazard Mitigation Grant.

**W. Craig Fugate,**

*Administrator, Federal Emergency Management Agency.*

[FR Doc. 2012-22959 Filed 9-17-12; 8:45 am]

**BILLING CODE 9111-23-P**

## DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT

[Docket No. FR-5603-N-65]

### Notice of Proposed Information Collection to OMB and Comment Request: Legal Instructions Concerning Applications for Full Insurance Benefits; Assignment of Multifamily Mortgages to the Secretary

**AGENCY:** Office of the Chief Information Officer, HUD.

**ACTION:** Notice.

**SUMMARY:** The proposed information collection requirement described below has been submitted to the Office of Management and Budget (OMB) for review, as required by the Paperwork Reduction Act. The Department is soliciting public comments on the subject proposal for a period of 30 days. This notice also corrects an error that was in the 60-day notice published on July 12, 2012.

Mortgagees of HUD-insured mortgages may receive mortgage insurance benefits upon assignment of mortgages to HUD. In connection with the assignment, legal documents (e.g., mortgage, mortgage note, security agreement, title insurance policy) must be submitted to the Department. The instructions describe the document submitted to OMB and the procedures for submission.

**DATES:** *Comments Due Date:* October 18, 2012.

**ADDRESSES:** Interested persons are invited to submit comments regarding this proposal. Comments should refer to the proposal by name and/or OMB Control Number (2510-0006) and should be sent to: HUD Desk Office of Management and Budget, New Executive Office Building, Washington, DC 20503; fax 202-395-5806. *OIRA Submission@omb.eop.gov*

**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. Copies of instruction submitted to OMB may be obtained from Ms. Pollard.

**SUPPLEMENTARY INFORMATION:** This notice informs the public that, as required by the Paperwork Reduction Act of 1995 (44 U.S.C. Chapter 35, as amended) the Department of Housing and Urban Development has submitted to OMB a request for approval of the Information collection described below.

This notice is soliciting comments for an additional period of 30 days from members of the public and affected agencies concerning the proposed collection of information to: (1) 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; (2) Evaluate the accuracy of the agency's estimate of the burden of the proposed collection of information; (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; including through the use of

appropriate automated collection techniques or other forms of information technology, e.g., permitting electronic submission of responses.

The first notice pertaining to this information collection, referred to as the 60-day notice, published in the **Federal Register** on July 12, 2012, at 77 FR 41197. The notice set out the revisions that HUD proposed to the legal instructions and also presented the proposed number of respondents and burden hours. Although HUD received no comments in response to the July 12, 2012, notice, HUD identified an error. The number of respondents was incorrect. The 60-day notice listed respondents as 359. This number was incorrect. The correct number is 128. This notice published today provides the correct information and also provides the following information:

*Title of Proposal:* Legal Instructions Concerning Applications for Full Insurance Benefits—Assignment of Multifamily Mortgage to the Secretary.

*OMB Control Number, if applicable:* 2510-0006.

*Agency form numbers, if applicable:* N/A.

*Members of affected public:* Mortgagees when applying for insurance benefits from HUD.

*Description of the Need for the Information and its Proposed Use.* Mortgagees of HUD-insured Mortgagees may receive mortgage insurance benefits upon assignment of mortgages to HUD. In connection with the assignment, legal documents (e.g., mortgage, mortgage note, security agreement, title insurance policy) must be submitted to the Department. The instructions describe the document submitted to OMB and the procedures for submission.

*Estimation of the total numbers of hours needed to prepare the information collection including number of respondents, frequency of response, and hours of response:*

Number of respondents	Burden hours	Frequency of response	Total burden hours
128 .....	26	1	3,328

*Status of the proposed information collection:* Extension of a currently approved collection.

**Authority:** The Paperwork Reduction Act of 1995, 44 U.S.C. Chapter 35, as amended.

Dated: September 13, 2012.

**Colette Pollard,**

*Department Reports Management Officer  
Office of the Chief Information Officer.*

[FR Doc. 2012-22984 Filed 9-17-12; 8:45 am]

**BILLING CODE 4210-67-P**

**DEPARTMENT OF THE INTERIOR**

**Fish and Wildlife Service**

[FWS-HQ-EA-2012-N217; FF09D00000-FXGO1664091HCC05D-123]

**Wildlife and Hunting Heritage Conservation Council**

**AGENCY:** Fish and Wildlife Service, Interior.

**ACTION:** Notice of meeting.

**SUMMARY:** We, the U.S. Fish and Wildlife Service, announce a public meeting of the Wildlife and Hunting Heritage Conservation Council (Council).

**DATES:** *Meeting:* Tuesday October 16, 2012, from 8:30 a.m. to 4:30 p.m., and Wednesday October 17, 2012, from 8:30 a.m. to 4:30 p.m. (Eastern daylight time).

For deadlines and directions on registering to attend, submitting written material, and giving an oral presentation, please see "Public Input" under **SUPPLEMENTARY INFORMATION.**

**ADDRESSES:** The meeting will be held in the Room 5160 at the Main Interior Building, 1849 C Street NW., Washington DC 20240.

**FOR FURTHER INFORMATION CONTACT:** Joshua Winchell, Council Coordinator, 4401 North Fairfax Drive, Mailstop 3103-AEA, Arlington, VA 22203; telephone (703) 358-2639; fax (703) 358-2548; or email [joshua\\_winchell@fws.gov](mailto:joshua_winchell@fws.gov).

**SUPPLEMENTARY INFORMATION:** In accordance with the requirements of the Federal Advisory Committee Act, 5 U.S.C. App., we announce that Wildlife and Hunting Heritage Conservation Council will hold a meeting.

**Background**

Formed in February 2010, the Council provides advice about wildlife and habitat conservation endeavors that:

1. Benefit wildlife resources;
2. Encourage partnership among the public, sporting conservation organizations, States, Native American tribes, and the Federal Government; and
3. Benefit recreational hunting.

The Council advises the Secretary of the Interior and the Secretary of

Agriculture, reporting through the Director, U.S. Fish and Wildlife Service (Service), in consultation with the Director, Bureau of Land Management (BLM); Director, National Park Service (NPS); Chief, Forest Service (USFS); Chief, Natural Resources Service (NRCS); and Administrator, Farm Services Agency (FSA). The Council's duties are strictly advisory and consist of, but are not limited to, providing recommendations for:

1. Implementing the Recreational Hunting and Wildlife Resource Conservation Plan—A Ten-Year Plan for Implementation;
2. Increasing public awareness of and support for the Wildlife Restoration Program;
3. Fostering wildlife and habitat conservation and ethics in hunting and shooting sports recreation;
4. Stimulating sportsmen and women's participation in conservation and management of wildlife and habitat resources through outreach and education;
5. Fostering communication and coordination among State, tribal, and Federal governments; industry; hunting and shooting sportsmen and women; wildlife and habitat conservation and management organizations; and the public;

6. Providing appropriate access to Federal lands for recreational shooting and hunting;

7. Providing recommendations to improve implementation of Federal conservation programs that benefit wildlife, hunting, and outdoor recreation on private lands; and

8. When requested by the Designated Federal Officer, in consultation with the Council Chairperson, performing a variety of assessments or reviews of policies, programs, and efforts through the Council's designated subcommittees or workgroups.

Background information on the Council is available at <http://www.fws.gov/whhcc>.

**Meeting Agenda**

The Council will convene to consider:

1. The Recreational Hunting and Wildlife Resource Conservation Plan—A Ten-Year Plan for Implementation;

2. America's Great Outdoors initiative; and

3. Other Council business.

The final agenda will be posted on the Internet at <http://www.fws.gov/whhcc>.

**Public Input**

If you wish to	You must contact the Council Coordinator (see <b>FOR FURTHER INFORMATION CONTACT</b> ) no later than
Attend the meeting .....	October 5, 2012.
Submit written information or questions before the meeting for the council to consider during the meeting.	October 5, 2012.
Give an oral presentation during the meeting.	October 5, 2012.

**Attendance**

Because entry to Federal buildings is restricted, all visitors are required to preregister to be admitted. In order to attend this meeting, you must register by close of business on the dates listed in "Public Input" under **SUPPLEMENTARY INFORMATION**. Please submit your name, time of arrival, email address, and phone number to the Council Coordinator (see **FOR FURTHER INFORMATION CONTACT**).

**Submitting Written Information or Questions**

Interested members of the public may submit relevant information or questions for the Council to consider during the public meeting. Written statements must be received by the date above, so that the information may be made available to the Council for their

consideration prior to this meeting. Written statements must be supplied to the Council Coordinator in both of the following formats: One hard copy with original signature, and one electronic copy via email.

**Giving an Oral Presentation**

Individuals or groups requesting to make an oral presentation at the meeting will be limited to 2 minutes per speaker, with no more than a total of 30 minutes for all speakers. Interested parties should contact the Council Coordinator, in writing (preferably via email; see **FOR FURTHER INFORMATION CONTACT**), to be placed on the public speaker list for this meeting. Nonregistered public speakers will not be considered during the meeting. Registered speakers who wish to expand upon their oral statements, or those who had wished to speak but could not be accommodated on the agenda, may submit written statements to the Council Coordinator up to 30 days subsequent to the meeting.

**Meeting Minutes**

Summary minutes of the conference will be maintained by the Council Coordinator (see **FOR FURTHER INFORMATION CONTACT**) and will be available for public inspection within 90 days of the meeting and will be posted on the Council's Web site at <http://www.fws.gov/whhcc>.

**Christine E. Eustis,**

*Acting Director.*

[FR Doc. 2012-22935 Filed 9-17-12; 8:45 am]

**BILLING CODE 4310-55-P**

**DEPARTMENT OF THE INTERIOR**

**Bureau of Land Management**

[LNM9300000 L12200000 XX0000]

**Renewal of Approved Information Collection**

**AGENCY:** Bureau of Land Management, Interior.

**ACTION:** 30-day notice and request for comments.

**SUMMARY:** The Bureau of Land Management (BLM) has submitted an information collection request to the Office of Management and Budget (OMB) to continue the collection of information that is necessary to implement two provisions of the Federal Cave Resources Protection Act—one which requires Federal agencies to consult with interested parties to develop a listing of significant caves, and another under which Federal and State governmental agencies and bona fide educational and research

institutions may request confidential information regarding significant caves. The Office of Management and Budget (OMB) previously approved this information collection activity, and assigned it control number 1004-0165.

**DATES:** The OMB is required to respond to this information collection request within 60 days but may respond after 30 days. For maximum consideration, written comments should be received on or before October 18, 2012.

**ADDRESSES:** Please submit comments directly to the Desk Officer for the Department of the Interior (OMB #1004-0165), Office of Management and Budget, Office of Information and Regulatory Affairs, fax 202-395-5806, or by electronic mail at [oir\\_docket@omb.eop.gov](mailto:oir_docket@omb.eop.gov). Please provide a copy of your comments to the BLM. You may do so via mail, fax, or electronic mail.

**Mail:** U.S. Department of the Interior, Bureau of Land Management, 1849 C Street NW., Room 2134LM, Attention: Jean Sonneman, Washington, DC 20240.

**Fax:** to Jean Sonneman at 202-245-0050.

**Electronic mail:**

[Jean\\_Sonneman@blm.gov](mailto:Jean_Sonneman@blm.gov).

Please indicate "Attn: 1004-0165" regardless of the form of your comments.

**FOR FURTHER INFORMATION CONTACT:**

James Goodbar, at 575-234-5929. Persons who use a telecommunication device for the deaf (TDD) may call the Federal Information Relay Service (FIRS) at 1-800-877-8339, to leave a message for Mr. Goodbar. You may also review the information collection request online at <http://www.reginfo.gov/public/do/PRAMain>.

**SUPPLEMENTARY INFORMATION:** The Paperwork Reduction Act (44 U.S.C. 3501-3521) and OMB regulations at 5 CFR part 1320 provide 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. In order to obtain and renew an OMB control number, Federal agencies are required to seek public comment on information collection and recordkeeping activities (see 5 CFR 1320.8(d) and 1320.12(a)).

As required at 5 CFR 1320.8(d), the BLM published a 60-day notice in the **Federal Register** on June 18, 2012 (77 FR 36290), and the comment period ended August 17, 2012. The BLM received no comments. The BLM now requests comments on the following subjects:

1. Whether the collection of information is necessary for the proper functioning of the BLM and other collecting agencies, including whether the information will have practical utility;

2. The accuracy of the BLM's estimate of the burden of collecting the information, including the validity of the methodology and assumptions used;

3. The quality, utility and clarity of the information to be collected; and

4. How to minimize the information collection burden on those who are to respond, including the use of appropriate automated, electronic, mechanical, or other forms of information technology.

Please send comments as directed under **ADDRESSES** and **DATES**. Please refer to OMB control number 1004-0165 in your correspondence. 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.

The following information is provided for the information collection.

*Title:* Cave Management: Cave Nominations and Confidential Information (43 CFR Part 37).

*Forms:* None.

*OMB Control Number:* 1004-0165.

*Abstract:* The information covered in this Information Collection Request applies to caves on Federal lands administered by the BLM, National Park Service, U.S. Fish and Wildlife Service, and Bureau of Reclamation. These agencies collect information from parties who are knowledgeable about caves, in order to update a list of

significant caves that are under the jurisdiction of the agencies listed above. They also process requests for confidential information regarding significant caves. The information collected enables the agencies to comply with the Federal Cave Resources Protection Act (16 U.S.C. 4301-4310).

*Frequency of Collection:* On occasion.

*Obligation to Respond:* Required to obtain or maintain benefits.

*Estimated Number and Description of Respondents Annually:* 100 individuals and households.

*Estimated Reporting and Recordkeeping "Hour" Burden Annually:* 1090 hours.

*Estimated Reporting and Recordkeeping "Non-Hour Cost" Burden:* None.

The following table details the individual components and respective hour burdens of this information collection request:

A. Type of response	B. Number of responses	C. Time per response	D. Total hours (Column B × Column C)
Cave Nomination .....	90	12	1080
Request for Confidential Cave Information .....	10	1	10
Totals .....	100	.....	1090

**Jean Sonneman,**  
Information Collection Clearance Officer,  
Bureau of Land Management.  
[FR Doc. 2012-22937 Filed 9-17-12; 8:45 am]  
**BILLING CODE 4310-84-P**

**DEPARTMENT OF THE INTERIOR**

**Bureau of Land Management**

[LLCAC09000 L11500000.JP0000]

**Notice of Intent To Prepare a Resource Management Plan Amendment for the Southern Diablo Mountain Range and Central Coast of California and Associated Environmental Assessment**

**AGENCY:** Bureau of Land Management, Interior.

**ACTION:** Notice.

**SUMMARY:** In compliance with the National Environmental Policy Act of 1969, as amended (NEPA), and the Federal Land Policy and Management Act of 1976, as amended (FLPMA), the Bureau of Land Management (BLM) Hollister Field Office, Hollister, California intends to prepare a Resource Management Plan (RMP) amendment for

the Southern Diablo Mountain Range and Central Coast of California RMP with an associated Environmental Assessment (EA) to address the Panoche-Coalinga Area of Critical Environmental Concern (ACEC) and by this notice is announcing the beginning of the scoping process to solicit public comments and identify issues.

**DATES:** This notice initiates the public scoping process for the RMP amendment and associated EA. Comments on issues may be submitted in writing until 30 days after the date of this notice in the **Federal Register**. The date(s) and location(s) of any scoping meetings will be announced at least 15 days in advance through the local news media, newspapers and the BLM Web site at: <http://www.blm.gov/ca/hollister>. In order to be included in the analysis, all comments must be received prior to the close of the 30-day scoping period or 15 days after the last public meeting, whichever is later. We will provide additional opportunities for public participation as appropriate.

**ADDRESSES:** You may submit comments on issues and planning criteria related to the RMP amendment EA by any of the following methods:

- *Web site:* <http://www.blm.gov/ca/hollister>.

- *Email:* [BLM\\_CA\\_Hollister\\_RMP@blm.gov](mailto:BLM_CA_Hollister_RMP@blm.gov).

- *Fax:* 831-630-5055.
- *Mail:* Hollister Field Office, 20 Hamilton Court, Hollister, CA 95023.

Documents pertinent to this proposal may be examined at the Hollister Field Office, 20 Hamilton Court, Hollister, CA 95023.

**FOR FURTHER INFORMATION CONTACT:** And/or to have your name added to our mailing list, contact Sky Murphy, telephone 831-630-5039; address (see **ADDRESSES** above); email [BLM\\_CA\\_Hollister\\_RMP@blm.gov](mailto:BLM_CA_Hollister_RMP@blm.gov). Persons who use a telecommunications device for the deaf (TDD) may call the Federal Information Relay Service (FIRS) at 1-800-877-8339 to contact the above individual during normal business hours. The FIRS is available 24 hours a day, 7 days a week, to leave a message or question with the above individual. You will receive a reply during normal business hours.

**SUPPLEMENTARY INFORMATION:** The BLM approved the Record of Decision (ROD) for the RMP for the Southern Diablo Mountain Range and Central Coast of California in 2007. The ROD calls for

detailed ACEC management plans to identify site-specific projects, as well as implementation strategies to address complex natural and cultural resource management issues. Accordingly, the BLM is preparing an RMP amendment/EA to address the Panoche-Coalinga ACEC. The RMP amendment will incorporate relevant new information and program guidance or policies developed since the 2007 ROD.

The planning area is located in southern San Benito and western Fresno counties and encompasses approximately 56,000 acres of public land. The purpose of the public scoping process is to determine relevant issues that will inform the scope of the environmental analysis, including alternatives, and guide the planning process. Preliminary issues for the plan amendment area have been identified by the BLM; Federal, State, and local agencies; and other stakeholders. The issues include designation and management of special areas such as ACECs and Research Natural Areas, special status species recovery, recreation management, energy development, livestock grazing, fire management, and lands available for disposal or potential acquisition.

Preliminary planning criteria include:

1. Compliance with FLPMA, NEPA, and all other applicable laws;
2. Coordination with local and county governments for analysis of economic and social impacts;
3. Government-to-government consultation with federally recognized tribes;
4. Designation of motorized use areas and routes;
5. Compliance with Rangeland Health Standards and Guidelines; and
6. Consideration of cost effectiveness of proposed actions and alternatives.

You may submit comments on issues and planning criteria in writing to the BLM at any public scoping meeting, or you may submit them to the BLM using one of the methods listed in the **ADDRESSES** section above. To be most helpful, you should submit comments by the close of the 30-day scoping period or within 15 days after the last public meeting, whichever is later.

The BLM will provide opportunities for public participation as required by NEPA and the National Historic Preservation Act (NHPA). Information about historic and cultural resources within the area potentially affected by the proposed action will assist the BLM in identifying and evaluating impacts to such resources in the context of NEPA and the NHPA.

The BLM will consult with Indian tribes on a government-to-government

basis in accordance with Executive Order 13175 and other policies. Tribal concerns, including impacts on Indian trust assets and potential impacts to cultural resources, will be given due consideration. Federal, State, and local agencies, along with tribes and other stakeholders that may be interested in or affected by the proposed action that the BLM is evaluating, are invited to participate in the scoping process and, if eligible, may request or be requested by the BLM to participate in the development of the environmental analysis as a cooperating agency.

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.

The BLM will evaluate identified issues to be addressed in the plan, and will place them into one of three categories:

1. Issues to be resolved in the plan amendment;
2. Issues to be resolved through policy or administrative action; or
3. Issues beyond the scope of this plan amendment.

The BLM will provide an explanation in the EA as to why an issue was placed in category two or three. The public is also encouraged to help identify any management questions and concerns that should be addressed in the plan. The BLM will work collaboratively with interested parties to identify the management decisions that are best suited to local, regional, and national needs and concerns.

The BLM will use an interdisciplinary approach to develop the plan amendment in order to consider the variety of resource issues and concerns identified. Specialists with expertise in the following disciplines will be involved in the planning process: rangeland management, minerals and geology, outdoor recreation, archaeology, paleontology, wildlife and fisheries, lands and realty, hydrology, soils, and sociology and economics.

**Authority:** 40 CFR 1501.7 and 43 CFR 1610.2

**Thomas Pogacnik,**

*Deputy State Director, California.*

[FR Doc. 2012-22939 Filed 9-17-12; 8:45 am]

**BILLING CODE 4310-40-P**

## DEPARTMENT OF THE INTERIOR

### Bureau of Land Management

[LLCO956000 L14200000.BJ0000]

#### Notice of Filing of Plats

**AGENCY:** Bureau of Land Management, Interior.

**ACTION:** Notice of Filing of Plats; Colorado

**SUMMARY:** The Bureau of Land Management (BLM) Colorado State Office is publishing this notice to inform the public of the official filing of the survey plats listed below. The plats will be available for viewing at <http://www.gloreCORDS.blm.gov>.

**DATES:** The plats described in this notice were filed on August 15, 2012.

**ADDRESSES:** BLM Colorado State Office, Cadastral Survey, 2850 Youngfield Street, Lakewood, Colorado 80215-7093.

#### FOR FURTHER INFORMATION CONTACT:

Randy Bloom, Chief Cadastral Surveyor for Colorado, (303) 239-3856.

Persons who use a telecommunications device for the deaf (TDD) may call the Federal Information Relay Service (FIRS) at 1-800-877-8339 to contact the above individual during normal business hours. The FIRS is available 24 hours a day, 7 days a week, to leave a message or question with the above individual. You will receive a reply during normal business hours.

**SUPPLEMENTARY INFORMATION:** The supplemental plat of Sections 19 and 30, in Township 1 North, Range 1 East, Ute Meridian, Colorado, was accepted and filed on August 15, 2012.

The supplemental plat of Section 24, in Township 1 North, Range 1 West, Ute Meridian, Colorado, was accepted and filed on August 15, 2012.

**Randy Bloom,**

*Chief Cadastral Surveyor for Colorado.*

[FR Doc. 2012-22956 Filed 9-17-12; 8:45 am]

**BILLING CODE 4310-JB-P**

## DEPARTMENT OF THE INTERIOR

### Bureau of Land Management

[LLWY910000 L16100000 XX0000]

#### Notice of Public Meeting; Wyoming Resource Advisory Council

**AGENCY:** Bureau of Land Management, Interior.

**ACTION:** Notice of public meeting.

**SUMMARY:** In accordance with the Federal Land Policy and Management Act and the Federal Advisory

Committee Act of 1972, the U.S. Department of the Interior, Bureau of Land Management (BLM) Wyoming Resource Advisory Council (RAC) will meet as indicated below.

**DATES:** The meeting will be held Oct. 25, (8 a.m. to 5 p.m.) and Oct. 26, (8 a.m. to noon) 2012.

**ADDRESSES:** The meeting will be at the Cam-Plex, 1635 Reata Drive, Gillette, WY.

**FOR FURTHER INFORMATION CONTACT:** Cindy Wertz, Wyoming Resource Advisory Council Coordinator, Wyoming State Office, 5353 Yellowstone, Cheyenne, WY 82009; telephone 307-775-6014; email [cwertz@blm.gov](mailto:cwertz@blm.gov).

Persons who use a telecommunications device for the deaf (TDD) may call the Federal Information Relay Service (FIRS) at 1-800-877-8339 to contact the above individual during normal business hours. The FIRS is available 24 hours a day, 7 days a week, to leave a message or question with the above individual. You will receive a reply during normal business hours.

**SUPPLEMENTARY INFORMATION:** This 10-member RAC advises the Secretary of the Interior on a variety of management issues associated with public land management in Wyoming.

Planned agenda topics include a discussion on energy development in a split-estate environment, reclamation and restoration efforts in the Powder River Basin, and follow up from previous meetings on planning.

All RAC meetings are open to the public with time allocated for hearing

public comments. On Oct. 26, there will be public comment period beginning at 8 a.m. The public may also submit written comments to the RAC.

Depending on the number of persons wishing to comment and time available, the time for individual oral comments may be limited. If there are no members of the public interested in speaking, the meeting will move promptly to the next agenda item.

**Brenda V. Neuman,**  
*Acting State Director.*

[FR Doc. 2012-22934 Filed 9-17-12; 8:45 am]

**BILLING CODE 4310-22-P**

**DEPARTMENT OF THE INTERIOR**

**Bureau of Ocean Energy Management**

**Environmental Documents Prepared for Oil, Gas, and Mineral Operations by the Gulf of Mexico Outer Continental Shelf (OCS) Region**

**AGENCY:** Bureau of Ocean Energy Management (BOEM), Interior.

**ACTION:** Notice of the availability of environmental documents prepared for ocs mineral proposals by the Gulf of Mexico OCS Region.

**SUMMARY:** BOEM, in accordance with Federal Regulations that implement the National Environmental Policy Act (NEPA), announces the availability of NEPA-related Site-Specific Environmental Assessments (SEAs), Environmental Assessments (EAs), and Findings of No Significant Impact (FONSI). These EAs were prepared

during the period April 1, 2012, through June 30, 2012, for oil, gas, and mineral-related activities that were proposed in the Gulf of Mexico, or more specifically described in the Supplementary Information Section of this notice.

**FOR FURTHER INFORMATION CONTACT:** Public Information Unit, Information Services Section at the number below. Bureau of Ocean Energy Management, Gulf of Mexico OCS Region, Attention: Public Information Office (GM 250E), 1201 Elmwood Park Boulevard, Room 250, New Orleans, Louisiana 70123-2394, or by calling 1-800-200-GULF.

**SUPPLEMENTARY INFORMATION:** BOEM prepares SEAs and FONSI for certain proposals that relate to exploration, development, production, and transport of oil, gas, and mineral resources on the Federal OCS. These SEAs examine the potential environmental effects of proposed activities and present BOEM conclusions regarding the significance of those effects. The SEAs are used as a basis for determining whether or not approval of the proposals constitutes a major Federal action that significantly affects the quality of the human environment in accordance with NEPA Section 102(2)(C). A FONSI is prepared in those instances where BOEM finds that approval will not result in significant effects on the quality of the human environment. The FONSI briefly presents the basis for that finding and includes a summary or copy of the SEA.

This notice constitutes the public notice of availability of environmental documents required under the NEPA Regulations.

Activity/operator	Location	Date
Exxon Mobil Corporation, Exploration Plan, SEA N-9623.	Keathley Canyon, Block 918, located 215 miles from the nearest Louisiana shoreline, southwest of Morgan City, Louisiana.	4/2/2012
BP Exploration & Production Inc., Exploration Plan, SEA N-9616.	Keathley Canyon, Block 93, Lease OCS-G 25780, located 197 miles from the nearest Louisiana shoreline, in Cameron Parish, Louisiana, and 172 miles from the nearest Texas shoreline, in Brazoria County, Texas.	4/2/2012
Petroleum Geo Services, Geological & Geophysical Survey, SEA T11-005.	Located in the Western and Central Planning Areas of the Gulf of Mexico .....	4/3/2012
CGG Veritas Services (US), Inc., Geological & Geophysical Survey, SEA T11-004.	Located in the Western Planning Area of the Gulf of Mexico .....	4/5/2012
Repsol E&P USA Inc., Exploration Plan, SEA N-9613.	Walker Ridge, Block 365, Lease OCS-G 33967, located 170 miles from the nearest Louisiana shoreline.	4/5/2012
ATP Oil & Gas Corporation, Structure Removal, SEA ES/SR 11-075A.	Ship Shoal, Block 322, Lease RUE G 23617, located 75 miles from the nearest Louisiana shoreline.	4/12/2012
Mariner Energy Resources, Inc., Structure Removal, SEA ES/SR 11-277.	Eugene Island, Block 266, Lease OCS-G 00811, located 67 miles from the nearest Louisiana shoreline.	4/13/2012
Energy Resource Technology GOM, Inc., Structure Removal, SEA ES/SR 11-313A.	Mobile, Block 863, Lease OCS-G 05748, located 7 miles from the nearest Mississippi shoreline.	4/13/2012
Mariner Energy Resources, Inc., Structure Removal, SEA ES/SR 12-004.	South Marsh Island, Block 11, Lease OCS-G 01182, located 37 miles from the nearest Louisiana shoreline.	4/13/2012
Chevron U.S.A. Inc., Structure Removal, SEA ES/SR 12-055 & 12-056.	Eugene Island, Block 74, Lease OCS-G 02099, located 18 miles from the nearest Louisiana shoreline.	4/15/2012
Mariner Energy Resources, Inc., Structure Removal, SEA ES/SR 12-001 & 12-002.	South Marsh Island, Block 11, Lease OCS-G 01182, located 37 miles from the nearest Louisiana shoreline.	4/15/2012

Activity/operator	Location	Date
Energy Resource Technology GOM, Inc., Structure Removal, SEA ES/SR 11-300.	Vermilion, Block 182, Lease OCS-G 10665, located 52 miles from the nearest Louisiana shoreline.	4/16/2012
McMoRan Oil & Gas LLC, Structure Removal, SEA ES/SR 10-099A.	West Cameron, Block 639, Lease OCS-G 02027, located 116 miles from the nearest Louisiana shoreline.	4/17/2012
McMoRan Oil & Gas LLC, Structure Removal, SEA ES/SR 10-064A.	West Cameron, Block 648, Lease OCS-G 04268, located 118 miles from the nearest Louisiana shoreline.	4/17/2012
Apache Deepwater LLC, Exploration Plan, SEA N-9620.	Garden Banks, Block 204, Lease OCS-G 33795, located 122.5 miles from the nearest Louisiana shoreline.	4/19/2012
BP Exploration & Production Inc., Exploration Plan, SEA R-5516.	Keathley Canyon, Block 292, located 188 miles from the nearest Louisiana shoreline.	4/19/2012
Chevron U.S.A. Inc., Structure Removal, SEA ES/SR 12-050.	South Marsh Island, Block 219, Lease OCS 00310, located 8 miles from the nearest Louisiana shoreline.	4/19/2012
Chevron U.S.A. Inc., Structure Removal, SEA ES/SR 12-077.	South Marsh Island, Block 229, Lease OCS 00310, located 12 miles from the nearest Louisiana shoreline.	4/19/2012
Energy Resource Technology GOM, Inc., Structure Removal, SEA ES/SR 11-301.	Vermilion, Block 182, Lease OCS-G 10665, located 52 miles from the nearest Louisiana shoreline.	4/20/2012
LLOG Exploration Offshore, L.L.C., Exploration Plan, SEA S-7539.	Mississippi Canyon, Block 431, located 60 miles from the nearest Louisiana shoreline.	4/22/2012
Noble Energy, Inc., Exploration Plan, SEA R-5504.	Mississippi Canyon, Block 948, located 67 miles from the nearest Louisiana shoreline.	4/23/2012
Mariner Energy Resources, Inc., Structure Removal, SEA ES/SR 12-079.	South Timbalier, Block 72, Lease OCS-G 01244, located 17 miles from the nearest Louisiana shoreline.	4/23/2012
Energy Resource Technology GOM, Inc., Structure Removal, SEA ES/SR 11-302.	Vermilion, Block 162, Lease OCS-G 23820, located 46 miles from the nearest Louisiana shoreline.	4/23/2012
Tana Exploration Company LLC, Structure Removal, SEA ES/SR 11-322.	West Cameron, Block 116, Lease OCS-G 22513, located 16 miles from the nearest Louisiana shoreline.	4/23/2012
LLOG Exploration Offshore, L.L.C., Exploration Plan, SEA R-5517.	Mississippi Canyon, Block 300, located 59 miles from the nearest Louisiana shoreline.	4/24/2012
Mariner Energy, Inc., Structure Removal, SEA ES/SR 12-085.	South Timbalier, Block 72, Lease OCS-G 01244, located 17 miles from the nearest Louisiana shoreline.	4/24/2012
Energy Resource Technology GOM, Inc., Structure Removal, SEA ES/SR 11-299.	Vermilion, Block 250, Lease OCS-G 27072, located 65 miles from the nearest Louisiana shoreline.	4/24/2012
Tana Exploration Company LLC, Structure Removal, SEA ES/SR 11-323.	Vermilion, Block 41, Lease OCS-G 33076, located 13 miles from the nearest Louisiana shoreline.	4/24/2012
Chevron U.S.A. Inc., Structure Removal, SEA ES/SR 12-078.	Ship Shoal, Block 183, Lease OCS-G 00821, located 30 miles from the nearest Louisiana shoreline.	4/25/2012
Hilcorp Energy GOM, LLC, Structure Removal, SEA ES/SR 96-042B.	Ship Shoal, Block 108, Lease OCS-G 00814, located 17 miles from the nearest Louisiana shoreline.	4/26/2012
Mariner Energy Resources, Inc., Structure Removal, SEA ES/SR 12-083.	Sabine Pass, Block 9, Lease OCS-G 27972, located 10 miles from the nearest Louisiana shoreline.	4/27/2012
Dynamic Offshore Resources, LLC, Structure Removal, SEA ES/SR 12-094.	Ship Shoal, Block 166, Lease OCS-G 05549, located 27 miles from the nearest Louisiana shoreline.	4/27/2012
Dynamic Offshore Resources, LLC, Structure Removal, SEA ES/SR 12-091.	Ship Shoal, Block 167, Lease OCS-G 00818, located 27 miles from the nearest Louisiana shoreline.	4/27/2012
Mariner Energy Resources, Inc., Structure Removal, SEA ES/SR 12-082.	South Marsh Island, Block 11, Lease OCS-G 01182, located 36 miles from the nearest Louisiana shoreline.	4/27/2012
Stone Energy Corporation, Structure Removal, SEA ES/SR 12-101.	South Marsh Island, Block 250, Lease OCS-G 22651, located 18 miles from the nearest Louisiana shoreline.	4/27/2012
Dynamic Offshore Resources, LLC, Structure Removal, SEA ES/SR 12-089.	South Timbalier, Block 178, Lease OCS-G 12019, located 36 miles from the nearest Louisiana shoreline.	4/27/2012
Dynamic Offshore Resources, LLC, Structure Removal, SEA ES/SR 12-100.	West Delta, Block 79, Lease OCS-G 01449, located 6 miles from the nearest Louisiana shoreline.	4/27/2012
Petrobras America Inc., Exploration Plan, SEA N-9609.	Walker Ridge, Block 376, located 169 miles from the nearest Louisiana shoreline ...	4/29/2012
ATP Oil & Gas Corporation, Structure Removal, SEA ES/SR 12-045.	High Island, Block 74, Lease OCS-G 21348, located 20 miles from the nearest Louisiana shoreline.	5/1/2012
Exxon Mobil Corporation, Development Operations Coordination Document, SEA R-5410.	Mississippi Canyon, Block 211, located 54 miles from the nearest Louisiana shoreline, southeast of Boothville, Louisiana.	5/1/2012
Shell Offshore Inc., Exploration Plan, SEA R-5506.	Mississippi Canyon, Block 765, 766, 808, 809, 810, 811, 851, 852, 853 & 854, located 50 miles from the nearest Louisiana shoreline, south of Venice, Louisiana.	5/1/2012
Apache Corporation, Structure Removal, SEA ES/SR 12-059.	South Pelto, Block 11, Lease OCS 00071, located 6 miles from the nearest Louisiana shoreline.	5/1/2012
Anadarko Petroleum Corporation, Exploration Plan, SEA S-7533.	De Soto Canyon, Blocks 490, 491 & 535, Leases OCS-G 23515, 23516 & 23520, located 97 miles from the nearest Louisiana shoreline.	5/3/2012

Activity/operator	Location	Date
Tana Exploration Company LLC, Structure Removal, SEA ES/SR 11-321.	Eugene Island, Block 85, Lease OCS-G 24889, located 18 miles from the nearest Louisiana shoreline.	5/3/2012
Stone Energy Corporation, Structure Removal, SEA ES/SR 04-067A.	South Timbalier, Block 111, Lease OCS-G 05602, located 26 miles from the nearest Louisiana shoreline.	5/3/2012
Mariner Energy, Inc., Structure Removal, SEA ES/SR 12-084.	South Timbalier, Block 72, Lease OCS-G 01244, located 17 miles from the nearest Louisiana shoreline.	5/3/2012
Mariner Energy Resources, Inc., Structure Removal, SEA ES/SR 12-011.	Vermilion, Block 26, Lease OCS 00297, located 5 miles from the nearest Louisiana shoreline.	5/3/2012
Walter Oil & Gas Corporation, Exploration Plan, SEA R-5515.	Ewing Bank, Blocks 790 and 834, located 60 miles from the nearest Louisiana shoreline.	5/4/2012
Nexen Petroleum U.S.A. Inc., Exploration Plan, SEA R-5456.	Green Canyon, Block 504, located 108 miles from the nearest Louisiana shoreline	5/4/2012
Exxon Mobil Corporation, Exploration Plan, SEA N-9631.	Walker Ridge, Blocks 630 & 674, Leases OCS-G 32698 & 32699, located 189 miles from the nearest Louisiana shoreline, respectively.	5/4/2012
Shell Offshore Inc., Exploration Plan, SEA N-9633.	Mississippi Canyon, Blocks 894 & 850, Leases OCS-G 24122 & 09881, located 58 miles from the nearest Louisiana shoreline, respectively.	5/9/2012
Tana Exploration Company LLC, Structure Removal, SEA ES/SR 11-326.	West Cameron, Block 157, Lease OCS-G 24729, located 17 miles from the nearest Louisiana shoreline.	5/9/2012
Tana Exploration Company LLC, Structure Removal, SEA ES/SR 11-324.	High Island, Block 73, Lease OCS-G 25553, located 18 miles from the nearest Louisiana shoreline.	5/10/2012
ATP Oil & Gas Corporation, Structure Removal, SEA ES/SR 12-044.	High Island, Block 74, Lease OCS-G 21348, located 18 miles from the nearest Louisiana shoreline.	5/10/2012
Apache Corporation, Structure Removal, SEA ES/SR 11-037.	Mustang Island, Block 762, Lease OCS-G 03021, located 33 miles from the nearest Texas shoreline.	5/10/2012
Eni US Operating Co. Inc., Exploration Plan, SEA S-7442.	Mississippi Canyon, Block 546, located 38 miles from the nearest Louisiana shoreline.	5/11/2012
Dynamic Offshore Resources, LLC, Structure Removal, SEA ES/SR 12-095.	Ship Shoal, Block 166, Lease OCS-G 05549, located 26 miles from the nearest Louisiana shoreline.	5/11/2012
Mariner Energy, Inc., Structure Removal, SEA ES/SR 12-016 & 12-019.	South Timbalier, Block 72, Lease OCS-G 01244, located 16 miles from the nearest Louisiana shoreline.	5/11/2012
Mariner Energy, Inc., Structure Removal, SEA ES/SR 12-017 & 12-018.	South Timbalier, Block 72, Lease OCS-G 01244, located 16 miles from the nearest Louisiana shoreline.	5/11/2012
Stone Energy Corporation, Structure Removal, SEA ES/SR 12-117.	South Timbalier, Block 81, Lease OCS-G 27155, located 18 miles from the nearest Louisiana shoreline.	5/11/2012
Dynamic Offshore Resources NS, LLC, Structure Removal, SEA ES/SR 12-090.	Vermilion, Block 161, Lease OCS-G 01127, located 43 miles from the nearest Louisiana shoreline.	5/11/2012
ATP Oil & Gas Corporation, Structure Removal, SEA ES/SR 11-317.	West Cameron, Block 461, Lease OCS-G 14336, located 128 miles from the nearest Louisiana shoreline.	5/11/2012
Stone Energy Corporation, Structure Removal, SEA ES/SR 12-122.	Ship Shoal, Block 146, Lease OCS-G 22705, located 23 miles from the nearest Louisiana shoreline.	5/14/2012
Dynamic Offshore Resources, LLC, Structure Removal, SEA ES/SR 12-093.	Galveston, Block 298, Lease OCS-G 25536, located 24 miles from the nearest Texas shoreline.	5/15/2012
Noble Energy, Inc., Exploration Plan, SEA R-5450.	Green Canyon, Block 198, located 87 miles from the nearest Louisiana shoreline ...	5/15/2012
Eni US Operating Co. Inc., Structure Removal, SEA ES/SR 12-048.	Main Pass, Block 139, Lease OCS-G 13653, located 13 miles from the nearest Louisiana shoreline.	5/16/2012
W & T Offshore, Inc., Structure Removal, SEA ES/SR 12-154.	High Island, Block 177, Lease OCS-G 06165, located 21 miles from the nearest Louisiana shoreline.	5/17/2012
TGS-NOPEC Geophysical Company, Geological & Geophysical Survey, SEA L12-006.	Located in the Central Gulf of Mexico .....	5/17/2012
LLOG Exploration Offshore, L.L.C., Exploration Plan, SEA S-7548.	Mississippi Canyon, Block 301, Lease OCS-G 24069, located 60 miles from the nearest Louisiana shoreline.	5/18/2012
McMoRan Oil & Gas LLC, Structure Removal, SEA ES/SR 12-149.	Eugene Island, Block 193, Lease OCS-G 00572, located 38 miles from the nearest Louisiana shoreline.	5/22/2012
Anadarko Petroleum Corporation, Exploration Plan, SEA N-9626.	Lloyd Ridge, Block 621, located 143 miles from the nearest Louisiana shoreline, in Plaquemines Parish, Louisiana.	5/22/2012
Chevron U.S.A. Inc., Exploration Plan, SEA R-5503.	Keathley Canyon, Block 736, located 216 miles from the nearest Louisiana shoreline.	5/23/2012
Energy Resource Technology GOM, Inc., Structure Removal, SEA ES/SR 12-166.	Ship Shoal, Block 223, Lease OCS-G 01526, located 43 miles from the nearest Louisiana shoreline.	5/23/2012
Stone Energy Corporation, Structure Removal, SEA ES/SR 12-130.	Ship Shoal, Block 99, Lease OCS-G 13912, located 14 miles from the nearest Louisiana shoreline.	5/23/2012
Stone Energy Corporation, Structure Removal, SEA ES/SR 12-146.	South Pelto, Block 23, Lease OCS-G 01238, located 15 miles from the nearest Louisiana shoreline.	5/23/2012
Medco Energi US LLC, Structure Removal, SEA ES/SR 12-102.	Brazos, Block 451, Lease OCS-G 03935, located 12 miles from the nearest Texas shoreline.	5/24/2012
McMoRan Oil & Gas LLC, Structure Removal, SEA ES/SR 12-147.	East Cameron, Block 42, Lease OCS-G 02857, located 9 miles from the nearest Louisiana shoreline.	5/24/2012

Activity/operator	Location	Date
Nexen Petroleum U.S.A. Inc., Exploration Plan, SEA S-7517.	Mississippi Canyon, Block 842, Lease OCS-G 24118, located 58 miles from the nearest Louisiana shoreline, south of Venice, Louisiana, in Plaquemines Parish, Louisiana.	5/24/2012
Stone Energy Corporation, Structure Removal, SEA ES/SR 12-159.	Ship Shoal, Block 106, Lease OCS-G 24923, located 20 miles from the nearest Louisiana shoreline.	5/24/2012
Woodside Energy (USA) Inc., Exploration Plan, SEA R-5492.	Green Canyon, Block 451, Lease OCS-G 32509, located 110 miles from the nearest Louisiana shoreline.	5/25/2012
LLOG Exploration Offshore, L.L.C., Development Operations Coordination Document, SEA S-7545.	Mississippi Canyon, Blocks 503 & 547, located 36 miles from the nearest Louisiana shoreline, southeast of Venice, Louisiana, respectively.	5/25/2012
Medco Energi US LLC, Structure Removal, SEA ES/SR 12-153.	Mustang Island, Block 758, Lease OCS-G 23135, located 28 miles from the nearest Texas shoreline.	5/25/2012
Stone Energy Corporation, Structure Removal, SEA ES/SR 12-158.	Ship Shoal, Block 113, Lease OCS-G 00067, located 14 miles from the nearest Louisiana shoreline.	5/25/2012
Stone Energy Corporation, Structure Removal, SEA ES/SR 12-131.	Ship Shoal, Block 99, Lease OCS-G 13912, located 15 miles from the nearest Louisiana shoreline.	5/25/2012
Stone Energy Corporation, Structure Removal, SEA ES/SR 12-145.	South Timbalier, Block 11, Lease OCS-G 13925, located 3 miles from the nearest Louisiana shoreline.	5/25/2012
W & T Offshore, Inc., Structure Removal, SEA ES/SR 12-164 & 12-165.	West Cameron, Block 180, Lease OCS-G 00763, located 27 miles from the nearest Louisiana shoreline.	5/25/2012
Noble Energy, Inc., Exploration Plan, SEA N-9619.	Mississippi Canyon, Blocks 993, 992, 948 & 949, Leases OCS-G 24134, 24133, 28030 & 32363, located 70 miles from the nearest Louisiana shoreline, respectively.	5/29/2012
Petrobras America Inc., Development Operations Coordination Document, SEA S-7518.	Walker Ridge, Blocks 206, Lease OCS-G 16965, located 165 miles from the nearest Louisiana shoreline.	5/29/2012
Union Oil Company of California, Exploration Plan, SEA N-9640.	Walker Ridge, Blocks 98 & 99, Leases OCS-G 21841 & 21842, located 155 miles from the nearest Louisiana shoreline, respectively.	5/29/2012
BHP Billiton Petroleum (GOM) Inc., Exploration Plan, SEA N-9617.	DeSoto Canyon, Block 726, located 133 miles from the nearest Florida shoreline, south of Pensacola, Florida, in Gulf County, Florida.	5/30/2012
Apache Corporation, Development Operations Coordination Document, SEA S-7466.	High Island, Block A365, Lease OCS-G 02750, located 114 miles from the nearest Louisiana shoreline and 112 miles from the nearest Texas shoreline.	5/30/2012
CGGVeritas Services (US) Inc., Geological and Geophysical Survey, SEA L12-012.	Located in the Central and Western Planning Areas of the Gulf of Mexico .....	5/30/2012
Stone Energy Corporation, Structure Removal, SEA ES/SR 12-142.	South Pelto, Block 5, Lease OCS-G 12027, located 3 miles from the nearest Louisiana shoreline.	5/30/2012
Exxon Mobil Production Company, Exploration Plan, SEA N-9646.	Walker Ridge, Blocks 717 & 629, Leases OCS-G 26412 & 33383, located 189.4 miles from the nearest Louisiana shoreline.	5/30/2012
Century Exploration New Orleans, LLC, Structure Removal, SEA ES/SR 07-146A.	West Cameron, Block 101, Lease OCS-G 32105, located 13 miles from the nearest Louisiana shoreline.	5/30/2012
Dynamic Offshore Resources, LLC, Structure Removal, SEA ES/SR 12-092.	East Cameron, Block 178, Lease OCS-G 27834, located 49 miles from the nearest Louisiana shoreline.	5/31/2012
Arena Offshore, LP, Structure Removal, SEA ES/SR 12-088.	East Cameron, Block 328, Lease OCS-G 10638, located 96 miles from the nearest Louisiana shoreline.	5/31/2012
Apache Corporation, Structure Removal, SEA ES/SR 12-076.	Eugene Island, Block 108, Lease OCS-G 03811, located 23 miles from the nearest Louisiana shoreline.	5/31/2012
Maritech Resources, Inc., Structure Removal, SEA ES/SR 11-295.	Main Pass, Block 223, Lease OCS-G 12096, located 57 miles from the nearest Louisiana shoreline.	5/31/2012
Maritech Resources, Inc., Structure Removal, SEA ES/SR 11-296.	Main Pass, Block 250, Lease OCS-G 15387, located 59 miles from the nearest Louisiana shoreline.	5/31/2012
Mariner Energy Resources, Inc., Structure Removal, SEA ES/SR 12-081.	South Marsh Island, Block 11, Lease OCS-G 01182, located 36 miles from the nearest Louisiana shoreline.	5/31/2012
Murphy Exploration & Production Company—USA, Development Operations Coordination Document, SEA N-9602.	De Soto Canyon, Blocks 4 & 47, Leases OCS-G 10437 & 10439, located 77 & 72 miles from the nearest Louisiana shoreline, respectively.	6/1/2012
LLOG Exploration Offshore, L.L.C., Exploration Plan, SEA R-5208.	Mississippi Canyon, Blocks 253 & 208, located 48 miles from the nearest Louisiana shoreline.	6/1/2012
Shell Offshore Inc., Exploration Plan, SEA R-5534.	Mississippi Canyon, Blocks 720, 721, 722, 723, 763, 764, 765, 766, 767, 807, 808, 809, 810, 851, 852 & 853, 50 miles from the nearest Louisiana shoreline, respectively.	6/1/2012
Shell Gulf of Mexico Inc., Exploration Plan, SEA R-5552.	Mississippi Canyon, Block 391, located 64 miles from the nearest Louisiana shoreline.	6/4/2012
Walter Oil & Gas Corporation, Exploration Plan, SEA R-5544.	South Timbalier, Block 311, located 64 miles from the nearest Louisiana shoreline	6/4/2012
Union Oil Company of California, Structure Removal, SEA ES/SR 12-124.	Vermilion, Block 38, Lease OCS-G 00205, located 7 miles from the nearest Louisiana shoreline.	6/4/2012
Petrobras America Inc., Development Operations Coordination Document, SEA S-7493.	Walker Ridge, Blocks 425 & 469, Leases OCS-G16987 & 16997, located 174 miles from the nearest Louisiana shoreline, respectively.	6/4/2012

Activity/operator	Location	Date
Nexen Petroleum U.S.A. Inc., Structure Removal, SEA ES/SR 12-156.	Vermilion, Block 340, Lease OCS-G 02091, located 90 miles from the nearest Louisiana shoreline.	6/5/2012
Statoil USA E&P Inc., Exploration Plan, SEA N-9641.	Green Canyon, Blocks 35 & 36, Leases OCS-G 26287 & 26286, located 77 miles from the nearest Louisiana shoreline, respectively.	6/6/2012
Tesla Offshore, LLC, Geological and Geophysical Survey, SEA L12-010.	Located in the Central Planning Area of the Gulf of Mexico .....	6/7/2012
W & T Offshore, Inc., Structure Removal, SEA ES/SR 10-066A.	Eugene Island, Block 397, Lease OCS-G 15271, located 112 miles from the nearest Louisiana shoreline.	6/11/2012
Apache Corporation, Structure Removal, SEA ES/SR 12-062.	Eugene Island, Block 120, Lease OCS-G 00050, located 21 miles from the nearest Louisiana shoreline.	6/13/2012
Stone Energy Corporation, Structure Removal, SEA ES/SR 12-143.	South Pelto, Block 5, Lease OCS-G 12027, located 5 miles from the nearest Louisiana shoreline.	6/13/2012
Apache Corporation, Structure Removal, SEA ES/SR 12-060.	South Pelto, Block 9, Lease OCS-G 02924, located 7 miles from the nearest Louisiana shoreline.	6/13/2012
Apache Corporation, Structure Removal, SEA ES/SR 06-084.	South Timbalier, Block 162, Lease OCS-G 01249, located 33 miles from the nearest Louisiana shoreline.	6/13/2012
Mariner Energy, Inc., Structure Removal, SEA ES/SR 12-109.	East Cameron, Block 312, Lease OCS-G 21077, located 92 miles from the nearest Louisiana shoreline.	6/14/2012
Arena Offshore, LP, Structure Removal, SEA ES/SR 12-046 & 12-047.	Matagorda Island, Block 587, Lease OCS-G 04996, located 19 miles from the nearest Texas shoreline.	6/15/2012
Mariner Energy, Inc., Structure Removal, SEA ES/SR 12-041.	South Timbalier, Block 72, Lease OCS-G 01244, located 17 miles from the nearest Louisiana shoreline.	6/15/2012
Mariner Energy, Inc., Structure Removal, SEA ES/SR 12-042 & 12-043.	Vermilion, Block 35, Leases OCS-G 00549 & 00548, located 8 & 6 miles from the nearest Louisiana shoreline, respectively.	6/15/2012
Apache Corporation, Structure Removal, SEA ES/SR 12-061.	Grand Isle, Block 45, Lease OCS-G 16461, located 17 miles from the nearest Louisiana shoreline.	6/18/2012
Apache Corporation, Structure Removal, SEA ES/SR 12-063, 12-064, 12-065, 12-066, 12-067, 12-068, 12-070, 12-071 & 12-072.	Eugene Island, Block 119, Lease OCS 00049, located 21 miles from the nearest Louisiana shoreline.	6/19/2012
Shell Offshore Inc., Exploration Plan, SEA R-5556.	Garden Banks, Block 427, located 134 miles to the nearest Louisiana shoreline .....	6/19/2012
Stone Energy Corporation, Structure Removal, SEA ES/SR 12-132.	Ship Shoal, Block 99, Lease OCS-G 13912, located 14 miles from the nearest Louisiana shoreline.	6/19/2012
Mariner Energy Resources, Inc., Structure Removal, SEA ES/SR 12-020.	South Timbalier, Block 274, Lease OCS-G 21680, located 57 miles from the nearest Louisiana shoreline.	6/19/2012
Mariner Energy Resources, Inc., Structure Removal, SEA ES/SR 96-053.	Vermilion, Block 26, Lease OCS 00297, located 4 miles from the nearest Louisiana shoreline.	6/19/2012
Mariner Energy Resources, Inc., Structure Removal, SEA ES/SR 08-003.	Vermilion, Block 35, Lease OCS-G 00549, located 8 miles from the nearest Louisiana shoreline.	6/19/2012
Union Oil Company of California, Structure Removal, SEA ES/SR 12-123.	Vermilion, Block 38, Lease OCS 00205, located 7 miles from the nearest Louisiana shoreline.	6/19/2012
EOG Resources, Inc., Structure Removal, SEA ES/SR 12-126.	Matagorda Island, Block 685, Lease OCS-G 04548, located 18 miles from the nearest Texas shoreline.	6/21/2012
Mariner Energy Resources, Inc., Structure Removal, SEA ES/SR 12-006.	Vermilion, Block 26, Lease OCS 00297, located 5 miles from the nearest Louisiana shoreline.	6/21/2012
Noble Energy, Inc., Exploration Plan, SEA S-7551.	Vioska Knoll, Block 962, Lease OCS 15445, located 74.5 miles from the nearest Louisiana shoreline.	6/21/2012
Apache Corporation, Structure Removal, SEA ES/SR 12-015.	Galveston Island, Block 333, Lease OCS-G 06104, located 11 miles from the nearest Texas shoreline.	6/22/2012
Mariner Energy Resources, Inc., Structure Removal, SEA ES/SR 12-036.	Vermilion, Block 26, Lease OCS 00297, located 4 miles from the nearest Louisiana shoreline.	6/22/2012
Mariner Energy Resources, Inc., Structure Removal, SEA ES/SR 12-031.	Vermilion, Block 26, Lease OCS 00297, located 5 miles from the nearest Louisiana shoreline.	6/22/2012
Mariner Energy Resources, Inc., Structure Removal, SEA ES/SR 12-029.	Vermilion, Block 26, Lease OCS 00297, located 6 miles from the nearest Louisiana shoreline.	6/22/2012
Mariner Energy Resources, Inc., Structure Removal, SEA ES/SR 12-027.	Vermilion, Block 26, Lease OCS 00297, located 3 miles from the nearest Louisiana shoreline.	6/25/2012
Mariner Energy Resources, Inc., Structure Removal, SEA ES/SR 12-026.	Vermilion, Block 26, Lease OCS 00297, located 4 miles from the nearest Louisiana shoreline.	6/25/2012
Mariner Energy Resources, Inc., Structure Removal, SEA ES/SR 12-008.	Vermilion, Block 26, Lease OCS 00297, located 5 miles from the nearest Louisiana shoreline.	6/25/2012
Mariner Energy Resources, Inc., Structure Removal, SEA ES/SR 12-010.	Vermilion, Block 26, Lease OCS 00297, located 5 miles from the nearest Louisiana shoreline.	6/25/2012
Mariner Energy Resources, Inc., Structure Removal, SEA ES/SR 12-033.	Vermilion, Block 26, Lease OCS 00297, located 5 miles from the nearest Louisiana shoreline.	6/25/2012
Mariner Energy Resources, Inc., Structure Removal, SEA ES/SR 12-030.	Vermilion, Block 26, Lease OCS 00297, located 6 miles from the nearest Louisiana shoreline.	6/25/2012
Mariner Energy Resources, Inc., Structure Removal, SEA ES/SR 12-034.	Vermilion, Block 26, Lease OCS 00297, located 6 miles from the nearest Louisiana shoreline.	6/25/2012
EOG Resources, Inc., Structure Removal, SEA ES/SR 12-128.	Mustang Island, Block 758, Lease OCS-G 03020, located 28 miles from the nearest Texas shoreline.	6/26/2012
Apache Corporation, Structure Removal, SEA ES/SR 12-013.	Eugene Island, Block 119, Lease OCS 00049, located 22 miles from the nearest Louisiana shoreline.	6/27/2012

Activity/operator	Location	Date
Apache Corporation, Structure Removal, SEA ES/SR 12-069.	Eugene Island, Block 119, Lease OCS 00049, located 22 miles from the nearest Louisiana shoreline.	6/27/2012
Stone Energy Corporation, Exploration Plan, SEA N-9598.	Located in the Central Planning Area of the Gulf of Mexico, southwest of Venice, Louisiana.	6/27/2012
Mariner Energy Resources, Inc., Structure Removal, SEA ES/SR 12-028.	Vermilion, Block 26, Lease OCS 00297, located 3 miles from the nearest Louisiana shoreline.	6/27/2012
Mariner Energy Resources, Inc., Structure Removal, SEA ES/SR 12-007.	Vermilion, Block 26, Lease OCS 00297, located 5 miles from the nearest Louisiana shoreline.	6/27/2012
Nexen Petroleum U.S.A. Inc., Exploration Plan, SEA N-9650.	Located in the Central Planning Area of the Gulf of Mexico, south of Terrebonne Parish, Louisiana.	6/28/2012
EOG Resources, Inc., Structure Removal, SEA ES/SR 12-127.	Mustang Island, Block 784, Lease OCS-G 05996, located 31 miles from the nearest Texas shoreline.	6/28/2012
EOG Resources, Inc., Structure Removal, SEA ES/SR 12-129.	Mustang Island, Block 784, Lease OCS-G 05996, located 32 miles from the nearest Texas shoreline.	6/28/2012

Persons interested in reviewing environmental documents for the proposals listed above or obtaining information about SEAs, EAs and FONSI's prepared by the Gulf of Mexico OCS Region are encouraged to contact BOEM at the address or telephone listed in the **FOR FURTHER INFORMATION CONTACT** section.

Dated: August 10, 2012.

**John Rodi,**

*Regional Director, Gulf of Mexico OCS Region.*

[FR Doc. 2012-22905 Filed 9-17-12; 8:45 am]

**BILLING CODE 4310-MR-P**

## DEPARTMENT OF THE INTERIOR

### Bureau of Reclamation

#### Agency Information Collection; Proposed Revisions to a Currently Approved Information Collection

**AGENCY:** Bureau of Reclamation, Interior.

**ACTION:** Notice of revisions.

**SUMMARY:** The Bureau of Reclamation intends to submit a request for renewal (with revisions) of an existing approved information collection to the Office of Management and Budget (OMB): Forms to Determine Compliance by Certain Landholders, 43 CFR part 426, OMB Control Number: 1006-0023.

**DATES:** Submit written comments on the revised information collection on or before November 19, 2012.

**ADDRESSES:** Send written comments to or requests for copies of the proposed revised forms to the Bureau of Reclamation, Attention: 84-53000, P.O. Box 25007, Denver, CO 80225-0007.

**FOR FURTHER INFORMATION CONTACT:** Stephanie McPhee at (303) 445-2897.

#### SUPPLEMENTARY INFORMATION:

##### I. Abstract

*Identification of limited recipients—* Some entities that receive Reclamation

irrigation water may believe that they are under the Reclamation Reform Act of 1982 (RRA) forms submittal threshold and, consequently, may not submit the appropriate RRA form(s). However, some of these entities may in fact have a different RRA forms submittal threshold than what they believe it to be due to the number of natural persons benefiting from each entity and the location of the land held by each entity. In addition, some entities that are exempt from the requirement to submit RRA forms due to the size of their landholdings (directly and indirectly owned and leased land) may in fact be receiving Reclamation irrigation water for which the full-cost rate must be paid because the start of Reclamation irrigation water deliveries occurred after October 1, 1981 [43 CFR 426.6(b)(2)]. The information obtained through completion of the Limited Recipient Identification Sheet (Form 7-2536) allows us to establish entities' compliance with Federal reclamation law. The Limited Recipient Identification Sheet is disbursed at our discretion.

*Trust review—*In order to administer section 214 of the RRA and 43 CFR 426.7, we are required to review and approve all trusts. Land held in trust generally will be attributed to the beneficiaries of the trust rather than the trustee if the criteria specified in the RRA and 43 CFR 426.7 are met. We may extend the option to complete and submit for our review the Trust Information Sheet (Form 7-2537) instead of actual trust documents when we become aware of trusts with a relatively small landholding (40 acres or less in districts subject to the prior law provisions of Federal reclamation law, 240 acres or less in districts subject to the discretionary provisions of Federal reclamation law). If we find nothing on the completed Trust Information Sheet that would warrant the further investigation of a particular trust, that

trustee will not be burdened with submitting trust documents to us for in-depth review. The Trust Information Sheet is disbursed at our discretion.

*Acres limitation provisions applicable to public entities—*Land farmed by a public entity can be considered exempt from the application of the acres limitation provisions provided the public entity meets certain criteria pertaining to the revenue generated through the entity's farming activities (43 CFR 426.10 and the Act of July 7, 1970, Pub. L. 91-310). We are required to ascertain whether or not public entities that receive Reclamation irrigation water meet such revenue criteria regardless of how much land the public entities hold (directly or indirectly own or lease) [43 CFR 426.10(a)]. In order to minimize the burden on public entities, standard RRA forms are submitted by a public entity only when the public entity holds more than 40 acres subject to the acres limitation provisions westwide, which makes it difficult to apply the revenue criteria as required to those public entities that hold less than 40 acres. When we become aware of such public entities, we request those public entities complete and submit for our review the Public Entity Information Sheet (Form 7-2565), which allows us to establish compliance with Federal reclamation law for those public entities that hold 40 acres or less and, thus, do not submit a standard RRA form because they are below the RRA forms submittal threshold. In addition, for those public entities that do not meet the exemption criteria, we must determine the proper rate to charge for Reclamation irrigation water deliveries. The Public Entity Information Sheet is disbursed at our discretion.

*Acres limitation provisions applicable to religious or charitable organizations—*Some religious or charitable organizations that receive Reclamation irrigation water may

believe that they are under the RRA forms submittal threshold and, consequently, may not submit the appropriate RRA form(s). However, some of these organizations may in fact have a different RRA forms submittal threshold than what they believe it to be depending on whether these organizations meet all of the required criteria for full special application of the acreage limitations provisions to religious or charitable organizations [43 CFR 426.9(b)]. In addition, some organizations that (1) do not meet the criteria to be treated as a religious or charitable organization under the acreage limitation provisions, and (2) are exempt from the requirement to submit RRA forms due to the size of their landholdings (directly and indirectly owned and leased land), may in fact be receiving Reclamation irrigation water for which the full-cost rate must be paid because the start of Reclamation irrigation water deliveries occurred after October 1, 1981 [43 CFR 426.6(b)(2)]. The Religious or Charitable Organization Identification Sheet (Form

7-2578) allows us to establish certain religious or charitable organizations' compliance with Federal reclamation law. The Religious or Charitable Organization Identification Sheet is disbursed at our discretion.

**II. Changes to the RRA Forms and Their Instructions**

The changes made to the currently approved RRA forms and the corresponding instructions are of an editorial nature, and are designed to assist the respondents by increasing their understanding of the forms, clarifying the instructions for completing the forms, and clarifying the information that is required to be on the forms. The proposed revisions to the Trust Information Sheet also include clarification of the 40-acre and 240-acre thresholds applicable to prior law districts and discretionary provisions districts, respectively. The proposed revisions to the RRA forms will be effective in the 2014 water year.

**III. Data**

OMB Control Number: 1006-0023.

*Title:* Forms to Determine Compliance by Certain Landholders, 43 CFR part 426.

*Form Number:* Form 7-2536, Form 7-2537, Form 7-2565, and Form 7-2578.

*Frequency:* Generally, these forms will be submitted only once per identified entity, trust, public entity, or religious or charitable organization. Each year, we expect new responses in accordance with the following numbers.

*Respondents:* Entity landholders, trusts, public entities, and religious or charitable organizations identified by Reclamation that are subject to the acreage limitation provisions of Federal reclamation law.

*Estimated Annual Total Number of Respondents:* 500.

*Estimated Number of Responses per Respondent:* 1.0.

*Estimated Total Number of Annual Responses:* 500.

*Estimated Total Annual Burden on Respondents:* 72 hours.

*Estimated Completion Time per Respondent:* See table below.

Form No.	Burden estimate per form (in minutes)	Number of respondents	Annual number of responses	Annual burden on respondents (in hours)
Limited Recipient Identification Sheet .....	5	175	175	15
Trust Information Sheet .....	5	150	150	23
Public Entity Information Sheet .....	15	100	100	15
Religious or Charitable Identification Sheet .....	15	75	75	19
Totals .....		500	500	72

**IV. Request for Comments**

We invite your comments on:

(a) Whether the proposed collection of information is necessary for the proper performance of our functions, including whether the information will have practical use;

(b) The accuracy of our burden estimate for the proposed collection of information;

(c) Ways to enhance the quality, usefulness, and clarity of the information to be collected; and

(d) Ways to minimize the burden of the information collection on respondents, including the use of automated collection techniques or other forms of information technology.

We will summarize all comments received regarding this notice. We will publish that summary in the **Federal Register** when the information collection request is submitted to OMB for review and approval.

**V. Public Disclosure**

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 7, 2012.

**Roseann Gonzales,**

*Director, Policy and Administration, Denver Office.*

[FR Doc. 2012-22940 Filed 9-17-12; 8:45 am]

**BILLING CODE 4310-MN-P**

**DEPARTMENT OF THE INTERIOR**

**Bureau of Reclamation**

**Agency Information Collection; Proposed Revisions to a Currently Approved Information Collection**

**AGENCY:** Bureau of Reclamation, Interior.

**ACTION:** Notice of revisions.

**SUMMARY:** The Bureau of Reclamation intends to submit a request for renewal (with revisions) of an existing approved information collection to the Office of Management and Budget (OMB): Certification Summary Form, Reporting Summary Form for Acreage Limitation, 43 CFR part 426 and 43 CFR part 428, OMB Control Number: 1006-0006.

**DATES:** Submit written comments on the revised information collection on or before November 19, 2012.

**ADDRESSES:** Send written comments to or requests for copies of the proposed revised forms to the Bureau of

Reclamation, Attention: 84-53000, P.O. Box 25007, Denver, CO 80225-0007.  
**FOR FURTHER INFORMATION CONTACT:** Stephanie McPhee at (303) 445-2897.  
**SUPPLEMENTARY INFORMATION:**

**I. Abstract**

This information collection is required under the Reclamation Reform Act of 1982 (RRA), Acreage Limitation Rules and Regulations, 43 CFR part 426, and Information Requirements for Certain Farm Operations In Excess of 960 Acres and the Eligibility of Certain Formerly Excess Land, 43 CFR part 428. The forms in this information collection are to be used by district offices to summarize individual landholder (direct or indirect landowner or lessee) and farm operator certification and reporting forms. This information

allows us to establish water user compliance with Federal reclamation law.

**II. Changes to the RRA forms and their instructions**

The changes made to the currently approved RRA forms and the corresponding instructions are of an editorial nature, and are designed to assist the respondents by increasing their understanding of the forms, clarifying the instructions for completing the forms, and clarifying the information that is required to be on the forms. The proposed revisions to the RRA forms will be effective in the 2014 water year.

**III. Data**

OMB Control Number: 1006-0006.

*Title:* Certification Summary Form, Reporting Summary Form for Acreage Limitation, 43 CFR part 426 and 43 CFR part 428.

*Form Number:* Form 7-21SUMM-C and Form 7-21SUMM-R.

*Frequency:* Annually.

*Respondents:* Contracting entities that are subject to the acreage limitation provisions of Federal reclamation law.

*Estimated Annual Total Number of Respondents:* 182.

*Estimated Number of Responses per Respondent:* 1.25.

*Estimated Total Number of Annual Responses:* 228.

*Estimated Total Annual Burden on Respondents:* 9,120 hours.

*Estimated Completion Time per Respondent:* See table below.

Form No.	Burden estimate per form (in hours)	Number of respondents	Annual number of responses	Annual burden on respondents (in hours)
7-21SUMM-C and associated tabulation sheets .....	40	172	215	8,600
7-21SUMM-R and associated tabulation sheets .....	40	10	13	520
Totals .....		182	228	9,120

**IV. Request for Comments**

We invite your comments on:  
 (a) Whether the proposed collection of information is necessary for the proper performance of our functions, including whether the information will have practical use;  
 (b) The accuracy of our burden estimate for the proposed collection of information;  
 (c) Ways to enhance the quality, usefulness, and clarity of the information to be collected; and  
 (d) Ways to minimize the burden of the information collection on respondents, including the use of automated collection techniques or other forms of information technology.  
 We will summarize all comments received regarding this notice. We will publish that summary in the **Federal Register** when the information collection request is submitted to OMB for review and approval.

**V. Public Disclosure**

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 7, 2012.

**Roseann Gonzales,**  
 Director, Policy and Administration, Denver Office.

[FR Doc. 2012-22938 Filed 9-17-12; 8:45 am]

**BILLING CODE 4310-MN-P**

**DEPARTMENT OF THE INTERIOR**

**Bureau of Reclamation**

**Agency Information Collection; Proposed Revisions to a Currently Approved Information Collection**

**AGENCY:** Bureau of Reclamation, Interior.

**ACTION:** Notice of revisions.

**SUMMARY:** The Bureau of Reclamation intends to submit a request for renewal (with revisions) of an existing approved information collection to the Office of Management and Budget (OMB): Individual Landholder's and Farm Operator's Certification and Reporting Forms for Acreage Limitation, 43 CFR part 426 and 43 CFR part 428, OMB Control Number: 1006-0005.

**DATES:** Submit written comments on the revised information collection on or before November 19, 2012.

**ADDRESSES:** Send written comments to or requests for copies of the proposed

revised forms to the Bureau of Reclamation, Attention: 84-53000, P.O. Box 25007, Denver, CO 80225-0007.

**FOR FURTHER INFORMATION CONTACT:** Stephanie McPhee at (303) 445-2897.

**SUPPLEMENTARY INFORMATION:**

**I. Abstract**

This information collection is required under the Reclamation Reform Act of 1982 (RRA), Acreage Limitation Rules and Regulations, 43 CFR part 426, and Information Requirements for Certain Farm Operations In Excess of 960 Acres and the Eligibility of Certain Formerly Excess Land, 43 CFR part 428. This information collection requires certain landholders (direct or indirect landowners or lessees) and farm operators to complete forms demonstrating their compliance with the acreage limitation provisions of Federal reclamation law. The forms in this information collection are submitted to districts that use the information to establish each landholder's status with respect to landownership limitations, full-cost pricing thresholds, lease requirements, and other provisions of Federal reclamation law. In addition, forms are submitted by certain farm operators to provide information concerning the services they provide and the nature of their farm operating arrangements. All landholders whose entire westwide

landholdings total 40 acres or less are exempt from the requirement to submit RRA forms. Landholders who are “qualified recipients” have RRA forms submittal thresholds of 80 acres or 240 acres depending on the district’s RRA forms submittal threshold category where the land is held. Only farm operators who provide multiple services to more than 960 acres held in trusts or by legal entities are required to submit forms.

**II. Changes to the RRA Forms and Their Instructions**

The changes made to the currently approved RRA forms and the corresponding instructions are of a formatting or editorial nature, and are designed to assist the respondents by

increasing their understanding of the forms, clarifying the instructions for completing the forms, and clarifying the information that is required to be on the forms. The proposed revisions to the RRA forms will be effective in the 2014 water year.

**III. Data**

*OMB Control Number:* 1006–0005.  
*Title:* Individual Landholder’s and Farm Operator’s Certification and Reporting Forms for Acreage Limitation, 43 CFR part 426 and 43 CFR part 428.  
*Form Number:* Form 7–2180, Form 7–2180EZ, Form 7–2181, Form 7–2184, Form 7–2190, Form 7–2190EZ, Form 7–2191, Form 7–2194, Form 7–21TRUST, Form 7–21PE, Form 7–21PE–IND, Form 7–21FARMOP, Form 7–21VERIFY,

Form 7–21FC, Form 7–21XS, Form 7–21XSINAQ, Form 7–21CONT–I, Form 7–21CONT–L, Form 7–21CONT–O, and Form 7–21INFO.

*Frequency:* Annually.

*Respondents:* Landholders and farm operators of certain lands in our projects, whose landholdings exceed specified RRA forms submittal thresholds.

*Estimated Annual Total Number of Respondents:* 14,002.

*Estimated Number of Responses per Respondent:* 1.02.

*Estimated Total Number of Annual Responses:* 14,282.

*Estimated Total Annual Burden on Respondents:* 10,467 hours.

*Estimated Completion Time per Respondent:* See table below.

Form No.	Burden estimate per form (in minutes)	Number of respondents	Annual number of responses	Annual burden on respondents (in hours)
Form 7–2180	60	3,596	3,668	3,668
Form 7–2180EZ	45	374	381	286
Form 7–2181	78	1,051	1,072	1,394
Form 7–2184	45	32	33	24
Form 7–2190	60	1,618	1,650	1,650
Form 7–2190EZ	45	96	98	73
Form 7–2191	78	777	793	1,030
Form 7–2194	45	4	4	3
Form 7–21PE	75	139	142	177
Form 7–21PE–IND	12	4	4	1
Form 7–21TRUST	60	700	714	714
Form 7–21VERIFY	12	5,081	5,183	1,037
Form 7–21FC	30	214	218	109
Form 7–21XS	30	144	147	73
Form 7–21FARMOP	78	172	175	228
<b>Totals</b>		<b>14,002</b>	<b>14,282</b>	<b>10,467</b>

**IV. Request for Comments**

We invite your comments on:

(a) Whether the proposed collection of information is necessary for the proper performance of our functions, including whether the information will have practical use;

(b) The accuracy of our burden estimate for the proposed collection of information;

(c) Ways to enhance the quality, usefulness, and clarity of the information to be collected; and

(d) Ways to minimize the burden of the information collection on respondents, including the use of automated collection techniques or other forms of information technology.

We will summarize all comments received regarding this notice. We will publish that summary in the **Federal Register** when the information collection request is submitted to OMB for review and approval.

**V. Public Disclosure**

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 7, 2012.

**Roseann Gonzales,**  
*Director, Policy and Administration, Denver Office.*

[FR Doc. 2012–22936 Filed 9–17–12; 8:45 am]

**BILLING CODE 4310–MN–P**

**INTERNATIONAL TRADE COMMISSION**

[Investigation No. 337–TA–786]

**Certain Integrated Circuits, Chipsets, and Products Containing Same Including Televisions; Commission Decision To Review in Part a Final Initial Determination Finding No Violation of Section 337; Termination of Investigation**

**AGENCY:** U.S. International Trade Commission.

**ACTION:** Notice.

**SUMMARY:** Notice is hereby given that the U.S. International Trade Commission has determined to review in part the presiding administrative law judge’s (“ALJ”) final initial determination (“ID”) issued on July 12, 2012, finding no violation of section 337 of the Tariff Act of 1930, 19 U.S.C. 1337 in the above-captioned investigation. On review, the Commission affirms the ID’s

finding of no violation, and terminates the investigation.

**FOR FURTHER INFORMATION CONTACT:**

Megan M. Valentine, Office of the General Counsel, U.S. International Trade Commission, 500 E Street SW., Washington, DC 20436, telephone (202) 708-2301. Copies of non-confidential documents filed in connection with this investigation are or will be 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., Washington, DC 20436, telephone (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>. Hearing-impaired persons are advised that information on this matter can be obtained by contacting the Commission's TDD terminal on (202) 205-1810.

**SUPPLEMENTARY INFORMATION:** The Commission instituted this investigation on July 14, 2011, based on a complaint filed by Freescale Semiconductor, Inc. of Austin, Texas ("Freescale"). 76 FR 41521-2 (July 14, 2011). The complaint alleges violations of section 337 of the Tariff Act of 1930, as amended, 19 U.S.C. 1337, by reason of infringement of certain claims of U.S. Patent No. 5,467,455 ("the '455 patent"). The complaint further alleges the existence of a domestic industry. The Commission's notice of investigation named Funai Electric Co., Ltd. of Osaka, Japan and Funai Corporation, Inc. of Rutherford, New Jersey (collectively "Funai"); MediaTek Inc. of Hsinchu City, Taiwan ("MediaTek"); and Zoran Corporation of Sunnyvale, California ("Zoran") as respondents. The Office of Unfair Import Investigations was named as a party. On May 25, 2012, the Commission determined not to review an ID (Order No. 27) terminating the investigation as to Funai on the basis of a consent order. Notice (May 25, 2012). On May 29, 2012, the Commission determined not to review an ID (Order No. 31) terminating the investigation as to certain Zoran products and certain MediaTek products. Notice (May 29, 2012).

On July 12, 2012, the ALJ issued his final ID, finding no violation of section 337 as to the '455 patent. The ID included the ALJ's recommended determination ("RD") on remedy and bonding. In particular, the ALJ found that claims 9 and 10 of the '455 patent are not invalid pursuant to 35 U.S.C.

102, but that they are invalid pursuant to 35 U.S.C. 103. The ALJ further found that those Zoran products that were adjudicated in *Integrated Circuits I* are precluded under the doctrine of issue preclusion. The ALJ also found that certain of the accused Zoran products remaining in the investigation infringe claims 9 and 10 of the '455 patent, but that the accused MediaTek products do not infringe claims 9 and 10 of the '455 patent. The ALJ further found that Freescale has failed to satisfy the domestic industry requirement with respect to the '455 patent. The ALJ's RD recommended a limited exclusion order barring entry of Zoran's and MediaTek's infringing integrated circuits, chipsets, and products containing same including televisions. Freescale did not request, and the ALJ did not recommend, issuance of a cease and desist order against Zoran. The ALJ also recommended that respondents be required to post no bond for the importation of products found to infringe during the period of Presidential review.

On July 24, 2012, Freescale filed a petition for review of certain aspects of the final ID's findings concerning infringement, validity, and domestic industry, and preclusion. Also on July 25, 2012, the IA timely filed a petition for review of certain aspect of the final ID's findings concerning claim construction. Further on July 24, 2012, Zoran and MediaTek contingently petitioned for review of certain aspects of the final ID's findings concerning claim construction, infringement, domestic industry, and preclusion. No post-RD statements on the public interest pursuant to Commission Rule 201.50(a)(4) or in response to the post-RD Commission Notice issued on July 16, 2012, were filed. See 77 FR 42764 (July 20, 2012).

Having examined the record of this investigation, including the ALJ's final ID, the petitions for review, and the responses thereto, the Commission has determined to review the final ID in part. Specifically, the Commission has determined to review, and on review, reverses the ALJ's finding that Japanese Patent Application JP H05-83113-A to Kuboki ("Kuboki") discloses the limitation "[a] data processor within an integrated circuit package comprising: \* \* \* a plurality of bus termination circuits" of claim 9 of the '455 patent. The Commission has also determined to review, and on review, affirms with modification the ID's finding that Kuboki in combination with the knowledge of one of ordinary skill in the art renders obvious claims 9 and 10 of the '455 patent. The Commission has

further determined to review the ID's finding that the Kuboki reference in combination with U.S. Patent No. 5,479,123 to Gist ("Gist") renders obvious claims 9 and 10, and on review, finds that the Kuboki reference in combination with Gist and the knowledge of one of ordinary skill in the art renders obvious claims 9 and 10 of the '455 patent. The Commission has also determined to review the ID's finding that Freescale failed to establish the existence of a domestic industry based on its licensing activities, and on review, affirms the ID's finding with modification. The Commission has further determined to review the ID's finding that Freescale has failed to show that the Accused Zoran Hybrid Termination Circuits infringe claims 9 and 10 of the '455 patent and on review, affirms the ID's finding with modification.

The Commission has determined not to review the remaining issues decided in the ID. A Commission opinion will issue shortly.

The authority for the Commission's determination is contained in section 337 of the Tariff Act of 1930, as amended (19 U.S.C. 1337), and in sections 210.42-46 and 210.50 of the Commission's Rules of Practice and Procedure (19 CFR 210.42-46 and 210.50).

By order of the Commission.

Issued: September 12, 2012.

**Lisa R. Barton,**

*Acting Secretary to the Commission.*

[FR Doc. 2012-22943 Filed 9-17-12; 8:45 am]

**BILLING CODE 7020-02-P**

## DEPARTMENT OF JUSTICE

### Bureau of Alcohol, Tobacco, Firearms and Explosives

[OMB Number 1140-0001]

#### Agency Information Collection Activities; Proposed Collection; Comments Requested: ATF Distribution Center Survey

**ACTION:** 60-Day notice of information collection under review.

The Department of Justice (DOJ), Bureau of Alcohol, Tobacco, Firearms and Explosives (ATF), will be submitting the following information collection request to the Office of Management and Budget (OMB) for review and approval in accordance with the Paperwork Reduction Act of 1995. The proposed information collection is published to obtain comments from the public and affected agencies. Comments

are encouraged and will be accepted for "sixty days" until November 19, 2012. This process is conducted in accordance with 5 CFR 1320.10.

If you have comments especially on the estimated public burden or associated response time, suggestions, or need a copy of the proposed information collection instrument with instructions or additional information, please contact John Sickler, Materiel Management Branch at [John.Sickler@atf.gov](mailto:John.Sickler@atf.gov), 1519 Cabin Branch Drive, Landover, MD 20785.

Written comments and suggestions from the public and affected agencies concerning the proposed collection of information are encouraged. Your comments should address one or more of the following four points:

- 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 to respond, including through the use of appropriate automated, electronic, mechanical, or other technological collection techniques or other forms of information technology, e.g., permitting electronic submission of responses.

#### Summary of Information Collection

(1) *Type of Information Collection:* Extension of a currently approved collection.

(2) *Title of the Form/Collection:* ATF Distribution Center Survey.

(3) *Agency form number, if any, and the applicable component of the Department of Justice sponsoring the collection:* Form Number: ATF F 1370.4. Bureau of Alcohol, Tobacco, Firearms and Explosives.

(4) *Affected public who will be asked or required to respond, as well as a brief abstract.* Primary: Business or other for-profit. Other: Individual or households.

#### Need for Collection

The information provided on the form is used to evaluate the ATF Distribution Center and the services it provides to the users of ATF forms and publications.

(5) *An estimate of the total number of respondents and the amount of time*

*estimated for an average respondent to respond:* It is estimated that 240 respondents will complete a 1 minute form.

(6) *An estimate of the total public burden (in hours) associated with the collection:* There are an estimated 4 annual total burden hours associated with this collection.

If additional information is required contact: Jerri Murray, Department Clearance Officer, Policy and Planning Staff, Justice Management Division, United States Department of Justice, Two Constitution Square, 145 N Street NE., Room 2E-508, Washington, DC 20530.

Dated: September 12, 2012.

**Jerri Murray,**

*Department Clearance Officer, PRA, U.S. Department of Justice.*

[FR Doc. 2012-22892 Filed 9-17-12; 8:45 am]

**BILLING CODE 4410-FY-P**

## DEPARTMENT OF JUSTICE

### Bureau of Alcohol, Tobacco, Firearms and Explosives

[OMB Number 1140-0008]

#### Agency Information Collection Activities; Proposed Collection; Comments Requested: Application and Permit for Permanent Exportation of Firearms

**ACTION:** 60-Day notice of information collection under review.

The Department of Justice (DOJ), Bureau of Alcohol, Tobacco, Firearms and Explosives (ATF), will be submitting the following information collection request to the Office of Management and Budget (OMB) for review and approval in accordance with the Paperwork Reduction Act of 1995. The proposed information collection is published to obtain comments from the public and affected agencies. Comments are encouraged and will be accepted for "sixty days" until November 19, 2012. This process is conducted in accordance with 5 CFR 1320.10.

If you have comments especially on the estimated public burden or associated response time, suggestions, or need a copy of the proposed information collection instrument with instructions or additional information, please contact Gary Schaible, National Firearms Act Branch at [gary.schaible@atf.gov](mailto:gary.schaible@atf.gov).

Written comments and suggestions from the public and affected agencies concerning the proposed collection of information are encouraged. Your

comments should address one or more of the following four points:

- 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 to respond, including through the use of appropriate automated, electronic, mechanical, or other technological collection techniques or other forms of information technology, e.g., permitting electronic submission of responses.

#### Summary of Information Collection

(1) *Type of Information Collection:* Extension of a currently approved collection.

(2) *Title of the Form/Collection:* Application and Permit for Permanent Exportation of Firearms.

(3) *Agency form number, if any, and the applicable component of the Department of Justice sponsoring the collection:* Form Number: ATF F 9 (5320.9). Bureau of Alcohol, Tobacco, Firearms and Explosives.

(4) *Affected public who will be asked or required to respond, as well as a brief abstract:* Primary: Business or other for-profit. Other: Individual or households.

#### Need for Collection

The form is used to obtain permission to export firearms and serves as a vehicle to allow either the removal of the firearm from registration in the National Firearms Registration and Transfer Record or collection of an excise tax. It is used by Federal firearms licensees and others to obtain a benefit.

(5) *An estimate of the total number of respondents and the amount of time estimated for an average respondent to respond:* It is estimated that 930 respondents will complete a 18 minute form.

(6) *An estimate of the total public burden (in hours) associated with the collection:* There are an estimated 279 annual total burden hours associated with this collection.

If additional information is required contact: Jerri Murray, Department Clearance Officer, Policy and Planning Staff, Justice Management Division, U.S. Department of Justice, Two Constitution

Square 145 N Street NE., Room 2E-508, Washington, DC 20530.

Dated: September 12, 2012.

**Jerri Murray,**

*Department Clearance Officer, PRA, U.S. Department of Justice.*

[FR Doc. 2012-22893 Filed 9-17-12; 8:45 am]

**BILLING CODE 4410-FY-P**

## DEPARTMENT OF JUSTICE

### Bureau of Alcohol, Tobacco, Firearms and Explosives

[OMB Number 1140-0066]

#### Agency Information Collection Activities; Proposed Collection; Comments Requested: Manufacturers of Ammunition, Records and Supporting Data of Ammunition Manufactured and Disposed of

**ACTION:** 60-Day notice of information collection under review.

The Department of Justice (DOJ), Bureau of Alcohol, Tobacco, Firearms and Explosives (ATF), will be submitting the following information collection request to the Office of Management and Budget (OMB) for review and approval in accordance with the Paperwork Reduction Act of 1995. The proposed information collection is published to obtain comments from the public and affected agencies. Comments are encouraged and will be accepted for "sixty days" until November 19, 2012. This process is conducted in accordance with 5 CFR 1320.10.

If you have comments especially on the estimated public burden or associated response time, suggestions, or need a copy of the proposed information collection instrument with instructions or additional information, please contact Erica Reid, Firearms Industry Programs Branch at [fipb-informationcollection@atf.gov](mailto:fipb-informationcollection@atf.gov).

Written comments and suggestions from the public and affected agencies concerning the proposed collection of information are encouraged. Your comments should address one or more of the following four points:

- 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 to respond, including through the use of appropriate automated, electronic, mechanical, or other technological collection techniques or other forms of information technology, e.g., permitting electronic submission of responses.

#### Summary of Information Collection

(1) *Type of Information Collection:* Extension of a currently approved collection.

(2) *Title of the Form/Collection:* Manufacturers of Ammunition, Records and Supporting Data of Ammunition Manufactured and Disposed of.

(3) *Agency form number, if any, and the applicable component of the Department of Justice sponsoring the collection:* Form Number: None. Bureau of Alcohol, Tobacco, Firearms and Explosives.

(4) *Affected public who will be asked or required to respond, as well as a brief abstract:* Primary: Business or other for-profit. Other: None.

#### Need for Collection

These records are used by ATF in criminal investigations and compliance inspections in fulfilling the Bureau's mission to enforce the Gun Control Law.

(5) *An estimate of the total number of respondents and the amount of time estimated for an average respondent to respond:* It is estimated that 260 respondents will take 30 minutes to respond.

(6) *An estimate of the total public burden (in hours) associated with the collection:* There are an estimated 130 annual total burden hours associated with this collection.

If additional information is required contact: Jerri Murray, Department Clearance Officer, Policy and Planning Staff, Justice Management Division, U.S. Department of Justice, Two Constitution Square, 145 N Street NE., Room 2E-508, Washington, DC 20530.

Dated: September 12, 2012.

**Jerri Murray,**

*Department Clearance Officer, PRA, U.S. Department of Justice.*

[FR Doc. 2012-22894 Filed 9-17-12; 8:45 am]

**BILLING CODE 4810-FY-P**

## DEPARTMENT OF JUSTICE

### Bureau of Alcohol, Tobacco, Firearms and Explosives

[OMB Number 1140-0072]

#### Agency Information Collection Activities; Proposed Collection; Comments Requested: Employee Possessor Questionnaire

**ACTION:** 60-Day notice of information collection under review.

The Department of Justice (DOJ), Bureau of Alcohol, Tobacco, Firearms and Explosives (ATF), will be submitting the following information collection request to the Office of Management and Budget (OMB) for review and approval in accordance with the Paperwork Reduction Act of 1995. The proposed information collection is published to obtain comments from the public and affected agencies. Comments are encouraged and will be accepted for "sixty days" until November 19, 2012. This process is conducted in accordance with 5 CFR 1320.10.

If you have comments especially on the estimated public burden or associated response time, suggestions, or need a copy of the proposed information collection instrument with instructions or additional information, please contact Christopher Reeves, Chief, Federal Explosives Licensing Center at [FELC@usdoj.gov](mailto:FELC@usdoj.gov), 244 Needy Road, Martinsburg, WV 25405.

Written comments and suggestions from the public and affected agencies concerning the proposed collection of information are encouraged. Your comments should address one or more of the following four points:

- 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 to respond, including through the use of appropriate automated, electronic, mechanical, or other technological collection techniques or other forms of information technology, e.g., permitting electronic submission of responses.

**Summary of Information Collection**

(1) *Type of Information Collection:* Extension of a currently approved collection.

(2) *Title of the Form/Collection:* Employee Possessor Questionnaire.

(3) *Agency form number, if any, and the applicable component of the Department of Justice sponsoring the collection:* Form Number: ATF F 5400.28. Bureau of Alcohol, Tobacco, Firearms and Explosives.

(4) *Affected public who will be asked or required to respond, as well as a brief abstract:* Primary: Individuals or households. Other: Business or other for-profit.

**Need for Collection**

Each employee possessor in the explosives business or operations required to ship transport, receive, or possess (actual or constructive), explosive materials must submit this form. The form will be submitted to ATF to determine whether the person who provided the information is qualified to be an employee possessor in an explosive business.

(5) *An estimate of the total number of respondents and the amount of time estimated for an average respondent to respond:* It is estimated that 10,000 respondents will complete a 20 minute form.

(6) *An estimate of the total public burden (in hours) associated with the collection:* There are an estimated 3,334 annual total burden hours associated with this collection.

If additional information is required contact: Jerri Murray, Department Clearance Officer, Policy and Planning Staff, Justice Management Division, U.S. Department of Justice, Two Constitution Square, 2E-508, 145 N Street NE., Washington, DC 20530.

**Jerri Murray,**

*Department Clearance Officer, PRA, U.S. Department of Justice.*

[FR Doc. 2012-22895 Filed 9-17-12; 8:45 am]

**BILLING CODE 4810-FY-P**

**DEPARTMENT OF JUSTICE****Bureau of Alcohol, Tobacco, Firearms and Explosives**

[OMB Number 1140-0073]

**Agency Information Collection**

**Activities: Proposed Collection; Comments Requested: Furnishing of Samples**

**ACTION:** 60-Day notice of information collection under review.

The Department of Justice (DOJ), Bureau of Alcohol, Tobacco, Firearms and Explosives (ATF), will be submitting the following information collection request to the Office of Management and Budget (OMB) for review and approval in accordance with the Paperwork Reduction Act of 1995. The proposed information collection is published to obtain comments from the public and affected agencies. Comments are encouraged and will be accepted for "sixty days" until November 19, 2012. This process is conducted in accordance with 5 CFR 1320.10.

If you have comments especially on the estimated public burden or associated response time, suggestions, or need a copy of the proposed information collection instrument with instructions or additional information, please contact Anita Scheddel, Explosives Industry Programs Branch at [eipb-informationcollection@atf.gov](mailto:eipb-informationcollection@atf.gov).

Written comments and suggestions from the public and affected agencies concerning the proposed collection of information are encouraged. Your comments should address one or more of the following four points:

- 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 to respond, including through the use of appropriate automated, electronic, mechanical, or other technological collection techniques or other forms of information technology, e.g., permitting electronic submission of responses.

**Summary of Information Collection**

(1) *Type of Information Collection:* Extension of a currently approved collection.

(2) *Title of the Form/Collection:* Furnishing of Samples.

(3) *Agency form number, if any, and the applicable component of the Department of Justice sponsoring the collection:* Form Number: None. Bureau of Alcohol, Tobacco, Firearms and Explosives.

(4) *Affected public who will be asked or required to respond, as well as a brief*

*abstract:* Primary: Business or other for-profit. Other: None.

**Need for Collection**

Licensed manufacturers and licensed importers and persons who manufacture or import explosive materials or ammonium nitrate must, when required by the Director, furnish samples of such explosive materials or ammonium nitrate; information on chemical composition of those products; and any other information that the Director determines is relevant to the identification of the ammonium nitrate.

(5) *An estimate of the total number of respondents and the amount of time estimated for an average respondent to respond:* It is estimated that 100 respondents will take 30 minutes to submit the samples.

(6) *An estimate of the total public burden (in hours) associated with the collection:* There are an estimated 50 annual total burden hours associated with this collection.

If additional information is required contact: Jerri Murray, Department Clearance Officer, Policy and Planning Staff, Justice Management Division, Department of Justice, Two Constitution Square, 145 N Street NE., Room 2E-508, Washington, DC 20530.

Dated: September 12, 2012.

**Jerri Murray,**

*Department Clearance Officer, PRA, U.S. Department of Justice.*

[FR Doc. 2012-22896 Filed 9-17-12; 8:45 am]

**BILLING CODE 4410-FY-P**

**DEPARTMENT OF LABOR****Employment and Training Administration****Comment Request for Information Collection for Reemployment Demonstration Grants and Projects, Extension Without Revisions**

**AGENCY:** Employment and Training Administration (ETA), Labor.

**ACTION:** Notice.

**SUMMARY:** The Department of Labor (Department), as part of its continuing effort to reduce paperwork and respondent burden, conducts a preclearance consultation program to provide the 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 [44 U.S.C. 3506(c)(2)(A)] (PRA). This program helps 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 requirements on respondents can be properly assessed. Currently, ETA is soliciting comments concerning the collection of data about reemployment demonstration grants and projects, expiring 10/31/2012.

**DATES:** Written comments must be submitted to the office listed in the addresses section below on or before November 19, 2012.

**ADDRESSES:** Submit written comments to Scott Gibbons, Office of Unemployment Insurance, Employment and Training Administration, U.S. Department of Labor, 200 Constitution Avenue NW., Washington, DC 20210. Telephone number: 202-693-3008 (this is not a toll-free number). Individuals with hearing or speech impairments may access the telephone number above via TTY by calling the toll-free Federal Information Relay Service at 1-877-889-5627 (TTY/TDD). Email: [gibbons.scott@dol.gov](mailto:gibbons.scott@dol.gov). A copy of the proposed information collection request (ICR) can be obtained by contacting Mr. Gibbons.

**SUPPLEMENTARY INFORMATION:**

**I. Background**

The Middle Class Tax Relief and Job Creation Act of 2012 (Pub. L. 112-96) provides states with the opportunity to pilot new and innovative strategies to better help connect unemployed Americans with work. Section 2102 of the Extended Benefits, Reemployment, and Program Integrity Improvement Act (Act) enacts a new Section 305 of the Social Security Act (SSA) which allows the Secretary of Labor (Secretary) to enter into agreements with up to 10 states that submit applications for approval to conduct demonstration projects to test and evaluate measures to expedite reemployment of certain individuals found eligible for unemployment compensation (UC), or to improve the effectiveness of a state in carrying out its state law with respect to reemployment.

Section 305(a)(1), SSA, as enacted, establishes two purposes for which the Secretary may grant approval for states to conduct demonstration projects: (1) To test and evaluate measures designed to expedite the reemployment of individuals who establish a benefit year and are otherwise eligible to receive UC "under the state law of such state [the state submitting the application]"; or (2) to improve the effectiveness of a state in carrying out its state law with respect to reemployment.

ETA will provide states with guidance explaining the provisions of the new law, and laying out the application procedure that states must follow in order to be considered for this program. This PRA package consists of several elements:

- The guidance explaining the provisions of the new law, and the application process
- An application checklist to ensure the submission package is complete
- A draft agreement that will serve as the template for each individual state agreement
- Draft reporting requirements
- Data elements that states must be able to produce for evaluation

In addition to Public Law 112-96, collection of data necessary for oversight of the program is authorized under Section 303(a)(6) of the Social Security Act. In order for states to prepare their summary reports and to be in compliance with these new requirements of the law, ETA believes states will need to collect this information from employers.

**II. Review Focus**

The Department is particularly interested in comments which:

- 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 to respond, including through 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.

**III. Current Actions**

*Type of Review:* Extension without changes.

*Title:* Reemployment Demonstration Grants and Projects.

*OMB Number:* 1205-0492.

*Affected Public:* State Workforce Agencies.

*Form(s):* Unemployment Insurance Program Letter (UIPL) 15-12 ([http://wdr.doleta.gov/directives/corr\\_doc.cfm?DOCN=8173](http://wdr.doleta.gov/directives/corr_doc.cfm?DOCN=8173)) and UIPL 15-12, change 1, ([http://wdr.doleta.gov/directives/corr\\_doc.cfm?DOCN=5913](http://wdr.doleta.gov/directives/corr_doc.cfm?DOCN=5913)).

*Total Annual Respondents:* 10.  
*Annual Frequency:* One time and quarterly.

*Total Annual Responses:* 50.  
*Average Time per Response:* 9.66 hours per response (average).

*Estimated Total Annual Burden Hours:* 5,600.

*Total Annual Burden Cost for Respondents:* There are no annualized costs to respondents.

Comments submitted in response to this comment request will be summarized and/or included in the request for OMB approval of the ICR; they will also become a matter of public record.

Dated: Signed in Washington, DC, on this 10th day of September, 2012.

**Jane Oates,**

*Assistant Secretary for Employment and Training, Labor.*

[FR Doc. 2012-22931 Filed 9-17-12; 8:45 am]

**BILLING CODE 4510-FW-P**

**DEPARTMENT OF LABOR**

**Employment and Training Administration**

**Comment Request for Information Collection for the ETA 191, Statement of Expenditures and Financial Adjustments of Federal Funds for Unemployment Compensation for Federal Employees and Ex-Servicemembers Report, Extension Without Revisions**

**AGENCY:** Employment and Training Administration (ETA), Labor.

**ACTION:** Notice.

**SUMMARY:** The Department of Labor (Department), as part of its continuing effort to reduce paperwork and respondent burden, conducts a preclearance consultation program to provide the 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 [44 U.S.C. 3506(c)(2)(A)]. This program helps 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 requirements on respondents can be properly assessed.

Currently, ETA is soliciting comments concerning the collection of data about Expenditures and Financial Adjustments of Federal Funds for Unemployment Compensation for Federal Employees and Ex-Servicemembers.

**DATES:** Written comments must be submitted to the office listed in the addresses section below on or before November 19, 2012.

**ADDRESSES:** Submit written comments to Scott Gibbons, Office of Unemployment Insurance, Employment and Training Administration, U.S. Department of Labor, 200 Constitution Avenue NW., Washington, DC 20210. Telephone number: 202-693-3008 (this is not a toll-free number). Individuals with hearing or speech impairments may access the telephone number above via TTY by calling the toll-free Federal Information Relay Service at 1-877-889-5627 (TTY/TDD). Email: [gibbons.scott@dol.gov](mailto:gibbons.scott@dol.gov). A copy of the proposed information collection request (ICR) can be obtained by contacting Mr. Gibbons.

#### SUPPLEMENTARY INFORMATION:

##### I. Background

Public Law 97-362, Miscellaneous Revenue Act of 1982, amended the Unemployment Compensation for Ex-Servicemembers (UCX) law (5 U.S.C. 8509), and Public Law 96-499, Omnibus Budget Reconciliation Act, amended the Unemployment Compensation for Federal Employees (UCFE) law (5 U.S.C. 8501, et. seq.) requiring each Federal employing agency to pay the costs of regular and extended UCFE/UCX benefits paid to its employees by the State Workforce Agencies (SWAs). The ETA 191 report submitted quarterly by each SWA shows the amount of benefits that should be charged to each Federal employing agency. The Office of Unemployment Insurance uses this information to aggregate the SWA quarterly charges and submit one official bill to each Federal agency being charged. Federal agencies then reimburse the Federal Employees Compensation Account maintained by the U.S. Treasury.

##### II. Review Focus

The Department is particularly interested in comments which:

- 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 to respond, including through 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.

#### III. Current Actions

*Type of Review:* Extension without changes.

*Title:* Statement of Expenditures and Financial Adjustments of Federal Funds for Unemployment Compensation for Federal Employees and Ex-Servicemembers.

*OMB Number:* 1205-0162.

*Affected Public:* State Workforce Agencies.

*Form(s):* ETA 191.

*Total Annual Respondents:* 53.

*Annual Frequency:* Quarterly.

*Total Annual Responses:* 212.

*Average Time per Response:* 6 Hours.

*Estimated Total Annual Burden*

*Hours:* 1,272 Hours.

*Total Annual Burden Cost for Respondents:* There is no cost to respondents.

Comments submitted in response to this comment request will be summarized and/or included in the request for OMB approval of the ICR; they will also become a matter of public record.

Dated: Signed in Washington, DC, on this 10th day of September, 2012.

**Jane Oates,**

*Assistant Secretary for Employment and Training, Labor.*

[FR Doc. 2012-22930 Filed 9-17-12; 8:45 am]

**BILLING CODE 4510-FW-P**

#### DEPARTMENT OF LABOR

##### Employment and Training Administration

##### Comment Request for Information Collection for Unemployment Compensation for Ex-Servicemembers (UCX), Extension Without Revisions

**AGENCY:** Employment and Training Administration (ETA), Labor.

**ACTION:** Notice.

**SUMMARY:** The Department of Labor (Department), as part of its continuing effort to reduce paperwork and respondent burden, conducts a preclearance consultation program to provide the 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 [44 U.S.C. 3506(c)(2)(A)]. This program

helps 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 requirements on respondents can be properly assessed. Currently, ETA is soliciting comments concerning the collection of data for the administration of the UCX program.

**DATES:** Written comments must be submitted to the office listed in the addresses section below on or before November 19, 2012.

**ADDRESSES:** Submit written comments to Scott Gibbons, Office of Unemployment Insurance, Employment and Training Administration, U.S. Department of Labor, 200 Constitution Avenue NW., Washington, DC 20210. Telephone number: (202) 693-3008 (this is not a toll-free number). Individuals with hearing or speech impairments may access the telephone number above via TTY by calling the toll-free Federal Information Relay Service at 1-877-889-5627 (TTY/TDD). Email: [gibbons.scott@dol.gov](mailto:gibbons.scott@dol.gov). A copy of the proposed information collection request (ICR) can be obtained by contacting Mr. Gibbons.

#### SUPPLEMENTARY INFORMATION:

##### I. Background

The UCX law (5 U.S.C. 8521-8525) requires State Workforce Agencies (SWAs) to administer the UCX program in accordance with the same terms and conditions of the paying state's unemployment insurance law which apply to unemployed claimants who worked in the private sector. Each state agency needs to obtain certain military service information on claimants filing for UCX benefits to enable the state to determine their eligibility for benefits. As needed, state agencies may record or obtain required UCX information on the form developed by the Department, ETA 843, Request for Military Document and Information. The use of this form is essential to the UCX claims process. Form ETA 841, Request for Determination of Federal Military Service and Wages, is no longer used by most states; it has become an optional form.

Information pertaining to the UCX claimant can only be obtained from the individual's military discharge papers, maintained by the appropriate branch of military service or the Department of Veterans' Affairs (formerly the Veterans' Administration). Without the claimant's military information, the state cannot adequately determine potential UCX eligibility of ex-servicemembers and

would not be able to properly administer the program.

## II. Review Focus

The Department is particularly interested in comments which:

- 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 to respond, including through 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.

## III. Current Actions

*Type of Review:* Extension without changes.

*Title:* Unemployment Compensation for Ex-Servicemembers.

*OMB Number:* 1205-0176.

*Affected Public:* State Workforce Agencies.

*Form(s):* ETA 841, ETA 843.

*Total Annual Respondents:* 53.

*Annual Frequency:* As needed.

*Estimated Annual Responses:* 6,898 for the ETA 843, 260 for the ETA 841.

*Average Time per Response:* 1 minute.

*Estimated Total Annual Burden Hours:* 119.3 hours.

*Total Annual Burden Cost for Respondents:* There are no costs for respondents.

Comments submitted in response to this comment request will be summarized and/or included in the request for OMB approval of the ICR; they will also become a matter of public record.

Dated: Signed in Washington, DC, on this 10th day of September, 2012.

**Jane Oates,**

*Assistant Secretary for Employment and Training, Labor.*

[FR Doc. 2012-22933 Filed 9-17-12; 8:45 am]

**BILLING CODE 4510-FW-P**

## NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

[Notice (12-068)]

### Government-Owned Inventions, Available for Licensing

**AGENCY:** National Aeronautics and Space Administration.

**ACTION:** Notice of availability of inventions for licensing.

**SUMMARY:** Patent applications on the inventions listed below assigned to the National Aeronautics and Space Administration, have been filed in the United States Patent and Trademark Office, and are available for licensing.

**DATES:** September 18, 2012.

**FOR FURTHER INFORMATION CONTACT:** James J. McGroary, Patent Counsel, Marshall Space Flight Center, Mail Code LS01, Huntsville, AL 35812; telephone (256) 544-0013; fax (256) 544-0258.

**SUPPLEMENTARY INFORMATION:**

- NASA Case No.: MFS-32757-1: Thermal-Powered Reciprocating-Force Motor;
- NASA Case No.: MFS-31559-1-CON: Thermal Stir Welder;
- NASA Case No.: MFS-32871-1: Rapidly Deployed Modular Telemetry System;
- NASA Case No.: MFS-32889-1: Intelligent Flow Control Valve;
- NASA Case No.: MFS-32924-1: Partial Automated Alignment & Integration System;
- NASA Case No.: MFS-32940-1: Weld Nugget Temperature Control in Thermal Stir Welding;
- NASA Case No.: MFS-31559-2-DIV: Thermal Stir Welding Process;
- NASA Case No.: MFS-32611-1: Mass Gauging Demonstrator for Any Gravitational Conditions;
- NASA Case No.: MFS-32817-1: Dynamically Variable Spot Size Laser System;
- NASA Case No.: MFS-32859-1: Pulsed Ultrasonic Stir Welding System;
- NASA Case No.: MFS-32655-1: Aerospace Laser Ignition/Ablation Variable High Precision Thruster;
- NASA Case No.: MFS-32841-1: System for Configuring Modular Telemetry Transponders;
- NASA Case No.: MFS-32667-1: System of Extraction of Volatiles from Soil Using Microwave Processes;
- NASA Case No.: MFS-32809-1: Adaptable Transponder for Multiple Telemetry Systems;
- NASA Case No.: MFS-32831-1: Physicochemical-Managed Killing of Penicillin-Resistant Static and Growing Gram-Positive and Gram-Negative Vegetative Bacteria;
- NASA Case No.: MFS-32857-1: Space Vehicle Valve System;

- NASA Case No.: MFS-32903-1: Fluid Harmonic Absorber;
- NASA Case No.: MFS-32895-1: Ultrasonically-Assisted Thermal Stir Welding System;
- NASA Case No.: MFS-32840-1: Non-collinear Valve Actuator;
- NASA Case No.: MFS-32865-4: Airfoil-Shaped Fluid Flow Tool for Use in Making Differential;
- NASA Case No.: MFS-32797-1: Optical Multi-Species Gas Monitoring Sensor and System;
- NASA Case No.: MFS-32826-1: Safety Drain System for Fluid Reservoir;
- NASA Case No.: MFS-32916-1: Improved Impact Toughness and Heat Treatment for Cast Aluminum;
- NASA Case No.: MFS-32719-1: System for In-Situ Detection of Plant Exposure to Trichloroethylene (TCE);
- NASA Case No.: MFS-32737-1: Hermetic Seal Leak Detection Apparatus;
- NASA Case No.: MFS-32865-3: Star-Shaped Fluid Flow Tool for Use in Making Differential Measurements;
- NASA Case No.: MFS-32865-1: Self-Contained Compressed-Flow Generation Device for Use in Making Differential Measurements;
- NASA Case No.: MFS-32912-1: Radio Frequency Power Load and Associated Method;
- NASA Case No.: MFS-32830-1: Chemicals Contained in Boundary Layer-Targeted Emulsions;
- NASA Case No.: MFS-32777-1: Systems and Methods for the Electrodeposition of a Nickel-Cobalt Alloy;
- NASA Case No.: MFS-32865-2: Self-Contained Tubular Compressed-Flow Generation Device for Use in Making Differential Measurements.

**Sumara M. Thompson-King,**

*Acting Deputy General Counsel.*

[FR Doc. 2012-22853 Filed 9-17-12; 8:45 am]

**BILLING CODE P**

## NATIONAL CREDIT UNION ADMINISTRATION

### Sunshine Act; Notice of Agency Meeting

**TIME AND DATE:** 8:30 a.m., Thursday, September 20, 2012.

**PLACE:** Board Room, 7th Floor, Room 7047, 1775 Duke Street, Alexandria, VA 22314-3428.

**STATUS:** Closed.

**MATTERS TO BE CONSIDERED:**

1. Creditor Claim Appeals (2). Closed pursuant to exemption (4).
2. Personnel (3). Closed pursuant to exemptions (2) and (6).

**RECESS:** 9:45 a.m.

**TIME AND DATE:** 10 a.m., Thursday, September 20, 2012.

**PLACE:** Board Room, 7th Floor, Room 7047, 1775 Duke Street (All visitors must use Diagonal Road Entrance), Alexandria, VA 22314-3428.

**STATUS:** Open.

**MATTERS TO BE CONSIDERED:**

1. NCUA's Rules and Regulations, Permissible Investments - Treasury Inflation Protected Securities.
2. NCUA's Rules and Regulations and Interpretive Ruling and Policy Statement 12-2, Regulatory Relief for Small Credit Unions.
3. NCUA's Rules and Regulations, Expanded Definition of "Rural District" for Field of Membership.
4. NCUA's Rules and Regulations, Payday-Alternative Loans.

**FOR FURTHER INFORMATION CONTACT:** Mary Rupp, Secretary of the Board, Telephone: 703-518-6304.

**Mary Rupp,**

*Board Secretary.*

[FR Doc. 2012-23009 Filed 9-14-12; 11:15 am]

**BILLING CODE 7535-01-P**

## NUCLEAR REGULATORY COMMISSION

[NRC-2012-0002]

### Sunshine Federal Register Notice

**AGENCY HOLDING THE MEETINGS:** Nuclear Regulatory Commission,

**DATE:** Weeks of September 17, 24, October 1, 8, 15, 22, 2012.

**PLACE:** Commissioners' Conference Room, 11555 Rockville Pike, Rockville, Maryland.

**STATUS:** Public and Closed.

#### Week of September 17, 2012

There are no meetings scheduled for the week of September 17, 2012.

#### Week of September 24, 2012—Tentative

*Tuesday, September 25, 2012*

9:30 a.m. Strategic Programmatic Overview of the New Reactors Business Line (Public Meeting) (Contact: Donna Williams, 301-415-1322)

This meeting will be webcast live at the Web address—[www.nrc.gov](http://www.nrc.gov).

#### Week of October 1, 2012—Tentative

*Tuesday, October 2, 2012*

9:30 a.m. Strategic Programmatic Overview of the Nuclear Materials Users and Decommissioning and Low-Level Waste Business Lines

(Public Meeting) (Contact: Kimyata Morgan Butler, 301-415-0733)

This meeting will be webcast live at the Web address—[www.nrc.gov](http://www.nrc.gov).

#### Week of October 8, 2012—Tentative

There are no meetings scheduled for the week of October 8, 2012.

#### Week of October 15, 2012—Tentative

There are no meetings scheduled for the week of October 15, 2012.

#### Week of October 22, 2012—Tentative

*Tuesday, October 23, 2012*

9:30 a.m. Strategic Programmatic Overview of the Spent Fuel Storage and Transportation and Fuel Facilities Business Lines (Public Meeting) (Contact: Kevin Mattern, 301-492-3221)

This meeting will be webcast live at the Web address—[www.nrc.gov](http://www.nrc.gov).

\* \* \* \* \*

\*The schedule for Commission meetings is subject to change on short notice. To verify the status of meetings, call (recording)—301-415-1292. Contact person for more information: Rochelle Baval, 301-415-1651.

\* \* \* \* \*

The NRC Commission Meeting Schedule can be found on the Internet at: <http://www.nrc.gov/public-involve/public-meetings/schedule.html>.

\* \* \* \* \*

The NRC provides reasonable accommodation to individuals with disabilities where appropriate. If you need a reasonable accommodation to participate in these public meetings, or need this meeting notice or the transcript or other information from the public meetings in another format (e.g. braille, large print), please notify Bill Dosch, Chief, Work Life and Benefits Branch, at 301-415-6200, TDD: 301-415-2100, or by email at [william.dosch@nrc.gov](mailto:william.dosch@nrc.gov). Determinations on requests for reasonable accommodation will be made on a case-by-case basis.

\* \* \* \* \*

This notice is distributed electronically to subscribers. If you no longer wish to receive it, or would like to be added to the distribution, please contact the Office of the Secretary, Washington, DC 20555 (301-415-1969), or send an email to [darlene.wright@nrc.gov](mailto:darlene.wright@nrc.gov).

Dated: September 13, 2012.

**Rochelle C. Baval,**

*Policy Coordinator, Office of the Secretary.*

[FR Doc. 2012-23062 Filed 9-14-12; 11:15 am]

**BILLING CODE 7590-01-P**

## SECURITIES AND EXCHANGE COMMISSION

[Investment Company Act Release No. 30201; File No. 812-13967]

### Wells Fargo Funds Trust, et al.; Notice of Application

September 12, 2012.

**AGENCY:** Securities and Exchange Commission ("Commission").

**ACTION:** Notice of an application for an order under section 12(d)(1)(f) of the Investment Company Act of 1940 (the "Act") for an exemption from sections 12(d)(1)(A) and (B) of the Act, under sections 6(c) and 17(b) of the Act for an exemption from sections 17(a)(1) and (2) of the Act, and under section 6(c) of the Act for an exemption from rule 12d1-2(a) under the Act.

**SUMMARY OF THE APPLICATION:** The requested order would (a) permit certain registered open-end management investment companies to acquire shares of other registered open-end management investment companies and unit investment trusts ("UITs") that are within and outside the same group of investment companies as the acquiring investment companies, and (b) permit funds of funds relying on rule 12d1-2 under the Act to invest in certain financial instruments.

**APPLICANTS:** Wells Fargo Funds Trust ("Trust"), on behalf of its series, Wells Fargo Advantage WealthBuilder Conservative Allocation Portfolio, Wells Fargo Advantage WealthBuilder Moderate Balanced Portfolio, Wells Fargo Advantage WealthBuilder Growth Balanced Portfolio, Wells Fargo Advantage WealthBuilder Growth Allocation Portfolio, Wells Fargo Advantage WealthBuilder Equity Portfolio and Wells Fargo Advantage WealthBuilder Tactical Equity Portfolio (collectively, the "WealthBuilder Portfolios"), and Wells Fargo Funds Management, LLC ("WFFM" or the "Adviser").

**DATES:** *Filing Dates:* The application was filed on October 12, 2011, and amended on May 10, 2012, and August 27, 2012. Applicants have agreed to file an amendment during the notice period, the substance of which is reflected in this notice.

**HEARING OR NOTIFICATION OF HEARING:** An order granting the application 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 9, 2012, 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 Street NE., Washington, DC 20549-1090.

Applicants: 525 Market Street, 12th Floor, San Francisco, CA 94105.

**FOR FURTHER INFORMATION CONTACT:** Deepak T. Pai, Senior Counsel, at (202) 551-6876, or Mary Kay Frech, Branch Chief, at (202) 551-6821 (Division of Investment Management, Office of Investment Company Regulation).

**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 Trust is a Delaware statutory trust and is registered as an open-end management investment company under the Act. The WealthBuilder Portfolios are series of the Trust, and each pursues a distinct investment objective and strategy.<sup>1</sup> The WealthBuilder Portfolios are the only Wells Fargo Advantage Funds that currently intend to rely on the requested order. In the future, other Wells Fargo Advantage Funds, including series of Wells Fargo Variable Trust, that pursue their investment objective by investing in Underlying Funds (as defined below) may rely on the requested order.<sup>2</sup>

<sup>1</sup> Applicants request that the relief apply to any existing or future registered open-end management investment companies and any series thereof that are part of the same group of investment companies (as defined in section 12(d)(1)(G)(ii) of the Act) as the WealthBuilder Portfolios and that are, or may in the future be, advised by WFFM (together with the WealthBuilder Portfolios, the "Wells Fargo Advantage Funds").

<sup>2</sup> Shares of the series of Wells Fargo Variable Trust are not offered directly to the public. Shares of each series of Wells Fargo Variable Trust are offered to separate accounts that are registered as investment companies under the Act ("Registered Separate Accounts") or that are not registered under the Act ("Unregistered Separate Accounts", and together with the Registered Separate Accounts, "Separate Accounts") of affiliated and unaffiliated insurance companies (collectively, "Insurance Companies") as the underlying investment vehicles for the variable life insurance and variable annuity

2. The Adviser is registered as an investment adviser under the Investment Advisers Act of 1940 ("Advisers Act") and serves as investment adviser for each Wells Fargo Advantage Fund.<sup>3</sup> The Adviser may engage one or more affiliated or unaffiliated subadvisers (each a "Subadviser"). Each Subadviser will be registered as an investment adviser under the Advisers Act.

3. Applicants request an order to permit (a) certain Wells Fargo Advantage Funds that operate as a "fund of funds" (each, a "Wells Fargo Fund-of-Funds") to acquire shares of (i) registered open-end management investment companies that are not part of the same "group of investment companies," within the meaning of section 12(d)(1)(G)(ii) of the Act, as the Wells Fargo Fund-of-Funds (the "Unaffiliated Investment Companies") and unit investment trusts ("UITs") that are not part of the same "group of investment companies" as the Wells Fargo Fund-of-Funds ("Unaffiliated Trusts" and together with the Unaffiliated Investment Companies, "Unaffiliated Funds"),<sup>4</sup> and (ii) registered open-end management companies or UITs that are part of the same "group of investment companies" as the Wells Fargo Fund-of-Funds (collectively, "Affiliated Funds," and together with the Unaffiliated Funds, "Underlying Funds") and (b) each Underlying Fund, any principal underwriter for the Underlying Fund, and any broker or dealer registered under the Securities Exchange Act of 1934 ("Broker") to sell shares of the Underlying Fund to the Wells Fargo Fund-of-Funds.<sup>5</sup> Applicants also request an order under sections 6(c) and 17(b) of the Act to exempt applicants from section 17(a) to the extent necessary to permit Underlying Funds to sell their shares to Wells Fargo Funds-of-Funds

contracts ("Variable Contracts") issued by the Insurance Companies.

<sup>3</sup> The term "WFFM" or "Adviser" includes any existing or future entity controlling, controlled by or under common control with Wells Fargo Funds Management, LLC and any successor thereto. A successor entity is limited to any entity that results from a reorganization of the Adviser into another jurisdiction or a change in the type of business organization.

<sup>4</sup> Certain of the Unaffiliated Funds may be registered under the Act as either UITs or open-end management investment companies and have received exemptive relief to permit their shares to be listed and traded on a national securities exchange at negotiated prices ("ETFs").

<sup>5</sup> All entities that currently intend to rely on the requested order are named as applicants, and any other entity that relies on the order in the future will comply with the terms and conditions of the application.

and redeem their shares from Wells Fargo Funds-of-Funds.

4. Applicants also request an exemption under section 6(c) from rule 12d1-2 under the Act to permit any existing or future Wells Fargo Fund-of-Funds that relies on section 12(d)(1)(G) of the Act ("Same Group Fund of Funds") and that otherwise complies with rule 12d1-2 to also invest, to the extent consistent with its investment objective, policies, strategies and limitations, in financial instruments that may not be securities within the meaning of section 2(a)(36) of the Act ("Other Investments").

### Applicants' Legal Analysis

#### *Investments in Underlying Funds*

##### A. Section 12(d)(1)

1. Section 12(d)(1)(A) of the Act, in relevant part, prohibits a registered investment company from acquiring shares of an investment company if the securities represent more than 3% of the total outstanding voting stock of the acquired company, more than 5% of the total assets of the acquiring company, or, together with the securities of any other investment companies, more than 10% of the total assets of the acquiring company. Section 12(d)(1)(B) of the Act prohibits a registered open-end investment company, its principal underwriter, and any broker or dealer from selling the investment company's shares to another investment company if the sale will cause the acquiring company to own more than 3% of the acquired company's voting stock, or if the sale will cause more than 10% of the acquired company's voting stock to be owned by investment companies generally.

2. Section 12(d)(1)(J) of the Act provides that the Commission may exempt any person, security, or transaction, or any class or classes of persons, securities or transactions, from any provision of section 12(d)(1) if the exemption is consistent with the public interest and the protection of investors. Applicants seek an exemption under section 12(d)(1)(J) of the Act to permit a Wells Fargo Funds-of-Funds to acquire shares of the Underlying Funds in excess of the limits in section 12(d)(1)(A), and an Underlying Fund, any principal underwriter for an Underlying Fund, and any Broker to sell shares of an Underlying Fund to a Wells Fargo Fund-of-Funds in excess of the limits in section 12(d)(1)(B) of the Act.

3. Applicants state that the terms and conditions of the proposed arrangement will not give rise to the policy concerns underlying sections 12(d)(1)(A) and (B), which include concerns about undue

influence by a fund of funds over underlying funds, excessive layering of fees, and overly complex fund structures. Accordingly, applicants believe that the requested exemption is consistent with the public interest and the protection of investors.

4. Applicants submit that the proposed arrangement will not result in the exercise of undue influence by a Wells Fargo Fund-of-Funds or a Fund of Funds Affiliate (as defined below) over the Unaffiliated Funds.<sup>6</sup> To limit the control that a Wells Fargo Fund-of-Funds may have over an Unaffiliated Fund, applicants propose condition 1 prohibiting the Adviser, any person controlling, controlled by, or under common control with the Adviser, and any investment company or issuer that would be an investment company but for section 3(c)(1) or 3(c)(7) of the Act that is advised or sponsored by the Adviser or any person controlling, controlled by, or under common control with the Adviser (the "Advisory Group") from controlling (individually or in the aggregate) an Unaffiliated Fund within the meaning of section 2(a)(9) of the Act. The same prohibition would apply to any Subadviser within the meaning of section 2(a)(20)(B) of the Act to a Wells Fargo Fund-of-Funds, any person controlling, controlled by or under common control with the Subadviser, and any investment company or issuer that would be an investment company but for section 3(c)(1) or 3(c)(7) of the Act (or portion of such investment company or issuer) advised or sponsored by the Subadviser or any person controlling, controlled by or under common control with the Subadviser (the "Subadvisory Group").

5. Applicants also propose conditions to limit the potential for undue influence over the Unaffiliated Funds, including that no Wells Fargo Fund-of-Funds or Fund of Funds Affiliate (except to the extent it is acting in its capacity as an investment adviser to an Unaffiliated Investment Company or sponsor to an Unaffiliated Trust) will cause an Unaffiliated Fund to purchase a security in an offering of securities during the existence of any underwriting or selling syndicate of which a principal underwriter is an Underwriting Affiliate ("Affiliated Underwriting"). An "Underwriting

Affiliate" is a principal underwriter in any underwriting or selling syndicate that is an officer, director, member of an advisory board, investment adviser, Subadviser, or employee of the Wells Fargo Fund-of-Funds, or a person of which any such officer, director, member of an advisory board, investment adviser, Subadviser, or employee is an affiliated person. An Underwriting Affiliate does not include any person whose relationship to an Unaffiliated Fund is covered by section 10(f) of the Act.

6. As an additional assurance that an Unaffiliated Investment Company understands the implications of an investment by a Wells Fargo Fund-of-Funds under the requested order, prior to a Wells Fargo Fund-of-Funds' investment in the shares of an Unaffiliated Investment Company in excess of the limit in section 12(d)(1)(A)(i) of the Act, the Wells Fargo Fund-of-Funds and the Unaffiliated Investment Company will execute an agreement stating, without limitation, that their boards of directors or trustees ("Boards") and their investment advisers understand the terms and conditions of the order and agree to fulfill their responsibilities under the order ("Participation Agreement"). Applicants note that an Unaffiliated Investment Company (other than an ETF whose shares are purchased by a Wells Fargo Fund-of-Funds in the secondary market) will retain its right at all times to reject any investment by a Wells Fargo Fund-of-Funds.<sup>7</sup>

7. Applicants state that they do not believe that the proposed arrangement will involve excessive layering of fees. The Board of the Wells Fargo Fund-of-Funds, including a majority of the trustees who are not "interested persons" (within the meaning of section 2(a)(19) of the Act) ("Independent Trustees"), will find that the advisory fees charged under any investment advisory or management contract are based on services provided that will be in addition to, rather than duplicative of, the services provided under the advisory contract(s) of any Underlying Fund in which the Wells Fargo Fund-of-Funds may invest. In addition, the Adviser will waive fees otherwise payable to it by the Wells Fargo Fund-of-Funds in an amount at least equal to any compensation (including fees received pursuant to any plan adopted by an Unaffiliated Investment Company

under rule 12b-1 under the Act) received from an Unaffiliated Fund by the Adviser or an affiliated person of the Adviser, other than any advisory fees paid to the Adviser or its affiliated person by an Unaffiliated Investment Company, in connection with the investment by the Wells Fargo Fund-of-Funds in the Unaffiliated Fund.

8. Applicants state that with respect to Registered Separate Accounts that may invest in a Wells Fargo Fund-of-Funds in the future, no sales load will be charged at the Wells Fargo Fund-of-Funds level or at the Underlying Fund level. Other sales charges and service fees, as defined in Rule 2830 of the Conduct Rules of the NASD ("NASD Conduct Rule 2830"),<sup>8</sup> if any, will only be charged at the Wells Fargo Fund-of-Funds level or at the Underlying Fund level, not both. With respect to other investments in a Wells Fargo Fund-of-Funds, any sales charges and/or service fees charged with respect to shares of the Wells Fargo Fund-of-Funds will not exceed the limits applicable to funds of funds as set forth in NASD Conduct Rule 2830.

9. Applicants represent that if a series of Wells Fargo Variable Trust operates as a Wells Fargo Fund-of-Funds in the future, each such Wells Fargo Fund-of-Funds will represent in its Participation Agreement that no Insurance Company sponsoring a Registered Separate Account funding Variable Contracts will be permitted to invest in the Wells Fargo Fund-of-Funds unless the Insurance Company has certified to the Wells Fargo Fund-of-Funds that the aggregate amount of all fees and charges associated with each Variable Contract that invests in the Wells Fargo Fund-of-Funds, including fees and charges at the Separate Account, Wells Fargo Fund-of-Funds, and Underlying Fund levels, is reasonable in relation to the services rendered, the expenses expected to be incurred, and the risks assumed by the Insurance Company.

10. Applicants submit that the proposed arrangement will not create an overly complex fund structure. Applicants note that no Underlying Fund will acquire securities of any investment company or company relying on section 3(c)(1) or 3(c)(7) of the Act in excess of the limits contained in section 12(d)(1)(A) of the Act, except in certain circumstances identified in condition 11 below.

<sup>8</sup> Any references to NASD Conduct Rule 2830 include any successor or replacement rule to NASD Conduct Rule 2830 that may be adopted by FINRA.

<sup>6</sup> A "Fund of Funds Affiliate" is the Adviser, any Subadviser, promoter or principal underwriter of a Wells Fargo Fund-of-Funds, as well as any person controlling, controlled by, or under common control with any of those entities. An "Unaffiliated Fund Affiliate" is an investment adviser, sponsor, promoter, or principal underwriter of an Unaffiliated Fund, as well as any person controlling, controlled by, or under common control with any of those entities.

<sup>7</sup> An Unaffiliated Investment Company, including an ETF, would retain its right to reject any initial investment by a Wells Fargo Fund-of-Funds in excess of the limit in section 12(d)(1)(A)(i) of the Act by declining to execute the Participation Agreement with the Wells Fargo Fund-of-Funds.

## B. Section 17(a)

1. Section 17(a) of the Act generally prohibits sales or purchases of securities between a registered investment company and any affiliated person of the company. Section 2(a)(3) of the Act defines an “affiliated person” of another person to include (a) any person directly or indirectly owning, controlling, or holding with power to vote, 5% or more of the outstanding voting securities of the other person; (b) any person 5% or more of whose outstanding voting securities are directly or indirectly owned, controlled, or held with power to vote by the other person; and (c) any person directly or indirectly controlling, controlled by, or under common control with the other person.

2. Applicants state that a Wells Fargo Fund-of-Funds and the Affiliated Funds might be deemed to be under common control of the Adviser and therefore affiliated persons of one another. Applicants also state that a Wells Fargo Fund-of-Funds and the Unaffiliated Funds might be deemed to be affiliated persons of one another if the Wells Fargo Fund-of-Funds acquires 5% or more of an Unaffiliated Fund’s outstanding voting securities. In light of these and other possible affiliations, section 17(a) could prevent an Underlying Fund from selling shares to and redeeming shares from a Wells Fargo Fund-of-Funds.

3. Section 17(b) of the Act authorizes the Commission to grant an order permitting a transaction otherwise prohibited by section 17(a) if it finds that (a) the terms of the proposed transaction are fair and reasonable and do not involve overreaching on the part of any person concerned; (b) the proposed transaction is consistent with the policies of each registered investment company involved; and (c) the proposed transaction is consistent with the general purposes of the Act. Section 6(c) of the Act permits the Commission to exempt any person or transactions from any provision of the Act if such exemption is necessary or appropriate in the public interest and consistent with the protection of investors and the purposes fairly intended by the policy and provisions of the Act.

4. Applicants submit that the proposed transactions satisfy the standards for relief under sections 17(b) and 6(c) of the Act.<sup>9</sup> Applicants state

<sup>9</sup> Applicants acknowledge that receipt of any compensation by (a) an affiliated person of a Wells Fargo Fund-of-Funds, or an affiliated person of such person, for the purchase by a Wells Fargo Fund-of-Funds of shares of an Underlying Fund or (b) an affiliated person of an Underlying Fund, or an

that the terms of the transactions are reasonable and fair and do not involve overreaching. Applicants state that the terms upon which an Underlying Fund will sell its shares to or purchase its shares from a Wells Fargo Fund-of-Funds will be based on the net asset value of the Underlying Fund.<sup>10</sup> Applicants state that the proposed transactions will be consistent with the policies of each Wells Fargo Fund-of-Funds and each Underlying Fund and with the general purposes of the Act.

### *Other Investments by Same Group Funds of Funds*

1. Section 12(d)(1)(G) of the Act provides that section 12(d)(1) will not apply to securities of an acquired company purchased by an acquiring company if: (i) The acquiring company and acquired company are part of the same group of investment companies; (ii) the acquiring company holds only securities of acquired companies that are part of the same group of investment companies, government securities, and short-term paper; (iii) the aggregate sales loads and distribution-related fees of the acquiring company and the acquired company are not excessive under rules adopted pursuant to section 22(b) or section 22(c) of the Act by a securities association registered under section 15A of the Exchange Act or by the Commission; and (iv) the acquired company has a policy that prohibits it from acquiring securities of registered open-end management investment companies or registered unit investment trusts in reliance on section 12(d)(1)(F) or (G) of the Act.

2. Rule 12d1-2 under the Act permits a registered open-end investment company or a registered UIT that relies on section 12(d)(1)(G) of the Act to acquire, in addition to securities issued by another registered investment

affiliated person of such person, for the sale by the Underlying Fund of its shares to a Wells Fargo Fund-of-Funds may be prohibited by section 17(e)(1) of the Act. The Participation Agreement also will include this acknowledgement.

<sup>10</sup> Applicants note that a Wells Fargo Fund-of-Funds generally would purchase and sell shares of an Unaffiliated Fund that operates as an ETF through secondary market transactions rather than through principal transactions with the Unaffiliated Fund. To the extent purchases and sales of shares of an ETF occur in the secondary market (and not through principal transactions directly between a Wells Fargo Fund-of-Funds and an ETF), relief from section 17(a) would not be necessary. The requested relief is intended to cover, however, transactions directly between ETFs and a Wells Fargo Fund-of-Funds. Applicants are not seeking relief from section 17(a) for, and the requested relief will not apply to, transactions where an ETF could be deemed an affiliated person, or an affiliated person of an affiliated person of a Wells Fargo Fund-of-Funds, because an investment adviser to the ETF is also an investment adviser to the Wells Fargo Fund-of-Funds.

company in the same group of investment companies, government securities, and short-term paper: (1) Securities issued by an investment company that is not in the same group of investment companies, when the acquisition is in reliance on section 12(d)(1)(A) or 12(d)(1)(F) of the Act; (2) securities (other than securities issued by an investment company); and (3) securities issued by a money market fund, when the investment is in reliance on rule 12d1-1 under the Act. For the purposes of rule 12d1-2, “securities” means any security as defined in section 2(a)(36) of the Act.

3. Applicants state that the proposed arrangement would comply with the provisions of rule 12d1-2 under the Act, but for the fact that the Same Group Fund of Funds may invest a portion of their assets in Other Investments. Applicants request an order under section 6(c) of the Act for an exemption from rule 12d1-2(a) to allow the Same Group Funds of Funds to invest in Other Investments. Applicants assert that permitting Same Group Funds of Funds to invest in Other Investments as described in the application would not raise any of the concerns that the requirements of section 12(d)(1) were designed to address.

4. Consistent with its fiduciary obligations under the Act, the Board of each Same Group Fund of Funds will review the advisory fees charged by the Same Group Fund of Funds’s investment adviser to ensure that they are based on services provided that are in addition to, rather than duplicative of, services provided pursuant to the advisory agreement of any investment company in which the Same Group Fund of Funds may invest.

### **Applicants’ Conditions**

#### **Investments by Funds of Funds in Underlying Funds**

Applicants agree that the relief to permit Funds of Funds to invest in Underlying Funds shall be subject to the following conditions:

1. The members of an Advisory Group will not control (individually or in the aggregate) an Unaffiliated Fund within the meaning of section 2(a)(9) of the Act. The members of a Subadvisory Group will not control (individually or in the aggregate) an Unaffiliated Fund within the meaning of section 2(a)(9) of the Act. If, as a result of a decrease in the outstanding voting securities of an Unaffiliated Fund, the Advisory Group or a Subadvisory Group, each in the aggregate, becomes a holder of more than 25 percent of the outstanding voting securities of the Unaffiliated

Fund, then the Advisory Group or the Subadvisory Group will vote its shares of the Unaffiliated Fund in the same proportion as the vote of all other holders of the Unaffiliated Fund's shares. This condition will not apply to a Subadvisory Group with respect to an Unaffiliated Fund for which the Subadviser or a person controlling, controlled by, or under common control with the Subadviser acts as the investment adviser within the meaning of section 2(a)(20)(A) of the Act (in the case of an Unaffiliated Investment Company) or as the sponsor (in the case of an Unaffiliated Trust). A Registered Separate Account will seek voting instructions from its Variable Contract holders and will vote its shares of an Unaffiliated Fund in accordance with the instructions received and will vote those shares for which no instructions were received in the same proportion as the shares for which instructions were received. An Unregistered Separate Account will either (i) vote its shares of the Unaffiliated Fund in the same proportion as the vote of all other holders of the Unaffiliated Fund's shares; or (ii) seek voting instructions from its Variable Contract holders and vote its shares in accordance with the instructions received and vote those shares for which no instructions were received in the same proportion as the shares for which instructions were received.

2. No Wells Fargo Fund-of-Funds or Fund of Funds Affiliate will cause any existing or potential investment by the Wells Fargo Fund-of-Funds in shares of an Unaffiliated Fund to influence the terms of any services or transactions between the Wells Fargo Fund-of-Funds or a Fund of Funds Affiliate and the Unaffiliated Fund or an Unaffiliated Fund Affiliate.

3. The Board of each Wells Fargo Fund-of-Funds, including a majority of the Independent Trustees, will adopt procedures reasonably designed to assure that its Adviser and any Subadviser(s) to the Wells Fargo Fund-of-Funds are conducting the investment program of the Wells Fargo Fund-of-Funds without taking into account any consideration received by the Wells Fargo Fund-of-Funds or Fund of Funds Affiliate from an Unaffiliated Fund or an Unaffiliated Fund Affiliate in connection with any services or transactions.

4. Once an investment by a Wells Fargo Fund-of-Funds in the securities of an Unaffiliated Investment Company exceeds the limit of section 12(d)(1)(A)(i) of the Act, the Board of the Unaffiliated Investment Company, including a majority of the Independent Trustees,

will determine that any consideration paid by the Unaffiliated Investment Company to a Wells Fargo Fund-of-Funds or a Fund of Funds Affiliate in connection with any services or transactions: (a) IS fair and reasonable in relation to the nature and quality of the services and benefits received by the Unaffiliated Investment Company; (b) is within the range of consideration that the Unaffiliated Investment Company would be required to pay to another unaffiliated entity in connection with the same services or transactions; and (c) does not involve overreaching on the part of any person concerned. This condition does not apply with respect to any services or transactions between an Unaffiliated Investment Company and its investment adviser(s) or any person controlling, controlled by, or under common control with such investment adviser(s).

5. No Wells Fargo Fund-of-Funds or Fund of Funds Affiliate (except to the extent it is acting in its capacity as an investment adviser to an Unaffiliated Investment Company or sponsor to an Unaffiliated Trust) will cause an Unaffiliated Fund to purchase a security in any Affiliated Underwriting.

6. The Board of an Unaffiliated Investment Company, including a majority of the Independent Trustees, will adopt procedures reasonably designed to monitor any purchases of securities by the Unaffiliated Investment Company in an Affiliated Underwriting once an investment by a Wells Fargo Fund-of-Funds in the securities of the Unaffiliated Investment Company exceeds the limit of section 12(d)(1)(A)(i) of the Act, including any purchases made directly from an Underwriting Affiliate. The Board of the Unaffiliated Investment Company will review these purchases periodically, but no less frequently than annually, to determine whether the purchases were influenced by the investment by the Wells Fargo Fund-of-Funds in the Unaffiliated Investment Company. The Board of the Unaffiliated Investment Company will consider, among other things, (a) whether the purchases were consistent with the investment objectives and policies of the Unaffiliated Investment Company; (b) how the performance of securities purchased in an Affiliated Underwriting compares to the performance of comparable securities purchased during a comparable period of time in underwritings other than Affiliated Underwritings or to a benchmark such as a comparable market index; and (c) whether the amount of securities purchased by the Unaffiliated Investment Company in Affiliated Underwritings and the amount

purchased directly from an Underwriting Affiliate have changed significantly from prior years. The Board of the Unaffiliated Investment Company will take any appropriate actions based on its review, including, if appropriate, the institution of procedures designed to assure that purchases of securities in Affiliated Underwritings are in the best interests of shareholders.

7. Each Unaffiliated Investment Company shall maintain and preserve permanently in an easily accessible place a written copy of the procedures described in the preceding condition, and any modifications to such procedures, and shall maintain and preserve for a period not less than six years from the end of the fiscal year in which any purchase in an Affiliated Underwriting occurred, the first two years in an easily accessible place, a written record of each purchase of securities in an Affiliated Underwriting once an investment by a Wells Fargo Fund-of-Funds in the securities of an Unaffiliated Investment Company exceeds the limit of section 12(d)(1)(A)(i) of the Act, setting forth the: (a) Party from whom the securities were acquired, (b) identity of the underwriting syndicate's members, (c) terms of the purchase, and (d) information or materials upon which the determinations of the Board of the Unaffiliated Investment Company were made.

8. Prior to its investment in shares of an Unaffiliated Investment Company in excess of the limit in section 12(d)(1)(A)(i) of the Act, the Wells Fargo Fund-of-Funds and the Unaffiliated Investment Company will execute a Participation Agreement stating, without limitation, that their Boards and their investment advisers understand the terms and conditions of the order and agree to fulfill their responsibilities under the order. At the time of its investment in shares of an Unaffiliated Investment Company in excess of the limit in section 12(d)(1)(A)(i), a Wells Fargo Fund-of-Funds will notify the Unaffiliated Investment Company of the investment. At such time, the Wells Fargo Fund-of-Funds will also transmit to the Unaffiliated Investment Company a list of the names of each Fund of Funds Affiliate and Underwriting Affiliate. The Wells Fargo Fund-of-Funds will notify the Unaffiliated Investment Company of any changes to the list of the names as soon as reasonably practicable after a change occurs. The Unaffiliated Investment Company and the Wells Fargo Fund-of-Funds will maintain and preserve a copy of the order, the Participation

Agreement, and the list with any updated information for the duration of the investment and for a period of not less than six years thereafter, the first two years in an easily accessible place.

9. Before approving any advisory contract under section 15 of the Act, the Board of each Wells Fargo Fund-of-Funds, including a majority of the Independent Trustees, shall find that the advisory fees charged under such advisory contract are based on services provided that are in addition to, rather than duplicative of, services provided under the advisory contract(s) of any Underlying Fund in which the Wells Fargo Fund-of-Funds may invest. Such finding and the basis upon which the finding was made will be recorded fully in the minute books of the appropriate Wells Fargo Fund-of-Funds.

10. The Adviser will waive fees otherwise payable to it by a Wells Fargo Fund-of-Funds in an amount at least equal to any compensation (including fees received pursuant to any plan adopted by an Unaffiliated Investment Company under rule 12b-1 under the Act) received from an Unaffiliated Fund by the Adviser, or an affiliated person of the Adviser, other than any advisory fees paid to the Adviser or its affiliated person by an Unaffiliated Investment Company, in connection with the investment by the Wells Fargo Fund-of-Funds in the Unaffiliated Fund. Any Subadviser will waive fees otherwise payable to the Subadviser, directly or indirectly, by the Wells Fargo Fund-of-Funds in an amount at least equal to any compensation received by the Subadviser, or an affiliated person of the Subadviser, from an Unaffiliated Fund, other than any advisory fees paid to the Subadviser or its affiliated person by an Unaffiliated Investment Company, in connection with the investment by the Wells Fargo Fund-of-Funds in the Unaffiliated Fund made at the direction of the Subadviser. In the event that the Subadviser waives fees, the benefit of the waiver will be passed through to the Wells Fargo Fund-of-Funds.

11. No Underlying Fund will acquire securities of any other investment company or company relying on section 3(c)(1) or 3(c)(7) of the Act in excess of the limits contained in section 12(d)(1)(A) of the Act, except to the extent that such Underlying Fund: (a) Receives securities of another investment company as a dividend or as a result of a plan of reorganization of a company (other than a plan devised for the purpose of evading section 12(d)(1) of the Act); or (b) acquires (or is deemed to have acquired) securities of another investment company pursuant to exemptive relief from the Commission

permitting such Underlying Fund to (i) acquire securities of one or more investment companies for short-term cash management purposes, or (ii) engage in interfund borrowing and lending transactions.

12. With respect to Registered Separate Accounts that invest in a Wells Fargo Fund-of-Funds, no sales load will be charged at the Wells Fargo Fund-of-Funds level or at the Underlying Fund level. Other sales charges and service fees, as defined in NASD Conduct Rule 2830, if any, will only be charged at the Wells Fargo Fund-of-Funds level or at the Underlying Fund level, not both. With respect to other investments in a Wells Fargo Fund-of-Funds, any sales charges and/or service fees charged with respect to shares of a Wells Fargo Fund-of-Funds will not exceed the limits applicable to funds of funds set forth in NASD Conduct Rule 2830.

#### **Other Investments by Same Group Funds of Funds**

Applicants agree that the relief to permit Same Group Funds of Funds to invest in Other Investments shall be subject to the following condition:

13. Applicants will comply with all provisions of rule 12d1-2 under the Act, except for paragraph (a)(2), to the extent that it restricts any Same Group Fund of Funds from investing in Other Investments as described in the application.

For the Commission, by the Division of Investment Management, pursuant to delegated authority.

**Kevin M. O'Neill,**

*Deputy Secretary.*

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**BILLING CODE 8011-01-P**

## **SECURITIES AND EXCHANGE COMMISSION**

**[Release No. 34-67835; File No. SR-OCC-2012-14]**

### **Self-Regulatory Organizations; The Options Clearing Corporation; Notice of Filing of Proposed Rule Change Relating to the Clearance and Settlement of Over-the-Counter Options**

September 12, 2012.

Pursuant to Section 19(b)(1) of the Securities Exchange Act of 1934 ("Act")<sup>1</sup> and Rule 19b-4 thereunder<sup>2</sup> notice is hereby given that on August 30, 2012, The Options Clearing Corporation ("OCC") filed with the Securities and Exchange Commission

("Commission") the proposed rule change as described in Items I, II, and III below, which Items have been prepared primarily by OCC. 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 would allow OCC to provide central clearing of index options on the S&P 500 that are negotiated bilaterally in the over-the-counter market and submitted to OCC for clearance.

#### **II. Self-Regulatory Organization'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) Self-Regulatory Organization's Statement of the Purpose of, and Statutory Basis for, the Proposed Rule Change*

The purpose of this proposed rule change is to allow OCC to provide central clearing of OTC index options on the S&P 500 Index. The proposed rule change replaces a previously proposed rule change which was withdrawn by OCC.<sup>3</sup> OCC will clear the proposed OTC options in a manner that is highly similar to the manner in which it clears listed options, with only such modifications as are appropriate to reflect the unique characteristics of OTC options.

##### **OTC Options**

OCC has entered into a license agreement with Standard & Poor's Financial Services LLC ("S&P") that allows OCC to clear OTC options on three equity indices published by the S&P: the S&P 500 Index, the S&P MidCap 400 Index and the S&P Small Cap 600 Index. The initial OTC options to be cleared by OCC will consist of options on the S&P 500 Index. OCC may clear OTC options on other indices and on individual equity securities in the future, subject to Commission approval

<sup>1</sup> 15 U.S.C. 78s(b)(1).

<sup>2</sup> 17 CFR 240.19b-4.

<sup>3</sup> Securities Exchange Act Release No. 34-66090 (January 3, 2012), 77 FR 1107 (January 9, 2012) (SR-OCC-2011-19).

of one or more additional rule filings. The current rule filing defines “OTC option” and “OTC index option” generically in order to simplify future amendments to provide for additional underlying interests. OTC options will have predominantly common terms and characteristics, but also include unique terms negotiated by the parties. Transactions in OTC options will not be executed through the facilities of any exchange, but will instead be entered into bilaterally and submitted to OCC for clearance through one or more providers of trade affirmation services.<sup>4</sup>

OTC options will be similar to exchange-traded standardized equity index options called “FLEX Options” that are currently traded on certain options exchanges.<sup>5</sup> FLEX Options are exchange-traded put and call options that allow for customization of certain terms. For example, FLEX index Options traded on the Chicago Board Options Exchange have six customizable terms: (1) Underlying index, (2) put or call, (3) expiration date, (4) exercise price, (5) American or European exercise style, and (6) method of calculating settlement value. OCC is the issuer and guarantor of FLEX Options and clears FLEX Options traded on multiple exchanges.

Similar to FLEX Options, OTC options will allow for customization of a limited number of variable terms with a specified range of values that may be assigned to each as agreed between the buyer and seller. Parties submitting transactions in OTC options for clearing by OCC will be able to customize six discrete terms: (1) Underlying index;<sup>6</sup> (2) put or call; (3) exercise price; (4) expiration date; (5) American or European exercise style; and (6) method of calculating exercise settlement value on the expiration date.<sup>7</sup> The variable

terms and permitted values will be specified in the proposed Section 6 of Article XVII of the By-Laws. With respect to future OTC options accepted for clearing, OCC intends that such future OTC options will conform to the general variable terms and limits on the variable terms set forth in proposed Section 6 of the By-Laws, and will either amend the Interpretations and Policies thereunder to specify additional requirements for specific OTC options or publish such requirements on OCC’s Web site.

#### Clearing of OTC Options

OCC proposes to clear OTC options subject to the same basic rules and procedures used for the clearance of listed index options. The proposed rules require that the counterparties to the OTC options must be eligible contract participants (“ECPs”), as defined in Section 3a(65) of the Securities Exchange Act of 1934,<sup>8</sup> as amended (the “Exchange Act”) and Section 1a(18) of the Commodity Exchange Act,<sup>9</sup> as amended (the “CEA”). Because an OTC option will be a “security” as defined in the Exchange Act, the proposed rules also require that the transactions be cleared through a clearing member of OCC that is registered with the Commission as a broker-dealer or one of the small number of clearing members that are “non-U.S. securities firms” as defined in OCC’s By-Laws. OCC is not proposing to require clearing members to meet any different financial standards for clearing OTC options. However, clearing members must be specifically approved by OCC to clear OTC options pursuant to new Interpretation and Policy .11 to Section 1 of Article V in order to assure the operational readiness of such clearing members to clear OTC options. Clearing members seeking to submit a business expansion request and complete an operational review. The operational review consists of an initial meeting with the clearing member’s staff to evaluate the staff’s experience, confirm the staff’s familiarity with current OCC systems and procedures, complete an operational questionnaire, perform a high level review of the clearing member’s systems and processing capabilities, and review other pertinent operational information. Successful testing of messaging capability between the clearing member, MarkitSERV and

OCC is also necessary. These procedures will determine whether the firm is operationally ready to clear OTC Index Options.

Exercise of an OTC option will be settled by payment of cash by the assigned writer and to the exercising holder through OCC’s cash settlement system on the business day following exercise in exactly the same manner as is the case with exercise settlement of listed index options. As in the case of listed index options, the exercise-settlement amount will be equal to the difference between the current value of the underlying interest and the exercise price of the OTC option, times the multiplier that determines the size of the OTC option. In the case of OTC index options on the S&P 500, the multiplier will be fixed at 1. The multipliers for additional OTC index options that OCC may in the future clear may be fixed at such value as OCC determines and provides for in its By-Laws and Rules.

OCC will calculate clearing margin for the OTC options using its STANS margin system on the same basis as for listed index options and will otherwise apply the same risk management practices to both OTC options and listed index options, including new risk modeling enhancements for longer-tenor options discussed below under “Risk Management Enhancement for Longer-Tenor Options.” Because OCC currently clears listed options on all three of the underlying indexes on which OCC is currently licensed to clear OTC options, and because the customizable terms of these OTC options are relatively limited and the range of values that customizable terms may be given is limited, OCC does not believe that valuation and risk management for these OTC options present challenges that are different from those faced in the listed options market. Nevertheless, as discussed further below, OCC is proposing special OTC Options Auctions to be used in the unlikely event that OCC would be unable to close out positions in OTC options of a failed clearing member through other means.

OTC options may be carried in a clearing member’s firm account, in market-maker accounts or in its securities customers’ account, as applicable. Although customer positions in OTC options will be carried in the securities customers’ account (an omnibus account), OCC will use a “customer ID” to identify positions of individual customers based on information provided by clearing

<sup>4</sup> The initial provider of the trade affirmation services in connection with the OTC options will be MarkitSERV.

<sup>5</sup> Note that FINRA Rule 2360(a)(16) refers to FLEX Options as “FLEX Equity Options,” which it defines as “any options contract issued, or subject to issuance by, The Options Clearing Corporation whereby the parties to the transaction have the ability to negotiate the terms of the contract consistent with the rules of the exchange on which the options contract is traded.” OCC does not believe this definition would capture OTC options as they are not traded on any exchange. Nevertheless, as discussed below, OCC is working with FINRA to amend certain of FINRA’s rules to clarify the proper application of such rules to OTC options.

<sup>6</sup> Initially, however, the S&P 500 Index will be the only permitted underlying index.

<sup>7</sup> The expiration date of an OTC option must fall on a business day. The method of determining the exercise settlement value of an OTC option on its expiration date may be either the opening settlement value or the closing settlement value of the underlying index (calculated by S&P using the

opening or closing price, as applicable, in the primary market of each component security of the underlying index on the specified expiration date), in each case as reported to OCC by CBOE.

<sup>8</sup> 15 U.S.C. 78c(a)(65).

<sup>9</sup> 7 U.S.C. 1a(18).

members.<sup>10</sup> However, positions are not presently intended to be carried in individual customer sub-accounts, and positions in OTC options will be margined at OCC in the omnibus customers' account on the same basis as listed options. If a clearing member takes the other side of a transaction with its customer in an OTC option, the transaction will result in the creation of a long or short position (as applicable) in the clearing member's customers' account and the opposite short or long position in the clearing member's firm account. The positions could also be includable in the internal cross-margining account, subject to any necessary regulatory approvals.

The trade data for an OTC option trade will be entered into the system of MarkitSERV or another trade confirmation/affirmation vendor approved by OCC for this purpose (the "OTC Trade Source").<sup>11</sup> While MarkitSERV will be the only OTC Trade Source at launch, OCC will permit additional OTC Trade Sources in the future in response to sufficient market demand from OCC's clearing members and subject to the ability of any such OTC Trade Source to meet OCC's requirements for operational readiness and interoperability with OCC's systems, as well as requirements with respect to relevant business experience and reputation, adequate personnel and expertise, financial qualification and such other factors as OCC deems relevant. OCC will receive confirmed trades from the OTC Trade Source. It will be permissible for parties to submit trades for clearance that were entered into bilaterally at any time in the past, provided that the eligibility for clearance will be determined as of the date the trade is submitted to OCC for

<sup>10</sup> Such customer IDs are necessary in order to allow OCC to comply with certain terms of OCC's license agreement with S&P. As described further below, customer IDs will be used for other purposes as well.

<sup>11</sup> MarkitSERV, LLC is owned by Markit Group Limited, Markit Group Holdings Limited and The Depository Trust & Clearing Corporation. MarkitSERV Limited is a wholly-owned U.K. subsidiary of MarkitSERV, LLC. MarkitSERV, LLC and MarkitSERV Limited (collectively, "MarkitSERV") provide derivatives transaction processing, electronic confirmation, portfolio reconciliation services, and other related services for firms that conduct business in the over-the-counter derivatives markets through a variety of electronic systems, including the MarkitWire system. MarkitWire, owned by MarkitSERV Limited, is an OTC derivatives electronic confirmation/affirmation service offered by MarkitSERV as part of its post-trade processing suite of products. The role of MarkitSERV and MarkitWire in OCC's clearing of OTC options is described in further detail below.

clearance.<sup>12</sup> The OTC Trade Source will process the trade and submit it as a confirmed trade to OCC for clearing. If the trade meets OCC's validation requirements, OCC will so notify the OTC Trade Source, which will notify the submitting parties. Customers of clearing members may have direct access to the OTC Trade Source for purposes of entering or affirming trade data and receiving communications regarding the status of transactions, in which case mechanisms will be put in place for a clearing member to authorize a customer to enter a trade for the clearing member's customers' account or for the clearing member to affirm a trade once entered.

In order for a clearing member to be approved for clearing OTC options, the clearing member must enter into a standard agreement with MarkitSERV (or another OTC Trade Source with which the clearing member intends to enter trade data, if and when OCC enters into arrangements with other OTC Trade Sources). At launch, OTC options will not be subject to the same clearing member trade assignment rules and procedures through which exchange-traded options can be cleared by a clearing member other than the executing clearing member. This functionality may be added at a later date. OCC and MarkitSERV will adopt procedures to permit a customer that has an account with Clearing Member A ("CM A") to enter into an OTC option transaction with Clearing Member B ("CM B") and have the position included in its account at CM A and cleared in CM A's customers' account at OCC.

OTC options will be fungible with each other to the extent that there are OTC options in the system with identical terms. However, OCC will not treat OTC options as fungible with index options listed on any exchange, even if an OTC option has terms identical to the terms of the exchange-listed option.

Clearing members that carry customer positions in cleared OTC options will be subject to all OCC rules governing OCC-cleared options generally, as well as all applicable rules of the Commission and of any self-regulatory organization, including the Financial Industry Regulatory Authority ("FINRA"), of which they are a member. Section 8 of Article III of OCC's By-Laws provides that, subject to the By-Laws and Rules, "the Board of Directors may suspend Clearing Members and may prescribe

<sup>12</sup> OCC's license agreement with S&P imposes certain requirements relating to minimum time remaining to expiration of an OTC option.

and impose penalties for the violation of the By-Laws or the Rules of the Corporation, and it may, by Rule or otherwise, establish all disciplinary procedures applicable to Clearing Members and their partners, officers, directors and employees." As a condition to admission, Section 3(c) of Article V of the By-Laws provides that a clearing member must agree, among other things, to "pay such fines as may be imposed on it in accordance with the By-Laws and Rules." Rule 305 permits OCC to impose restrictions on the clearing activities of a clearing member if it finds that the financial or operational condition of the clearing member makes it necessary or advisable to do so for the protection of OCC, other clearing members, or the general public. Rule 1201(a) provides that OCC "may censure, suspend, expel or limit the activities, functions or operations of any Clearing Member for any violation of the By-Laws and Rules or its agreements with the Corporation." In addition to, or in lieu of, such actions, OCC is permitted under the same paragraph to impose fines. Rule 1202(b) establishes procedures for taking any such disciplinary actions. The foregoing provisions are sufficient to permit OCC to fine or otherwise discipline a clearing member that fails to abide by OCC's By-Laws and Rules applicable to OTC options, or to prohibit such clearing member from continuing to clear such options.

#### Regulatory Status of the OTC Options

An OTC option will be a "security" as defined in both the Securities Act of 1933, as amended (the "Securities Act") and, as noted above, the Exchange Act. OCC will be the "issuer" of the OTC options. The OTC options will be neither "swaps" nor "security-based swaps" for purposes of the Dodd-Frank Wall Street Reform and Consumer Protection Act ("Dodd-Frank").<sup>13</sup>

Most of OCC's clearing members are members of FINRA and subject to FINRA's rules, which have different provisions for "listed" and "OTC options" and contain various definitions distinguishing between the two. In some cases, OTC options would fall into

<sup>13</sup> Section 1a(47)(A)(i) of CEA, 7 U.S.C. 1a(47)(A)(i), as added by Section 721(a)(21) of Dodd-Frank, defines "swaps" broadly to include options on indices. However, Section 1a(47)(B)(iii) of the CEA, 7 U.S.C. 1a(47)(B)(iii), excludes from the "swap" definition any option on any index of securities that is subject to the Securities Act and the Exchange Act. A contract that is excluded from the definition of a "swap" under Section 1a(47)(B) of the CEA, 7 U.S.C. 1a(47)(B) (other than Section 1a(47)(B)(x)), 7 U.S.C. 1a(47)(B)(x)) is not a "security-based swap" for purposes of Section 3a(68) of the Exchange Act, 15 U.S.C. 78c(a)(68).

neither category under FINRA's definitions and in other cases, they would fall within what OCC perceives to be the wrong category. FINRA and OCC are working together to implement appropriate amendments to FINRA rules to clarify the proper application of such rules to cleared OTC options.

#### MarkitSERV Trade Submission Mechanics

MarkitSERV provides an interface to OCC that allows OCC to receive messages containing details of transactions in OTC options submitted for clearing by clearing members with access to MarketWire and also allows OCC to transmit messages to MarkitWire participants identifying the status of submitted transactions. MarkitWire applications use product-specific templates to simplify deal entry and negotiations. The templates specify the data required for a given product and also the business validation rules for each field. MarkitSERV has included OCC's validation requirements for OTC options in its trade templates.

The trade data for each OTC option transaction must be entered into MarkitWire. MarkitSERV will use a "confirmation/affirmation" procedure in which one party to the trade enters the trade data to the MarkitWire platform, which issues a confirmation to the counterparty to be affirmed, rejected or requested to be revised. If the trade details are confirmed, the trade will then be submitted to OCC for clearance and MarkitSERV will affirm such submission to both parties. OCC then validates the trade information for compliance with applicable requirements, such as the identification of an account of an eligible clearing member in which each side of the trade will be cleared, that the variable terms are within permissible ranges, and that minimum size requirements under OCC's license agreement with S&P are met. This validation will be completed by OCC immediately upon submission. OCC's clearing system will automatically accept the trade if it passes the validation process and will otherwise reject it.<sup>14</sup> A trade that is rejected by OCC may be corrected and submitted as a new transaction. Clearing members and customers with access to MarkitSERV will be able to determine

<sup>14</sup> Once accepted, a trade is guaranteed by OCC. Note, however, that OTC options for which the premium payment date communicated by MarkitSERV to OCC is prior to the business day on which the OTC option is submitted to OCC for clearing (referred to as a "Backloaded OTC Option") will not be accepted and guaranteed until the selling clearing member has met its initial morning cash settlement obligations to OCC on the following business day.

whether a trade has been accepted or rejected both through MarkitSERV and, in the case of clearing members, through their interface with OCC's clearing system.

*MarkitSERV's Regulatory Status*<sup>15</sup>  
MarkitSERV is not registered as a clearing agency under the Exchange Act, and the Commission staff has asked OCC to consider whether MarkitSERV would be required to so register in order to provide the proposed services to the OTC options market. OCC believes that no such registration is necessary based upon relevant interpretive guidance issued by the Commission.

Section 3(a)(23)(A) of the Exchange Act<sup>16</sup> defines a "clearing agency" broadly. The definition includes, in relevant part, "any person who \* \* \* provides facilities for comparison of data respecting the terms of settlement of securities transactions[.]" In 1998, the Commission issued a release entitled "Confirmation and Affirmation of Securities Trades; Matching" (the "Matching Release").<sup>17</sup> In the Matching Release, the Commission published "its interpretation that a 'matching' service that compares securities trade information from a broker-dealer and the broker-dealer's customer is a clearing agency function." The Matching Release distinguishes between such a matching service and a "confirmation/affirmation service" where the "vendor intermediary will only transmit information between the parties to a trade, and the parties will confirm and affirm the accuracy of the information." The Commission noted that "matching" constitutes the "comparison of data respecting the terms of settlement of securities transactions" and that such services therefore trigger status as a clearing agency, while confirmation/affirmation services would not, by themselves, constitute such a data comparison. The Commission concluded in the Matching Release that "an intermediary that captures trade information from a buyer and a seller of securities and performs an independent reconciliation or matching of that information is providing facilities for the comparison of data within the scope of Exchange Act Section 3(a)(23)." The Commission stated that "matching" is "so closely tied to the clearance and settlement process that it is different not only in degree but also different in kind from

<sup>15</sup> MarkitSERV offers different services in different markets, and this discussion is addressed only to the "confirmation/affirmation" procedure to be used in submitting trades to OCC.

<sup>16</sup> 15 U.S.C. 78c(a)(23)(A).

<sup>17</sup> Securities Exchange Act Release No. 34-39829 (April 13, 1998), 63 FR 17943 (April 13, 1998).

the \* \* \* confirmation and affirmation process." The Matching Release goes on to state: "a vendor that provides confirmation/affirmation services only will exchange messages between a broker-dealer and its institutional customer. The broker-dealer and its institutional customer will compare the trade information contained in those messages, and the institution itself will issue the affirmed confirmation." This is precisely what occurs when a counterparty to a trade affirms the trade data through MarkitSERV and requests submission to OCC for clearance. MarkitSERV transmits messages only; it does not "compare" or "match" trade data submitted by two parties.

The "confirmation/affirmation" functionality (as described above) to be provided by MarkitSERV (through MarkitWire) with respect to OTC options is functionally identical to the confirmation/affirmation service described in the Matching Release and OCC believes such service would not be a "matching" service within the meaning of the release. OCC believes that MarkitSERV will not be a "clearing agency" with respect to the services to be provided in connection with OTC options. The confirmation/affirmation service described in the Matching Release referred "to the transmission of messages among broker-dealers, institutional investors, and custodian banks regarding the terms of a trade executed for the institutional investor." MarkitWire's confirmation/affirmation process will allow for the transmission of messages among OCC's clearing members (most of which are registered broker-dealers), their customers (all of whom will be ECPs and will therefore be large and financially sophisticated market participants) and OCC, which is itself registered and subject to the Commission's oversight as a clearing agency.

By contrast, the "matching" services contemplated in the Matching Release would involve "the process whereby an intermediary compares the broker dealer's trade data submission \* \* \* with the institution's allocation instructions \* \* \* to determine whether the two descriptions of the trade agree." MarkitWire performs no such comparison. Under the confirmation/affirmation procedure, trade data is entered into MarkitWire by one party and such data is made available to the counterparty to be affirmed, rejected or requested to be revised. MarkitWire merely facilitates the transfer of information between the parties sufficient to allow the comparison to be made. A binding transaction (*i.e.*, an "affirmed

confirmation” in the language of the Matching Release) is not produced through any action of MarkitSERV, but is instead created by the completion, by the counterparty, of an affirmation of the trade data entered by the first party. MarkitWire provides no “independent reconciliation or matching” of trade data. Rather MarkitWire is providing essentially a messaging service among OCC and the parties to trades in OTC Options. The Matching Release is clear as to the distinction between a matching service and a confirmation/affirmation service, and OCC believes that there is no ambiguity that the services to be provided by MarkitWire with respect to OTC options fall into the latter, rather than the former, category.

#### Risk Management Enhancements for Longer-Tenor Options

Although OCC’s license agreement with S&P allows OCC to clear OTC options with tenors of up to fifteen years, OCC has elected at this time to clear only OTC options on the S&P 500 index with tenors of up to five years. However, OCC currently clears FLEX Options on the S&P 500 with tenors of up to 15 years. While OCC believes that its current risk management practices are adequate for current clearing activity, OCC is in the process of implementing risk modeling enhancements with respect to longer-tenor options, including OTC options. The enhancements are part of OCC’s ongoing efforts to test and improve its risk management operations with respect to all longer-tenor options that OCC currently clears. These procedures will be submitted for review in a separate “advance notice” filing and OCC will not commence clearing of OTC options until such procedures have been approved and implemented.

The proposed enhancements are as follows:

- First, OCC will introduce indicative over-the-counter quotations into the daily dataset of prices used to risk manage OCC-cleared products. These quotations will be obtained from a service provider that will collect OTC dealer polling information on a daily basis and provide such data to OCC.

- Second, OCC will introduce variations in the implied volatilities used in the modeling of all cleared options whose residual tenors are at least three years. To date, OCC’s margin methodology has assumed that implied volatilities of option contracts are static over the two-day risk horizon. While OCC’s backtesting has identified few exceedances related to implied volatility shocks, such shocks could occur and taking them into account in OCC’s

margin model will allow more robust risk management. OCC proposes to achieve this result by incorporating into the risk factors included in OCC’s models time series of proportional changes in implied volatilities for a range of representative volatilities.

- Third, OCC will introduce a valuation adjustment into its calculation of portfolio net asset value. This adjustment will be based on the aggregate sensitivity of the longer-tenor options in a portfolio to the overall level of implied volatilities at three and five years, and to the implied volatility skew.

A review of individual S&P 500 Index put and call options positions that are in the money by varying amounts and have expiration dates between four and nine years out indicates that the inclusion of modeled implied volatilities tends to result in less margin being held against short call positions and more being held against short put positions. These results are consistent with what would be expected given the strong negative correlation that exists between changes in implied volatility and market returns. On average, OCC observed a decrease in the margin requirement of approximately 24% on the nine call options tested and a 63% increase associated with the nine put options.

#### Proposed By-Law and Rule Changes

The specific proposed changes to OCC’s By-Laws and Rules to provide for the clearing of OTC options relate primarily to: (i) Specification of customizable terms; (ii) procedures for submission and acceptance of trades for clearance; and (iii) specification of criteria for eligibility of clearing members to clear transactions in OTC options and limitation of the types of customers for whom clearing members may effect transactions in OTC options. Otherwise, the currently proposed OTC options will be cleared and settled under the same provisions applicable to clearance of listed index options. Many of the proposed amendments are self-explanatory, and OCC has therefore attempted to confine the following discussion to a broad overview with specific explanation only where the reasons for the change may be less obvious.

Article I of the By-Laws contains defined terms used throughout the By-Laws and Rules. OCC proposes to modify certain existing definitions and include certain new definitions in order to incorporate OTC options into existing rules and facilitate the creation of new provisions unique to OTC options. Throughout the By-Laws and Rules,

OCC proposes to replace the term “Exchange transaction,” which is currently defined in Article I, in relevant part, as “a transaction on or through the facilities of an Exchange for the purchase, writing or sale of a cleared contract” with the term “confirmed trade” so as to make the relevant portions of the By-Laws and Rules applicable to transactions in OTC options as well as listed options, without causing confusion about the role of the OTC Trade Source in OCC’s clearing of OTC options. “Confirmed trade” is proposed to be defined in Article I to include transactions “effected on or through the facilities of an exchange” or “affirmed through the facilities of an OTC Trade Source” in order to include transactions in both listed options and OTC options. The current definition of “confirmed trade” in Rule 101 is proposed to be deleted as unnecessary given the new definition. Much of the length of this rule filing is attributable to the fact that the term “Exchange transaction” is used so many places in the rules. OCC has entered into agreements in the past which reference the term “Exchange transaction” or “exchange transaction.” OCC is also proposing to add an Interpretation and Policy to the new definition of “confirmed trade” in order to avoid any ambiguity concerning how such terms should be interpreted in any such agreement.

OCC proposes to add a new Interpretation and Policy .11 to Section 1 of Article V of the By-Laws, providing the additional criteria that must be met by a clearing member in order to clear OTC index options. Among these new criteria are that clearing members seeking to clear OTC index options on underlying indices published by Standard & Poor’s Financial Services LLC (“S&P”) must execute and maintain in effect a short-form license agreement in such form as specified from time to time by S&P. The current form of S&P short-form index license agreement is attached hereto as Exhibit 3.

The Interpretations and Policies under Section 1, Article VI allow clearing members to adjust their positions with OCC for certain enumerated reasons. OCC proposes to amend the Interpretations and Policies to clarify that adjustment of positions in OTC options will be effected through a manual process (as opposed to the electronic process available to post-trade adjustments in listed options), to the extent permitted by OCC. For the same reason, OCC is proposing to amend Rule 403 to prohibit clearing member trade assignment (“CMTA”) transactions in OTC options. Trade

“give-ups” that are effected through the CMTA process in the case of listed options will, in the case of OTC options, be effected through MarkitSERV before the trades are submitted to OCC for clearing.

Article XVII of the By-Laws governs index options in general and OCC is proposing amendments to Article XVII in order to set forth the terms applicable to the initial OTC options proposed to be cleared by OCC—options on the S&P 500 Index—and to differentiate OTC index options from other index options cleared by OCC. For example, certain amendments to the definitions are necessary because OTC options will be permitted to have a much wider range of expiration dates than exchange-traded options (other than FLEX Options). Additional definitional amendments ensure that OTC index options will constitute a separate class of options from other cash-settled index options even if both index options have the same terms and cover the same underlying interest.

Section 3 of Article XVII provides for adjustment of the terms of outstanding index options as necessary to reflect possible changes in the underlying index—such as those creating a discontinuity in the level of the index—that could theoretically make an adjustment necessary to protect the legitimate expectations of holders and writers of options on the index. Pursuant to paragraph (g) of Section 3, most but not all such adjustments would be made, in the case of listed index options, by an adjustment panel consisting of representatives of the exchanges on which the options are traded. In the case of OTC options, any such adjustments will be made by OCC in its sole discretion. However, in exercising that discretion, OCC may take into consideration adjustment made by the adjustment panel with respect to exchange-traded options covering the same underlying index.<sup>18</sup>

OCC proposes to add a new Section 6 to Article XVII to set forth certain provisions unique to OTC index options, including the variable terms allowed for OTC index options and the general limitations on such variable terms. In general, all OTC index options must conform to the terms and limitations set forth in Section 6, and additional specific requirements applicable to specific OTC index options will either be set forth in the Interpretations and Policies under

Section 6 or published separately on OCC’s Web site. Section 6 also makes clear that although OTC index options are not fungible with exchange-traded index options, OTC index options of the same series (*i.e.*, options having identical terms) will be fungible with each other. In addition to the terms and limitations applicable to OTC index options, Section 6 will establish that clearing members will be deemed to have made a number of representations and warranties in connection with their activities in OTC options each time they affirm a confirmed trade entered into an OTC Trade Source.

OCC has submitted a rulemaking petition to the Commission<sup>19</sup> seeking an amendment to Commission Rule 238<sup>20</sup> that would exempt the OTC Options from most provisions of the Securities Act. Unless another exemption from the registration requirements of the Securities Act is available, OCC intends to rely upon Rule 506 of Regulation D<sup>21</sup> under the Securities Act, which is a safe harbor under the Securities Act exemption in Section 4(a)(2)<sup>22</sup> for offerings by an issuer not involving a public offering. OCC intends to satisfy the conditions of Rule 506 of Regulation D as in effect at the time OCC relies upon the safe harbor. Participants in the existing markets for OTC equity options offered and sold in the United States commonly rely on the private offering exemption under these provisions and such reliance is therefore consistent with existing practice. OTC Options will be available for purchase only by highly sophisticated investors that are both “eligible contract participants,” as defined in Section 3a(65) of the Exchange Act,<sup>23</sup> and “accredited investors,” as defined in Rule 501(a) under Regulation D.<sup>24</sup> Section 6(f) of Article XVII includes representations of clearing members necessary to ensure that there is no general solicitation or general advertising in connection with the offer or sale of the OTC Options until such time as OCC notifies clearing members that such restriction no longer applies.

Chapter IV of the Rules sets forth the requirements for reporting of confirmed trades to OCC, and Rule 401 thereunder governs reporting of transactions in listed options by participant Exchanges. OCC is proposing to add new Rule 404 to govern the details of reporting of

confirmed trades in OTC options by an OTC Trade Source.

As discussed above, positions in OTC options will generally be margined in the same manner as positions in listed options using STANS and pursuant to Chapter VI of the Rules. However, OCC proposes to amend Rule 611 to establish different procedures for the segregation of long positions in OTC options for margining purposes. Long positions in listed options are held in a clearing member’s customers’ account or firm non-lien account and by default are deemed to be “segregated,” meaning that they are not subject to OCC’s lien and are given no collateral value when determining the margin requirement in the account. Such positions may be unsegregated only when a clearing member instructs OCC to unsegregate a long position and represents to OCC that the long position is part of a spread transaction carried for a single customer whose margin requirement on the corresponding short position has been reduced in recognition of the spread. OCC will then unsegregate the long position and so reduce OCC’s margin requirement. However, in case of long positions in OTC options that are carried in a clearing member’s customers’ account and for which OCC has received a customer ID, OCC proposes that it will automatically unsegregate such long positions if OCC identifies a qualifying short position in OTC options carried under the same customer ID. Clearing members will not be required to give an affirmative instruction to OCC to unsegregate a long position in OTC options or make a separate representation regarding the spread transaction. Instead, by carrying a qualifying spread position in a customer account, clearing members are deemed to have represented to OCC that the customer’s margin has been reduced in recognition of the spread. Based on discussion with the clearing members, it is OCC’s understanding that, in practice, broker-dealers reduce customers’ margin requirements to reflect spread positions. Therefore, OCC believes that automatic recognition of such spreads by OCC together with the deemed representation will greatly increase operational efficiency while providing equal assurance that long positions in OTC options will be unsegregated only if an identified customer will receive the benefit of the reduced margin required for spread transactions.

Rule 1001 sets forth the amount of the contribution that each clearing member is required to make to the clearing fund. OCC proposes to amend Rule 1001(c) so that, for purposes of calculating the daily average number of cleared

<sup>19</sup> See SEC File No. 4-644 (Submitted January 13, 2012), available at <http://www.sec.gov/rules/petitions/2012/petn4-644.pdf>.

<sup>20</sup> 17 CFR 230.238.

<sup>21</sup> 17 CFR 230.506.

<sup>22</sup> 15 U.S.C. 77d(a)(2).

<sup>23</sup> 15 U.S.C. 77c(a)(65).

<sup>24</sup> 17 CFR 230.501.

<sup>18</sup> Because index options, unlike options on individual stocks, rarely, if ever, require adjustments, allocation of the adjustment authority may have little practical significance.

contracts held by a clearing member in open positions with OCC during a calendar month (which number is used in turn to determine the clearing member's contribution to the clearing fund), open positions in OTC options will be adjusted as needed to account for any differences between the multiplier or unit of trading with respect to OTC options relative to non-OTC options covering the same underlying index or interest so that OTC options and non-OTC options are given comparable weight in the computation.<sup>25</sup>

In general, the rules in Chapter XI governing the suspension of a clearing member will apply equally to clearing members that transact in OTC options. Rule 1104 provides broad authority for OCC to liquidate a suspended clearing member's margin and clearing fund deposits "in the most orderly manner practicable." Rule 1106 provides similarly worded authority to close out open positions in options and certain other cleared contacts carried by a suspended clearing member. In 2011, the Commission approved an OCC rule change providing OCC the express authority to use a private auction as one of the means by which OCC may close out open positions and liquidate margin and clearing fund deposits of a suspended clearing member.<sup>26</sup> OCC anticipates it will use this auction process for OTC options as well. As an additional tool to ensure its ability to close out positions in OTC options promptly, OCC is proposing to amend Rule 1106 to provide for an alternative auction procedure specifically applicable only to OTC index options and related positions hedging, or hedged by, OTC index options (an "OTC Options Auction"). An OTC Options Auction would be used only in unusual circumstances where OCC determines it is not feasible to close out open positions in OTC index options through the other means provided for in OCC's Rules and By-Laws.<sup>27</sup> The amendments

to Rule 1106 summarize the OTC Options Auction procedures and incorporate by reference the detailed procedures contained in a document entitled "OTC Options Auction Procedures," which will be posted on the Corporation's Web site and otherwise made available to clearing members upon request of OCC. A copy of the OTC Options Auction Procedures is attached hereto as Exhibit 5.

Rule 1106(e)(2)(C) clarifies that, in the event that the liquidation of a clearing member results in a deficiency that would otherwise result in a proportionate charge against the clearing fund contributions of other clearing members, each OTC Index Option Member (as defined below) that failed to purchase or assume its share of an auction portfolio will be the first to absorb the deficiency, through a "Priority Charge" against such clearing members' clearing fund contributions. The Priority Charge is a "first loss" mechanism, and is not intended to increase a clearing member's total maximum exposure to OCC.

Under the OTC Options Auction procedures, all clearing members authorized to clear transactions in OTC index options ("OTC Index Option Members"), other than the defaulting clearing member, will be required to participate in the OTC Options Auction by submitting competitive bids for all or a portion of the defaulting clearing member's OTC index option portfolio. Each such participant will be subject to a minimum participation level based on the participant's proportionate share of the total "risk margin" requirement posted by all OTC Index Options Members in the previous month for all positions (not limited to OTC option positions) held in accounts eligible to hold OTC options positions ("OTC Eligible Accounts"), after removing the defaulting clearing member.<sup>28</sup> This method of calculating the minimum participation level in the OTC Options Auction results in all OTC Index Option Members being required to participate in the OTC Options Auction based on their clearing activity related to all positions in OTC Eligible Accounts. Required participation ensures that the OTC Options Auction will have sufficient participants authorized to

options, and will amend it as and if appropriate to apply to other over-the-counter products that OCC may propose to clear in the future.

<sup>28</sup> This minimum participation level will be multiplied by 1.15 to calculate each participant's minimum bid size, such that the sum of all participants' bids will equal 115% of the auction portfolio, in order to increase the likelihood that the entire auction portfolio will be allocated to participants.

clear transactions in OTC index options and that the most active clearing members in OTC index options will submit bids for the largest percentage of the auction portfolio, increasing the likelihood of the acquisition of OTC options positions by clearing members with appropriate financial strength, risk management capabilities and trading expertise. Each participant may submit bids at varying quantities and varying prices, so long as the participant's bids equal or exceed its minimum participation level. A participant may use bids from non-OTC Index Options Members and non-clearing members in order to meet its minimum participation level, subject to certain Corporation requirements including that it guarantee the performance of such third parties. Each bid will indicate what percentage of the auction portfolio the participant is bidding on and the amount of the bid. Bids will be stated in terms of a price for the entire auction portfolio, and may be either positive or negative. (Negative bids imply an auction portfolio that has a negative net asset value and indicate how much the Corporation would be required to pay the participant to assume the relevant percentage of the auction portfolio.) The Corporation will rank the submitted bids from best to worst and the auction portfolio will be allocated among the bidding participants accordingly until the auction portfolio is exhausted. The bid price that is sufficient to clear the entire auction portfolio will become the single price to be used for all winning bids, even if a participant's stated bid was better.

In order to provide a strong incentive to ensure competitive bidding by the OTC Index Option Members required to participate in an OTC Options Auction, OTC Index Options Members who fail to win their minimum participation in the auction will be subject to a potential priority charge against its clearing fund contribution. If the cost of liquidating a suspended clearing member's positions exhausts the clearing member's margin and clearing fund contribution and any other assets of the suspended clearing member available to OCC, then OCC, pursuant to Section 5 of Article VIII of the By-Laws, would ordinarily withdraw the amount of the deficiency from the clearing fund and charge it on a proportionate basis against all other clearing members' computed contributions as fixed at the time. When an OTC Options Auction has been held in respect of a suspended OTC Index Options Member, however, some or all of any such remaining loss would be assessed first against the clearing fund

<sup>25</sup> For example, the index multiplier applicable to OTC index options on the S&P 500 Index will be fixed at 1. In comparison, the index multiplier applicable to listed index options is 100.

<sup>26</sup> See Securities Exchange Act Release No. 34-65654 (October 28, 2011), 76 FR 68238 (November 3, 2011) (SR-OCC-2011-08). OCC subsequently filed a rule change to provide for detailed procedures for the conduct of such an auction. See Securities Exchange Act Release No. 34-67443 (July 16, 2012), 77 FR 42784 (July 20, 2012) (SR-OCC-2012-11). The Staff notes that SR-OCC-2012-11 was approved on August 27, 2012. See Securities Exchange Act Release No. 34-6773 (August 27, 2012), 77 FR 53241 (August 31, 2012).

<sup>27</sup> OCC anticipates that these procedures would be applicable to other OTC derivatives that may be cleared by OCC in the future. However, OCC has limited the currently proposed rule to OTC index

contributions of any OTC Options Auction participant(s) whose bids are insufficiently competitive to be allocated a portion of the auction portfolio equal to such participant's minimum required participation. This priority charge would be made regardless of the reason for the shortfall—*i.e.*, whether or not the loss resulted from the closing out of OTC options positions. The priority charge would be calculated based on an "assessment ratio," which is formulated to provide incentive to all OTC Options Auction participants to participate to their full minimum participation level in the auction. The method of calculating the assessment ratio is such that if the net asset value of the auction portfolio is zero the assessment ratio will also be zero and no priority charge will be made. As the absolute net asset value of the auction portfolio (whether positive or negative) increases, the assessment ratio also increases, all other factors being equal. If all OTC Options Auction participants submit bids such that each receives an allocation of OTC options positions equal to its minimum participation level, no priority charge will be made regardless of whether or not there is a liquidation shortfall. If a liquidation shortfall remains after any priority charges, or if no priority charges were required, the Corporation will then make a proportionate charge against the clearing fund contributions of all clearing members, including those that participated in the OTC Options Auction, in the usual manner pursuant to Section 5 of Article VIII of OCC's By-Laws.

In order to protect the estate of the suspended clearing member, OCC reserves some discretion in supervising the auction. In the event that the bid price that clears the entire auction portfolio is determined by OCC to be an outlier bid, OCC may choose as the winning bid a price that clears at least 80% of the auction portfolio. The remaining auction portfolio will then be re-auctioned as described above.

OCC anticipates that the likelihood of having to use this alternative auction is small. Nevertheless, in view of the fact that positions in OTC index options are expected to be large and that there may be no active trading market in options with terms precisely identical to the terms of the OTC index options in question, OCC believes that this is an appropriate failsafe provision. It should be noted that the Chicago Mercantile Exchange Inc. ("CME") has rules allowing its clearing house and certain CME committees to administer an auction process to liquidate positions in interest rate swaps ("IRS") in the event

of a default of a CME clearing member authorized to submit IRS for clearing (an "IRS Member").<sup>29</sup> Although the financial safeguards supporting IRS clearing, including its "guaranty fund," and the IRS auction process are different from OCC's clearing fund and OTC Options Auction in that, among other things, there is a separate guaranty fund for IRS, the IRS auction shares certain similarities with the OTC Options Auction. In particular, the IRS auction process requires mandatory participation of IRS clearing members with open interest in a position being auctioned and, in order to provide incentive for IRS Members to submit quality bids in an IRS auction, provides that in the event there is a loss to CME's clearing house associated with an IRS Member's default, IRS Members that do not submit quality bids in an IRS auction are subject to having their IRS guaranty fund deposit assessed before assessments are made against other IRS clearing members' guaranty fund deposits. In its original rule filing, OCC had proposed a different failsafe solution whereby OCC could terminate open positions of a suspended clearing member by setting a close-out value that non-defaulting clearing members holding the opposite side of the suspended clearing member's positions would be required to accept or pay in settlement of the terminated positions. However, clearing members objected to that proposed method and have advocated the auction procedures proposed here in lieu of the early termination proposal.<sup>30</sup> Clearing members in an OTC advisory group were active in designing the OTC Options Auction procedures, including the priority charges.

#### Impact of Clearing OTC Options on Other OCC-Cleared Products

Cleared OTC options will not be fungible with listed options. However, an OTC option may have economic characteristics that are substantially similar or identical to the characteristics of options in series of listed options that OCC clears. While it is possible that in any given instance a market participant

may elect to enter into an OTC option in lieu of an economically similar listed product, OCC does not believe that its clearing of OTC options will adversely affect the efficiency or liquidity of the listed markets. The OTC options markets currently exist to accommodate a variety of commercial and other needs of market participants, including the ability to customize the terms of transactions. While the availability of an OCC guarantee for OTC transactions in which the parties would otherwise be exposed to each others' creditworthiness may cause transactions that currently occur in the non-cleared OTC markets to migrate to the cleared-OTC markets, OCC does not believe it will cause significant migration from the listed markets to the cleared OTC markets. The limitation of the OTC options markets to ECPs as well as the significant minimum transaction size and tenor requirements that are applicable to certain transactions in the currently proposed OTC options under the S&P License Agreement will limit the use of cleared OTC options and should help to ensure that there is no substantial migration from the listed markets to the OTC markets for this product. The existing bilateral OTC options markets have existed for years alongside the listed options markets, and OCC believes that dealers in such bilateral options often use the listed markets to hedge positions taken in such bilateral options and other OTC derivatives.

#### Notice of Launch Date

Following approval of this rule change by the Commission, OCC expects to provide notice to its clearing members of the date on which it intends to implement this rule change and begin clearing OTC options.

OCC believes that the proposed changes to OCC's By-Laws are consistent with the purposes and requirements of Section 17A of the Exchange Act<sup>31</sup> because they are designed to permit OCC to clear OTC options subject to the same basic rules, procedures and risk management practices that have been used successfully by OCC in clearing transactions in listed options. OCC believes that clearance and settlement of OTC options pursuant to this rule filing is fully consistent with OCC's obligations with respect to the prompt and accurate clearance and settlement of securities transactions and the protection of securities investors and the public interest. The proposed rule

<sup>29</sup> See CME Rules 8G14, 8G25 and 8G802.B. See also Commodity Futures Trading Commission Rule Change Submission No. 12-061RR of CME, the Board of Trade of the City of Chicago Inc. and the New York Mercantile Exchange, available at: <http://www.cmegroup.com/market-regulation/files/12-061rr.pdf>.

<sup>30</sup> See comment letter from Alessandro Cocco, Managing Director of J.P. Morgan Clearing Corporation and J.P. Morgan Securities LLC, to Ms. Elizabeth M. Murphy, Secretary, Securities and Exchange Commission (January 30, 2012), available at <http://www.sec.gov/comments/sr-occ-2011-19/occ201119-2.pdf>.

<sup>31</sup> 15 U.S.C. 78q-1.

change is not inconsistent with any existing rule of OCC.

*(B) Self-Regulatory Organization's Statement on Burden on Competition*

OCC does not believe that the proposed rule change would impose any burden on competition.

*(C) Self-Regulatory Organization's Statement on Comments on the Proposed Rule Change Received From Members, Participants or Others*

Written comments were not and are not intended to be solicited with respect to the proposed rule change and, except as discussed below, none have been received. OCC has been actively engaged with a number of clearing members that have expressed an interest in clearing OTC Options. The following are the only substantive written comments that were received, and they have been addressed, in the manner indicated:

- OCC received a written comment that the role of the Default Management Advisory Committee, as described in the OTC Options Auction procedures attached as Exhibit 5 to this rule filing, should be clarified. OCC has revised the procedures to clarify that the Default Management Advisory Committee will be a standing committee and will be formed from the inception of OCC's clearing of OTC Options. It will not be an *ad hoc* committee formed at the time of a default.

- OCC received a written comment asking that the Membership/Risk Committee have a role in setting exercise settlement values with respect to OTC index options in unusual circumstances pursuant to Section 4(a)(2) of Article XVII of the ByLaws. OCC has revised the rules to provide that OCC will consult with that committee when appropriate in setting exercise settlement values pursuant to Section 4(a)(2).

- OCC received a written comment asking for limitations on the indemnification of OCC by clearing members under Section 6(f) of Article XVII of the ByLaws. In response to this comment OCC has added an exclusion from the indemnity for claims, liabilities, or expenses that result primarily from OCC's gross negligence or willful misconduct or from OCC conduct that causes the offer or sale of the OTC Options to become subject to the registration provisions of Section 5 of the Securities Act.<sup>32</sup>

**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 the proposed rule change or

(B) Institute proceedings to determine whether the proposed rule change should be disapproved.

OCC has also filed the proposed rule change as an advance notice under Section 806(e)(1) of the Payment, Clearing, and Settlement Supervision Act of 2010 ("Clearing Supervision Act").<sup>33</sup> The proposed changes contained in the advance notice may be implemented pursuant to Section 806(e)(1)(G) of Clearing Supervision Act<sup>34</sup> if the Commission does not object to the proposed changes within 60 days of the later of (i) the date that the advance notice was filed with the Commission or (ii) the date that any additional information requested by the Commission is received. The clearing agency shall not implement the proposed changes contained in the advance notice if the Commission objects to the proposed changes.

The Commission may extend the period for review by an additional 60 days if the proposed changes raise novel or complex issues, subject to the Commission providing the clearing agency with prompt written notice of the extension. Proposed changes may be implemented in fewer than 60 days from the date the advance notice is filed, or the date further information requested by the Commission is received, if the Commission notifies the clearing agency in writing that it does not object to the proposed changes and authorizes the clearing agency to implement the proposed changes on an earlier date, subject to any conditions imposed by the Commission.

The proposals contained in the proposed rule change and advance notice shall not take effect until all regulatory actions required with respect to the proposals are completed. 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. 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](mailto:rule-comments@sec.gov). Please include File Number SR-OCC-2012-14 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-2012-14. 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, on official business days between the hours of 10:00 a.m. and 3:00 p.m. Copies of such filings will also be available for inspection and copying at the principal office of OCC and on OCC's Web site at [http://www.optionsclearing.com/components/docs/legal/rules\\_and\\_bylaws/sr\\_occ\\_12\\_14.pdf](http://www.optionsclearing.com/components/docs/legal/rules_and_bylaws/sr_occ_12_14.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-2012-14 and should be submitted on or before October 9, 2012.

<sup>32</sup> 15 U.S.C. 77e.

<sup>33</sup> 12 U.S.C. 5465(e)(1).

<sup>34</sup> 12 U.S.C. 5465(e)(1)(G).

For the Commission by the Division of Trading and Markets, pursuant to delegated authority.<sup>35</sup>

Kevin M. O'Neill,

Deputy Secretary.

[FR Doc. 2012-22908 Filed 9-17-12; 8:45 am]

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## SECURITIES AND EXCHANGE COMMISSION

[Release No. 34-67836; File No. SR-NYSEArca-2012-100]

### Self-Regulatory Organizations; NYSE Arca, Inc.; Notice of Filing and Immediate Effectiveness of Proposed Rule Change to Amend NYSE Arca Options Rule 6.96 by Adding a New Paragraph (c) That Addresses the Authority of the Exchange or Archipelago Securities LLC ("Arca Securities") To Cancel Orders When a Technical or Systems Issue Occurs and To Describe the Operation of an Error Account for Arca Securities

September 12, 2012.

Pursuant to Section 19(b)(1)<sup>1</sup> of the Securities Exchange Act of 1934 (the "Act")<sup>2</sup> and Rule 19b-4 thereunder,<sup>3</sup> notice is hereby given that, on September 4, 2012, 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 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 amend NYSE Arca Options Rule 6.96 by adding a new paragraph (c) that addresses the authority of the Exchange or Archipelago Securities LLC ("Arca Securities") to cancel orders when a technical or systems issue occurs and to describe the operation of an error account for Arca Securities. The text of the proposed rule change is available on the Exchange's Web site at [www.nyse.com](http://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 Exchange proposes to amend NYSE Arca Options Rule 6.96 by adding a new paragraph (c) that addresses the authority of the Exchange or Arca Securities to cancel orders when a technical or systems issue occurs and to describe the operation of an error account for Arca Securities.<sup>4</sup>

Arca Securities is an approved routing broker of the Exchange, subject to the conditions listed in NYSE Arca Options Rule 6.96.<sup>5</sup> When necessary, the

<sup>4</sup> Arca Securities is a facility of the Exchange. Accordingly, under NYSE Arca Rule 6.96, the Exchange is responsible for filing with the Commission rule changes and fees relating to Arca Securities' functions. In addition, the Exchange is using the phrase "Arca Securities or the Exchange" in this rule filing to reflect the fact that a decision to take action with respect to orders affected by a technical or systems issue may be made in the capacity of Arca Securities or the Exchange depending on where those orders are located at the time of that decision.

<sup>5</sup> The Exchange currently relies on non-affiliate third-party broker-dealers to provide outbound routing services (*i.e.*, third-party Routing Brokers). In those cases, orders are submitted to the third-party Routing Broker through Arca Securities, the third-party Routing Broker routes the orders to the routing destination in its name, and any executions are submitted for clearance and settlement in the name of Arca Securities so that any resulting positions are delivered to Arca Securities upon settlement. As described above, Arca Securities normally arranges for any resulting positions to be delivered to the OTP Holder or OTP Firm that submitted the corresponding order to the Exchange. If error positions (as defined in proposed Rule 6.96(c)(2)) result in connection with the Exchange's use of a third-party Routing Broker for outbound routing, and those positions are delivered to Arca Securities through the clearance and settlement process, Arca Securities would be permitted to resolve those positions in accordance with proposed Rule 6.96(c). If the third-party Routing Broker received error positions in connection with its role as a routing broker for the Exchange, and the error positions were not delivered to Arca Securities through the clearance and settlement process, then the third-party Routing Broker would resolve the error positions itself, and Arca Securities would not be permitted to accept the

Exchange may utilize Arca Securities to provide outbound routing services from itself to routing destinations of Arca Securities ("routing destinations"). When Arca Securities routes orders to a routing destination, it does so by sending a corresponding order in its own name to the routing destination. In the normal course, routed orders that are executed at routing destinations are submitted for clearance and settlement in the name of Arca Securities, and Arca Securities arranges for any resulting securities positions to be delivered to the OTP Holder or OTP Firm that submitted the corresponding order to the Exchange. However, from time to time, the Exchange and Arca Securities encounter situations in which it becomes necessary to cancel orders and resolve error positions.<sup>6</sup>

##### Examples of Circumstances That May Lead to Canceled Orders

A technical or systems issue may arise at Arca Securities, a routing destination, or the Exchange that may cause the Exchange or Arca Securities to take steps to cancel orders if the Exchange or Arca Securities determines that such action is necessary to maintain a fair and orderly market. The examples set forth below describe some of the circumstances in which the Exchange or Arca Securities may decide to cancel orders.

*Example 1.* If Arca Securities or a routing destination experiences a technical or systems issue that results in Arca Securities not receiving responses to immediate or cancel ("IOC") orders that it sent to the routing destination, and that issue is not resolved in a timely manner, Arca Securities or the Exchange would seek to cancel the routed orders affected by the issue.<sup>7</sup> For instance, if

error positions, as set forth in proposed Rule 6.96(c)(2)(B).

<sup>6</sup> The examples described in this filing are not intended to be exclusive. Proposed NYSE Arca Rule 6.96(c) would provide general authority for the Exchange or Arca Securities to cancel orders in order to maintain fair and orderly markets when technical and systems issues are occurring, and Rule 6.96(c) also would set forth the manner in which error positions may be handled by the Exchange or Arca Securities. The proposed rule change is not limited to addressing order cancellation or error positions resulting only from the specific examples described in this filing.

<sup>7</sup> In a normal situation (*i.e.*, one in which a technical or systems issue does not exist), Arca Securities should receive an immediate response to an IOC order from a routing destination, and would pass the resulting fill or cancellation on to the OTP Holder or OTP Firm. After submitting an order that is routed to a routing destination, if an OTP Holder or OTP Firm sends an instruction to cancel that order, the cancellation is held by the Exchange until a response is received from the routing destination. For instance, if the routing destination executes that order, the execution would be passed on to the OTP

Continued

<sup>35</sup> 17 CFR 200.30-3(a)(12).

<sup>1</sup> 15 U.S.C. 78s(b)(1).

<sup>2</sup> 15 U.S.C. 78a.

<sup>3</sup> 17 CFR 240.19b-4.

Arca Securities experiences a connectivity issue affecting the manner in which it sends or receives order messages to or from routing destinations, it may be unable to receive timely execution or cancellation reports from the routing destinations, and Arca Securities or the Exchange may consequently seek to cancel the affected routed orders. Once the decision is made to cancel those routed orders, any cancellation that an OTP Holder or OTP Firm submitted to the Exchange on its initial order during such a situation would be honored.<sup>8</sup>

*Example 2.* If the Exchange experiences a systems issue, the Exchange may take steps to cancel all outstanding orders affected by that issue and notify affected OTP Holders and OTP Firms of the cancellations. In those cases, the Exchange would seek to cancel any routed orders related to the OTP Holders' and OTP Firms' initial orders.

#### Examples of Circumstances That May Lead to Error Positions

In some instances, the technical or systems issue at Arca Securities, a routing destination, the Exchange, or a non-affiliate third-party Routing Broker may also result in Arca Securities acquiring an error position that it must resolve. The examples set forth below describe some of the circumstances in which error positions may arise.

*Example A.* Error positions may result from routed orders that the Exchange or Arca Securities attempts to cancel but that are executed before the routing destination receives the cancellation message or that are executed because the routing destination is unable to process the cancellation message. Using the situation described in Example 1 above, assume that the Exchange seeks to cancel orders routed to a routing destination because it is not receiving timely execution or cancellation reports from the routing destination. In such a situation, Arca Securities may still receive executions from the routing destination after connectivity is restored, which it would not then allocate to OTP Holders or OTP Firms because of the earlier decision to cancel the affected routed orders. Instead, Arca Securities would post those positions into its error account and resolve the

Holder or OTP Firm and the cancellation instruction would be disregarded.

<sup>8</sup> If an OTP Holder or OTP Firm did not submit a cancellation to the Exchange, however, that initial order would remain "live" and thus be eligible for execution or posting on the Exchange, and neither the Exchange nor Arca Securities would treat any execution of that initial order or any subsequent routed order related to that initial order as an error.

positions in the manner described below.

*Example B.* Error positions may result from an order processing issue at a routing destination. For instance, if a routing destination experienced a systems problem that affects its order processing, it may transmit back a message purporting to cancel a routed order, but then subsequently submit an execution of that same order to the OCC for clearance and settlement. In such a situation, the Exchange would not then allocate the execution to the OTP Holder or OTP Firm because of the earlier cancellation message from the routing destination. Instead, Arca Securities would post those positions into its error account and resolve the positions in the manner described below.

*Example C.* Error positions may result if Arca Securities receives an execution report from a routing destination but does not receive clearing instructions for the execution from the routing destination. For instance, assume that an OTP Holder or OTP Firm sends the Exchange an order to buy 100 contracts overlying ABC stock, which causes Arca Securities to send an order to a routing destination that is subsequently executed, cleared and closed out by that routing destination, and the execution is ultimately communicated back to that OTP Holder or OTP Firm. If the routing destination does not provide clearing instructions for that execution, Arca Securities would still be responsible for settling that OTP Holder's or OTP Firm's purchase, but would be left with a short position in its error account.<sup>9</sup> Arca Securities would resolve the position in the manner described below.

*Example D.* Error positions may result from a technical or systems issue that causes orders to be executed in the name of Arca Securities and are not related to any corresponding orders of OTP Holders or OTP Firms. As a result, Arca Securities would not be able to assign any positions resulting from such an issue to OTP Holders or OTP Firms. Instead, Arca Securities would post those positions into its error account and resolve the positions in the manner described below.

*Example E.* Error positions may result from a technical or systems issue through which the Exchange does not receive sufficient notice that an OTP Holder or OTP Firm that has executed trades on the Exchange has lost the ability to clear trades through OCC. In such a situation, the Exchange would

<sup>9</sup> To the extent that Arca Securities incurred a loss in covering its position, it may submit a reimbursement claim to that routing destination.

not have valid clearing information, which would prevent the trade from being processed pursuant to Rule 6.79. Accordingly, Arca Securities would assume that OTP Holder's or OTP Firm's side of the trades so that the counterparties can settle the trades. Arca Securities would post those positions into its error account and resolve the positions in the manner described below.

In the circumstances described above, Arca Securities may not learn about an error position until T+1, either: (1) During the clearing process when a routing destination has submitted to OCC a transaction for clearance and settlement for which Arca Securities never received an execution confirmation; or (2) when a routing destination does not recognize a transaction submitted on behalf of Arca Securities to OCC for clearance and settlement. Moreover, the affected OTP Holders' or OTP Firms' trade may not be nullified absent express authority under Exchange rules.<sup>10</sup>

#### Proposed Amendments to NYSE Arca Options Rule 6.96

The Exchange proposes to amend NYSE Arca Options Rule 6.96 to add new paragraph (c) to address the cancellation of orders due to technical or systems issues and the use of an error account by Arca Securities.

Specifically, under paragraph (c)(1) of the proposed rule, the Exchange or Arca Securities would be expressly authorized to cancel orders as may be necessary to maintain fair and orderly markets if a technical or systems issue occurred at the Exchange, Arca Securities, or a routing destination.<sup>11</sup> The Exchange or Arca Securities would be required to provide notice of the cancellation to affected OTP Holders and OTP Firms as soon as practicable.

Paragraph (c)(2) of the proposed rule would permit Arca Securities to maintain an error account for the purpose of addressing positions that result from a technical or systems issue at Arca Securities, the Exchange, a routing destination, or a non-affiliate third-party Routing Broker that affects

<sup>10</sup> See, e.g., NYSE Arca Options Rule 6.87 (regarding obvious and catastrophic errors).

<sup>11</sup> Such a situation may not cause the Exchange to declare self-help against the routing destination pursuant to NYSE Arca Options Rule 6.94(b)(1). If the Exchange or Arca Securities determines to cancel orders routed to a routing destination under proposed Rule 6.96(c), but does not declare self-help against that routing destination, the Exchange would continue to be subject to the trade-through requirements in the Options Order Protection and Locked/Crossed Markets Plan and NYSE Arca Options Rule 6.94 with respect to that routing destination.

one or more orders (“error positions”). By definition, an error position would not include any position that results from an order submitted by an OTP Holder or OTP Firm to the Exchange that is executed on the Exchange and processed pursuant to NYSE Arca Options Rule 6.79.<sup>12</sup> Arca Securities also would not be permitted to accept any positions in its error account from an account of an OTP Holder or OTP Firm and could not permit any OTP Holder or OTP Firm to transfer any positions from the OTP Holder’s or OTP Firm’s account to Arca Securities’ error account under the proposed rule.<sup>13</sup> However, if a technical or systems issue results in the Exchange not having valid clearing instructions for an OTP Holder or OTP Firm to a trade, Arca Securities may assume that OTP Holder’s or OTP Firm’s side of the trade so that the trade can be processed pursuant to NYSE Arca Options Rule 6.79.<sup>14</sup>

Under paragraph (c)(3), in connection with a particular technical or systems issue, Arca Securities or the Exchange would be permitted to either (i) assign all resulting error positions to OTP Holders or OTP Firms, or (ii) have all resulting error positions liquidated, as described below. Any determination to assign or liquidate error positions, as well as any resulting assignments, would be required to be made in a nondiscriminatory fashion.

Arca Securities or the Exchange would be required to assign all error positions resulting from a particular technical or systems issue to the

applicable OTP Holders or OTP Firms affected by that technical or systems issue if Arca Securities or the Exchange:

- Determined that it has accurate and sufficient information (including valid clearing information) to assign the positions to all of the applicable OTP Holders or OTP Firms affected by that technical or systems issue;
- Determined that it has sufficient time pursuant to normal clearance and settlement deadlines to evaluate the information necessary to assign the positions to all of the applicable OTP Holders or OTP Firms affected by that technical or systems issue; and
- Had not determined to cancel all orders affected by that technical or systems issue.

For example, a technical or systems issue of limited scope or duration may occur at a routing destination, and the resulting trades may be submitted for clearance and settlement by such routing destination to OCC. If there were a small number of trades, there may be sufficient time to match positions with OTP Holder or OTP Firm orders and avoid using the error account.

There may be scenarios, however, where Arca Securities determines that it is unable to assign all error positions resulting from a particular technical or systems issue to all of the affected OTP Holders or OTP Firms, or determines to cancel all affected routed orders. For example, in some cases, the volume of questionable executions and positions resulting from a technical or systems issue might be such that the research necessary to determine which OTP Holder or OTP Firm to assign those executions to could be expected to extend past the normal settlement cycle for such executions. Furthermore, if a routing destination experiences a technical or systems issue after Arca Securities has transmitted IOC orders to it that prevents Arca Securities from receiving responses to those orders, Arca Securities or the Exchange may determine to cancel all routed orders affected by that issue. In such a situation, Arca Securities or the Exchange would not pass on to the OTP Holders or OTP Firms any executions on the routed orders received from the routing destination.

The proposed rule also would require Arca Securities to liquidate error positions as soon as practicable.<sup>15</sup> In

liquidating error positions, Arca Securities would be required to provide complete time and price discretion for the trading to liquidate the error positions to a third-party broker-dealer and could not attempt to exercise any influence or control over the timing or methods of trading to liquidate the error positions. Arca Securities also would be required to establish and enforce policies and procedures reasonably designed to restrict the flow of confidential and proprietary information between the third-party broker-dealer and Arca Securities/the Exchange associated with the liquidation of the error positions.

Under proposed paragraph (c)(4), Arca Securities and the Exchange would be required to make and keep records to document all determinations to treat positions as error positions and all determinations for the assignment of error positions to OTP Holders or OTP Firms or the liquidation of error positions, as well as records associated with the liquidation of error positions through the third-party broker-dealer.

## 2. Statutory Basis

The proposed rule change is consistent with Section 6(b)<sup>16</sup> of the Securities Exchange Act of 1934 (the “Act”), in general, and furthers the objectives of Section 6(b)(5),<sup>17</sup> in particular, in that 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, 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 it is not designed to permit unfair discrimination among customers, brokers, or dealers. The Exchange believes that this proposal is in keeping with those principles since Arca Securities’ or the Exchange’s ability to cancel orders during a technical and systems issue and to maintain an error account facilitates the smooth and efficient operations of the market. Specifically, the Exchange believes that allowing Arca Securities or the Exchange to cancel orders during a technical or systems issue would allow the Exchange to maintain fair and orderly markets. Moreover, the Exchange believes that allowing Arca Securities to assume error positions in an error account and to liquidate those positions, subject to the conditions set

<sup>12</sup> As provided in NYSE Arca Options Rule 6.79, “[a]ll transactions made on the Exchange shall be submitted for clearance to the [OCC], and all such transactions shall be subject to the Rules of the [OCC].”

<sup>13</sup> The purpose of this provision is to clarify that Arca Securities may address error positions under the proposed rule that are caused by a technical or systems issue, but that Arca Securities may not accept from an OTP Holder or OTP Firm positions that are delivered to the OTP Holder or OTP Firm through the clearance and settlement process, even if those positions may have been related to a technical or systems issue at Arca Securities, the Exchange, a routing destination of Arca Securities, or a non-affiliate third-party Routing Broker. This provision would not apply, however, to situations like the one described above in which Arca Securities incurred a short position to settle an OTP Holder or OTP Firm purchase, as the OTP Holder or OTP Firm did not yet have a position in its account as a result of the purchase at the time of Arca Securities’ action (*i.e.*, Arca Securities’ action was necessary for the purchase to settle into the OTP Holder’s or OTP Firm’s account). Moreover, to the extent an OTP Holder or OTP Firm receives positions pursuant to Rule 6.79 in connection with a technical or systems issue, that OTP Holder or OTP Firm may seek to rely on NYSE Arca Options Rule 14.2 if it experiences a loss. That rule provides OTP Holders and OTP Firms with the ability to file claims against the Exchange “for the failure of its systems or facilities.”

<sup>14</sup> See Example E above.

<sup>15</sup> If Arca Securities determines in connection with a particular technical or systems issue that some error positions can be assigned to some affected OTP Holders or OTP Firms but other error positions cannot be assigned, Arca Securities would be required under the proposed rule to liquidate all such error positions (including those positions that could be assigned to the affected OTP Holders or OTP Firms).

<sup>16</sup> 15 U.S.C. 78f(b).

<sup>17</sup> 15 U.S.C. 78f(b)(5).

forth in the proposed amendments to NYSE Arca Options Rule 6.96, would be the least disruptive means to correct these errors, except in cases where Arca Securities can assign all such error positions to all affected OTP Holders or OTP Firms of the Exchange. Overall, the proposed amendments are designed to ensure full trade certainty for market participants and to avoid disrupting the clearance and settlement process. The proposed amendments are also designed to provide a consistent methodology for handling error positions in a manner that does not discriminate among OTP Holders or OTP Firms. The proposed amendments are also consistent with Section 6 of the Act insofar as they would require Arca Securities to establish controls to restrict the flow of any confidential information between the third-party broker and Arca Securities/the Exchange associated with the liquidation of error positions.

#### *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.

#### *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 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 Section 19(b)(3)(A) of the Act<sup>18</sup> and Rule 19b-4(f)(6)<sup>19</sup> thereunder.

NYSE Arca has requested that the Commission waive the 30-day operative delay.<sup>20</sup> The Commission believes that waiver of the operative delay is consistent with the protection of

investors and the public interest. Such waiver would allow the Exchange, without delay, to implement the proposed rule change, which is designed to provide a consistent methodology for handling error positions in a manner that does not discriminate among OTP Holders or OTP Firms. The Commission also notes that the proposed rule change is based on, and substantially similar to, NYSE Arca Equities Rule 7.45(d), which the Commission recently approved.<sup>21</sup> Accordingly, the Commission designates the proposal operative upon filing.<sup>22</sup>

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](mailto:rule-comments@sec.gov). Please include File Number SR-NYSEArca-2012-100 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-2012-100. 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 a.m. and 3 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-2012-100 and should be submitted on or before October 9, 2012.

For the Commission, by the Division of Trading and Markets, pursuant to delegated authority.<sup>23</sup>

**Kevin M. O'Neill,**  
*Deputy Secretary.*

[FR Doc. 2012-22909 Filed 9-17-12; 8:45 am]

**BILLING CODE 8011-01-P**

## **SECURITIES AND EXCHANGE COMMISSION**

[Release No. 34-67837; File No. SR-NASDAQ-2012-102]

### **Self-Regulatory Organizations; The NASDAQ Stock Market LLC; Notice of Filing and Immediate Effectiveness of Proposed Rule Change Relating to Pricing of Options on Facebook, Inc., Google, Inc. and Groupon, Inc.**

September 12, 2012.

Pursuant to Section 19(b)(1) of the Securities Exchange Act of 1934 ("Act"),<sup>1</sup> and Rule 19b-4 thereunder,<sup>2</sup> notice is hereby given that on August 31, 2012, 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.

<sup>23</sup> 17 CFR 200.30-3(a)(12).

<sup>1</sup> 15 U.S.C. 78s(b)(1).

<sup>2</sup> 17 CFR 240.19b-4.

<sup>18</sup> 15 U.S.C. 78s(b)(3)(A).

<sup>19</sup> 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.

<sup>20</sup> 17 CFR 240.19b-4(f)(6)(iii).

<sup>21</sup> See Securities Exchange Act Release No. 66963 (May 10, 2012), 77 FR 28919 (May 16, 2012) (SR-NYSEArca-2012-22).

<sup>22</sup> For purposes only of waiving the 30-day operative delay, the Commission has considered the proposed rule change's impact on efficiency, competition, and capital formation. 15 U.S.C. 78c(f).

### I. Self-Regulatory Organization's Statement of the Terms of Substance of the Proposed Rule Change

The NASDAQ Stock Market LLC proposes to modify pricing for NASDAQ members using the NASDAQ Options Market ("NOM"), NASDAQ's facility for executing and routing standardized equity and index options. Specifically, NASDAQ proposes to amend Chapter XV, Section 2 entitled "NASDAQ Options Market—Fees and Rebates" to adopt rebates and fees relating to options on Facebook, Inc. ("FB"), Google, Inc. ("GOOG") and Groupon, Inc. ("GRPN").

While the changes proposed herein are effective upon filing, the Exchange has designated these changes to be operative on September 4, 2012.

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.

#### A. Self-Regulatory Organization's Statement of the Purpose of, and Statutory Basis for, the Proposed Rule Change

##### 1. Purpose

NASDAQ proposes to amend Chapter XV, Section 2 to adopt rebates and fees relating to FB, GOOG and GRPN options.<sup>3</sup> The Exchange has previously adopted pricing specific to certain securities as have other options exchanges. The Exchange proposes to assess the following Rebates to Add Liquidity<sup>4</sup>, Fees for Adding Liquidity and Fees for Removing Liquidity<sup>5</sup> for transactions in FB, GOOG and GRPN:

	Customer	Professional	Firm	Non-NOM market maker	NOM market maker
Rebate to Add Liquidity .....	\$0.77	N/A	N/A	N/A	N/A
Fee for Adding Liquidity .....	N/A	0.45	0.45	0.45	0.25
Fee for Removing Liquidity .....	0.79	0.85	0.85	0.85	0.79

The Exchange is proposing to increase the Customer Rebate to Add Liquidity for FB, GOOG and GRPN. Today, Customers receive the Non-Penny Pilot Option Rebate to Add Liquidity. The FB, GOOG and GRPN Customer Rebate to Add Liquidity would increase from \$0.20 per contract (Non-Penny Pilot Options Rebate to Add Liquidity) to \$0.77 per contract (FB, GOOG and GRPN Rebate to Add Liquidity). No other market participant would be entitled to a Rebate to Add Liquidity in FB, GOOG and GRPN, as is the case today.<sup>6</sup>

The Exchange is proposing to increase the Professional Fee for Adding Liquidity from \$0.30 per contract (Non-Penny Pilot Options Fee for Adding Liquidity) to \$0.45 per contract Professional Fee for Adding Liquidity in FB, GOOG and GRPN. Firms and Non-NOM Market Makers would continue to pay a \$0.45 per contract Fee for Adding Liquidity in FB, GOOG and GRPN as they do today for Non-Penny Pilot Options. The Exchange would decrease

the NOM Market Maker Fee for Adding Liquidity from \$0.30 per contract (Non-Penny Pilot Options Fee for Adding Liquidity) to a \$0.25 per contract NOM Market Maker Fee for Adding Liquidity in FB, GOOG and GRPN. Customers would continue to incur no Fee for Adding Liquidity in FB, GOOG and GRPN, as is the case today.<sup>7</sup>

The Exchange is proposing to increase the Fees for Removing Liquidity for FB, GOOG and GRPN. The FB, GOOG and GRPN Fees for Removing Liquidity would increase as follows: A Customer that today pays a Non-Penny Pilot Options Fee for Removing Liquidity of \$0.45 per contract would pay a \$0.79 per contract Fee for Removing Liquidity in FB, GOOG and GRPN, a Professional, Firm and Non-NOM Market Maker that today pays a \$0.50 per contract Non-Penny Pilot Fee for Removing Liquidity would pay \$0.85 per contract Fee for Removing Liquidity in FB, GOOG and GRPN and a NOM Market Maker that today pays \$0.50 per contract Non-Penny Pilot Options Fee for Removing

Liquidity would pay a \$0.79 per contract Fee for Removing Liquidity in FB, GOOG and GRPN.<sup>8</sup>

The Exchange believes that this pricing will incentivize members to transact FB, GOOG and GRPN on NOM. The Exchange notes that if FB, GOOG and GRPN are included in the Penny Pilot at a later date, the Exchange would file to eliminate the specific fees and rebates for FB, GOOG and/or GRPN in order that FB, GOOG and GRPN would be subject to the Exchange's Penny Pilot Options<sup>9</sup> pricing.

The Exchange is also proposing to make a technical amendment to the pricing in Section 2(1) of Chapter XV to replace any reference to "\$0.00" to "N/A" for clarity. The Exchange believes that using "N/A" reduces confusion when no rebate is being paid or fee is being assessed by the Exchange.

##### 2. Statutory Basis

NASDAQ believes that the proposed rule changes are consistent with the

<sup>3</sup> FB, GOOG and GRPN are Non-Penny Pilot Options.

<sup>4</sup> An order that adds liquidity is one that is entered into NOM and rests on the NOM book.

<sup>5</sup> An order that removes liquidity is one that is entered into NOM and that executes against an order resting on the NOM book.

<sup>6</sup> Today, only a Customer receives a Rebate to Add Liquidity in Non-Penny Pilot Options.

<sup>7</sup> Today, Customers are not assessed a Fee for Adding Liquidity in Non-Penny Pilot Options.

<sup>8</sup> With respect to the Opening Cross, all orders would be subject to Chapter XV, Section 2(2).

<sup>9</sup> The Penny Pilot was established in March 2008 and in October 2009 was expanded and extended through June 30, 2012. See Securities Exchange Act Release Nos. 57579 (March 28, 2008), 73 FR 18587 (April 4, 2008) (SR-NASDAQ-2008-026) (notice of filing and immediate effectiveness establishing Penny Pilot); 60874 (October 23, 2009), 74 FR 56682 (November 2, 2009) (SR-NASDAQ-2009-091) (notice of filing and immediate effectiveness expanding and extending Penny Pilot); 60965 (November 9, 2009), 74 FR 59292 (November 17, 2009) (SR-NASDAQ-2009-097) (notice of filing and immediate effectiveness adding seventy-five classes to Penny Pilot); 61455 (February 1, 2010), 75 FR 6239 (February 8, 2010) (SR-NASDAQ-

2010-013) (notice of filing and immediate effectiveness adding seventy-five classes to Penny Pilot); 62029 (May 4, 2010), 75 FR 25895 (May 10, 2010) (SR-NASDAQ-2010-053) (notice of filing and immediate effectiveness adding seventy-five classes to Penny Pilot); 65969 (December 15, 2011), 76 FR 79268 (December 21, 2011) (SR-NASDAQ-2011-169) (notice of filing and immediate effectiveness extension and replacement of Penny Pilot); and 67325 (June 29, 2012), 77 FR 40127 (July 6, 2012) (SR-NASDAQ-2012-075) (notice of filing and immediate effectiveness extension and replacement of Penny Pilot through December 31, 2012). See also NOM Rules, Chapter VI, Section 5.

provisions of Section 6 of the Act,<sup>10</sup> in general, and with Section 6(b)(4) of the Act,<sup>11</sup> in particular, in that they provide 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.

The Exchange operates in a highly competitive market comprised of ten 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 or the rebate offered to be inadequate. The Exchange believes that the proposed fee and rebate scheme is competitive and similar to other fees and rebates in place on other exchanges. 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.

The Exchange believes that its proposed Customer Rebate to Add Liquidity for FB, GOOG and GRPN is reasonable because the Exchange is continuing to incentivize NOM Participants to transact Customer order flow on NOM. Customer order flow benefits all market participants through the increased liquidity in the market. The Exchange believes that its proposed Customer Rebate to Add Liquidity for FB, GOOG and GRPN is equitable and not unfairly discriminatory because today in the non-Penny Pilot names the Exchange only offers Customers a Rebate to Add Liquidity. The Exchange will continue to only offer Customers a rebate but increase that rebate.

The Exchange believes the proposed increased Professional Fee for Adding Liquidity in FB, GOOG and GRPN (from \$0.30 to \$0.45 per contract) is reasonable because it is within the range of fees assessed today to Firms and Non-NOM Market Makers transacting Non-Penny Pilot Options on NOM today when those market participants are adding liquidity.<sup>12</sup> The Exchange believes that decreasing the NOM Market Maker Fee for Adding Liquidity is reasonable because the Exchange is seeking to incentivize NOM Market Makers to continue to add liquidity on NOM by lowering the transaction fee from \$0.30 to \$0.25 per contract. The Firm and Non-NOM Market Maker Fees

for Adding Liquidity in FB, GOOG and GRPN will remain at \$0.45 per contract.

The Exchange believes that assessing Professionals a similar Fee for Adding Liquidity in FB, GOOG and GRPN as Firms and Non-NOM Market Makers is equitable and not unfairly discriminatory because the Exchange is assessing all market participants the same fee, except Customers who are not assessed a fee and NOM Market Makers who are assessed a lower fee. As previously mentioned, attracting Customer orders enhances liquidity on the Exchange for the benefit of all market participants. The Exchange believes that assessing NOM Market Makers a lower Fee for Adding Liquidity in FB, GOOG and GRPN is equitable and not unfairly discriminatory because NOM Market Makers have obligations to the market and regulatory requirements,<sup>13</sup> which normally do not apply to other market participants. A NOM Market Maker has the obligation 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. The proposed differentiation as between NOM Market Makers and other market participants recognizes the differing contributions made to the liquidity and trading environment on the Exchange by NOM Market Makers, as well as the differing mix of orders entered.

The Exchange believes that the proposed Fees for Removing Liquidity for FB, GOOG and GRPN are reasonable because the Exchange is proposing to increase the fees for all market participants in order to offer Customers an increased Rebate to Add Liquidity in FB, GOOG and GRPN of \$0.77 per contract. The Exchange believes that offering Customers a financial incentive will attract additional Customer order flow to the Exchange. Also, the proposed Fees for Removing Liquidity in FB, GOOG and GRPN are similar to the non-Penny Pilot Options fees at BATS Exchange, Inc. ("BATS").<sup>14</sup>

<sup>13</sup> 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.

<sup>14</sup> BATS has a \$0.75 per contract fee for Customer orders that remove liquidity from the BATS Options

The Exchange believes that the proposed Fees for Removing Liquidity for FB, GOOG and GRPN are equitable and not unfairly discriminatory because all market participants would be assessed the same \$0.85 per contract fee except Customers and NOM Market Makers who would be assessed a lower fee of \$0.79 per contract. As mentioned previously, attracting Customer orders enhances liquidity on the Exchange for the benefit of all market participants and the increased fees for removing liquidity cover the cost of offering Customers a rebate to add liquidity in FB, GOOG and GRPN. Also, the Non-Penny Pilot Customer Fee for Removing Liquidity is lower today for Customers as compared to other market participants (\$0.45 per contract vs. \$0.50 per contract), the proposed Customer Fee for Removing Liquidity in FB, GOOG and GRPN would be lower for Customers as compared to Professionals, Firms and Non-NOM Market Makers. The Exchange believes that providing NOM Market Makers a lower Fee for Removing Liquidity in FB, GOOG and GRPN as compared to Professionals, Firms and Non-NOM Market Makers is equitable and not unfairly discriminatory because NOM Market Makers have obligations to the market and regulatory requirements, which normally do not apply to other market participants. The proposed differentiation as between Customers and NOM Market Makers and other market participants recognizes the differing contributions made to the liquidity and trading environment on the Exchange by Customers and NOM Market Makers, as well as the differing mix of orders entered.

In the current U.S. options market, many of the contracts are quoted in pennies. Under this pricing structure, the minimum penny tick increment equates to a \$1.00 economic value difference per contract, given that a single standardized U.S. option contract covers 100 shares of the underlying stock. Where contracts are quoted in \$0.05 increments (non-pennies), the value per tick is \$5.00 in proceeds to the investor transacting in these contracts. Liquidity rebate and access fee structures on the make-take exchanges, including NOM, for securities quoted in penny increments are commonly in the \$0.30 to \$0.45 per contract range.<sup>15</sup> A

book in non-Penny Pilot securities. BATS also has an \$0.80 per contract fee for Professionals, Firms and Market Maker orders that remove liquidity from the BATS Options order book in non-Penny Pilot Securities. See BATS BZX Exchange Fee Schedule.

<sup>15</sup> NOM is proposing to only pay a Customer a Rebate to Add Liquidity in FB, GOOG and GRPN.

<sup>10</sup> 15 U.S.C. 78f.

<sup>11</sup> 15 U.S.C. 78f(b)(4).

<sup>12</sup> Firms and Non-NOM Market Makers are assessed a Non-Penny Pilot Option Fee for Adding Liquidity of \$0.45 per contract. These market participants would continue to be assessed the same fees.

\$0.30 per contract rebate in a penny quoted security is a rebate equivalent to 30% of the value of the minimum tick. A \$0.45 per contract fee in a penny quoted security is a charge equivalent to 45% of the value of that minimum tick. In other words, in penny quoted securities, where the price is improved by one tick with an access fee of \$0.45 per contract, an investor paying to access that quote is still \$0.55 better off than trading at the wider spread, even without the access fee (\$1.00 of price improvement – \$0.45 access fee = \$0.55 better economics). This computation is equally true for securities quoted in wider increments. Rebates and access fees near the \$0.85 per contract level equate to only 17% of the value of the minimum tick in Non-Penny Pilot Options, less than the experience today in Penny Pilot Options. For example, a retail investor transacting a single contract in a non-penny quoted security quoted a single tick tighter than the rest of the market, and paying an access fee of \$0.79 per contract, is receiving an economic benefit of \$4.21 (\$0.05 improved tick = \$5.00 in proceeds – \$0.79 access fee = \$4.21). The Exchange believes that encouraging NOM Market Makers to quote more aggressively by reducing transaction fees<sup>16</sup> and incentivizing Customer orders to post on NOM will narrow the spread in FB, GOOG and GRPN to the benefit of investors and all market participants by improving the overall economics of the resulting transactions that occur on the Exchange, even if the access fee paid in connection with such transactions is higher. Accordingly, the Exchange believes that the proposed fees and rebates for FB, GOOG and GRPN are reasonable, equitable and not unfairly discriminatory.

Further, the Exchange believes that it is reasonable, equitable, and not unfairly discriminatory to adopt specific pricing for FB, GOOG and GRPN because pricing by symbol is a common practice on many U.S. options exchanges as a means to incentivize order flow to be sent to an exchange for execution in the most actively traded

Other market participants would not be entitled to a rebate.

<sup>16</sup> The Exchange notes that the proposed \$0.25 per contract NOM Market Maker Fee for Adding in FB, GOOG and GRPN is significantly less than transaction fees plus payment for order flow fees assessed by other options exchanges. For example, on NASDAQ OMX PHLX LLC (“Phlx”), the combined payment for order flow fee plus the transaction fee is \$0.92 per contract. See Phlx’s Pricing Schedule. Unlike Penny Pilot Options, the Exchange believes this significant reduction in fees for adding liquidity will have the same effect as a rebate in non-Penny Pilot Options in terms of a narrower spread.

options classes. The Exchange notes that FB, GOOG and GRPN are some of the most actively traded options in the U.S.<sup>17</sup> Finally, the Exchange believes the proposed technical amendments to Section 2(1) of Chapter XV to replace any reference to “\$0.00” to “N/A” is reasonable, equitable and not unfairly discriminatory because the Exchange is identifying when no fees are assessed and no rebates paid with an “N/A” to avoid any confusion.

#### *B. Self-Regulatory Organization’s Statement on Burden on Competition*

NASDAQ 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, NASDAQ has designed its fees and rebates to compete effectively for the execution and routing of options contracts and to reduce the overall cost to investors of options trading. The Exchange believes that the proposed fee/rebate pricing structure would attract liquidity to and benefit order interaction at the Exchange to the benefit of all market participants.

#### *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.<sup>18</sup> 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

<sup>17</sup> From August 1, 2012 through August 21, 2012, FB was the 5th most actively traded equity option class, GOOG was the 28th most actively traded equity option class and GRPN was the 51st most actively traded equity option class.

<sup>18</sup> 15 U.S.C. 78s(b)(3)(A)(ii).

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](mailto:rule-comments@sec.gov). Please include File Number SR–NASDAQ–2012–102 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–2012–102. 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 a.m. and 3 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–2012–102 and should be submitted on or before October 9, 2012.

For the Commission, by the Division of Trading and Markets, pursuant to delegated authority.<sup>19</sup>

**Kevin M. O’Neill,**  
*Deputy Secretary.*

[FR Doc. 2012–22910 Filed 9–17–12; 8:45 am]

**BILLING CODE 8011–01–P**

<sup>19</sup> 17 CFR 200.30–3(a)(12).

**SECURITIES AND EXCHANGE COMMISSION**

[Release No. 34-67843; File No. SR-NASDAQ-2012-104]

**Self-Regulatory Organizations; The NASDAQ Stock Market LLC; Notice of Filing and Immediate Effectiveness of Proposed Rule Change Relating to the Customer Rebate To Add Liquidity and Non-Customer Fees for Removing Liquidity in Penny Pilot Options**

September 12, 2012.

Pursuant to Section 19(b)(1) of the Securities Exchange Act of 1934 (“Act”)<sup>1</sup> and Rule 19b-4 thereunder,<sup>2</sup> notice is hereby given that on August 31, 2012, The NASDAQ Stock Market LLC (“NASDAQ” or “Exchange”) filed with the Securities and Exchange Commission (“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 NASDAQ Stock Market LLC proposes to modify Chapter XV, entitled “Options Pricing,” at Section 2 governing pricing for NASDAQ members using the NASDAQ Options Market (“NOM”), NASDAQ’s facility for executing and routing standardized equity and index options. Specifically, NOM proposes to amend the Customer Rebate to Add Liquidity and Non-Customer Fees for Removing Liquidity in Penny Pilot<sup>3</sup> Options.

<sup>1</sup> 15 U.S.C. 78s(b)(1).

<sup>2</sup> 17 CFR 240.19b-4.

<sup>3</sup> The Penny Pilot was established in March 2008 and in October 2009 was expanded and extended through June 30 [sic], 2012. See Securities Exchange Act Release Nos. 57579 (March 28, 2008), 73 FR 18587 (April 4, 2008)(SR-NASDAQ-2008-026)(notice of filing and immediate effectiveness establishing Penny Pilot); 60874 (October 23, 2009), 74 FR 56682 (November 2, 2009)(SR-NASDAQ-2009-091)(notice of filing and immediate effectiveness expanding and extending Penny Pilot); 60965 (November 9, 2009), 74 FR 59292 (November 17, 2009)(SR-NASDAQ-2009-097)(notice of filing and immediate effectiveness adding seventy-five classes to Penny Pilot); 61455 (February 1, 2010), 75 FR 6239 (February 8, 2010)(SR-NASDAQ-2010-013)(notice of filing and immediate effectiveness adding seventy-five classes to Penny Pilot); 62029 (May 4, 2010), 75 FR 25895 (May 10, 2010) (SR-NASDAQ-2010-053)(notice of filing and immediate effectiveness adding seventy-five classes to Penny Pilot); 65969 (December 15, 2011), 76 FR 79268 (December 21, 2011) (SR-NASDAQ-2011-169) (notice of filing and immediate effectiveness extension and replacement of Penny Pilot); and 67325 (June 29, 2012), 77 FR 40127 (July 6, 2012) (SR-NASDAQ-2012-075)

While the changes proposed herein are effective upon filing, the Exchange has designated these changes to be operative on September 4, 2012.

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.

*A. Self-Regulatory Organization’s Statement of the Purpose of, and Statutory Basis for, the Proposed Rule Change*

1. Purpose

NASDAQ proposes to modify Chapter XV, entitled “Options Pricing,” at Section 2(1) governing the rebates and fees assessed for option orders entered into NOM. The Exchange is proposing to increase the Non-Customer Penny Pilot Options Fees for Removing Liquidity in order to offer additional Penny Pilot Options Customer Rebates to Add Liquidity to attract additional order flow to the Exchange to the benefit of all market participants.

Specifically, the Exchange is proposing to modify the five tier structure for paying Customer Rebates to Add Liquidity in Penny Pilot Options. Today, the Exchange pays Rebates to Add Liquidity in Penny Pilot Options as follows:

\* \* \* The Customer Rebate to Add Liquidity in Penny Pilot Options will be paid as noted below. Each Customer order of 5,000 or more, displayed or non-displayed contracts, which adds liquidity in Penny Pilot Options, will qualify for an additional rebate of \$0.01 per contract provided the NOM Participant has qualified for a rebate in Tier 2, 3, 4 or 5 for that month.

(notice of filing and immediate effectiveness extension and replacement of Penny Pilot through December 31, 2012). See also NOM Rules, Chapter VI, Section 5.

Monthly volume	Rebate to add liquidity
Tier 1 Participant adds Customer liquidity of up to 14,999 contracts per day in a month .....	\$0.26
Tier 2 Participant adds Customer liquidity of 15,000 to 49,999 contracts per day in a month .....	0.38
Tier 3 Participant adds Customer liquidity of 50,000 to 74,999 contracts per day in a month .....	0.43
Tier 4 <sup>a</sup> Participant adds Customer liquidity of 75,000 or more contracts per day in a month or has Total Volume of 100,000 or more contracts per day in a month .....	0.44
Tier 5 <sup>b</sup> Participant adds (1) Customer liquidity of 25,000 or more contracts per day in a month, (2) the Participant has certified for the Investor Support Program set forth in Rule 7014; and (3) the Participant executed at least one order on NASDAQ’s equity market .....	0.42

<sup>a</sup> For purposes of Tier 4, “Total Volume” shall be defined as Customer, Professional, Firm, NOM Market Maker and Non-NOM Market Maker volume in Penny Pilot Options which either adds or removes liquidity.

<sup>b</sup> For purposes of Tier 5, the Exchange will allow a NOM Participant to qualify for the rebate if a NASDAQ member under common ownership with the NOM Participant has certified for the Investor Support Program and executed at least one order on NASDAQ’s equity market. Common ownership is defined as 75 percent common ownership or control.

The Exchange proposes to add a Tier 6 to the Penny Pilot Options Customer Rebates to Add Liquidity and pay Customers a rebate of \$0.45 per contract when a Participant has Total Volume of 130,000 or more contracts per day in month. Total Volume is defined as Customer, Professional, Firm, NOM Market Maker and Non-NOM Market Maker volume in Penny Pilot Options and Non-Penny Pilot Options which either adds or removes liquidity. In addition, NOM Participants under common ownership will be permitted to aggregate their volume to qualify for the Tier 6 rebate. The Exchange defines common ownership as 75 percent common ownership or control.<sup>4</sup> In connection with offering the Tier 6 rebate, the Exchange proposes to eliminate the current incentive for Customer orders of 5,000 or more, displayed or non-displayed contracts, which add liquidity in Penny Pilot Options provided the NOM Participant

<sup>4</sup> NOM Participants may be requested by the Exchange’s Membership Department to demonstrate that they are under 75% common ownership if the information is not readily available in Web CRD.

has qualified for Tier 2, 3, 4 or 5 for that month. The Exchange believes that the Tier 6 incentive will encourage NOM Participants to send additional order flow to the Exchange and is therefore eliminating the incentive at this time.

The Exchange also proposes to amend Tier 4 which currently provides that a NOM Participant that adds Customer liquidity of 75,000 or more contracts per day in a month or has Total Volume of 100,000 or more contracts per day in month qualifies for a \$0.44 per contract rebate. The Exchange proposes to amend Tier 4 to state that only a NOM Participant that adds Customer liquidity of 75,000 or more contracts per day in a month qualifies for a \$0.44 per contract rebate.<sup>5</sup> The Exchange would eliminate the qualifier of 100,000 or more contracts of Total Volume because it is instead offering the Tier 6 rebate. The Exchange would also eliminate note "a," which is no longer relevant because it applied to Total Volume in Tier 4. The remainder of the notes would change lettering.

The Exchange also proposes to amend the Fees for Removing Liquidity in Penny Pilot Options. Professionals, Firms, Non-NOM Market Makers and NOM Market Makers who are currently assessed a \$0.45 per contract fee would be assessed a \$0.47 per contract Fee for Removing Liquidity in a Penny Pilot Option.<sup>6</sup> In addition, the Exchange proposes to reduce the Professional, Firm, Non-NOM Market Maker and NOM Market Maker Penny Pilot Option Fees for Removing Liquidity by \$0.01 per contract for transactions in which the same participant is the buyer and the seller to further incentivize these NOM Participants to add and remove liquidity in the market.

## 2. Statutory Basis

NASDAQ believes that the proposed rule changes are consistent with the provisions of Section 6 of the Act,<sup>7</sup> in general, and with Section 6(b)(4) of the Act,<sup>8</sup> in particular, in that they provide 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.

The Exchange believes that the proposed addition of Tier 6 is reasonable because it is part of an

existing program<sup>9</sup> to encourage broker-dealers acting as agent for Customer orders to select the Exchange as a venue to post Customer orders. The Exchange believes that its success at attracting Customer order flow benefits all market participants by improving the quality of order interaction and executions at the Exchange. Also, the Exchange believes the existing monthly volume thresholds have incentivized firms that route Customer orders to send additional Customer order flow to the Exchange. The Exchange desires to continue to encourage firms that route Customer orders to increase Customer order flow to the Exchange by providing an additional opportunity to qualify for a Customer Rebate. The Exchange would allow a NOM Participant to total both Penny Pilot Option Volume and Non-Penny Pilot Option volume that adds or removes liquidity to qualify for the \$0.45 per contract Customer Rebate to Add Liquidity in Penny Pilot Options proposed in Tier 6. The Exchange believes that additional NOM Participants would be able to qualify for this tier, including NOM Participants who do not qualify for rebates today, as long as the 130,000 volume requirement was met. Proposed Tier 6 is a broader category because it includes Non-Penny Pilot Option volume to qualify for the rebate. The proposed Tier 6 Total Volume qualifier is similar to pricing currently in place on BATS Exchange, Inc. ("BATS").<sup>10</sup>

The Exchange believes that proposed Tier 6 is equitable and not unfairly discriminatory because the Exchange is proposing to offer an even higher Customer rebate in Penny Pilot Options of \$0.45 per contract to NOM Participants which will be based on Total Volume. NOM Participants may total all Penny Pilot Option and Non-

Penny Pilot Option volume that either adds or removes liquidity to qualify for this new tier. The Exchange believes that this added incentive would allow additional NOM Participants to qualify and receive the Customer rebate. All NOM Participants that transact Customer orders in Penny Pilot Options are eligible for the Customer rebates.<sup>11</sup> The Exchange believes that allowing NOM Participants to qualify for proposed Tier 6 by totaling Penny and Non-Penny Option volume that adds or removes liquidity would enable a greater number of NOM Participants to qualify for the rebate because NOM Participants can utilize either Penny or Non-Penny Pilot volume to reach the 130,000 volume requirement. All NOM Participants may transact orders in both Penny and Non-Penny Pilot Options and the Exchange would equally apply the criteria for Tier 6 to all NOM Participants.

The Exchange believes that it is reasonable, equitable and not unfairly discriminatory to permit NOM Participants under common ownership to aggregate their volume for purposes of qualifying for the Tier 6 rebate. Certain NOM Participants chose to segregate their businesses into different legal entities for purposes of conducting business. The Exchange believes that these NOM Participants should be treated as one entity for purposes of qualifying for the Tier 6 rebate as long as there is at least 75% common ownership or control present among the NOM Participants. The Exchange currently permits a similar aggregation for the Tier 5 Total Volume calculation.

The Exchange believes that its proposal to eliminate the \$0.01 per contract rebate incentive for Customer orders of 5,000 or more, displayed or non-displayed, contracts that add liquidity in Penny Pilot Options for NOM Participants that qualified for certain tiers is reasonable because the Exchange has proposed an alternative incentive for NOM Participants in its proposal to adopt Tier 6 with a higher rebate. The Exchange believes the Tier 6 rebate will increase order flow to the Exchange because all Penny Pilot Option and Non-Penny Pilot Option volume that either adds or removes liquidity would count toward the 130,000 volume requirement to qualify for the rebate.

The Exchange believes that the proposal to eliminate the \$0.01 incentive is equitable and not unfairly

<sup>5</sup> The Exchange is not proposing to amend the amount of the \$0.44 per contract rebate at this time.

<sup>6</sup> The Customer Penny Pilot Fee for Removing Liquidity of \$0.45 per contract is not being amended.

<sup>7</sup> 15 U.S.C. 78f.

<sup>8</sup> 15 U.S.C. 78f(b)(4).

<sup>9</sup> The Exchange adopted these monthly volume achievement tiers in September 2011. See Securities Exchange Act Release Nos. 65317 (September 12, 2011), 76 FR 57778 (September 16, 2011) (SR-NASDAQ-2011-124), 65317 (September 12, 2011), 76 FR 61129 (October 3, 2011) (SR-NASDAQ-2011-127), 66126 (January 10, 2012), 77 FR 2335 (January 17, 2012) (SR-NASDAQ-2012-003), 66360 (February 8, 2012), 77 FR 8312 (February 14, 2012) (SR-NASDAQ-2012-022), 66768 (April 6, 2012), 77 FR 22015 (April 12, 2012) (SR-NASDAQ-2012-048) 67388 (July 10, 2012), 77 FR 42073 (July 17, 2012) (SR-NASDAQ-2012-083).

<sup>10</sup> BATS pays rebates for certain Customer Penny Pilot orders based on, among other factors, total consolidated volume. BATS defines total consolidated volume as the volume reported by all exchanges to the consolidated transaction reporting plan for the month for which the fees apply. See BATS BZX Exchange Fee Schedule. The Exchange is proposing to utilize Total Volume which would include Penny Pilot Option and Non-Penny Pilot Option volume which either adds or removes liquidity to qualify for the Customer Rebate to Add Liquidity in Penny Pilot Options.

<sup>11</sup> Tier 1 pays a rebate for NOM Participants that add Customer liquidity of up to 14,999 contracts per day in a month of Penny Pilot Options. There is no required minimum volume of Customer orders to qualify for a Customer Rebate to Add Liquidity.

discriminatory because it is being replaced with the Tier 6 rebate which offers a higher rebate to NOM Participants who may currently qualify for other tiers or a new rebate for NOM Participants that currently do not qualify for a rebate. Today, the \$0.01 incentive is applicable to NOM Participants that qualified for Tiers 2, 3, 4 and 5. Proposed Tier 6 would be applicable to the Total Volume of contracts in Penny and Non-Penny Pilot Options which either adds or removes liquidity for any market participant. The Exchange believes a greater number of NOM Participants may qualify for proposed Tier 6 as compared to other tiers which are limited to Customer volume in Penny Pilot Options.

The Exchange believes that the proposal to eliminate the text of Tier 4, which provides that NOM Participants may qualify for Tier 4 by achieving Total Volume of 100,000 or more contracts per day in a month, is reasonable, equitable and not unfairly discriminatory because the Exchange is proposing to offer a new Tier 6 rebate which would allow NOM Participants to achieve an even higher rebate if the NOM Participant is able to meet the increased volume requirement of 130,000 contracts per day in a month. The Exchange believes the new tier may further incentivize NOM Participants to send additional volume to the Exchange that either adds or removes liquidity in Penny or Non-Penny Pilot Options to qualify for the \$0.45 per contract rebate.

The Exchange believes that the increased Fees for Removing Liquidity in Penny Pilot Options are reasonable because they permit the Exchange to offer an increased Tier 6 rebate to attract additional order flow to NOM. The Exchange believes that the increased Fees for Removing Liquidity in Penny Pilot Options are equitable and not unfairly discriminatory because all market participants, other than Customers, are being assessed the same Fees for Removing Liquidity in Penny Pilot Options. The Exchange believes that Customer order flow brings unique benefits to the market which benefits all market participants and therefore Customers are assessed lower fees as compared to other market participants. Additionally, the Exchange is offering NOM Participants, other than Customers, the ability to reduce the Fees for Removing Liquidity by \$0.01 per contract when the same participant is the buyer and the seller. The Exchange believes that this additional fee reduction should further incentivize non-Customer NOM Participants to both add and remove liquidity in Penny Pilot Options on NOM. It is important to note

that NOM Participants are unaware at the time the order is entered of the identity of the contra-party. Because contra-parties are anonymous, NOM Participants would aggressively pursue order flow in order to receive the benefit of the reduction. Providing the additional incentive is reasonable for this reason and also is equitable and not unfairly discriminatory because all NOM Participants are entitled to receive the fee reduction when they are both the buyer and seller. By way of example, if a NOM Participant that is assigned the firm code "ABC" by the Exchange posted an order utilizing its Customer order router, which order was removed by an ABC firm proprietary order, the NOM Participant would receive the \$0.01 per contract fee reduction. The Exchange proposes to utilize the Exchange assigned firm code<sup>12</sup> to determine which NOM Participant executed an order and to apply the fee reduction to the Penny Pilot Option Fee for Removing Liquidity if the same non-Customer NOM Participant was the buyer and the seller to a transaction.<sup>13</sup> The Exchange believes that it is reasonable, equitable and not unfairly discriminatory to not offer the same fee reduction to Customers because the Customer fee is not being increased and will now be \$0.02 per contract lower than the Penny Pilot Options Fees for Removing Liquidity applicable to all other market participants.

The Exchange operates in a highly competitive market comprised of ten 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 or rebate opportunities to be inadequate. The Exchange believes that the proposed rebate scheme and fees are competitive and similar to other fees, rebates and tier opportunities in place on other exchanges. The Exchange believes that this competitive marketplace materially impacts rebates and fees present on the Exchange today and substantially influences the proposal set forth above.

#### *B. Self-Regulatory Organization's Statement on Burden on Competition*

NASDAQ does not believe that the proposed rule changes will result in any burden on competition that is not necessary or appropriate in furtherance of the purposes of the Act, as amended.

<sup>12</sup> Each NOM Participant is assigned a firm code by the Exchange.

<sup>13</sup> In this example, the same NOM Participant added and removed the order and would be entitled to the fee reduction because the NOM Participant was the buyer and seller on the transaction.

To the contrary, NASDAQ has designed its rebates and fees to compete effectively for the execution and routing of options contracts and to reduce the overall cost to investors of options trading. The Exchange believes that incentivizing NOM Participants to transact greater Customer volume on the Exchange benefits all market participants because of the increased liquidity to the market.

#### *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.<sup>14</sup> 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](mailto:rule-comments@sec.gov). Please include File Number SR-NASDAQ-2012-104 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-2012-104. This file number should be included on the subject line if email is used. To help the

<sup>14</sup> 15 U.S.C. 78s(b)(3)(A)(ii).

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 a.m. and 3 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 publicly available. All submissions should refer to File Number SR-NASDAQ-2012-104 and should be submitted on or before October 9, 2012.

For the Commission, by the Division of Trading and Markets, pursuant to delegated authority.<sup>15</sup>

**Kevin M. O'Neill,**  
*Deputy Secretary.*

[FR Doc. 2012-22915 Filed 9-17-12; 8:45 am]

BILLING CODE 8011-01-P

## SECURITIES AND EXCHANGE COMMISSION

[Release No. 34-67838; File No. SR-NYSEMKT-2012-46]

### Self-Regulatory Organizations; NYSE MKT LLC; Notice of Filing and Immediate Effectiveness of Proposed Rule Change Amending Rule 993NY by Adding a New Paragraph (c) That Addresses the Authority of the Exchange or Archipelago Securities LLC ("Arca Securities") To Cancel Orders When a Technical or Systems Issue Occurs and To Describe the Operation of an Error Account for Arca Securities

September 12, 2012.

Pursuant to Section 19(b)(1)<sup>1</sup> of the Securities Exchange Act of 1934 (the

"Act")<sup>2</sup> and Rule 19b-4 thereunder,<sup>3</sup> notice is hereby given that on August 31, 2012, NYSE MKT LLC (the "Exchange" or "NYSE MKT") filed with the Securities and Exchange Commission (the "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 amend Rule 993NY by adding a new paragraph (c) that addresses the authority of the Exchange or Archipelago Securities LLC ("Arca Securities") to cancel orders when a technical or systems issue occurs and to describe the operation of an error account for Arca Securities. The text of the proposed rule change is available on the Exchange's Web site at [www.nyse.com](http://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 Exchange proposes to amend Rule 993NY by adding a new paragraph (c) that addresses the authority of the Exchange or Arca Securities to cancel orders when a technical or systems issue occurs and to describe the operation of an error account for Arca Securities.<sup>4</sup>

<sup>2</sup> 15 U.S.C. 78a.

<sup>3</sup> 17 CFR 240.19b-4.

<sup>4</sup> Arca Securities is a facility of the Exchange. Accordingly, under Rule 993NY, the Exchange is responsible for filing with the Commission rule changes and fees relating to Arca Securities' functions. In addition, the Exchange is using the phrase "Arca Securities or the Exchange" in this

Arca Securities is an approved routing broker of the Exchange, subject to the conditions listed in Rule 993NY.<sup>5</sup> When necessary, the Exchange may utilize Arca Securities to provide outbound routing services from itself to routing destinations of Arca Securities ("routing destinations").<sup>6</sup> When Arca Securities routes orders to a routing destination, it does so by sending a corresponding order in its own name to the routing destination. In the normal course, routed orders that are executed at routing destinations are submitted for clearance and settlement in the name of Arca Securities, and Arca Securities arranges for any resulting securities positions to be delivered to the ATP Holder that submitted the corresponding order to the Exchange. However, from time to time, the Exchange and Arca Securities encounter situations in which it becomes necessary to cancel orders and resolve error positions.<sup>7</sup>

rule filing to reflect the fact that a decision to take action with respect to orders affected by a technical or systems issue may be made in the capacity of Arca Securities or the Exchange depending on where those orders are located at the time of that decision.

<sup>5</sup> The Exchange currently relies on non-affiliate third-party broker-dealers to provide outbound routing services (*i.e.*, third-party Routing Brokers). In those cases, orders are submitted to the third-party Routing Broker through Arca Securities, the third-party Routing Broker routes the orders to the routing destination in its name, and any executions are submitted for clearance and settlement in the name of Arca Securities so that any resulting positions are delivered to Arca Securities upon settlement. As described above, Arca Securities normally arranges for any resulting positions to be delivered to the ATP Holder that submitted the corresponding order to the Exchange. If error positions (as defined in proposed Rule 993NY(c)(2)) result in connection with the Exchange's use of a third-party Routing Broker for outbound routing, and those positions are delivered to Arca Securities through the clearance and settlement process, Arca Securities would be permitted to resolve those positions in accordance with proposed Rule 993NY(c). If the third-party Routing Broker received error positions in connection with its role as a routing broker for the Exchange, and the error positions were not delivered to Arca Securities through the clearance and settlement process, then the third-party Routing Broker would resolve the error positions itself, and Arca Securities would not be permitted to accept the error positions, as set forth in proposed Rule 993NY(c)(2)(B).

<sup>6</sup> The Exchange has also been approved to receive inbound routes of option orders by Arca Securities from NYSE Arca, Inc. ("NYSE Arca"). See Rule 993NY(b).

<sup>7</sup> The examples described in this filing are not intended to be exclusive. Proposed Rule 993NY(c) would provide general authority for the Exchange or Arca Securities to cancel orders in order to maintain fair and orderly markets when technical and systems issues are occurring, and Rule 993NY(c) also would set forth the manner in which error positions may be handled by the Exchange or Arca Securities. The proposed rule change is not limited to addressing order cancellation or error positions resulting only from the specific examples described in this filing.

<sup>15</sup> 17 CFR 200.30-3(a)(12).

<sup>1</sup> 15 U.S.C.78s(b)(1).

### Examples of Circumstances That May Lead to Canceled Orders

A technical or systems issue may arise at Arca Securities, a routing destination, or the Exchange that may cause the Exchange or Arca Securities to take steps to cancel orders if the Exchange or Arca Securities determines that such action is necessary to maintain a fair and orderly market. The examples set forth below describe some of the circumstances in which the Exchange or Arca Securities may decide to cancel orders.

*Example 1.* If Arca Securities or a routing destination experiences a technical or systems issue that results in Arca Securities not receiving responses to immediate or cancel (“IOC”) orders that it sent to the routing destination, and that issue is not resolved in a timely manner, Arca Securities or the Exchange would seek to cancel the routed orders affected by the issue.<sup>8</sup> For instance, if Arca Securities experiences a connectivity issue affecting the manner in which it sends or receives order messages to or from routing destinations, it may be unable to receive timely execution or cancellation reports from the routing destinations, and Arca Securities or the Exchange may consequently seek to cancel the affected routed orders. Once the decision is made to cancel those routed orders, any cancellation that an ATP Holder submitted to the Exchange on its initial order during such a situation would be honored.<sup>9</sup>

*Example 2.* If the Exchange experiences a systems issue, the Exchange may take steps to cancel all outstanding orders affected by that issue and notify affected ATP Holders of the cancellations. In those cases, the Exchange would seek to cancel any routed orders related to the ATP Holders’ initial orders.

<sup>8</sup> In a normal situation (*i.e.*, one in which a technical or systems issue does not exist), Arca Securities should receive an immediate response to an IOC order from a routing destination, and would pass the resulting fill or cancellation on to the ATP Holder. After submitting an order that is routed to a routing destination, if an ATP Holder sends an instruction to cancel that order, the cancellation is held by the Exchange until a response is received from the routing destination. For instance, if the routing destination executes that order, the execution would be passed on to the ATP Holder and the cancellation instruction would be disregarded.

<sup>9</sup> If an ATP Holder did not submit a cancellation to the Exchange, however, that initial order would remain “live” and thus be eligible for execution or posting on the Exchange, and neither the Exchange nor Arca Securities would treat any execution of that initial order or any subsequent routed order related to that initial order as an error.

### Examples of Circumstances That May Lead to Error Positions

In some instances, the technical or systems issue at Arca Securities, a routing destination, the Exchange, or a non-affiliate third-party Routing Broker may also result in Arca Securities acquiring an error position that it must resolve. The examples set forth below describe some of the circumstances in which error positions may arise.

*Example A.* Error positions may result from routed orders that the Exchange or Arca Securities attempts to cancel but that are executed before the routing destination receives the cancellation message or that are executed because the routing destination is unable to process the cancellation message. Using the situation described in Example 1 above, assume that the Exchange seeks to cancel orders routed to a routing destination because it is not receiving timely execution or cancellation reports from the routing destination. In such a situation, Arca Securities may still receive executions from the routing destination after connectivity is restored, which it would not then allocate to ATP Holders because of the earlier decision to cancel the affected routed orders. Instead, Arca Securities would post those positions into its error account and resolve the positions in the manner described below.

*Example B.* Error positions may result from an order processing issue at a routing destination. For instance, if a routing destination experienced a systems problem that affects its order processing, it may transmit back a message purporting to cancel a routed order, but then subsequently submit an execution of that same order to the OCC for clearance and settlement. In such a situation, the Exchange would not then allocate the execution to the ATP Holder because of the earlier cancellation message from the routing destination. Instead, Arca Securities would post those positions into its error account and resolve the positions in the manner described below.

*Example C.* Error positions may result if Arca Securities receives an execution report from a routing destination but does not receive clearing instructions for the execution from the routing destination. For instance, assume that an ATP Holder sends the Exchange an order to buy 100 contracts overlying ABC stock, which causes Arca Securities to send an order to a routing destination that is subsequently executed, cleared and closed out by that routing destination, and the execution is ultimately communicated back to that ATP Holder. If the routing destination

does not provide clearing instructions for that execution, Arca Securities would still be responsible for settling that ATP Holder’s purchase, but would be left with a short position in its error account.<sup>10</sup> Arca Securities would resolve the position in the manner described below.

*Example D.* Error positions may result from a technical or systems issue that causes orders to be executed in the name of Arca Securities and are not related to any corresponding orders of ATP Holders. As a result, Arca Securities would not be able to assign any positions resulting from such an issue to ATP Holders. Instead, Arca Securities would post those positions into its error account and resolve the positions in the manner described below.

*Example E.* Error positions may result from a technical or systems issue through which the Exchange does not receive sufficient notice that an ATP Holder that has executed trades on the Exchange has lost the ability to clear trades through OCC. In such a situation, the Exchange would not have valid clearing information, which would prevent the trade from being processed pursuant to Rule 960. Accordingly, Arca Securities would assume that ATP Holder’s side of the trades so that the counterparties can settle the trades. Arca Securities would post those positions into its error account and resolve the positions in the manner described below.

In the circumstances described above, Arca Securities may not learn about an error position until T+1, either: (1) During the clearing process when a routing destination has submitted to OCC a transaction for clearance and settlement for which Arca Securities never received an execution confirmation; or (2) when a routing destination does not recognize a transaction submitted on behalf of Arca Securities to OCC for clearance and settlement. Moreover, the affected ATP Holders’ trade may not be nullified absent express authority under Exchange rules.<sup>11</sup>

### Proposed Amendments to Rule 993NY

The Exchange proposes to amend Rule 993NY to add new paragraph (c) to address the cancellation of orders due to technical or systems issues and the use of an error account by Arca Securities.

Specifically, under paragraph (c)(1) of the proposed rule, the Exchange or Arca

<sup>10</sup> To the extent that Arca Securities incurred a loss in covering its position, it may submit a reimbursement claim to that routing destination.

<sup>11</sup> See, e.g., Rule 975NY (regarding obvious and catastrophic errors).

Securities would be expressly authorized to cancel orders as may be necessary to maintain fair and orderly markets if a technical or systems issue occurred at the Exchange, Arca Securities, or a routing destination.<sup>12</sup> The Exchange or Arca Securities would be required to provide notice of the cancellation to affected ATP Holders as soon as practicable.

Paragraph (c)(2) of the proposed rule would permit Arca Securities to maintain an error account for the purpose of addressing positions that result from a technical or systems issue at Arca Securities, the Exchange, a routing destination, or a non-affiliate third-party Routing Broker that affects one or more orders (“error positions”). By definition, an error position would not include any position that results from an order submitted by an ATP Holder to the Exchange that is executed on the Exchange and processed pursuant to Rule 960.<sup>13</sup> Arca Securities also would not be permitted to accept any positions in its error account from an account of an ATP Holder and could not permit any ATP Holder to transfer any positions from the ATP Holder’s account to Arca Securities’ error account under the proposed rule.<sup>14</sup> However, if a technical or systems issue results in the Exchange not having valid

clearing instructions for an ATP Holder to a trade, Arca Securities may assume that ATP Holder’s side of the trade so that the trade can be processed pursuant to Rule 960.<sup>15</sup>

Under paragraph (c)(3), in connection with a particular technical or systems issue, Arca Securities or the Exchange would be permitted to either (i) assign all resulting error positions to ATP Holders, or (ii) have all resulting error positions liquidated, as described below. Any determination to assign or liquidate error positions, as well as any resulting assignments, would be required to be made in a nondiscriminatory fashion.

Arca Securities or the Exchange would be required to assign all error positions resulting from a particular technical or systems issue to the applicable ATP Holders affected by that technical or systems issue if Arca Securities or the Exchange:

- Determined that it has accurate and sufficient information (including valid clearing information) to assign the positions to all of the applicable ATP Holders affected by that technical or systems issue;
- Determined that it has sufficient time pursuant to normal clearance and settlement deadlines to evaluate the information necessary to assign the positions to all of the applicable ATP Holders affected by that technical or systems issue; and
- Had not determined to cancel all orders affected by that technical or systems issue.

For example, a technical or systems issue of limited scope or duration may occur at a routing destination, and the resulting trades may be submitted for clearance and settlement by such routing destination to OCC. If there were a small number of trades, there may be sufficient time to match positions with ATP Holder or orders and avoid using the error account.

There may be scenarios, however, where Arca Securities determines that it is unable to assign all error positions resulting from a particular technical or systems issue to all of the affected ATP Holders, or determines to cancel all affected routed orders. For example, in some cases, the volume of questionable executions and positions resulting from a technical or systems issue might be such that the research necessary to determine which ATP Holder to assign those executions to could be expected to extend past the normal settlement cycle for such executions. Furthermore, if a routing destination experiences a technical or systems issue after Arca

Securities has transmitted IOC orders to it that prevents Arca Securities from receiving responses to those orders, Arca Securities or the Exchange may determine to cancel all routed orders affected by that issue. In such a situation, Arca Securities or the Exchange would not pass on to the ATP Holders any executions on the routed orders received from the routing destination.

The proposed rule also would require Arca Securities to liquidate error positions as soon as practicable.<sup>16</sup> In liquidating error positions, Arca Securities would be required to provide complete time and price discretion for the trading to liquidate the error positions to a third-party broker-dealer and could not attempt to exercise any influence or control over the timing or methods of trading to liquidate the error positions. Arca Securities also would be required to establish and enforce policies and procedures reasonably designed to restrict the flow of confidential and proprietary information between the third-party broker-dealer and Arca Securities/the Exchange associated with the liquidation of the error positions.

Under proposed paragraph (c)(4), Arca Securities and the Exchange would be required to make and keep records to document all determinations to treat positions as error positions and all determinations for the assignment of error positions to ATP Holders or the liquidation of error positions, as well as records associated with the liquidation of error positions through the third-party broker-dealer.

## 2. Statutory Basis

The proposed rule change is consistent with Section 6(b)<sup>17</sup> of the Securities Exchange Act of 1934 (the “Act”), in general, and furthers the objectives of Section 6(b)(5),<sup>18</sup> in particular, in that 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, to remove impediments to and perfect the mechanism of a free and open market and a national market system and, in

<sup>16</sup> If Arca Securities determines in connection with a particular technical or systems issue that some error positions can be assigned to some affected ATP Holders but other error positions cannot be assigned, Arca Securities would be required under the proposed rule to liquidate all such error positions (including those positions that could be assigned to the affected ATP Holders).

<sup>17</sup> 15 U.S.C. 78f(b).

<sup>18</sup> 15 U.S.C. 78f(b)(5).

<sup>12</sup> Such a situation may not cause the Exchange to declare self-help against the routing destination pursuant to Rule 991NY(b)(1). If the Exchange or Arca Securities determines to cancel orders routed to a routing destination under proposed Rule 993NY(c), but does not declare self-help against that routing destination, the Exchange would continue to be subject to the trade-through requirements in the Options Order Protection and Locked/Crossed Markets Plan and Rule 991NY with respect to that routing destination.

<sup>13</sup> As provided in Rule 960, “[a]ll Exchange option transactions shall be submitted to the Exchange for comparison of trade information, and all compared transactions shall be cleared through the [OCC] and shall be subject to the rules of the [OCC].”

<sup>14</sup> The purpose of this provision is to clarify that Arca Securities may address error positions under the proposed rule that are caused by a technical or systems issue, but that Arca Securities may not accept from an ATP Holder positions that are delivered to the ATP Holder through the clearance and settlement process, even if those positions may have been related to a technical or systems issue at Arca Securities, the Exchange, a routing destination of Arca Securities, or a non-affiliate third-party Routing Broker. This provision would not apply, however, to situations like the one described above in which Arca Securities incurred a short position to settle an ATP Holder purchase, as the ATP Holder did not yet have a position in its account as a result of the purchase at the time of Arca Securities’ action (*i.e.*, Arca Securities’ action was necessary for the purchase to settle into the ATP Holder’s account). Moreover, to the extent an ATP Holder receives positions pursuant to Rule 960 in connection with a technical or systems issue, that ATP Holder may seek to rely on Rule 905NY if it experiences a loss. That rule provides ATP Holders with the ability to file claims against the Exchange “for the failure of its systems or facilities.”

<sup>15</sup> See Example E above.

general, to protect investors and the public interest, and it is not designed to permit unfair discrimination among customers, brokers, or dealers. The Exchange believes that this proposal is in keeping with those principles since Arca Securities' or the Exchange's ability to cancel orders during a technical and systems issue and to maintain an error account facilitates the smooth and efficient operations of the market. Specifically, the Exchange believes that allowing Arca Securities or the Exchange to cancel orders during a technical or systems issue would allow the Exchange to maintain fair and orderly markets. Moreover, the Exchange believes that allowing Arca Securities to assume error positions in an error account and to liquidate those positions, subject to the conditions set forth in the proposed amendments to Rule 993NY, would be the least disruptive means to correct these errors, except in cases where Arca Securities can assign all such error positions to all affected ATP Holders of the Exchange. Overall, the proposed amendments are designed to ensure full trade certainty for market participants and to avoid disrupting the clearance and settlement process. The proposed amendments are also designed to provide a consistent methodology for handling error positions in a manner that does not discriminate among ATP Holders. The proposed amendments are also consistent with Section 6 of the Act insofar as they would require Arca Securities to establish controls to restrict the flow of any confidential information between the third-party broker and Arca Securities/the Exchange associated with the liquidation of error positions.

#### *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.

#### *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 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 Section 19(b)(3)(A) of the Act<sup>19</sup> and Rule 19b-4(f)(6)<sup>20</sup> thereunder.

NYSE MKT has requested that the Commission waive the 30-day operative delay.<sup>21</sup> The Commission believes that waiver of the operative delay is consistent with the protection of investors and the public interest. Such waiver would allow the Exchange, without delay, to implement the proposed rule change, which is designed to provide a consistent methodology for handling error positions in a manner that does not discriminate among ATP Holders. The Commission also notes that the proposed rule change is based on, and substantially similar to, NYSE Arca Equities Rule 7.45(d), which the Commission recently approved.<sup>22</sup> Accordingly, the Commission designates the proposal operative upon filing.<sup>23</sup>

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](mailto:rule-comments@sec.gov). Please include File

<sup>19</sup> 15 U.S.C. 78s(b)(3)(A).

<sup>20</sup> 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.

<sup>21</sup> 17 CFR 240.19b-4(f)(6)(iii).

<sup>22</sup> See Securities Exchange Act Release No. 66963 (May 10, 2012), 77 FR 28919 (May 16, 2012) (SR-NYSEArca-2012-22).

<sup>23</sup> For purposes only of waiving the 30-day operative delay, the Commission has considered the proposed rule change's impact on efficiency, competition, and capital formation. 15 U.S.C. 78c(f).

Number SR-NYSEMKT-2012-46 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-NYSEMKT-2012-46. 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-NYSEMKT-2012-46 and should be submitted on or before October 9, 2012.

For the Commission, by the Division of Trading and Markets, pursuant to delegated authority.<sup>24</sup>

**Kevin M. O'Neill,**

*Deputy Secretary.*

[FR Doc. 2012-22911 Filed 9-17-12; 8:45 am]

**BILLING CODE 8011-01-P**

<sup>24</sup> 17 CFR 200.30-3(a)(12).

## SECURITIES AND EXCHANGE COMMISSION

[Release No. 34-67846; File No. SR-NYSE-2012-44]

### Self-Regulatory Organizations; New York Stock Exchange LLC; Notice of Filing of Proposed Rule Change Amending Section 907.00 of the Listed Company Manual, Which Describes Certain Complimentary Products and Services that are Offered to Certain Issuers

September 12, 2012.

Pursuant to Section 19(b)(1) of the Securities Exchange Act of 1934 (the “Act”)<sup>1</sup> and Rule 19b-4 thereunder,<sup>2</sup> notice is hereby given that, on August 30, 2012, New York Stock Exchange LLC (“NYSE” or the “Exchange”) 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 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 Section 907.00 of the Listed Company Manual (the “Manual”), which describes certain complimentary products and services that are offered to certain issuers. The text of the proposed rule change is available on the Exchange’s Web site at [www.nyse.com](http://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 Section 907.00 of the Manual, which describes certain complimentary products and services that are offered to certain issuers.

##### Background

Section 907.00 of the Manual sets forth certain complimentary products and services that are offered to certain currently and newly listed issuers. These products and services are developed or delivered by NYSE or by a third party for use by NYSE-listed companies. Some of these products are commercially available from such third-party vendors. All listed issuers receive some complimentary products and services through the NYSE Market Access Center. Certain tiers of currently listed issuers and newly listed issuers receive additional products and services.

##### Expand Definition of Newly Listed Issuer

Under Section 907.00, a newly listed issuer is defined as a U.S. issuer conducting an initial public offering (“IPO”) or an issuer emerging from a bankruptcy, spinoff (where a company lists new shares in the absence of a public offering), or carve-out (where a company carves out a business line or division, which then conducts a separate IPO), but does not include an issuer that transfers its listing from another U.S. exchange.<sup>3</sup>

The Exchange proposes to broaden the definition of newly listed issuer to mean any U.S. company listing common stock on the Exchange for the first time, and any non-U.S. company<sup>4</sup> listing an equity security<sup>5</sup> on the Exchange under

<sup>3</sup> See Securities Exchange Act Release No. 65127 (Aug. 12, 2011), 76 FR 51449, 51450 n. 13 (Aug. 18, 2011) (SR-NYSE-2011-20).

<sup>4</sup> For purposes of the Manual, the terms “Foreign Private Issuer” and “non-U.S. company” have the same meaning and are defined in accordance with the Commission’s definition of foreign private issuer set out in Rule 3b-4(c) of the Securities Exchange Act of 1934, as amended (the “Act”). See Section 103.00 of the Manual. Strictly for ease of reference and to use a less technical term, the Exchange proposes to amend the text of Section 907.00 to refer to “non-U.S. companies” rather than “Foreign Private Issuers.” This aspect of the proposed rule change does not result in any substantive change in the entities eligible under Section 907.00.

<sup>5</sup> In some instances, a non-U.S. company may not list its common stock on the Exchange; rather, such company may have its common stock listed on a foreign market and list some other type of security on the Exchange, such as American Depositary

Section 102.01 or 103.00 of the Manual for the first time, regardless of whether such U.S. or non-U.S. company conducts an offering; the definition would continue to exclude any issuer that transfers its listing from another U.S. securities exchange.<sup>6</sup> Under the proposed rule change, the definition of “newly listed issuer” also would mean any U.S. or non-U.S. company emerging from a bankruptcy, spinoff (where a company lists new shares in the absence of a public offering), and carve-out (where a company carves out a business line or division, which then conducts a separate initial public offering).

##### Changes to Tier One and Tier Two for Currently Listed Issuers

Currently, the Exchange has two tiers of products and services that are available to currently listed issuers. Under Tier One, the Exchange offers market surveillance and Web-hosting products and services to U.S. issuers that have 270 million or more total shares of common stock issued and outstanding in all share classes, including and in addition to Treasury shares, and Foreign Private Issuers that have 270 million or more in ADRs issued and outstanding, each calculated annually as of December 31 of the preceding year. Under Tier Two, at each such issuer’s election, the Exchange offers either market analytics or Web-hosting products and services to U.S. issuers that have 160 million to 269,999,999 total shares of common stock issued and outstanding in all share classes, including and in addition

Receipts (“ADRs”). Thus, to qualify for the products and services under Section 907.00, the Exchange would require the non-U.S. company to list an “equity security” on the Exchange, which would be defined to mean common stock or common share equivalents such as ordinary shares, New York shares (a type of share used by Canadian companies), global shares, ADRs, or Global Depository Receipts. Each of these types of shares has been used by non-U.S. companies when listing on the Exchange. The definition of “equity security” would be added to Section 907.00. The Exchange proposes to make conforming amendments throughout Section 907.00 to change specific references to ADRs to the broader term “equity security.”

<sup>6</sup> The current text of Section 907.00 states that the definition of “newly listed issuer” excludes an issuer that transfers its listing from another exchange. In a prior filing, the Exchange’s stated that the exclusion applied to transfers from a national securities exchange, *i.e.*, another U.S. securities exchange. See *supra* note 3. For greater clarity, the text of the Section 907.00 would be amended to provide specifically that a transfer from a U.S. securities exchange would be excluded from the definition of newly listed issuers. The Exchange does not believe that such issuers need the services offered to newly listed issuers because they already have been trading in U.S. capital markets. Rather, issuers that transfer from another U.S. exchange may qualify for the products and services offered to currently listed issuers under Section 907.00.

<sup>1</sup> 15 U.S.C.78s(b)(1).

<sup>2</sup> 17 CFR 240.19b-4.

to Treasury shares. Tier Two products and services also are offered to Foreign Private Issuers that have 160 million to 269,999,999 in ADRs issued and outstanding, each calculated annually as of December 31 of the preceding year.

The Exchange has determined that using December 31 as the date of qualification is not optimal because it provides issuers with too little notice of their qualification for Tier One or Tier Two. The Exchange has determined that it would be preferable to determine issuers' qualifications as of September 30 of the preceding year. Thus, for example, shortly after September 30, 2012, the Exchange would run the calculations for each issuer and determine which are eligible for Tier One or Tier Two for calendar year 2013, and so notify the qualifying issuers.<sup>7</sup> Qualifying issuers then would have nearly three months to select from the available services in their tier for the following calendar year, and non-qualifying issuers would have additional time to budget and plan for obtaining the services elsewhere should they so wish. The Exchange also proposes that for non-U.S. companies, the measurement of shares of an equity security would mean shares issued and outstanding in the U.S.

With respect to Tier One offerings, the Exchange proposes to permit a Tier One issuer to choose market analytics products and services as an alternative to market surveillance products and services. Some issuers would prefer to receive the former. Web-hosting products and services would continue to be offered to Tier One issuers.

#### Change to Tier A Offering

Tiers A and B describe the products and services available to newly listed issuers. Tier A includes issuers with a global market value of \$400 million or more based on the public offering price. Tier B includes issuers with a global market value of less than \$400 million based on the public offering price.

With one exception, the specified products and services for newly listed issuers are offered for 24 months after listing, at which time the issuers may be eligible for the Tier One or Tier Two products and services offered to existing issuers. The exception is market surveillance products and services, which currently are offered to Tier A issuers for the initial 12 months after listing. Under the current Manual, those issuers would not be eligible to receive

the market surveillance products and services for the next 12 months, until they qualified for Tier One status at the end of the 24-month period following listing. The Exchange proposes to eliminate that 12-month gap by amending Section 907.00 to provide that if, at the end of the 12-month period following a new listing, an issuer that has selected market surveillance products and services meets the qualifications of a Tier One issuer, then such issuer may continue to receive such services for an additional 12 months. This amendment would assure that there is no break in the offering of market surveillance products and services to otherwise qualified issuers.

The Exchange also proposes to amend the text that refers to global market value based on public offering price. As noted above, some listed companies may not conduct a public offering in connection with listing. For example, non-U.S. companies that are already listed on a foreign exchange may not conduct a public offering in connection with listing in the U.S. markets for the first time on the Exchange. The Exchange proposes to add text to Section 907.00 that would provide that if a newly listed issuer does not conduct a public offering, then its global market value will be determined by the Exchange at the time of listing for purposes of determining whether the issuer qualifies for Tier A or B.

#### 2. Statutory Basis

The Exchange believes that the proposed rule change is consistent with the provisions of Section 6 of the Act,<sup>8</sup> in general, and Section 6(b)(4) of the Act,<sup>9</sup> in particular, in that it is designed to provide for the equitable allocation of reasonable dues, fees, and other charges among its members and issuers and other persons using its facilities. The Exchange also believes that the proposed rule change is consistent with Section 6(b)(5) of the Act<sup>10</sup> in that it is not designed to permit unfair discrimination between customers, issuers, brokers, or dealers.

The Exchange believes that it is reasonable to offer complimentary products and services to attract new listings, retain currently listed issuers, and respond to competitive pressures. The Exchange faces competition in the market for listing services, and it competes in part by improving the quality of the services that it offers to listed companies. By offering products and services on a complimentary basis

and ensuring that it is offering the services most valued by its listed issuers, NYSE will improve the quality of the services that listed companies receive.

With respect to the change to the definition of newly listed issuer, the Exchange believes that a non-U.S. company that is listing an equity security for the first time on the Exchange, or is emerging from a bankruptcy, spinoff, or carve-out, is similarly situated to a U.S. issuer conducting an IPO or emerging from a bankruptcy, spinoff, or carve-out, and should be eligible to receive the same products and services from the NYSE Market Access Center as those U.S. issuers do. The proposed rule change would result in a more reasonable and equitable allocation of the listing benefits received in return for a non-U.S. company's listing fees<sup>11</sup> and would not be unfairly discriminatory because all similarly situated non-U.S. companies that list an equity security on the Exchange as described above would be eligible (other than transfers from another U.S. securities exchange). The Exchange also believes that amending the text of Section 907.00 to refer to listing on the Exchange for the first time, rather than the specific offerings that may occur in conjunction with the listing would make the coverage of the Section sufficiently broad to account for different types of offerings that may occur in connection with a new listing. The Exchange believes that defining the term "equity security," would make the coverage of the Section sufficiently broad to account for different types of securities. The Exchange believes that the text of Section 907.00 would be more transparent if it is [sic] specifically referenced the exclusion of issuers transferring from another U.S. securities exchange, as had been noted in a prior filing.<sup>12</sup>

With respect to the changes to Tier One, the Exchange believes that it is reasonable, equitable, and not unfairly discriminatory to allow issuers that qualify under this tier to choose whether they receive market surveillance or market analytics products and services.

With respect to changing the qualification date from December 31 to September 30 of the preceding year, the Exchange believes that it is reasonable, equitable, and not unfairly discriminatory to provide issuers with greater advance notice of their qualification (or non-qualification) for

<sup>7</sup> The Exchange notes that the proposed rule change may not be in effect prior to September 30, 2012; however, the Exchange believes that there will be sufficient time following approval of the proposed rule change to notify qualifying issuers.

<sup>8</sup> 15 U.S.C. 78f.

<sup>9</sup> 15 U.S.C. 78f(b)(4).

<sup>10</sup> 15 U.S.C. 78f(b)(5).

<sup>11</sup> Listing fees for non-U.S. companies are set forth in Section 902.03 of the Manual.

<sup>12</sup> See *supra* note 3.

Tier One and Tier Two services, providing such issuers with additional time to plan and budget accordingly. The Exchange also believes that stating in the text of Section 907.00 that (i) the measurement of shares of an equity security for non-U.S. companies is limited to shares issued and outstanding in the U.S., and (ii) the Exchange will determine global market value for newly listed issuers that do not conduct a public offering in connection with the listing would provide greater clarity in the Exchange's rules, and as such is reasonable.

With respect to the change to Tier A, the Exchange believes that it is reasonable, equitable, and not unfairly discriminatory to offer market surveillance products and services throughout the 24-month period following listing, rather than just the initial 12 months, in order to eliminate the interruption in service that would otherwise occur for issuers that would qualify for Tier One status as existing issuers at the end of the 24-month period.

The Exchange further notes that the proposed rule change is equitable and not unfairly discriminatory because the criteria for satisfying the tiers are the same for all similarly situated issuers. Issuers are not forced or required to utilize the complimentary products and services as a condition of listing. All issuers will continue to receive some level of free services.

#### *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.

#### *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**

Within 45 days of the date of publication of this notice in the **Federal Register** or within such longer period (i) as the Commission may designate up to 90 days of such date 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 the proposed rule change, or

(B) Institute proceedings to determine whether the proposed rule change should be 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](mailto:rule-comments@sec.gov). Please include File Number SR-NYSE-2012-44 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-NYSE-2012-44. 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 10 a.m. and 3 p.m.. Copies of the filing will also be available for inspection and copying at the NYSE's principal office and on its Internet Web site at [www.nyse.com](http://www.nyse.com). 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-NYSE-2012-44 and should

be submitted on or before October 9, 2012.

For the Commission, by the Division of Trading and Markets, pursuant to delegated authority.<sup>13</sup>

**Kevin M. O'Neill,**

*Deputy Secretary.*

[FR Doc. 2012-22963 Filed 9-17-12; 8:45 am]

**BILLING CODE 8011-01-P**

## **SECURITIES AND EXCHANGE COMMISSION**

[Release No. 34-67847; File No. SR-NYSE-2012-43]

### **Self-Regulatory Organizations; New York Stock Exchange LLC; Notice of Filing and Immediate Effectiveness of Proposed Rule Change Amending Sections 902.02 and 902.03 of the Listed Company Manual of the New York Stock Exchange LLC**

September 12, 2012.

Pursuant to Section 19(b)(1)<sup>1</sup> of the Securities Exchange Act of 1934 (the "Act")<sup>2</sup> and Rule 19b-4 thereunder,<sup>3</sup> notice is hereby given that, on August 30, 2012, New York Stock Exchange LLC ("NYSE" or the "Exchange") 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 Sections 902.02 and 902.03 of the Listed Company Manual (the "Manual") to provide that, where both of the companies that form an umbrella partnership real estate investment trust ("UPREIT") structure are listed on the Exchange, Listing and Annual Fees for the two related listed issuers will be subject to a single fee cap at the time of original listing and on an annual basis. The text of the proposed rule change is available on the Exchange's Web site at [www.nyse.com](http://www.nyse.com), at the principal office of the Exchange, and at the Commission's Public Reference Room.

<sup>13</sup> 17 CFR 200.30-3(a)(12).

<sup>1</sup> 15 U.S.C. 78s(b)(1).

<sup>2</sup> 15 U.S.C. 78a.

<sup>3</sup> 17 CFR 240.19b-4.

## 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 Sections 902.02 and 902.03 of the Manual to provide that, where both of the companies that form an UPREIT structure are listed on the Exchange, Listing and Annual Fees for the two related listed companies will be subject to a single fee cap at the time of original listing and on an annual basis.

Many listed real estate investment trusts ("REITs") form part of what is known as an "umbrella partnership real estate investment trust" or "UPREIT" structure.<sup>4</sup> In connection with the creation of an UPREIT structure, the owners of a portfolio of real estate assets contribute those assets to a limited partnership (the "Operating Partnership") in exchange for common equity interests in the Operating Partnership ("OP Units"). The sole general partner of the Operating Partnership is an entity which elects to be taxed as a real estate investment trust (the "REIT"). The partnership agreement of the Operating Partnership grants the REIT (as general partner) sole control over the Operating Partnership and, consequently, the Operating Partnership has no board of directors. In addition, the Operating Partnership has no employees of its own and its operations are managed entirely by the

<sup>4</sup> While the terms "umbrella partnership real estate investment trust" and "UPREIT" are not defined in the Internal Revenue Code, those terms are generally used to describe the specific structure set forth in Treas. Reg. § 1.701-2(d), ex. 4. ("Example 4"). For purposes of this rule filing and the proposed amendments, the Exchange uses those terms solely to describe a structure which is consistent with the structure described in Example 4 to a degree sufficient to qualify for the tax treatment described in Example 4 as in effect on the date of this filing (or any successor provision in the Internal Revenue Code which describes a structure which is materially identical to the structure described in Example 4).

management and employees of the REIT. In conjunction with the contribution of the initial portfolio of real estate assets, the REIT typically raises additional capital in an initial public offering.<sup>5</sup> In exchange for contributing the proceeds of the IPO and any subsequent offerings to the Operating Partnership, the REIT receives a number of OP Units corresponding to the number of shares sold by the REIT itself. Shareholders of the REIT receive exactly the same cash dividends as are paid to OP Unit holders, as the REIT passes through to its own shareholders the dividends it receives in relation to the OP Units it owns. After a specified period of time (typically one year after the IPO), the limited partners have the ability at any time to require the REIT to redeem their OP Units for a cash amount equal to the then market price of the REIT's common stock, subject to the REIT's right to satisfy that redemption requirement by issuing shares of its own common stock on a one-for-one basis in exchange for the OP Units.<sup>6</sup>

As is apparent from the above description, OP Units and shares of common stock of the REIT effectively have the same economic rights. Each OP Unit represents the same proportionate share in the assets of the Operating Partnership as a corresponding common share of the REIT and is exchangeable for either a share of the REIT or an amount in cash equal to the market value of a share of the REIT. It is the Exchange's understanding that the securities industry typically views the Operating Partnership as the relevant entity for analysis rather than the REIT, as the common stock of the REIT effectively functions as an indirect means of owning an equity interest in the overall enterprise represented by the Operating Partnership.

The question as to how the Exchange should treat the REIT and the Operating Partnership components of an UPREIT for fee purposes when both are listed companies has not previously arisen. One reason for this is that typically the Operating Partnership has very few direct investors and would therefore not qualify for listing. However, the

<sup>5</sup> A pre-existing REIT may also enter into an UPREIT structure, generally by contributing its assets to a new Operating Partnership in exchange for interests in the Operating Partnership and in conjunction with the contribution of real estate assets by third parties in exchange for OP Units. The Operating Partnership of an UPREIT structure can acquire additional portfolios of real estate assets in exchange for OP Units at any time after its inception.

<sup>6</sup> Generally, the REIT will elect to satisfy all redemption requests by issuing its own stock rather than by making cash payments.

possibility that both the REIT and the Operating Partnership might both be listed is not precluded by Exchange rules.<sup>7</sup>

The Exchange believes that the REIT and the Operating Partnership in an UPREIT structure are effectively a single entity, as they represent economic interests in the same enterprise and have a single management and board of directors, with the Operating Partnership relying entirely on the REIT for its management and corporate governance. Consequently, there are significant efficiencies for the Exchange in the listing and regulation of the two listed entities that constitute an UPREIT structure. In particular, the Exchange notes that a significant proportion of the regulatory cost it incurs in connection with the initial and continued listing of an issuer relates to the review by NYSE Regulation staff of the issuer's compliance with the board composition and board committee requirements set forth in Section 303A of the Manual.<sup>8</sup> As a limited partnership, the Operating Partnership component of an UPREIT structure is exempt from the Exchange's board and committee requirements with the exception of Section 303A.06, which requires the Operating Partnership to

<sup>7</sup> The Exchange has a significant number of listed limited partnerships which are listed under the initial listing standards for operating companies set forth in Section 102.01 of the Manual. As such, subject to compliance with all applicable listing requirements, the Operating Partnership component of an UPREIT could list under the existing listing standards for operating companies set forth in Section 102.01. As the Operating Partnership is not itself a REIT, it could not list under the REIT listing standard set forth in Section 102.05.

<sup>8</sup> The Exchange also incurs regulatory costs in reviewing compliance by listed issuers with the Exchange's initial and continued financial listing standards, which largely consists of a review of the issuer's financial statements. The Exchange believes that there would also be regulatory efficiencies in conducting financial compliance reviews of UPREITs, as the financial statements of the two entities are directly related, in that the REIT's financial statements simply represent its percentage ownership interest in the Operating Partnership. In particular, the Exchange notes that because the two entities' financial condition is directly interrelated, any significant deterioration in the financial condition or stock price of either issuer which causes that issuer to fall below compliance with the Exchange's financial listing standards would likely also cause the same compliance problem for the other issuer. As a consequence, if both the REIT and the Operating Partnership fall below compliance with the Exchange's ongoing financial listing standards, any compliance plan submissions would be virtually identical and therefore the NYSE Regulation staff's review, approval and ongoing monitoring of such plans would require substantially fewer resources than would normally be the case for two independent companies. Similarly, the Exchange believes that non-regulatory efficiencies would exist, as the Exchange's listings client service group, which communicates with listed issuers on a regular basis, would interact with one management team instead of two.

have an independent audit committee as required by SEC Rule 10A-3, and the additional audit committee requirements in Section 303A.07. As the Operating Partnership is controlled by the REIT in its capacity as general partner, the Operating Partnership is able to rely on the audit committee of the REIT's board for its compliance with Sections 303A.06 and 303A.07.<sup>9</sup> Consequently, for all practical purposes, NYSE Regulation staff can rely on their corporate governance compliance reviews of the REIT as a means of effectively monitoring the Operating Partnership's compliance.<sup>10</sup> The Exchange believes it is appropriate to recognize these cost efficiencies by providing some limited relief from its initial and annual listing fees to the two issuers that form an UPREIT structure if both are listed on the Exchange. Section 902.03 of the Manual provides that the minimum and maximum initial listing fees the first time an issuer lists a class of common shares are \$125,000 and \$250,000, respectively. The Exchange proposes to amend Section 902.03 to provide that, when the REIT and the Operating Partnership components of an UPREIT structure list at the same time, these minimum and maximum fee amounts will be applied to the aggregate fees payable by both issuers. In cases where the fees payable by the REIT and Operating Partnership components of an UPREIT are determined based on either the minimum or maximum fee levels, the fees will be allocated between the two issuers based on the percentage of the total outstanding OP Units represented by the OP Units owned by the REIT. In addition, the Exchange proposes to treat the REIT and Operating Partnership components of an UPREIT as a single issuer when applying the \$500,000 cap on all listing and annual fees payable by an issuer in a calendar year as set forth in Section 902.02 and to allocate those fees between the two issuers in the manner

<sup>9</sup> See Exchange Act Rule 10A-3(e)(3), which provides that "[I]n the case of a listed issuer that is a limited partnership or limited liability company where such entity does not have a board of directors or equivalent body, the term board of directors means the board of directors of the managing general partner, managing member or equivalent body." See also the discussion at page 18790 of the adopting release for Rule 10A-3, Release Nos. 33-8220 and 34-47654, 68 FR 18788 (April 16, 2003).

<sup>10</sup> The Exchange notes that NYSE Regulation's corporate governance compliance program relies largely on a review of required disclosures in issuers' annual meeting proxy statements. As the OP Unit holders do not have the right to elect directors, the Operating Partnership does not have an annual meeting proxy statement and the staff will rely on a review of the REIT's proxy statement as the basis for a combined review of both the REIT and the Operating Partnership.

described in the immediately preceding sentence. The Exchange does not believe that the limitation of the proposed amendments to the fee caps to issuers that are related as the component parts of an UPREIT structure is unfairly discriminatory. The UPREIT structure is distinctive in the degree to which the two component issuers function as a single economic enterprise with one management team and board. As the expectation is that these sorts of listings will be rare, the Exchange does not anticipate that it will experience any meaningful diminution in revenue as a result of the proposed amendments and therefore does not believe that the proposed amendments would in any way negatively affect its ability to continue to adequately fund its regulatory program or the services the Exchange provides to issuers. The Exchange also notes that the initial and annual listing fees applicable to all other REITs and operating companies are remaining unchanged, so no company that is not eligible to benefit from the proposed amendments is being asked to pay higher fees than it is currently paying.

## 2. Statutory Basis

The Exchange believes that the proposed rule change is consistent with Section 6(b) of the Securities Exchange Act of 1934 (the "Act"),<sup>11</sup> in general, and furthers the objectives of Section 6(b)(4) and 6(b)(5) of the Act,<sup>12</sup> 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 is consistent with Section 6(b)(5) of the Act, in particular in that it is designed 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.

The Exchange believes that the proposed rule change is consistent with Section 6(b)(5) of the Act in that it does not unfairly discriminatory [sic] among listed companies because there is a reasonable justification for charging UPREITs different fees from those

charged to other issuers and there are cost efficiencies for the Exchange in that the two listed issuers associated with an UPREIT represent essentially a single enterprise with a single management and board. In particular, the Exchange notes that a significant proportion of the regulatory cost it incurs in connection with the initial and continued listing of an issuer relates to the review by NYSE Regulation staff of the issuer's compliance with the board composition and board committee requirements set forth in Section 303A of the Manual. As the Operating Partnership is controlled by the REIT in its capacity as general partner, the Operating Partnership is able to rely on the audit committee of the REIT's board for its compliance with Sections 303A.06 and 303A.07.<sup>13</sup> Consequently, for all practical purposes, NYSE Regulation staff can rely on their corporate governance compliance reviews of the REIT as a means of effectively monitoring the Operating Partnership's compliance.<sup>14</sup>

The Exchange also notes that no other company will be required to pay higher fees as a result of the proposed amendments.

The Exchange believes that the proposed rule change is reasonable in light of the fact that the two listed issuers associated with an UPREIT share a single board of directors and management team and the listed securities represent equivalent economic interests in a single enterprise. In light of the regulatory and client service efficiencies and resultant cost savings to the Exchange resulting from this distinctive overlapping of corporate governance and economic interests in the UPREIT structure, the Exchange believes that it would be more equitable to establish an overall cap on what these affiliated entities would be required to pay for listing services. Moreover, the Exchange believes that the proposal is not unfairly discriminatory in that it will be available to all UPREITs; other listed companies do not present the same sort of overlapping economic interests and

<sup>13</sup> See note 9, supra.

<sup>14</sup> As noted above, the Exchange believes that there are also regulatory efficiencies in its financial compliance review process in regards to UPREITs, particularly because if both the REIT and the Operating Partnership fall below compliance with the Exchange's ongoing financial listing standards, any compliance plan submissions would be virtually identical and therefore the NYSE Regulation staff's review, approval and ongoing monitoring of such plans would require substantially fewer resources than were they for two independent companies. Similarly, the Exchange believes that non-regulatory efficiencies would exist, as the Exchange's listings client service group would interact with one management team instead of two. See note 10, supra.

<sup>11</sup> 15 U.S.C. 78f(b).

<sup>12</sup> 15 U.S.C. 78f(b)(4) and 15 U.S.C. 78f(b)(5).

governance structures that warrant common treatment of UPREITs for fee cap purposes.

#### *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.

#### *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)<sup>15</sup> of the Act and subparagraph (f)(2) of Rule 19b-4<sup>16</sup> thereunder, because it establishes a due, fee, or other charge imposed by the NYSE.

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.

### **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](mailto:rule-comments@sec.gov). Please include File Number SR-NYSE-2012-43 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-NYSE-2012-43. 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 Web site viewing and printing at the NYSE's principal office and on its Internet Web site at [www.nyse.com](http://www.nyse.com). 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-NYSE-2012-43 and should be submitted on or before October 9, 2012.

For the Commission, by the Division of Trading and Markets, pursuant to delegated authority.<sup>17</sup>

**Kevin M. O'Neill,**

*Deputy Secretary.*

[FR Doc. 2012-22964 Filed 9-17-12; 8:45 am]

**BILLING CODE 8011-01-P**

### **SECURITIES AND EXCHANGE COMMISSION**

[Release No. 34-67844; File No. SR-NYSEArca-2012-75]

#### **Self-Regulatory Organizations; NYSE Arca, Inc.; Order Approving a Proposed Rule Change Amending NYSE Arca Equities Rule 7.37(c) to Provide That the Tracking Order Process Is Available Only for Orders That Are Eligible To Route To an Away Market**

September 12, 2012.

### **I. Introduction**

On July 11, 2012, NYSE Arca, Inc. ("Exchange" or "NYSE Arca") filed with the Securities and Exchange

Commission ("Commission"), pursuant to Section 19(b)(1) of the Securities Exchange Act of 1934 ("Act")<sup>1</sup> and Rule 19b-4 thereunder,<sup>2</sup> a proposed rule change to amend NYSE Arca Equities Rule 7.37(c) to provide that the Tracking Order Process is available only for orders that are eligible to route to an away market. The proposed rule change was published for comment in the **Federal Register** on July 30, 2012.<sup>3</sup> The Commission received no comment letters regarding the proposed rule change. This order approves the proposed rule change.

### **II. Description of the Proposal**

The Exchange proposes to amend NYSE Arca Equities Rule 7.37(c) to specify that only orders that are eligible to route to an away market would participate in the Tracking Order Process. This proposed rule change would make Rule 7.37(c) consistent with the manner by which the Exchange operates the Tracking Order Process.

NYSE Arca Equities Rule 7.37 sets forth the Order Execution process at the Exchange. The Tracking Order Process is the fourth step in the Order Execution process, and is preceded by the Directed Order Process, Display Order Process and Working Order Process.<sup>4</sup> Currently, Rule 7.37(c) states that if an order has not been executed in its entirety in one of the processes preceding the Tracking Order Process, such order will enter the Tracking Order Process for potential matching and execution against Tracking Orders.<sup>5</sup> Rule 7.37(c) does not specify that among the orders that are not fully executed in the processes preceding the Tracking Order Process, it is only those that are eligible to route to an away market that participate in the Tracking Order Process. The proposed rule change would add this specification to Rule 7.37(c) to make the rule consistent with the operation of the Tracking Order Process.

The Exchange also proposes to delete provisions in current rule 7.37(c) stating that any portion of an order received from another market center or market participant is cancelled immediately, and an incoming order that is designated as an ISO does not interact in the Tracking Order Process.

<sup>1</sup> 15 U.S.C. 78s(b)(1).

<sup>2</sup> 17 CFR 240.19b-4.

<sup>3</sup> See Securities Exchange Act Release No. 67490 (July 24, 2012), 77 FR 44702 ("Notice").

<sup>4</sup> See NYSE Arca Equities Rule 7.37.

<sup>5</sup> Tracking Orders are undisplayed, priced round lot orders that are eligible for execution in the Tracking Order Process against orders equal to or less than the aggregate size of the Tracking Order interest at that price. See NYSE Arca Equities Rule 7.31(f).

<sup>15</sup> 15 U.S.C. 78s(b)(3)(A).

<sup>16</sup> 17 CFR 240.19b-4(f)(2).

<sup>17</sup> 17 CFR 200.30-3(a)(12).

According to the Exchange, these provisions are obviated by the proposed clarification in Rule 7.37(c) that only routable order types participate in the Tracking Order Process.

### III. Discussion and Commission Findings

After careful review, the Commission finds that the proposed rule change is consistent with the requirements of the Act and the rules and regulations thereunder applicable to a national securities exchange.<sup>6</sup> In particular, the Commission finds that the proposed rule change is consistent with Section 6(b)(5) of the Act,<sup>7</sup> which requires, among other things, that 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 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 are not designed to permit unfair discrimination between customers, issuers, brokers or dealers. The Commission notes that the Exchange believes that the proposed rule change removes impediments to and perfects the mechanism of a free and open market by providing transparency regarding the type of orders that are eligible to interact in the Tracking Order Process and eliminating obsolete rule text. Based on the Exchange's statements, the Commission believes that the proposed rule change is consistent with Section 6(b)(5) of the Act.<sup>8</sup>

### IV. Conclusion

It is therefore ordered, pursuant to Section 19(b)(2) of the Act,<sup>9</sup> that the proposed rule change (SR-NYSEArca-2012-75) be, and it hereby is, approved.

<sup>6</sup>In approving this proposed rule change, the Commission has considered the proposed rule's impact on efficiency, competition, and capital formation. See 15 U.S.C. 78c(f).

<sup>7</sup> 15 U.S.C. 78f(b)(5).

<sup>8</sup>The Commission notes that it recently approved a proposal by EDGA Exchange, Inc. to add a new order type called the Route Peg Order, which is a non-displayed limit order that, similar to the Tracking Order, is eligible to execute against only routable orders. See Securities Exchange Act Release No. 67726 (August 24, 2012), 77 FR 52771 (August 30, 2012) (SR-EDGA-2012-28).

<sup>9</sup> 15 U.S.C. 78s(b)(2).

For the Commission, by the Division of Trading and Markets, pursuant to delegated authority.<sup>10</sup>

Kevin M. O'Neill,  
Deputy Secretary.

[FR Doc. 2012-22916 Filed 9-17-12; 8:45 am]

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## SECURITIES AND EXCHANGE COMMISSION

[Release No. 34-67839; File No. SR-EDGA-2012-41]

### Self-Regulatory Organizations; EDGA Exchange, Inc.; Notice of Filing and Immediate Effectiveness of Proposed Rule Change Relating to Amendments to the EDGA Exchange, Inc. Fee Schedule

September 12, 2012.

Pursuant to Section 19(b)(1) of the Securities Exchange Act of 1934 (the "Act"),<sup>1</sup> and Rule 19b-4 thereunder,<sup>2</sup> notice is hereby given that on September 5, 2012 the EDGA Exchange, Inc. (the "Exchange" or "EDGA") filed with the Securities and Exchange Commission ("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 its fees and rebates applicable to Members<sup>3</sup> of the Exchange pursuant to EDGA Rule 15.1(a) and (c). All of the changes described herein are applicable to EDGA Members. The text of the proposed rule change is available on the Exchange's Internet Web site at <http://www.directedge.com>, at the Exchange's principal office, and at the Public Reference Room of the Commission.

#### 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 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 the Statutory Basis for, the Proposed Rule Change

##### 1. Purpose

The Exchange proposes to add Flag RP to the Exchange's fee schedule for Non-Displayed Orders that add liquidity using the Route Peg Order type.<sup>4</sup> The Exchange proposes to assess a charge of \$0.0005 per share for orders that yield Flag RP. The volume associated with Flag RP will also count towards the volume tiers for non-displayed orders that add liquidity.

As defined in Exchange Rule 11.5(c)(14), a Route Peg Order is a non-displayed limit order that posts to the EDGA Book, and thereafter is eligible for execution at the National Best Bid ("NBB") for buy orders and National Best Offer ("NBO"), and together with the NBB, the "NBBO") for sell orders against the original size of the routable orders that are equal to or less than the original size of the Route Peg Orders. Route Peg Orders are passive, resting orders on the EDGA Book and do not take liquidity. Route Peg Orders may be entered, cancelled, and cancelled/replaced prior to and during Regular Trading Hours.<sup>5</sup> Route Peg Orders are eligible for execution in a given security during Regular Trading Hours, except that, even after the commencement of Regular Trading Hours, Route Peg Orders are not eligible for execution (1) in the opening cross, and (2) until such time that regular session orders in that security can be posted to the EDGA Book. A Route Peg Order does not execute at a price that is inferior to a Protected Quotation, and is not permitted to execute if the NBBO is locked or crossed. Any and all remaining, unexecuted Route Peg Orders are cancelled at the conclusion of Regular Trading Hours.

The Exchange also proposes to amend the text of Footnote 2 of the fee schedule to list Flag RP as one of the non-displayed order types where the volume associated with Flag RP will count toward the volume threshold in Footnote 2.

The Exchange proposes to implement these amendments to its fee schedule on September 7, 2012.

<sup>4</sup> See Securities and Exchange Act Release No. 67726 (August 24, 2012) (SR-EDGA-2012-28).

<sup>5</sup> As defined in Rule 1.5(y).

<sup>10</sup> 17 CFR 200.30-3(a)(12).

<sup>1</sup> 15 U.S.C. 78s(b)(1).

<sup>2</sup> 17 CFR 240.19b-4.

<sup>3</sup> As defined in Rule 1.5(n).

## 2. Statutory Basis

The Exchange believes that the proposed rule change is consistent with the objectives of Section 6 of the Act,<sup>6</sup> in general, and furthers the objectives of Section 6(b)(4),<sup>7</sup> in particular, as it is designed to provide for the equitable allocation of reasonable dues, fees and other charges among its Members and other persons using its facilities.

The Exchange proposes to add Flag RP to the Exchange's fee schedule for Non-Displayed Orders that add liquidity using the Route Peg Order type. The Exchange believes that assessing a charge of \$0.0005 per share for orders that yield Flag RP represents an equitable allocation of reasonable dues, fees and other charges among its Members and other persons using its facilities because a rate of \$0.0005 per share is equal or less than the prevailing rates for other forms of non-displayed order types that add liquidity, (e.g., the Exchange assesses a charge of \$0.0005 per share for Flag DM and \$0.0010 per share for Flag HA). Within the non-displayed category of liquidity, Flag RP is similar to Flag DM in that both have lower order book priority in Rule 11.8(a)(2) compared to Flag HA (Non-Displayed Orders). Lower order book priority correlates to a lower chance of execution on EDGA, which justifies a lower price. Therefore, the Exchange is offering comparable pricing to Flag DM.

Furthermore, the Route Peg Order type gives the Member a valuable ability to control the interaction with certain types of contra-side liquidity (i.e., routable orders of equal or lesser size). The Mid-Point Discretionary Order ("MDO") (Flag DM) has a displayed component<sup>8</sup> and non-displayed component. The Exchange assesses a lower fee for the non-displayed component when compared to the standard displayed charge of \$0.0006 as an acknowledgement of the fact that the MDO also brings in valuable displayed liquidity. The Route Peg Order, on the other hand, has no displayed component, but has the lowest priority in the order book. Even though the priority is lower, the Exchange assigns the same charge to the Route Peg Order type as to Flag DM because of its unique features, as described above.

Similarly, the Exchange is assigning a lower charge for Flag RP when compared to the standard displayed charge of \$0.0006 because of its lower priority ranking in Rule 11.8(a)(2). The Exchange recently implemented a taker/maker model<sup>9</sup> to make the Exchange more attractive to liquidity takers for their routing decisions because liquidity takers would be receiving a rebate. For liquidity providers, it is an attractive place to post liquidity since liquidity takers are rebated to remove liquidity. Therefore, EDGA is ranked as one of the first markets in the intermarket queue on system routing tables because of its attractive removal rebate compared to other markets. As a result, liquidity providers are willing to pay a fee to compete to interact with these liquidity takers, resulting in a deeper order book. As such, order book priority is an important determinant of their interaction. The Exchange has set the fees for various orders types (Flags DM, RP, and HA) that reflect that order book priority. Therefore, orders that have a higher priority in the order book (displayed orders) will generally be charged more than orders of lower priority (e.g., Flag DM and RP) because they are more likely to interact with a liquidity taker and obtain a quicker execution.

By assessing a proposed rate of \$0.0005 per share for Flag RP, the Exchange believes it will encourage use of the new order type. In addition, the Exchange is setting the fee at such level in order to incentivize liquidity by encouraging Members to use Route Peg Orders (Flag RP) since these orders provide Members that enter them and other Members an additional way to offer/access liquidity at the NBBO, respectively. This contributes to additional depth of book at the NBBO. Furthermore, as stated in SR-EDGA-2012-28, the Exchange believes that by encouraging the use of the Route Peg Order, Members seeking to access liquidity at the NBBO would be more motivated to direct their orders to EDGA because they would have a heightened expectation of the availability of liquidity at the NBBO. The increased liquidity also benefits all investors by deepening EDGA's liquidity pool, offering additional flexibility for all investors to enjoy cost savings, supporting the quality of price discovery, and improving investor protection. In addition, a User<sup>10</sup> whose order executed against a Route Peg Order would be able to obtain an execution at the NBB or NBO while

minimizing the risk that incremental latency associated with routing the order to an away destination may result in an inferior execution.

The Exchange's proposal to amend the text of Footnote 2<sup>11</sup> of the fee schedule to list Flag RP as one of the non-displayed order types where the volume associated with Flag RP will count toward the volume threshold in Footnote 2 is reasonable and equitable as the volume tiers in Footnote 2 include "non-displayed" liquidity flags and Flag RP is a non-displayed liquidity flag. Therefore, the Exchange believes it is appropriate to include Flag RP in Footnote 2 in order to provide additional transparency to Members.

Lastly, the Exchange also believes that the proposed amendment is non-discriminatory because it applies uniformly to all Members.

The Exchange also notes that it operates in a highly-competitive market in which market participants can readily direct order flow to competing venues if they deem fee levels at a particular venue to be excessive. The proposed rule change reflects a competitive pricing structure designed to incent market participants to direct their order flow to the Exchange. The Exchange believes that the proposed rates are equitable and non-discriminatory in that they apply uniformly to all Members. The Exchange believes the fees and credits remain competitive with those charged by other venues and therefore continue to be reasonable and equitably allocated to Members.

### *B. Self-Regulatory Organization's Statement on Burden on Competition*

The proposed rule change does not impose any burden on competition that is not necessary or appropriate in furtherance of the purposes of the Act.

### *C. Self-Regulatory Organization's Statement on Comments on the Proposed Rule Change Received From Members, Participants, or Others*

The Exchange has not solicited, and does not intend to solicit, comments on this proposed rule change. The Exchange has not received any unsolicited written comments from Members or other interested parties.

<sup>11</sup> Footnote 2 currently provides that rates for Flags HA and HR are contingent upon Members adding or removing greater than 1,000,000 shares non-displayed (hidden) on a daily basis, measured monthly (yield Flags HA, HR, DM and DT) or Member posting greater than 8,000,000 shares on a daily basis, measured monthly. Members not meeting either minimum will be charged \$0.0030 per share for Flags HA and HR.

<sup>6</sup> 15 U.S.C. 78f.

<sup>7</sup> 15 U.S.C. 78f(b)(4).

<sup>8</sup> See Securities Exchange Act Release No. 67226 (June 20, 2012), 77 FR 38113 (June 26, 2012) (SR-EDGA-2012-22) (The MDO has two discrete components—a displayed portion that is pegged to the national best bid or national best offer, and a non-displayed portion which gives discretion to execute to the mid-point of the national best bid/offer ("NBBO"), subject to certain limits).

<sup>9</sup> See SR-EDGA-2012-39 (August 30, 2012).

<sup>10</sup> As defined in Rule 1.5(ee).

### 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) of the Act<sup>12</sup> and Rule 19b-4(f)(2)<sup>13</sup> thereunder. 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.

### 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](mailto:rule-comments@sec.gov). Please include File Number SR-EDGA-2012-41 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-EDGA-2012-41. 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

a.m. and 3 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-EDGA-2012-41 and should be submitted on or before October 9, 2012.

For the Commission, by the Division of Trading and Markets, pursuant to delegated authority.<sup>14</sup>

Kevin M. O'Neill,

Deputy Secretary.

[FR Doc. 2012-22912 Filed 9-17-12; 8:45 am]

BILLING CODE 8011-01-P

## SECURITIES AND EXCHANGE COMMISSION

[Release No. 34-67840; File No. SR-EDGX-2012-41]

### Self-Regulatory Organizations; EDGX Exchange, Inc.; Notice of Filing and Immediate Effectiveness of Proposed Rule Change Relating to Amendments to the EDGX Exchange, Inc. Fee Schedule

September 12, 2012.

Pursuant to Section 19(b)(1) of the Securities Exchange Act of 1934 (the "Act"),<sup>1</sup> and Rule 19b-4 thereunder,<sup>2</sup> notice is hereby given that on September 5, 2012 the EDGX Exchange, Inc. (the "Exchange" or "EDGX") filed with the Securities and Exchange Commission ("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 its fees and rebates applicable to Members<sup>3</sup> of the Exchange pursuant to EDGX Rule 15.1(a) and (c). All of the changes described herein are applicable to EDGX Members. The text of the proposed rule change is available on the Exchange's Internet Web site at <http://www.directedge.com>, at the Exchange's

principal office, and at the Public Reference Room of the Commission.

#### 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 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 the Statutory Basis for, the Proposed Rule Change

###### 1. Purpose

The Exchange proposes to add Flag RP to the Exchange's fee schedule for Non-Displayed Orders that add liquidity using the Route Peg Order type.<sup>4</sup> The Exchange proposes to offer a rebate of \$0.0015 per share for orders that yield Flag RP. The volume associated with Flag RP will also count towards the volume tiers for orders that add liquidity. Accordingly, the Exchange proposes making conforming changes to the text of Footnotes 12 and 13 to include Flag RP as part of the "added flags."

As defined in Exchange Rule 11.5(c)(17), a Route Peg Order is a non-displayed limit order that posts to the EDGX Book, and thereafter is eligible for execution at the National Best Bid ("NBB") for buy orders and National Best Offer for sell orders ("NBO", and together with the NBB, the "NBBO") against the original size of the routable orders that are equal to or less than the original size of the Route Peg Orders. Route Peg Orders are passive, resting orders on the EDGX Book and do not take liquidity. Route Peg Orders may be entered, cancelled, and cancelled/replaced prior to and during Regular Trading Hours.<sup>5</sup> Route Peg Orders are eligible for execution in a given security during Regular Trading Hours, except that, even after the commencement of Regular Trading Hours, Route Peg Orders are not eligible for execution (1) in the opening cross, and (2) until such time that regular session orders in that security can be posted to the EDGX Book. A Route Peg Order does not

<sup>14</sup> 17 CFR 200.30-3(a)(12).

<sup>15</sup> 15 U.S.C. 78s(b)(1).

<sup>2</sup> 17 CFR 240.19b-4.

<sup>3</sup> As defined in Rule 1.5(n).

<sup>4</sup> See Securities and Exchange Act Release No. 67727 (August 24, 2012), (SR-EDGX-2012-25).

<sup>5</sup> As defined in Rule 1.5(y).

<sup>12</sup> 15 U.S.C. 78s(b)(3)(A).

<sup>13</sup> 17 CFR 19b-4(f)(2).

execute at a price that is inferior to a Protected Quotation, and is not permitted to execute if the NBBO is locked or crossed. Any and all remaining, unexecuted Route Peg Orders are cancelled at the conclusion of Regular Trading Hours.

The Exchange proposes to implement these amendments to its fee schedule on September 7, 2012.

## 2. Statutory Basis

The Exchange believes that the proposed rule change is consistent with the objectives of Section 6 of the Act,<sup>6</sup> in general, and furthers the objectives of Section 6(b)(4),<sup>7</sup> in particular, as it is designed to provide for the equitable allocation of reasonable dues, fees and other charges among its Members and other persons using its facilities.

The Exchange proposes to add Flag RP to the Exchange's fee schedule for Non-Displayed Orders that add liquidity using the Route Peg Order type. The Exchange believes that offering a rebate of \$0.0015 per share for orders that yield Flag RP represents an equitable allocation of reasonable dues, fees and other charges among its Members and other persons using its facilities because a rebate of \$0.0015 per share is equal to the prevailing rebate of \$0.0015 that the Exchange offers for Flag HA, which is a non-displayed order type that adds liquidity but less than the default rebate of \$0.0023 per share for adding displayed liquidity on EDGX. By offering a proposed rebate of \$0.0015 per share for Flag RP, the Exchange believes it will encourage use of the new order type, while maintaining consistency with the Exchange's overall pricing philosophy of encouraging displayed liquidity. In addition, the Exchange is setting the rebate at such level in order to incentivize liquidity by encouraging Members to use Route Peg Orders (Flag RP) since these orders provide Members that enter them and other Members an additional way to offer/access liquidity at the NBBO, respectively. In addition, since Flag RP has lowest priority according to Rule 11.8(a)(2), it would otherwise be rebated more than Flag HA, which has a higher priority. However, the Exchange is offering the same rebate as Flag HA because of the Route Peg Order type's unique features which provides Members the ability to control interaction with certain types of contra-side liquidity (*i.e.*, routable orders of equal or lesser size). This contributes to additional depth of book at the NBBO.

Furthermore, as stated in SR-EDGX-2012-25, the Exchange believes that by encouraging the use of the Route Peg Order, Members seeking to access liquidity at the NBBO would be more motivated to direct their orders to EDGX because they would have a heightened expectation of the availability of liquidity at the NBBO. The increased liquidity also benefits all investors by deepening EDGX's liquidity pool, offering additional flexibility for all investors to enjoy cost savings, supporting the quality of price discovery, and improving investor protection. In addition, a User<sup>8</sup> whose order executed against a Route Peg Order would be able to obtain an execution at the NBB or NBO while minimizing the risk that incremental latency associated with routing the order to an away destination may result in an inferior execution.

The Exchange believes that offering a proposed rebate of \$0.0015 per share for orders that yield Flag RP is reasonable because the pricing is similar to analogous order types offered by other exchanges. On NASDAQ, customers earn a rebate of \$0.0015 per share executed for MPIDs adding less than 1 million shares of Supplemental Orders and customers earn a rebate of \$0.0018 per share executed for MPIDs adding greater than 1 million shares of Supplemental Orders.<sup>9</sup> Similarly, NYSE Arca offers the Tracking Order type where its customers earn credits ranging from \$0.001 to \$0.0015 per share based on achieving applicable tiers.<sup>10</sup> Lastly, the Exchange believes that the proposed amendment is non-discriminatory because it applies uniformly to all Members.

The Exchange's proposal to amend the text of Footnotes 12 and 13 of the fee schedule to list Flag RP as one of the "added flags" where the volume

associated with Flag RP will count toward the volume thresholds in Footnotes 12 and 13 is reasonable and equitable as the volume tiers in Footnotes 12 and 13 include "added" liquidity flags and Flag RP is an added liquidity flag. The Exchange notes that the liquidity ratio will now capture the RP "add flag" as one of several add flags in the calculation of the "add liquidity" ratio.<sup>11</sup> The Exchange believes this amendment to Footnotes 12 and 13 supports the Exchange's efforts to achieve consistent application and specificity among the flags on the fee schedule and provide transparency for its Members.

The Exchange believes that the above proposal is nondiscriminatory in that it applies uniformly to all Members.

The Exchange also notes that it operates in a highly-competitive market in which market participants can readily direct order flow to competing venues if they deem fee levels at a particular venue to be excessive. The proposed rule change reflects a competitive pricing structure designed to incent market participants to direct their order flow to the Exchange. The Exchange believes that the proposed rates are equitable and non-discriminatory in that they apply uniformly to all Members. The Exchange believes the fees and credits remain competitive with those charged by other venues and therefore continue to be reasonable and equitably allocated to Members.

### *B. Self-Regulatory Organization's Statement on Burden on Competition*

The proposed rule change does not impose any burden on competition that is not necessary or appropriate in furtherance of the purposes of the Act.

### *C. Self-Regulatory Organization's Statement on Comments on the Proposed Rule Change Received From Members, Participants, or Others*

The Exchange has not solicited, and does not intend to solicit, comments on this proposed rule change. The Exchange has not received any unsolicited written comments from members or other interested parties.

### **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) of

<sup>8</sup> As defined in Rule 1.5(ee).

<sup>9</sup> See Securities Exchange Act Release No. 66540 (March 8, 2012), 77 FR 15167 (March 14, 2012) (SR-NASDAQ-2012-031). The Route Peg Order is functionally similar to NASDAQ's Supplemental Order type, as the Supplemental Order is a non-displayed order that posts to the book, that is accessed only after other liquidity on the NASDAQ book, and that executes only at the NBBO. See also NASDAQ's Price List—Trading & Connectivity, at <http://www.nasdaqtrader.com/Trader.aspx?id=PriceListTrading2>.

<sup>10</sup> See Securities Exchange Act Release No. 60944 (November 5, 2009), 74 FR 58668 (November 13, 2009) (SR-NYSEArca-2009-99). The Route Peg Order is functionally similar to NYSE Arca's Tracking Order type, which is a non-displayed order that will only execute at the NBBO and incoming orders are matched against all other orders on the book before executing against NYSE Arca's Tracking Orders. See also NYSE Arca Equities Order Types, at [https://usequities.nyx.com/sites/usequities.nyx.com/files/nyse\\_arca\\_marketplace\\_fees\\_8\\_01\\_12.pdf](https://usequities.nyx.com/sites/usequities.nyx.com/files/nyse_arca_marketplace_fees_8_01_12.pdf).

<sup>11</sup> The "add liquidity" ratio is the ratio of the "added" flags/("added" flags + "removal" flags) × 100. If the resulting ratio is equal to or greater than 10%, the MPID qualifies for the lower removal rate of \$0.0029 per share instead of \$0.0030 per share.

<sup>6</sup> 15 U.S.C. 78f.

<sup>7</sup> 15 U.S.C. 78f(b)(4).

the Act<sup>12</sup> and Rule 19b-4(f)(2)<sup>13</sup> thereunder. 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.

#### 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](mailto:rule-comments@sec.gov). Please include File Number SR-EDGX-2012-41 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-EDGX-2012-41. 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 a.m. and 3 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-EDGX-2012-41 and should be submitted on or before October 9, 2012.

For the Commission, by the Division of Trading and Markets, pursuant to delegated authority.<sup>14</sup>

**Kevin M. O'Neill,**

*Deputy Secretary.*

[FR Doc. 2012-22913 Filed 9-17-12; 8:45 am]

**BILLING CODE 8011-01-P**

## SECURITIES AND EXCHANGE COMMISSION

[Release No. 34-67841; File No. SR-NYSEArca-2012-99]

### Self-Regulatory Organizations; NYSE Arca, Inc.; Notice of Filing and Immediate Effectiveness of Proposed Rule Change Amending NYSE Arca Equities Rule 7.31(d) To Provide That an Inside Limit Order Designated as a Primary Until 9:45 Order or a Primary After 3:55 Order Will Follow the Order Processing of an Inside Limit Order Only When the Order Is On the NYSE Arca Book

September 12, 2012.

Pursuant to Section 19(b)(1)<sup>1</sup> of the Securities Exchange Act of 1934 (the "Act")<sup>2</sup> and Rule 19b-4 thereunder,<sup>3</sup> notice is hereby given that, on August 31, 2012, NYSE Arca, Inc. ("NYSE Arca" or the "Exchange") filed with the Securities and Exchange Commission (the "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 amend NYSE Arca Equities Rule 7.31(d) to provide that an Inside Limit Order designated as a Primary Until 9:45 Order or a Primary After 3:55 Order will follow the order processing of an Inside Limit Order only when the order is on the NYSE Arca Book.

The text of the proposed rule change is available on the Exchange's Web site at [www.nyse.com](http://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 NYSE Arca Equities Rule 7.31(d) to provide that an Inside Limit Order designated as either a Primary Until 9:45 Order or a Primary After 3:55 Order will follow the order processing of an Inside Limit Order only when the order is on the NYSE Arca Book and to clarify that the order processing of the inside limit order is repeated at each next best displayed price.

As defined in NYSE Arca Equities Rule 7.31(d), an Inside Limit Order is a Limit Order, which, if routed away pursuant to NYSE Arca Equities Rule 7.37(d), will be routed to the market participant with the best displayed price. Any unfilled portion of the order will not be routed to the next best price level until all quotes at the current best bid or offer are exhausted. Once each current best bid or offer is exhausted, Exchange systems will repeat the process at each new best displayed price level until the order is filled or no longer marketable.

The Exchange proposes to amend Rule 7.31(d) to clarify that this process is repeated at each next best displayed price. Once the Inside Limit Order is no longer marketable it will be ranked in the NYSE Arca Book pursuant to NYSE Arca Equities Rule 7.36. An Inside Limit Order is "marketable" when it is priced to buy (sell) at or above (below) the national best bid or offer for the security.

The purpose of the Inside Limit Order is to assess away market displayed interest on a price-by-price basis, thereby slowing down the routing of such order, rather than simultaneously routing an order to away markets at

<sup>14</sup> 17 CFR 200.30-3(a)(12).

<sup>15</sup> 15 U.S.C. 78s(b)(1).

<sup>2</sup> 15 U.S.C. 78a.

<sup>3</sup> 17 CFR 240.19b-4.

<sup>12</sup> 15 U.S.C. 78s(b)(3)(A).

<sup>13</sup> 17 CFR 19b-4(f)(2).

potentially multiple prices. For example, if the national best bid and offer is 10.10 by 10.12, and the Exchange receives an order to buy with a limit of 10.15, in addition to executing with the interest on the Exchange's book, the Exchange will route the balance of the order to all protected quotes, including quotes with an inferior price than the NBO (e.g., any protected offers priced at 10.13 or higher), up to the limit order price of 10.15.<sup>4</sup> By contrast, an Inside Limit Order with a price of 10.15 would be matched with interest on the Arca Book and routed only to away market interest priced at the NBO of 10.12. After routing to the 10.12 offer(s), Exchange systems will reevaluate the next best displayed offer price, and route to that single price point and continue such assessment at each price point until either the limit order has been filled, or there is no further interest available to satisfy the limit order price either at the Exchange or at away markets.

As defined in NYSE Arca Equities Rule 7.31(oo), a Primary Until 9:45 Order is an Order entered for participation on the primary market until 9:45 a.m. Eastern Time, after which time the order is cancelled on the primary market and entered on the NYSE Arca Book. Orders that return to the NYSE Arca Book after routing to the primary market will retain their original order attributes.

As defined in NYSE Arca Equities Rule 7.31(pp), a Primary After 3:55 Order is an Order entered for participation on the Exchange until 3:55 p.m. Eastern Time (12:55 p.m. Pacific Time) after which time the order is cancelled on the Exchange and an order is entered for participation on the primary market. Orders that route to the primary market at 3:55 p.m. Eastern Time will retain their original order attributes.

As currently defined, the Primary Until 9:45 Order and Primary After 3:55 Order are available to orders entered for participation on the Exchange, except for orders that, by definition, do not route, and currently, Inside Limit Orders. The Exchange proposes to amend NYSE Arca Equities Rule 7.31(d) to clarify that when an Inside Limit Order is designated as a Primary Until 9:45 Order or as a Primary After 3:55 Order, it will follow the order processing set forth in Rule 7.31(d), i.e., that if routed, it would be routed to the market participant with the best displayed price, only when the Inside Limit Order is on the NYSE Arca Book. Accordingly, when an Inside Limit

Order is routed to the primary market pursuant to the terms of a Primary Until 9:45 Order or a Primary After 3:55 Order, such order will be routed as a straight limit order to the primary market, and the order processing of an Inside Limit Order will be applicable only if it returns to the NYSE Arca Book (in the case of a Primary Until 9:45 Order) or before it is routed to the primary market (in the case of a Primary After 3:55 Order). The Exchange is proposing this rule change to make clear that the routing process of the Inside Limit Order, i.e., routing to the best displayed price, will not be in effect when the Primary Until 9:45 Order or Primary After 3:55 Order is applicable, because during those periods, the entirety of the order would be routed to the primary market, regardless of whether the primary market is displaying the best price.

The Exchange believes that the proposed rule change provides transparency in the rules regarding the order processing applicable to Inside Limit Orders when such an order is routed to a primary market pursuant to the terms of a Primary Until 9:45 Order or a Primary After 3:55 Order.

The Exchange will announce the implementation date of the proposed rule change in a Trader Update to be published no later than 30 days following the date of filing. The implementation date will be no later than 30 days following publication of the Trader Update announcing the rule change.

## 2. Statutory Basis

The proposed rule change is consistent with Section 6(b) of the Securities Exchange Act of 1934 (the "Act"),<sup>5</sup> in general, and furthers the objectives of Section 6(b)(5),<sup>6</sup> 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, 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 proposed change to the Inside Limit Order meets these requirements because it provides that the order processing of an Inside Limit Order will only be applicable when such an order is on the NYSE Arca Book, and will not be applicable if the order is routed to a

primary market pursuant to the terms of a Primary Until 9:45 Order or Primary After 3:55 Order. Accordingly, the proposed rule change will remove impediments to and perfect the mechanism of a free and open market and national market system by providing transparency in the rules regarding the order processing applicable to Inside Limit Orders when such an order is routed to a primary market pursuant to the terms of a Primary Until 9:45 Order or a Primary After 3:55 Order.

## 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.

## 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 Exchange has filed the proposed rule change pursuant to Section 19(b)(3)(A)(iii) of the Act<sup>7</sup> and Rule 19b-4(f)(6) thereunder.<sup>8</sup> 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 prior to 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 Act and Rule 19b-4(f)(6)(iii) thereunder.

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.

## IV. Solicitation of Comments

Interested persons are invited to submit written data, views, and arguments concerning the foregoing,

<sup>5</sup> 15 U.S.C. 78f(b).

<sup>6</sup> 15 U.S.C. 78f(b)(5).

<sup>7</sup> 15 U.S.C. 78s(b)(3)(A)(iii).

<sup>8</sup> 17 CFR 240.19b-4(f)(6).

<sup>4</sup> See NYSE Arca Equities Rule 7.37(d)(2)(B).

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](mailto:rule-comments@sec.gov). Please include File Number SR-NYSEArca-2012-99 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-2012-99. 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 a.m. and 3 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-2012-99 and should be submitted on or before October 9, 2012.

For the Commission, by the Division of Trading and Markets, pursuant to delegated authority.<sup>9</sup>

**Kevin M. O'Neill,**  
Deputy Secretary.

[FR Doc. 2012-22914 Filed 9-17-12; 8:45 am]

**BILLING CODE 8011-01-P**

<sup>9</sup> 17 CFR 200.30-3(a)(12).

## DEPARTMENT OF STATE

### [Public Notice 8028]

#### Culturally Significant Objects Imported for Exhibition Determinations: "City of Gold: Tomb and Temple in Ancient Cyprus"

**SUMMARY:** Notice is hereby given of the following determinations: Pursuant to the authority vested in me by the Act of October 19, 1965 (79 Stat. 985; 22 U.S.C. 2459), Executive Order 12047 of March 27, 1978, the Foreign Affairs Reform and Restructuring Act of 1998 (112 Stat. 2681, *et seq.*; 22 U.S.C. 6501 note, *et seq.*), Delegation of Authority No. 234 of October 1, 1999, and Delegation of Authority No. 236-3 of August 28, 2000, I hereby determine that the objects to be included in the exhibition "City of Gold: Tomb and Temple in Ancient Cyprus," imported from abroad for temporary exhibition within the United States, are of cultural significance. The objects are imported pursuant to loan agreements with the foreign owners or custodians. I also determine that the exhibition or display of the exhibit objects at the Princeton University Art Museum, Princeton, New Jersey, from on or about October 20, 2012, until on or about January 20, 2013, and at possible additional exhibitions or venues yet to be determined, is in the national interest. I have ordered that Public Notice of these Determinations be published in the **Federal Register**.

**FOR FURTHER INFORMATION CONTACT:** For further information, including a list of the exhibit objects, contact Paul W. Manning, Attorney-Adviser, Office of the Legal Adviser, U.S. Department of State (telephone: 202-632-6469). The mailing address is U.S. Department of State, SA-5, L/DP, Fifth Floor (Suite 5H03), Washington, DC 20522-0505.

Dated: September 11, 2012.

**Ann Stock,**

*Assistant Secretary, Bureau of Educational and Cultural Affairs, Department of State.*

[FR Doc. 2012-23008 Filed 9-17-12; 8:45 am]

**BILLING CODE 4710-05-P**

## DEPARTMENT OF STATE

### [Public Notice 8029]

#### Culturally Significant Objects Imported for Exhibition Determinations: "The Place of Provenance—Regional Styles in Tibetan Painting"

**SUMMARY:** Notice is hereby given of the following determinations: Pursuant to the authority vested in me by the Act of October 19, 1965 (79 Stat. 985; 22 U.S.C. 2459), Executive Order 12047 of March

27, 1978, the Foreign Affairs Reform and Restructuring Act of 1998 (112 Stat. 2681, *et seq.*; 22 U.S.C. 6501 note, *et seq.*), Delegation of Authority No. 234 of October 1, 1999, and Delegation of Authority No. 236-3 of August 28, 2000, I hereby determine that the objects to be included in the exhibition "The Place of Provenance—Regional Styles in Tibetan Painting," imported from abroad for temporary exhibition within the United States, are of cultural significance. The objects are imported pursuant to loan agreements with the foreign owners or custodians. I also determine that the exhibition or display of the exhibit objects at the Rubin Museum of Art, New York, New York, from on or about October 12, 2012, until on or about March 25, 2013, and at possible additional exhibitions or venues yet to be determined, is in the national interest. I have ordered that Public Notice of these Determinations be published in the **Federal Register**.

**FOR FURTHER INFORMATION CONTACT:** For further information, including a list of the exhibit objects, contact Paul W. Manning, Attorney-Adviser, Office of the Legal Adviser, U.S. Department of State (telephone: 202-632-6469). The mailing address is U.S. Department of State, SA-5, L/DP, Fifth Floor (Suite 5H03), Washington, DC 20522-0505.

Dated: September 11, 2012.

**Ann Stock,**

*Assistant Secretary, Bureau of Educational and Cultural Affairs, Department of State.*

[FR Doc. 2012-23006 Filed 9-17-12; 8:45 am]

**BILLING CODE 4710-05-P**

## DEPARTMENT OF STATE

### [Public Notice 8031]

#### Shipping Coordinating Committee; Notice of Committee Meeting

The Shipping Coordinating Committee (SHC) will conduct an open meeting at 9:30 a.m. on Friday, October 26, 2012, in Room 1200 of the United States Coast Guard Headquarters Building, 2100 Second Street, SW., Washington, DC 20593-7126. The primary purpose of the meeting is to prepare for the one-hundred and ninth Session of the IMO Council Session (C 109) to be held at the IMO Headquarters, United Kingdom, from November 5-9, 2012.

The agenda items to be discussed include:

- Adoption of the agenda
- Report of the Secretary-General on credentials
- Strategy, planning and reform
- Resource management:

- Human resource matters, including amendments to the Staff Regulations and Staff Rules
  - Recommendations of the External Auditor: implementation action plan
  - Report on arrears of contributions and of advances to the Working Capital Fund and on the implementation of Article 61 of the IMO Convention
  - Budget considerations for 2012 and 2013
  - Development of a long-term plan for the future financial sustainability of the Organization
  - Voluntary IMO Member State Audit Scheme
  - Consideration of the report of the Marine Environment Protection Committee
  - Report on the 34th Consultative Meeting of Contracting Parties to the London Convention 1972 and the 7th Meeting of Contracting Parties to the 1996 Protocol to the London Convention
  - Report on the 2012 Conference for the adoption of an agreement on the implementation of the 1993 Protocol relating to the 1977 Torremolinos Convention on the Safety of Fishing Vessels
  - IMO International Maritime Law Institute: review of the IMLI Statute
  - Protection of vital shipping lanes
  - Periodic review of administrative requirements in mandatory IMO instruments
  - External relations:
    - Relations with the United Nations and the specialized agencies
    - Joint Inspection Unit
    - Relations with intergovernmental organizations
    - Relations with non-governmental organizations
    - Day of the Seafarer
    - Report on World Maritime Day 2012
  - Report on the status of the Convention and membership of the Organization
  - Report on the status of conventions and other multilateral instruments in respect of which the Organization performs functions
  - Substantive items for inclusion in the provisional agendas for the next two sessions of the Council
  - Place, date and duration of the next session of the Council
  - Supplementary agenda items, if any
- Members of the public may attend this meeting up to the seating capacity of the room. To facilitate the building security process, those who plan to attend should contact the meeting coordinator, LCDR Matthew Frazee, by

email at [imo@uscg.mil](mailto:imo@uscg.mil); by phone at (202) 372-1376; or in writing at Commandant (CG-5PS), U.S. Coast Guard Headquarters, 2100 2nd Street SW STOP 7126, Room 1200, Washington, DC 20593-7126, not later than 7 days before the meeting. Please note that due to security considerations, two valid, government issued photo identifications must be presented to gain entrance to the Headquarters building. The Headquarters building is accessible by taxi and privately owned conveyance (public transportation is not generally available), however, parking in the vicinity of the building is extremely limited. Additional information regarding this and other IMO SHC public meetings may be found at: [www.uscg.mil/imo](http://www.uscg.mil/imo).

Dated: September 12, 2012.

**Brian Robinson,**

*Executive Secretary, Shipping Coordinating Committee, Department of State.*

[FR Doc. 2012-23007 Filed 9-17-12; 8:45 am]

**BILLING CODE 4710-09-P**

## DEPARTMENT OF STATE

### [Public Notice 8030]

#### Shipping Coordinating Committee; Notice of Committee Meeting

The Shipping Coordinating Committee (SHC) will conduct an open meeting at 9:30 a.m. on Friday, November 16, in Room 2501 of the United States Coast Guard Headquarters Building, 2100 Second Street SW., Washington, DC 20593-7126. The primary purpose of the meeting is to prepare for the ninety-first Session of the International Maritime Organization's (IMO) Marine Safety Committee to be held at the IMO Headquarters, London, England, United Kingdom, November 26-30, 2012.

The matters to be considered include:

- Adoption of the agenda; report on credentials;
- Decisions of other IMO bodies;
- Consideration and adoption of amendments to mandatory instruments;
- Measures to enhance maritime security;
- Goal-based new ship construction standards;
- LRIT-related matters;
- Passenger ship safety;
- Making the Polar Code mandatory;
- Radiocommunications and search and rescue (report of the sixteenth session of the Sub-Committee);
- Flag State implementation (report of the twentieth session of the Sub-Committee);

- Training and Watchkeeping (report of the forty-third session of the Sub-Committee);
- Safety of navigation (report of the fifty-eighth session of the Sub-Committee);
- Dangerous goods, solid cargoes and containers (urgent matters emanating from the seventeenth session of the Sub-Committee);
- Technical co-operation activities relating to maritime safety and security;
- Capacity-building for the implementation of new measures;
- Formal safety assessment;
- Piracy and armed robbery against ships;
- Implementation of instruments and related matters;
- Work programme;
- Election of Chairman and Vice-Chairman for 2013;
- Any other business;
- Consideration of the report of the Committee on its ninety-first session.

Members of the public may attend this meeting up to the seating capacity of the room. To facilitate the building security process, and to request reasonable accommodation, those who plan to attend should contact the meeting coordinator, LCDR Matthew Frazee, by email at [imo@uscg.mil](mailto:imo@uscg.mil); by phone at (202) 372-1376; or in writing at Commandant (CG-5PS), U.S. Coast Guard, 2100 2nd Street SW., Stop 7126, Washington, DC 20593-7126. Requests should be made no later than November 9, 2012. Requests made after this date might not be able to be accommodated. Please note that due to security considerations, two valid, government issued photo identifications must be presented to gain entrance to the Headquarters building. The Headquarters building is accessible by taxi and privately owned conveyance (public transportation is not generally available), however, parking in the vicinity of the building is extremely limited. Additional information regarding this and other IMO SHC public meetings may be found at: [www.uscg.mil/imo](http://www.uscg.mil/imo).

Dated: September 12, 2012.

**Brian Robinson,**

*Executive Secretary, Shipping Coordinating Committee, Department of State.*

[FR Doc. 2012-23005 Filed 9-17-12; 8:45 am]

**BILLING CODE 4710-09-P**

**DEPARTMENT OF STATE**

[Public Notice 8027]

**Privacy Act; System of Records: Records of the Office of White House Liaison, State-34**

**SUMMARY:** Notice is hereby given that the Department of State proposes to amend an existing system of records, Records of the Office of White House Liaison, State-34, pursuant to the provisions of the Privacy Act of 1974, as amended (5 U.S.C.552a) and Office of Management and Budget Circular No. A-130, Appendix I.

**DATES:** This system of records will be effective on October 29, 2012, unless we receive comments that will result in a contrary determination.

**ADDRESSES:** Any persons interested in commenting on the amended system of records may do so by writing to the Director, Office of Information Programs and Services, A/GIS/IPS, Department of State, SA-2, 515 22nd Street NW., Washington, DC 20522-8001.

**FOR FURTHER INFORMATION CONTACT:** Director, Office of Information Programs and Services, A/GIS/IPS, Department of State, SA-2, 515 22nd Street NW., Washington, DC 20522-8001.

**SUPPLEMENTARY INFORMATION:** The Department of State proposes that the current system will retain the name "Records of the Office of White House Liaison" (64 FR 922). The system maintains information used by the White House Liaison Office for the consideration, review, clearance and appointment of an individual to a non-career appointment. The amended system of records will include modifications to the following sections: Categories of Individuals Covered by the System, Categories of Records in the System, Routine Uses, Safeguards, Retrievability, Retention and Disposal, and administrative updates. The following section has been added to the system of records, Records of the Office of White House Liaison, State-34, to ensure Privacy Act of 1974 compliance: Purpose.

The Department's report was filed with the Office of Management and Budget. The amended system description, "Records of the Office of

White House Liaison, State-34," will read as set forth below.

**Joyce A. Barr,**  
*Assistant Secretary for Administration, U.S. Department of State.*

**STATE-34****SYSTEM NAME:**

Records of the Office of White House Liaison.

**SECURITY CLASSIFICATION:**

Classified and Unclassified.

**SYSTEM LOCATION:**

Department of State; 2201 C Street, NW; Washington, DC 20520.

**CATEGORIES OF INDIVIDUALS COVERED BY THE SYSTEM:**

Potential candidates and candidates who are being considered for non-career appointments within the Department of State including Presidential appointments requiring Senate confirmation, non-career Senior Executive Service, Schedule C and limited term non-career appointments. Individuals selected for non-career appointments within the Department and who are at various stages of employment approval and confirmation clearance processes. Individuals who currently hold a non-career position within the Department and career ambassadors.

**CATEGORIES OF RECORDS IN THE SYSTEM:**

An individual's prospective and/or confirmed Presidential appointment records typically contain, but are not limited to, full name, date and place of birth, Social Security number, and contact information. Records also include resumes; requisite employment forms which include financial disclosure forms, employment history, background and security clearance information received from Executive Offices and Bureau of Human Resources; Congressional forms (Senate Foreign Relations Committee questionnaire, competence statements for the Senate Foreign Relations Committee, Federal Campaign Contribution Report); letters of recommendation; biographic summary; White House draft press release; agreement telegrams (if bilateral ambassadorial positions); employment documents for non-career selectees; correspondence, memoranda and/or email exchanges relative to appointment processing, selection and nomination; transmittal correspondence from the private sector, other government agencies and the Executive and Legislative branches of Federal government; official appointment notice

prepared following Presidential attestation of an appointment; documents related to accretion of duties requests including requests for approval submitted to the White House and internal Department processing of the accretion of duties; position description; Foreign Service Residence and Dependency Report; Race and National Origin Identification; and resignation letters and responses from the President.

**AUTHORITY FOR MAINTENANCE OF THE SYSTEM:**

22 U.S.C. 2651a (Organization of the Department of State); 22 U.S.C. 3921 (Management of the Foreign Service); 5 U.S.C. 301 (Departmental Regulations).

**PURPOSE:**

The information in the system is used for the consideration, review, clearance and appointment of an individual to a non-career appointment.

**ROUTINE USES OF RECORDS MAINTAINED IN THE SYSTEM, INCLUDING CATEGORIES OF USERS AND THE PURPOSES OF SUCH USERS:**

The records in this system may be disclosed to the White House Office of Presidential Personnel and the Office of White House Counsel for the purposes of consideration, review, clearance and appointment of an individual to a Presidential position/title. Information may be made available to members of Congress for purposes of confirming nominees to presidentially-appointed positions.

The Department of State periodically publishes in the **Federal Register** its standard routine uses which apply to all of its Privacy Act systems of records. These notices appear in the form of a Prefatory Statement. These standard routine uses apply to Records of the Office of White House Liaison, State-34.

**POLICIES AND PRACTICES FOR STORING, RETRIEVING, ACCESSING, RETAINING AND DISPOSING OF RECORDS IN THE SYSTEM:****STORAGE:**

Electronic and paper records.

**RETRIEVABILITY:**

By individual name.

**SAFEGUARDS:**

All users are given cyber security awareness training which covers the procedures for handling Sensitive but Unclassified information, including personally identifiable information (PII). Annual refresher training is mandatory. In addition, all Foreign Service and Civil Service employees and those Locally Engaged Staff who handle PII are required to take the FSI distance learning course instructing employees on privacy and security requirements, including the rules of behavior for

handling PII and the potential consequences if it is handled improperly. Before being granted access to Records of the Office of White House Liaison, a user must first be granted access to the Department of State computer system.

Remote access to the Department of State network from non-Department owned systems is authorized only through a Department approved access program. Remote access to the network is configured with the Office of Management and Budget Memorandum M-07-16 security requirements which include but are not limited to two-factor authentication and time out function.

All Department of State employees and contractors with authorized access have undergone a thorough background security investigation. Access to the Department of State, its annexes and posts abroad is controlled by security guards and admission is limited to those individuals possessing a valid identification card or individuals under proper escort. All paper records containing personal information are maintained in secured file cabinets in restricted areas, access to which is limited to authorized personnel only. Access to computerized files is password-protected and under the direct supervision of the system manager. The system manager has the capability of printing audit trails of access from the computer media, thereby permitting regular and ad hoc monitoring of computer usage.

When it is determined that a user no longer needs access, the user account is disabled.

#### **RETENTION AND DISPOSAL:**

These records will be maintained until they become inactive at which time they will be retired or destroyed in accordance with published record schedules of the Department of State and as approved by the National Archives and Records Administration. More specific information may be obtained by writing to the Director; Office of Information Programs and Services, A/GIS/IPS, SA-2, Department of State, 515 22nd Street NW., Washington, DC 20522-8100.

#### **SYSTEM MANAGER(S) AND ADDRESS:**

Senior Adviser to the Secretary for Appointments and White House Liaison, Room 7245, Department of State, 2201 C Street NW., Washington DC 20520.

#### **NOTIFICATION PROCEDURES:**

Individuals who have reason to believe that the Office of the White House Liaison might have records

pertaining to themselves should write to the Director, Office of Information Programs and Services, A/GIS/IPS, SA-2, Department of State, 515 22nd Street NW., Washington, DC 20522-8100. The individual must specify that he/she wishes the records of the White House Liaison Office to be checked. At a minimum, the individual must include: name, date and place of birth, approximate dates of employment with the Department of State, particularly the time during which the individual was a candidate or held a non-career Presidential appointment; current mailing address and zip code; and signature.

#### **RECORD ACCESS PROCEDURES:**

Individuals who wish to gain access to records pertaining to themselves should write to the Director, Office of Information Programs and Services (address above).

#### **CONTESTING RECORD PROCEDURES:**

Individuals who wish to amend records pertaining to themselves should write to the Director, Office of Information Programs and Services (address above).

#### **RECORD SOURCE CATEGORIES:**

These records contain information obtained directly from the individual who is the subject of these records; Office of the Legal Adviser; Bureau of Diplomatic Security; Bureau of Human Resources; Bureau of Legislative Affairs; the White House Office of Presidential Personnel; and/or individuals who know or worked with the subject and may offer recommendations.

#### **SYSTEM EXEMPTED FROM CERTAIN PROVISIONS OF THE ACT:**

Pursuant to 5 U.S.C. 552a (k)(1) and (k)(5), certain records in this system are classified or contain confidential source information and are exempted from 5 U.S.C. 522a(c)(3), (d), (e)(1),(e)(4)(G), (H) and (I), and (f). See Department of State Rules published under 22 CFR 171.36.

[FR Doc. 2012-23004 Filed 9-17-12; 8:45 am]

**BILLING CODE 4710-24-P**

## **DEPARTMENT OF TRANSPORTATION**

### **Intelligent Transportation Systems Program Advisory Committee; Notice of Meeting**

**AGENCY:** ITS Joint Program Office, Research and Innovative Technology Administration, U.S. Department of Transportation.

**ACTION:** Notice.

The Intelligent Transportation Systems (ITS) Program Advisory Committee (ITS PAC) will hold a meeting on October 10, 2012, from 8 a.m. to 5 p.m. (EST), and on October 11, 2012, from 8 a.m. to 4 p.m. (EST) in Room 1122, Building 520 of the University of Michigan North Campus Research Complex, 1600 Huron Parkway, Ann Arbor, Michigan 48109.

The ITS PAC, established under Section 5305 of Public Law 109-59, Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users, August 10, 2005, and re-chartered on January 23, 2012, was created to advise the Secretary of Transportation on all matters relating to the study, development, and implementation of intelligent transportation systems. Through its sponsor, the ITS Joint Program Office, the ITS PAC makes recommendations to the Secretary regarding ITS Program needs, objectives, plans, approaches, content, and progress.

The following is a summary of the meeting tentative agenda. October 10: (1) Opening Remarks; (2) ITS Joint Program Office Briefing; (3) ITS Technology Review; (4) Safety Pilot Demonstration; and (5) Discussion of Safety Pilot Program. October 11: (1) ITS Security/Implementation Discussion; (2) Subcommittee Breakout Meetings; (3) Subcommittee Reports; (4) 2012 Interim Advice Memorandum Discussion; and (5) Summary and Wrap-up.

The meeting will be open to the public, but limited space will be available on a first-come, first-served basis. Members of the public who wish to present oral statements at the meeting must request approval from Mr. Stephen Glasscock, the Committee Designated Federal Official, at (202) 366-9126 not later than October 3, 2012.

Questions about the agenda or written comments may be submitted by U.S. Mail to: U.S. Department of Transportation, Research and Innovative Technology Administration, ITS Joint Program Office, Attention: Stephen Glasscock, 1200 New Jersey Avenue SE, HOIT, Washington, DC 20590 or faxed to (202) 493-2027. The ITS Joint Program Office requests that written comments be submitted not later than October 3, 2012.

Notice of this meeting is provided in accordance with the Federal Advisory Committee Act and the General Services Administration regulations (41 CFR Part 102-3) covering management of Federal advisory committees.

Issued in Washington, DC, on the 10th day of September 2012.

**Shelley Row,**

*Director, ITS Joint Program Office.*

[FR Doc. 2012-22806 Filed 9-17-12; 8:45 am]

**BILLING CODE 4910-HY-P**

## DEPARTMENT OF TRANSPORTATION

### National Highway Traffic Safety Administration

[Docket No. NHTSA-2012-0119]

#### Tentative Decision That Certain Canadian-Certified

Vehicles Are Eligible for Importation

**AGENCY:** National Highway Traffic Safety Administration (NHTSA), Department of Transportation.

**ACTION:** Request for Comments.

**SUMMARY:** This notice requests comments on a tentative decision by the National Highway Traffic Safety Administration (NHTSA) that certain vehicles that do not comply with all applicable Federal motor vehicle safety standards (FMVSS), but that are certified by their original manufacturer as complying with all applicable Canadian motor vehicle safety standards (CMVSS), are nevertheless eligible for importation into the United States. The vehicles in question either are substantially similar to vehicles that were certified by their manufacturers as complying with the U.S. safety standards and are capable of being readily altered to conform to those standards, or have safety features that comply with, or are capable of being altered to comply with, all U.S. safety standards.

**DATES:** You should submit your comments early enough to ensure that the docket receives them not later than October 9, 2012.

**ADDRESSES:** You may submit comments to the docket number identified in the heading of this document by any of the following methods:

- *Federal eRulemaking Portal:* Go to <http://www.regulations.gov>. Follow the online instructions for submitting comments.
- *Mail:* Docket Management Facility: U.S. Department of Transportation, 1200 New Jersey Avenue SE., West Building Ground Floor, Room W12-140, Washington, DC 20590-0001.
- *Hand Delivery or Courier:* 1200 New Jersey Avenue SE., West Building Ground Floor, Room W12-140, between 9 a.m. and 5 p.m. ET, Monday through Friday, except Federal holidays.
- *Fax:* 202-493-2251.

**Instructions:** For detailed instructions on submitting comment, see the Public Participation heading of the **SUPPLEMENTARY INFORMATION** section of this notice. Note that all comments received will be posted without change to <http://www.regulations.gov>, including any personal information provided. Please see the "Privacy Act" heading below.

**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 (65 FR 19477-78) or you may visit <http://DocketInfo.dot.gov>.

**Confidential Information:** If you wish to submit any information under a claim of confidentiality, you should submit three copies of your complete submission, including the information you claim to be confidential business information, to the Chief Counsel, NHTSA, at the address given below under **FOR FURTHER INFORMATION CONTACT**. In addition, you should submit two copies, from which you have deleted the claimed confidential business information, to Docket Management at the address given above under **ADDRESSES**. When you send a comment containing information claimed to be confidential business information, you should include a cover letter setting forth the information specified in our confidential business information regulation. (49 CFR Part 512.)

**Docket:** For access to the docket to read background documents or comments received, go to <http://www.regulations.gov> or the street address listed above. Follow the online instructions for accessing the dockets.

**FOR FURTHER INFORMATION CONTACT:** Mr. Coleman Sachs, Office of Vehicle Safety Compliance, National Highway Traffic Safety Administration, 1200 New Jersey Avenue SE, Washington, DC 20590. Telephone: (202) 366-3151.

#### **SUPPLEMENTARY INFORMATION:**

##### **Background**

Under 49 U.S.C. 30141(a)(1)(A), a motor vehicle that was not originally manufactured to conform to all applicable FMVSS shall be refused admission into the United States unless NHTSA has decided, either pursuant to a petition from the manufacturer or registered importer or on its own initiative, (1) that the nonconforming

motor vehicle is substantially similar to a motor vehicle of the same model year that was originally manufactured for importation into and sale in the United States and certified by its manufacturer as complying with all applicable FMVSS, and (2) that the nonconforming motor vehicle is capable of being readily altered to conform to all applicable FMVSS. Where there is no substantially similar U.S.-certified motor vehicle, 49 U.S.C. 30141(a)(1)(B) permits a nonconforming motor vehicle to be admitted into the United States if NHTSA decides that its safety features comply with, or are capable of being altered to comply with, all applicable FMVSS based on destructive test data or such other evidence as NHTSA decides to be adequate.

#### **Most Recent Decision**

On September 27, 2007, NHTSA published a notice in the **Federal Register** announcing that it had made a final decision on its own initiative that certain motor vehicles that are certified by their original manufacturer as complying with all applicable CMVSS are eligible for importation into the United States (72 FR 54975). The notice identified these vehicles as:

(a) All passenger cars manufactured on or after September 1, 2007, and before September 1, 2008, that, as originally manufactured, comply with FMVSS Nos. 110, 118, 138, 201, 208, 213, 214, 225, and 401;

(b) All passenger cars manufactured on or after September 1, 2008 and before September 1, 2011 that, as originally manufactured, comply with FMVSS Nos. 110, 118, 138, 201, 202a, 206, 208, 213, 214, 225, and 401;

(c) All passenger cars manufactured on or after September 1, 2011 and before September 1, 2012 that, as originally manufactured, comply with FMVSS Nos. 110, 118, 126, 138, 201, 202a, 206, 208, 213, 214, 225, and 401;

(d) All multipurpose passenger vehicles, trucks, and buses with a GVWR of 4,536 kg (10,000 lb) or less manufactured on or after September 1, 2007 and before September 1, 2008, that, as originally manufactured, comply with FMVSS Nos. 110, 118, 201, 202, 208, 213, 214, and 216, and insofar as they are applicable, with FMVSS Nos. 138 and 225;

(e) All multipurpose passenger vehicles, trucks, and buses with a GVWR of 4,536 kg (10,000 lb) or less manufactured on or after September 1, 2008 and before September 1, 2011, that, as originally manufactured, comply with FMVSS Nos. 110, 118, 201, 202a, 206, 208, 213, 214, and 216, and insofar

as they are applicable, with FMVSS Nos. 138 and 225; and

(f) All multipurpose passenger vehicles, trucks, and buses with a GVWR of 4,536 kg (10,000 lb) or less manufactured on or after September 1, 2011 and before September 1, 2012, that, as originally manufactured, comply with FMVSS Nos. 110, 118, 126, 201, 202a, 206, 208, 213, 214, and 216, and insofar as they are applicable, with FMVSS Nos. 138 and 225.

In the notice of tentative decision that preceded the final decision, the agency explained that the identified standards incorporated requirements that were not adopted, in whole or in part, by Canada (72 FR 45488; August 14, 2007). The notice proposed limiting the import eligibility decision to vehicles manufactured before September 1, 2012 so that the agency could assess, prior to that date, whether any other requirements were added to the FMVSS that Canada chose not to adopt. This limitation was included in the final eligibility decision published on September 27, 2007.

**Additional Actions By the United States and Canada Since the Prior Eligibility Decision**

Since the last eligibility decision covering Canadian-certified vehicles was issued, NHTSA published a final rule that amended FMVSS No. 222 *School Bus Passenger Seating and Crash Protection* that raised the seat back height for school buses from 20 inches to 24 inches; required lap/shoulder belts for all passenger seats in small school buses, specified performance requirements for school bus seats with seat belts, and required self-latching mechanism for seat bottoms that are designed to flip up (73 FR 62744; October 21, 2008). The height

requirements were effective April 20, 2009 and the belt requirements October 21, 2011. Since this final rule, the US and Canadian versions of Standard No. 222 are no longer harmonized. The agency has therefore tentatively decided to limit the import eligibility of school buses with Gross Vehicle Weight Ratings of 4,536 kg (10,000 lb) or less manufactured on or after September 1, 2008 to those that were originally manufactured to comply with FMVSS No. 222.

In addition, NHTSA has adopted a new FMVSS No. 226 *Ejection Mitigation*. On January 19, 2011 NHTSA published a final rule to establish this new standard to mitigate occupant ejection from side windows in rollovers and side impacts (76 FR 3212). This final rule will be effective September 1, 2017, except for altered and multistage vehicles for which it will be effective September 1, 2018. If Canada does not adopt a substantially similar CMVSS by those dates, this standard would be added to the list of FMVSS that a vehicle must be originally manufactured to meet to be eligible for importation.

On September 17, 2008, Canada amended its regulations to align the requirements of CMVSS 110 with those of FMVSS No. 110 *Tire Selection and Rims for Motor Vehicles with a GVWR of 4,536 kg (10,000) lb) or Less*. The newly aligned requirements became effective on August 1, 2009.

On May 2, 2009, Canada amended its regulations to align the requirements of CMVSS 118 with those of FMVSS No. 118 *Power-Operated Window, Partition, and Roof Panel Systems*. The newly aligned requirements became effective on October 1, 2010.

On December 10, 2009, Canada adopted CMVSS 126 incorporating the requirements of FMVSS No. 126

*Electronic Stability Control Systems*. The newly adopted requirements became effective for passenger cars, multi-purpose passenger vehicles, trucks, and buses with a GVWR of 4,536 kg (10,000 lb) or less manufactured after August 31, 2011.

On July 9, 2011, Canada published a Technical Standards Document (TSD) that adopts the requirements of FMVSS No. 202a *Head Restraints*. The newly adopted requirements become effective on September 1, 2012.

On July 24, 2010, Canada published a revision to a TSD that incorporates the requirements of FMVSS No. 216 *Roof Crush Resistance*. The newly adopted requirements become effective on September 1, 2016.

On August 22, 2007, Canada amended its regulations to align the requirements of CMVSS 401 with those of FMVSS No. 401 *Interior Trunk Release*. The newly aligned requirements became effective on September 1, 2010.

Canada has yet to adopt or fully align the requirements of its regulations with those of FMVSS Nos. 138 *Tire Pressure Monitoring Systems*, 201 *Occupant Protection in Interior Impact*, 208 *Occupant Crash Protection*, 213 *Child Restraint Systems*, 214 *Side Impact Protection*, and 225 *Child Restraint Anchorage Systems*.

The tables below summarize the current state of harmonization between the CMVSS and the FMVSS. Table 1 is a list of all FMVSS that are harmonized to the CMVSS, or for which the differences are such that compliance with the US standard can be readily achieved. Table 2 is a list of all FMVSS which are not harmonized. Table 3 is a list of FMVSS that have been adopted and are not yet effective, but will be in the future.

TABLE 1—HARMONIZED STANDARDS

FMVSS	Canadian equivalent	Date harmonized since last determination
102—Transmission Shift Position Sequence, Starter Interlock, and Transmission Braking Effect.	CMVSS 102—Transmission Control Functions.	
103—Windshield Defrosting and Defogging Systems .....	CMVSS 103—Windshield Defrost and Defog.	
104—Windshield Wiping and Washing Systems .....	CMVSS 104—Windshield Wiping and Wash.	
105—Hydraulic and Electric Brake Systems .....	CMVSS 105—Hydraulic and Electric Brakes; TSD 105.	
106—Brake Hoses .....	CMVSS 106—Brake Hoses; TSD 106.	
108—Lamps, Reflective Devices and Associated Equipment.	CMVSS 108—Lighting Systems and Retroreflective Devices; TSD 108.	
110—Tire Selection and Rims for Motor Vehicles with a GVWR of 4,536 kg (10,000) lb) or Less.	CMVSS 110—Tire Selection and Rims; TSD 110 .....	September 1, 2009.
111—Rearview Mirrors .....	CMVSS 111—Mirrors.	
113—Hood Latch Systems .....	CMVSS 113—Hood Latch System.	
114—Theft Protection and Rollaway Prevention .....	CMVSS 114—Locking and Immobilization; TSD 114.	
116—Motor Vehicle Brake Fluids .....	CMVSS 116—Hydraulic Brake Fluids; TSD 116.	
118—Power-Operated Window, Partition, and Roof Panel Systems.	CMVSS 118—Power-operated Windows; TSD 118 .....	September 1, 2011.

TABLE 1—HARMONIZED STANDARDS—Continued

FMVSS	Canadian equivalent	Date harmonized since last determination
120—Tire Selection and Rims and Motor Home/Recreation Vehicle Trailer Load Carrying Capacity Information for Motor Vehicles with a GVWR of More Than 4,536 Kilograms (10,000 pounds).	CMVSS 120—Tire Selection and Rims for Vehicles Other Than Passenger Cars; TSD 120.	
121—Air Brake Systems .....	CMVSS 121—Air Brakes for Trucks; TSD 121.	
122—Motorcycle Brake Systems .....	CMVSS 122—Motorcycle Brake Systems; TSD 122.	
123—Motorcycle Controls and Displays .....	CMVSS 123—Motorcycle Control & Displays; TSD 123.	
124—Accelerator Control Systems .....	CMVSS 124—Accelerator Control Systems; TSD 124.	
126—Electronic Stability Control Systems .....	CMVSS 126—Electronic Stability Control; TSD 126 .....	September 1, 2011.
131—School Bus Pedestrian Safety Devices .....	CMVSS 131—School Bus Pedestrian Safety Devices; TSD 131.	
135—Light Vehicle Brake Systems .....	CMVSS 135—Light Vehicle Brake Systems; TSD 135.	
202—Head Restraints; Applicable unless a vehicle is certified to § 571.202a.	CMVSS 202—Head Restraints; TSD 202 .....	
202a—Head Restraints .....	CMVSS 202—Head Restraints; TSD 202 .....	September 1, 2012.
203—Impact protection for the driver from the steering control system.	CMVSS 203—Driver Impact Protection.	
204—Steering control rearward displacement .....	CMVSS 204—Steering Column Rearward Displacement.	
205—Glazing materials .....	CMVSS 205—Glazing Materials.	
205a—Glazing materials before September 1, 2006 and glazing materials used in vehicles manufactured before November 1, 2006.	CMVSS 205—Glazing Materials.	
207—Seating systems .....	CMVSS 207—Anchorage of Seats.	
210—Seat belt assembly anchorages .....	CMVSS 210—Seat Belt Assembly Anchorages.	
212—Windshield mounting .....	CMVSS 212—Windshield Mounting.	
216—Roof crush resistance; Applicable unless a vehicle is certified to § 571.216a.	CMVSS 216—Roof Intrusion Protection; TSD 216.	
216a—Roof crush resistance; Upgraded standard .....	CMVSS 216—Roof Intrusion Protection; TSD 216.	
217—Bus emergency exits and window retention and release.	CMVSS 217—Bus Window Retention and Emergency Exits.	
219—Windshield zone intrusion .....	CMVSS 219—Windshield Zone Intrusion.	
220—School bus rollover protection .....	CMVSS 220—Rollover Protection; TSD 220.	
221—School bus body joint strength .....	CMVSS 221—School Bus Body Joint Strength.	
224—Rear impact protection .....	CMVSS 223—Rear Impact Guards.	
301—Fuel system integrity .....	CMVSS 301—Fuel System Integrity; TSD 301.	
302—Flammability of interior materials .....	CMVSS 302—Flammability; TSD 302.	
303—Fuel system integrity of compressed natural gas vehicles.	CMVSS 301.2—CNG Fuel System Integrity.	
304—Compressed natural gas fuel container integrity .....	CMVSS 301.2—CNG Fuel System Integrity.	
305—Electric-powered vehicles: electrolyte spillage and electrical shock protection.	CMVSS 305—Electrolyte Spillage and Electrical Shock Protection; TSD 305.	
401—Internal trunk release .....	CMVSS 401—Interior Trunk Release; TSD 401 .....	September 1, 2010.
500—Low-speed vehicles .....	CMVSS 500—Low-speed Vehicles; TSD 500.	

TABLE 2—STANDARDS THAT HAVE NOT BEEN HARMONIZED

U.S. Standard	Canadian standard	Passenger cars	Multipurpose passenger vehicles, trucks, and buses with a GVWR of 4,536 Kg (10,000 Lb) or less
FMVSS 101—Controls and Displays .....	CMVSS 101—Controls and Displays .....	X	X
FMVSS 138—Tire Pressure Monitoring Systems.	.....	X	X
FMVSS 201—Occupant Protection in Interior Impact.	CMVSS 201—Occupant Protection .....	X	X
206—Door locks and door retention components.	CMVSS 206—Door Locks and Door Retention Components.	X	X
FMVSS 208—Occupant Crash Protection ...	CMVSS 208—Occupant Restraint Frontal Impact.	X	X
FMVSS 213—Child Restraint Systems .....	CMVSS 213.4—Built-in Child Restraint Systems.	X	X
FMVSS 214—Side Impact Protection .....	CMVSS 214—Side Door Strength .....	X	X
FMVSS 222—School Bus Passenger Seating and Crash Protection.	CMVSS 222—School Bus Passenger Seating and Crash Protection.	.....	1
FMVSS 225—Child restraint anchorage systems.	.....	X	X

<sup>1</sup> School buses only.

TABLE 3—FMVSS THAT HAVE BEEN ADOPTED BUT ARE NOT YET EFFECTIVE

FMVSS	Federal Register Notice	Description	Effective date
226—Ejection Mitigation .....	76 FR 3212; 1/19/2011.	New standard to mitigate occupant ejection from side windows in rollovers and side impacts..	9/1/17, except for altered and multistage vehicles 9/1/18.

In light of these developments, NHTSA has tentatively decided to require, as a condition for import eligibility, that Canadian-certified passenger cars manufactured on or after September 1, 2012 and before September 1, 2017 comply, as originally manufactured, with FMVSS Nos. 138, 201, 206, 208, 213, 214, and 225. The agency has also tentatively decided to require, as a condition for import eligibility, that Canadian-certified multipurpose passenger vehicles, trucks, and buses with a GVWR of 4,536 kg (10,000 lb) or less manufactured on or after September 1, 2012 and before September 1, 2017 comply, as originally manufactured, with FMVSS Nos. 201, 206, 208, 213, 214, and 216, and insofar as they are applicable, with FMVSS Nos. 138 and 225. The agency has also tentatively decided to require, as a condition for import eligibility, that Canadian-certified school buses with a GVWR of 4,536 kg (10,000 lb) or less manufactured on or after September 1, 2012 and before September 1, 2017 also comply with FMVSS No. 222.

The agency has also tentatively decided to revise its prior import eligibility decisions to eliminate references to the following harmonized standards for the vehicles identified below:

- FMVSS No. 110 for all passenger cars and all multipurpose passenger vehicles, trucks, and buses with a GVWR of 4,536 kg (10,000 lb) or less manufactured on or after September 1, 2009;
- FMVSS No. 118 for all passenger cars and all multipurpose passenger vehicles, trucks, and buses with a GVWR of 4,536 kg (10,000 lb) or less manufactured on or after September 1, 2011;
- FMVSS No. 126 for all passenger cars and all multipurpose passenger vehicles, trucks, and buses with a GVWR of 4,536 kg (10,000 lb) or less manufactured on or after September 1, 2011; and
- FMVSS No. 401 for all passenger cars manufactured on or after September 1, 2010.

**Future Cut-Off Date**

To avoid the need to amend any existing eligibility decisions in the event

that there are any further requirements imposed under the FMVSS that are not carried into the corresponding CMVSS, NHTSA has tentatively decided to limit its import eligibility decisions for Canadian-certified passenger cars and for multipurpose passenger vehicles, trucks, and buses with a GVWR of 10,000 pounds or less to such vehicles manufactured before September 1, 2017. Prior to that date, the agency will assess whether there is a need to condition the import eligibility of any subsequently manufactured Canadian-certified vehicles on compliance with any additional FMVSS. The agency intends to issue new decisions covering vehicles manufactured on or after September 1, 2017 within a sufficient period before that date is reached.

**Tentative Decision**

Pending its review of any comments submitted in response to this notice, NHTSA hereby tentatively decides that—

(a) All passenger cars manufactured on or after September 1, 2012 and before September 1, 2017 that, as originally manufactured, comply with FMVSS Nos. 138, 201, 206, 208, 213, 214, and 225; and

(b) All multipurpose passenger vehicles, trucks, and buses with a GVWR of 4,536 kg (10,000 lb) or less manufactured on or after September 1, 2012 and before September 1, 2017, that, as originally manufactured, comply with FMVSS Nos. 201, 206, 208, 213, 214, and 216, and insofar as they are applicable, with FMVSS Nos. 138, 222, and 225; that are certified by their original manufacturer as complying with all applicable Canadian motor vehicle safety standards, are eligible for importation into the United States on the basis that either:

1. They are substantially similar to vehicles of the same make, model, and model year originally manufactured for importation into and sale in the United States, or originally manufactured in the United States for sale therein, and certified as complying with all applicable FMVSS, and are capable of being readily altered to conform to all applicable FMVSS, or
2. They have safety features that comply with, or are capable of being

altered to comply with, all applicable FMVSS.

**Vehicle Eligibility Number**

The importer of a vehicle admissible under any final decision must indicate on the form HS-7 accompanying entry the appropriate vehicle eligibility number indicating that the vehicle is eligible for entry. Vehicle Eligibility Number VSA-80 is currently assigned to Canadian-certified passenger cars and Vehicle Eligibility Number VSA-81 is currently assigned to Canadian-certified multipurpose passenger vehicles, trucks, and buses with a GVWR of 4,536 kg (10,000 lb) or less. If this tentative decision is made final, all passenger cars admissible under the final decision will be assigned vehicle eligibility number VSA-80, and all multipurpose passenger vehicles, trucks, and buses admissible under the final decision will be assigned vehicle eligibility number VSA-81.

**Public Participation**

*How do I prepare and submit comments?*

Your comments must be written and in English. To ensure that your comments are correctly filed in the Docket, please include the docket number of this document in your comments.

Your comments must not be more than 15 pages long. (49 CFR 553.21). We established this limit to encourage you to write your primary comments in a concise fashion. However, you may attach necessary additional documents to your comments. There is no limit on the length of the attachments.

Comments may be submitted to the docket electronically by logging onto the Docket Management System Web site at <http://www.regulations.gov>. Follow the online instructions for submitting comments.

You may also submit two copies of your comments, including the attachments, to Docket Management at the address given above under **ADDRESSES**.

Please note that pursuant to the Data Quality Act, in order for substantive data to be relied upon and used by the agency, it must meet the information quality standards set forth in the OMB

and DOT Data Quality Act guidelines. Accordingly, we encourage you to consult the guidelines in preparing your comments. OMB's guidelines may be accessed at <http://www.whitehouse.gov/omb/fedreg/reproducible.html>. DOT's guidelines may be accessed at [http://www.bts.gov/programs/statistical\\_policy\\_and\\_research/data\\_quality\\_guidelines](http://www.bts.gov/programs/statistical_policy_and_research/data_quality_guidelines).

*How can I be sure that my comments were received?*

If you wish Docket Management to notify you upon its receipt of your comments, enclose a self-addressed, stamped postcard in the envelope containing your comments. Upon receiving your comments, Docket Management will return the postcard by mail.

*How do I submit confidential business information?*

If you wish to submit any information under a claim of confidentiality, you should submit three copies of your complete submission, including the information you claim to be confidential business information, to the Chief Counsel, NHTSA, at the address given above under **FOR FURTHER INFORMATION CONTACT**. In addition, you should submit two copies, from which you have deleted the claimed confidential business information, to Docket Management at the address given above under **ADDRESSES**. When you send a comment containing information claimed to be confidential business information, you should include a cover letter setting forth the information specified in our confidential business information regulation. (49 CFR Part 512.)

*Will the agency consider late comments?*

We will consider all comments that Docket Management receives before the close of business on the comment closing date indicated above under **DATES**. To the extent possible, we will also consider comments that Docket Management receives after that date. If Docket Management receives a comment

too late for us to consider in developing a determination (assuming that one is issued), we will consider that comment as an informal suggestion for future action.

*How can I read the comments submitted by other people?*

You may read the comments received by Docket Management at the address given above under **ADDRESSES**. The hours of the Docket are indicated above in the same location. You may also see the comments on the Internet. To read the comments on the Internet, go to <http://www.regulations.gov>. Follow the online instructions for accessing the dockets.

Please note that even after the comment closing date, we will continue to file relevant information in the Docket as it becomes available. Further, some people may submit late comments. Accordingly, we recommend that you periodically check the Docket for new material.

**Authority:** 49 U.S.C. 30141(a)(1)(A), (a)(1)(B), and (b)(1); 49 CFR 593.8; delegation of authority at 49 CFR 1.95.

Issued on: September 12, 2012.

**Daniel C. Smith,**

*Senior Associate Administrator for Vehicle Safety.*

[FR Doc. 2012-22818 Filed 9-17-12; 8:45 am]

**BILLING CODE 4910-59-P**

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## DEPARTMENT OF THE TREASURY

### United States Mint

#### Citizens Coinage Advisory Committee; Meeting

**ACTION:** Notification of Citizens Coinage Advisory Committee September 21, 2012, Public meeting.

**SUMMARY:** Pursuant to United States Code, Title 31, section 5135(b)(8)(C), the United States Mint announces the Citizens Coinage Advisory Committee (CCAC) public meeting scheduled for September 21, 2012.

*Date:* September 21, 2012.  
*Time:* 10 a.m. to 3 p.m.

*Location:* Conference Room A, United States Mint, 801 9th Street NW., Washington, DC 20220.

*Subject:* Review and consideration of candidate designs for the reverse of the 2013 Native American \$1 Coin, the proposed theme for the reverse of the 2014 and 2015 Native American \$1 Coins, and additional tribal candidate designs for the Code Talkers Congressional Gold Medals; discussion of the theme for the 2014 Civil Rights Act of 1964 Commemorative Coin; and review and approval of the CCAC 2011 Annual Report.

Interested persons should call the CCAC HOTLINE at (202) 354-7502 for the latest update on meeting time and room location.

In accordance with 31 U.S.C. 5135, the CCAC:

- Advises the Secretary of the Treasury on any theme or design proposals relating to circulating coinage, bullion coinage, Congressional Gold Medals, and national and other medals.

- Advises the Secretary of the Treasury with regard to the events, persons, or places to be commemorated by the issuance of commemorative coins in each of the five calendar years succeeding the year in which a commemorative coin designation is made.

- Makes recommendations with respect to the mintage level for any commemorative coin recommended.

**FOR FURTHER INFORMATION CONTACT:** Greg Weinman, Acting United States Mint Liaison to the CCAC; 801 9th Street NW., Washington, DC 20220; or call 202-354-7200.

Any member of the public interested in submitting matters for the CCAC's consideration is invited to submit them by fax to the following number: 202-756-6525.

**Authority:** 31 U.S.C. 5135(b)(8)(C).

Dated: September 12, 2012.

**Richard A. Peterson,**

*Deputy Director, United States Mint.*

[FR Doc. 2012-22957 Filed 9-17-12; 8:45 am]

**BILLING CODE P**



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Part II

## Department of the Interior

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Fish and Wildlife Service

50 CFR Part 17

Endangered and Threatened Wildlife and Plants; Endangered Status for 23 Species on Oahu and Designation of Critical Habitat for 124 Species; Final Rule

## DEPARTMENT OF THE INTERIOR

## Fish and Wildlife Service

## 50 CFR Part 17

[Docket No. FWS-R1-ES-2010-0043:  
4500030114]

RIN 1018-AV49

**Endangered and Threatened Wildlife and Plants; Endangered Status for 23 Species on Oahu and Designation of Critical Habitat for 124 Species**AGENCY: Fish and Wildlife Service,  
Interior.

ACTION: Final rule.

**SUMMARY:** We, the U.S. Fish and Wildlife Service (Service), list 23 species on the island of Oahu in the Hawaiian Islands as endangered under the Endangered Species Act of 1973, as amended (Act). We also designate 42,804 acres (17,322 hectares) as critical habitat. This designation includes critical habitat for these 23 species, 2 plant species that are already listed as endangered, and revised critical habitat for 99 plant species that are already listed as endangered or threatened. In this final rule we are also recognizing taxonomic revision of the scientific names of nine plant species and revising the List of Endangered and Threatened Plants accordingly. This final rule will implement the Federal protections provided by the Act.

**DATES:** This rule becomes effective on October 18, 2012.

**ADDRESSES:** This final rule and final economic analysis are available on the Internet at <http://www.regulations.gov>. Comments and materials received, as well as supporting documentation used in preparing this final rule, are available for public inspection, by appointment, during normal business hours, at the Pacific Islands Fish and Wildlife Office, 300 Ala Moana Boulevard, Box 50088, Honolulu, HI 96850; telephone 808-792-9400; facsimile 808-792-9581. The coordinates or plot points or both from which the critical habitat maps were generated are included in the administrative record for this critical habitat designation, and are available at <http://www.fws.gov/pacificislands>, at <http://www.regulations.gov> at Docket No. FWS-R1-ES-2010-0043, and at the Pacific Islands Fish and Wildlife Office. Any additional tools or supporting information that we developed for this critical habitat designation are also available at the Fish and Wildlife Service Web site and Field Office set out above, and may also be included in the

preamble or at <http://www.regulations.gov>.

**FOR FURTHER INFORMATION CONTACT:**

Loyal Mehrhoff, Field Supervisor, Pacific Islands Fish and Wildlife Office (see **ADDRESSES** above). If you use a telecommunications device for the deaf (TDD), you may call the Federal Information Relay Service (FIRS) at 800-877-8339.

**SUPPLEMENTARY INFORMATION:****Executive Summary**

*Why we need to publish a rule.* This is a final rule to list 23 species as endangered under the Act, including 20 native Hawaiian plant species and 3 Hawaiian damselflies. In addition, the rule designates critical habitat for these 23 species, critical habitat for 2 additional plant species that are already listed as endangered, and revised critical habitat for 99 plant species that are already listed as endangered or threatened. These species are on the island of Oahu, in the Hawaiian Islands. In this final rule, we also recognize taxonomic revision of the scientific names of nine plant species and revise the List of Endangered and Threatened Plants accordingly.

*The basis for our action.* Under the Endangered Species Act, we determine that a species is endangered or threatened 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 23 Oahu species are currently in danger of extinction throughout all their ranges, as the result of the following current and ongoing threats:

- All of these species face threats from the present destruction and modification of their habitats, primarily from introduced ungulates, such as feral pigs and goats, and the spread of nonnative plants.
- Six of these species face threats from habitat destruction and modification from fire.
- Fourteen species face threats from destruction and modification of their habitats from hurricanes, landslides, rockfalls, and flooding.
- The projected effects of climate change will likely exacerbate the effects of the other threats to these species.
- There is a serious threat of widespread impacts of predation and herbivory on 19 of the 20 plant species

by nonnative pigs, goats, rats, and invertebrates; and predation on the three damselflies by nonnative fish, bullfrogs, and ants.

- Some of the plant species face the additional threat of trampling.
- The inadequacy of existing regulatory mechanisms (specifically, inadequate protection of habitat and inadequate protection from the introduction of nonnative species) poses a current and ongoing threat to all 23 species.
- There are current and ongoing threats to nine plant species and the three damselflies due to factors associated with small numbers of populations and individuals.
- The three damselflies face further threats from the loss of native host plants, from habitat degradation and loss due to agriculture and urban development, from stream diversion and channelization, and by dewatering of aquifers.

• These threats are exacerbated by these species' inherent vulnerability to extinction from stochastic events at any time because of their endemism, small numbers of individuals and populations, and restricted habitats.

*This rule designates critical habitat for 25 species and revises critical habitat for 99 species.* Under section 4(b)(2) of the Act, we are required to designate critical habitat based on the best scientific data available and after taking into consideration the economic impact and other relevant impacts of an area being considered for designation. The Secretary (of the Interior) may exclude an area from critical habitat if the benefits of exclusion outweigh the benefits of designation, unless the exclusion will result in the extinction of the species.

- This rule designates a total of 42,804 acres (ac) (17,322 hectares (ha)) as critical habitat.
- We fully considered comments from the public and peer reviewers on the proposed rule and made additional field visits, in order to refine our designation and remove areas that are not essential to the conservation of the species. We found changes in land use had occurred in certain areas within the proposed critical habitat that preclude these areas from supporting the primary constituent elements, and that these areas do not meet the definition of critical habitat.
- A total of 307 ac (124 ha) have been removed in this final designation from the area originally proposed, as a result of refinement in unit areas made in response to public comments and additional field visits. These areas do

not meet the definition of critical habitat.

- In addition, Department of Defense lands on Naval Station Pearl Harbor Lualualei Branch (NAVMAG PH Lualualei) and Naval Radar Transmittal Facility at Lualualei (NRTF Lualualei) (380 acres; 154 hectares) with a completed and effective integrated natural resource management plan (INRMP) have been exempted from this final designation under section 4(a)(3) of the Act.

- All lands being designated as critical habitat are either (1) currently considered to be occupied by one or more of the 124 species, and contain physical or biological features essential to the conservation of the species by supporting the life-history needs of the species and that may require special management, or (2) areas outside the geographical areas occupied by the species at the time of listing, which the Secretary has determined are essential for the conservation of the species.

*Peer reviewers support our methods.* We obtained opinions from knowledgeable individuals with scientific expertise to review our technical assumptions, analysis, and whether or not we had used the best available information. These peer reviewers generally concurred with our methods and conclusions and provided additional information, clarifications, and suggestions to improve this final rule.

**Previous Federal Actions**

Federal actions for these species prior to August 2, 2011, are outlined in our proposed rule (76 FR 46362), which was

published on that date. Publication of the proposed rule opened a 60-day comment period, which closed on October 3, 2011. In addition, we published a public notice of the proposed rule on August 6, 2011, in the local Honolulu Star Advertiser newspaper. On April 12, 2012 (77 FR 21936) we made available the draft economic analysis (DEA) on proposed critical habitat designation, and opened a 30-day comment period on the DEA, as well as reopened the comment period on the entire August 2, 2011 proposed rule (76 FR 46362). This second comment period closed on May 14, 2012.

**Background**

*An Ecosystem-Based Approach To Listing 23 Species on Oahu*

On the island of Oahu, as on most of the Hawaiian Islands, native species that occur in the same habitat types (ecosystems) depend on many of the same biological features and on the successful functioning of that ecosystem to survive. We have therefore organized the species addressed in this final rule by common ecosystems. Although the listing determination for each species is analyzed separately, we have organized the specific analysis for each species within the context of the broader ecosystem in which it occurs, to avoid redundancy. In addition, native species that share ecosystems often face a suite of common factors that may pose threats to them, and ameliorating or eliminating these threats requires similar management actions. Effective management of these threats often requires implementation of conservation

actions at the ecosystem scale, to enhance or restore critical ecological processes and provide for long-term viability of those species in their native environment. Thus, by taking this approach, we hope not only to organize this rule efficiently, but also to more effectively focus conservation management efforts on the common threats that occur across these ecosystems, restore ecosystem functionality for the recovery of each species, and provide conservation benefits for associated native species, thereby potentially precluding the need to list other species under the Act (16 U.S.C. 1531 *et seq.*) that occur in these shared ecosystems.

We are listing *Bidens amplexans*, *Cyanea calycina*, *Cyanea lanceolata*, *Cyanea purpurellifolia*, *Cyrtandra gracilis*, *Cyrtandra kaulantha*, *Cyrtandra sessilis*, *Cyrtandra waiolani*, *Doryopteris takeuchii*, *Korthalsella degeneri*, *Melicope christophersenii*, *Melicope hiiakae*, *Melicope makahae*, *Platydesma cornuta* var. *cornuta*, *Platydesma cornuta* var. *decurrens*, *Pleomele forbesii*, *Psychotria hexandra* ssp. *oahuensis*, *Pteralyxia macrocarpa*, *Tetraplasandra lydgatei*, and *Zanthoxylum oahuense*; and the blackline (*Megalagrion nigrohamatum nigrolineatum*), crimson (*M. leptodemas*), and oceanic (*M. oceanicum*) Hawaiian damselflies, endemic to the island of Oahu, as endangered species. These 23 species (20 plants and 3 damselflies) are found in 7 ecosystem types: coastal, lowland dry, lowland mesic, lowland wet, montane wet, dry cliff, and wet cliff (Table 1).

TABLE 1—THE 23 SPECIES AND THE ECOSYSTEMS UPON WHICH THEY DEPEND

Ecosystem	Species
Coastal .....	Plants: <i>Bidens amplexans</i> .
Lowland Dry .....	Plants: <i>Bidens amplexans</i> , <i>Doryopteris takeuchii</i> , <i>Pleomele forbesii</i> .
Lowland Mesic .....	Plants: <i>Cyanea calycina</i> , <i>Cyanea lanceolata</i> , <i>Melicope makahae</i> , <i>Platydesma cornuta</i> var. <i>decurrens</i> , <i>Pleomele forbesii</i> , <i>Pteralyxia macrocarpa</i> , <i>Tetraplasandra lydgatei</i> Animals: oceanic Hawaiian damselfly.
Lowland Wet .....	Plants: <i>Cyanea calycina</i> , <i>Cyanea lanceolata</i> , <i>Cyanea purpurellifolia</i> , <i>Cyrtandra gracilis</i> , <i>Cyrtandra kaulantha</i> , <i>Cyrtandra sessilis</i> , <i>Cyrtandra waiolani</i> , <i>Melicope hiiakae</i> , <i>Platydesma cornuta</i> var. <i>cornuta</i> , <i>Psychotria hexandra</i> ssp. <i>oahuensis</i> , <i>Pteralyxia macrocarpa</i> , <i>Zanthoxylum oahuense</i> Animals: blackline Hawaiian damselfly, crimson Hawaiian damselfly, oceanic Hawaiian damselfly.
Montane Wet .....	Plants: <i>Cyanea calycina</i> , <i>Melicope christophersenii</i> .
Dry Cliff .....	Plants: <i>Korthalsella degeneri</i> , <i>Melicope makahae</i> , <i>Platydesma cornuta</i> var. <i>decurrens</i> , <i>Pleomele forbesii</i> , <i>Pteralyxia macrocarpa</i> .
Wet Cliff .....	Plants: <i>Cyanea calycina</i> , <i>Cyanea purpurellifolia</i> , <i>Cyrtandra kaulantha</i> , <i>Cyrtandra sessilis</i> , <i>Melicope christophersenii</i> , <i>Psychotria hexandra</i> ssp. <i>oahuensis</i> , <i>Pteralyxia macrocarpa</i> Animals: crimson Hawaiian damselfly, oceanic Hawaiian damselfly.

Most of these species are found in multiple ecosystems. For each species, we identified and evaluated those factors that pose threats to the species

and that may be common to all of the species at the ecosystem level (see discussion below in Summary of Factors Affecting the 23 Species). For example,

climate change is considered a threat to each species within each ecosystem. As a result, this threat factor is considered to be a multiple ecosystem threat, as

each individual species within each ecosystem faces a threat that is essentially identical in terms of the nature of the impact, its severity, its imminence, and its scope. We further identified and evaluated any threat factors that may be unique to certain species, that is, threat factors that do not apply to all species under consideration within the same ecosystem. For example, the threat of predation by nonnative fish is unique to the three damselflies in this rule; it is not applicable to any of the other species being listed. We have identified such threat factors, which apply only to certain species within the ecosystems addressed here, as species-specific threats.

*An Ecosystem-Based Approach to Determining Physical or Biological Features of Critical Habitat*

Under the Act, we are required to designate critical habitat to the maximum extent prudent and determinable concurrently with the publication of a final determination that a species is endangered or threatened. In this rule, we are designating critical habitat for the 23 Oahu species which we have found to meet the definition of an endangered species. We are also designating critical habitat for two Oahu plants that are already listed as endangered species but for which critical habitat has not been previously designated. In addition, we are revising critical habitat for 99 Oahu plants already listed as endangered or threatened species. When critical habitat was designated for these 99 Oahu plant species in 2003 (68 FR 35950; June 17, 2003), it was based primarily on the specific localities where the species were known to occur. We are revising critical habitat for these species because since then, we have learned that many native Hawaiian plants and animals can thrive when reintroduced into historical habitats when threats are effectively managed. For this reason, we believe it is important to designate unoccupied habitat where it is essential for the recovery of the species. Based on new information on plant occurrences and a better understanding of the species' biological requirements, the physical or biological features have been more precisely identified, and now include elevation, precipitation, substrate, canopy, subcanopy, and understory characteristics. We believe the added precision will be helpful in identifying the special management considerations or protections needed in specific occupied areas to recover the species. In addition, because the 2003 designation

focused on discrete areas occupied by the species at the time of listing, the result was an overlapping and confusing patchwork of critical habitat areas for the 99 plant species that was difficult for the public to interpret. Although this revision of critical habitat is solely based on our determination of the lands that meet the statutory definition of critical habitat (16 U.S.C. 1532(5) and other applicable provisions (e.g., 16 U.S.C. 1533(4)(b)(2)), we believe the end result will provide for greater public understanding of the conservation and recovery needs of each of the species in the specific areas addressed in this rule.

In this rule, we are designating critical habitat for 124 species in 62 multiple-species critical habitat units. Although critical habitat is identified for each species individually, we have found that the conservation of each depends, at least in part, on the successful functioning of the physical or biological features of the commonly shared ecosystem. Each critical habitat unit identified in this rule contains the physical or biological features essential to the conservation of those individual species that occupy that particular unit, or contains areas essential to the conservation of those individual species that do not presently occupy that particular unit, but depend on that ecosystem type for recovery purposes. Where the unit is not known to be occupied by a particular species, we believe it is still essential for the conservation of that species. The designation of unoccupied habitat allows for the expansion of its range and reintroduction of individuals into areas where it occurred historically, and provides areas for recovery in the case of a stochastic event at one or more locations where the species occurs.

Each of the designated areas represents critical habitat for multiple species, based upon their shared habitat requirements, and takes into account any species-specific conservation needs as appropriate (see discussion below in Methods). For example, the presence of a perennial stream is essential for the conservation of the blackline Hawaiian damselfly, but is not a requirement shared by all species within the same ecosystem; however, a functioning ecosystem is also essential to the damselfly because the ecosystem provides other physical or biological features that support the damselfly's specific life-history requirements.

*The Island of Oahu*

The island of Oahu is the third oldest and third largest of the eight main Hawaiian Islands, located southeast of Kauai and northwest of Molokai and

Lanai (Foote *et al.* 1972, p. 19; Department of Geography, University of Hawaii at Hilo (UHH) 1998, pp. 7–10). It was formed from two shield volcanoes, the Koolau Volcano and the Waianae Volcano, that ceased erupting about 1 to 2 million years ago, and is about 600 square (sq) miles (mi) (1,557 sq kilometers (km)) in area (Macdonald and Abbot 1970, p. 265; Foote *et al.* 1972, p. 19; Department of Geography, UHH 1998, pp. 7–10; Rowland and Garcia 2004, p. 1). Two mountain ranges resulted from these eruptions, the western Waianae range and eastern Koolau range. Oahu is characterized by the fact that the two mountain ranges are aligned perpendicular to the prevailing trade winds, so that distinctive leeward and windward climates result, with the Waianae range in the rain shadow of the Koolau range (Department of Geography, UHH 1998, pp. 7–10; Wagner *et al.* [adapted from Price (1983) and Carlquist (1980) 1999, p. 39]. The maximum elevation on Oahu is 4,025 feet (ft) (1,225 meters (m)) at the summit of Mount Kaala in the Waianae Mountains, and this higher elevation area is not affected by the Koolau rain shadow (Blumenstock and Price 1972, p. 156; Wagner *et al.* [adapted from Price (1983) and Carlquist (1980) 1999, pp. 39–41]. The maximum elevation is relatively low compared to the higher Hawaiian Islands. Consequently, Oahu does not have dry alpine areas, as the mountains do not reach the height of the temperature inversion layer (Wagner *et al.* [adapted from Price (1983) and Carlquist (1980)] 1999, pp. 38, 40). Rainfall ranges from less than 20 inches (in) (50 centimeters (cm)) to more than 250 in (635 cm) per year (Department of Geography, UHH 1998, p. 7). Temperatures in the Hawaiian Islands differ by an average of 41 degrees Fahrenheit (°F) (22 degrees Celsius (°C)) throughout the year. Since temperature decreases with increasing elevation, microclimates range from tropical to sub-arctic across the island chain (Wagner *et al.* [adapted from Price (1983) and Carlquist (1980)] 1999, pp. 37–38), although the sub-arctic zone does not occur on Oahu.

The current soil classification system for the Hawaiian Islands distinguishes soil types based on their measurable physical and chemical properties, and environmental factors that influenced their formation. Widely ranging geological ages of rocks, different rates of weathering, and microclimates create these highly variable soils (Sherman 1972, pp. 205–207). Most soils are volcanic in origin; a few formed from organic material and sand (Foote *et al.*

1972, p. 1). On Oahu, sizable areas of highly weathered, red-colored oxisols (nutrient-poor soils, red or yellowish) occur on the Schofield Plateau; in contrast, the Koolau and Waianae mountain ranges have large areas of rocky, unweathered entisols (soils with few or no horizontal layers) due to erosion (Gavenda *et al.* 1998, p. 92).

Because of its age and relative isolation, species diversity and endemism are high in the Hawaiian archipelago (Gagne and Cuddihy 1999, p. 45). However, the flora and fauna of Oahu have undergone extreme alterations because of past and present land use and other activities. Land with rich soils was altered by the early Hawaiians and, more recently, converted to agricultural use (Gagne and Cuddihy 1999, p. 45) or pasture. Intentional and inadvertent introduction of alien plant and animal species has contributed to the reduction in range of native species on the island (throughout this rule, the terms “alien,” “feral,” “nonnative,” and “introduced” all refer to species that are not naturally native to the Hawaiian Islands). Most of the taxa included in this rule persist on steep slopes, precipitous cliffs, valley headwalls, and other regions where unsuitable topography has prevented urbanization and agricultural development, or where inaccessibility has limited encroachment by nonnative plant and animal species.

#### Oahu Ecosystems

The seven Oahu ecosystems that support the species addressed in this rule are described in the following sections.

##### Coastal

The coastal ecosystem is found on all of the main Hawaiian Islands, with the highest species diversity in the least populated coastal areas of Hawaii, Maui, Molokai, Kahoolawe, Oahu, and Kauai, and their associated islets. On Oahu, the coastal ecosystem includes mixed herblands, shrublands, and grasslands, from sea level to 980 ft (300 m) in elevation, generally within a narrow zone above the influence of waves to within 330 ft (100 m) inland, sometimes extending further inland if strong prevailing onshore winds drive sea spray and sand dunes into the lowland zone (The Nature Conservancy (TNC) 2006a). The coastal vegetation zone is typically dry, with annual rainfall of less than 20 in (50 cm), however windward rainfall may be high enough (up to 40 in (100 cm)) to support mesic-associated and sometimes wet-associated vegetation (Gagne and Cuddihy 1999, pp. 54–66). Biological

diversity is low to moderate in this ecosystem, but may include some specialized plants and animals such as nesting seabirds and the rare native plant *Sesbania tomentosa* (ohai) (TNC 2006a). The plant *Bidens amplexans*, which is listed as endangered in this final rule, is reported from this ecosystem on Oahu (Hawaii Biodiversity and Mapping Program (HBMP) 2008; TNC 2007).

##### Lowland Dry

The lowland dry ecosystem includes shrublands and forests generally below 3,300 ft (1,000 m) elevation that receive less than 50 in (130 cm) annual rainfall, or are in otherwise prevailing dry substrate conditions. Areas consisting of predominantly native species in the lowland dry ecosystem are now rare; however, this ecosystem is found on the islands of Hawaii, Molokai, Lanai, Kahoolawe, Oahu, and Kauai, and is best represented on the leeward sides of the islands (Gagne and Cuddihy 1999, p. 67). On Oahu, this ecosystem is typically found on the leeward side of the Waianae Mountains, and the leeward southern coast, including Diamond Head Crater (Gagne and Cuddihy 1999, p. 67; TNC 2006b). Biological diversity is low to moderate in this ecosystem, and includes specialized animals and plants such as the Hawaiian owl or pueo (*Asio flammeus sandwichensis*) and *Santalum ellipticum* (iliahialoe) (Wagner *et al.* 1999, pp. 1,220–1,221; TNC 2006b). The plants *Bidens amplexans*, *Doryopteris takeuchii*, and *Pleomele forbesii*, which are listed as endangered in this final rule, are reported from this ecosystem on Oahu (HBMP 2008; TNC 2007).

##### Lowland Mesic

The lowland mesic ecosystem includes a variety of grasslands, shrublands, and forests, generally below 3,300 ft (1,000 m) elevation, that receive between 50 and 75 in (130 and 190 cm) annual rainfall, or are in otherwise mesic substrate conditions (TNC 2006c). In the Hawaiian Islands, this ecosystem is found on Hawaii, Maui, Molokai, Lanai, and Kauai, on both windward and leeward sides of the islands. On Oahu, this ecosystem is typically found on the leeward slopes of both the Waianae and Koolau Mountains (Gagne and Cuddihy 1999, p. 75; TNC 2006c). Biological diversity is high in this system (TNC 2006c). The plants *Cyanea calycina*, *C. lanceolata*, *Melicope makahae*, *Platydesma cornuta* var. *decurrens*, *Pleomele forbesii*, *Pteralyxia macrocarpa*, and *Tetraplasandra lydgatei*, and the oceanic Hawaiian damselfly, which are listed as

endangered in this final rule, are reported from this ecosystem (HBMP 2008; TNC 2007).

##### Lowland Wet

The lowland wet ecosystem is generally found below 3,300 ft (1,000 m) elevation on the windward sides of the main Hawaiian Islands, except Kahoolawe and Niihau (Gagne and Cuddihy 1999, p. 85; TNC 2006d). These areas include a variety of wet grasslands, shrublands, and forests that receive greater than 75 in (190 cm) annual precipitation, or are in otherwise wet substrate conditions (TNC 2006d). On Oahu, this system is best developed in wet valleys and slopes along the summit of the Koolau Mountains, with a small area located on the windward side of the summit of the Waianae Mountains (TNC 2006d). Biological diversity is high in this system (TNC 2006d). The plants *Cyanea calycina*, *C. lanceolata*, *C. purpurellifolia*, *Cyrtandra gracilis*, *C. kaulantha*, *C. sessilis*, *C. waiolani*, *Melicope hiiakae*, *Platydesma cornuta* var. *cornuta*, *Psychotria hexandra* ssp. *oahuensis*, *Pteralyxia macrocarpa*, and *Zanthoxylum oahuense*, and the blackline, crimson, and oceanic Hawaiian damselflies, which are listed as endangered in this final rule, are reported from this ecosystem (HBMP 2008; TNC 2007).

##### Montane Wet

The montane wet ecosystem is composed of natural communities (grasslands, shrublands, forests, and bogs) found at elevations between 3,300 and 6,600 ft (1,000 and 2,000 m), in areas where annual precipitation is greater than 75 in (190 cm) (TNC 2006e). This system is found on all of the main Hawaiian Islands except Niihau and Kahoolawe (only the islands of Molokai, Maui, and Hawaii have areas above 4,020 ft (1,225 m) (TNC 2006e). On Oahu, this ecosystem is found only at the summit of the Waianae Mountains (TNC 2007). Biological diversity is moderate to high (TNC 2006e). Due to the restricted distribution of this ecosystem on Oahu, only the plants *Cyanea calycina* and *Melicope christophersenii*, which are listed as endangered in this final rule, are reported from this ecosystem (HBMP 2008; TNC 2007).

##### Dry Cliff

The dry cliff ecosystem is composed of vegetation communities occupying steep slopes (greater than 65 degrees) in areas that receive less than 75 in (190 cm) of rainfall annually, or are in otherwise dry substrate conditions (TNC 2006f). This ecosystem is found on all

of the main Hawaiian Islands except Niihau, and on the island of Oahu is best represented along the leeward slopes of the Waianae Mountains (TNC 2006f). A variety of shrublands occur within this ecosystem (TNC 2006f). Biological diversity is low to moderate (TNC 2006f). The plants *Korthalsella degeneri*, *Melicope makahae*, *Platydesma cornuta* var. *decurrens*, *Pleomele forbesii*, and *Pteralyxia macrocarpa*, which are listed as endangered in this final rule, are reported from this ecosystem (HBMP 2008; TNC 2007).

#### Wet Cliff

The wet cliff ecosystem is generally composed of shrublands on near-vertical slopes (greater than 65 degrees) in areas that receive more than 75 in (190 cm) of annual precipitation, or in otherwise wet substrate conditions (TNC 2006g). This system is found on the islands of Hawaii, Maui, Molokai, Lanai, Oahu, and Kauai. On Oahu, this ecosystem is typically found along the entire length of the summit of the Koolau Mountains and at the summit of Mt. Kaala in the Waianae Mountains (TNC 2006g). Biological diversity is low to moderate (TNC 2006g). The plants *Cyanea calycina*, *C. purpurellifolia*, *Cyrtandra kaulantha*, *C. sessilis*, *Melicope christophersenii*, *Psychotria hexandra* ssp. *oahuensis*, *Pteralyxia macrocarpa*, and the crimson and oceanic Hawaiian damselflies, which are listed as endangered in this final rule, are reported from this ecosystem (HBMP 2008; TNC 2007).

#### Description of the 23 Species

Below is a brief description of each of the 23 species, presented in alphabetical order by genus. Plants are presented first, followed by animals.

##### Plants

*Bidens amplexens* (kookoolau), a perennial or sometimes annual herb in the sunflower family (Asteraceae), is restricted to windward cliffs and crests along the northern portion of the Waianae Mountains on the island of Oahu, in the coastal and lowland dry ecosystems, at elevations between 300 and 1,400 ft (90 and 430 m) (Ganders and Nagata 1999, p. 271; TNC 2007; HBMP 2008). This species intergrades with *B. torta* and forms hybrid swarms from near Kaena Point along the Waianae summit ridges to the head of Makua Valley (a hybrid swarm occurs where there is no reproductive barrier between distinct populations, or where a barrier has broken down). Pure *B. amplexens* is restricted to the windward cliffs and crests of the

Waianae range (Ganders and Nagata 1999, p. 271). *Bidens amplexens* was historically known from five locations spanning 7 mi (11 km) in the northern Waianae Mountains including Makaleha Valley, Uluhulu Gulch, Puu Pueo to Alau Gulch, Manini Gulch to Alau Gulch, and Nihoa Gulch (HBMP 2008). At last observation, there were fewer than 1,000 individuals in four locations separated by less than 4 mi (6 km): Kealia Trail on the east side of Haili Gulch; Kapuna-Kamimi Ridge on the road to the Pahole Natural Area Reserve (NAR); Kealia east of Kawaii Gulch; and from Kuaokala to Keawaula Ridge (Lau 2001, in litt.; HBMP 2008).

*Cyanea calycina* (haha), an unbranched shrub in the bellflower family (Campanulaceae), is found in both the Waianae and Koolau Mountains of Oahu in the lowland mesic, lowland wet, montane wet, and wet cliff ecosystems (Lammers 1999, p. 483; Wagner and Herbst 2003, p. 17; TNC 2007; HBMP 2008). In the Waianae Mountains, *C. calycina* occurs in *Acacia-Metrosideros-Dicranopteris* (koa-ohia-uluhe) forests at elevations between 1,800 and 3,920 ft (550 and 1,195 m), and in the Koolau Mountains this species occurs in wet *Metrosideros-Dicranopteris* forest and shrubland at elevations between 1,830 and 3,000 ft (558 and 900 m) (HBMP 2008). Currently, *C. calycina* is found from Pahole in the northern portion of the Waianae Mountains south along the summit to Palawai, in 18 occurrences totaling at least 170 individuals (U.S. Army 2006; HBMP 2008). In the Koolau Mountains, *C. calycina* was known historically from nine locations along the entire length of the range (HBMP 2008). Currently, 22 occurrences totaling between 155 and 169 individuals are known, from the most northern point at Kamananui Gulch along the summit ridges south to Konahuanui (U.S. Army 2006; HBMP 2008). The combined 40 occurrences total 325 to 339 individuals.

*Cyanea lanceolata* (haha) is an unbranched shrub in the bellflower family (Campanulaceae) that occurs in the southeastern Koolau Mountains in the lowland mesic and lowland wet ecosystems, at elevations between 1,000 and 2,500 ft (305 and 760 m) (Wagner *et al.* 1999, p. 483; Wagner and Herbst 2003, p. 17; TNC 2007; HBMP 2008). Historically, this species was wide-ranging along the Koolau Mountains, from the northern Schofield-Waikane area to Wailupe at the southern end of the range, in at least 17 occurrences (HBMP 2008). Currently, there are 4 known occurrences, totaling fewer than 60 individuals, sparsely scattered over a

much smaller area of the southern Koolau range. These occurrences include Kului-Hawaii Loa, Wailupe, Mauumae, and Waialae Nui, with an unconfirmed report of individuals in Pia Valley (HBMP 2008; Lau 2008, in litt.).

*Cyanea purpurellifolia* (haha) is an unbranched shrub in the bellflower family (Campanulaceae) that occurs in the Koolau Mountains in the lowland wet and wet cliff ecosystems, at elevations between 1,860 and 2,160 ft (570 and 660 m) (TNC 2007; HBMP 2008). Historically, this species was known from a few individuals in the vicinity of Kaluanui Valley and north to Maakua-Papali Ridge (Lammers 1999, p. 484; Wagner and Herbst 2003, p. 17; HBMP 2008). Currently, *C. purpurellifolia* occurs in the northern Koolau Mountains from Maakua-Kaipapau to Punaluu-Kaluanui Ridge, in 5 occurrences totaling approximately 20 individuals (Plant Extinction Prevention (PEP) Program 2008, pp. 20–21; HBMP 2008).

*Cyrtandra gracilis* (haiwale) (Gesneriaceae, African violet family) is a perennial shrub that is found in *Metrosideros polymorpha-Dicranopteris linearis* forest in the lowland wet ecosystem at 1,600 ft (488 m) in elevation, on the leeward side of the southern Koolau Mountains (Wagner *et al.* 1999, p. 755; National Tropical Botanical Garden (NTBG) Provenance Report 2004; TNC 2007; HBMP 2008; PEP Program 2008, p. 16). Presumed extinct since the 1800s, 10 individuals of *C. gracilis* were discovered by botanists in Pia Valley in 2001 (NTBG Provenance Report 2002). Between 2001 and 2008, only six to eight plants were observed at this location (NTBG Provenance Report 2002; PEP Program 2008, p. 16; Bakutis 2008, in litt.). It is apparently extirpated from historical locations in Palolo Valley, Konahuanui Gulch, and Manoa Valley (Wagner *et al.* 1999, p. 755; HBMP 2008).

*Cyrtandra kaulantha* (haiwale) is a perennial shrub in the African violet family (Gesneriaceae) found in dense shade in moist wooded gulches at elevations between 840 and 1,050 ft (255 and 320 m), in the lowland wet and wet cliff ecosystems in the Koolau Mountains (Wagner *et al.* 1999, p. 763; TNC 2007; HBMP 2008). *Cyrtandra kaulantha* was historically known from the Waiahole Ditch Trail and Kahanaiki Stream areas. It was considered “locally common” and a collection was taken from a “large colony” in 1985 (Takeuchi 1985, in litt.; Wagner *et al.* 1999, p. 763; Lau 2006a, in litt.). Prior to October 2005, there were 34 wild individuals in 3 occurrences (15, 8, and 11 individuals, respectively) in the subgulches of

Waianu Valley (Bakutis 2005a, in litt.). In 2005, the third occurrence was discovered crushed by a tree, leaving six living individuals (Bakutis 2005a, in litt.). In March 2006, it was reported that only one individual remained at the second occurrence, and that some individuals in the other two occurrences had fruit (Bakutis 2006a, in litt.). In addition, 4 more individuals were discovered at the site of the first occurrence, bringing the total number of wild individuals to 26 (Bakutis 2006b, in litt.). In May 2006, another tree fall crushed 4 individuals in the third occurrence, leaving 2 remaining; however, a fourth occurrence of 4 individuals was discovered in another subgulch, and 1 new individual was found in the first occurrence, bringing the total number of wild individuals to 27 (Bakutis 2006a, in litt.; Bakutis 2006b, in litt.). All occurrences were visited again in April 2007, with a total of 28 wild individuals observed (PEP Program 2007, p. 17). Outplanting has been conducted in the four subgulches of Waianu Valley, but in areas some distance from the known occurrences. A total of 28 individuals were outplanted between 2005 and 2007. However, due to predation by nonnative slugs, only 12 outplanted individuals remained in 2007 (PEP Program 2007, p. 17). *Cyrtandra kaulantha* is therefore currently found in 5 occurrences totaling 28 wild and 12 outplanted individuals.

*Cyrtandra sessilis* (haiwale) (Gesneriaceae, African violet family) is a small shrub that was historically known only from a few collections in wet gulch bottoms and slopes of mesic valleys in the windward Koolau Mountains (Wagner *et al.* 1999, p. 778). Typical habitat is wet *Metrosideros* forests at elevations between 1,600 and 2,200 ft (490 and 670 m) in the lowland wet and wet cliff ecosystems (TNC 2007; HBMP 2008; Bakutis 2008, in litt.). In 1993, there were about 200 individuals in the only known occurrence near the summit of the Schofield-Waikane Trail (HBMP 2008). In 2003, there were an estimated 50 individuals in 2 occurrences (Perlman 2003, in litt.). *Cyrtandra sessilis* is currently known from 4 occurrences totaling approximately 83 individuals: 75 individuals along the Waikane-Schofield Trail in Kahana Valley, 1 individual at Lulumahu Gulch, 2 individuals in Wailupe, and 5 individuals at Hawaii Loa Ridge near Pia Valley (Perlman 2003, in litt.; Bakutis 2006c, in litt.; HBMP 2008; Bakutis 2008, in litt.).

*Cyrtandra waiolani* (haiwale), a small shrub in the African violet family

(Gesneriaceae), is found in rich, partly sunny gulches; shady, moist banks above creeks; and wet gulch bottoms in the lowland wet ecosystem (Wagner *et al.* 1999, p. 781; HBMP 2008; Lau 2011, in litt.). *Cyrtandra waiolani* was historically known from at least seven locations: five in the southern Koolau Mountains and two in the northern Koolau Mountains, at elevations between 800 and 3,000 ft (240 and 900 m) (HBMP 2008). Plants have not been observed in these areas since then. Individuals likely representing *C. waiolani*, based on vegetative characteristics, were seen in 1994, along the ridge between Kaipapau and Maakua (Lau 2011, in litt.). In 2005, it was thought there was a small chance that individuals found on the Kualono Ridge near Kaaawa could be *C. waiolani*, and cuttings were taken for propagation and positive identification when flowering and fruiting occurred (Hawaii Department of Land and Natural Resources (HDLNR) 2005a; U.S. Army 2006; Bakutis 2008, in litt.; Ching 2009, in litt.; Lau 2009, in litt.); however, these plants were found not to be *C. waiolani* (Lau 2011, in litt.). Many areas within the lowland wet ecosystem in the Koolau Mountains have not been surveyed for this species. The Koolau mountain range is over 35 mi (58 km) in length. Historical surveys that we have records of from the 1800s did not cover the entire mountain range, but collections were made at seven widely distributed locations along the 35-mi (58-km) range. In the 1800s, forests in the Koolau Mountains were more intact at the summits; therefore, we believe that if seven collections were made, there were possibly many more individuals in the wild. The plants were only known from a ridge between Kaipapau and Maakua in 1994, and from Kahana in 2005, but those plants are no longer present, which represents a population decline from seven (and possibly more than seven historically) to zero. Botanists suggest that the species is likely still extant in these areas and may be found with more intensive surveying (Bakutis 2008, in litt.; Lau 2009 and 2011, in litt.).

*Doryopteris takeuchii* (no common name (NCN)) is a fern in the Pteridaceae family (Palmer 2003, p. 133). It occurs in dry shrubland on the slopes of Diamond Head Crater, a volcanic tuff cone on the southern coast of Oahu, at elevations between 140 and 300 ft (43 and 91 m) (NTBG 2007a, p. 1). This area consists of pockets of native and nonnative species in the lowland dry ecosystem (TNC 2007). Little is known of the historical distribution of *D.*

*takeuchii*. Currently, there are 50 to 100 plants along the main trail to the summit, with individuals on the Kuilei cliffs and the southwest-facing gulches above Munro Trail on the outer slopes of the crater, totaling 160 to 200 individuals on Diamond Head (NTBG 2007, p. 1; Lau 2011, in litt.).

*Korthalsella degeneri* (hulumoa), a subshrub (a perennial with stems that are woody at the base) in the mistletoe family (Viscaceae), is parasitic on the native trees *Sapindus oahuensis* (kaulu) and *Nestegis sandwicensis* (olopua) (Wagner *et al.* 1999, p. 1,339). This species occurs in diverse forest in the dry cliff ecosystem at elevations between 1,100 and 1,500 ft (335 and 460 m) in the Waianae Mountains (U.S. Army 2006; TNC 2007; HBMP 2008). In 1938, *K. degeneri* was recorded from Makua Valley, but little else is known of its historical range (HBMP 2008). Currently, *K. degeneri* is known from Makaha Valley. In addition, individuals of this species may also occur in Makua Valley and at Kahanahaiki. Confirmation of the identification of these individuals is difficult because another related species, *Korthalsella platycaula*, is also found in Makua Valley (Lau 2001b and 2011, in litt.; U.S. Army 2006).

*Melicope christophersenii* (alani), a shrub or tree in the rue family (Rutaceae), occurs in wet forest and shrubland in the montane wet and wet cliff ecosystems at elevations between 2,400 and 4,000 ft (730 and 1,200 m) in the Waianae Mountains (Stone *et al.* 1999, pp. 1,184–1,185; U.S. Army 2006; TNC 2007; HBMP 2008). Historically, *M. christophersenii* was known from a few scattered locations in the Mt. Kaala area of the Waianae Mountains, and as far south as Puu Kua (HBMP 2008). Currently, there are 3 occurrences totaling approximately 250 individuals in the Waianae summit area, with the southernmost occurrence at Puu Hapapa (U.S. Army 2006; HBMP 2008).

*Melicope hiiakae* (alani) is a small tree in the rue family (Rutaceae) that occurs in wet forest in the lowland wet ecosystem in the Koolau Mountains, between elevations of 1,300 and 2,260 ft (400 and 700 m) (U.S. Army 2006; NTBG 2007, p. 3; TNC 2007; HBMP 2008). Historically, *M. hiiakae* was found along the entire length of the Koolau range (HBMP 2008). Currently, there are 10 scattered occurrences totaling fewer than 60 individuals from Kawailoa to Waimalu (NTBG 2007, p. 3; HBMP 2008; Lau 2011, in litt.).

*Melicope makahae* (alani), a shrubby tree in the rue family (Rutaceae), occurs in mesic forest and shrubland in the lowland mesic and dry cliff ecosystems

in the Waianae Mountains, at elevations between 2,200 and 2,900 ft (670 and 890 m) (Stone *et al.* 1999, p. 1,194; U.S. Army 2006; TNC 2007; HBMP 2008; Lau 2011, in litt.). Historically, *M. makahae* was found in the Waianae Mountains on the west side of Mt. Kaala in Makaha Valley (Stone 1963, p. 410; TNC 2007). Currently, there are 4 occurrences totaling fewer than 200 individuals north and west of the summit area of the Waianae Mountains (HBMP 2008).

*Platydesma cornuta* var. *cornuta* (NCN) is a palmoid (leaves dividing or radiating from one point) shrub in the rue family (Rutaceae) (Stone *et al.* 1999, pp. 1,209–1,210). It occurs in wet forest, shrubland, and gulches in the lowland wet ecosystem of the Koolau Mountains, at elevations between 1,900 and 2,500 ft (580 and 760 m) (U.S. Army 2006; TNC 2007; HBMP 2008). Historically, this species was found along the entire length of the Koolau range, and at elevations below 800 ft, from Pupukea to Wailupe Valley (HBMP 2008). Currently, 9 occurrences (totaling 32 individuals) are restricted to the summit area of the northern Koolau Mountains, with only 1 occurrence (16 individuals) near the summit of the southern Koolau Mountains (HBMP 2008).

*Platydesma cornuta* var. *decurrens* (NCN), a palmoid shrub in the rue family (Rutaceae), occurs in the lowland mesic and dry cliff ecosystems of the Waianae Mountains, at elevations between 1,990 and 3,000 ft (600 and 900 m) (Stone *et al.* 1999, pp. 1,209–1,210; U.S. Army 2006; TNC 2007; HBMP 2008). Historically, this species was wide-ranging in the Waianae Mountains, from the Mokuleia Forest Reserve south to Kaluaa (TNC 2007; HBMP 2008). Currently, *P. cornuta* var. *decurrens* is found in 15 occurrences scattered from Pahole to Palawai Gulch, totaling 259 to 309 individuals (U.S. Army 2006; HBMP 2008).

*Pleomele forbesii* (hala pepe) is a tree in the asparagus (Asparagaceae) family (Smithsonian Department of Botany 2008). It occurs in mesic and dry forest and shrubland in the lowland dry, lowland mesic, and dry cliff ecosystems in the Waianae and Koolau Mountains, at elevations between 800 and 2,900 ft (240 and 900 m) (Wagner *et al.* 1999, p. 1,352; TNC 2007; HBMP 2008).

Historically, *P. forbesii* was found in at least 11 locations, totaling an unknown number of individuals, in the Waianae Mountains (HBMP 2008). Currently, there are approximately 19 occurrences totaling 290 to 307 individuals, from Keawaula, Kaluakauila, Kuaokala, Kahanahaiki, the east and south rim of Makua Valley, the rim of Waianae Kai Valley, Keaau, Makaha, Kamaileunu,

Kolekole Pass, Puu Hapapa, Puukaua, Ekahanui, Halona, Palawai, and Nanakuli, in the Waianae Mountains, and one occurrence of a few individuals in the Koolau Mountains (Lau 2011, in litt.; HBMP 2008).

*Psychotria hexandra* ssp. *oahuensis* (kopiko), a tree in the coffee family (Rubiaceae), occurs in wet forest and shrubland in the lowland wet and wet cliff ecosystems of the Koolau Mountains, at elevations between 1,080 and 2,000 ft (330 and 600 m) (Wagner *et al.* 1999, p. 1,166; TNC 2007; HBMP 2008). Two varieties of this subspecies, var. *hosakana* and var. *oahuensis*, were historically known only from the northern Koolau Mountains, while var. *rockii* was known only from the southern Koolau Mountains (Lau 2011, in litt.). This species is currently known from three occurrences: one occurrence of 8 to 9 individuals in Maakua Gulch; one individual at Opauala Gulch; and an estimated fewer than 10 individuals scattered between Kaipapau and Kaluanui, just south of Maakua Gulch (Bakutis 2005, in litt.; U.S. Army 2006; PEP Program 2007, p. 25; HBMP 2008). A single individual was outplanted within a fenced area in Makua Valley (February 2007) and has been observed to be healthy in subsequent monitoring visits (PEP Program 2007, p. 25).

*Pteralyxia macrocarpa* (kaulu) is a tree in the dogbane family (Apocynaceae). It occurs in the Waianae and Koolau Mountains, in the lowland mesic, lowland wet, dry cliff, and wet cliff ecosystems, at elevations between 1,100 and 2,800 ft (340 and 850 m) (Wagner *et al.* 1999, p. 220; U.S. Army 2006; TNC 2007; HBMP 2008). Historically, this species was found along the entire length of the Koolau range and on the summit ridges of the Waianae Mountains (HBMP 2008). Currently, *P. macrocarpa* is found from Kapuhi Gulch to North Palawai Gulch in the Waianae Mountains, in approximately 31 occurrences totaling between 233 and 289 individuals. In the Koolau Mountains, 7 occurrences totaling 47 individuals occur in the most northern portion of this range, while only 11 individuals in 2 occurrences are found in the southernmost portion of the range (U.S. Army 2006; HBMP 2008).

*Tetraplasandra lydgatei* (NCN), a tree in the ginseng family (Araliaceae), is found in mesic forest in the lowland mesic ecosystem at elevations between 800 and 1,600 ft (240 and 490 m) in the Koolau Mountains (Motley 2005, p. 107; TNC 2007). In 2005, Motley formally recognized *T. lydgatei* as distinct from *T. oahuensis* (Motley 2005; p. 105), and all known populations were surveyed at

that time (PEP Program 2007, pp. 27–28). Formerly found from Niu Valley to the Halawa Ridge Trail, its distribution is now limited to two wild occurrences: one on the eastern slope of Hawaii Loa Ridge and another on Kulepeamoia Ridge. These occurrences total 8 individuals (HBMP 2008).

*Zanthoxylum oahuense* (ae), a small tree in the rue family (Rutaceae), occurs in wet forest in the lowland wet ecosystem at elevations between 2,060 and 2,720 ft (630 and 830 m) (Wagner *et al.* 1999, p. 1,216; TNC 2007; HBMP 2008). This species was historically known from 17 locations scattered along the entire length of the Koolau Mountains (HBMP 2008). Currently, *Z. oahuense* is found in the Koolau Mountains from Halawa-Kalauao ridge to ridges in Moanalua-Kamanui-Manaiki, and further east at Hawaii Loa Ridge, in 5 occurrences totaling 21 to 25 individuals (U.S. Army 2006; HBMP 2008; Lau 2011, in litt.).

#### Animals

The crimson Hawaiian damselfly (*Megalagrion leptodemas*) is a medium-sized, slender and delicate species, with adults measuring from 1.4 to 1.6 in (36 to 41 mm) in length and having a wingspan of 1.5 to 1.6 in (39 to 42 mm). The species exhibits minimal striping and patterns. Males are primarily red and black in color, with females appearing somewhat paler and with green coloration present on the abdomen laterally (Polhemus and Asquith 1996, p. 65).

The crimson Hawaiian damselfly breeds in the slow reaches of streams and seep-fed pools (Williams 1936, p. 306; Zimmerman 1948a, p. 369; Polhemus 1994a, p. 7; Polhemus 1994b, p. 37). Crimson Hawaiian damselfly naiads, the aquatic life-history stage, frequent open water, resting horizontally, or on submerged vegetation (Williams 1936, p. 309). Adults perch on streamside vegetation and patrol along the stream corridor, staying close to breeding pools (Polhemus and Asquith 1996, p. 65).

Between 1991 and 2003, over 150 sites were surveyed on the island of Oahu for native damselflies, and results indicate that one lowland species, the Pacific Hawaiian damselfly, has been extirpated from Oahu, and the orangeblack Hawaiian damselfly has been reduced to a single remnant population (Polhemus 2007, pp. 233–235). The crimson Hawaiian damselfly was known historically from approximately eight areas where it is now extirpated, including the windward side of the Waianae Mountains and scattered locations in the Koolau

Mountains (Polhemus 1994a, p. 7; Polhemus 1994b, pp. 37–38; Englund 1999, pp. 228–229, 231; Polhemus 2007, pp. 234, 238). In 2003, this species was not found during surveys of Kahana Stream and may be extirpated from this stream system (Englund *et al.* 2003, p. 6). Currently, only three occurrences of the crimson Hawaiian damselfly are known, all from the Koolau Mountains in the lowland wet and wet cliff ecosystems at Moanalua, north Halawa, and Maakua (TNC 2007; Polhemus 2008a, in litt.; HBMP 2008; Preston 2011, in litt.). This species was last observed in the lowland wet ecosystem at Waiawa in the late 1990s (Englund 1999, p. 229). All colonies of this damselfly are constrained to portions of streams not occupied by nonnative predatory fish—that is, stream portions above geologic or manmade barriers (e.g., waterfalls, steep gradients, dry stream midreaches, or constructed diversions). No estimates of population size for the crimson Hawaiian damselfly are available.

The blackline Hawaiian damselfly (*Megalagrion nigrohamatum nigrolineatum*) is a moderately-sized and delicate subspecies (Polhemus and Asquith 1996, p. 73). It occurs in the slow sections or pools along mid-reach and headwater sections of perennial upland streams and in seep-fed pools along overflow channels bordering such streams. The adults measure from 1.4 to 1.8 in (35 to 45 mm) in length and have a wingspan of 1.7 to 1.9 in (45 to 50 mm). Naiads remain concealed and are found under stones or in mats of algae (Williams 1936, p. 318; Zimmerman 1948a, pp. 371–372).

The blackline Hawaiian damselfly was known historically from the Koolau and Waianae Mountains, from sea level to over 2,400 ft (730 m) (Williams 1936, p. 318; Polhemus 1994a, pp. 6–12). Currently, this species is found in the lowland wet ecosystem on the windward and leeward sides of the Koolau Mountains, in the headwaters and upper reaches of 17 streams: Koloa, Kaipapau, Maakua, upper Kaluanui, Palaa, Helemano headwaters, Poamoho, Kahana, Waiahole, Waiawa, Kaalaea, Waihee, Kahaluu, north Halawa, Heeia, Kalihi, and Maunawili (TNC 2007; Polhemus 2008a, in litt.; Wolff 2008, in litt.; HBMP 2008; Preston 2011, in litt.). Like the crimson Hawaiian damselfly, all colonies of the blackline Hawaiian damselfly are constrained to portions of streams not occupied by nonnative predatory fish—that is, stream portions above geologic or manmade barriers (e.g., waterfalls, steep gradients, dry stream midreaches, or constructed diversions). Currently, the 17 stream

colonies are estimated to total 800 to 1,000 individuals, with approximately 50 individuals per stream (Polhemus 2008c, in litt.).

The oceanic Hawaiian damselfly (*Megalagrion oceanicum*) is a comparatively large and robust species. The adults measure from 1.8 to 1.9 in (47 to 50 mm) in length and have a wingspan of 2.0 to 2.2 in (51 to 55 mm). Both sexes exhibit prominent patterns including black stripes, but males are bright red in color while females are pale green. Immature individuals of this species are also large with long grasping legs and dagger-like gills (Polhemus and Asquith 1996, p. 77). The oceanic Hawaiian damselfly can be distinguished from other Oahu damselfly species by its large size, black stripes, and fast flight along flowing sections of streams.

Individuals of the immature stage of the oceanic Hawaiian damselfly are found in swiftly flowing sections of streams, usually amid rocks and gravel in stream riffles (stream sections with sufficient gradient to create small standing waves) and small cascades on waterfalls (Williams 1936, pp. 321–322; Polhemus and Asquith 1996, p. 106). While capable of swimming, the naiads usually crawl among gravel or submerged vegetation. Older naiads frequently forage out of the actual stream channel and have been observed among wet moss on rocks, and wet rock walls and seeps (Williams 1936, pp. 321–323). Adults are very bold and strong flyers, and when disturbed frequently fly upward into the forest canopy overhanging the stream or waterfall (Williams 1936, p. 323; Polhemus 1994b, p. 48).

Historically, the oceanic Hawaiian damselfly occurred on both the leeward and windward sides of the Koolau and Waianae Mountains, and was known, but is currently extirpated, from approximately 16 general localities, including the Waianae Mountains and all leeward streams of the Koolau Mountains (Englund and Polhemus 1994, p. 8). The species now currently occupies 12 sites above 300 ft (100 m) in elevation on the windward side of the Koolau Mountains at Kahawainui, Waialele, Koloa, Kaipapau, Maakua, upper Kaluanui, Kawaiiki, Opaeula, upper Helemano, Makaua, Waihee, and Kahaluu, in the lowland mesic, lowland wet, and wet cliff ecosystems (TNC 2007; Polhemus 2007, pp. 237–239; HBMP 2008; Preston 2011, in litt.). Like the crimson and blackline Hawaiian damselflies, the oceanic Hawaiian damselfly is constrained to portions of streams not occupied by nonnative predatory fish—that is, stream portions

above geologic or manmade barriers (e.g., waterfalls, steep gradients, dry stream midreaches, or constructed diversions). No estimates of population size for the oceanic Hawaiian damselfly are available.

### Summary of Comments and Recommendations

On August 2, 2011, we published a proposed rule to list these 23 Oahu species as endangered throughout their ranges, and to designate critical habitat for 124 species (76 FR 46362). The comment period for the proposal opened on August 2, 2011, and closed on October 3, 2011. We requested that all interested parties submit comments or information concerning the proposed listing and designation of critical habitat for the 124 species. We contacted all appropriate State and Federal agencies, county governments, elected officials, scientific organizations, and other interested parties and invited them to comment. In addition, we published a public notice of the proposed rule on August 6, 2011, in the local Honolulu Star Advertiser newspaper, at the beginning of the comment period. On April 12, 2012, we published a document (77 FR 21936) announcing the availability of our draft economic analysis, requesting comments on it until May 14, 2012, and reopening the comment period on the August 2, 2011, proposed rule (76 FR 46362) until that time as well.

During the comment periods, we received a total of 55 comment letters. We did not receive any requests for public hearings. Four commenters were peer reviewers, 5 were State of Hawaii agencies, 1 was a Federal agency (U.S. Navy), and 45 were nongovernmental organizations or individuals. Due to the nature of the proposed rule, we received combined comments from the public on both the listing action and the critical habitat; we have therefore addressed these issues in a single comment section.

Four of the comment letters supported the listing and designation of critical habitat for the Oahu species. Thirty-one commenters requested that we exclude 695 ac (281 ha) (representing entire or portions of five different critical habitat units), based on possible economic effects of the designation. We reviewed all comments we received for substantive issues and new data regarding the proposed listing of 23 species and designation of critical habitat for 124 species. We have fully considered all substantive comments in this final rule. Written comments we received during the comment periods are addressed in the following

summary. For readers' convenience, we have combined similar comments into single comments and responses.

#### Peer Review

In accordance with our peer review policy published in the **Federal Register** on July 1, 1994 (59 FR 34270), we solicited expert opinions from 13 knowledgeable individuals with scientific expertise on the Oahu plants and damselflies and their habitats, including familiarity with the species, the geographic region in which these species occur, and conservation biology principles. We received responses from four of the peer reviewers who were solicited. These four peer reviewers generally supported our methodology and conclusions. One reviewer supported the listing and critical habitat for the Oahu species, one reviewer supported protection of the stream habitat essential to the Hawaiian damselflies, and all four reviewers provided new information on one or more of the Oahu species, which was incorporated into this final rule. We reviewed all comments received from the peer reviewers for substantive issues and new information regarding the listing of 23 species and designation of critical habitat for 124 species. Peer reviewer comments are addressed in the following summary and incorporated into the final rule as appropriate.

#### Peer Reviewer Comments

(1) *Comment:* One peer reviewer suggested that we use the more current and accepted terms “ferns and lycophytes” instead of “ferns and allies” in the published rule.

*Our Response:* We agree that “ferns and lycophytes” is the currently accepted terminology; however, changing the term “ferns and allies” to “ferns and lycophytes” at 50 CFR 17.12 and at 50 CFR 17.99(j) would require a separate rulemaking to amend the Code of Federal Regulations (CFR), not only for the Hawaiian species listings, but for all previously listed species nationwide. This rulemaking would also require an opportunity for public review and comment, which we are unable to accommodate in this final rule.

(2) *Comment:* One peer reviewer disagreed with our statement that “many native Hawaiian plants and animals currently occupy only areas of marginal habitat because the threats are reduced in those areas,” and suggested that the areas where the species currently occur constitute their prime habitat, not marginal habitat.

*Our Response:* Prime habitat and marginal habitat are not terms used in the Act. However, we agree that some

native Hawaiian plants and animals thrive in areas that are “marginal” (i.e., not dominated by other native species) and have modified our statement in this final rule. The areas designated as critical habitat in this final rule include both occupied and unoccupied habitat.

(3) *Comment:* One peer reviewer expressed concern regarding the potential threat to the three proposed Hawaiian damselflies from the use of biopesticides (pesticides derived from natural materials such as animals, plants, bacteria, and minerals) to combat, for example, mosquitoes.

*Our Response:* We do not have sufficient data to evaluate the effects that biopesticides, in particular, *Bacillus thuringiensis israelensis* (Bti), may have on Hawaiian damselflies. Therefore, Bti is not considered a current threat to the three proposed Hawaiian damselflies because the specific impacts to these damselflies are unknown at this time.

(4) *Comment:* Two peer reviewers provided information from their recent surveys for species of *Megalagrion* and stated that survey results demonstrated that only streams without nonnative fish provide habitat for native damselflies, and that these streams are crucial for the continued survival of *Megalagrion*. The commenters also stated that, in addition to predation by nonnative fish, siltation of stream gravel beds and other stream modifications resulting from erosion of nearby riparian habitat caused by the actions of feral ungulates is a significant threat to *Megalagrion* species. The commenters recommended that the Service should try to protect the remaining stream habitat that is free of nonnative fish, eliminate nonnative fish in the streams in which they occur, and restore streams and surrounding habitat to provide suitable habitat for Hawaii's *Megalagrion* and other native aquatic species. They also stated that the positive impacts from the removal of nonnative fish and ungulates in aquatic and surrounding habitat will improve overall environmental conditions, that native Hawaiian damselfly larvae may effectively control mosquitoes in place of nonnative fish, and that removal of ungulates in stream areas may reduce the incidence of leptospirosis in Hawaii, which has the largest number of reported cases of this human-health hazard in the United States.

*Our Response:* We agree that habitat degradation and destruction by feral ungulates and predation of *Megalagrion* spp. by nonnative fish are significant threats to the three species of damselflies in this rule (see Factor A and Factor C, below). Listing these species as endangered and designating their critical habitat will provide

conservation benefits including: Protection from being jeopardized by Federal activities; protections against the adverse modification of critical habitat; restrictions on take and trafficking; a requirement that the Service develop and implement recovery plans; authorization to seek land purchases or exchanges for important habitat; and Federal aid to State conservation departments and cooperative endangered species agreements. Listing also lends greater recognition to a species' precarious status, encouraging conservation effort by other agencies, independent organizations, and concerned individuals.

The Service has identified high-quality stream habitat in the State of Hawaii and participates in several programs that provide for stream habitat restoration. One of these programs is the Hawaii Fish Habitat Partnership, whose members developed a strategic plan for implementation of stream restoration projects. Also, funding for implementation of stream restoration activities is available through the National Fish Habitat Action Plan (which includes Federal, State, and private partners), and through the National Fish Passage Program (Service), which will allow for migration of native fish and invertebrates (while excluding nonnative fish) into essential headwater stream reaches. Currently, there are two stream restoration projects funded by these programs on the windward side of Oahu. In 2009, funding was provided to restore native habitat in Waihee Stream and provide a barrier to prevent nonnative fish passage into the upper reaches of the stream where the blackline Hawaiian damselfly occurs. In 2010 and 2011, funds were provided to initiate restoration of habitat for native fish and the blackline Hawaiian damselfly at the lower elevations of Heeia Stream. Additional funding will be pursued to restore the habitat further upstream and to construct a barrier to prevent nonnative fish passage into the upper elevation watershed.

#### Comments From the State of Hawaii

(5) *Comment:* The Department of Business, Economic Development & Tourism (DBEDT), Office of Planning commented that the proposed rule for the Oahu species is subject to Hawaii Coastal Zone Management (CZM) Program Federal consistency review, pursuant to section 307(c) of the Coastal Zone Management Act (16 U.S.C. 1451 *et seq.*) and 15 CFR part 930, subpart C. In their letter, DBEDT stated that Federal consistency review is required

because the Federal agency activity will occur within the Hawaii CZM area, which includes all lands of the State (Hawaii Revised Statutes Chapter 205A), and will affect coastal uses and resources (i.e., any land or water use or natural resource of the coastal zone (15 CFR 930.11(b))). In addition, DBEDT cited *Palila v. Hawaii Department of Land and Natural Resources* [DLNR], 471 F. Supp. 985 (Haw. 1979), as a case where no Federal lands or Federal funds were involved yet Hawaii DLNR was held liable for its non-Federal actions within palila critical habitat.

*Our Response:* The *Palila* case was based on section 9 of the Act, which makes it a crime for anyone to “take” (defined as harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, collect, or attempt any of these actions) an endangered species. This provision of the Act can be asserted by private citizens or by the Federal Government. In the *palila* lawsuit, private nonprofit organizations claimed that DLNR was taking the Palila by maintaining populations of feral sheep and goats in the bird’s habitat. The fact that the bird’s habitat was designated critical habitat had no legal relevance to this allegation; the designation played only an informational role in identifying habitat important to the species. There is no regulatory connection between the Act’s section 9 prohibition against “take” of a listed species and the designation of critical habitat.

The designation of critical habitat does not physically alter any coastal resources or uses, initiate any activity or a series of activities with effects on coastal resources or uses, or direct future agency actions that affect or alter coastal resources or uses. The designation of critical habitat simply requires a Federal agency proposing an activity that may itself affect the coastal zone to consult with the Service under section 7(a)(2) of the Act to ensure that the activity does not destroy or adversely modify critical habitat. It is the Federal agency activity that results in reasonably foreseeable effects on coastal resources or coastal uses that is subject to the consistency requirement of the Coastal Zone Management Act (CZMA). It is also the responsibility of the Federal agency proposing the activity to ensure the agency complies with the CZMA. The designation of critical habitat does not affect coastal resources or uses in this manner, nor does critical habitat designation affect the coastal zone in other ways. Thus, the designation of critical habitat is not a “Federal agency activity” under the CZMA definition, and a consistency

determination is not necessary for the designation of critical habitat on Oahu.

(6) *Comment:* The Department of Hawaiian Homelands (DHHL) expressed concerns over the designation of critical habitat on their lands. DHHL requested that we remove Oahu—Lowland Dry—Unit 10, which overlays lands on which they were developing two on-grid 5 megawatt (MW) solar power generating facilities (DHHL 2011, in litt.). In addition, they requested that we remove any pasture lands from Oahu—Dry Cliff—Unit 8 and any DHHL lands that overlay Oahu—Lowland Wet—Units 9 and 13, and Oahu—Wet Cliff—Unit 8 from the final designation, to ensure there are no limitations on their authority over the use and development of their landholdings.

*Our Response:* We carefully reviewed the areas proposed as critical habitat that overlap lands owned by DHHL. We determined that proposed Oahu—Lowland Dry—Unit 10 (43 ac; 17 ha) is essential for the conservation and recovery of 17 plant species that require the physical and biological features of the lowland dry ecosystem. This unit also provides the species-specific primary constituent element of coral outcrop substrate required for the endangered plant *Chamaesyce skottsbergii* var. *skottsbergii* (Ewa Plains akoko), which was present in the area in 1998, and is endemic only to the Kalaeloa area. The revised recovery strategy for akoko (“Recovery Needs and Strategy for *Chamaesyce skottsbergii* var. *skottsbergii* (Ewa Plains akoko)”) (Service 2012, entire) describes the need for several discrete populations distributed across the landscape, in order to recover this species. For *C. skottsbergii* var. *skottsbergii*, a plant requiring another individual for pollination (obligate-outcrosser) and living 10 years or less (short-lived perennial), we need to establish and maintain 7 to 8 populations across the 4 units proposed in the lowland dry habitat in Kalaeloa (Oahu—Lowland Dry—Units 8–11), although there may be some flexibility within each unit regarding the precise location and management of each population within the unit (HPPRCC 2011; Guerrant *et al.* 2004, pp. 419–441; Neel and Cummings 2003).

We are aware of the planned development of the Kalaeloa Solar One and Two alternative energy facilities (DHHL 2011, in litt.) on lands within, and adjacent to, this unit. The facilities, which are independently owned and operated, are being developed for the purpose of reducing Oahu’s dependence on fossil-fuel for power generation. The January 2011 Draft Environmental

Assessment prepared for this project states that no Federal funding or Federal authorizations will be required to develop this facility. We are also unaware of any Federal nexus for this project. Accordingly, since a critical habitat designation only triggers a consultation under section 7(a)(2) of the Act for activities that have a Federal nexus, the designation of this unit as critical habitat is not anticipated to have an impact on this project as proposed.

Another 52 ac (21 ha) of proposed Oahu—Dry Cliff—Unit 8 overlap DHHL lands in the Waianae Mountains; however, this area is situated on a steep cliff (greater than 65 degree slope), and does not include any pastureland. Accordingly, the critical habitat designation is not expected to affect any pasture operations. This portion of Oahu—Dry Cliff—Unit 8 is essential to the conservation and recovery of 45 plant species that require the physical and biological features of the dry cliff ecosystem. Based upon landownership information from the State’s GIS database, we determined that proposed Oahu—Lowland Wet—Unit 9 and Oahu—Wet Cliff—Unit 8 do not overlap any DHHL lands. We removed 86 ac (35 ha) from proposed Oahu—Lowland Wet—Unit 13 (which corresponds to the critical habitat units *Megalagrion leptodemias* Unit 8—Lowland Wet; *M. nigrohamatum nigrolineatum* Unit 8—Lowland Wet, and *M. oceanicum* Unit 9—Lowland Wet), portions of which overlap DHHL lands. We determined these unoccupied lands, which are too degraded or modified by buildings and roads to support the species, are not essential for the conservation and recovery of the 45 species for which they were proposed as critical habitat. The designation of critical habitat does not affect activities on State or private lands absent a Federal nexus (a program or project authorized, funded, or carried out by a Federal agency), even if such lands are within the geographical boundaries of the critical habitat.

(7) *Comment:* The Hawaii Department of Transportation (HDOT) opposed the designation of critical habitat on lands surrounding the Kalaeloa Barber’s Point Harbor, specifically in proposed Oahu—Lowland Dry—Unit 8. The HDOT believes the critical habitat designation will result in a significant delay in implementing the expansion of Kalaeloa Barber’s Point Harbor, which would be detrimental to the State and local economy. The HDOT Harbors Division is planning to expand the harbor, which would include purchasing 54 ac (22 ha) within the proposed Oahu—Lowland Dry—Unit 8 area. The HDOT is concerned that designating the 54-ac

(22-ha) area will impact planning efforts that have been underway for decades, within one of Oahu's and the State of Hawaii's most important industrial areas.

*Our Response:* When proposed, Oahu—Lowland Dry—Unit 8 was comprised of 292 ac (118 ha). Information gained from site visits and from comments we received during the public comment period (76 FR 46362, August 2, 2011; 77 FR 21936, April 12, 2012) confirmed that 193 ac (78 ha) of this unit are not essential to the conservation of the species because they are too degraded to support the species or be functionally restored to support the essential features and habitat for which this area was proposed as critical habitat (see “Summary of Changes from Proposed Rule,” below). The 54-ac (22-ha) area to be purchased by HDOT is no longer within Oahu—Lowland Dry—Unit 8.

(8) *Comment:* In a separate letter, the HDOT requested clarification regarding the impact of listing the 23 species on State and federally funded highway projects currently undergoing environmental review, existing HDOT roadways, and mitigation requirements for future HDOT projects in or near designated critical habitat.

*Our Response:* The listing of the 23 Oahu species and designation of critical habitat would not impact existing HDOT roadways, unless a proposed or ongoing federal action (i.e., a federally funded highway modification) may affect one or more of the 124 Oahu species or designated critical habitat. If an existing or ongoing Federal, federally authorized, or federally funded project is likely to adversely affect one or more of these species or critical habitat, ESA section 7 consultation would be required so the Federal agency can ensure the proposed action(s) are not likely to jeopardize the continued existence of the species, or result in the destruction or adverse modification of designated critical habitat. This would also apply to future HDOT project(s) with a Federal nexus. If such projects would likely result in jeopardy to the listed species or the adverse modification of critical habitat, the Service would identify reasonable and prudent alternatives to minimize such impact. Reasonable and prudent alternatives are alternative actions identified during formal section 7 consultation that can be implemented in a manner consistent with the purpose of the action and the Federal agency's legal authority and jurisdiction. Reasonable and prudent alternatives must be economically and technical feasible, and avoid the likelihood of jeopardizing

the continued existence of a listed species or destroying or adversely modifying critical habitat.

(9) *Comment:* The HDOT, Harbors Division, Planning Office requested information on how the designation of critical habitat in Oahu—Lowland Dry—Unit 8 may affect harbor development in the existing Kalaeloa Barber's Point Harbor area and the proposed acquisition area for harbor expansion.

*Our Response:* See also our response to Comment (7), above. The designation of critical habitat does not affect activities on State or private lands absent a Federal nexus, even if such lands are within the geographical boundaries of the critical habitat. However, Federal agencies are required to consult with the Service on actions they carry out, fund, or authorize to ensure that their actions will not destroy or adversely modify critical habitat. In this way, a critical habitat designation provides additional protections beyond classifying a species as endangered or threatened by requiring consideration of the effects of Federal actions on areas essential for the conservation of the species. The area being considered for harbor expansion, which was within proposed Oahu—Lowland Dry—Unit 8, was resurveyed by the Service. Those areas that are too degraded to support the species or be functionally restored to support the essential features and habitat are not essential for the conservation of the species, and have been removed from critical habitat. This includes the proposed acquisition area for harbor expansion.

(10) *Comment:* The Hawaii Community Development Authority (HCDA), which expects to acquire lands within the former Barbers Point Naval Air Station at Kalaeloa, requested that lands within the Kalaeloa Northern Skeet Range, which are overlapped by Oahu—Lowland Dry—Unit 11, be excluded from critical habitat. According to HCDA, they are developing a preservation plan for akoko, which occurs on this land, in coordination with the Navy, Hawaii Division of Forestry and Wildlife (HDOFAW), and the Service; the planned development of the renewable energy project in this area will reduce the State's dependence on foreign oil and generate revenue to develop needed infrastructure in Kalaeloa and fund akoko preservation activities. The HCDA is developing a cadre of volunteers to steward the site.

The HDOFAW concurred with the proposed listing of the 23 Oahu species and the designation of critical habitat for 124 species with the exception of Oahu—Lowland Dry—Unit 11. Hawaii

DOFAW recommended that the western third of TMK parcel 91013039 (approximately 60 ac (24 ha)) within the unit be removed from critical habitat designation. According to their letter, this portion of the parcel is the most appropriate area for development of a photovoltaic project, because of the absence or low numbers of akoko, due to the dense overgrowth of weeds and tall grasses. The Hawaii DOFAW is recommending that HCDA and the photovoltaic developer enter into a [Hawaii State] Habitat Conservation Plan for the site, in order to secure development rights and provide assurances of funding for akoko conservation.

*Our Response:* We determined that proposed Oahu—Lowland Dry—Unit 11 (166 ac; 67 ha) is essential for the conservation and recovery of 17 plant species that require the physical and biological features of the lowland dry ecosystem. This unit also provides the species-specific primary constituent element of coral outcrop substrate required for the endangered Ewa Plains akoko, known only from the Kalaeloa area. This area was once the largest known population of akoko and contains the last known wild individuals and approximately 600 outplanted individuals. The revised recovery strategy for akoko (“Recovery Needs and Strategy for *Chamaesyce skottsbergii* var. *skottsbergii* (Ewa Plains akoko)”) (Service 2012, entire) describes the need for several discrete populations distributed across the landscape, in order to recover this species. For *C. skottsbergii* var. *skottsbergii*, a plant requiring another individual for pollination (obligate-outcrosser) and living 10 years or less (short-lived perennial), we need to establish and maintain 7 to 8 populations across the 4 units proposed in the lowland dry habitat in Kalaeloa (Oahu—Lowland Dry—Units 8–11), although there may be some flexibility within each unit regarding the precise location and management of each population within the unit. (HPPRCC 2011; Guerrant *et al.* 2004, pp. 419–441; Neel and Cummings 2003).

We are aware and supportive of the efforts underway by State and the Navy to develop a long-term preservation or conservation plan for *C. skottsbergii* var. *skottsbergii* within this unit. These include the development of a State of Hawaii Habitat Conservation Plan and the conditional transfer of some of the Navy lands within this unit to the HCDA. The State of Hawaii Endangered Species Act already prohibits the take of individual listed plants by the State or any other non-Federal entity, without

State review and authorization. If the lands are transferred by the Navy, the deed will require Grantees and successors to enter into a legally binding conservation and management plan approved by the Hawaii Department of Land and Natural Resources, to ensure protection of *C. skottsbergii* var. *skottsbergii* before conveying the property (U.S. Navy 2011, in litt.), based on the species being State and federally listed. The purpose of this agreement is to ensure the use or development of the transferred property does not adversely affect *C. skottsbergii* var. *skottsbergii*, as long as the species remains listed under the Act. If the Navy lands are transferred to HCDA, a portion of the lands may be used to develop a photovoltaic alternative energy project (HCDA 2012, in litt.; HDOFAW 2012, in litt.). The HCDA plans to use a portion of the revenue generated by commercial use of HCDA property to fund the conservation actions required under a conservation management plan (U.S. Navy 2011, in litt.). The Service is committed to working with the Navy and HCDA in the development of this conservation plan, to ensure it will provide for the long-term conservation of the plant and its habitat. Because of this close coordination, and because the deed restriction stipulates that *C. skottsbergii* var. *skottsbergii* will not be adversely affected, we believe the development of the photovoltaic alternative energy project, as proposed, will not be impacted by the designation of critical habitat in this unit, and it is our intent to work with our partners to facilitate this project.

#### Comments From Federal Agencies

(11) *Comment:* The Navy requested that the Service exclude Navy lands from critical habitat designation under Section 4(a)(3)(B)(i) of the Act because of benefits provided to the species from the implementation of an integrated natural resources management plan (INRMP). The Navy advised the Service that it was revising the Joint Base Pearl Harbor-Hickam (JBPHH) INRMP, and the finalized plan will address conservation measures for plant species for which critical habitat is proposed on Navy lands (U.S. Navy 2011, in litt.). The INRMP will be fully coordinated with the Service and include an assessment of conservation needs of the listed plant species, a statement of goals and priorities, and a detailed description of the actions to address the needs of the plant species, and will include a monitoring and adaptive management plan.

*Our Response:* Critical habitat was proposed for 60 plant species within 10

units that overlap Navy lands at Lualualei Valley (NAVMAG PH Lualualei and NRTF Lualualei) (Oahu—Lowland Dry—Units 3, 4, and 5; Oahu—Dry Cliff—Units 4, 5, 6, and 7; and Oahu—Wet Cliff—Units 2 and 5) and at Kalaeloa Barber's Point (Oahu—Lowland Dry—Unit 11). The 10 units are occupied by 28 of the 60 plant species and provide unoccupied habitat essential to the conservation of 32 species. Implementation of the June 2012 Addendum to the Navy's September 2011 final INRMP JBPHH (encompassing Naval facilities of Pearl Harbor Naval Complex, Naval Magazine Pearl Harbor Lualualei and West Loch Branches, Naval Computer and Telecommunications Area Master Station Pacific Wahiawa, Naval Radio Transmitter Facility Lualualei, Navy-retained lands at Kalaeloa, and Hickam Air Force Base) will provide a conservation benefit for 59 of the 60 plant species for which critical habitat was proposed on Navy lands (76 FR 46362). The Navy's final INRMP and Addendum does not include conservation measures for *Chamaesyce skottsbergii* var. *skottsbergii* (Oahu—Lowland Dry—Unit 11 at Kalaeloa Barber's Point), as the Navy is planning on transferring the property as part of the closure process (or Base Realignment and Closure (BRAC)) of the Barber's Point Naval Facility. The Navy's INRMP also does not cover actions conducted by the Navy on U.S. Coast Guard property. We are exempting critical habitat from Navy lands within Lualualei Valley, based on the implementation of conservation measures described in the 2011 final INRMP and the 2012 Addendum. For detailed information regarding conservation measures for listed plants and their critical habitat provided by the 2011 final INRMP and the 2012 Addendum to the INRMP, please see "Approved INRMPs," below). We are retaining Oahu—Lowland Dry—Unit 11 as critical habitat because the INRMP does not provide a benefit to the species for which that critical habitat unit is designated and the Navy is in the process of transferring ownership of this property.

(12) *Comment:* The Navy commented that they agree with the proposed critical habitat designation within Oahu—Lowland Dry—Units 9, 10, and 11, and that the parcel that is within proposed Oahu—Lowland Dry—Unit 11 is owned by the Hawaii Community Development Authority (HCDA), in accordance with 2005 Defense Base Closure and Realignment Commission (BRAC) law. The Navy has no planned

conservation actions for the listed plant species on this site.

*Our Response:* A review of tax assessor parcel data for Oahu confirms that the Navy does not own lands overlapped by critical habitat units Oahu—Lowland Dry—Unit 9 and Oahu—Lowland Dry—Unit 10. Accordingly, the Navy is no longer subject to requirements under the Act on these lands. Current City and County records indicate that the Navy retains ownership of its lands within Oahu—Lowland Dry—Unit 11 (City and County Real Property Assessment Division 2011). All lands under U.S. Navy ownership or management continue to be subject to requirements under the Act until such time as they are conveyed to other parties. The Navy's 2011 INRMP and 2012 Addendum provide conservation measures that allow exemption of proposed critical habitat on Navy lands at Lualualei; however, the last remaining wild population of *Chamaesyce skottsbergii* var. *skottsbergii* occurs on Navy lands at Barber's Point (Oahu—Lowland Dry—Unit 11). The Service believes the Navy's INRMP does not provide a benefit to the species for which critical habitat was proposed, and we therefore cannot exempt this area from critical habitat.

(13) *Comment:* The Navy commented that the proposed critical habitat within Oahu—Lowland Wet—Unit 5 slightly overlaps Navy land by a small area (0.16 acres (ac) (0.063 hectares (ha)), and that if the intent was for the boundary to follow the ridgeline, no Navy lands would be included in the unit. If true, the Navy recommends that this unit be adjusted to follow the ridge and not overlap Navy property.

*Our Response:* We have reexamined proposed critical habitat on Navy lands in Lualualei Valley. The Service believes that if conservation measures outlined in the 2010 INRMP and the 2012 Addendum are followed, fences are constructed for ungulate control, nonnative plants are controlled, propagation and outplanting of endangered species on Navy lands is allowed, monitoring and adaptive management actions are completed, and reporting is provided, including development and implementation of a fire management plan, we can exclude areas of Navy land in Lualualei Valley from critical habitat. The portion of Oahu—Lowland Wet—Unit 5 on Navy lands at Lualualei referred to in the comment above is therefore exempted from critical habitat in this rule.

## Public Comments on Proposed Oahu—Lowland Dry—Unit 8

Many commenters opposed the designation of critical habitat in proposed Oahu—Lowland Dry—Unit 8, and we grouped similar comments together relating specifically to this proposed unit. These comments are addressed in the following summary.

(14) *Comment:* Several commenters requested that their specific lands within Oahu—Lowland Dry—Unit 8 be excluded from the final designation of critical habitat for akoko due to: Potential significant economic impacts, the lands absence of the physical and biological features essential to the conservation of akoko, or the social or economic benefits of excluding these lands from critical habitat outweighs the conservation benefit to the species that may result from their inclusion in the final designation.

*Our Response:* Following the publication of the proposed rule, the Service, in coordination with the property owners, conducted a field visit of Oahu—Lowland Dry—Unit 8 in November 2011, to obtain further field verification of the current condition of habitat for akoko. Following the field visit, it was determined that approximately 193 acres of the 292 acres proposed were too degraded to support akoko or to be functionally restored to support the essential features and habitat for akoko. It was further determined during that field visit and a subsequent field visit in June 2012, that 99 acres (40 ha) contained the features essential to the conservation of akoko and could be adequately restored to allow for a functioning population of akoko if re-established. In our April 12, 2012, Notice of Availability of the Draft Economic Analysis (DEA) (77 FR 21936), we advised the public that we were considering these boundary adjustments and requested comment. The DEA did not reflect these revisions to Oahu—Lowland Dry—Unit 8.

Based on the revisions the final rule makes to Oahu—Lowland Dry—Unit 8, many of the specific lands that commenters were concerned with were removed from the designation due to the lack of features or because they were so degraded. These include: (1) Kapolei Harborside, (2) the lands where the biofuel farm is planned, (3) the Wastepile site, (4) the Maritime Industrial area where the harbor expansion is planned, and (5) Ko Olina Resort and Marina property. As a result, we will not address any specific comments concerning the inclusion of these lands in this final rule or the potential impacts from their inclusion.

The remaining lands within Oahu—Lowland Dry—Unit 8 overlap two parcels that are part of the Kapolei West planned development area. Comments concerning the inclusion of these lands in the final rule have been fully considered and are addressed in the “Public Comments on Proposed Oahu—Lowland Dry—Unit 8” section.

(15) *Comment:* The primary constituent elements (PCEs) for ecosystems are arbitrary and capricious, and are conflicting for the lowland dry area.

*Our Response:* We disagree. We consider the PCEs to be the specific compositional elements of physical and biological features that are essential to the conservation of the species. This final rule identifies the appropriate PCEs sufficient to support the life-history processes for each species within the ecosystems in which they occur, and reflects a distribution that we believe is essential to the species’ recovery needs within those ecosystems. The ecosystems’ features include the appropriate microclimatic conditions for germination and growth of the plants (e.g., light availability, soil nutrients, hydrologic regime, and temperature) and space within the appropriate habitats for population growth and expansion, as well as to maintain the historical geographical and ecological distribution of each species. The PCEs are defined by elevation, annual levels of precipitation, substrate type and slope, and the potential to maintain characteristic native plant genera in the canopy, subcanopy, and understory levels of the vegetative community. The PCEs for the lowland dry ecosystem are described in Table 4 of this final rule and were derived from several sources, including:

(a) The Nature Conservancy’s Ecoregional Assessment of the Hawaiian High Islands (2006) and ecosystem maps (2007);

(b) Natural Resources Conservation Service’s soil type analysis data layer for GIS mapping;

(c) Oahu vegetation analyses by Gagne and Cuddihy (1999, pp. 45–114);

(d) Plant databases from the U.S. Army Environmental (2006) and the National Tropical Botanical Garden;

(e) Geographic information system maps of habitat essential to the recovery of Hawaiian plants (HPPRCC 1998);

(f) GAP (geographic analysis program) vegetation data (GAP 2005);

(g) **Federal Register** documents such as listing rules and 5-year status reviews;

(h) Final critical habitat designation for the island of Oahu (68 FR 35950, June 17, 2003); and

(i) Recent biological surveys and scientific reports regarding species and their habitats.

Where further information was available indicating additional, specific, life-history requirements for some species, the primary constituent elements (PCEs) relating to these requirements are described separately and are termed “unique” PCEs for species; for example, we have identified coral outcrop substrate as a unique PCE for *Chamaesyce skottsbergii* var. *skottsbergii* (see Table 5, below).

(16) *Comment:* One commenter disputed the number of occurrences and individuals reported for *Chamaesyce skottsbergii* var. *skottsbergii* in our proposed rule (76 FR 46362; August 2, 2011), based on a September 2011 report by a private consultant on *C. skottsbergii* var. *skottsbergii* at Barber’s Point. In addition, the commenter questioned why our total number of individuals of *C. skottsbergii* var. *skottsbergii* did not include the individuals outplanted in the Kalaeloa unit of the Pearl Harbor National Wildlife Refuge, and why we did not include a map of the location of the 1998 *C. skottsbergii* var. *skottsbergii* observation by Whistler (2008).

*Our Response:* In the September 2011 report provided by the commenter on *Chamaesyce skottsbergii* var. *skottsbergii* at Barber’s Point, the author summarized status information for this species. According to the report, *C. skottsbergii* var. *skottsbergii* was found at the Northern Trap and Skeet Range (NTSR), Building 1527, and at the Service’s Kalaeloa unit of the Pearl Harbor National Wildlife Refuge (Refuge). No information was provided on the total number of individuals or the numbers of individuals at each location. However, based on the best available information, approximately 700 individuals of *C. skottsbergii* var. *skottsbergii* are present in two occurrences within an area previously used by the Navy as a trap and skeet range for the Barber’s Point Naval Air Station, and at the Refuge (U.S. Navy *et al.* 2012). Of these, fewer than approximately 200 are wild individuals. The Whistler (2008) reference mentioned by the commenter was used in our analysis, but was inadvertently omitted from the list of references for the proposed rule.

(17) *Comment:* Designation of critical habitat in Oahu—Lowland Dry—Unit 8 is a taking of property without just compensation.

*Our Response:* The mere promulgation of a regulation, like the enactment of a statute, does not take private property, unless the regulation on its face denies the property owners

all economically beneficial or productive use of their land. The designation of critical habitat alone does not deny anyone economically viable use of their property. The Act does not automatically restrict all uses of critical habitat, but only imposes restrictions under section 7(a)(2) on Federal agency actions that may result in destruction or adverse modification of designated critical habitat. Furthermore, if in the course of a consultation with a Federal agency, the resulting biological opinion concludes that a proposed action is likely to result in destruction or adverse modification of critical habitat, we are required to suggest reasonable and prudent alternatives that can be implemented in a manner consistent with the intended purpose of the action, that can be implemented consistent with the scope of the Federal agency's legal authority and jurisdiction, and that are economically and technologically feasible (Service 1998, p. xvii).

(18) *Comment:* The Service did not have accurate land ownership information for Oahu—Lowland Dry—Unit 8.

*Our Response:* During the initial public comment period on our proposed rule (76 FR 46362; August 2, 2011), we became aware that there were errors in the landownership information for proposed Oahu—Lowland Dry—Unit 8 in the geospatial data sets associated with parcel data from Honolulu County (2008), which were used to identify affected landowners. However, we subsequently received accurate landownership information from the City and County of Honolulu's Real Property Assessment Office (2011). We sent letters to all of the affected landowners we were able to identify, notifying them that the proposed critical habitat designation may overlap some or all of their property. In that letter we also provided general information on the proposed critical habitat designation and that we were considering a revision for proposed Oahu—Lowland Dry—Unit 8.

#### Public Comments on the Draft Economic Analysis

Many commenters questioned the draft economic analysis (DEA). These comments and our responses are grouped below.

(19) *Comment:* Several commenters questioned our assumption that a Federal nexus may not exist for the planned development projects in Oahu—Lowland Dry—Unit 8, and that by asserting there was no Federal nexus, we may be underestimating the potential impacts resulting from the inclusion of these lands in the final

designation of critical habitat for akoko. Commenters further asserted that if there was a Federal nexus, there would be many more than one consultation due to parcels being subdivided, with individual consultations conducted on actions affecting each parcel. One commenter stated they submitted permit applications to the Department of the Army for the expansion of existing buildings, infrastructure and facilities at Ko Olina Resort and Marina within Oahu—Lowland Dry—Unit 8. Another commenter (James Campbell Company LLC) identified several potential activities that could trigger section 7 consultation, including Army Corps of Engineers approval of a regional drainage system, Federal funding for a State highway project, Federal grants to fund harbor expansion, EPA emission permits for energy projects, and Small Business Administration loans. National Pollutant Discharge Elimination System permits under the Clean Water Act for any storm water discharges associated with any of the above development.

*Our Response:* Following a review of the information we received from public comments and otherwise available to us, we agree there is a reasonable probability that a Federal action agency would be involved with funding, permitting, or otherwise authorizing the planned development project for Kapolei West. Because it now appears that there are only two parcels that we are designating as critical habitat in Oahu—Lowland Dry—Unit 8 that are part of the larger Kapolei West planned development, we anticipate there would likely be only a single consultation involved for the entire master planned development. In our history with such large development projects, it has generally been the case that there is one consultation with the Federal action agency covering the entire project, and not smaller individual consultations on smaller individual components of the project.

That being stated, to evaluate potential impacts from the designation given the uncertainty of whether there may be a Federal nexus and how many specific consultations there may be, we evaluated a range in the DEA and our final rule. At one end of the range, we assume that there will be no Federal nexus. In this case, because there is no regulatory effect under the Act for a designation of critical habitat absent a Federal nexus, we assume there will be no impact from the designation. This constitutes the lower bound that is identified in the DEA, and we still believe this scenario could occur. At the other end of the range, where a Federal nexus is assumed, we also assume that

the consultation resulting from the designation of critical habitat would take into consideration the entire master planned project based on past comparable examples. For example, one property owner (James Campbell Company LLC) commented that the entire 107 acres (43 ha) being designated within Oahu—Lowland Dry—Unit 8 fall within the Kapolei West project, which is slated for residential and mixed-use development, with development rights vested by several public approval processes and County ordinance. They also commented that the land use entitlement process for Kapolei West began in the 1980's and was assessed in an Environmental Impact Statement prepared under Hawaii Revised Statutes Chapter 343 (Kapolei West Expansion Area Final EIS, June 2005; James Campbell Company LLC letter dated May 12, 2012). Because the consultation is anticipated to be for the entire master planned community, then the specific number of parcels may not be significant. The final economic analysis reexamined the potential upper-bound of economic costs, including administrative costs to the Service, Federal agencies, and third parties. The estimated combined administrative costs in occupied and unoccupied critical habitat is \$145,000 over a 20-year period (\$94,178 using a 7 percent discount rate, \$117,075 using a 3 percent discount rate). The total administrative costs (i.e., costs related to section 7 consultation) in occupied areas are estimated to be \$105,000 over a 20-year period (or \$54,178 using a 7 percent discount rate—\$77,075 using a 3 percent discount rate). Combined annualized costs over this period are \$8,776 using a 7 percent discount rate, or \$7,000 using a 3 percent discount rate (Service 2012, Table ES-12).

(20) *Comment:* One commenter indicated that the time horizon of the DEA, 20-years, was too short a time to evaluate the potential economic impacts of the designation.

*Our Response:* While Executive Order 12866 and 13563 and Office of Management and Budget (OMB) Circular A-4 clarify the importance for the government to carefully assess, to the best of its abilities, the benefits and costs of proposed rules before making any final determinations, neither Executive Order nor Circular A-4 specify a specific timeframe for analysis. Recent guidance from OMB indicates that if a regulation has no predetermined sunset provision, the agency will need to choose the endpoint of its analysis based on the foreseeable future or the agency's ability to forecast reliably (Office of Management and

Budget, 2011 p. 5). For most agencies, a standard time period of analysis is 10 to 20 years. Additionally, since we identified 21 parcels of property in unoccupied habitat, and the DEA assumed that there would be a single section 7 consultation in each unit, the DEA made the further assumption that there would be, on average, one consultation each year for the next 21 years. This assumption was influenced by the fact that it was unknown when activities would take place in the future that would trigger a consultation and that it was highly unlikely all 21 supposed consultations would occur in the first year (which would provide the most conservative (i.e., highest) economic cost after discounting).

(21) *Comment:* One commenter stated that the DEA understates the economic impact the designation will have on small business.

*Our Response:* Section 4(b)(2) of the Act requires us to consider the economic impact of designating a particular area as critical habitat for an endangered or threatened species. We also evaluate potential economic impacts of a rulemaking pursuant to Executive Order 12866 (E.O. 12866), which states that a rulemaking will be determined to be economically significant if it will result in an impact of more than \$100 million in any given year, and 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.*). Under the RFA, 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.

To understand the potential impacts of a critical habitat designation as discussed in the DEA, we evaluate the incremental impacts of the designation as identified by evaluating the additional protections or conservation measures afforded the species through the designation beyond those that the species receives by being federally listed

(i.e., baseline conservation measures). Under E.O. 12866, we are required to evaluate the direct and indirect impacts of the designation. The evaluation of these potential impacts is discussed in our final economic analysis (FEA).

Additionally, under the RFA and following recent case law, we are to evaluate the potential impacts to small businesses, but this evaluation is limited to impacts to only directly regulated entities. The designation of critical habitat only has regulatory impact through section 7 of the Act, in which a Federal action agency is required to consult with us on any project that is funded, permitted, or otherwise authorized that may affect designated critical habitat. In other words, critical habitat only has a regulatory effect and therefore impact if a Federal nexus exists. Critical habitat has no regulatory effect or impact under the Act on actions that do not have a Federal nexus. Since Federal action agencies are the only directly regulated entities as a result of the designation of critical habitat, it is therefore reasonable for us to conclude that the designation of critical habitat does not directly regulate small business entities and, therefore, does not significantly impact them. As a result, we believe that we have accurately assessed potential impacts to small business entities in the rulemaking, and can reasonably certify that this designation will not have a significant impact on a substantial number of small business entities. For a further discussion of our rationale, please see the Required Determinations section of this final rule, below.

(22) *Comment:* The DEA misstates the development planned within Oahu—Lowland Dry—Unit 8. The commenter claims that the DEA part II failed to discuss the potential that a critical habitat designation could influence the State Land Use Commission to reclassify lands from its current status as part of the Urban District to Conservation District. Furthermore, the commenter claims that the DEA incorrectly assumes that some of the parcels within Oahu—Lowland Dry—Unit 8 are classified as agricultural and that the DEA fails to acknowledge that some of the parcels also fall within the Kapolei West project.

The commenter also states that DEA misstates the intended use of parcel 191014041, based on the Kapolei Area Long Range Master Plan, and that the DEA needs to provide an assessment for parcel 191015004, which the Honolulu Land Information System (HOLIS) database identified as having no assessment. The HOLIS database is used to collect, maintain, and distribute geo-

referenced information necessary to support City of Honolulu operations, including land use, permits, tax, infrastructure, and environmental data.

*Our Response:* Table 3.3 of the DEA and the associated discussion identify the zoning status for each parcel within Oahu—Lowland Dry—Unit 8. None of the parcels are identified in the table as having agricultural zoning, but rather as being zoned for commercial or industrial purposes. However, in the DEA's introductory description of Oahu—Lowland Dry—Unit 8, the DEA did cite the commenter's description of the area from its Web site, which stated at that time that some of the lands within Oahu—Lowland Dry—Unit 8 were still zoned as agriculture, although a petition was filed with the State Land Use Commission to rezone the area for industrial. Since then, the land classification on the Web site has been updated, and the FEA has factored this into the description and analysis.

The commenter is correct that part II of the DEA did not discuss the potential that a critical habitat designation could have on influencing the State Land Use Commission to reclassify its lands to a more conservative category. This is because the Service is unaware of any instances over the past 10 years, when critical habitat designations were initially promulgated across the State of Hawaii, where the State Land Use Commission reclassified lands based on critical habitat.

The DEA's discussion of the parcels in Oahu—Lowland Dry—Unit 8 did not acknowledge that some of the parcels may have fallen within the Kapolei West project. The discussion in the FEA acknowledges the existence of this master plan.

The commenter did not state what the characterization of TMK (tax map key) 91014041 was according to their reading of the Master Plan. The commenter stated only that the DEA was incorrect. A review of the zoning characteristics identified in the DEA match that in HOLIS. The commenter helpfully provided the current TMK for that identified by the Service (TMK 91015004) that is no longer in the HOLIS database. The correct TMK for this parcel is 91015026. The Honolulu Real Property Assessment Division clarified that TMK 91014041 is primarily zoned P-2 (General Preservation), which typically carries a low value. Since the assessment did not take into account the A-2 (Medium Density Apartments), B-2 (Community Business), and IMX-1 (Industrial Mixed Use) portions, it is undervalued. TMK 91015026 contains a 3-acre common element value for a condominium

project, and eight CPR's carry the remaining condominium value for that parcel (Palenske 2012, pers. comm.). The FEA will be updated to reflect the characteristics and valuations for this parcel.

(23) *Comment:* The DEA misstates land ownership within Oahu—Lowland Dry—Unit 8.

*Our Response:* This comment references statements made in the Incremental Effects Memorandum that is appended to the DEA. The Incremental Effects memorandum is an early, iterative statement as to what potential effects may result from critical habitat designation. Through the rulemaking process, we received clarifications of land ownership, and this information has been incorporated into the FEA and final rule.

(24) *Comment:* The DEA misstates the status of development within Oahu—Lowland Dry—Unit 8.

*Our Response:* The DEA states that of the 13 parcels in Oahu—Lowland Dry—Unit 8 analyzed, only one, at the time, had an active permit. This information came from the HOLIS Web site. This information has been updated through the information and clarifications we received as a result of the rulemaking process.

(25) *Comment:* The DEA fails to consider State and county land use plans.

*Our Response:* The commenter believes the DEA should also expressly consider the General Plan for the City and County of Honolulu (2002) and the Ewa Development Plan (2000). The DEA relied on current assessment and zoning information from the City and County of Honolulu, as well as more recent planning documents, some of which are affiliated with the commenter. In summary, the DEA was clear about the planned development of all parcels in Oahu—Lowland Dry—Unit 8 for commercial and industrial purposes, despite their current status as relatively undeveloped properties.

(26) *Comment:* The DEA understates the economic impact of designation. The DEA inappropriately uses property tax assessed values rather than market values. The DEA inappropriately uses a “per acre” approach to determine economic impact potential, and it does not take into account the impact on development cost and revenue streams of prohibiting development on a portion of land.

*Our Response:* In developing our DEA we relied on the publicly available information from the Honolulu Land Information System (HOLIS; <http://gis.hicentral.com>). This database contains the latest assessed values for real

properties originating from the City and County of Honolulu Department of Budget and Fiscal Services Real Property Assessment Division (<https://www.realpropertyhonolulu.com>). According to the Division's Web site, sec. 8–7.1, Revised Ordinances of Honolulu, requires the fair market value of all taxable real property to be determined and annually assessed by the market data (sales comparison) and cost approaches to value. All properties are valued at 100 percent of market value. While actual sales values may deviate from current assessed values based on factors such as economic conditions or site characteristics, we believe that the City and County of Honolulu's database reflects the best available information for our assessment of potential economic impacts.

As explained in the DEA, the current market value for property (as best represented by the assessed sales price absent a direct sale) reflects the present value of future revenue streams that the property would generate under anticipated development scenarios. Lacking any information to credibly differentiate within a parcel how development may or may not be suitable, given certain land characteristics, the analysis reasonably assumed that each parcel analyzed was uniform in its physical development characteristics, and, correspondingly that the total assessed value of a parcel reflected these uniform characteristics for the purposes of this analysis. As explained in the DEA, the analysis makes the case that the current market assessment for land in this area primarily reflects the discounted future earnings that the land is expected to generate after development (i.e., growth premium).

(27) *Comment:* In section 3.5 of the DEA, the Department's 137-acre parcel in Kalaeloa was assessed at approximately \$48,000,000 based on the Kalaeloa Master Plan and the General Urban land use designation under HCDA Chapter 15–215. However, since the Hawaiian Homes Commission (HHC) has land use authorities that cannot be superseded by other authority, it is not clear that the urban designation used as a basis for assessment would be the designation the HHC would choose. For example, the HHC could designate these lands at a high or more intensive urban, or industrial value, that would result in a higher land assessed value.

*Our response:* We appreciate the information concerning the categorization for the assessed land value; however, in developing our DEA, we relied on the publicly available

information from HOLIS (<http://gis.hicentral.com>). This database contains the latest assessed values for real properties originating from the City and County of Honolulu Department of Budget and Fiscal Services Real Property Assessment Division (<https://www.realpropertyhonolulu.com>). According to the Division's Web site, sec. 8–7.1, Revised Ordinances of Honolulu, requires the fair market value of all taxable real property to be determined and annually assessed by the market data (sales comparison) and cost approaches to value. All properties are valued at 100 percent of market value. While actual sales values may deviate from current assessed values, based on factors such as economic conditions or site characteristics, we believe that the City and County of Honolulu's database reflects the best available information for our assessment of potential economic impacts. Further, any changes in land use by HHC is speculative at this time.

Other Public Comments Not Related to Oahu—Lowland Dry—Unit 8

(28) *Comment:* All species of *Chamaesyce* are now recognized as species of *Euphorbia*.

*Our Response:* We agree. Steinman and Porter's 2002 (p. 473) molecular data for classification of Euphorbiae and the analysis of Bruyns *et al.* (2006, pp. 416–417) found that *Chamaesyce* is nested among species of *Euphorbia*. However, changing the names for the endangered Oahu plants *Chamaesyce celastroides* var. *kaenana*, *C. deppeana*, *C. herbstii*, *C. kuwaleana*, *C. rockii* and *C. skottsbergii* var. *skottsbergii* in 50 CFR 17.12 and in 50 CFR 17.99(j) would require a separate rulemaking, not only for the Hawaiian species listings, but for all previously listed species.

(29) *Comment:* One landowner questioned the designation of critical habitat in several units, including Oahu—Lowland Wet—Unit 9, Blackline Hawaiian damselfly—Unit 4—Lowland Wet, Crimson Hawaiian damselfly—Unit 4—Lowland Wet, and Oceanic Hawaiian damselfly—Unit 5—Lowland Wet, and the existing plant critical habitat designated in 2003 under and next to Hawaii Interstate H–3, near the summit of the Koolau Mountains.

*Our Response:* Although no specific objections to the proposed critical habitat were given, we provided the commenter with maps of Oahu—Lowland Wet—Unit 9 and all three damselfly units (Blackline Hawaiian damselfly—Unit 4—Lowland Wet, Crimson Hawaiian damselfly—Unit 4—Lowland Wet, and Oceanic Hawaiian damselfly—Unit 5—Lowland Wet),

which geographically correspond to the same area (i.e., they completely overlap). These units provide critical habitat for 44 plant species and 3 Hawaiian damselflies. The area consists of 15,728 ac (6,365 ha) on the leeward side of the Koolau Mountains, on Federal, State, City and County of Honolulu, and privately-owned lands. This area includes the wet forest and shrubland, moisture regime and subcanopy, and understory native plant species identified as physical or biological features in the lowland wet ecosystem, as well as the unique PCEs (e.g., perennial streams, slow reaches of streams or pools) for the Hawaiian damselflies. This critical habitat is essential for the conservation and recovery of these lowland wet species, because it provides suitable habitat and space for expansion of populations, and for reintroduction of individuals within their current and historical ranges. We have no information that would indicate any areas within these units should be removed based on economic, national security, or other relevant impacts, or new biological information.

(30) *Comment:* The Service does not provide justification for elimination of 11,549 ac (4,674 ha) of critical habitat. The proposed rule eliminates smaller habitat patches and undermines the 2003 proposal.

*Our Response:* The commenter did not provide clarification on the statement that 11,549 ac (4,674 ha) of critical habitat were eliminated in the August 2011 proposed rule. When 55,040 ac (22,274 ha) of critical habitat were designated for 99 Oahu plants in the June 17, 2003, final rule (68 FR 35950), the designation was based primarily on the specific localities where the species were known to occur, and focused on discrete areas occupied by the species at the time of listing. In this final rule, we have revised critical habitat for these 99 species based on new information on plant occurrences and a better understanding of the species' biological requirements. As a result, we are designating both occupied areas with physical or biological features essential to the species' conservation, and unoccupied areas that are essential to the species' conservation. We are able to do this with a designation of 42,804 ac (17,322 ha). Each of the areas provides critical habitat for multiple species based upon their shared habitat requirements, and takes into account any species-specific conservation needs, as appropriate. We have found that some of the areas designated as critical habitat in 2003 were not within the historical or current ranges of the species, and do not

provide the PCEs essential to their conservation and recovery (i.e., these areas were not within the geographical area occupied at the time of the species' listing, and are not essential to their conservation). Accordingly, 17,325 ac (7,011 ha) designated in 2003 that fall into this category are not included in this critical habitat designation. The critical habitat designated in this rule is based on a biological and ecosystem-based approach, and provides essential habitat for the conservation and recovery of the 124 species included in this rule. Therefore, contrary to the commenter's assertion, the proposed rule does not undermine the 2003 final critical habitat designation for 99 Oahu plants.

(31) *Comment:* Given the extremely low population numbers of many of the species, it is not scientifically justifiable to eliminate habitat that supports individuals of the endangered plants. The proposed rule does not state that habitat that is known to support individuals is not being removed from critical habitat. Since the 2003 rule is based on occurrence data, the public is left to assume that some habitat that is known to support individuals will no longer be protected as critical habitat. We are concerned that eliminating critical habitat where plants currently occur will interfere with the recovery of these endangered species.

*Our Response:* The only designated critical habitat known to support individuals that is being removed from critical habitat in this rule are those areas covered by the Navy's INRMP for Lualualei. In this final rule, lands under Navy jurisdiction are exempted from critical habitat designation under section 4(a)(3)(B)(i) of the Act (a 2004 amendment to the Act). Section 4(a)(3)(B)(i) of the Act states 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. (See "Approved INRMPs", below, for further discussion).

(32) *Comment:* One commenter stated that "the proposed rule expressly fails to provide any detailed narrative description of appropriate specificity to allow fair comment" and cites page 76 FR 46511 at (12)(i) "[Reserved for textual description of Unit 8]". The commenter also stated that the proposed

rule contains only generalized "maps" to indicate the areas proposed for designation, and this failure to provide sufficient information to allow fully informed public review and comment is arbitrary, capricious, and otherwise not in accordance with law.

*Our Response:* The section in brackets was reserved for the UTM (mapping vertices) for unit delineation using GIS, which, until recently, were identified and published in the **Federal Register** in the final rule. However, on May 1, 2012 (USFWS 2012a, 77 FR 25611), the Service published revised regulations for requirements to publish textual descriptions of final critical habitat boundaries in the **Federal Register**. As of May 31, 2012, the Service no longer publishes the coordinates for critical habitat boundaries in the **Federal Register**. The coordinates on which each map is based are available to the public at the Federal eRulemaking portal (<http://www.regulations.gov>) using the docket number for the rulemaking (in this case, FWS-R1-ES-2010-0043), and at the web site of the field office responsible for the critical habitat (<http://www.fws.gov/pacificislands>) for the final critical habitat for the 124 Oahu species. The maps provided in the proposed rule identify the areas proposed for critical habitat designation. We believe these maps are adequate for regulatory purposes. The proposed rule also directs reviewers to contact the Service for further clarification on any part of the proposed rule, and provides contact information (76 FR 46362; August 2, 2011).

(33) *Comment:* The Service did not provide references. Unpublished databases are not references.

*Our Response:* Complete lists of references cited in the proposed rule (76 FR 46362; August 2, 2011) and in this final rule are available on the Internet at <http://www.regulations.gov>, and upon request from the Pacific Islands Fish and Wildlife Office (see **ADDRESSES**). This information was also presented in the proposed rule (76 FR 46470). One reference (Whistler 2008) was inadvertently omitted from those provided for the proposed rule, and is now available on our Web site. Under section 4(b)(1)(A) of the Act, we make a determination whether a species is endangered or threatened solely on the basis of the best scientific and commercial data available. Under section 4(b)(2), we designate, and make revisions to, critical habitat based on the best scientific data available and after taking into consideration the economic impact, the impact on national security, and any other relevant impact. In the

August 2, 2011, proposed rule and in this final rule, we used the best information available, including the State's Hawaii Biodiversity and Mapping Program database, the U.S. Army Environmental database from 2006 for Oahu, and the National Tropical Botanical Garden's plant databases. These databases include information from numerous sources including, but not limited to, expert field observations, museum collections, and published and unpublished literature, and are, in our opinion, sources of the best scientific data available.

(34) *Comment*: The damselflies should not be protected under the Act because flies do not need our protection. Residents should not have to fear punishment for removing pests from their homes and property.

*Our Response*: Native Hawaiian damselflies (in the genus *Megalagrion*) are endemic (i.e., unique and found nowhere else in the world) to Hawaii and are similar to dragonflies in appearance. There are 23 species of these damselflies, and they are found almost entirely in aquatic habitats (e.g., streams, lowland swamps, and marshes), although a few species are considered terrestrial or semi-terrestrial and found in moist, damp areas like rock faces, wet leaf litter, or water trapped in the leaves of native plants. Native Hawaiian damselflies are unlikely to be found in homes or developed property or landscaped areas because of their ecological requirements, and are not considered pests.

#### Summary of Changes From Proposed Rule

We fully considered comments from the public and peer reviewers on the proposed rule to develop this final listing for 23 species and critical habitat designation for 124 species from Oahu. This final rule incorporates the following substantive changes to our proposed listing and designation, based on the comments we received:

(1) We removed 193 ac (78 ha) from proposed Oahu—Lowland Dry—Unit 8 to exclude areas that are not essential to the conservation of the species, based on additional, refined information gained from field visits. We observed that changes in land use had occurred in certain areas within the proposed critical habitat that would preclude these areas from supporting the primary constituent elements, and that these areas would not support viable populations of the 17 plants for which it was proposed critical habitat. Oahu—Lowland Dry—Unit 8 now encompasses

99 ac (40 ha) essential to the conservation of 16 lowland dry plant species.

(2) We made revisions to the demographic status and distribution of 11 species of plants (*Cyanea lanceolata*, *C. purpurellifolia*, *Cyrtandra sessilis*, *C. waiolani*, *Doryopteris takeuchii*, *Korthalsella degeneri*, *Melicope hiikae*, *M. makahae*, *Pleomele forbesii*, *Psychotria hexandra* ssp. *oahuensis*, and *Zanthoxylum oahuense*) by correcting their current locations or numbers of individuals in Description of the 23 Species, based on comments we received.

(3) We made revisions to the primary constituent elements (PCEs) for three plants, based on comments we received, by removing the lowland mesic ecosystem from the PCEs for *Cyrtandra waiolani* and the lowland wet ecosystem from the PCEs for *Melicope makahae* and *Pleomele forbesii*. Accordingly, we removed *Cyrtandra waiolani* from the list of plants in Oahu—Lowland Mesic—Units 4, 5, 6, and 7, and we removed *Pleomele forbesii* and *Melicope makahae* from the list of plants in Oahu—Lowland Wet—Units 1, 2, 3, 4, and 5, because a peer reviewer recommended that these ecosystems were inappropriate for the species. We also removed *Pleomele forbesii* from the list of plants in Oahu—Lowland Dry—Units 8, 9, 10, and 11 because the elevation of these four units is too low to have the ability to provide habitat for this species.

(4) We revised the unit boundaries we proposed Oahu—Lowland Wet—Unit 5, Oahu—Lowland Wet—Unit 13, Oahu—Dry Cliff—Unit 4, Oahu—Dry Cliff—Unit 6, Oahu—Dry Cliff—Unit 7, Oahu—Wet Cliff—Unit 2, and Oahu—Wet Cliff—Unit 5, which resulted in acreage reductions in these units as follows:

Oahu—Lowland Wet—Unit 5: Reduced by 2 ac (1 ha)  
 Oahu—Lowland Wet—Unit 13: Reduced by 86 ac (35 ha)  
 Oahu—Dry Cliff—Unit 4: Reduced by 84 ac (34 ha)  
 Oahu—Dry Cliff—Unit 6: Reduced by 106 ac (43 ha)  
 Oahu—Dry Cliff—Unit 7: Reduced by 102 ac (42 ha) (combined 7a and 7b)  
 Oahu—Wet Cliff—Unit 2: Reduced by 4 ac (2 ha)  
 Oahu—Wet Cliff—Unit 5: Reduced by 12 ac (5 ha)

These revisions were based on comments indicating that (a) Changes in land use had occurred within the proposed critical habitat units that would preclude certain areas from supporting the primary constituent elements; (b) adjustments were needed

for the adjoining borders of wet cliff and lowland wet ecosystem areas; (c) the areas in question were not essential to the conservation of the species; or (d) portions of the unit were exempted from critical habitat under section 4(a)(3)(B)(i) of the Act.

(5) We are not designating lands within proposed Oahu—Dry Cliff—Unit 5, Oahu—Lowland Dry—Unit 3, Oahu—Lowland Dry—Unit 4, and Oahu—Lowland Dry—Unit 5 as critical habitat under section 4(a)(3)(B)(i) of the Act.

(6) Following publication of our proposed rule in August 2011, we found that 21 plants (*Bidens amplexans*, *Chamaesyce celastroides* var. *kaenana*, *Cyrtandra dentata*, *Dubautia herbstobatae*, *Eragrostis fosbergii*, *Euphorbia haeleleana*, *Gouania vitifolia*, *Hibiscus brackenridgei*, *Isodendron laurifolium*, *I. pyriformis*, *Kadua degeneri*, *Korthalsella degeneri*, *Melanthera tenuifolia*, *Melicope makahae*, *Peucedanum sandwicense*, *Phyllostegia kaalaensis*, *Schiedea kealiae*, *S. obovata*, *S. trinervis*, *Silene lanceolata*, and *Tetramolopium filiforme*) were inadvertently omitted from the discussion of species for which critical habitat was initially proposed on Navy lands. We also determined that four previously listed plants (*Hesperomannia arbuscula*, *Melicope pallida*, *Stenogyne kanehoana*, and *Urera kaalae*) were inadvertently included in this discussion (i.e., critical habitat was proposed for these species when it should not have been). Although critical habitat is exempted for the above 21 species within one or more of the 10 units that overlap Navy lands, none of these species presently occupy Navy lands.

(7) We adjusted critical habitat acreages on Table 7A and Table 7B to account for changes in unit areas and to correct arithmetical errors. This resulted in the following specific changes:

Oahu—Coastal—Unit 9: reduced by 4 ac (2 ha)  
 Oahu—Coastal—Unit 13: Reduced by 1 ac (0 ha)  
 Oahu—Coastal—Unit 15: Reduced by 1 ac (0 ha)  
 Oahu—Lowland Dry—Unit 9: Reduced by 4 ac (2 ha)  
 Oahu—Lowland Mesic—Unit 1: Reduced by 1 ac (0 ha)  
 Oahu—Lowland Mesic—Unit 7: Reduced by 6 ac (3 ha)  
 Oahu—Lowland Wet—Unit 7: Reduced by 3 ac (1 ha)

(8) We added “coral outcrop substrate” to the PCEs for *Chamaesyce skottsbergii* var. *skottsbergii*.

(9) We added *Plumbago*, *Sida*, and *Waltheria* to the list of understory plants in the lowland dry ecosystem.

(10) We removed *Cyrtandra waiolani* from the list of plants in Oahu—Lowland Mesic—Units 4, 5, 6, and 7, as a peer reviewer recommended that this ecosystem was inappropriate for the species.

**Summary of Factors Affecting the 23 Species**

Section 4 of the Act and its implementing regulations (50 CFR part 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 mechanism; 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. The threats to each of the individual 23 species are summarized in Table 2 and discussed in detail below. Factor B (overutilization) is not included in the table because we have no information on primary threats to the species that would fall under this category.

*Ecosystem Approach*

Each of the 23 species in this final rule is adversely affected by the threats to the ecosystems on which it depends. There is information available on many of the threats that act on Hawaiian ecosystems, and for some ecosystems, there is a growing body of literature

regarding these threats (e.g., nonnative ungulates and invasive plant species). The best available information on ecosystem threats affecting the species therein is discussed below. Table 2 identifies the threats to the ecosystems and the individual species within those ecosystems that are affected by those threats. Information on threats specific to certain species is also discussed where necessary and available; however we acknowledge that we do not completely understand all the threats to each species. Scientific research directed toward these species is limited because of their rarity and the generally challenging logistics associated with conducting field work in Hawaii (e.g., areas are typically remote and difficult to survey in a comprehensive manner, and the target species are exceptionally uncommon).

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TABLE 2.—SUMMARY OF PRIMARY THREATS IDENTIFIED FOR EACH OF THE 23 OAHU SPECIES

Species	Ecosystem	Factor A										Factor C			Factor D	Factor E
		Non-native plants	Pigs	Goats	Fire	Agriculture and urban development	Stream alteration	Stochastic events	Climate change	Predation by ungulates	Predation by other nonnative vertebrates	Predation by nonnative invertebrates	Inadequate existing regulatory mechanisms	Other species-specific threats		
<i>Bidens amplexicens</i>	C, LD	X	X	X	X			H	X	X (LD)				X		
<i>Cyanea calycina</i>	LM, LW, MW, WC	X	X	X	X				X	X				X	T	
<i>Cyanea lanceolata</i>	LM, LW	X	X					L, RF	X	X				X		
<i>Cyanea purpurellifolia</i>	LW, WC	X	X						X	X				X	LN	
<i>Cyrtandra gracilis</i>	LW	X	X						X	X				X	LN	
<i>Cyrtandra kaulantha</i>	LW, WC	X	X					L, RF, H	X	X				X	LN	
<i>Cyrtandra sessilis</i>	LW, WC	X	X					L, RF, FL, H	X	X				X	T	
<i>Cyrtandra waiolani</i>	LW	X	X						X	X				X	LN	
<i>Doryopteris takeuchii</i>	LD	X			X			L, RF	X					X	T	





## BILLING CODE 4310-55-C

*Ecosystem-Scale Threats That Affect the 23 Species*

The following constitutes a list of ecosystem-scale threats that affect the 23 species in all of the seven ecosystems on Oahu:

(1) Foraging and trampling of native plants by goats (*Capra hircus*) and pigs (*Sus scrofa*), which results in severe erosion of watersheds because these mammals inhabit terrain that is often steep and remote (Cuddihy and Stone 1990, p. 63). These events destabilize soils that support native plant communities, bury or damage native plants, and have adverse water quality effects due to runoff over exposed soils.

(2) Disturbance of soils by feral pigs, which creates fertile seedbeds for alien plants (Cuddihy and Stone 1990, p. 65).

(3) Increased nutrient availability as a result of pigs rooting in nitrogen-poor soils, which facilitates the establishment of alien weeds. Alien weeds are more adapted to nutrient rich soils than native plants (Cuddihy and Stone 1990, p. 63), and rooting activity creates open areas in forests allowing alien species to completely replace native stands.

(4) Ungulate destruction of seeds and seedlings of native plant species (Cuddihy and Stone 1990, p. 63), which facilitates the conversion of disturbed areas from native to nonnative vegetative communities.

(5) Rodent damage to plant propagules, seedlings, or native trees, which changes forest composition and structure (Cuddihy and Stone 1990, p. 67).

(6) Feeding or defoliation of native plants by alien insects, which reduces geographic ranges of some species because of damage (Cuddihy and Stone 1990, p. 71).

(7) Alien insect predation on native insects, which affects pollination of native plant species (Cuddihy and Stone 1990, p. 71).

(8) Significant changes in nutrient cycling processes, because of large numbers of alien invertebrates such as earthworms, ants, slugs, and snails, resulting in the changes to the composition and structure of plant communities (Cuddihy and Stone 1990, p. 73).

Each of the above threats is discussed in more detail below, and summarized in Table 2 above. The most-often cited effects of nonnative plants on native plant species are competition and displacement; competition may be for water or nutrients, or it may involve allelopathy (chemical inhibition of other plants). Alien plants may displace native species of plants by preventing

their reproduction, usually by shading and taking up available sites for seedling establishment. Alien plant invasions may also alter entire ecosystems by forming monotypic stands, changing fire characteristics of native communities, altering soil-water regimes, changing nutrient cycling, or encouraging other nonnative organisms (Smith 1985, pp. 180, 218, 228–229; Vitousek *et al.* 1987 in Cuddihy and Stone 1990, p. 74).

*A. The Present or Threatened Destruction, Modification, or Curtailment of Its Habitat or Range*

The Hawaiian Islands are located over 2,000 mi (3,200 km) from the nearest continent. This isolation has allowed the few plants and animals that arrived in the Hawaiian Islands to evolve into many highly varied and endemic species (species that occur nowhere else in the world). The only native terrestrial mammals on the Hawaiian Islands are two bat taxa, the Hawaiian hoary bat (*Lasiurus cinereus semotus*), and an extinct, unnamed insectivorous bat (Ziegler 2002, p. 245). The native plants of the Hawaiian Islands therefore evolved in the absence of mammalian predators, browsers, or grazers; many of the native species lost unneeded defenses against threats such as mammalian predation and competition with aggressive, weedy plant species that are typical of mainland environments (Loope 1992, p. 11; Gagne and Cuddihy 1999, p. 45; Wagner *et al.* 1999, pp. 3–6). For example, Carlquist (in Carlquist and Cole 1974, p. 29) notes that “Hawaiian plants are notably nonpoisonous, free from armament, and free from many characteristics thought to be deterrents to herbivores (oils, resins, stinging hairs, coarse texture).” In addition, species restricted to highly specialized locations or food sources (e.g., some Hawaiian damselflies) are particularly vulnerable to changes (from nonnative species, hurricanes, fire, and climate change) in their habitat (Carlquist and Cole 1974, pp. 28–29; Loope 1992, pp. 3–6; Stone 1992, pp. 88–102).

*Habitat Destruction and Modification by Introduced Ungulates*

Introduced mammals have greatly impacted the native vegetation, as well as the native fauna, of the Hawaiian Islands. Impacts to the native species and ecosystems of Hawaii accelerated following the arrival of Captain James Cook in 1778. The Cook expedition and subsequent explorers intentionally introduced a European race of pigs or boars and other livestock, such as goats, to serve as food sources for seagoing

explorers (U.S. Geological Survey 1998, p. 752). The mild climate of the islands, combined with the lack of competitors or predators, led to the successful establishment of large populations of these introduced mammals, to the detriment of native Hawaiian species and ecosystems (Cox 1992, pp. 116–117). The presence of introduced alien mammals is considered one of the primary factors underlying the alteration and degradation of native vegetation and habitats on the island of Oahu (Cox 1992, pp. 118–119). Six of the seven ecosystems (lowland dry, lowland mesic, lowland wet, montane wet, dry cliff, and wet cliff) and their associated species are currently impacted by threats of the destruction or degradation of habitat due to nonnative ungulates (hoofed mammals), including pigs (*Sus scrofa*) and goats (*Capra hircus*) (HBMP 2008). Only the coastal ecosystem on Oahu is not currently facing threats by nonnative ungulates (Perlman 2007a, in litt.).

Pigs have been described as the most pervasive and disruptive nonnative influence on the unique native forests of the Hawaiian Islands, and are widely recognized as one of the greatest current threats to forest ecosystems in Hawaii (Aplet *et al.* 1991, p. 56; Anderson and Stone 1993, p. 195). European pigs, introduced to Hawaii by Captain James Cook in 1778, hybridized with domesticated Polynesian pigs, became feral, and invaded forested areas, especially wet and mesic forests and dry areas at high elevations. They are currently present on Kauai, Niihau, Oahu, Molokai, Maui, and Hawaii. The Hawaii Territorial Board of Agriculture and Forestry started a feral pig eradication project in the early 1900s that continued through 1958, removing 170,000 pigs from forests Statewide (Diong 1982 in Loope 1998, pp. 752–753).

These introduced pigs are extremely destructive, and have both direct and indirect impacts on native plant communities. While rooting in the earth in search of invertebrates and plant material, pigs directly impact native plants by disturbing and destroying vegetative cover, and trampling plants and seedlings. They may also reduce or eliminate plant regeneration by damaging or eating seeds and seedlings. Further discussion of predation by nonnative ungulates is under Factor C, below. Pigs are a major vector for the establishment and spread of competing invasive, nonnative plant species, by dispersing plant seeds on their hooves and coats, as well as through the spread of their feces (Diong 1982, pp. 169–170), and by fertilizing the disturbed soil with

their feces (Matson 1990, p. 245; Siemann *et al.* 2009, p. 547). Pigs feed preferentially on the fruits of many nonnative plants, such as *Passiflora tarminiana* (banana poka) and *Psidium cattleianum* (strawberry guava), spreading the seeds of these invasive species through their feces as they travel in search of food. In addition, rooting pigs contribute to erosion by clearing vegetation and creating large areas of disturbed soil, especially on slopes (Smith 1985, pp. 190, 192, 196, 200, 204, 230–231; Stone 1985, pp. 254–255, 262–264; Medeiros *et al.* 1986, pp. 27–28; Scott *et al.* 1986, pp. 360–361; Tomich 1986, pp. 120–126; Cuddihy and Stone 1990, pp. 64–65; Aplet *et al.* 1991, p. 56; Loope *et al.* 1991, pp. 1–21; Gagne and Cuddihy 1999, p. 52).

Goats native to the Middle East and India were also successfully introduced to the Hawaiian Islands in the late 1700s. Actions to control goat populations began in the 1920s (Tomich 1986, pp. 152–153). Feral goats now occupy a wide variety of habitats on Oahu, where they consume native vegetation, trample roots and seedlings, accelerate erosion, and promote the invasion of alien plants that have greater competitive abilities (van Riper and van Riper 1982, pp. 34–35; Stone 1985, p. 261). Goats are able to access and forage in extremely rugged terrain, and they have a high reproductive capacity (Clarke and Cuddihy 1980, pp. C–19, C–20; Culliney 1988, p. 336; Cuddihy and Stone 1990, p. 64). Because of these factors, goats are believed to have completely eliminated some plant species from islands (Atkinson and Atkinson 2000, p. 21). Goats can be highly destructive to natural vegetation and contribute to erosion by: (1) Eating young trees and young shoots of plants before they can become established; (2) creating trails that can damage native vegetative cover, destabilize substrate, and create gullies that convey water; and (3) dislodging stones from ledges that can cause rockfalls and landslides that damage vegetation below (Cuddihy and Stone 1990, pp. 63–64).

The 23 species dependent on the lowland dry, lowland mesic, lowland wet, montane wet, dry cliff, and wet cliff ecosystems are exposed to direct and indirect negative impacts of feral ungulates (pigs and goats), which result in the destruction and degradation of habitat for these native Oahu species. The effects of these nonnative animals include: (1) The destruction of vegetative cover; (2) trampling of plants and seedlings; (3) direct consumption of native vegetation; (4) soil disturbance; (5) dispersal of alien plant seeds on hooves, coats, and through the spread of

seeds in feces; and (5) the creation of open, disturbed areas conducive to further invasion by nonnative pest plant species. All of these impacts lead to the subsequent conversion of a plant community dominated by native species to one dominated by nonnative species (see “Habitat Destruction and Modification by Nonnative Plants,” below). In addition, because these mammals inhabit terrain that is often steep and remote (Cuddihy and Stone 1990, p. 59), foraging and trampling contributes to severe erosion of watersheds and degradation of streams. As early as 1900, there was increasing concern expressed about the integrity of island watersheds, due to effects of ungulates and other factors, leading to establishment of a professional forestry program emphasizing soil and water conservation (Nelson 1989, p. 3).

#### Habitat Destruction and Modification by Nonnative Plants

Native vegetation on all of the main Hawaiian Islands has undergone extreme alteration, because of past and present land management practices, including ranching, the deliberate introduction of nonnative plants and animals, and agricultural development (Cuddihy and Stone 1990, pp. 27, 58). The original native flora of Hawaii (plant species that were present before humans arrived) consisted of about 1,000 taxa, 89 percent of which were endemic. Over 800 plant taxa have been introduced from outside Hawaii, and nearly 100 of these have become pests (e.g., injurious plants) (Smith 1985, p. 180; Cuddihy and Stone 1990, p. 73; Gagne and Cuddihy 1999, p. 45). Of these 100 nonnative plant species, over 50 species have altered the habitat of 20 of the 23 species in this final rule. Some of these plants were brought to Hawaii by various groups of people, for food or cultural reasons, to reforest native forests destroyed by grazing feral and domestic animals, for pasture for domestic animals, and for other agricultural purposes. Other plants were brought to Hawaii for their potential horticultural value (Scott *et al.* 1986, pp. 361–363; Cuddihy and Stone 1990, p. 73).

Nonnative plants adversely impact native habitat in Hawaii, including the seven Oahu ecosystems and the 20 plant species identified in this final rule, by: (1) Modifying the availability of light; (2) altering soil-water regimes; (3) modifying nutrient cycling; (4) altering fire characteristics of native plant communities (e.g., successive fires that burn farther and farther into native habitat, destroying native plants and removing habitat for native species by

altering microclimatic conditions to favor alien species); and (5) ultimately, converting native-dominated plant communities to nonnative plant communities (Smith 1985, pp. 180–181; Cuddihy and Stone, 1990, p. 74; D’Antonio and Vitousek 1992, p. 73; Vitousek *et al.* 1997, p. 6). Nonnative plants (and animals) have contributed to the extinction of native species in the lowlands of Hawaii and have been a primary cause of extinction in upland habitats (Vitousek *et al.* 1987, in Cuddihy and Stone 1990, p. 74). The most-often cited effects of nonnative plants on native plant species are displacement through competition. Competition may be for water or nutrients, or it may involve allelopathy (chemical inhibition of other plants) (Smith 1985, in Cuddihy and Stone 1990, p. 74). Nonnative plants may also displace native species by preventing their reproduction, usually by shading and taking up available sites for seedling establishment (Vitousek *et al.* 1987, in Cuddihy and Stone 1990, p. 74).

Alteration of fire regimes clearly represents an ecosystem-level change caused by the invasion of nonnative grasses (D’Antonio and Vitousek 1992, p. 73). The grass life form supports standing dead material that burns readily, and grass tissues have large surface-to-volume ratios and can dry out quickly (D’Antonio and Vitousek 1992, p. 73). The flammability of biological materials is determined primarily by their surface-to-volume ratio and moisture content, and secondarily by mineral content and tissue chemistry (D’Antonio and Vitousek 1992, p. 73). The finest size classes of material (mainly grasses) ignite and spread fires under a broader range of conditions than do woody fuels or even surface litter (D’Antonio and Vitousek 1992, p. 73). The grass life form allows rapid recovery following fire; there is little above-ground structural tissue, so almost all new tissue fixes carbon and contributes to growth (D’Antonio and Vitousek 1992, p. 73). Grass canopies also support a microclimate in which surface temperatures are hotter, vapor pressure deficits are larger, and the drying of tissues occurs more rapidly than in forests or woodlands (D’Antonio and Vitousek 1992, p. 73). Thus, conditions that favor fire are much more frequent in grasslands (D’Antonio and Vitousek 1992, p. 73). In summary, nonnative plants directly and indirectly affect the 20 plant species in this final rule by modifying or destroying their terrestrial habitat. Please refer to the proposed rule (76 FR 46362; August 2,

2011) for a list of nonnative plants and a discussion of their specific negative effects on the 20 plant species.

#### Habitat Destruction and Modification by Fire

Fire is a relatively new, human-exacerbated threat to native species and natural vegetation in Hawaii. The historical fire regime in Hawaii was characterized by infrequent, low-severity fires, as few natural ignition sources existed (Cuddihy and Stone 1990, p. 91; Smith and Tunison 1992, pp. 395–397). Natural fuel beds were often discontinuous, and rainfall in many areas on most islands was, and is, moderate to high. Fires inadvertently or intentionally ignited by the original Polynesians in Hawaii probably contributed to the initial decline of native vegetation in the drier plains and foothills. These early settlers practiced slash-and-burn agriculture that created open lowland areas suitable for the later colonization of nonnative, fire-adapted grasses (Kirch 1982, pp. 5–6, 8; Cuddihy and Stone 1990, pp. 30–31). Beginning in the late 18th century, Europeans and Americans introduced plants and animals that further degraded native Hawaiian ecosystems. Pasturage and ranching, in particular, created highly fire-prone areas of nonnative grasses and shrubs (D'Antonio and Vitousek 1992, p. 67). Although fires are infrequent in mountainous regions today, extensive fires have occurred in lowland mesic areas, leading to grass/fire cycles that convert woodland to grassland (D'Antonio and Vitousek 1992, p. 77).

Although Vogl (1969, in Cuddihy and Stone 1990, p. 91) proposed that naturally occurring fires, primarily from lightning strikes, have been important in the development of the original Hawaiian flora, and that many Hawaiian plants might be fire adapted, Mueller-Dombois (1981, in Cuddihy and Stone 1990, p. 91) points out that most natural vegetation types of Hawaii would not carry fire before the introduction of alien grasses. Smith and Tunison (in Cuddihy and Stone 1990, p. 91) state that native plant fuels typically have low flammability. Because of the greater frequency, intensity, and duration of fires that have resulted from the introduction of nonnative plants (especially grasses), fires are now destructive to native Hawaiian ecosystems (Brown and Smith 2000, p. 172), and a single grass-fueled fire can kill most native trees and shrubs in the burned area (D'Antonio and Vitousek 1992, p. 74).

Fire represents a threat to the habitats of six of the plant species in this final

rule, based on information identifying fire as a threat to a particular species at a particular location: *Bidens amplexans*, *Cyanea calycina*, *Doryopteris takeuchii*, *Korthalsella degeneri*, *Pleomele forbesii*, and *Pteralyxia macrocarpa* (see Table 2). These six plant species are found in the coastal, lowland dry, lowland mesic, or dry cliff ecosystems. Fire can destroy dormant seeds of the six species as well as the plants themselves, even in steep or inaccessible areas. Successive fires that burn farther and farther into native habitat destroy native plants, and remove habitat for native species by altering microclimate conditions favorable to alien plants. Alien plant species most likely to be spread as a consequence of fire are those that produce a high fuel load, are adapted to survive and regenerate after fire, and establish rapidly in newly burned areas. Grasses (particularly those that produce mats of dry material or retain a mass of standing dead leaves) that invade native forests and shrublands provide fuels that allow fire to burn areas that would not otherwise easily burn (Fujioka and Fujii 1980, in Cuddihy and Stone 1990, p. 93; D'Antonio and Vitousek 1992, pp. 70, 73–74; Tunison *et al.* 2002, p. 122). Native woody plants may recover from fire to some degree, but fire tips the competitive balance toward alien species (National Park Service 1989, in Cuddihy and Stone 1990, p. 93).

On a post-burn survey at Puuwaawaa on the island of Hawaii within an area of native *Diospyros* forest with undergrowth of the nonnative grass *Pennisetum setaceum*, Takeuchi noted that “no regeneration of native canopy is occurring within the Puuwaawaa burn area” (Takeuchi 1991, p. 2). Takeuchi also stated that “burn events served to accelerate a decline process already in place, compressing into days a sequence which would ordinarily have taken decades” (Takeuchi 1991, p. 4), and concluded that in addition to increasing the number of fires, the nonnative *Pennisetum* acted to suppress establishment of native plants after a fire (Takeuchi 1991, p. 6). There have been several recent fires on Oahu that have impacted rare or endangered species, including areas designated as critical habitat in this final rule. Between 2004 and 2005, wildfires burned more than 360 ac (146 ha) in Honouliuli Preserve, home to more than 90 rare and endangered plants and animals, which is located along the windward side of the Waianae Mountains (The Nature Conservancy 2005, in litt.). In 2006, a fire at Kaena Point State Park burned 60 ac (24 ha),

including portions of two units designated as critical habitat in this rule, and encroached on endangered plants in Makua Military Training Area. In 2007, there was a significant fire at Kaukonahua that crossed 12 gulches, eventually encompassing 5,655 ac (2,289 ha), and negatively impacted seven endangered plant species. Occurrences of three of the species were extirpated as a result of the fire. The Kaukonahua fire also provided pathways for nonnative ungulates (cattle, goats, and pigs) into previously undisturbed areas, and opened up previously densely vegetated areas for growth of the invasive grass *Panicum maximum* (guinea grass), which is also used as a food source by cattle and goats. An area infested by guinea grass burned, and the grass was observed to generate blades over 2 feet in length only 2 weeks after the fire (U.S. Army Garrison 2007, Appendices pp. 1–5). In 2009, there were two smaller fires that burned 200 ac (81 ha) at Manini Pali (Kaena Point State Park) and 4 ac (2 ha) at Makua Cave (at the mouth of Makua Valley). Both of these fires burned in designated critical habitat, although no individual plants were directly affected (U.S. Army Natural Resource Program 2009, Appendix 2, 17 pp.). These examples of recent fires illustrate that nonnative grass invasion leads to grass/fire cycles that convert native vegetation to grassland (D'Antonio and Vitousek 1992, p. 77)

#### Habitat Destruction and Modification by Hurricanes

Hurricanes adversely impact native Hawaiian terrestrial habitat, including each of the seven Oahu ecosystems and their associated species identified in this final rule. They do this by destroying native vegetation, opening the canopy and thus modifying the availability of light, and creating disturbed areas conducive to invasion by nonnative pest species (see “*Specific Nonnative Plant Species Impacts*,” in our August 2, 2011, proposed rule (76 FR 46362)) (Asner and Goldstein 1997, p. 148; Harrington *et al.* 1997, pp. 539–540). Canopy gaps allow for the establishment of nonnative plant species, which may be present as plants, or as seeds incapable of growing under shaded conditions. In addition, hurricanes adversely impact native Hawaiian stream habitat by defoliating and toppling vegetation, thus loosening the soil around the toppled vegetation. Loosened soil, loose vegetation, and other debris can be washed into streambeds (by hurricane-induced rain or subsequent rain storms), resulting in the scouring of the stream bottoms and

channels, and catastrophic flooding (Polhemus 1993, 88 pp.). Because many Hawaiian plant and animal species, including the 23 species in this final rule, persist in low numbers and in restricted ranges, natural disasters, such as hurricanes, can be particularly devastating (Mitchell *et al.* 2005, p. 4–3).

Hurricanes affecting Hawaii were only rarely reported from ships in the area from the 1800s until 1949. Between 1950 and 1997, 22 hurricanes passed near or over the Hawaiian Islands, 5 of which caused serious damage (Businger 1998, pp. 1–2). In November 1982, Hurricane Iwa struck the Hawaiian Islands, with wind gusts exceeding 100 miles per hour (mph) (161 kilometers per hour (kph)), causing extensive damage, especially on the islands of Niihau, Kauai, and Oahu (Businger 1998, pp. 2, 6). Many native forest trees were destroyed (Perlman 1992, in litt., pp. 1–9), which opened the canopy and facilitated the invasion of nonnative plants (Kitayama and Mueller-Dombois 1995, p. 671). Historically (prior to the introduction of nonnative, invasive plants to the Hawaiian Islands), it is likely that areas affected by hurricanes would eventually have been repopulated by native plants. However, competition with nonnative plants is exacerbated by hurricanes, and represents a threat to each of the 7 ecosystems and the 20 plant species addressed in this final rule, as described in “*Specific Nonnative Plant Species Impacts*,” in our August 2, 2011, proposed rule (76 FR 46362). In September 1992, Hurricane Iniki, a Category 4 hurricane with maximum sustained wind speeds recorded at 140 mph (225 kph), passed directly over the island of Kauai and close to the island of Oahu, causing significant damage to areas along Oahu’s southwestern coast (from Barber’s Point or Kalaeloa, to Kaena Point) (Blake *et al.* 2007, p. 20), where the endangered plant *Bidens amplexans* occurs. Biologists have documented hurricane damage (e.g., denuded foliage, toppled and uprooted trees and shrubs, landslides) to the habitat of six other plant species (*Cyrtandra kaulantha*, *C. sessilis*, *Melicope christophersenii*, *M. hiiakae*, *Platydesma cornuta* var. *cornuta*, and *Psychotria hexandra* ssp. *oahuensis*). Polhemus (1993, pp. 86–87) documented the extirpation of the scarlet Kauai damselfly (*Megalagrion vagabundum*), a species related to the blackline, crimson, and oceanic Hawaiian damselflies included in this final rule, from the entire Hanakapiai Stream system on the island of Kauai as

a result of the impacts of Hurricane Iniki in 1992. Damage by future hurricanes could further decrease the remaining native-plant-dominated habitat areas that support rare plants and animals in Oahu ecosystems (Bellingham *et al.* 2005, p. 681).

#### Habitat Destruction and Modification Due to Landslides, Rockfalls, Flooding, and Drought

Landslides, rockfalls, and flooding destabilize substrates, damage and destroy individual plants, and alter hydrological patterns, which result in changes to native plant and animal communities. In the open sea near Hawaii, rainfall averages 25 to 30 in (63 to 76 cm) per year, yet the islands may receive up to 15 times this amount in some places, caused by orographic features (Wagner *et al.* 1999; adapted from Price (1983) and Carlquist (1980), pp. 38–39). During storms, rain may fall at 3 in (7.6 cm) per hour or more, and sometimes may reach nearly 40 in (100 cm) in 24 hours, causing destructive flash-flooding in streams and narrow gulches (Wagner *et al.* 1999; adapted from Price (1983) and Carlquist (1980), pp. 38–39). Due to the steep topography of much of the area on Oahu where the species remain, erosion and disturbance caused by introduced ungulates exacerbate the potential for landslides, rockfalls, or flooding, which in turn threaten native plants and some of the damselfly species (see Table 2). For those species that occur in small numbers in highly restricted geographic areas, such events have the potential to eradicate all individuals of a population, or even all populations of a species, resulting in extinction.

Landslides and rockfalls likely adversely impact nine of the species addressed in this final rule, including *Cyanea lanceolata*, *Cyrtandra kaulantha*, *C. sessilis*, *Doryopteris takeuchii*, *Melicope makahae*, *Platydesma cornuta* var. *decurrens*, *Psychotria hexandra* ssp. *oahuensis*, and the crimson and oceanic Hawaiian damselflies, as documented in observations by field botanists and surveyors (HBMP 2008). Monitoring data from the PEP program and the Hawaii Biodiversity and Mapping Program (HBMP) suggest that these nine species face threats from landslides or falling rocks, as they are found in landscape settings susceptible to these events (e.g., steep slopes and cliffs). Since *C. kaulantha* is known from only a few individuals in steep-walled stream valleys, one landslide could lead to near extirpation of the species by direct destruction of the individual plants, mechanical damage to individual plants

that could lead to their death, destabilization of the cliff habitat leading to additional landslides, and alteration of hydrological patterns (e.g., affecting the availability of soil moisture). Landslides can modify and destroy riparian and stream habitat by direct physical damage (e.g., rocks and debris falling in a stream, mechanical damage to riparian vegetation), and create disturbed areas leading to invasion by nonnative plants that outcompete the native plants, as well as damage or destroy plants used by the crimson and oceanic damselflies for perching. Field survey data presented by Bakutis (2006c, in litt.) and the PEP Program (2006, p. 51) suggest that flooding is a likely threat to two plant species included in this final listing, one population of *Psychotria hexandra* ssp. *oahuensis*, located in a narrow gulch, and one population of *Cyrtandra sessilis*, growing near a stream in a narrow valley. Intermittent flooding events likely occurred in the stream habitats of the blackline, crimson, and oceanic Hawaiian damselflies in the past, due to stochastic events such as storms and hurricanes. However, the current low numbers of individuals and populations, combined with their breeding, life-history requirements in stream habitats, and reduced ranges, of these three Hawaiian damselflies increase their vulnerability to the threat of flooding. The impact of flooding events may be increased by channelization of stream reaches, or degradation of riparian vegetation by feral ungulates. Naiads may be washed out of streams into the surrounding terrestrial habitat or washed downstream into portions of streams that are occupied by nonnative predatory fish. Adults perching on surrounding vegetation may be washed into flooded streams and drown.

The blackline, crimson, and oceanic Hawaiian damselflies may also be affected by temporary habitat loss associated with droughts, which are not uncommon in the Hawaiian Islands. Between 1860 and 2002, the island of Oahu was affected by 49 periods of drought (Giambelluca *et al.* 1991, pp. 3–4; Hawaii Commission on Water Resource Management 2009a and 2009b). These drought events often desiccate streams, irrigation ditches, and reservoirs; deplete groundwater supplies; and lead to forest and brush fires (Hawaii Commission on Water Resource Management 2009a and 2009b). Desiccation of streams, ditches, and reservoirs directly removes damselfly hunting and breeding habitat. Drought leads to an increase in the

number of forest and brush fires (Giambelluca *et al.* 1991, p. v), causing a reduction of native plant cover and habitat (D'Antonio and Vitousek 1992, pp. 77–79), and of plants used by the three Hawaiian damselflies for perching and hunting for prey.

#### Habitat Destruction and Modification by Agriculture and Urban Development

Although we are unaware of any comprehensive, site-by-site assessment of wetland loss in Hawaii, Erikson and Puttock (2006, p. 40) and Dahl (1990, p. 7) estimated that at least 12 percent of lowland to upper-elevation wetlands in Hawaii had been converted to non-wetland habitat by the 1980s. If only coastal plain (below 1,000 ft (300 m)) marshlands and wetlands are considered, it is estimated that 30 percent have been converted to agricultural and urban development (Kosaka 1990, in litt.). Historical records show these marshlands and wetlands provided habitat for many damselfly species, including the blackline, oceanic, and crimson Hawaiian damselflies (Polhemus 2007, pp. 233, 237–239; HBMP 2008).

Although filling of wetlands is regulated by permitting today, the loss of riparian or wetland habitats utilized by the blackline and crimson Hawaiian damselflies may still occur due to Oahu's population growth and development, with concurrent demands on limited developable land and water resources (Lester 2007, in litt.). The State's Commission on Water Resource Management recognized the need for a water resource protection plan, which is currently under development (Commission on Water Resource Management 2010). In addition, marshes have been slowly filled and converted to meadow habitat, as a result of sedimentation from increased storm water runoff from upslope development, the accumulation of uncontrolled growth of invasive vegetation, and blockage of downslope drainage (Wilson Okamoto & Associates, Inc. 1993, pp. 3–4, 3–5).

The threats posed by conversion of wetland and other aquatic habitat for agriculture and urban development are ongoing and are expected to continue into the future. Hawaii's population has increased almost 8 percent in the past 11 years, along with the associated increased demands on limited land and water resources (Hawaii Department of Business, Economic Development and Tourism (HDBEDT) 2012). These modified areas lack the aquatic habitat features that the blackline and crimson Hawaiian damselflies require for essential life-history needs, such as

marshes, sidepools along streams, and slow sections of perennial streams, and no longer support populations of these two species. Agriculture and urban development have thus contributed to the present curtailment of the habitat of these two Hawaiian damselflies, and we have no indication that this threat is likely to be significantly ameliorated in the near future.

#### Habitat Destruction and Modification by Stream Diversion

Stream modifications began with the early Hawaiians who diverted water to irrigate taro (*kalo*, *Colocasia esculenta*). A taro planter's share of water was determined by the amount of labor contributed to the construction and maintenance of the ditch, and was not proportional to their acreage of flooded terraces. Water rights of others taking water from the main stream below the dam had to be respected, and no ditch was permitted to divert more than half the flow from a stream. Water was withdrawn according to a time schedule, from a few hours at a time day or night, up to 2 or 3 days, and in times of drought, the "water boss" had the right to adjust the sharing of available water to meet exigencies (Handy and Handy 1972, pp. 58–59).

The advent of plantation sugarcane cultivation led to far more extensive stream diversions, with the first diversion built in 1856 on Kauai (Wilcox 1996, p. 54). The first diversion on Oahu, Oahu Ditch, was built in 1902 (Wilcox 1996, p. 65). These systems were designed to tap water at upper elevations (above 1,000 ft (300 m)) by means of a concrete weir in the stream (Wilcox 1996, p. 54). All, or most, of the low or average flow of the stream was, and often still is, diverted into fields or reservoirs, leaving many stream channels completely dry (Takasaki *et al.* 1969, pp. 27–28; Harris *et al.* 1993, p. 12; Wilcox 1996, p. 56).

By the 1930s, water diversions had been developed on all of the main Hawaiian Islands, and by 1978, the stream flow in more than half the 366 perennial streams in Hawaii had been altered in some manner (Brasher 2003, p. 1,055). Some stream diversion systems are extensive, such as the Waiahole Ditch on Oahu, built in the early 1900s, which diverts water from 37 streams within the ranges of the blackline, crimson, and oceanic damselflies, on the windward side of Oahu to the dry plains on the leeward side of the island via a tunnel cut through the Koolau range (Stearns and Vaksvik 1935, pp. 399–403; Tvedt and Oestigaard 2006, pp. 43–44). Historically, damselflies in the genus

*Megalagrion* were a common component of Hawaiian streams and wetlands at elevations ranging from sea level to the summit of the Koolau range on Oahu. This loss of stream habitat may have contributed to the extirpation of populations of the three damselflies from lower elevations (Polhemus 2007, pp. 233–234, 238–239).

#### Habitat Destruction and Modification by Dewatering of Aquifers

In addition to the diversion of stream water and the resultant downstream dewatering, many streams on Oahu have experienced reduced or zero surface flow as a result of the dewatering of their source aquifers. Often these aquifers, which previously fed the streams, were tapped by tunneling or through the injudicious placement of wells (Gingerich and Oki 2000, p. 6; Stearns 1985, pp. 291–305). These groundwater sources were diverted for both domestic and agricultural use, and in some areas have completely depleted nearby stream and spring flows. For example, both the bore tunnels and the contour tunnel of the Waiahole Ditch system intersect perched aquifers (aquifers above the primary ground water table), which subsequently are drained to the elevation of the tunnels (Stearns and Vaksvik 1935, pp. 399–406). This has reduced stream habitat available to the blackline, crimson, and oceanic damselflies. Likewise, the boring of the Haiku tunnel on Oahu in 1940 caused a 25 percent reduction in the base flow of Kahaluu Stream, which is more than 2.5 mi (4 km) away (Takasaki *et al.* 1969, pp. 31–32), and has impacted available habitat for the blackline and oceanic Hawaiian damselflies (HBMP 2008). Many of these aquifers were also the sources of springs that contributed flow to Oahu's windward streams; draining of these aquifers caused many of the springs to dry up, including some more than 0.3 mi (0.5 km) away from the bore tunnels (Stearns and Vaksvik 1935, pp. 379–380).

#### Habitat Destruction and Modification by Vertical Wells

Surface flow of streams has also been affected by vertical wells drilled in pre-modern times, because the basal aquifer (lowest groundwater layer) and alluvial caprock (sediment-deposited harder rock layer) through which the lower sections of streams flow can be penetrated and hydraulically connected by wells (Gingerich and Oki 2000, p. 6; Stearns 1940, p. 88). This allows water in aquifers normally feeding the stream to be diverted elsewhere underground. Dewatering of the streams by tunneling

and well placement near or in streams was a significant cause of habitat loss, and these effects continue today. Historically, for example, there was sufficient surface flow in Makaha and Nanakuli Streams on Oahu to support taro loi (artificial ponds for taro cultivation) in their lower reaches, but this flow disappeared subsequent to construction of vertical wells upstream (Devick 1995, pers. comm.). The inadvertent dewatering of streams through the penetration of their aquifers (which are normally separated from adjacent waterbearing layers by an impermeable layer), by tunneling or through placement of vertical wells, caused the loss of habitat of blackline, crimson, and oceanic Hawaiian damselflies habitat, as these species were historically known from these areas.

#### Habitat Destruction and Modification by Stream Channelization

Stream degradation has been particularly severe on the island of Oahu where, by 1978, 58 percent of the perennial streams and banks had been channelized (e.g., concrete lined, partially lined, or altered) to control flooding (Polhemus and Asquith 1996, p. 24; Brasher 2003, p. 1,055). These alterations have resulted in an overall 89 percent loss of the total stream length island-wide (Polhemus and Asquith 1996, p. 24; Parrish *et al.* 1984, p. 83). The channelization of streams creates artificial, wide-bottomed stream beds, and often results in removal of riparian vegetation, which reduces shading, increases substrate homogeneity, increases temporal water velocity (increased water flow speed during times of higher precipitation including minor and major flooding), and causes higher water temperatures (Parrish *et al.* 1984, p. 83; Brasher 2003, p. 1,052). Tests conducted on native aquatic species showed that the higher water temperatures in channelized streams caused stress, and sometimes death (Parrish *et al.* 1984, p. 83). Natural streams meander and are lined with rocks, trees, and natural debris, and during times of flooding, jump their banks. Channelized streams are straightened and often lack natural obstructions, and during times of higher precipitation or flooding, facilitate a higher water flow velocity. Hawaiian damselflies are largely absent from channelized portions of streams (Polhemus and Asquith 1996, p. 24), which has likely contributed to a reduction in the historical range of Hawaiian damselfly species. In contrast, undisturbed Hawaiian stream systems exhibit a greater amount of riffle and

pool habitat canopy closure, higher consistent flow velocity, and lower water temperatures that are characteristic of streams to which the Hawaiian damselflies, in general, are adapted (Brasher 2003, pp. 1,054–1,057).

Channelization of streams has not been restricted to lower stream reaches. For example, there is extensive channelization of Oahu's Kalihi Stream above 1,000 ft (300 m) elevation. Extensive stream channelization on Oahu has also contributed to the loss of habitat for the blackline, crimson, and oceanic Hawaiian damselflies (Englund 1999, p. 236; Polhemus 2008, in litt.).

Stream diversion, channelization, dewatering, and vertical wells represent serious and ongoing threats to the blackline, crimson, and oceanic Hawaiian damselflies for the following reasons: (1) They reduce the amount and distribution of stream habitat available to these species; (2) they reduce stream flow, leaving lower elevation stream segments completely dry except during storms, or leaving many streams completely dry year round, thus reducing or eliminating stream habitat; and (3) they indirectly lead to an increase in water temperature that results in physiological stress and to the loss of blackline, crimson, and oceanic Hawaiian damselfly naiads. The blackline, crimson, and oceanic Hawaiian damselflies are particularly vulnerable to extinction due to such changes (i.e., stream diversion, channelization, and dewatering), a vulnerability which is exacerbated by their range and habitat constrictions and declines in their population numbers.

#### Habitat Destruction and Modification by Climate Change

Climate change will be a particular challenge for biodiversity because the introduction and interaction of additional stressors may push species beyond their ability to survive (Lovejoy *et al.* 2005, pp. 325–326). The synergistic implications of climate change and habitat fragmentation are the most threatening facet of climate change for biodiversity (Lovejoy *et al.* 2005, p. 4). The magnitude and intensity of the impacts of global climate change and increasing temperatures on native Hawaiian ecosystems are unknown. We are not aware of climate change studies specifically related to the seven Oahu ecosystems described in this final rule, or the 23 species that are associated with those ecosystems. Based on the best available information, climate change impacts could lead to the decline or loss of native species that comprise the communities in which the

23 species occur (Pounds *et al.* 1999, pp. 611–612; Still *et al.* 1999, p. 610; Benning *et al.* 2002, pp. 14,246 and 14,248). In addition, weather regime changes (e.g., droughts, floods) will likely result from increased annual average temperatures related to more frequent El Niño episodes in Hawaii. These changes may decrease water availability and increase the consumptive demand on Oahu's natural streams and reservoirs by Oahu's residents (Giambelluca *et al.* 1991, p. v). The effects of increasing temperatures on the aquatic habitat of the three damselfly species are not specifically known, but likely include the loss of aquatic habitat from reduced stream flow, evaporation of standing water, and increased water temperature (Pounds *et al.* 1999, pp. 611–612; Still *et al.* 1999, p. 610; Benning *et al.* 2002, pp. 14,246 and 14,248).

Oki (2004, p. 4) has noted long-term evidence of decreased precipitation and stream flow on the Hawaiian Islands, based upon evidence collected by stream gauging stations. This long-term drying trend, coupled with existing ditch diversions and periodic El Niño-caused drying events, has created a pattern of severe and persistent stream dewatering events (Polhemus 2008, in litt.). Future changes in precipitation and the forecast of those changes are highly uncertain because they depend, in part, on how the El Niño-La Niña weather cycle (a disruption of the ocean atmospheric system in the tropical Pacific having important global consequences for weather and climate) might change (Hawaii Climate Change Action Plan 1998, pp. 2–10).

The 23 species in this final rule may be especially vulnerable to extinction due to anticipated environmental changes that may result from global climate change. Environmental changes that may affect these species are expected to include habitat loss or alteration and changes in disturbance regimes (e.g., storms and hurricanes), in addition to direct physiological stress caused by increased streamwater temperatures to which the native Hawaiian damselfly fauna are not adapted. The probability of a species going extinct as a result of these factors increases when its range is restricted, habitat decreases, and population numbers decline (Intergovernmental Panel on Climate Change 2007, p. 8). The 23 species have limited environmental tolerances, limited ranges, restricted habitat requirements, small population sizes, and low numbers of individuals. Therefore, we would expect these species to be particularly vulnerable to projected

environmental impacts that may result from changes in climate, and subsequent impacts to their habitats (e.g., Pounds *et al.* 1999, pp. 611–612; Still *et al.* 1999, p. 610; Benning *et al.* 2002, pp. 14,246 and 14,248). We believe changes in environmental conditions that may result from climate change may impact these 23 species and their habitat, and we do not anticipate a reduction in this potential threat in the near future.

#### Summary of Habitat Destruction and Modification

The threats to the habitats of each of the 23 Oahu species addressed in this final rule are occurring throughout the entire range of each of the species. These threats include introduced ungulates, nonnative plants, fire, natural disasters, and climate change. In addition, the habitats of the blackline, crimson, and oceanic Hawaiian damselflies also face threats from agricultural and urban development, stream diversion, stream channelization, and stream dewatering.

The effects from ungulates are ongoing, because ungulates currently occur in six of the seven ecosystems on which these species depend. The threat posed by introduced ungulates to the species and their habitats in this final rule that occur in these six ecosystems (see Table 2) is serious, because they cause: (1) Trampling and grazing that directly impact the plant communities, which include the 19 of the 20 plant species listed in this final rule, and impact plants in riparian areas used by the blackline, crimson, and oceanic damselflies for perching, reproduction, and hunting for prey; (2) increased soil disturbance, leading to mechanical damage to individuals of the plant species listed in this final rule, and plants in riparian areas used by the damselflies for perching, reproduction, and hunting for prey; (3) creation of open, disturbed areas conducive to weedy plant invasion and establishment of alien plants from dispersed fruits and seeds, which results over time in the conversion of a community dominated by native vegetation to one dominated by nonnative vegetation (leading to all of the negative impacts associated with nonnative plants, listed below); and (4) increased watershed erosion and sedimentation, which affects aquatic habitats used by the three Hawaiian damselflies. Although plants used for perching by damselflies are not necessarily native plants, ungulate activity damages or removes all plants near the stream. Damselflies depend on plants near the stream for their daily activities, territory establishment,

reproduction, and hunting prey. These threats are expected to continue or increase without ungulate control or eradication.

Nonnative plants represent a serious and ongoing threat to the habitats of all 20 plant species being addressed in this final rule through habitat destruction and modification because they: (1) Adversely impact microhabitat by modifying the availability of light; (2) alter soil-water regimes; (3) modify nutrient cycling processes; (4) alter fire characteristics of native plant habitat, leading to incursions of fire-tolerant nonnative plant species into native habitat; and (5) outcompete, and possibly directly inhibit the growth of, native plant species. Each of these threats can convert native-dominated plant communities to nonnative plant communities (Cuddihy and Stone 1990, p. 74; Vitousek 1992, pp. 33–35). This conversion has negative impacts on, and is a threat to, the 20 plant species addressed here.

The threat from fire to the habitats of six species in this final rule (*Bidens amplexans*, *Cyanea calycina*, *Doryopteris takeuchii*, *Korthalsella degeneri*, *Pleomele forbesii*, and *Pteralyxia macrocarpa*; see Table 2) is a serious and ongoing threat, because fire damages and destroys native vegetation, including dormant seeds, seedlings, and juvenile and adult plants. Many nonnative, invasive plants, particularly fire-tolerant grasses, can outcompete native plants and inhibit their regeneration (D'Antonio and Vitousek 1992, pp. 70, 73–74; Tunison *et al.* 2002, p. 122). Successive fires that burn farther and farther into native habitat destroy native plants and remove habitat for native species by altering microclimatic conditions and creating conditions favorable to alien plants. The threat from fire is unpredictable but omnipresent in ecosystems that have been invaded by nonnative, fire-prone grasses.

Natural disasters, such as hurricanes, represent a serious threat to the habitats of 7 of the 20 plant species addressed in this final rule (*Bidens amplexans*, *Cyrtandra kaulantha*, *C. sessilis*, *Melicope christophersenii*, *M. hiikae*, *Platydesma cornuta* var. *cornuta*, and *Psychotria hexandra* ssp. *oahuensis*), because they open the forest canopy, modify available light, and create disturbed areas that are conducive to invasion by nonnative pest plants (Asner and Goldstein 1997, p. 148; Harrington *et al.* 1997, pp. 346–347). The discussion under “Habitat Destruction and Modification by Nonnative Plants” above provides additional information related to canopy

gaps, light availability, and the establishment of nonnative plant species. In addition, hurricanes are a threat to the habitats of the three Hawaiian damselfly species in this final rule, because they alter and cause direct damage to streams (Polhemus 1993, pp. 86–87). These habitat impacts can be particularly devastating to the seven plant species and three Hawaiian damselfly species addressed in this final rule, because, due to other threats, they now persist in low numbers or occur in restricted ranges, and are therefore less resilient to such disturbances. Furthermore, a particularly destructive hurricane holds the potential to drive a localized endemic species to extinction in a single event. Hurricanes pose an ongoing and ever-present threat, because they can occur at any time, although their occurrence is not predictable.

Landslides, rockfalls, and flooding adversely impact the habitats of 10 of the species in this final rule (*Cyanea lanceolata*, *Cyrtandra kaulantha*, *C. sessilis*, *Doryopteris takeuchii*, *Melicope makahae*, *Platydesma cornuta* var. *decurrens*, *Psychotria hexandra* ssp. *oahuensis*, and the blackline, crimson and oceanic Hawaiian damselflies) (see Table 2) by destabilizing substrates, damaging and destroying individual plants and damselflies, and altering hydrological patterns. These threats result in habitat destruction or modification, and changes to native plant and animal communities. Drought is a threat to all three damselfly species' habitats by desiccation of streams, ditches, and reservoirs, which eliminates damselfly hunting and breeding habitat. These threats are significant and have the potential to occur at any time, although their incidence is not predictable.

The threats caused by conversion of wetland and other aquatic habitat to agriculture and urban development are ongoing, expected to continue into the future, and affect each of the three damselfly's habitats. Twelve percent of the freshwater habitat in Hawaii has already been lost, and 30 percent of all coastal plain wetlands in Hawaii has been lost to agriculture and urban development (Kosaka 1990, in litt.). These modified areas no longer support populations of these Hawaiian damselflies. These threats are expected to continue in the future.

Stream diversion, channelization, and dewatering represent serious and ongoing threats to the blackline, crimson, and oceanic Hawaiian damselflies because they: (1) Reduce the amount and distribution of stream habitat; (2) reduce stream flow, which

leaves lower elevation stream segments either completely dry year round, or completely dry except during storms, which reduces or eliminates stream habitat; and (3) indirectly lead to an increase in water temperature by altering the normal hydrograph patterns, which leads to the loss of damselfly naiads, due to direct physiological stress. The probability of species extinction increases when ranges are restricted, the quality and quantity of habitat decreases, and population numbers decline. Accordingly, the blackline, crimson, and oceanic Hawaiian damselflies are vulnerable to extinction due to such changes in their stream habitat.

The projected effects of global climate change and increasing temperatures on the habitats of the 23 species addressed in this final rule are related to changes in microclimatic conditions in their habitats. These changes may lead to the loss of native species due to direct physiological stress, the loss or alteration of habitat, increased competition from nonnative species, and changes in disturbance regimes (e.g., fire, storms, and hurricanes). Because the specific and cumulative effects of climate change on these 23 species are presently unknown, we are not able to determine the magnitude of this possible threat with confidence.

#### *B. Overutilization for Commercial, Recreational, Scientific, or Educational Purposes*

We are not aware of any threats to the 23 species addressed in this final rule that are attributable to overutilization for commercial, recreational, scientific, or educational purposes.

#### *C. Disease or Predation*

##### Disease

We are not aware of any threats to the 23 species addressed in this final rule that are attributable to disease.

##### Predation

Hawaii's plants and animals evolved in nearly complete isolation from continental influences. Successful colonization of these remote volcanic islands was infrequent, and many organisms never established populations. For example, Hawaii lacks any native ants or conifers, has very few bird families, and has only a single native land mammal (Loope 1998, p. 748). Defenses against mammalian herbivory, such as thorns, prickles, and production of toxins, were not needed, and the evolutionary pressure for plants to produce or maintain them was lacking. Therefore, Hawaiian plants

either lost or never developed these defenses (Carlquist 1980, p. 173). The native flora and fauna of the islands are thus particularly vulnerable to the impacts of introduced nonnative species, as discussed below.

##### Introduced Ungulates

In addition to the habitat impacts discussed above, ungulates pose a threat to the following 19 of the 20 plant species in this final rule by trampling and eating individual plants (this information is also presented in Table 2): *Bidens amplexans* (feral pigs and goats), *Cyanea calycina* (feral pigs and goats), *C. lanceolata* (feral pigs), *C. purpurellifolia* (feral pigs), *Cyrtandra gracilis* (feral pigs), *C. kaulantha* (feral pigs), *C. sessilis* (feral pigs), *C. waiolani* (feral pigs), *Korthalsella degeneri* (feral pigs and goats), *Melicope christophersenii* (feral pigs), *M. hiikae* (feral pigs), *M. makahae* (feral pigs and goats), *Platydesma cornuta* var. *cornuta* (feral pigs), *P. cornuta* var. *decurrens* (feral pigs and goats), *Pleomele forbesii* (feral pigs and goats), *Psychotria hexandra* ssp. *oahuensis* (feral pigs), *Pteralyxia macrocarpa* (feral pigs and goats), *Tetraplasandra lydgatei* (feral pigs), and *Zanthoxylum oahuense* (feral pigs). Predation by feral pigs and goats is also a threat to the host plants (*Nestegis sandwicensis* and *Sapindus oahuensis*) of *Korthalsella degeneri*. The fern *Doryopteris takeuchii* grows on the slopes of Diamond Head Crater, an area that is not affected by introduced ungulates.

We have direct evidence of ungulate damage to some of these species, but for many, ungulate damage is presumed based on several studies conducted in Hawaii and elsewhere. In a study conducted by Diong (1982, p. 160) on Maui, feral pigs were observed browsing on young shoots, leaves, and fronds of a wide variety of plants, of which over 75 percent were endemic species (Diong 1982, p. 160). A stomach content analysis in this study showed that 60 percent of the pigs' food source consisted of the endemic *Cibotium* (hapuu, tree fern). Pigs were observed to fell plants and remove the bark of the native plant species *Clermontia*, *Cibotium*, *Coprosma*, *Psychotria*, *Scaevola*, and *Hedyotis*, resulting in larger trees being killed over a few months of repeated feeding (Diong 1982, p. 144). A study in Texas conducted by Beach (1997, pp. 3–4) revealed that feral pigs spread disease and parasites, and that their rooting and wallowing behavior led to spoilage of watering holes and loss of soil through leaching and erosion. Rooting activities also decreased the survivability of some

plant species through disruption at root level of mature plants and seedlings (Beach 1997, pp. 3–4).

Feral goats thrive on a variety of food plants, and are instrumental in the decline of native vegetation in many areas (Cuddihy and Stone 1990, p. 64). Feral goats trample roots and seedlings, cause erosion, and promote the invasion of alien plants. They are able to forage in extremely rugged terrain and have a high reproductive capacity (Clarke and Cuddihy 1980, p. C–20; van Riper and van Riper 1982, pp. 34–35; Tomich 1986, pp. 153–156; Cuddihy and Stone 1990, p. 64). A study of goat predation on a native *Acacia koa* forest on the island of Hawaii has shown that grazing pressure by goats can cause the eventual extinction of *Acacia koa* because it is unable to reproduce (Spatz and Mueller-Dombois 1973, p. 876). If goats are maintained at constantly high numbers, mature trees will eventually die, including the root systems that support suckers and vegetative reproduction (Spatz and Mueller-Dombois 1973, p. 876). Another study at Puuwaawaa on the island of Hawaii demonstrated that prior to management actions in 1985, regeneration of endemic shrubs and trees in goat-grazed areas was almost totally lacking, contributing to the invasion of the forest understory by exotic grasses and weeds. After the removal of grazing animals in 1985, *A. koa* and *Metrosideros* spp. seedlings were observed germinating by the thousands (HDLNR 2002, p. 52). Based on a comparison of fenced and unfenced areas, it is clear that goats can devastate native ecosystems (Loope *et al.* 1988, p. 277). Because goats occur in 6 of the 7 described ecosystems on Oahu, the results of the studies described above suggest that goats can also alter these ecosystems and directly damage or destroy native plants.

##### Rats

There are three species of introduced rats on the Hawaiian Islands. The Polynesian rat (*Rattus exulans*) and the black rat (*Rattus rattus*) are primarily found in the wild, in dry to wet habitats, while the Norway rat (*Rattus norvegicus*) is typically found in manmade habitats such as urban areas or agricultural fields (Tomich 1986, p. 41). Studies of Polynesian rat DNA suggest that they first appeared in the Hawaiian Islands along with emigrants from the Marquesas about 400 A.D., with a second cultural interaction around 1100 A.D. (Ziegler 2002, p. 315). The black rat and the Norway rat most likely arrived in the Hawaiian Islands more recently, as stowaways on ships,

sometime in the 19th century (Atkinson and Atkinson 2000, p. 25).

Rats occur in all 7 of the Oahu ecosystems, and rat predation is a threat to 5 of the 20 plant species addressed in this final rule (*Cyanea calycina*, *C. lanceolata*, *Cyrtandra gracilis*, *Melicope hiiakae*, and *Psychotria hexandra* ssp. *oahuensis*; see Table 2), which have fleshy fruits. Rats impact native plants by eating fleshy fruits, seeds, flowers, stems, leaves, roots, and other plant parts (Atkinson and Atkinson 2000, p. 23), and can seriously affect regeneration. They are known to have caused declines or even the total elimination of island plant species (Campbell and Atkinson 1999, as cited in Atkinson and Atkinson 2000, p. 24). On the Hawaiian Islands, rats may consume as much as 90 percent of the seeds produced by some trees, or, in some cases, prevent the regeneration of forest species completely (Cuddihy and Stone 1990, pp. 68–69). Plants with fleshy fruits are particularly susceptible to rat predation, including several of the plant genera in this final rule, for example, the fruits of plants in the bellflower (e.g., *Cyanea* spp.) and African violet (e.g., *Cyrtandra* spp.) families (Cuddihy and Stone 1990, pp. 67–69). Research on rats in forests in New Zealand has demonstrated that, over time, rats may alter the species composition of forested areas (Cuddihy and Stone 1990, pp. 68–69).

#### Nonnative Fish

Predation by nonnative fish is a serious and ongoing threat to the blackline, crimson, and oceanic Hawaiian damselflies. Crimson and blackline Hawaiian damselfly naiads occur in standing or seep-fed pools and slow-flowing sections of streams, and oceanic Hawaiian damselfly naiads occur under stones or mats of moss and algae in streams, where they are each vulnerable to predation by nonnative fish. Information suggests that Hawaiian damselflies experience limited natural predation pressure from the five species of freshwater fish native to Hawaii—gobies (Gobiidae) and sleepers (Eleotridae) (Ego 1956, p. 24; Kido *et al.* 1993, pp. 43–44; Englund 1999, pp. 236–237). Hawaii's native fishes are benthic (bottom) feeders, and stream-dwelling Hawaiian damselfly species, including the blackline, crimson, and oceanic Hawaiian damselflies, avoid these areas in preference for shallow side channels, sidepools, and higher velocity riffles and seeps (Englund 1999, pp. 236–237). While fish predation has been an important factor in the evolution of behavior in damselfly naiads in continental systems (Johnson

1991, p. 8), it can only be speculated that Hawaii's stream-dwelling damselflies adapted behaviors to avoid the benthic feeding habits of native fish species.

Over 70 species of nonnative fish have been introduced into Hawaiian freshwater habitats (Devick 1991, p. 190; Englund 1999, p. 226; Englund and Eldredge 2001, p. 32; Brasher 2003, p. 1,054; Englund 2004, p. 27; Englund *et al.* 2007, p. 232), with at least 51 species now established (Freshwater Fishes of Hawaii 2008). The initial introduction of nonnative fish to Hawaii began with the release of food stock species by Asian immigrants at the turn of the 20th century; however, the impact of these first introductions on Hawaiian damselflies cannot be assessed because they predated the initial collection of damselflies in Hawaii (Perkins 1899, pp. 64–76). Between 1905 and 1922, fish were introduced for biological control of mosquitoes, including the mosquito fish (*Gambusia affinis*), sailfin molly (*Poecilia latipinna*), green swordtail (*Xiphophorus helleri*), moonfish (*Xiphophorus maculatus*), and guppy (*Poecilia reticulata*) (Van Dine 1907, p. 9; Englund 1999, p. 225; Brasher 2003, p. 1,054). By 1935, some Oahu damselflies were becoming less common, and these introduced fish were the suspected cause of their decline (Williams 1936, p. 313; Zimmerman 1948a, p. 341). From 1946 through 1961, several additional nonnative fish were introduced for the purpose of controlling nonnative aquatic plants and for recreational fishing (Brasher 2003, p. 1,054). During the 1980s, additional nonnative fish species were established in Oahu waters, including aggressive predators and habitat-altering species such as the channel catfish (*Ictalurus punctatus*), cichlids (e.g., *Tilapia* spp.), sailfin catfish (*Liposarcus multiradiatus*), top minnows (*Limia vittata*), and piranha (*Serrasalmus* sp.) (Devick 1991, pp. 189, 191–192; Brasher 2003, p. 1,054; Freshwater Fishes of Hawaii 2008). Englund (1999, p. 233) found several of these species to be abundant in nearly all lowland Oahu streams and water systems, although not all were as capable of colonizing higher elevation stream reaches as the introduced poeciliid species.

Geologic or manmade barriers (e.g., waterfalls, steep gradients, dry stream midreaches, or constructed diversions) appear to prevent access by nonnative fish species to stream areas above these barriers; however, there is still a chance of facilitated fish movement. For example, in 2000, a maintenance worker introduced *Tilapia* spp. into ponds

located on the grounds of Tripler Medical Army Hospital that were upslope from the remaining Oahu population of the orangeblack Hawaiian damselfly (*Megalagrion xanthomelas*) (Englund 2000, in litt.). The ponds were drained and the *Tilapia* spp. removed. The importance of their removal was underscored by the fact that a large storm caused the ponds to fill and overflow downslope into the stream supporting the damselflies soon after the *Tilapia* spp. were removed (Preston *et al.* 2007, p. 263).

Current literature indicates that the extirpation of Hawaiian damselflies from nearly all of their historical lowland habitat sites on Oahu is the result of predation by introduced nonnative fish (Moore and Gagne 1982, p. 4; Liebherr and Polhemus 1997, p. 502; Englund 1999, pp. 235–237; Brasher 2003, p. 1,055; Englund *et al.* 2007, p. 215; Polhemus 2007, pp. 238–239). The threats posed by continued introduction and establishment of nonnative fish in Hawaiian waters, and the possible movement of those nonnative species to new streams and other aquatic habitat, are ongoing and expected to continue into the future. This represents a serious threat to the survival of the blackline, crimson, and oceanic Hawaiian damselflies.

#### Bullfrogs and Toads

Currently there are three species of introduced aquatic amphibians on the Hawaiian Islands: the North American bullfrog (*Rana catesbeiana*), the cane toad (*Bufo marinus*), and the Japanese wrinkled frog (*Rana rugosa*). Native to the eastern United States and the Great Plains region (Moyle 1973, pp. 18–19; Bury and Whelan 1985, p. 1; Lever 2003, p. 203), the bullfrog was first introduced to Hawaii in 1899 (Bryan 1931, pp. 62–63) to help control insects, specifically the nonnative Japanese beetle (*Popillia japonica*), a significant pest of ornamental plants (Bryan 1931, p. 62). First released on the island of Hawaii, bullfrogs have demonstrated great success in establishing new populations on all the main islands (Bryan 1931, p. 63; Moyle 1973, p. 19; USGS 2008, p. 8). This species is flexible in both habitat and food requirements (McKeown 1996, pp. 24–27; Bury and Whelan 1984, pp. 3–7; Lever 2003, pp. 203–204), and can utilize any water source within its temperature range, 60°F to 75°F (16°C to 24°C) (DesertUSA 2008). In other areas outside its native range, the bullfrog's primary impact is the elimination of native frog species (Moyle 1973, p. 21). Englund *et al.* (2007, pp. 215, 219) found a strong

correlation between the presence of bullfrogs and the absence of Hawaiian damselflies in their study of streams on all the main Hawaiian Islands. Bullfrogs are a threat to the blackline, crimson, and oceanic Hawaiian damselflies because they are omnivorous feeders that occur in the same habitat as the damselflies on Oahu (McKeown 1996, pp. 24–27; Bury and Whelan 1984, pp. 3–7; Lever 2003, pp. 203–204). They have a negatively correlated pattern of occurrence with native damselflies, including the three species described in this final rule (Polhemus 2012, in litt.).

The effects of possible predation by the cane toad and the Japanese wrinkled frog on the blackline, crimson, and oceanic Hawaiian damselflies are unknown at this time, and we are not able to determine the magnitude or the significance of this potential threat.

#### Invertebrates

Predation by nonnative invertebrate pests adversely impacts 11 of the plant species (see Table 2) through mechanical damage, destruction of plant parts, parasitism, and mortality. Those introduced invertebrate pests with the greatest effect on these native plant species include at least 14 different species of slugs (Joe 2006, p. 10), the black twig borer (*Xylosandrus compactus*) (Davis 1970, pp. 38–39), and the two-spotted leafhopper (*Sophonia rufofascia*) (Fukada 1996, pp. 1–12; Hawaii Department of Agriculture 2006). The blackline, crimson, and oceanic Hawaiian damselflies face the threat of predation by ants (Borror *et al.* 1989, pp. 737–741).

#### Slugs

Predation by nonnative slugs is a threat to individuals of the three species of *Cyanea* (*Cyanea calycina*, *C. lanceolata*, and *C. purpurellifolia*) and the four species of *Cyrtandra* (*Cyrtandra gracilis*, *C. kaulantha*, *C. sessilis*, and *C. waiolani*) (Joe 2006, p. 10) in this final rule. On Oahu, slugs have been reported to destroy *Cyanea calycina* and *Cyrtandra kaulantha* in the wild, and have been observed eating leaves and fruit of cultivated individuals of *Cyanea* (Mehrhoff 1995, in litt.; U.S. Army Garrison 2005a, pp. 3–34, 3–51). In addition, slugs have damaged individuals of *Cyrtandra* and individuals of other species of *Cyanea* in the wild (Wood *et al.* 2001, p. 3; Sailer and Kier 2002, p. 3; PEP 2007, p. 38; PEP 2008, pp. 23, 49, 52, 53, 57). Little is known about predation of certain rare plants by slugs; however, information in the U.S. Army's 2005 "Status Report for the Makua Implementation Plan" indicates that

slugs can be a threat to all species of *Cyanea*, based on laboratory studies (U.S. Army Garrison 2005a, p. 3–51). Research investigating slug herbivory and control methods shows that slug impacts on *Cyanea* spp. seedlings result in up to 80 percent seedling mortality (U.S. Army Garrison 2005a, p. 3–51). Direct evidence of slug predation has been reported for *Cyanea calycina* and *Cyrtandra kaulantha* in the wild (see above). Although we do not have direct evidence of slug predation on the species of *Cyanea* and *Cyrtandra* that are addressed in this final rule, research and field observations indicate that predation by slugs is a threat to species of *Cyanea* and *Cyrtandra* in the wild, the five species have similar life forms (e.g., fleshy stems, fruit, and leaves) and occur in habitat similar to that of the species that have been impacted by slug herbivory in the wild and under laboratory conditions, and slugs are found in the ecosystems on Oahu in which these plants occur. It is therefore reasonable to assume *Cyanea lanceolata* and *C. purpurellifolia*, and *Cyrtandra gracilis*, *C. sessilis*, and *C. waiolani* are exposed to similar impacts from slug predation.

#### Black Twig Borer

The black twig borer is known to infest a wide variety of common plant taxa, including native species of *Melicope* (Davis 1970, pp. 38–39; Extension Entomology and UH–CTAHR Integrated Pest Management Program 2006, p. 1). This insect pest burrows into branches, introduces a pathogenic fungus as food for its larvae, and lays its eggs (Davis 1970, p. 39). Twigs, branches, and entire plants can be damaged or killed from an infestation (Extension Entomology and UH–CTAHR Integrated Pest Management Program 2006, p. 2). Black twig borer damage is typically observed on plants in mesic or dry forests or shrublands, and not usually observed on plants in wet forest or shrubland (Lau 2012, in litt.). On the Hawaiian Islands, the black twig borer has many hosts, disperses easily, and is probably present at most elevations up to 2,500 ft (762 m) (Howarth 1985, pp. 152–153). The black twig borer is a threat to *M. makahae*, the only species of *Melicope* that occurs in mesic forest and shrubland.

#### Two-Spotted Leafhopper

The effects of predation by the two-spotted leafhopper have been observed on three plant species included in this final rule, *Pleomele forbesii*, *Pteralyxia macrocarpa*, and *Zanthoxylum oahuense* (HBMP 2008). This nonnative insect damages the leaves it feeds on,

typically causing chlorosis (yellowing due to disrupted chlorophyll production) to browning and death of foliage (Hawaii Department of Agriculture 2006). The damage to plants can result in the death of affected leaves or the whole plant, owing to the combined action of its feeding and oviposition behavior (Alyokhin *et al.* 2004, p. 1). In addition to the mechanical damage caused by the feeding process, the insect may introduce plant pathogens that lead to eventual plant death (Extension Entomology and UH–CTAHR Integrated Pest Management Program 2006, p. 2). The two-spotted leafhopper is a highly polyphagous insect (it feeds on many different types of food). Sixty-eight percent of its recorded host plant species in Hawaii are fruit, vegetable, and ornamental crops, and 22 percent are endemic plants, over half of which are rare and endangered (Alyokhin *et al.* 2004, p. 6). Its range is limited to below 4,000 ft (1,200 m) in elevation, unless there is a favorable microclimate. While there has been a dramatic reduction in the number of two-spotted leafhopper populations in the past few years (possibly due to egg parasitism), this nonnative insect has not been eradicated, and predation by this nonnative insect remains a threat (Fukada 2007, pers. comm.).

#### Ants

Ants are not a natural component of Hawaii's arthropod fauna, and native species evolved in the absence of predation pressure from ants. Ants can be particularly destructive predators because of their high densities, recruitment behavior, aggressiveness, and broad range of diet (Reimer 1993, pp. 14, 17–18). The threat of ant predation on the blackline, crimson, and oceanic Hawaiian damselflies is amplified by the fact that most ant species have winged reproductive adults (Borror *et al.* 1989, p. 738) and can quickly establish new colonies in additional suitable habitats (Staples and Cowie 2001, pp. 53–55). These attributes allow some ants to destroy otherwise geographically isolated populations of native arthropods (Nafus 1993, pp. 19, 22–23).

At least 47 species of ants are known to be established on the Hawaiian Islands (Hawaii Ants 2008, pp. 1–11), and at least four particularly aggressive species, the big-headed ant (*Pheidole megacephala*), the long-legged ant (also known as the yellow crazy ant, *Anoplolepis gracilipes*), *Solenopsis papuana* (NCN), and *Solenopsis geminata* (NCN) have severely impacted the native insect fauna, likely including

native damselflies (Zimmerman 1948b, p. 173; Reimer 1993, pp. 11–13; Hawaii Ecosystems at Risk (HEAR) database 2007). Numerous other species of ants are recognized as threats to Hawaii's native invertebrates, and an unknown number of new species are established every few years (Staples and Cowie 2001, p. 53). Due to their preference for drier habitat sites, ants are less likely to occur in high densities in the aquatic habitat currently occupied by the blackline, crimson, and oceanic Hawaiian damselflies. However, some species of ants (e.g., the long-legged ant and *Solenopsis papuana*) have increased their range into this aquatic habitat. Furthermore, the presence of ants in nearly all of the lower elevation, historical habitat sites may preclude the future recolonization of these areas by damselflies, including the blackline, crimson, and oceanic Hawaiian damselflies. Damselfly naiads may be particularly susceptible to ant predation while perching on vegetation or rocks when they crawl out of the water or seek a terrestrial location for their metamorphosis into the adult stage (Polhemus 2008b, in litt.). Newly emerged adult damselflies are also susceptible to predation until their wings have sufficiently hardened to permit flight (Polhemus and Asquith 1996, p. 4).

The long-legged ant appeared in Hawaii in 1952, and now occurs on Kauai, Oahu, Maui, and Hawaii (Reimer *et al.* 1990, p. 42). It inhabits low- to mid-elevation (less than 2,000 ft (600 m)) rocky areas of moderate rainfall (less than 100 in (250 cm) annually) (Reimer *et al.* 1990, p. 42). Direct observations indicate that Hawaiian arthropods are susceptible to predation by this species (Hardy 1979, p. 34; Gillespie and Reimer 1993, p. 21). *Solenopsis papuana* is the only abundant, aggressive ant that has invaded intact mesic and wet forest from sea level to 3,600 ft (1,100 m) on all the main Hawaiian Islands. Colonies reach dense populations, and ranges of this species are expanding on all islands (Reimer 1993, p. 14). The blackline, crimson, and oceanic Hawaiian damselflies' historical ranges were from sea level to over 2,400 ft (732 m) (Williams 1936, p. 318; Englund 1999, pp. 229–230), and they are currently found between 80 and 2,500 ft (24 and 760 m) in elevation (Polhemus 2008a, in litt.; Polhemus and Asquith 1996, p. 77; HBMP 2008). It is likely, based on our knowledge of the expanding range of *Solenopsis papuana*, that it threatens all populations of these three Hawaiian damselflies. The rarity or disappearance of the native blackline,

crimson, and oceanic damselfly species from historical observation sites is due to a variety of factors. While there is no documentation that conclusively ties the decrease in the blackline, crimson, and oceanic Hawaiian damselfly observations to the establishment of nonnative ants in the lowland mesic and lowland wet habitats, the presence of ants in these habitats, the knowledge that they prey on native invertebrates, and the decline of damselfly observations in some areas in these habitats suggest that nonnative ants play a role in the decline of some populations of these damselflies.

#### Summary of Disease or Predation

We are unaware of any information that indicates that disease is a threat to the 23 species. We consider predation and parasitism by nonnative animal species (pigs, goats, rats, fish, bullfrogs, and invertebrates) to pose an ongoing threat to 22 of the 23 species in this final rule throughout their ranges, and will continue to be so in the foreseeable future, for the following reasons:

(1) Observations and reports have documented that pigs and goats browse on and trample 19 of the 20 plant species, and browse on and trample the host plants of the other species (see Table 2); other studies demonstrate the negative impacts of ungulate browsing and trampling on native plant species of the Hawaiian islands (Spatz and Mueller-Dombois 1973, p. 874; Diong 1982, p. 160; Cuddihy and Stone 1990, p. 67).

(2) Nonnative invertebrates and rats cause mechanical damage to plants and destruction of plant parts (branches, fruits, seeds), affecting 13 of the 20 plant species in this final rule (see Table 2).

(3) The absence of Hawaiian damselflies (including the blackline, crimson, and oceanic Hawaiian damselflies) in streams and other aquatic habitat on the main Hawaiian Islands is strongly correlated with the presence of predatory nonnative fish as documented in numerous observations and reports (Englund 1999, p. 237; Englund 2004, p. 27; Englund *et al.* 2007, p. 215), which suggests nonnative predatory fishes eliminate native Hawaiian damselflies from these aquatic habitats. There are 70 introduced species of nonnative fishes, with over 51 species established in freshwater habitats on the Hawaiian Islands from sea level to over 3,800 ft (1,150 m) in elevation (Devick 1991, p. 190; Englund and Eldredge 2001, p. 32; Brasher 2003, p. 1,054; Englund 1999, p. 226; Englund 2004, p. 27; Englund *et al.* 2007, p. 232). Accordingly, predation by nonnative fishes is a serious and ongoing threat to

the blackline, crimson, and oceanic Hawaiian damselflies (see Table 2).

(4) Damselfly naiads are vulnerable to predation by ants, and the ranges of the blackline, crimson, and oceanic Hawaiian damselflies overlap that of particularly aggressive, nonnative, predatory ant species that currently occur from sea level to 2,000 ft (610 m) in elevation on all of the main Hawaiian Islands. We therefore consider the three Hawaiian damselflies in this final rule to be facing the threat of predation by these nonnative ants.

(5) Englund *et al.* (2007, pp. 215, 219) found a strong correlation between the presence of nonnative bullfrogs and the absence of Hawaiian damselflies. Bullfrogs are reported from riparian habitat on all the main Hawaiian Islands, except Kahoolawe and Niihau. Bullfrogs prey on almost anything that moves, including a wide variety of insects, invertebrates, and vertebrates (McKeown 1996, p. 24). The blackline, crimson, and oceanic Hawaiian damselflies also use riparian habitat, and face the threat of predation by bullfrogs.

#### D. The Inadequacy of Existing Regulatory Mechanisms

##### Feral Ungulates

Nonnative ungulates pose a major ongoing threat to 19 of the 20 plant species through destruction and degradation of terrestrial habitat, and through direct predation of 19 of the 20 plant species. The State of Hawaii provides game mammal (feral pigs and goats) hunting opportunities on 12 State-designated public hunting areas on the island of Oahu (H.A.R. sec. 13–123; HDLNR 2009, pp. 25–30). The State's management objectives for game animals range from maximizing public hunting opportunities (e.g., sustained yield) in some areas to removal by State staff, or their designees, in other areas (H.A.R. sec. 13–123). Approximately 23 percent (10,168 ac (4,119 ha)) of the critical habitat being designated in this final rule is in State hunting areas. Fifteen of the 20 plant species and all three damselfly species have populations in areas where terrestrial habitat may be managed for game enhancement, and where game populations are maintained at certain levels through public hunting (HBMP 2008; H.A.R. sec. 13–123). Public hunting areas are not fenced, and game mammals have unrestricted access to most areas across the landscape, regardless of underlying land use designation. While fences are sometimes built to provide protection from game mammals, the current number and

locations of fences are not adequate to prevent habitat destruction and degradation of the terrestrial habitat of 22 of the 23 species, and direct predation of 19 of the 20 plant species on Oahu. However, the State game animal regulations are not designed nor intended to provide habitat protection, and there are no other regulations designed to address habitat protection from ungulates.

#### Stream Flow

In Hawaii, instream flow is regulated by establishing standards on a stream-by-stream basis. The standards currently in effect represent flow conditions in 1988, the year the administrative rules were adopted (State Water Code, Haw. Rev. Stat. 174C-71, and Administrative Rules of the State Water Code, Title 13, Chapter 169-44-49). The State of Hawaii considers all natural flowing surface water (streams, springs, and seeps) as State property (Haw. Rev. Stat. 174C), and the Hawaii Department of Land and Natural Resources (HDLNR) has management responsibility for the aquatic organisms in these waters (Haw. Rev. Stat. Annotated, 1988, Title 12; 1992 Cumulative Supplement). Accordingly, damselfly populations in all natural flowing surface waters are under jurisdiction of the State of Hawaii, regardless of property ownership. This includes the blackline, crimson, and oceanic Hawaiian damselfly populations.

The State of Hawaii manages the use of surface and ground water resources through the Commission on Water Resource Management (Water Commission), as mandated by the 1987 State Water Code (State Water Code, Haw. Rev. Stat. 174, and Administrative Rules of the State Water Code, Title 13, Chapters 168 and 169). Because of the complexity of establishing instream flow standards (IFS) for approximately 376 perennial streams, the Water Commission established interim IFS at status quo levels in 1987 (Hawaii Commission on Water Resource Management 2009c). In the Waiahole Ditch Combined Contested Hearing on Oahu (1997-2006), the Hawaii Supreme Court determined that status quo interim IFS were not adequate, and required the Water Commission to reassess the IFS for Waiahole Ditch and other streams Statewide (Case No. CCH-OA95-1). The Water Commission has been gathering information to fulfill this requirement since 2006, but no IFS recommendations have been made to date (Hawaii Commission on Water Resource Management 2009c). Therefore, we find that the existing State regulations are inadequate to

maintain stream flow year round for the different life stages of the three damselflies. These threats are ongoing and are expected to continue into the future.

#### Introduction of Nonnative Species

The Hawaii Department of Agriculture (HDOA) is the lead State agency in protecting Hawaii's agricultural and horticultural industries, animal and public health, natural resources, and environment from the introduction of nonnative, invasive species (HDLNR 2003, p. 3-10). While there are several State agencies (HDOA, HDLNR, Hawaii Department of Health) authorized to prevent the entry of pest species into the State, the existing regulations are inadequate for the reasons discussed in the sections below.

In 1995, a partnership, Coordinating Group on Alien Pest Species (CGAPS), comprised primarily of managers from every major Federal, State, county, and private agency and organization involved in invasive species work in Hawaii, was formed in an effort to influence policy and funding decisions, improve communication, increase collaboration, and promote public awareness (CGAPS 2009). This group facilitated the formation of the Hawaii Invasive Species Council (HISC), which was created by gubernatorial executive order in 2002, to coordinate local initiatives for the prevention and control of invasive species by providing policy level direction and planning for the State departments responsible for invasive species issues. In 2003, the governor signed into law Act 85, which conveys statutory authority to the HISC to continue to coordinate approaches among the various State and Federal agencies, and international and local initiatives, for the prevention and control of invasive species (HDLNR 2003, p. 3-15; HISC 2009a; Haw. Rev. Stat. sec. 194-2(a)). Some of the recent priorities for the HISC include interagency efforts to control nonnative species such as the plants *Miconia calvescens* (miconia) and *Cortaderia* sp. (pampas grass), coqui frogs (*Eleutherodactylus coqui*), and ants (HISC 2009a). Since 2009, State funding for HISC has been cut by approximately 50 percent (total funding dropped from \$4 million in FY 2009 to \$2 million in FY 2010, and to \$1.8 mil in FY 2011 (Atwood 2012, in litt.)). Congressional earmarks made up some of the shortfall in State funding in 2010 and into 2011. These funds supported ground crew staff that would have been laid off due to the shortfall in State funding (Clark 2012, in litt.). Currently (in 2012) the HISC budget is relatively flat (i.e., State

funding is equal to funding provided in 2009). Current positions supported by HISC are fewer than those supported in 2009; most of the positions have been lost through attrition and have not been refilled (Atwood 2012, in litt.; Clark 2012, in litt.). In addition, HISC funds fewer projects and provides fewer services (Atwood 2012, in litt.; Clark 2012, in litt.) than in 2009 and earlier. Many projects (such as invasive species and biological control research) that were previously funded by HISC are receiving negligible HISC funding or remain unfunded (Atwood 2012, in litt.; Clark 2012, in litt.).

*Nonnative Aquatic Species*—The importation of nondomestic animals, including aquatic species, is regulated by a permit system (H.A.R. sec. 4-71) managed through the Hawaii Department of Agriculture (HDOA). The HDOA's Board of Agriculture maintains lists of nondomestic animals that are prohibited from entry, animals with entry restrictions, and those that require a permit for import and possession. The HDOA requires a permit to import animals, and conditionally approves entry for individual possession, businesses (e.g., pet/resale trade, retail sales, food consumption), or institutions.

The Division of Aquatic Resources (DAR), within the State's HDLNR, manages the aquatic resources of the State (Hawaii DAR 2009) and is responsible for conserving, protecting, and enhancing the State's renewable resources of aquatic life and habitat (HDLNR 2003, p. 3-13). The release of live nonnative fish or other live nonnative aquatic life into any waters of the State is prohibited (Haw. Rev. Stat. sec. 187A-6.5). The DAR has the authority to seize, confiscate, or destroy as a public nuisance, any fish or other aquatic life found in any waters of the State and whose importation is prohibited or restricted pursuant to rules of the HDOA (section 187A-2 (4 Haw. Rev. Stat. sec. 187A-6.5)). State and Federal regulations are in place to prevent the unauthorized entry of nonnative aquatic animals such as fish and amphibians into the State of Hawaii; however, their intentional or inadvertent introduction and movement between islands and between watersheds continues, although prohibited (HDOA 2003, pp. 2-12-2-14). Further, there is insufficient regulatory capacity to adequately enforce such regulations or to provide for sufficient inspection services and monitoring, although this priority need is recognized (Cravalho and Wilson 2009, in litt.).

*Nonnative Invertebrate Species*—Predation by nonnative invertebrate pests (e.g., slugs, black twig borer, two-spotted leafhopper) adversely impacts 13 of the plant species (see Table 2). In addition, naiads of the blackline, crimson, and oceanic Hawaiian damselflies are vulnerable to predation by ants. The decline of damselfly observations and the establishment of ants in lowland mesic and lowland wet habitats on Oahu suggest that the presence of nonnative ants in these habitats may preclude their occupancy by native damselflies (see *Factor C. Disease or Predation*). The prevention and control of introduction of pest species in Hawaii is the responsibility of Hawaii State government and Federal agencies, along with a few private organizations. Even though these agencies have regulations and some controls in place, the introduction and movement of nonnative invertebrate pest species between islands and from one watershed to the next continues. For example, an average of 20 new alien invertebrate species were introduced to Hawaii per year since 1970, an increase of 25 percent over the previous totals between 1930 to 1970 (The Nature Conservancy of Hawaii (TNCH) 1992, p. 8).

*Nonnative Plant Species*—Nonnative plants destroy and modify habitat throughout the ranges of each of the 20 plant species being addressed in this final rule. As such, they represent a serious and ongoing threat to each of these plant species. In addition, nonnative plants have been shown to outcompete native plants and convert native-dominated plant communities to nonnative plant communities (see “Habitat Destruction and Modification by Nonnative Plants,” under Factor A, above). The HDOA regulates the import of plants into the State from domestic origins under Hawaii State law (Haw. Rev. Stat. Ch. 150A). While all plants require inspection upon entry into the State and must be “apparently free” of insects and diseases, not all plants require import permits. Parcels brought into the State by mail or cargo must be clearly labeled as “plant materials” or “agricultural commodities,” but it is unlikely that all of these parcels are inspected or monitored prior to delivery in Hawaii. Shipments of plant material into Hawaii must be accompanied by an invoice or packing manifest listing the contents and quantities of the items imported, but, again, it is unclear if all of these shipments are inspected or monitored prior to delivery (HDOA 2009).

There are only 12 plant crops that are regulated (H.A.R. 4–70) to some degree,

including sugarcane and grasses, pineapple and other bromeliads, coffee, cruciferous vegetables, orchids, banana, passion fruit, pine, coconut, hosts of European corn borer, palms, and hosts of Caribbean fruit fly (HDLNR 2003, p. 3–11). The HDOA also maintains the State list of noxious weeds, and these plants are restricted from entry into the State except by permit from the HDOA’s Plant Quarantine Branch. Although the State has general guidelines for the importation of plants, and regulations are in place regarding the plant crops mentioned above, the intentional or inadvertent introduction of nonnative plants outside the regulatory process and movement of species between islands and from one watershed to the next continues, which represents a threat to native flora for the reasons described above. In addition, government funding is inadequate to provide for sufficient inspection services and monitoring. One study concluded that the plant importation laws virtually ensure new invasive plants will be introduced via the nursery and ornamental trade, and that outreach efforts cannot keep up with the multitude of new invasive plants being distributed. The author states the only thing that wide-scale public outreach can do in this regard is to let the public know new invasive plants are still being sold, and they should ask for noninvasive or native plants instead (Martin 2007, in litt.).

On the basis of the above information, existing State and Federal regulatory mechanisms are not adequately preventing the introduction of nonnative species into Hawaii via interstate and international mechanisms, or via intrastate movement of nonnative species between islands and watersheds in Hawaii. Therefore, State and Federal regulatory mechanisms do not adequately protect the 23 species being addressed in this final rule from the threat of new introductions of nonnative species or the continued expansion of nonnative species populations on and between islands and watersheds. Nonnative species may prey upon, modify or destroy habitat of, or directly compete with one or more of the 23 species for food, space, and other necessary resources. The impacts from these introduced threats are ongoing and are expected to continue in the foreseeable future.

#### Summary of Inadequacy of Existing Regulatory Mechanisms

The State Water Code does not provide for permanent or minimum IFS for the protection of aquatic ecosystems

upon which the three damselfly species in this final rule depend, and does not contain a regulatory mechanism for identifying and protecting damselfly habitat (Factor A). Existing State and Federal regulatory mechanisms are not preventing the introduction into Hawaii of nonnative species or the spread of nonnative species between islands and watersheds. Habitat-altering nonnative plant species (Factor A) and predation by nonnative animal species (Factor C) pose a major ongoing threat to the 23 species being addressed in this final rule. Because these regulatory mechanisms are inadequate to maintain habitat for the 23 species, and to prevent the spread of nonnative species, the inadequacy of existing regulatory mechanisms is considered to be a serious threat, both now and in the foreseeable future. Each of the 20 plant species experiences threats from habitat degradation and loss by nonnative plants (Factor A), and 19 of the 20 plants experience threats from nonnative animals (Factor A and Factor C). The three damselflies experience threats from habitat degradation and loss by stream channeling, conversion, and similar activities (Factor A), and by predation by nonnative fish and ants (Factor C). Therefore, the inadequacy of the regulatory mechanisms to address stream flow management and nonnative species is a threat to all 23 species.

#### *E. Other Natural or Manmade Factors Affecting Their Continued Existence*

Other factors that pose threats to some or all of the 23 species include small number of populations and small population sizes, human trampling as a result of hiking and other activities, loss of host plants, and lack of regeneration. Each threat is discussed in detail below, along with identification of which species are affected by these threats.

#### Small Number of Populations and Individuals

Species that are endemic to single islands are inherently more vulnerable to extinction than are widespread species, because of the increased risk of genetic bottlenecks; random demographic fluctuations; climate change effects; and localized catastrophes such as hurricanes, landslides, rockfalls, drought, and disease outbreaks (Pimm *et al.* 1988, p. 757; Mangel and Tier 1994, p. 607). These problems are further magnified when populations are few and restricted to a very small geographic area, and when the number of individuals of each population 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 Soulé 1986, pp. 24–34). Small, isolated populations often exhibit reduced levels of genetic variability, which diminishes the species' capacity to adapt and respond to environmental changes, thereby lessening the probability of long-term persistence (e.g., Barrett and Kohn 1991, p. 4; Newman and Pilson 1997, p. 361). The problems associated with small population size and vulnerability to random demographic fluctuations or natural catastrophes are further magnified by synergistic interactions with other threats, such as those discussed above (see discussions under Factors A and C).

Very small plant populations may experience reduced reproductive vigor due to ineffective pollination or inbreeding depression. This is particularly true for functionally unisexual plants like *Psychotria hexandra* ssp. *oahuensis*, in which staminate (male) and pistillate (female) flowers occur on separate individuals. Isolated individuals have difficulty achieving natural pollen exchange, which decreases the production of viable seed. Populations are also impacted by demographic stochasticity, through which populations are skewed toward either male or female individuals by chance.

The following nine plant species in this final rule face the threat of limited numbers (e.g., they total fewer than 50 individuals): *Cyanea purpurellifolia*, *Cyrtandra gracilis*, *C. kaulantha*, *C. waiolani*, *Melicope hiiakae*, *Platydesma cornuta* var. *cornuta*, *Psychotria hexandra* ssp. *oahuensis*, *Tetraplasandra lydgatei*, and *Zanthoxylum oahuense*. We consider small population size to be a threat to these species for the following reasons:

- *Cyanea purpurellifolia* is susceptible to reduced reproductive vigor due to the low number (20) of individuals remaining (DLNR 2005b, p. 2). Although facing severe threats from feral pigs, none of the individuals of this species are protected from ungulate predation (PEP 2007, p. 13).

- *Cyrtandra gracilis* is known only from a single occurrence, with six to eight individuals (NTBG Provenance Reports 2002, p. 1 and 2004, p. 1; PEP 2007, p. 16).

- The only known wild populations of *Cyrtandra kaulantha* and *Psychotria hexandra* ssp. *oahuensis* are facing imminent threats from flooding, landslides, and rock falls because of their locations in steep gulches (PEP 2006, p. 46, 51; PEP 2007, p. 25).

- The last confirmed observation of *Cyrtandra waiolani* in the wild was approximately 40 years ago. The identification of a possible wild individual of *C. waiolani* in 2005 was confirmed not to be this species. In addition, there are no tissues, propagules, or seeds in storage or propagation that have positively been identified (PEP 2007, p. 19; Bakutis 2008, in litt.; Lau 2011, in litt.).

- *Melicope hiiakae* is susceptible to reduced reproductive vigor due to the lack of pollination and seed predation (NTBG Report 2007b, p. 4; Perlman, 2007b, in litt.).

- *Platydesma cornuta* var. *cornuta* individuals are widely scattered in the Koolau Mountains, and are susceptible to reduced reproductive vigor (HBMP 2008).

- The range of known occurrences of *Tetraplasandra lydgatei* has been reduced from 10 mi (16 km) to 2 mi (3 km) since 2005, and consists of 2 occurrences totaling 8 individuals (HBMP 2008). These individuals are showing a decline in health (Bakutis 2008, in litt.).

- Botanists have observed a steady decline in the numbers of individuals of *Zanthoxylum oahuense* over the last 9 years. This species is also susceptible to infestation by the two-spotted leafhopper (Garnett and Obata 1999, in litt.).

The blackline, crimson, and oceanic Hawaiian damselflies face the threat of limited numbers. Jordan *et al.* (2007, p. 247) conducted a genetic and comparative phylogeography analysis (study of historical processes responsible for genetic divergence within a species) of four Hawaiian *Megalagrion* species, including Pacific Hawaiian damselfly (*Megalagrion pacificum*), an endangered species (75 FR 35990; June 24, 2010), and the orangeblack Hawaiian damselfly, a candidate species (76 FR 66370; October 26, 2011). This analysis demonstrated *Megalagrion* populations with low genetic diversity are at greater risk of decline and extinction than those with high genetic diversity. The authors found that low genetic diversity was observed in populations known to be bottlenecked or relictual (groups of animals or plants that exist as a remnant of a formerly widely distributed group), including Oahu and Maui populations of orangeblack Hawaiian damselfly and Pacific Hawaiian damselfly. Although this study did not include an analysis of the blackline, crimson, or oceanic Hawaiian damselflies, given that these five species have similar habitat, breeding, and life-history requirements, are related phylogenetically (same

genus), and have low numbers of populations and individuals, it is reasonable to assume that populations of the blackline, crimson, and oceanic Hawaiian damselflies (each known from fewer than 20 populations) are also at great risk of decline and extinction.

#### Human Trampling and Hiking

Visitors on foot, horseback, and motorbikes may pose threats to *Cyanea calycina* directly due to trampling and other direct damage, and indirectly due to being a source of fire ignition in areas in the southern Waianae Mountains (TNCH 1997, p. 10). Human impacts, such as trampling by hikers, has been documented as a threat to *C. calycina* in the northern Waianae Mountains, between Kaala and Puu Kalena summits (Wood 2001, in litt.). The largest known population of *Cyrtandra sessilis* is located along a popular hiking trail in the Koolau Mountains, and individuals climbing and hiking off the established trail to visit this occurrence could trample individual plants and contribute to soil compaction and erosion, preventing growth and establishment of seedlings (Bakutis 2008). This type of activity has been observed with other native species (Wood 2001, in litt.; Hawaii Rare Plant Restoration Group (HRPRG) 2007, p. 2). *Doryopteris takeuchii* occurs on the slopes of Diamond Head crater, a popular location for visitation by tour groups and hikers (HBMP 2008). Individuals leaving established trails will inadvertently trample plants and contribute to erosion of the steep hillsides where the plants are found. Field biologists have also observed trampling of vegetation near populations of *Melicope hiiakae* in the Koolau Mountains, suggesting that hikers could also be a threat to this species (HRPRG 2007, p. 2).

#### Loss of Host Plants and Loss of Regeneration

One species in this final rule, *Korthalsella degeneri*, is an obligate parasite on two native host plants, *Sapindus oahuensis* and *Nestegis sandwicensis*, which occur in the dry cliff ecosystem of the Waianae Mountains of Oahu. Introduced ungulates are a threat to the host plants, because of trampling and topsoil disruption, leading to erosion and the establishment and spread of nonnative plants (Factor A). Nonnative plants are a threat to *K. degeneri*, because they: (1) Degrade habitat and outcompete native plants; (2) can increase the intensity, extent, and frequency of fire, converting native shrubland and forest to land dominated by alien grasses; and (3) may

cause the loss of the native host plants upon which *K. degeneri* depends (Factor A). In addition, the host plants are at risk of predation by feral ungulates, although ungulates are unlikely to be a direct threat to *K. degeneri* (Factor C), because of its parasitic characteristics.

Lack of regeneration or low levels of regeneration (i.e., reproduction) in the wild has been documented, and represents a threat to, *Melicope makahae* and *Pleomele forbesii* (HBMP 2008; Lau 2001, in litt.). There are four scattered populations of *Melicope makahae* in the Waianae Mountains. Two of these populations are at risk of extirpation because only one adult plant has been observed at one location and one adult plant and a single juvenile plant have been observed at the second location. There are 19 populations of *P. forbesii* in the Waianae Mountains, and only one population in the Koolau Mountains. The Koolau population is at risk of extirpation because of very few (if any) seedlings or juvenile plants have been observed, which indicates a lack of reproduction.

#### Summary of Other Natural or Manmade Factors Affecting Their Continued Existence

We consider the limited numbers of populations and few (fewer than 50) individuals to be serious and ongoing threat to at least nine plant species in this final rule because: (1) These species may experience reduced reproductive vigor due to ineffective pollination or inbreeding depression; (2) they may experience reduced levels of genetic variability, leading to diminished capacity to adapt and respond to environmental changes, thereby lessening the probability of long-term persistence; and (3) a single catastrophic event may result in extirpation of remaining populations and extinction of the species. This threat applies to the entire range of each species.

The threat to the blackline, crimson, and oceanic Hawaiian damselflies from limited numbers of populations and individuals is ongoing and is expected to continue into the future because: (1) These species may experience reduced reproductive vigor due to inbreeding depression; (2) they may experience reduced levels of genetic variability, leading to diminished capacity to adapt and respond to environmental changes, thereby lessening the probability of long-term persistence; (3) a single catastrophic event (e.g., hurricane, landslide) may result in extirpation of remaining populations and extinction of these species; and (4) species with few known locations, such as the blackline, crimson, and oceanic Hawaiian

damselflies, are less resilient to threats that might otherwise have a relatively minor impact on widely distributed species. For example, the reduced availability of breeding habitat or an increase in predation of naiads that might be absorbed in widely distributed species could result in a significant decrease in survivorship or reproduction of a species with limited distribution. The limited distribution of these three species thus magnifies the severity of the impact of the other threats discussed in this final rule.

In addition, the threat to *Cyanea calycina*, *Cyrtandra sessilis*, *Doryopteris takeuchii*, and *Melicope hiiakae* from human activities (e.g., trampling and hiking) is ongoing and expected to continue into the future because populations of all of these species are located near hiking trails or in areas used for recreational activities, and the effect of these activities could lead to injury and death of individual plants.

The threat to *Korthalsella degeneri* from loss of its host plants is ongoing and expected to continue into the future because threats to its host plants from nonnative plants and feral ungulates are uncontrolled. Finally, we consider the threat to *Melicope makahae* and *Pleomele forbesii* from lack of regeneration to be ongoing and expected to continue into the future because, with their small numbers in the wild, any competition from nonnative plants or habitat modification or predation by ungulates could lead to the extirpation of these species.

#### Determination

We have carefully assessed the best scientific and commercial information available regarding threats to each of the 23 Oahu species. We find that all of these species face threats, which are ongoing and expected to continue into the future throughout their ranges, from the present destruction and modification of their habitats, primarily from introduced ungulates and nonnative plants. Six of these species (*Bidens amplexans*, *Cyanea calycina*, *Doryopteris takeuchii*, *Korthalsella degeneri*, *Pleomele forbesii*, and *Pteralyxia macrocarpa*) experience threats from habitat destruction and modification from fire, and 14 species (*Bidens amplexans*, *Cyanea lanceolata*, *Cyrtandra kaulantha*, *C. sessilis*, *Doryopteris takeuchii*, *Melicope christophersenii*, *M. hiiakae*, *M. makahae*, *Platydesma cornuta* var. *cornuta*, *P. cornuta* var. *decurrens*, *Psychotria hexandra* ssp. *oahuensis*, and the blackline, crimson, and oceanic Hawaiian damselflies) experience threats from the destruction and

modification of their habitats from hurricanes, landslides, rockfalls, and flooding. In addition, we are concerned about the effects of projected climate change but recognize there is limited information on the exact nature of impacts from climate change (Factor A). There is a serious threat of widespread impacts of predation and herbivory on 19 of the 20 plant species (all plant species except *Doryopteris takeuchii*) by nonnative pigs, goats, rats, and invertebrates; and likely by predation on the three damselflies (blackline, crimson, and oceanic Hawaiian damselflies) by nonnative fish, bullfrogs, and ants (Factor C). The inadequacy of existing regulatory mechanisms (e.g., inadequate protection of habitat and inadequate protection from the introduction of nonnative species) poses a current and ongoing threat to all 23 species (Factor D). There are current and ongoing threats to nine plant species (*Cyanea purpurellifolia*, *Cyrtandra gracilis*, *C. kaulantha*, *C. waiolani*, *Melicope hiiakae*, *Platydesma cornuta* var. *cornuta*, *Psychotria hexandra* ssp. *oahuensis*, *Tetraplasandra lydgatei*, and *Zanthoxylum oahuense*) and the three damselflies due to factors associated with small numbers of populations and individuals (Factor E); to *Melicope makahae* and *Pleomele forbesii* from the lack of regeneration (Factor E); to *Cyanea calycina*, *Cyrtandra sessilis*, *Doryopteris takeuchii*, and *Melicope hiiakae* from trampling (Factor E); and to *Korthalsella degeneri* from the loss of native host plants (Factor E) (see Table 2). In addition, the blackline, crimson, and oceanic Hawaiian damselflies experience threats from habitat degradation and loss due to agriculture and urban development, by stream diversion and channelization, and by dewatering of aquifers (Factor A). These threats are exacerbated by these species' inherent vulnerability to extinction from stochastic events at any time because of their endemism, small numbers of individuals and populations, and restricted habitats.

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 an endangered species within the foreseeable future throughout all or a significant portion of its range." We find that each of these endemic species is presently in danger of extinction throughout its entire range, based on the immediacy, severity, and scope of the threats described above. Based on our analysis, we have no

reason to believe that population trends for any of the species addressed in this final rule will improve, nor will the effects of current threats acting on the species be ameliorated in the foreseeable future. Therefore, on the basis of the best available scientific and commercial information, we are listing the following 23 species as endangered in accordance with section 3(6) of the Act: *Bidens amplexans*, *Cyanea calycina*, *Cyanea lanceolata*, *Cyanea purpurellifolia*, *Cyrtandra gracilis*, *Cyrtandra kaulantha*, *Cyrtandra sessilis*, *Cyrtandra waiolani*, *Doryopteris takeuchii*, *Korthalsella degeneri*, *Melicope christophersenii*, *Melicope hiiakeae*, *Melicope makahae*, *Platydesma cornuta* var. *cornuta*, *Platydesma cornuta* var. *decurrens*, *Pleomele forbesii*, *Psychotria hexandra* ssp. *oahuensis*, *Pterylaxia macrocarpa*, *Tetraplasandra lydgatei*, and *Zanthoxylum oahuense*; and the blackline Hawaiian damselfly, crimson Hawaiian damselfly, and oceanic Hawaiian damselfly.

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. Each of the 23 endemic Oahu species in this final rule is highly restricted in its range, and the threats occur throughout its range. Therefore, we assessed the status of each species throughout its entire range. In each case, the threats to the survival of these species occur throughout the species' entire range and are not restricted to any particular portion of that range. Accordingly, our assessment and determination applies to each species throughout its entire 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 activities. Recognition through listing results in public awareness and conservation by Federal, State, 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 measures required of Federal agencies and the prohibitions against certain activities involving listed animals and plants 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 it would not promote the conservation of the 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 at the same time or 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 are often established to develop recovery plans. When completed, the recovery outlines, draft recovery plans, and the final recovery plans will be available from our Web site (<http://www.fws.gov/endangered>), or from our Pacific Islands Fish and Wildlife Office (see **ADDRESSES**).

Implementation of recovery actions generally requires the participation of a broad range of partners, including other Federal agencies, States, 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 and State lands.

Funding for recovery actions are 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 Hawaii will be eligible for Federal funds to implement management actions that promote the protection and recovery of the 23 species in this rule. Information on our grant programs that are available to aid species recovery can be found at: <http://www.fws.gov/grants>.

Please let us know if you are interested in participating in recovery efforts for these listed species.

Additionally, we invite you to submit any new information on these species whenever it becomes available and any information you may have for recovery planning purposes (see **ADDRESSES**).

Section 7(a) of the Act, as amended, 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)(1) of the Act mandates that all Federal agencies shall utilize their authorities in furtherance of the purposes of the Act by carrying out programs for the conservation of endangered and threatened species listed under section 4 of the Act. 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 a listed species or result in destruction or adverse modification of critical habitat. If a Federal action may affect the continued existence of a listed species or its critical habitat, the responsible Federal agency must enter into consultation with the Service.

For the 23 plants and animals listed as endangered in this final rule, Federal agency actions that may require consultation as described in the preceding paragraph include, but are not limited to, actions within the jurisdiction of the Natural Resources Conservation Service, the U.S. Army Corps of Engineers, the U.S. Fish and Wildlife Service, and branches of the Department of Defense (DOD). Examples of these types of actions include activities funded or authorized under the Farm Bill Program, Environmental Quality Incentives Program, Ground and Surface Water Conservation Program, Clean Water Act (33 U.S.C. 1251 *et seq.*), Partners for Fish and Wildlife Program, and DOD construction activities related to training or other military missions.

The Act and its implementing regulations set forth a series of general prohibitions and exceptions that apply to all endangered wildlife and plants.

The prohibitions, codified at 50 CFR 17.21 for wildlife and 17.61 for plants, apply. For listed wildlife species, these prohibitions, 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 or foreign commerce in the course of commercial activity, or sell or offer for sale in interstate or foreign commerce any listed wildlife species. It is also illegal to possess, sell, deliver, carry, transport, or ship any such wildlife that has been taken illegally. In addition, for plants listed as endangered, the prohibitions include import or export, 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.

We may issue permits to carry out otherwise prohibited activities involving endangered or threatened wildlife and plant species under certain circumstances. Regulations governing permits are codified at 50 CFR 17.22 and 17.62 for endangered wildlife and plants, respectively. With regard to endangered wildlife, a permit must be issued for the following purposes: for scientific purposes, to enhance the propagation and survival of the species, and for incidental take in connection with otherwise lawful activities. With regard to endangered plants, a permit must be issued for the following purposes: for scientific purposes or for the enhancement of propagation or survival. Requests for copies of the regulations regarding listed species and inquiries about prohibitions and permits may be addressed to 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).

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 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 listing on proposed and ongoing activities within the range of a 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, handling, possessing, selling, delivering, carrying, or transporting of the species, 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) Introduction of nonnative species that compete with or prey upon the 23 species, such as the introduction of competing, nonnative plants or animals to the State of Hawaii.

(3) The unauthorized release of biological control agents that attack any life stage of these 23 species.

(4) Unauthorized modification of the channel or water flow of any stream, or removal or destruction of emergent aquatic vegetation in any body of water in which the blackline, crimson, or oceanic Hawaiian damselfly is known to occur.

(5) Unauthorized discharge of chemicals or fill material into any waters in which the blackline, crimson, or oceanic Hawaiian damselfly is known to occur.

Questions regarding whether specific activities would constitute a violation of section 9 of the Act should be directed to the Pacific Islands Fish and Wildlife Office (see **ADDRESSES**). Requests for copies of the regulations concerning listed species and general inquiries regarding prohibitions and permits may be addressed to the U.S. Fish and Wildlife Service, Endangered Species Permits, Ecological Services, Eastside Federal Complex, 911 NE. 11th Avenue, Portland, OR 97232-4181 (telephone 503-231-6158; facsimile 503-231-6243).

The State of Hawaii's endangered species law (State of Hawaii 2009) is automatically invoked when a species is listed, and provides supplemental protection, including prohibiting take of these species and encouraging 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 (State of Hawaii 2009). Funds for these activities could be made available under section 6 of the Act (Cooperation with the States). Thus, Federal protection afforded to listed species is reinforced and supplemented by protection under State law.

#### Taxonomic Name Changes for Nine Plant Species Since Listing

In 1982, we listed *Euphorbia skottsbergii* var. *kalaeloana* (47 FR

36846; August 24, 1982) as endangered following the taxonomy of Sherff (1936), although in 1959, Degener and Degener had moved this species to *Chamaesyce* (*Chamaesyce skottsbergii* var. *kalaeloana*). In both publications, the range for this species included only the "Ewa Plains of Oahu, Hawaii, in the vicinity of Barber's Point" (also known as Kalaelo). In 1990, Koutnik (p. 615) placed *Chamaesyce skottsbergii* var. *kalaeloana* in synonymy with *C. skottsbergii* var. *skottsbergii*. According to Koutnik, the range for *C. skottsbergii* var. *skottsbergii* included southwestern Oahu (the Ewa Plains) and northwestern Molokai. However, in 2005, based on genetic analysis, Morden and Gregoritz (2005, p. 969) found that the Oahu and Molokai populations of *C. skottsbergii* var. *skottsbergii* are genetically distinct, and they supported the recognition of these two populations as distinct varieties. The authors suggested that the variety on Molokai should be recognized by the previously used variety name, *C. skottsbergii* var. *audens*. The scientific community and the Service currently accept Morden and Gregoritz's taxonomic clarification of *C. skottsbergii* var. *skottsbergii*, the range of which includes only southwestern Oahu, and *C. skottsbergii* var. *audens*, the range of which includes only Molokai.

We are aware of Steinman and Porter's 2002 (p. 473) molecular data for classification of Euphorbiae and the analysis of Bruyns *et al.* (2006, pp. 416-417), who found that *Chamaesyce* is nested among species of *Euphorbia*. Changing the names for the endangered Oahu plants *Chamaesyce celastroides* var. *kaenana*, *C. deppeana*, *C. herbstii*, *C. kuwaleana*, *C. rockii* and *C. skottsbergii* var. *skottsbergii* at 50 CFR 17.12 and at 50 CFR 17.99(j) would require a separate amendment to the CFR, not only for the Hawaiian species listings, but for all previously listed species nationwide. This amendment requires a separate notice and opportunity for public comment, and although we are unable to address this change in this final rule, we will initiate proposed taxonomic name changes for these five endangered plants in a future proposed rule.

At the time we listed *Alsinidendron obovatum* (56 FR 55770; October 29, 1991), *A. trinerve* (56 FR 55770; October 29, 1991), *Hedyotis coriacea* (57 FR 20772; May 15, 1992), *H. degeneri* (56 FR 55770; October 29, 1991), *H. parvula* (56 FR 55770; October 29, 1991), and *Lipochaeta tenuifolia* (56 FR 55770; October 29, 1991) as endangered, we followed the taxonomic treatment of Wagner *et al.* (1990, pp. 343, 501,

1,141–1,142, 1,148–1,150). Subsequently, Wagner *et al.* (2005, pp. 57–63) recognized and published new combinations (new genus and species names) for *Alsinidendron obovatum* (now *Schiedea obovata*) and *A. trinerve* (now *Schiedea trinervis*) based on phylogenetic analyses. These new combinations are currently accepted by the scientific community and by the Service. Terrell *et al.* (2005, pp. 832, 833) published new combinations for *Hedyotis coriacea* (now *Kadua coriacea*), *H. degeneri* (now *Kadua degeneri*), and includes *K. degeneri* var. *coprosmifolia* and *K. degeneri* var. *degeneri*, and placed *Hedyotis parvula* in synonymy with *Kadua parvula*, an earlier and validly published name. Wagner and Robinson (2001, p. 554) recognized and published new

combinations for several Hawaiian species of *Lipochaeta*, including *Lipochaeta tenuifolia* (now *Melanthera tenuifolia*). At the time we listed *Phlegmariurus nutans* (59 FR 14482; March 28, 1994), we followed Ollgaard's *Index of the Lycopodiaceae* (1989, 135 pp.). Most recently, Palmer placed *Phlegmariurus nutans* in synonymy with *Huperzia nutans* (Palmer 2003, p. 257). We listed *Mariscus pennatiformis* (which included *M. pennatiformis* ssp. *bryanii* and *M. pennatiformis* ssp. *pennatiformis*) as endangered in 1994 (59 FR 56333) following the taxonomic treatment of Koyama (in Wagner *et al.* 1990, pp. 1,421–1,422). Since then, Strong and Wagner (1997, p. 39), and more recently Wagner and Herbst (2003, pp. 52–53), moved all Hawaiian species of *Mariscus* to *Cyperus*. The accepted

epithet for this species is *Cyperus pennatiformis* and includes *C. pennatiformis* var. *bryanii* and *C. pennatiformis* var. *pennatiformis*. The range of the species at the time of listing and now has not changed.

All of the aforementioned name changes are currently accepted by the scientific community, and, in accordance with the references cited above, we are revising the List of Endangered and Threatened Plants at 50 CFR 17.12 (see Table 3). In addition, we made editorial revisions to a limited number of units and species descriptions in 50 CFR 17.99(a)(1) and (b) (Kauai), 50 CFR 17.99(e)(1) and (f) (Maui), and 50 CFR 17.99(g) and (h) (Northwestern Hawaiian Islands) to adopt the taxonomic revisions.

TABLE 3—NAME CHANGES FOR 9 LISTED ENDANGERED HAWAIIAN PLANTS

Listing	Currently listed name	Accepted name change
56 FR 55770 .....	<i>Alsinidendron obovatum</i> .....	<i>Schiedea obovata</i> .
56 FR 55770 .....	<i>Alsinidendron trinerve</i> .....	<i>Schiedea trinervis</i> .
47 FR 36846 .....	<i>Chamaesyce skottsbergii</i> var. <i>kalaeloana</i> .....	<i>Chamaesyce skottsbergii</i> var. <i>skottsbergii</i> .
57 FR 20772 .....	<i>Hedyotis coriacea</i> .....	<i>Kadua coriacea</i> .
56 FR 55770 .....	<i>Hedyotis degeneri</i> .....	<i>Kadua degeneri</i> .
56 FR 55770 .....	<i>Hedyotis parvula</i> .....	<i>Kadua parvula</i> .
56 FR 55770 .....	<i>Lipochaeta tenuifolia</i> .....	<i>Melanthera tenuifolia</i> .
59 FR 14482 .....	<i>Phlegmariurus nutans</i> .....	<i>Huperzia nutans</i> .
59 FR 56333 .....	<i>Mariscus pennatiformis</i> .....	<i>Cyperus pennatiformis</i> .

**Critical Habitat**

*Background*

Critical habitat is defined in section 3 of the Act as:

(i) 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

(I) Essential to the conservation of the species and

(II) Which may require special management considerations or protection; and

(ii) 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 under 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, 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 prohibition against Federal agencies carrying out, funding, or authorizing the destruction or adverse modification of critical habitat. Section 7(a)(2) requires consultation on Federal actions that may affect 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 access to private lands. Such designation does not require implementation of restoration, recovery, or enhancement measures by the landowner. Where a landowner seeks or requests Federal agency funding or authorization 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 Federal action

agency's and the applicant's obligation is not to restore or recover the species, but to implement reasonable and prudent alternatives to avoid destruction or adverse modification of critical habitat.

For inclusion in a critical habitat designation, the habitat within the geographical area occupied by the species at the time of listing must contain physical or biological features essential to the conservation of the species, and be included only if those features may require special management considerations or protection. Critical habitat designations identify, to the extent known using the best scientific and commercial data available, habitat areas that provide for the necessary life cycle needs of the species (areas on which are found the physical or biological features essential for the conservation of the species). Under the Act and regulations at 50 CFR 424.12(e), we can designate critical habitat in areas outside the geographical area occupied by the species at the time it is listed only when we determine that those areas are essential for the conservation of the species and that designation limited to those areas occupied at the time of listing 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 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.

When we are determining which areas we should designate 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, or other unpublished materials and expert opinion or personal knowledge.

Habitat is often dynamic, and species may move from one area to another over time. Furthermore, 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 to be necessary for the recovery of the species, as additional scientific information may become available in the future. For these reasons, a critical habitat designation does not signal that habitat outside the designated area is unimportant or may not be required for recovery of the species.

The information currently available on the effects of global climate change and increasing temperatures does not make sufficiently precise estimates of the location and magnitude of the effects. We are currently not aware of any climate change information specific to the habitat of any of the species addressed in this rule that would indicate what areas may become important to the species in the future. Therefore, we were unable to determine what additional areas, if any, may be appropriate to include in the critical habitat designation for these species.

Areas that are important to the conservation of the species, but are outside the critical habitat designation, will continue to be subject to conservation actions we implement under section 7(a)(1) of the Act. These areas are also subject to the regulatory protections afforded by the section 7(a)(2) jeopardy standard, as determined on the basis of the best available scientific information at the time of the agency action. Federally funded or permitted projects affecting listed species outside their designated critical habitat areas may still result in jeopardy findings in some cases. 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), section 7 consultations, or other species conservation planning efforts if new information available to these planning efforts calls for a different outcome.

#### **Prudency Determination for 25 Oahu Species**

Section 4(a)(3) of the Act, as amended, and implementing regulations (50 CFR 424.12) require that, to the maximum extent prudent and determinable, the Secretary designate critical habitat at the time a species is determined to be endangered or threatened. Our regulations at 50 CFR 424.12(a)(1) state that 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 activity, and the identification of critical habitat can be expected to increase the degree of threat to the species; or (2) the designation of critical habitat would not be beneficial to the species.

As we have discussed under the Factor B analysis, there is currently no documentation that the 23 species listed in this rule are threatened by taking or other human activity. At the time we listed the plant *Achyranthes splendens* var. *rotundata* as endangered, we found that designation of critical habitat was not prudent because this plant was threatened by taking for lei-making, and the publication of critical habitat descriptions would make this plant more vulnerable (51 FR 10518; March 26, 1986). However, we have examined the best available information, and found no information to indicate that this plant is currently threatened by overcollection for lei-making, or is otherwise used for commercial, recreational, scientific, or educational purposes. Moreover, we have no information to indicate that

identification of critical habitat is expected to initiate such a threat to any of the species addressed in this final rule. Accordingly, this designation will provide information to individuals, local and State governments, and other entities engaged in activities or long-range planning in areas essential to the conservation of these species. Conservation of these species and their essential habitat will require habitat management, protection, and restoration, which will be facilitated by knowledge of habitat locations and the physical or biological features of the habitat. Other potential benefits include: (1) Triggering consultation under section 7 of the Act in new areas for actions with a Federal nexus where it would not otherwise occur; (2) focusing conservation activities on the most essential features and areas; and (3) preventing individuals from causing inadvertent harm to the species. Based on this information, we believe critical habitat will be beneficial, and have determined the designation of critical habitat is prudent for each of the species addressed in this final rule.

The primary regulatory effect of critical habitat is the section 7(a)(2) requirement that Federal agencies refrain from taking any action that destroys or adversely modifies critical habitat. We find that the designation of critical habitat for each of the 23 species listed listing in this final rule and the endangered plants *Achyranthes splendens* var. *rotundata* and *Chamaesyce skottsbergii* var. *skottsbergii* will benefit them by serving to focus conservation efforts on the restoration and maintenance of ecosystem functions that are essential for attaining their recovery and long-term viability. In addition, the designation of critical habitat serves to inform management and conservation decisions by identifying any additional physical or biological features of the ecosystem that may be essential for the conservation of certain species, such as the availability of sufficient instream flow for the blackline, crimson, and oceanic Hawaiian damselflies, or specific host plants such as *Nestegis sandwicensis* and *Sapindus oahuensis* for *Korthalsella degeneri*. Therefore, because we have determined that the designation of critical habitat will not likely increase the degree of threat to the species, and may provide some measure of benefit, we find that designation of critical habitat is prudent for the following 25 species, as critical habitat will be beneficial and there is no evidence that the designation of critical habitat will result in an increased threat

from taking or other human activity for these species:

(1) Plants—*Achyranthes splendens* var. *rotundata*, *Bidens amplexans*, *Chamaesyce skottsbergii* var. *skottsbergii*, *Cyanea calycina*, *Cyanea lanceolata*, *Cyanea purpurellifolia*, *Cyrtandra gracilis*, *Cyrtandra kaulanthera*, *Cyrtandra sessilis*, *Cyrtandra waiolani*, *Doryopteris takeuchii*, *Korthalsella degeneri*, *Melicope christophersenii*, *Melicope hiiakae*, *Melicope makahae*, *Platydesma cornuta* var. *cornuta*, *Platydesma cornuta* var. *decurrens*, *Pleomele forbesii*, *Psychotria hexandra* ssp. *oahuensis*, *Pteralyxia macrocarpa*, *Tetraplasandra lydgatei*, and *Zanthoxylum oahuense*;

(2) Animals—*Megalagrion leptodemas*, *Megalagrion nigrohamatum nigrolineatum*, and *Megalagrion oceanicum*.

#### Critical Habitat Determinability

As stated above, section 4(a)(3) of the Act requires the designation of critical habitat concurrently with the species' listing "to the maximum extent prudent and 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.

When critical habitat is not determinable, the Act provides for an additional year to publish a critical habitat designation (16 U.S.C. 1533(b)(6)(C)(ii)).

At the time we listed the plant *Chamaesyce skottsbergii* var. *skottsbergii* (see "Taxonomic Name Changes for Nine Plant Species Since Listing," above) as endangered, we were unable to identify the biological needs of this species, and, therefore were unable to identify areas essential for its conservation (critical habitat) (47 FR 36846; August 24, 1982). We reviewed the information available (since it was listed in 1982) pertaining to the biological needs of *Chamaesyce skottsbergii* var. *skottsbergii* and available information pertaining to the biological needs of the 23 species listed in this final rule and habitat characteristics where these species are located. This and other information represent the best scientific data available and led us to conclude that the designation of critical habitat is both prudent and determinable for these 25 species.

#### Revision of Critical Habitat for 99 Oahu Plants and Designation for 2 Previously-Listed Plants

This section discusses the revision of currently designated critical habitat for 99 Oahu plant species, based on new information. This section also provides a brief description of the two additional plant species (*Achyranthes splendens* var. *rotundata* and *Chamaesyce skottsbergii* var. *skottsbergii*) that were previously listed without designation of critical habitat, for which we are now designating critical habitat. This information represents the best scientific and commercial information available.

#### Revision of Critical Habitat for 99 Oahu Plants

Under section 4(a)(3)(A)(ii) of the Act we may, as appropriate, revise a critical habitat designation. In 2003, we designated critical habitat for 99 Oahu plants on 55,040 ac (22,274 ha) in 303 units, based on their known locations (68 FR 35950; June 17, 2003). Based on new information and scientific data available since 2003, we have revised critical habitat for these 99 plant species. In addition, since critical habitat was designated in 2003, we have learned that many native Hawaiian plants and animals can thrive when reintroduced into historical habitats, when threats are effectively managed. For this reason, we believe it is important to designate unoccupied habitat when it is essential for the recovery of the species. Approximately 93 percent of the area designated as critical habitat in this rule overlaps with the area designated in the 2003 final critical habitat rule. In some areas, the footprint of the revision is larger than the 2003 designation, to accommodate the expansion of species' ranges within the particular ecosystem in which they occur (e.g., expansion into unoccupied habitat). In other areas, we are reducing critical habitat, based on updated information on the historical ranges of certain species. The revision simply correlates to each species' physical or biological requirements with the characteristics of the ecosystems within which they occur (e.g., elevation, rainfall, species associations, etc.), and also includes areas unoccupied by the species, which are essential for their conservation. The revision will enable managers to focus conservation management efforts on common threats that occur across shared ecosystems and facilitate the restoration of the ecosystem function and species-specific habitat needs for the recovery of each of the 99 species. An added benefit

includes the publication of more comprehensive maps that should be more useful to the public and conservation managers.

#### Background for 99 Listed Oahu Plants

It is our intent to discuss only those topics directly relevant to the designation of critical habitat. For additional information on these 99 Oahu plants, refer to the final critical habitat rule for Oahu plants published in the **Federal Register** on June 17, 2003 (68 FR 35950).

#### Current Status of the 99 Plant Species With Revised Critical Habitat and the 2 Previously-Listed Plant Species

*Abutilon sandwicense* (no common name (NCN)), a member of the mallow family (Malvaceae), is a perennial shrub endemic to the Waianae Mountains of Oahu (Bates 1999, pp. 873–875). At the time we designated critical habitat in 2003, the 30 known occurrences contained an estimated 253 to 263 individuals (68 FR 35950; June 17, 2003). This species currently occurs in the Waianae Mountains in the dry cliff and lowland mesic ecosystems in 17 to 19 occurrences totaling between 296 and 515 individuals (U.S. Army 2006; TNC 2007; HBMP 2008).

*Achyranthes splendens* var. *rotundata* (round-leaved chaff flower), a shrub in the amaranth family (Amaranthaceae), occurred historically on Oahu, Lanai, and Molokai. In 1986, at the time of listing, four occurrences containing approximately 400 individuals were known from southwestern and western Oahu in the coastal ecosystem at Barber's Point and Kaena Point, respectively (51 FR 10518, March 26, 1986; HBMP 2008). Subsequently, three additional occurrences were documented in Keawaula, Makaha, and Waianae Kai (HBMP 2008). Currently, this species is found in 8 occurrences in the coastal, lowland dry, and dry cliff ecosystems totaling approximately 700 individuals (Kane 2004, in litt.; Phillipson 2007, in litt.; HBMP 2008; Silbernagle 2010, in litt.).

*Adenophorus periens* (pendent kahi fern), a fern in the grammitis family (Grammitidaceae), occurs on the islands of Hawaii, Molokai, and Kauai, and was known historically from the Koolau Mountains of Oahu (Palmer 2003, p. 39). This species is an epiphyte found in the lowland wet and wet cliff ecosystems (TNC 2007; HBMP 2008). The last recorded observations of this fern on Oahu were in the early 1900s (HBMP 2008).

*Alectryon macrococcus* (mahoe), a member of the soapberry family (Sapindaceae), is a tree found on the

islands of Kauai, Oahu, Molokai, and Maui (Wagner *et al.* 1999, p. 1,225). This species is known from two varieties, *A. macrococcus* var. *auwahiensis* (Maui) and *A. macrococcus* var. *macrococcus* (Kauai, Oahu, Molokai, and Maui). At the time we designated critical habitat in 2003, *A. macrococcus* var. *macrococcus* was known from 82 occurrences on Oahu containing approximately 300 individuals. Currently, *A. macrococcus* var. *macrococcus* is found in the Waianae Mountains in the dry cliff, lowland mesic, and montane wet ecosystems, in 15 occurrences totaling between 366 and 371 individuals (U.S. Army 2006; TNC 2007; HBMP 2008). This variety was historically known from the lowland mesic ecosystem in the Koolau Mountains.

*Bonamia menziesii* (NCN), a perennial vine in the morning glory family (Convolvulaceae), is found on Kauai, Oahu, Lanai, Maui, and Hawaii (Austin 1999, p. 550). At the time we designated critical habitat in 2003, this species was known from 18 occurrences on Oahu totaling fewer than 100 individuals. Currently, this species is declining on Oahu, with approximately 12 to 13 occurrences totaling fewer than 60 individuals, located in both the Waianae and Koolau Mountains, in the lowland dry, lowland mesic, and dry cliff ecosystems (U.S. Army 2006; TNC 2007; HBMP 2008).

*Cenchrus agrimonioides* (kamanomano), a perennial in the grass family (Poaceae), occurred historically on Oahu, Lanai, and Maui (O'Connor 1999, pp. 1,511–1,512). This species is known from two varieties, *C. agrimonioides* var. *agrimonioides* (Oahu, Lanai, and Maui) and *C. agrimonioides* var. *laysanensis* (Kure Atoll, Midway Atoll, and Laysan). *C. agrimonioides* var. *laysanensis* may be extinct. At the time we designated critical habitat in 2003, *C. agrimonioides* var. *agrimonioides* was known from 7 occurrences in the Waianae Mountains on Oahu, containing between 113 and 118 individuals. This variety is currently found on Oahu and Maui, and has been outplanted on Kahoolawe (USFWS 2007a; 2007b). On Oahu, 3 to 6 occurrences totaling approximately 300 wild individuals are found in the lowland mesic and dry cliff ecosystems in the Waianae Mountains (U.S. Army 2006; TNC 2007; USFWS 2007a; 2007b).

*Centaurium sebaeoides* (awiwī), an annual herb in the gentian family (Gentianaceae), is known from Kauai, Oahu, Molokai, Lanai, and west Maui (Wagner *et al.* 1999, p. 725). At the time we designated critical habitat in 2003,

this species was known from 2 occurrences in the Waianae and Koolau Mountains, totaling between 60 and 80 individuals. Currently, *C. sebaeoides* occurs on Oahu in the coastal ecosystem at Kaena Point and Halona (Waianae and Koolau Mountains), in 2 occurrences totaling between 40 and 50 individuals (TNC 2007; HBMP 2008).

*Chamaesyce celastroides* var. *kaenana* (akoko), a shrub in the spurge family (Euphorbiaceae), is endemic to Oahu (Koutnik 1999, pp. 605–606). At the time we designated critical habitat in 2003, this species was known from 15 occurrences containing 569 individuals. Historically known from both the Waianae and Koolau Mountains, *C. celastroides* var. *kaenana* is currently found in the coastal, lowland dry, and lowland mesic ecosystems only in the Waianae Mountains, in 8 occurrences totaling more than 900 individuals (Makua Implementation Team 2003, pp. 16–32–16–38; U.S. Army 2006; TNC 2007; HBMP 2008).

*Chamaesyce deppeana* (akoko), a perennial subshrub in the spurge family (Euphorbiaceae), is endemic to the Koolau Mountains of Oahu (Koutnik 1999, p. 607). At the time we designated critical habitat in 2003, this species was known from one occurrence of approximately 50 individuals. Currently, the same occurrence in the wet cliff ecosystem in the Koolau Mountains is estimated to contain as many as 100 individuals (Lau 2006b, in litt.; Perlman 2006, pers. comm.; TNC 2007).

*Chamaesyce herbstii* (akoko), a small tree in the spurge family (Euphorbiaceae), is endemic to the Waianae Mountains of Oahu (Koutnik 1999, p. 609). At the time we designated critical habitat in 2003, this species was known from 4 occurrences totaling between 162 and 164 individuals. *Chamaesyce herbstii* is declining in numbers, and is currently found in the lowland mesic and dry cliff ecosystems in the Waianae Mountains, in 2 occurrences totaling fewer than 60 individuals (Makua Implementation Team 2003, pp. 16–39–16–44; U.S. Army 2006; TNC 2007; HBMP 2008).

*Chamaesyce kuwaleana* (akoko), a shrub in the spurge family (Euphorbiaceae), is endemic to Oahu. At the time we designated critical habitat in 2003, this species was known from 5 occurrences containing approximately 2,000 individuals in the Waianae Mountains, with one individual known from Mokumanu, an islet off the windward coast of the Koolau Mountains (Koutnik 1999, p. 611). *Chamaesyce kuwaleana* was found historically in the coastal and dry cliff

ecosystems, but is currently found only in the dry cliff ecosystem in the Waianae Mountains in 2 occurrences of approximately 1,200 individuals (TNC 2007; HBMP 2008).

*Chamaesyce rockii* (akoko), a shrub or small tree in the spurge family (Euphorbiaceae), is endemic to the Koolau Mountains of Oahu (Koutnik 1999, p. 614). At the time we designated critical habitat in 2003, this species was known from 20 occurrences containing between 641 and 733 individuals. Currently, this species is found in 6 occurrences in the lowland wet and wet cliff ecosystems in the Koolau Mountains, totaling between 576 and 710 individuals (U.S. Army 2006; TNC 2007; HBMP 2008).

*Chamaesyce skottsbergii* var. *skottsbergii* (formerly *Chamaesyce skottsbergii* var. *kalaeloana*) (Ewa Plains akoko), a small shrub in the spurge family (Euphorbiaceae), is endemic to Oahu. Historically, this species was known only from the Ewa Plains on southwestern Oahu in the vicinity of Barber's Point (also known as Kalaeloa). The precise natural range of this taxon was unknown, but probably did not go beyond the coralline plains of southwestern Oahu (47 FR 36846, August 24, 1982). In 1982, at the time of listing, this species was known from 4 occurrences containing approximately 1,000 to 1,500 individuals (Char and Balakrishnan 1979, p.67; HBMP 2008). Surveys conducted between 1983 and 1984 in the vicinity of the former Barber's Point Naval Air Station indicated there was a total of approximately 5,000 plants (HINHP 1991; USFWS 1993, pp. 13–15). However, surveys conducted a decade later located only several hundred plants in the same location (USFWS 1993, pp. 13–15). Currently, this species is found in 2 occurrences in the lowland dry ecosystem on the Ewa Plain in southwestern Oahu, totaling approximately 200 wild individuals and 600 outplanted individuals (Guinther and Withrow 2008, pp. 6, 9–10; Whistler 2008, pp. 7–9; U.S. Navy *et al.* 2012, pp. 19–20).

*Colubrina oppositifolia* (kauila), a tree in the buckthorn family (Rhamnaceae), is known from Oahu, Maui, and the island of Hawaii (Wagner *et al.* 1999, p. 1,094). At the time we designated critical habitat in 2003, this species was found in 5 occurrences in the Waianae Mountains containing 61 individuals. Currently, on Oahu, *C. oppositifolia* is found in the lowland mesic ecosystem in the Waianae Mountains, in 4 occurrences totaling approximately 50 individuals (U.S. Army 2006; TNC 2007; HBMP 2008).

*Ctenitis squamigera* (pauoa), a medium to large-sized fern in the spleenwort family (Asplenaceae), is found on all the major islands except Hawaii. It is possibly now extinct on Kauai (Palmer 2003, pp. 100–102). At the time we designated critical habitat in 2003, there were 8 known occurrences with more than 80 individuals in the Waianae and Koolau Mountains of Oahu. Currently there are 4 occurrences totaling approximately 100 individuals, in the lowland mesic ecosystem in the Waianae Mountains (U.S. Army 2006; TNC 2007; HBMP 2008).

*Cyanea acuminata* (haha), a shrub in the bellflower family (Campanulaceae), is endemic to the Koolau Mountains of Oahu (Lammers 1999, p. 444). At the time we designated critical habitat in 2003, there were fewer than 200 individuals in 20 occurrences. Currently, there are 15 occurrences totaling between 149 and 175 individuals in the lowland mesic, lowland wet, montane wet, and wet cliff ecosystems in the Koolau Mountains (U.S. Army 2006; TNC 2007; HBMP 2008).

*Cyanea crispa* (haha), a shrub in the bellflower family (Campanulaceae), is endemic to the Koolau Mountains of Oahu (Lammers 1999, pp. 481–482; Wagner and Herbst 1999, p. 1,870). At the time we designated critical habitat in 2003, there were 11 occurrences containing a total of 56 individuals. Currently, this species is found in 7 occurrences, totaling 56 individuals, in the lowland mesic, lowland wet, and wet cliff ecosystems in the Koolau Mountains (U.S. Army 2006; TNC 2007; HBMP 2008).

*Cyanea grimesiana* ssp. *grimesiana* (haha), a shrub in the bellflower family (Campanulaceae), is found on Molokai, Lanai, Maui, and Oahu (Lammers 1999, pp. 451–452). At the time we designated critical habitat in 2003, there were seven occurrences totaling nine individuals in the Waianae and Koolau Mountains in the lowland mesic and lowland wet ecosystems (U.S. Army 2006; TNC 2007; HBMP 2008). The last known wild individual in Kupaua died in 2005. Propagules are in cultivation and will be outplanted in protected areas (PEP 2008, p. 19; Lau 2011, in litt.).

*Cyanea grimesiana* ssp. *obatae* (haha), a shrub in the bellflower family (Campanulaceae) is endemic to the Waianae Mountains of Oahu (Lammers 1999, pp. 451–452). At the time we designated critical habitat in 2003, there were 8 occurrences containing 16 individuals. Currently, there are 8 occurrences totaling 41 individuals in the dry cliff, lowland mesic, and

lowland wet ecosystems in the Waianae Mountains (U.S. Army 2006; TNC 2007; HBMP 2008).

*Cyanea humboldtiana* (haha), a shrub in the bellflower family (Campanulaceae), is endemic to the Koolau Mountains of Oahu (Lammers 1999, p. 483; Wagner and Herbst 1999, p. 1,870). At the time we designated critical habitat in 2003, there were 9 occurrences totaling between 133 and 239 individuals. Currently, this species occurs in 9 occurrences totaling between 160 to 260 individuals in the lowland wet and wet cliff ecosystems in the Koolau Mountains (U.S. Army 2006; TNC 2007; HBMP 2008).

*Cyanea koolauensis* (haha), a shrub in the bellflower family (Campanulaceae), is endemic to the Koolau Mountains of Oahu (Lammers 1999, p. 481; Wagner and Herbst 1999, p. 1,870). At the time we designated critical habitat in 2003, there were 42 occurrences with fewer than 80 individuals. Currently, this species is found in 15 occurrences with approximately 100 individuals in the lowland wet ecosystem in the Koolau Mountains (U.S. Army 2006; TNC 2007; HBMP 2008).

*Cyanea longiflora* (haha), a shrub in the bellflower family (Campanulaceae), occurs in the Waianae Mountains, and was historically known from the Koolau Mountains of Oahu (Lammers 1999, p. 484; Wagner and Herbst 1999, p. 1,870). At the time we designated critical habitat in 2003, there were 4 occurrences of fewer than 220 individuals in the Waianae Mountains. Currently, there are 4 occurrences totaling fewer than 170 individuals in the lowland mesic ecosystem in the Waianae Mountains (U.S. Army 2006; TNC 2007; HBMP 2008).

*Cyanea pinnatifida* (haha), a shrub in the bellflower family (Campanulaceae), is endemic to the Waianae Mountains of Oahu (Lammers 1999, p. 459). The last known wild individual died in 2001, although the species remains in cultivation, and 70 individuals have been outplanted within historical range in the lowland mesic ecosystem in the Waianae Mountains (TNC 2006h, p. 6).

*Cyanea st.-johnii* (haha), a shrub in the bellflower family (Campanulaceae), is endemic to the Koolau Mountains of Oahu (Lammers 1999, p. 484; Wagner and Herbst 1999, p. 1,871). At the time we designated critical habitat in 2003, there were 7 occurrences containing 57 individuals. Currently, 6 occurrences are found in the lowland wet and wet cliff ecosystems, with approximately 70 individuals, in the Koolau Mountains (U.S. Army 2006; TNC 2007; HBMP 2008).

*Cyanea superba* (NCN), a palm-like tree in the bellflower family (Campanulaceae), is endemic to the lowland mesic ecosystem of the Waianae Mountains of Oahu (Lammers 1999, p. 465). This species is known from two subspecies, *C. superba* ssp. *regina* (southern Koolau Mountains) and *C. superba* ssp. *superba* (northern Waianae Mountains). The last known wild individual of *C. superba* ssp. *superba* died in 2002; however, propagules are in cultivation, and more than 400 individuals have been outplanted over the past 10 years in the Waianae Mountains. Currently a total of at least 200 mature outplanted individuals survive (TNC 2007; HBMP 2008). *Cyanea superba* ssp. *regina* has not been observed since the 1930s (Lammers 1999, p. 465).

*Cyanea truncata* (haha), a shrub in the bellflower family (Campanulaceae), is endemic to the Koolau Mountains of Oahu, in the lowland mesic, lowland wet, and wet cliff ecosystems (Lammers 1999, p. 466). At the time we designated critical habitat in 2003, there were only two known individuals in the lowland mesic ecosystem in the Koolau Mountains. Currently, these individuals survive along with 4 outplanted occurrences totaling 37 individuals (U.S. Army 2006; TNC 2007; HBMP 2008).

*Cyperus pennatififormis* (formerly *Mariscus pennatififormis*) (NCN), a perennial in the sedge family (Cyperaceae), was found on Kauai, Oahu, east Maui, the island of Hawaii, and Laysan Island in the Northwestern Hawaiian Islands (Wagner *et al.* 1999, pp. 1,421–1,423). This species is known from two varieties, *C. pennatififormis* var. *bryanii* (Laysan) and *C. pennatififormis* var. *pennatififormis* (Kauai, Oahu, east Maui, and Hawaii). The last known individual of *C. pennatififormis* var. *pennatififormis* on Oahu was observed in the 1930s, in the lowland mesic ecosystem in the Waianae Mountains (TNC 2007; HBMP 2008).

*Cyperus trachysanthos* (puukaa), a perennial in the sedge family (Cyperaceae), was known from Niihau, Kauai, Oahu, Molokai, and Lanai; and is currently extant on Niihau, Kauai, and Oahu (Koyama 1999, p. 1,399). At the time we designated critical habitat in 2003, there were 6 occurrences totaling 40 individuals on Oahu. Currently, there are 3 occurrences totaling approximately 400 individuals in seasonal wetlands in the coastal and lowland dry ecosystems in both the Waianae and Koolau Mountains (TNC 2007; HBMP 2008).

*Cyrtandra dentata* (haiwale), a shrub in the African violet family

(Gesneriaceae), is endemic to Oahu, and is known from both the Waianae and Koolau Mountains (Wagner *et al.* 1999, p. 753). At the time we designated critical habitat in 2003, there were 11 known occurrences totaling 136 individuals. Currently, due to an increase in survey efforts over the last 6 years in potentially suitable habitat for this species, there are 6 occurrences totaling approximately 1,640 individuals in the lowland mesic and lowland wet ecosystems of both mountain ranges, and in the dry cliff ecosystem in the Waianae Mountains (U.S. Army 2006; TNC 2007; HBMP 2008).

*Cyrtandra polyantha* (haiwale), a shrub in the African violet family (Gesneriaceae), is endemic to the Koolau Mountains of Oahu (Wagner *et al.* 1999, pp. 774–775). At the time we designated critical habitat in 2003, there was one known occurrence of three individuals. Currently, there are two occurrences of seven to nine individuals in the lowland mesic and lowland wet ecosystems in the Koolau Mountains (U.S. Army 2006; TNC 2007; HBMP 2008).

*Cyrtandra subumbellata* (haiwale), a shrub in the African violet family (Gesneriaceae), is endemic to the Koolau Mountains of Oahu (Wagner *et al.* 1999, p. 779). At the time we designated critical habitat in 2003, there were 5 occurrences totaling 12 individuals. Currently, there are 3 occurrences totaling a little more than 100 individuals in the lowland wet and wet cliff ecosystems in the Koolau Mountains (U.S. Army 2006; TNC 2007; HBMP 2008).

*Cyrtandra viridiflora* (haiwale), a small shrub in the African violet family (Gesneriaceae), is endemic to the Koolau Mountains of Oahu (Wagner *et al.* 1999, p. 780). At the time we designated critical habitat in 2003, there were 23 occurrences totaling 52 individuals. Currently, there are 5 occurrences totaling 75 individuals in the lowland wet and wet cliff ecosystems in the Koolau Mountains (U.S. Army 2006; TNC 2007; HBMP 2008).

*Delissea subcordata* (oha), a shrub in the bellflower family (Campanulaceae), is found in the Waianae and Koolau Mountains of Oahu (Lammers 1999, p. 471). At the time we designated critical habitat in 2003, this species was known from 21 occurrences containing fewer than 70 individuals, in the Waianae Mountains. Currently, there are 9 occurrences totaling between 28 and 40 individuals in the lowland mesic ecosystem in the Waianae Mountains (U.S. Army 2006; TNC 2007; HBMP 2008).

*Diellia erecta* (asplenium-leaved diellia), a fern in the spleenwort family (Aspleniaceae), occurs on Oahu, Molokai, Maui, and Hawaii (Palmer 2003, p. 117). At the time we designated critical habitat in 2003, this species was known from Kauai, Molokai, Maui, and Hawaii, and there was only 1 known occurrence of 20 individuals on Oahu. This occurrence on Oahu persists, with approximately 20 to 30 individuals, in the lowland mesic ecosystem of the Koolau Mountains (TNC 2007; HBMP 2008).

*Diellia falcata* (NCN), a fern in the spleenwort family (Aspleniaceae), is endemic to the Waianae and Koolau Mountains of Oahu (Palmer 2003, p. 119). At the time we designated critical habitat in 2003, this species was found in 30 occurrences totaling fewer than 6,000 individuals in the Waianae Mountains. Currently, *D. falcata* is found in 13 occurrences (totaling between 4,000 and 7,000 individuals) in the lowland mesic and dry cliff ecosystems in the Waianae Mountains (U.S. Army 2006; TNC 2007; HBMP 2008).

*Diellia unisora* (NCN), a fern in the spleenwort family (Aspleniaceae), is endemic to the Waianae Mountains of Oahu (Palmer 2003, p. 122). At the time we designated critical habitat in 2003, this species was known from 4 occurrences containing fewer than 800 individuals. Currently, *D. unisora* is known from 4 occurrences totaling approximately 700 individuals in the lowland mesic and dry cliff ecosystems in the Waianae Mountains (U.S. Army 2006; TNC 2007; HBMP 2008).

*Diplazium molokaiense* (NCN), a fern in the spleenwort family (Aspleniaceae), was known from all the major islands except Hawaii (Palmer 2003, p. 125). At the time we designated critical habitat in 2003, this species had not been documented on Oahu since 1945, and was present only at one site on east Maui. On Oahu, this species was known from the lowland mesic and lowland wet ecosystems in the Waianae Mountains (Wood 2006, p. 32; TNC 2007; HBMP 2008).

*Dubautia herbstobatae* (naenae), a shrub in the sunflower family (Asteraceae), is endemic to the Waianae Mountains of Oahu (Carr 1999, pp. 297–298). At the time we designated critical habitat in 2003, this species was known from 12 occurrences totaling fewer than 100 individuals. Currently, *D. herbstobatae* is found in 2 occurrences totaling over 2,000 individuals in the lowland mesic and dry cliff ecosystems in the Waianae Mountains (U.S. Army 2006; TNC 2007; HBMP 2008). The increase in the number of individuals is

possibly due to the recent removal of feral goats from surrounding areas through fencing and eradication efforts (Makua Implementation Team 2003, pp. 2–98–2–104).

*Eragrostis fosbergii* (Fosberg's lovegrass), a perennial in the grass family (Poaceae), is endemic to the Waianae Mountains of Oahu (O'Connor 1999, pp. 1,541–1,542). At the time we designated critical habitat in 2003, there were only four occurrences known, each of a single individual. Currently, these individuals remain, with no reports of regeneration, in the lowland mesic and dry cliff ecosystems in the Waianae Mountains (TNC 2007; HBMP 2008).

*Eugenia koolauensis* (nioi), a small tree or shrub in the myrtle family (Myrtaceae), is known from Oahu and Molokai (Wagner *et al.* 1999, p. 960). At the time we designated critical habitat in 2003, there were 12 occurrences totaling fewer than 70 individuals in the Waianae and Koolau Mountains of Oahu. Currently, this species is found in the lowland mesic ecosystem in the Waianae Mountains (2 occurrences) and in the Koolau Mountains (11 occurrences), totaling approximately 500 mature individuals (U.S. Army 2006; TNC 2007; HBMP 2008). These individuals are currently threatened by *Puccinia psidii*, a rust fungus that infests plants in the Myrtaceae family (Loope and LaRosa 2007, p.1).

*Euphorbia haeleleana* (akoko), a small tree in the spurge family (Euphorbiaceae), is known from Kauai and Oahu (Koutnik and Huft 1999, p. 619). At the time we designated critical habitat in 2003, this species was known from 8 occurrences of approximately 134 individuals, in the Waianae Mountains of Oahu. Currently, there are 6 occurrences totaling 65 individuals in the lowland dry and lowland mesic ecosystems in the Waianae Mountains (U.S. Army 2006; TNC 2007; HBMP 2008).

*Flueggea neowawraea* (mehamehame), a tree in the spurge family (Euphorbiaceae), is known from Oahu, Kauai, Maui, and Hawaii, and was possibly historically found on Molokai (Wagner *et al.* 1999, pp. 620–621). At the time we designated critical habitat in 2003, this species was found in the Waianae Mountains of Oahu, in 23 occurrences with a total of 31 individuals. Currently, there are 18 occurrences totaling 36 individuals in the lowland mesic and dry cliff ecosystems in the Waianae Mountains (U.S. Army 2006; TNC 2007; HBMP 2008).

*Gardenia mannii* (nanu), a tree in the coffee family (Rubiaceae), is endemic to Oahu (Wagner *et al.* 1999, p. 1,133). At

the time we designated critical habitat in 2003, there were 49 occurrences in both the Waianae and Koolau Mountains, totaling between 69 and 80 individuals. Currently, 18 occurrences are known (totaling 108 to 110 individuals) in the lowland mesic and lowland wet ecosystems in both mountain ranges (TNC 2007; HBMP 2008).

*Gouania meyenii* (NCN), a shrub in the buckthorn family (Rhamnaceae), is known from Oahu and Kauai (Wagner *et al.* 1999, pp. 1,095–1,096; NTBG Provenance Report 1994, 2 pp.). On Oahu, this species was historically found in the lowland dry and lowland mesic ecosystems of the Waianae Mountains, and the lowland dry ecosystem at Diamond Head (HBMP 2008). At the time we designated critical habitat in 2003, the 4 known occurrences in the Waianae Mountains contained 63 individuals. Currently, this species is found in 3 occurrences totaling fewer than 70 individuals in the dry cliff ecosystem in the Waianae Mountains (U.S. Army 2006; TNC 2007; HBMP 2008).

*Gouania vitifolia* (NCN), a climbing shrub in the buckthorn family (Rhamnaceae), is known from Oahu, west Maui, and Hawaii (Wagner *et al.* 1999, p. 1,097). This species is endemic to the Waianae Mountains (Wagner *et al.* 1999, p. 1,097), and was thought to be extirpated from Oahu in the 1990s. However, at the time we designated critical habitat in 2003, *G. vitifolia* was found in 2 occurrences totaling 44 individuals in the Waianae Mountains. Currently, there are 2 occurrences totaling 58 to 64 individuals, within the lowland dry, lowland wet, and dry cliff ecosystems in the Waianae Mountains (HBMP 2008). This species was also historically known from the lowland mesic ecosystem in the Waianae Mountains (HBMP 2008).

*Hesperomannia arborescens* (NCN), a small tree in the sunflower family (Asteraceae), is found on Maui, Molokai, and the Koolau Mountains of Oahu, and was historically found on Lanai (Wagner *et al.* 1999, p. 325). At the time we designated critical habitat in 2003, there were 36 occurrences containing between 86 and 93 individuals on Oahu. Currently, there are 19 occurrences totaling approximately 130 individuals in the lowland mesic and lowland wet ecosystems in the Koolau Mountains (U.S. Army 2006; TNC 2007; HBMP 2008).

*Hesperomannia arbuscula* (NCN), a small tree or shrub in the sunflower family (Asteraceae), is found on Oahu and Maui (Wagner *et al.* 1999, p. 325). At the time we designated critical

habitat in 2003, there were 6 occurrences containing between 90 and 92 individuals in the Waianae Mountains of Oahu. Currently, there are 5 occurrences totaling 14 individuals in the lowland mesic and lowland wet ecosystems in the Waianae Mountains (U.S. Army 2006; TNC 2007; HBMP 2008).

*Hibiscus brackenridgei* (mao hau hele), a shrub in the mallow family (Malvaceae), includes 3 subspecies and is known from Kauai, Oahu, Molokai, Lanai, Maui, and Hawaii (Bates 1999, pp. 883–884). At the time we designated critical habitat in 2003, *H. brackenridgei* ssp. *brackenridgei* was known from Molokai, Lanai, Maui, and Hawaii. *Hibiscus brackenridgei* ssp. *mokuleianus* was known from Oahu and Kauai. On Oahu, there were fewer than 206 individuals in 5 occurrences in the Waianae Mountains. Also at that time, *H. brackenridgei* ssp. *molokaiana* was known from one occurrence of five individuals in the Waianae Mountains. Currently, *H. brackenridgei* ssp. *mokuleianus* is known from 7 occurrences totaling between 47 and 50 individuals in the lowland dry and lowland mesic ecosystems in the Waianae Mountains (HBMP 2008; TNC 2007; U.S. Army 2006). *Hibiscus brackenridgei* ssp. *molokaiana* is known from 1 occurrence of 32 individuals in the lowland dry and lowland mesic ecosystems in the Waianae Mountains (U.S. Army 2006; TNC 2007; HBMP 2008).

*Hyperzia nutans* (formerly *Phlegmariurus nutans*) (wawaeiole), a fern ally in the hanging fir-moss family (Lycopodiaceae), is known from Kauai and Oahu (Palmer 2003, p. 257). At the time we designated critical habitat in 2003, there were 3 occurrences containing 7 individuals in the Koolau Mountains of Oahu. Currently, there are 2 occurrences totaling between 10 to 15 individuals in the lowland wet and wet cliff ecosystems in the Koolau Mountains (U.S. Army 2006; TNC 2007; HBMP 2008).

*Isodendron laurifolium* (aupaka), a shrub in the violet family (Violaceae), is known from Kauai and Oahu (Wagner *et al.* 1999, p. 1,329). This species was historically known from both the Koolau and Waianae Mountains (HBMP 2008). At the time we designated critical habitat in 2003, there were 5 occurrences totaling between 22 and 23 individuals in the Waianae Mountains of Oahu. Currently, there are 5 known occurrences totaling between 24 and 64 individuals in the dry cliff ecosystem in the Waianae Mountains (U.S. Army 2006; TNC 2007; HBMP 2008).

*Isodendron longifolium* (aupaka), a shrub in the violet family (Violaceae), is known from Kauai and Oahu (Wagner *et al.* 1999, pp. 1,329–1,331). At the time we designated critical habitat in 2003, this species was known from 7 occurrences totaling 30 individuals in the Waianae and Koolau Mountains of Oahu. Currently, there are 4 occurrences of *I. longifolium* totaling between 32 and 36 individuals in the lowland mesic and lowland wet ecosystems in the Waianae and Koolau Mountains (U.S. Army 2006; TNC 2007; HBMP 2008).

*Isodendron pyriformium* (wahine noho kula), a shrub in the violet family (Violaceae), is known from Oahu, Maui, Hawaii, Niihau, Molokai, and Lanai (Wagner *et al.* 1999, p. 1,331). At the time we designated critical habitat in 2003, this species was no longer extant on Oahu. Currently, there are no known occurrences on Oahu; however, *I. pyriformium* was documented in the lowland dry and dry cliff ecosystems in the Waianae Mountains (TNC 2007; HBMP 2008).

*Kadua coriacea* (formerly *Hedyotis coriacea*) (kioele), a shrub in the coffee family (Rubiaceae), is known from Oahu, Maui, and Hawaii (Wagner *et al.* 1999, p. 1,141). At the time we designated critical habitat in 2003, this species was known only from historical occurrences on Oahu. Currently, there are no known occurrences on Oahu; however, *K. coriacea* is historic to the lowland mesic ecosystem in the Waianae and Koolau Mountains (TNC 2007; HBMP 2008).

*Kadua degeneri* (formerly *Hedyotis degeneri*) (NCN), a shrub in the coffee family (Rubiaceae), is endemic to the Waianae Mountains of Oahu (Wagner *et al.* 1999, pp. 1,141–1,142). Two varieties have been recognized. *Kadua degeneri* var. *coprosmyfolia* occurred in the lowland mesic ecosystem until the late 1980s; however, this occurrence may no longer be extant (Motley 2006, pers. comm.; HBMP 2008). *Kadua degeneri* var. *degeneri* was known from 4 occurrences, totaling 60 individuals at the time we designated critical habitat in 2003, and currently there are 4 to 5 occurrences totaling between 280 and 370 individuals, in the lowland mesic and dry cliff ecosystems in the Waianae Mountains (U.S. Army 2006; TNC 2007; HBMP 2008).

*Kadua parvula* (formerly *Hedyotis parvula*) (NCN), a small shrub in the coffee family (Rubiaceae), is endemic to the Waianae Mountains of Oahu (Wagner *et al.* 1999, pp. 1,149–1,150). At the time we designated critical habitat in 2003, this species was known from 7 occurrences totaling between 116 and 131 individuals. Currently, K.

*parvula* is found in 2 occurrences totaling approximately 240 individuals, in the lowland mesic and dry cliff ecosystems in the Waianae Mountains (U.S. Army 2003, pp. 16–91–16–95; U.S. Army 2006; TNC 2007; HBMP 2008; U.S. Army Garrison 2008, p. 2–45).

*Labordia cyrtandrae* (kamakahala), a shrub in the logania family (Loganiaceae), is endemic to the Waianae and Koolau Mountains of Oahu (Wagner *et al.* 1999, pp. 854–855). At the time we designated critical habitat in 2003, *L. cyrtandrae* was known from the Waianae Mountains, in 10 occurrences containing 20 individuals. Currently, due to an increase in survey efforts over the last 6 years in potentially suitable habitat for this species, there are 3 occurrences totaling 44 individuals in the lowland mesic, lowland wet, montane wet, and wet cliff ecosystems in the Waianae Mountains; and one individual in the lowland wet ecosystem in the Koolau Mountains, with historical occurrences in the lowland mesic and wet cliff ecosystems of the Koolau Mountains (U.S. Army 2006a; U.S. Army 2006b, pp. 3–2–13–3–2–17; TNC 2007; HBMP 2008).

*Lepidium arbuscula* (anaunau), a shrub in the mustard family (Brassicaceae), is endemic to the Waianae Mountains of Oahu (Wagner *et al.* 1999, p. 406). At the time we designated critical habitat in 2003, there were 10 occurrences totaling approximately 1,000 individuals. Currently, there are 9 occurrences totaling fewer than 900 individuals in the dry cliff ecosystem in the Waianae Mountains (U.S. Army 2006; TNC 2007; HBMP 2008).

*Lipochaeta lobata* var. *leptophylla* (nehe), a perennial herb in the sunflower family (Asteraceae), is endemic to the Waianae Mountains of Oahu (Wagner *et al.* 1999, pp. 337–338). At the time we designated critical habitat in 2003, this species was known from 4 occurrences totaling 147 individuals. Currently, there are 4 occurrences of approximately 150 individuals in the dry cliff ecosystem in the Waianae Mountains (U.S. Army 2006; TNC 2007; HBMP 2008).

*Lobelia gaudichaudii* ssp. *koolauensis* (NCN), a shrub in the bellflower family (Campanulaceae), is endemic to the Koolau Mountains of Oahu (Lammers 1999, p. 476). At the time we designated critical habitat in 2003, there were 5 occurrences totaling fewer than 270 individuals. Currently, this species is known from 2 occurrences totaling approximately 280 individuals in the lowland wet ecosystem in the Koolau

Mountains (U.S. Army 2006; TNC 2007; HBMP 2008).

*Lobelia monostachya* (NCN), a shrub in the bellflower family (Campanulaceae), is endemic to the Koolau Mountains of Oahu (Lammers 1999, p. 478). At the time we designated critical habitat in 2003, *L. monostachya* was known from one occurrence of three individuals. Currently, there are two occurrences (eight individuals) in the lowland mesic ecosystem in the Koolau Mountains (U.S. Army 2006; PEP 2007, p. 33; TNC 2007; HBMP 2008).

*Lobelia niihauensis* (NCN), a shrub in the bellflower family (Campanulaceae), is known from Oahu, Kauai, and Niihau (Lammers 1999, pp. 478–479). At the time we designated critical habitat in 2003, there were 40 occurrences containing between 362 and 397 individuals in the Waianae Mountains of Oahu. Currently, there are 14 occurrences totaling approximately 400 individuals in the lowland mesic and dry cliff ecosystems in the Waianae Mountains (U.S. Army 2006; TNC 2007; HBMP 2008).

*Lobelia oahuensis* (NCN), a shrub in the bellflower family (Campanulaceae), is endemic to the Waianae and Koolau Mountains of Oahu (Lammers 1999, p. 479). At the time we designated critical habitat in 2003, this species was known from 12 occurrences totaling 42 individuals. Currently, *L. oahuensis* is found in 7 occurrences totaling 41 individuals in the lowland wet, montane wet, and wet cliff ecosystems in the Waianae Mountains; and in the lowland wet and wet cliff ecosystems in the Koolau Mountains (U.S. Army 2006; TNC 2007; HBMP 2008).

*Lysimachia filifolia* (NCN), a small shrub in the primrose family (Primulaceae), is found on Kauai and Oahu (Wagner *et al.* 1999, p. 1,080). At the time we designated critical habitat in 2003, this species was known from 1 occurrence containing 50 individuals in the Koolau Mountains of Oahu. Currently, *L. filifolia* is found in 2 to 3 occurrences totaling between 50 and 160 individuals in the wet cliff ecosystem in the Koolau Mountains (U.S. Army 2006; TNC 2007; HBMP 2008).

*Marsilea villosa* (ihi ihi), a fern in the water clover fern family (Marsileaceae), is known from Niihau, Molokai, and Oahu (Palmer 2003, pp. 180–182). At the time we designated critical habitat in 2003, this species was known from five occurrences of an unknown number of individuals on Oahu. Currently, *M. villosa* is found in five to six occurrences of an unknown number of individuals in seasonal wetlands of the

coastal and lowland dry ecosystems in the Waianae and Koolau Mountains (TNC 2007; HBMP 2008; Chau 2009, in litt.).

*Melanthera tenuifolia* (formerly *Lipochaeta tenuifolia*) (nehe), a perennial herb in the sunflower family (Asteraceae), is endemic to the Waianae Mountains of Oahu (Wagner *et al.* 1999, p. 343). At the time we designated critical habitat in 2003, this species was known from 41 occurrences containing between 759 and 1,174 individuals. Currently, *M. tenuifolia* is found in 11 occurrences totaling as many as 4,000 individuals in the lowland dry, lowland mesic, and dry cliff ecosystems in the Waianae Mountains (U.S. Army 2006; TNC 2007; HBMP 2008).

*Melicope lydgatei* (alani), a small shrub in the rue family (Rutaceae), is endemic to the Koolau Mountains of Oahu (Stone *et al.* 1999, p. 1,193). At the time we designated critical habitat in 2003, this species was known from 18 occurrences containing an unknown number of individuals. Currently, *M. lydgatei* is found in 5 occurrences totaling 26 individuals in the lowland mesic and lowland wet ecosystems in the Koolau Mountains (U.S. Army 2006; TNC 2007; HBMP 2008).

*Melicope pallida* (alani), a tree in the rue family (Rutaceae), is known from Kauai and Oahu (Stone *et al.* 1999, pp. 1,198–1,199). At the time we designated critical habitat in 2003, this species was known from one individual in the Waianae Mountains of Oahu. Currently, one individual is found in the lowland mesic ecosystem in the Waianae Mountains (TNC 2007; HBMP 2008).

*Melicope saint-johnii* (alani), a tree in the rue family (Rutaceae), is endemic to the Waianae and Koolau Mountains of Oahu (Stone *et al.* 1999, pp. 1,203–1,204). At the time we designated critical habitat in 2003, there were no individuals in the Koolau Mountains, and 6 occurrences totaling fewer than 170 individuals in the Waianae Mountains. Currently, *M. saint-johnii* is found in the lowland mesic and dry cliff ecosystems of the Waianae Mountains, in 2 occurrences totaling as many as 162 individuals (TNC 2007; HBMP 2008). Historically, this species also occurred in the lowland mesic ecosystem in the Koolau Mountains.

*Myrsine juddii* (kolea), a shrub in the myrsine family (Myrsinaceae), is endemic to the Koolau Mountains of Oahu (Wagner *et al.* 1999, pp. 940–941). At the time we designated critical habitat in 2003, this species was known from 3 occurrences with an estimated 5,000 individuals. Currently, there is a single wide-ranging occurrence, estimated to contain 3,000 individuals,

in the lowland wet ecosystem in the Koolau Mountains (U.S. Army Garrison 2005b, p. 16–123; HBMP 2008).

*Neraudia angulata* (NCN), a shrub in the nettle family (Urticaceae), is endemic to the Waianae Mountains of Oahu (Wagner *et al.* 1999, pp. 1,302–1,303). At the time we designated critical habitat in 2003, the two recognized varieties, *N. angulata* var. *angulata* and *N. angulata* var. *dentata*, were found in 27 occurrences totaling 51 individuals. Currently, there are 4 occurrences (106 individuals) considered to be *N. angulata* var. *angulata*, and 2 occurrences (3 individuals) considered to be *N. angulata* var. *dentata*. Intermediate forms of the two varieties are found in 2 occurrences totaling over 100 individuals. The six occurrences are found in the lowland dry, lowland mesic, and dry cliff ecosystems in the Waianae Mountains. The numbers of individuals in each occurrence vary widely from year to year (U.S. Army Garrison 2003, pp. 16–116–16–119; U.S. Army 2006, pp. 3–1–129–3–1–139; TNC 2007; HBMP 2008).

*Nototrichium humile* (kului), a shrub in the amaranth family (Amaranthaceae), is known from Oahu and east Maui (Wagner *et al.* 1999, pp. 193–194). At the time we designated critical habitat in 2003, there were 25 occurrences containing between 775 and 995 individuals in the Waianae Mountains of Oahu. Currently, there are 12 occurrences totaling over 1,000 individuals in the lowland dry, lowland mesic, and dry cliff ecosystems in the Waianae Mountains (U.S. Army 2006; U.S. Army Garrison 2006, pp. 3–1–140–3–1–146; TNC 2007; HBMP 2008).

*Peucedanum sandwicense* (makou), a perennial herb in the parsley family (Apiaceae), is known from Kauai, Molokai, Maui, and Oahu (Constance and Affolter 1999, p. 208; HBMP 2008). At the time we designated critical habitat in 2003, this species was found in 4 occurrences containing 51 individuals in the Waianae Mountains of Oahu. Currently, there are 2 occurrences totaling 61 individuals in the dry cliff ecosystem in the Waianae Mountains (U.S. Army 2006; TNC 2007; HBMP 2008).

*Phyllostegia hirsuta* (NCN), a subshrub or vine in the mint family (Lamiaceae), is endemic to the Waianae and Koolau Mountains of Oahu (Wagner *et al.* 1999, p. 817). At the time we designated critical habitat in 2003, this species was known from 26 occurrences totaling between 214 and 277 individuals in the Waianae and Koolau Mountains. Currently, there are 9 occurrences totaling approximately 160

individuals in the lowland mesic, lowland wet, and wet cliff ecosystems in both the Waianae and Koolau Mountains; and in the montane wet ecosystem in the Waianae Mountains (U.S. Army 2006; U.S. Army Garrison 2006, pp. 3–2–24–3–2–28; TNC 2007; HBMP 2008).

*Phyllostegia kaalaensis* (NCN), an herb in the mint family (Lamiaceae), is endemic to the Waianae Mountains of Oahu (Wagner 1999, p. 270). At the time we designated critical habitat in 2003, this species was known from 7 occurrences containing fewer than 45 individuals. All of those occurrences (in the lowland mesic and dry cliff ecosystems in the Waianae Mountains) have since then been extirpated. However, there are 14 individuals outplanted in 4 locations in the Waianae Mountains (U.S. Army Garrison 2006, pp. 3–1–147–3–1–152).

*Phyllostegia mollis* (NCN), a perennial herb in the mint family (Lamiaceae), is known from Molokai, Maui, and Oahu (Wagner *et al.* 1999, p. 821). This species was historically known from both the Koolau and Waianae Mountains. At the time we designated critical habitat in 2003, this species was found in 5 occurrences totaling between 85 and 105 individuals only in the Waianae Mountains of Oahu. Currently, *P. mollis* is known from 6 occurrences totaling between 42 and 92 individuals in the lowland mesic and lowland wet ecosystems in the Waianae Mountains (U.S. Army 2006; TNC 2007; HBMP 2008).

*Phyllostegia parviflora* (NCN), a perennial herb in the mint family (Lamiaceae), is known from Oahu, Maui, and the island of Hawaii (Wagner *et al.* 1999, pp. 821–822; Wagner 1999, p. 273). There are three recognized varieties: *Phyllostegia parviflora* var. *glabriuscula* is known only from the island of Hawaii, *P. parviflora* var. *parviflora* is found on Maui and the Koolau Mountains of Oahu, and *P. parviflora* var. *lydgatei* is known from Oahu's Waianae Mountains. At the time we designated critical habitat in 2003, *P. parviflora* var. *parviflora* was known from 30 individuals in 1 occurrence in the Koolau Mountains, and *P. parviflora* var. *lydgatei* was known from 4 individuals in the Waianae Mountains. Currently, all four wild individuals of *P. parviflora* var. *lydgatei* in the Waianae Mountains are extirpated; however, 100 individuals have been outplanted (TNCH 1997, p. A–10; Sailer 2006, in litt.). *Phyllostegia parviflora* var. *parviflora* is known from approximately 100 individuals in the lowland wet and wet cliff ecosystems in the Koolau Mountains (NTBG 2009).

*Plantago princeps* (laukahi kuahiwi), a small shrub or perennial herb in the plantain family (Plantaginaceae), is known from Kauai, Oahu, Maui, and Molokai, and occurred historically on the island of Hawaii (Wagner *et al.* 1999, pp. 1,054–1,055). *Plantago princeps* is subdivided into four varieties: *P. princeps* var. *anomala* (Kauai), *P. princeps* var. *laxifolia* (Molokai, Maui, Hawaii), *P. princeps* var. *longibracteata* (Kauai and Oahu), and *P. princeps* var. *princeps* (Oahu). At the time we designated critical habitat in 2003, *P. princeps* var. *longibracteata*, known from the lowland wet ecosystem, was no longer extant on Oahu (TNC 2007; HBMP 2008). *Plantago princeps* var. *princeps* was known from 11 occurrences containing between 130 and 180 individuals. Currently, only *P. princeps* var. *princeps* is extant on Oahu, in 7 occurrences totaling between 159 and 232 individuals, in the lowland mesic, lowland wet, and dry cliff ecosystems in the Waianae Mountains, and in the lowland wet and wet cliff ecosystems in the Koolau Mountains. This taxon historically also occurred in the lowland mesic ecosystem in the Koolau Mountains (TNC 2007; HBMP 2008).

*Platanthera holochila* (NCN), an herb in the orchid family (Orchidaceae), is known from Kauai, Oahu, Molokai, and Maui (Wagner *et al.* 1999, p. 1,474). This species was last collected on Oahu in 1938, in the lowland wet ecosystem in the Koolau Mountains (TNC 2007; HBMP 2008).

*Pteris lidgatei* (NCN), a terrestrial fern in the maidenhair fern family (Adiantaceae), is known from Maui, Molokai, and Oahu (Palmer 2003, pp. 227–229). At the time we designated critical habitat in 2003, this species was found in 9 occurrences totaling 13 individuals in the Koolau Mountains of Oahu. Currently, there are 5 occurrences totaling between 17 and 24 individuals in the lowland wet ecosystem in the Koolau Mountains (U.S. Army 2006; TNC 2007; HBMP 2008).

*Sanicula mariversa* (NCN), a perennial herb in the parsley family (Apiaceae), is endemic to the Waianae Mountains of Oahu (Constance and Affolter, pp. 209–210). At the time we designated critical habitat in 2003, this species was known from 4 occurrences containing approximately 170 individuals. Currently, *S. mariversa* is found in 2 occurrences totaling as many as 188 individuals in the lowland mesic and dry cliff ecosystems in the Waianae Mountains (U.S. Army 200a; U.S. Army Garrison 2006, pp. 3–1–169–3–1–174; TNC 2007; HBMP 2008).

*Sanicula purpurea* (NCN), a stout perennial herb in the parsley family (Apiaceae), is known from Maui and Oahu (Constance and Affolter 1999, p. 210). At the time we designated critical habitat in 2003, there were 5 occurrences totaling 21 individuals in the Koolau Mountains. Currently, *S. purpurea* is found in 5 occurrences totaling 24 individuals in the lowland wet and wet cliff ecosystems in the Koolau Mountains (U.S. Army 2006; TNC 2007; HBMP 2008).

*Schiedea hookeri* (NCN), a perennial herb in the pink family (Caryophyllaceae), is known from Oahu and from a fragmentary collection from Maui that may represent a different species (Wagner *et al.* 1999, p. 514). At the time we designated critical habitat in 2003, this species was known from 17 occurrences containing between 328 and 378 individuals in the Waianae Mountains of Oahu. Currently, *S. hookeri* is found in 17 occurrences totaling approximately the same number of individuals, in the lowland dry, lowland mesic, lowland wet, dry cliff, and wet cliff ecosystems in the Waianae Mountains (U.S. Army 2006; TNC 2007; HBMP 2008).

*Schiedea kaalae* (NCN), a nearly stemless plant in the pink family (Caryophyllaceae), is endemic to the Waianae and Koolau Mountains of Oahu (Wagner *et al.* 1999, p. 515). At the time we designated critical habitat in 2003, this species was known from 7 occurrences totaling 49 individuals in the Waianae and Koolau Mountains. Currently, *S. kaalae* is found in 9 occurrences totaling 40 individuals, in the lowland mesic, lowland wet, and wet cliff ecosystems in the Waianae Mountains, and in the lowland mesic and wet cliff ecosystems in the Koolau Mountains (U.S. Army 2006; TNC 2007; HBMP 2008).

*Schiedea kealiae* (maolioli), a subshrub in the pink family (Caryophyllaceae), is endemic to the Waianae Mountains of Oahu (Wagner *et al.* 1999, p. 515). At the time we designated critical habitat in 2003, this species was known from 4 occurrences totaling between 265 and 315 individuals in the Waianae Mountains. Currently, *S. kealiae* is found in 1 occurrence totaling between 50 and 100 individuals, in the coastal and lowland dry ecosystems in the Waianae Mountains (U.S. Army 2006; TNC 2007; HBMP 2008).

*Schiedea nuttallii* (NCN), a subshrub in the pink family (Caryophyllaceae), is known from Kauai, Oahu, Molokai, and Maui (Wagner *et al.* 1999, pp. 517–519; Wagner *et al.* 2005). At the time we designated critical habitat in 2003, this

species was found in 7 occurrences with 49 individuals in the Waianae Mountains. Currently, there are 2 occurrences totaling between 41 and 54 individuals in the lowland mesic ecosystem in the Waianae Mountains (U.S. Army 2006; TNC 2007; HBMP 2008). Historical occurrences of this species were also known from the lowland mesic ecosystem in the Koolau Mountains (TNC 2007; HBMP 2008).

*Schiedea obovata* (formerly *Alsinidendron obovatum*) (NCN), a subshrub in the pink family (Caryophyllaceae), is endemic to the Waianae Mountains of Oahu (Wagner *et al.* 1999, p. 501). At the time we designated critical habitat in 2003, *S. obovata* was known from 6 occurrences containing 8 to 10 individuals in the Waianae Mountains. Currently, this species is found in 2 to 3 occurrences, totaling between 14 and 44 individuals, in the lowland mesic and dry cliff ecosystems in the Waianae Mountains (U.S. Army 2006; U.S. Army Garrison 2006, pp. 3–1–190–3–1–197; TNC 2007; HBMP 2008).

*Schiedea trinervis* (formerly *Alsinidendron trinerve*) (NCN), a subshrub in the pink family (Caryophyllaceae), is endemic to the Waianae Mountains of Oahu (Wagner *et al.* 1999, p. 501). At the time we designated critical habitat in 2003, this species was known from 13 occurrences totaling between 18 and 34 individuals. Currently, *S. trinervis* is found in 2 occurrences, totaling 192 individuals, in the montane wet, dry cliff, and wet cliff ecosystems in the Waianae Mountains (U.S. Army 2006; U.S. Army Garrison 2005b, pp. 16–151–16–153; TNC 2007; HBMP 2008).

*Sesbania tomentosa* (ohai), a shrub in the pea family (Fabaceae), is known from all of the main Hawaiian Islands, and from the Northwestern Hawaiian Islands of Necker and Nihoa (Geesink *et al.* 1999, pp. 704–705). At the time we designated critical habitat in 2003, this species was known from Kauai, Oahu, Molokai, Kahoolawe, Maui, Hawaii, Nihoa, and Necker. On Oahu, *S. tomentosa* was found in 3 occurrences totaling 55 individuals. Currently on Oahu, there are 2 outplanted occurrences totaling approximately 30 individuals in the coastal ecosystem at Kaena Point and Kaohikaipu islet (U.S. Army 2006; TNC 2007; HBMP 2008).

*Silene lanceolata* (NCN), a subshrub in the pink family (Caryophyllaceae), is known from Kauai, Oahu, Lanai, Molokai, and Hawaii (Wagner *et al.* 1999, p. 523). At the time we designated critical habitat in 2003, there were 4 occurrences with 62 individuals in the Waianae Mountains of Oahu. Currently,

*S. lanceolata* is found in 3 occurrences totaling between 100 and 130 individuals, in the dry cliff ecosystem in the Waianae Mountains (U.S. Army 2006; TNC 2007; HBMP 2008).

*Silene perlmanii* (NCN), a subshrub in the pink family (Caryophyllaceae), is endemic to the Waianae Mountains of Oahu (Wagner *et al.* 1999, pp. 523–524). At the time we designated critical habitat in 2003, this species was presumed extirpated. Currently, *S. perlmanii* is in propagation, and 15 individuals were outplanted in the Honouliuli Preserve between 2003 and 2006. However, as of 2007, only three plants were extant (Sailer 2007, pers. comm.).

*Solanum sandwicense* (popolo aiakeakua), a shrub in the nightshade family (Solanaceae), is known from Kauai and the lowland mesic ecosystem in the Waianae and Koolau Mountains of Oahu (Symon 1999, p. 1,275). This species was last observed on Oahu in 2000, in the Waianae Mountains. Currently, there are at least six outplantings of this species totaling an unknown number of individuals in the Waianae Mountains (PEP 2007, p. 27; TNC 2007; HBMP 2008).

*Spermolepis hawaiiensis* (NCN), an annual herb in the parsley family (Apiaceae), is known from Oahu and Maui (Constance and Affolter 1999, p. 212). At the time we designated critical habitat in 2003, there were 6 occurrences totaling between 110 and 910 individuals in the Waianae and Koolau Mountains (Diamond Head), in the lowland dry and dry cliff ecosystems. Currently, *S. hawaiiensis* is found in 4 occurrences totaling several hundred to thousands of individuals, depending on annual weather conditions (U.S. Army 2006; TNC 2007; HBMP 2008).

*Stenogyne kanehoana* (NCN), a vine in the mint family (Lamiaceae), is endemic to the Waianae Mountains of Oahu (Weller and Sakai 1999, pp. 838–839). At the time we designated critical habitat in 2003, this species was known from a recently extirpated occurrence of two individuals, and a newly discovered occurrence (in 2000) of one to six individuals in the lowland mesic ecosystem in the Waianae Mountains. Currently, the occurrence discovered in 2000 is no longer extant; however, another individual was discovered in 2004, and may persist at this time (U.S. Army Garrison 2005b, pp. 16–155–16–157; U.S. Army 2006; TNC 2007; HBMP 2008).

*Tetramolopium filiforme* (NCN), a dwarf shrub in the sunflower family (Asteraceae), is endemic to the Waianae Mountains of Oahu (Wagner *et al.* 1999,

p. 366). At the time we designated critical habitat in 2003, there were 21 occurrences containing approximately 250 individuals. Currently, this species is found in the dry cliff ecosystem in the Waianae Mountains, in 6 occurrences totaling almost 3,000 individuals (U.S. Army Garrison 2006b, pp. 3–1–198–3–1–204; TNC 2007; HBMP 2008). The large increase in the number of individuals is likely due to an increase in survey efforts over the past 6 years in potentially suitable habitat for this species (U.S. Army Garrison 2006b, p. 3–1–202).

*Tetralopium lepidotum* ssp. *lepidotum* (NCN), a shrub in the sunflower family (Asteraceae), is known from Lanai, Maui, and Oahu (Wagner *et al.* 1999, p. 367). At the time we designated critical habitat in 2003, there were 5 occurrences of approximately 15 individuals in the Waianae Mountains of Oahu. Currently, this species is found in 3 occurrences totaling 65 individuals, in the lowland mesic and dry cliff ecosystems in the Waianae Mountains (U.S. Army 2006; TNC 2007; HBMP 2008).

*Tetraplasandra gymnocarpa* (ohe ohe), a tree in the ginseng family (Araliaceae), is endemic to the Koolau Mountains of Oahu, and was historically known from one location in the Waianae Mountains (Lowry 1999, p. 234). At the time we designated critical habitat in 2003, there were 30 occurrences totaling fewer than 100 individuals in the Koolau Mountains. Currently, there are 13 occurrences totaling approximately 140 individuals in the lowland mesic, lowland wet, and wet cliff ecosystems in the Koolau Mountains (U.S. Army 2006; TNC 2007; HBMP 2008).

*Trematolobelia singularis* (NCN), a shrub in the bellflower family (Campanulaceae), is endemic to the Koolau Mountains of Oahu (Lammers 1999, p. 488). At the time we designated critical habitat in 2003, there were 3 occurrences totaling 165 individuals. Currently, *T. singularis* is found in 4 occurrences totaling approximately 360 individuals in the lowland wet and wet cliff ecosystems in the Koolau Mountains (U.S. Army 2006; TNC 2007; HBMP 2008).

*Urera kaalae* (opuhe), a small tree or shrub in the nettle family (Urticaceae), is endemic to the Waianae Mountains of Oahu (Wagner *et al.* 1999, pp. 1,313–1,314). At the time we designated critical habitat in 2003, there were 12 occurrences containing 41 individuals. Currently, *U. kaalae* is found in 4 occurrences totaling between 49 and 60 individuals, in the lowland mesic and lowland wet ecosystems in the Waianae

Mountains (U.S. Army 2006; TNC 2007; HBMP 2008).

*Vigna o-wahuensis* (NCN), a twining annual or perennial herb in the pea family (Fabaceae), is known from Niihau, Oahu, Molokai, Lanai, Kahoolawe, Maui, and Hawaii (Geesink *et al.* 1999, p. 720). The last collection from Oahu was made on the Mokulua Islets and North Islet, off Oahu's northeastern coast, in 1938, in the coastal ecosystem. At the time we designated critical habitat in 2003, there were no known occurrences, and currently, there are still no known occurrences on Oahu's offshore islets (TNC 2007; HBMP 2008).

*Viola chamissoniana* ssp. *chamissoniana* (pamakani), a shrub in the violet family (Violaceae), is endemic to the Waianae Mountains of Oahu (Wagner *et al.* 1999, p. 1,333). At the time we designated critical habitat in 2003, there were 15 occurrences containing 59 individuals. Currently, this species is found in 8 occurrences totaling slightly more than 600 individuals in the lowland mesic and dry cliff ecosystems in the Waianae Mountains (U.S. Army Garrison 2006b, pp. 3–1–205–3–1–210; TNC 2007; HBMP 2008).

*Viola oahuensis* (NCN), a subshrub in the violet family (Violaceae), is endemic to the Koolau Mountains of Oahu (Wagner *et al.* 1999, p. 1,336). At the time we designated critical habitat in 2003, there were 18 occurrences totaling fewer than 200 individuals. Currently, there are 8 occurrences totaling approximately 170 individuals in the lowland wet and wet cliff ecosystems in the Koolau Mountains (U.S. Army 2006; TNC 2007; HBMP 2008).

#### Methods

As required by section 4(b) of the Act, we used the best scientific data available in determining those areas that contain the physical or biological features essential to the conservation of the 124 species, and for which designation of critical habitat is considered prudent, by identifying the occurrence for each species and determining the ecosystems upon which they depend. This information was developed by using:

- The known locations of the 124 species, including site-specific species information from the HBMP database (HBMP 2008), the Army Environmental Division database (U.S. Army 2006), and our own rare plant database;
- Species information from the plant databases housed at NTBG;
- Oahu map of important habitat for the recovery of plants protected under the Act (Service 1999, p. F–7);

- Geographic Information System (GIS) map layer of habitat essential to the recovery of Hawaiian plants as determined by the Hawaii and Pacific Plant Recovery Coordinating Committee (HPPRCC 1998);

- Geodatabase feature dataset for Oahu soils (NRCS 2007);
- The Nature Conservancy's Ecoregional Assessment of the Hawaiian High Islands (2006) and ecosystem maps (2007);

- Color mosaic 1:19,000 scale digital aerial photographs for the Hawaiian Islands (April to May 2005);

- Island-wide GIS coverage (e.g., Gap Analysis Program (GAP)) vegetation data of 2005;

- 1:24,000 scale digital raster graphics of U.S. Geological Survey (USGS) topographic quadrangles;

- Geospatial data sets associated with parcel data from Honolulu County (2012);

- Final critical habitat designation for listed plant species on the island of Oahu (68 FR 35950, June 17, 2003);

- The FWS report (June 2012) "Recovery Needs and Strategy for 'Akoko'";

- Recent biological surveys and reports; and

- Discussions with qualified individuals familiar with these species and ecosystems (HBMP 2008; TNC 2007; NTBG 2007; PEP 2007; Polhemus 2008, pers. comm.; Bakutis, 2006, in litt.).

#### 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 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 physical or biological features provide the necessary life-history requirements of the species and 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.

For plant species, ecosystems that provide appropriate seasonal wetland and dry land habitats, host species, pollinators, soil types, and associated plant communities are taken into consideration when determining the physical or biological features essential for a species.

Under section 4(a)(3)(A)(ii) of the Act we may, as appropriate, revise a critical habitat designation. For the reasons described above, we revise critical habitat for 99 Oahu plants based on new information received since 2003, and the need to designate unoccupied habitat to conserve the species. We have derived the specific physical or biological features required for each of the 99 Oahu plants based on studies of their habitat, ecology, and life history; information in the 2003 critical habitat designations; and new scientific information that has become available since that time. In addition, the Recovery Plan for the Oahu Plants (Service 1998, p. vii) identifies several actions needed to recover these species, including expanding existing wild populations and reestablishing wild populations within the historic range. In accordance with the recovery plan, we have determined that designating certain unoccupied habitat is essential to the conservation of the species and that designation limited to occupied areas would be inadequate to ensure the conservation of the species. The physical or biological features for occupied areas, in conjunction with the unoccupied areas needed to expand and reestablish wild populations within the historical range, provide a more comprehensive view of the recovery needs and relevant geographic areas for each species. We believe this information will be helpful to Federal agencies and our other partners, as we collectively work to recover these imperiled species.

In 2003, the physical or biological features for each plant species were defined on the basis of habitat features of the areas actually occupied by the plants, which included plant community, associated native plant species, locale information (e.g., steep rocky cliffs, talus slopes, gulches, stream banks), and elevation (68 FR

35950; June 17, 2003). However, since 2003, we have found that many areas where these species are currently or recently reported are marginal habitat; the species occurs in these areas due to remoteness or inaccessibility to feral ungulates. In this final rule, the physical or biological features have been categorized into the ecosystem types on which these species depend. They have also been more precisely identified, and now include elevation, precipitation, substrate, canopy, subcanopy, and understory characteristics.

We identify these features in areas occupied by the species at the time of listing, focusing on the features' primary constituent elements. We consider the primary constituent elements (PCEs) to be the elements of physical and biological features that, provide for a species' life-history processes and are essential to the conservation of the species. In this rule, PCEs for each of the 124 species are defined based on those physical or biological features essential to support the successful functioning of the ecosystem upon which each species depends, and which may require special management considerations or protection. As the conservation of each species is dependent upon a functioning ecosystem to provide its fundamental life requirements, such as a certain soil type, minimum level of rainfall, or suitable water quantity (in the case of the three damselflies), we consider the physical or biological features present in the ecosystems described in this rule to provide the necessary PCEs for each species. The ecosystems' features collectively provide the suite of environmental conditions within each ecosystem essential to meeting the requirements of each species, including the appropriate microclimatic conditions for germination and growth of the plants (e.g., light availability, soil nutrients, hydrologic regime, temperature); adequate instream flows and upland habitat for cover and foraging for the damselfly species; maintenance of upland habitat so that it provides for the proper ecological functioning of streams for the damselflies (e.g., water quality, water temperature); and in all cases, space within the appropriate habitats for

population growth and expansion, as well as to maintain the historical, geographical, and ecological distribution of each species. In many cases, due to our limited knowledge of the specific life-history requirements for these species, which are little-studied and occur in remote and inaccessible areas, the more general description of the physical or biological features that provide for the successful function of the ecosystem that is essential to the conservation of the species represents the best scientific information available. Accordingly, for purposes of this rule, the physical or biological features of a properly functioning ecosystem are the physical or biological features essential to the conservation of the 124 species in this rule that occur in those ecosystems.

Table 4 identifies the physical or biological features of a functioning ecosystem for each of the ecosystem types identified in this rule, and each species identified in this rule requires the physical or biological features for each ecosystem in which that species occurs, as noted in Table 5. These physical or biological features provide the PCEs for the individual species in each ecosystem. The physical or biological features are defined here by elevation, annual levels of precipitation, substrate type and slope, and the ability to support viable populations of characteristic native plant genera that are found in the canopy, subcanopy, and understory levels of the vegetative community where applicable. If further information is available indicating additional, specific life-history requirements for some species, PCEs relating to these requirements are described separately and are termed "unique PCEs for species," and are identified in Table 5. The PCEs for each species are therefore composed of the physical or biological features found in its functioning ecosystem(s), in combination with additional unique requirements, if any, as shown in Table 4. Note that the PCEs identified in Table 5 for each species are directly related to the physical or biological features presented in detail in Table 4; thus, both Tables 4 and 5 must be read together to fully describe all of the PCEs for each species.

TABLE 4—PHYSICAL OR BIOLOGICAL FEATURES IN EACH ECOSYSTEM  
 [Read in association with table 5]

Ecosystem	Elevation	Annual precipitation	Substrate	Capable of Supporting Viable Populations of Associated Native Plant Genera		
				Canopy	Subcanopy	Understory
<b>Physical or Biological Features</b>						
Coastal <sup>1</sup> .....	< 980 ft (< 300 m)	< 20 in (50 cm) ...	Well-drained, calcareous, talus slopes; weathered clay soils; ephemeral pools; mudflats.	<i>Hibiscus, Myoporum, Santalum, Scaevola.</i>	<i>Gossypium, Sida, Vitex.</i>	<i>Eragrostis, Jacquemontia, Lyceum, Nama, Sesuvium, Sporobolus, Vigna</i>
Lowland Dry <sup>2</sup> .....	< 3,300 ft (<1,000 m).	< 50 in (130 cm)	Weathered silty loams to stony clay, rocky ledges, little-weathered lava.	<i>Diospyros, Myoporum, Pleomele, Santalum, Sapindus.</i>	<i>Chamaesyce, Dodonaea, Leptecophylla, Osteomeles, Psydrax, Scaevola, Wikstroemia.</i>	<i>Alyxia, Artemisia, Bidens, Chenopodium, Nephrolepis, Peperomia, Plumbago, Sicyos, Sida, Waltheria</i>
Lowland Mesic <sup>3</sup> .....	< 3,300 ft (<1,000 m).	50–75 in (130–190 cm).	Shallow soils, little to no herbaceous layer.	<i>Acacia, Diospyros, Metrosideros, Myrsine, Pouteria, Santalum.</i>	<i>Dodonaea, Freycinetia, Leptecophylla, Melanthera, Osteomeles, Pleomele, Psydrax.</i>	<i>Carex, Dicranopteris, Diplazium, Elaphoglossum, Peperomia</i>
Lowland Wet <sup>4</sup> .....	< 3,300 ft (<1,000 m).	> 75 in (> 190 cm).	Clays; ashbeds; deep, well-drained soils; lowland bogs.	<i>Antidesma, Metrosideros, Myrsine, Pisonia, Psychotria.</i>	<i>Cibotium, Claoxylon, Kadua, Melicope.</i>	<i>Alyxia, Cyrtandra, Dicranopteris, Diplazium, Machaerina, Microlepia</i>
Montane Wet <sup>5</sup> .....	3,300 to 6,600 ft (1,000 to 2,000 m).	> 75 in (> 190 cm).	Well-developed soils, montane bogs.	<i>Acacia, Charpentiera, Cheirodendron, Metrosideros.</i>	<i>Broussaisia, Cibotium, Eurya, Ilex, Myrsine.</i>	<i>Ferns, Carex, Coprosma, Leptecophylla, Oreobolus, Rhynchospora, Vaccinium</i>
Dry Cliff <sup>6</sup> .....	Unrestricted .....	< 75 in (< 190 cm).	> 65 degree slope, rocky talus.	none .....	<i>Antidesma, Chamaesyce, Diospyros, Dodonaea.</i>	<i>Bidens, Eragrostis, Melanthera, Schiedea</i>
Wet Cliff <sup>7</sup> .....	unrestricted .....	> 75 in (> 190 cm).	> 65 degree slope, shallow soils, weathered lava.	none .....	<i>Broussaisia, Cheirodendron, Leptecophylla, Metrosideros.</i>	<i>Ferns, Bryophytes, Coprosma, Dubautia, Kadua, Peperomia</i>

<sup>1</sup> The physical or biological features for species in the Coastal ecosystem apply to the following plant ecosystem units: Oahu—Coastal—Units 1–15.

<sup>2</sup> The physical or biological features for species in the Lowland Dry ecosystem apply to the following plant ecosystem units: Oahu—Lowland Dry—Units 1–11.

<sup>3</sup> The physical or biological features for species in the Lowland Mesic ecosystem apply to the following plant ecosystem units: Oahu—Lowland Mesic—Units 1–7, and to the following damselfly ecosystem units *Megalagrion oceanicum* Unit 1—Lowland Mesic.

<sup>4</sup> The physical or biological features for species in the Lowland Wet ecosystem apply to the following plant ecosystem units: Oahu—Lowland Wet—Units 1–16, and to the following damselfly ecosystem units *Megalagrion leptodemias* Units 1–11—Lowland Wet, *M. nigrohamatum nigrollineatum* Units 1–11—Lowland Wet, and *M. oceanicum* Units 2–12—Lowland Wet.

<sup>5</sup> The physical or biological features for species in the Montane Wet ecosystem apply to the following plant ecosystem units: Oahu—Montane Wet—Unit—1.

<sup>6</sup> The physical or biological features for species in the Dry Cliff ecosystem apply to the following plant ecosystem units: Oahu—Dry Cliff—Units 1–8.

<sup>7</sup> The physical or biological features for species in the Wet Cliff ecosystem apply to the following plant ecosystem units: Oahu—Wet Cliff—Units 1–8, and to the following damselfly ecosystem units *Megalagrion leptodemias* Units 12–14—Wet Cliff, and *M. oceanicum* Units 13–15—Wet Cliff.

TABLE 5—PRIMARY CONSTITUENT ELEMENTS FOR THE OAHU SPECIES ARE A COMBINATION OF THE PHYSICAL OR BIOLOGICAL FEATURES (SEE TABLE 4) IN THE APPLICABLE ECOSYSTEM(S) AS WELL AS UNIQUE PCES FOR SPECIES, IF ANY ARE IDENTIFIED

	Coastal	Lowland dry	Lowland mesic	Lowland wet	Montane wet	Dry cliff	Wet cliff	Unique PCes for species
PLANTS								
<i>Abutilon sandwicense</i> .....			X			X		
<i>Achyranthes splendens</i> var. <i>rotundata</i> .....	X	X				X		
<i>Adenophorus periens</i> .....				X			X	
<i>Alectryon macrococcus</i> .....			X		X	X		
<i>Bidens amplexans</i> .....	X	X						
<i>Bonamia menziesii</i> .....		X	X			X		
<i>Cenchrus agrimonoides</i> .....			X			X		
<i>Centaurium sebaeoides</i> .....	X							
<i>Chamaesyce celastroides</i> var. <i>kaenana</i> .....	X	X	X					
<i>Chamaesyce deppeana</i> .....							X	
<i>Chamaesyce herbstii</i> .....			X			X		
<i>Chamaesyce kuwaleana</i> .....	X					X		
<i>Chamaesyce rockii</i> .....				X			X	
<i>Chamaesyce skottsbergii</i> var. <i>skottsbergii</i> .....		X						coral outcrop substrate.
<i>Colubrina oppositifolia</i> .....			X					
<i>Ctenitis squamigera</i> .....			X					
<i>Cyanea acuminata</i> .....			X	X	X		X	
<i>Cyanea calycina</i> .....			X	X	X		X	
<i>Cyanea crispa</i> .....			X	X			X	
<i>Cyanea grimesiana</i> ssp. <i>grimesiana</i> .....			X	X				
<i>Cyanea grimesiana</i> ssp. <i>obatae</i> .....			X	X		X		
<i>Cyanea humboldtiana</i> .....				X			X	
<i>Cyanea koolauensis</i> .....				X				
<i>Cyanea lanceolata</i> .....			X	X				
<i>Cyanea longiflora</i> .....			X					
<i>Cyanea pinnatifida</i> .....			X					
<i>Cyanea purpurellifolia</i> .....				X			X	
<i>Cyanea st.-johnii</i> .....				X			X	
<i>Cyanea superba</i> .....			X					
<i>Cyanea truncata</i> .....			X	X			X	
<i>Cyperus pennatiformis</i> .....			X					
<i>Cyperus trachysanthos</i> .....	X	X						seasonal wetlands.
<i>Cyrtandra dentata</i> .....			X	X		X		
<i>Cyrtandra gracilis</i> .....				X				
<i>Cyrtandra kaulantha</i> .....				X			X	
<i>Cyrtandra polyantha</i> .....			X	X				
<i>Cyrtandra sessilis</i> .....				X			X	
<i>Cyrtandra subumbellata</i> .....				X			X	
<i>Cyrtandra viridiflora</i> .....				X			X	
<i>Cyrtandra waiolani</i> .....				X				
<i>Delissea subcordata</i> .....			X					
<i>Diellia erecta</i> .....			X					
<i>Diellia falcata</i> .....			X			X		
<i>Diellia unisora</i> .....			X			X		
<i>Diplazium molokaiense</i> .....			X	X				
<i>Doryopteris takeuchii</i> .....		X						
<i>Dubautia herbstobatae</i> .....			X			X		
<i>Eragrostis fosbergii</i> .....			X			X		
<i>Eugenia koolauensis</i> .....			X					
<i>Euphorbia haelealeana</i> .....		X	X					
<i>Flueggea neowawraea</i> .....			X			X		
<i>Gardenia mannii</i> .....			X	X				
<i>Gouania meyenii</i> .....		X	X			X		
<i>Gouania vitifolia</i> .....		X	X	X		X		
<i>Hesperomannia arborescens</i> .....			X	X				
<i>Hesperomannia arbuscula</i> .....			X	X				
<i>Hibiscus brackenridgei</i> .....		X	X					
<i>Huperzia nutans</i> .....				X			X	
<i>Isodendron laurifolium</i> .....			X			X		
<i>Isodendron longifolium</i> .....			X	X				
<i>Isodendron pyrifolium</i> .....		X				X		

TABLE 5—PRIMARY CONSTITUENT ELEMENTS FOR THE OAHU SPECIES ARE A COMBINATION OF THE PHYSICAL OR BIOLOGICAL FEATURES (SEE TABLE 4) IN THE APPLICABLE ECOSYSTEM(S) AS WELL AS UNIQUE PCES FOR SPECIES, IF ANY ARE IDENTIFIED—Continued

	Coastal	Lowland dry	Lowland mesic	Lowland wet	Montane wet	Dry cliff	Wet cliff	Unique PCes for species
<i>Kadua coriacea</i> .....			X					host plants <i>Sapindus oahuensis</i> and <i>Nestegis sandwicensis</i> .
<i>Kadua degeneri</i> .....			X			X		
<i>Kadua parvula</i> .....			X			X		
<i>Korthalsella degeneri</i> .....						X		
<i>Labordia cyrtandrae</i> .....			X	X	X		X	bogs.
<i>Lepidium arbuscula</i> .....						X		
<i>Lipochaeta lobata</i> var. <i>leptophylla</i> .						X		
<i>Lobelia gaudichaudii</i> ssp. <i>koolauensis</i> .				X				seasonal wetlands.
<i>Lobelia monostachya</i> .....			X					
<i>Lobelia niihauensis</i> .....			X			X		
<i>Lobelia oahuensis</i> .....				X	X		X	
<i>Lysimachia filifolia</i> .....							X	
<i>Marsilea villosa</i> .....	X	X						
<i>Melanthera tenuifolia</i> .....		X	X			X		
<i>Melicope christophersenii</i> .....					X		X	
<i>Melicope hiiakae</i> .....				X				
<i>Melicope lydgatei</i> .....			X	X				
<i>Melicope makahae</i> .....			X			X		
<i>Melicope pallida</i> .....			X					
<i>Melicope saint-johnii</i> .....			X			X		
<i>Myrsine judii</i> .....				X				
<i>Neraudia angulata</i> .....		X	X			X		
<i>Nototrichium humile</i> .....		X	X			X		
<i>Peucedanum sandwicense</i> .....						X		
<i>Phyllostegia hirsuta</i> .....			X	X	X		X	
<i>Phyllostegia kaalaensis</i> .....			X			X		
<i>Phyllostegia mollis</i> .....			X	X				
<i>Phyllostegia parviflora</i> var. <i>lydgatei</i> .			X					
<i>Phyllostegia parviflora</i> var. <i>parviflora</i> .			X	X			X	
<i>Plantago princeps</i> var. <i>longibracteata</i> .				X				
<i>Plantago princeps</i> var. <i>princeps</i> .			X	X		X	X	
<i>Platanthera holochila</i> .....				X				
<i>Platydesma cornuta</i> var. <i>cornuta</i> .				X				
<i>Platydesma cornuta</i> var. <i>decurrens</i> .			X			X		
<i>Pleomele forbesii</i> .....		X	X			X		
<i>Psychotria hexandra</i> ssp. <i>oahuensis</i> .				X			X	
<i>Pteralyxia macrocarpa</i> .....			X	X		X	X	
<i>Pteris lidgatei</i> .....				X				
<i>Sanicula mariversa</i> .....			X			X		
<i>Sanicula purpurea</i> .....				X			X	
<i>Schiedea hookeri</i> .....		X	X	X		X	X	
<i>Schiedea kaalae</i> .....			X	X			X	
<i>Schiedea kealiae</i> .....	X	X						
<i>Schiedea nuttallii</i> .....			X					
<i>Schiedea obovata</i> .....			X			X		
<i>Schiedea trinervis</i> .....					X	X	X	
<i>Sesbania tomentosa</i> .....	X							
<i>Silene lanceolata</i> .....						X		
<i>Silene perlmanni</i> .....			X			X		
<i>Solanum sandwicense</i> .....			X					
<i>Spermolepis hawaiiensis</i> .....		X				X		
<i>Stenogyne kanehoana</i> .....			X					
<i>Tetramolopium filiforme</i> .....						X		
<i>Tetramolopium lepidotum</i> ssp. <i>lepidotum</i> .			X			X		
<i>Tetraplasandra gymnocarpa</i> .....			X	X			X	
<i>Tetraplasandra lydgatei</i> .....			X					
<i>Trematolobelia singularis</i> .....				X			X	

TABLE 5—PRIMARY CONSTITUENT ELEMENTS FOR THE OAHU SPECIES ARE A COMBINATION OF THE PHYSICAL OR BIOLOGICAL FEATURES (SEE TABLE 4) IN THE APPLICABLE ECOSYSTEM(S) AS WELL AS UNIQUE PCES FOR SPECIES, IF ANY ARE IDENTIFIED—Continued

	Coastal	Lowland dry	Lowland mesic	Lowland wet	Montane wet	Dry cliff	Wet cliff	Unique PCes for species
<i>Urera kaalae</i> .....			X	X				
<i>Vigna o-wahuensis</i> .....	X							
<i>Viola chamissoniana</i> ssp. <i>chamissoniana</i> .			X			X		
<i>Viola oahuensis</i> .....				X			X	
<i>Zanthoxylum oahuense</i> .....				X				
<b>ANIMALS</b>								
blackline Hawaiian damselfly.				X				perennial stream, slow reaches of streams or pools.
crimson Hawaiian damselfly				X			X	perennial stream, slow reaches of streams or pools.
oceanic Hawaiian damselfly			X	X			X	perennial stream, swift-flowing sections and riffles of streams.

**Note:** Total number of species in table is greater than 124 because we identify the applicable ecosystems and unique PCes for the Oahu varieties of *Phyllostegia parviflora* and *Plantago princeps*.

Some of the species addressed in this rule occur in more than one ecosystem. The PCes for these species are described separately for each ecosystem in which they occur. The reasoning behind this approach is that each species requires a different suite of environmental conditions, depending upon the ecosystem in which it occurs. For example, *Cyanea calycina* will occur in association with different native plant species, depending on whether it is found within the lowland mesic, lowland wet, montane wet, or wet cliff ecosystems. Each of the physical or biological features described in each ecosystem in which the species occurs are essential to the conservation of the species, to retain its geographical and ecological distribution across the different ecosystem types in which it may occur. Each physical or biological feature is also essential to retaining the genetic representation that allows this species to successfully adapt to different environmental conditions in various native ecosystems. Although some of these species occur in multiple native ecosystems, their declining abundance in the face of ongoing threats, such as increasing numbers of nonnative plant competitors, indicates that they are not such broad habitat generalists as to be able to persist in highly altered habitats. Based on an analysis of the best available scientific information, functioning native ecosystems provide the fundamental biological requirements for the narrow-range endemics addressed in this rule.

Some examples may help to clarify our approach to describing the PCes for

each individual species. If we want to determine the PCes for the plant *Zanthoxylum oahuense*, we look at Table 5 to see that the PCes for *Z. oahuense* are provided by the physical or biological features in the lowland wet ecosystem. Table 4 indicates that the physical or biological features in the lowland wet ecosystem include elevations of less than 3,300 ft (1,000 m); annual precipitation of more than 75 in (190 cm); clays, ashbeds, deep, well-drained soils, and lowland bogs; and one or more genera of the subcanopy and understory plants *Alyxia*, *Cibotium*, *Claoxylon*, *Cyrtandra*, *Dicranopteris*, *Diplazium*, *Kadua*, *Machaerina*, *Melicope*, *Microlepia*; and one or more of the genera of the canopy species *Antidesma*, *Metrosideros*, *Myrsine*, *Pisonia*, and *Psychotria*. As we do not specifically know the unique PCes for *Z. oahuense*, and this plant is found only in the lowland wet ecosystem, the physical or biological features that characterize the lowland wet ecosystem are the physical and biological features required by *Z. oahuense*.

As another example, Table 5 tells us that the physical or biological features for the crimson Hawaiian damselfly include the physical or biological features for the lowland wet or wet cliff ecosystems, depending on the location, and also that this species has a species-specific PCE, which is a perennial stream with slow reaches. The PCes for the crimson Hawaiian damselfly are thus composed of the physical or biological features for each of the two ecosystems it occupies, as described in Table 4 for the lowland wet and wet

cliff ecosystems, as well as perennial streams with slow reaches (i.e., stream areas with no riffles or rapids). Table 5 is read in a similar fashion in conjunction with Table 4 to describe the PCes for each of the 124 species for which we are designating critical habitat in this rule.

*Criteria Used To Identify Critical Habitat Boundaries*

We considered several factors in the selection of specific boundaries for critical habitat for these 124 species. We are designating critical habitat on lands that contain the physical or biological features essential to conserving multiple species, based on their shared dependence on the functioning ecosystems they have in common. Because each of the seven ecosystems addressed in this rule does not form a single contiguous area, the ecosystems are divided into geographic units. The 7 ecosystem areas are divided into 62 critical habitat units.

The designated critical habitat is a combination of areas currently occupied by the species in that ecosystem, as well as areas that may be currently unoccupied. Due to the extremely remote and inaccessible nature of some of the areas, surveys are relatively infrequent and may be limited in scope; therefore, it is difficult to say with certainty whether individual representatives of a rare species may or may not be present. However, the best available scientific information suggests that these species are occupying or have occupied these habitats. A properly functioning ecosystem provides the life-

history requirements of the species that make up that ecosystem, and the physical and biological features found in such an ecosystem are the PCEs essential for the conservation of the species that occur there. In other words, the occupied areas provide the physical or biological features essential to the conservation of the species that occur in the ecosystems we analyzed, by providing for the successful functioning of the ecosystem on which the species depend. However, due to the small population sizes, few numbers of individuals, and reduced geographic range of each of the 124 species for which critical habitat is designated, we have determined that a designation limited to known present range of each species would be inadequate to achieve the conservation of those species. The areas believed to be unoccupied have been determined to be essential for the conservation and recovery of the species and will promote conservation actions to restore their historical, geographical, and ecological representation on Oahu.

Based on the best information available at this time, we have determined that the current size and distribution of the extant populations are not sufficient to expect a reasonable probability of long-term survival and recovery. For each of the 99 plant species for which critical habitat was designated in 2003 (and for which critical habitat is being revised in this rule), the overall recovery strategy outlined in approved recovery plans includes: (1) Stabilizing existing wild populations; (2) protection and management of habitat; (3) enhancement of existing small populations and reestablishment of new populations with historic range; and (4) research on species biology and ecology (Service 1994, 1995a, 1995b, 1996a, 1996b, 1996d, 1997, 1998a, 1998b, 1999). The overall recovery goal in the short-term is a successful population that can carry on basic life history processes, such as establishment, reproduction, and dispersal, at a level where the probability of extinction is low. In the long-term, the species and its populations should be at a reduced risk of extinction and be adaptable to environmental change. In general, long-lived woody perennial species would be expected to be viable at population levels of 50 to 250 individuals or more per population, while short-lived perennial species would be viable at levels of 1,500 to 2,500 individuals or more per population. In general, the larger the number of populations and the larger the size of each population, the lower

the probability of extinction (Meffe and Carroll 1996, pp. 218–219, Raup 1991, pp. 124, 126–127). The draft recovery plan for *Chamaesyce skottsbergii* var. *skottsbergii* and *Achranthes splendens* var. *rotundata* identifies the augmentation of existing populations and reestablishing both species in areas where they are no longer extant (Service 1994, p. 58) as a recovery strategy. The survival and recovery potential for the three Hawaiian damselflies for which critical habitat is being designated is compromised by a combination of threats exacerbated by their inherent vulnerability to extinction. Each of these species faces threats from limited numbers (less than 20 populations exist for each species), and susceptibility to stochastic events such as drought and flooding. The key to survival and recovery of these species relies on the effective use of measures to keep nonnative species, particularly fish, out of currently occupied habitats, and the reestablishment of populations within their historic range to reduce the possibility of extinction due to stochastic events or other threats. Protecting and properly managing occupied and unoccupied critical habitat areas is necessary to provide for the persistence of viable populations of these species.

In summary, the long-term survival and conservation of these species requires the designation of sufficient critical habitat units with suitable habitat. Some of the habitat being designated in this final rule is currently not known to be occupied. However, to recover these species, it is essential to conserve suitable habitat in both occupied and unoccupied units, which will in turn allow for the establishment of additional populations through natural recruitment or managed reintroductions. Establishment of these additional populations will increase the likelihood that the species will survive and recover in the face of normal and stochastic events (e.g., hurricanes, fire, and nonnative species introductions) (Mangel and Tier 1994, p. 612; Pimm *et al.* 1998, p. 777; Stacey and Taper 1992, p. 27). In this regard, the designation of critical habitat limited to the geographic areas occupied by the species at the time of listing would be insufficient to achieve these recovery objectives.

For seven of the plant species reported from Oahu and other Hawaiian Islands, *Adenophorus periens* (extant on Kauai, Molokai, and Hawaii), *Cyperus pennatifolius* (formerly *Mariscus pennatifolius*) (extant on Maui and Kauai), *Diplazium molokaiense* (extant on Maui), *Isodendron pyrifolium* (extant on Hawaii), *Kadua coriacea*

(formerly *Hedyotis coriacea*) extant on Maui and Kauai), *Platanthera holochila* (extant on Kauai, Molokai, and Maui), and *Vigna o-wahuensis* (extant on Hawaii, Kahoolawe, Lanai, Molokai, and Maui), we are designating unoccupied areas only, as these species are not believed to be extant on Oahu. For *Cyrtandra waiolani*, a plant known only from Oahu, we are designating potentially unoccupied areas only. Critical habitat boundaries for all species were delineated to clearly depict and promote the recovery and conservation of these species by incorporating the functioning ecosystems on which they depend.

With the exception of the seven above plant species believed to no longer be extant on Oahu, and *Cyrtandra waiolani*, which may no longer be extant in the wild, each of the critical habitat units in these ecosystems contain both occupied areas and areas that are currently unoccupied but essential for the conservation of the species. Because of their small numbers or low population sizes, each of the 124 species requires suitable habitat and space for the expansion of existing populations to achieve a level that could approach recovery. For example, although *Cyanea calycina* is found in multiple critical habitat units across four ecosystem types, its entire distribution is comprised of only 325 to 339 individuals (U.S. Army 2006; HBMP 2008). The unoccupied areas within each unit where the species occurs are essential for the expansion of this species to achieve viable population numbers and maintain its historical geographical and ecological distribution.

Current and historical species location information was used to develop initial critical habitat boundaries (polygons) in each of the 7 ecosystems that would individually and collectively provide for the conservation of the 124 species addressed in this rule. While all 3 damselfly species are historically known from both the Koolau and Waianae Mountains, 83 of the 122 plant species for which we are designating critical habitat are historically known from only one mountain range on Oahu. Forty-nine plant species (*Abutilon sandwicense*, *Achyranthes splendens* var. *rotundata*, *Bidens amplexans*, *Cenchrus agrimonioides* var. *agrimonioides*, *Chamaesyce herbstii*, *C. skottsbergii* var. *skottsbergii*, *Colubrina oppositifolia*, *Cyanea grimesiana* ssp. *obatae*, *C. pinnatifida*, *Cyanea superba*, *Cyperus pennatifolius* var. *pennatifolius*, *C. trachysanthos*, *Diellia unisora*, *Diplazium molokaiense*, *Dubautia*

*herbstobatae*, *Eragrostis fosbergii*, *Euphorbia haeleleana*, *Flueggea neowawraea*, *Gouania vitifolia*, *Hesperomannia arbuscula*, *Hibiscus brackenridgei*, *Isodendron pyrifolium*, *Kadua degeneri*, *K. parvula*, *Korthalsella degeneri*, *Lepidium arbuscula*, *Lipochaeta lobata* var. *leptophylla*, *Lobelia niiahuensis*, *Melanthera tenuifolia*, *Melicope christophersenii*, *M. makahae*, *M. pallida*, *Neraudia angulata*, *Nototrichium humile*, *Peucedanum sandwicense*, *Phyllostegia kaalaensis*, *Platydesma cornuta* var. *decurrens*, *Sanicula mariversa*, *Schiedea hookeri*, *S. kealiae*, *S. obovata*, *S. trinervis*, *Silene lanceolata*, *S. perlmanii*, *Stenogyne kanehoana*, *Tetramolopium filiforme*, *T. lepidotum* ssp. *lepidotum*, *Urera kaalae*, and *Viola chamissoniana* ssp. *chamissoniana*) are known only from the Waianae Mountains. Thirty-six plant species (*Adenophorus periens*, *Chamaesyce deppeana*, *C. rockii*, *Cyanea crispa*, *C. humboldtiana*, *C. koolauensis*, *C. lanceolata*, *C. purpurellifolia*, *C. st-johnii*, *C. truncata*, *Cyrtandra gracilis*, *C. kaulantha*, *C. polyantha*, *C. sessilis*, *C. subumbellata*, *C. viridiflora*, *C. waiolani*, *Diellia erecta*, *Doryopteris takeuchii*, *Huperzia nutans*, *Lobelia gaudichaudii* ssp. *koolauensis*, *L. monostachya*, *Lysimachia filifolia*, *Melicope hiiakae*, *M. lydgatei*, *Myrsine juddii*, *Platanthera holochila*, *Platydesma cornuta* var. *cornuta*, *Psychotria hexandra* ssp. *oahuensis*, *Pteris lidgatei*, *Sanicula purpurea*, *Tetraplasandra gymnocarpa*, *T. lydgatei*, *Trematolobelia singularis*, *Viola oahuensis*, and *Zanthoxylum oahuense*) are known only from the Koolau Mountains. For these species, we are designating critical habitat only in the mountain range of their historical

occurrence. The initial polygons were superimposed over digital topographic maps of the island of Oahu and further evaluated. In general, land areas that were identified as highly degraded were not included in the critical habitat units, and natural or manmade features (e.g., ridge lines, valleys, streams, coastlines, roads, obvious land features, etc.) were used to delineate critical habitat boundaries. Two species, *Chamaesyce skottsbergii* var. *skottsbergii* and *Doryopteris takeuchii* are not reported from either mountain range, and we are designating critical habitat only in their known geographic areas, the Ewa plain (Kalaeloa; represented by “W” for Waianae in Table 7A) and Diamond Head (represented by “K” for Koolau in Table 7A), respectively.

The critical habitat areas described below constitute our best assessment of the areas occupied at the time of listing containing the physical or biological features essential for the recovery and conservation of the 124 species, including unoccupied areas essential for the conservation of the species because they, for example, provide for the needed for expansion of reduced populations. The approximate size of each of the 62 plant critical habitat units and the 40 damselfly critical habitat units, and the status of their land ownership, are identified in Tables 6A and 6B, respectively. The species that currently occupy each of the 62 plant and 40 damselfly units are identified in Table 7A, along with areas determined to be exempt from critical habitat designation under section 4(a)(3) of the Act (Table 7B; see Exemptions, below, for further information). Table 7A also identifies the areas designated for *Cyrtandra waiolani* (a species that may

no longer be extant in the wild) and may be currently unoccupied by this species. All 40 damselfly critical habitat units overlap areas also designated as plant critical habitat.

When determining critical habitat boundaries within this rule, we made every effort to avoid including developed areas, such as buildings and paved areas, that lack the physical or biological features essential for the conservation of the 124 species. 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 areas. Any such structures and the land under them 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, Federal actions involving these areas would not trigger section 7 consultation with respect to critical habitat unless the specific action would affect the adjacent critical habitat or its primary constituent elements.

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 the rule portion. We include more detailed information on the boundaries of the critical habitat designation in the preamble of this document. The coordinates or plot points, or both, on which each map is based, is available to the public at <http://www.fws.gov/pacificislands>, at <http://www.regulations.gov> at Docket No. FWS-R1-ES-2010-0043, and at the Pacific Islands Fish and Wildlife Office (see ADDRESSES, above).

TABLE 6A—CRITICAL HABITAT DESIGNATED FOR 121 OAHU PLANT SPECIES  
[Totals may not sum due to rounding]

Critical habitat area	Size of unit in acres	Size of unit in hectares	Land ownership (acres)			
			State	Federal	City and county	Private
Oahu—Coastal						
—Unit 1	958	388	946	11	0	2
—Unit 2	12	5	12	0	0	0
—Unit 3	15	6	15	0	0	0
—Unit 4	3	1	3	0	0	0
—Unit 5	12	5	12	0	0	0
—Unit 6	9	4	9	0	0	0
—Unit 7	67	27	67	0	0	0
—Unit 8	10	4	10	0	0	0
—Unit 9	80	33	80	0	0	0
—Unit 10	74	30	0	0	74	0
—Unit 11	20	8	0	0	0	20
—Unit 12	11	5	0	0	0	11
—Unit 13	23	9	1	0	19	3
—Unit 14	4	2	0	2	2	0
—Unit 15	33	13	9	21	0	2

TABLE 6A—CRITICAL HABITAT DESIGNATED FOR 121 OAHU PLANT SPECIES—Continued

[Totals may not sum due to rounding]

Critical habitat area	Size of unit in acres	Size of unit in hectares	Land ownership (acres)			
			State	Federal	City and county	Private
TOTAL Coastal .....	1,332	539	1,164	34	95	38
Oahu—Lowland Dry						
—Unit 1 .....	102	41	49	0	0	53
—Unit 2 .....	29	12	0	29	0	0
—Unit 6 .....	287	116	287	0	0	0
—Unit 7 .....	15	6	15	0	0	0
—Unit 8 .....	99	40	3	0	0	96
—Unit 9 .....	37	15	1	16	17	3
—Unit 10 .....	43	17	43	0	0	0
—Unit 11 .....	166	67	0	166	0	0
TOTAL Lowland Dry .....	778	314	398	211	17	152
Oahu—Lowland Mesic						
—Unit 1 .....	4,448	1,800	3,565	22	583	277
—Unit 2 .....	1,062	430	1,062	0	0	0
—Unit 3 .....	353	143	353	0	0	0
—Unit 4 .....	20	8	20	0	0	0
—Unit 5 .....	29	12	29	0	0	0
—Unit 6 .....	247	100	12	0	0	235
—Unit 7 .....	1,663	673	681	0	129	852
TOTAL Lowland Mesic .....	7,822	3,166	5,722	22	712	1,364
Oahu—Lowland Wet						
—Unit 1 .....	541	219	428	0	112	0
—Unit 2 .....	19	8	19	0	0	0
—Unit 3 .....	29	12	29	0	0	0
—Unit 4 .....	27	11	27	0	0	0
—Unit 5 .....	74	30	74	0	0	0
—Unit 6 .....	790	320	0	0	0	790
—Unit 7 .....	1,786	723	1,499	0	0	288
—Unit 8 .....	3,041	1,231	1,386	0	0	1,655
—Unit 9 .....	15,728	6,365	3,827	4,509	147	7,245
—Unit 10 .....	124	50	0	0	0	124
—Unit 11 .....	123	50	0	0	123	0
—Unit 12 .....	53	21	0	0	28	26
—Unit 13 .....	75	30	1	0	74	0
—Unit 14 .....	478	193	274	0	195	9
—Unit 15 .....	407	165	407	0	0	0
—Unit 16 .....	2,507	1,014	1,533	0	365	608
TOTAL Lowland Wet .....	25,802	10,442	9,504	4,509	1,044	10,745
Oahu—Montane Wet						
—Unit 1 .....	370	150	352	0	18	<1
TOTAL Montane Wet .....	370	150	352	0	18	<1
Oahu—Dry Cliff						
—Unit 1 .....	49	20	49	0	0	0
—Unit 2 .....	412	167	320	0	91	0
—Unit 3 .....	450	182	101	0	349	0
—Unit 4 .....	24	10	24	0	0	0
—Unit 6 .....	149	60	149	0	0	0
—Unit 7a .....	68	27	68	0	0	0
—Unit 7b .....	38	16	38	0	0	0
—Unit 8 .....	259	105	259	0	0	0
TOTAL Dry Cliff .....	1,449	587	1,008	0	440	0
Oahu—Wet Cliff						
—Unit 1 .....	235	95	167	0	68	<1
—Unit 2 .....	3	1	3	0	0	0
—Unit 3 .....	16	6	16	0	0	0
—Unit 4 .....	23	9	23	0	0	0
—Unit 5 .....	31	13	31	0	0	0
—Unit 6 .....	151	61	151	0	0	0

TABLE 6A—CRITICAL HABITAT DESIGNATED FOR 121 OAHU PLANT SPECIES—Continued  
 [Totals may not sum due to rounding]

Critical habitat area	Size of unit in acres	Size of unit in hectares	Land ownership (acres)			
			State	Federal	City and county	Private
—Unit 7 .....	144	58	144	0	0	0
—Unit 8 .....	4,649	1,881	1,479	5	1,281	1,884
TOTAL Wet Cliff .....	5,252	2,124	2,014	5	1,349	1,884
TOTAL ALL UNITS .....	42,804	17,322	20,162	4,871	3,675	14,183

TABLE 6B—CRITICAL HABITAT DESIGNATED FOR 3 OAHU DAMSELFLY SPECIES  
 [Totals may not sum due to rounding]

Critical habitat unit	Size of unit in acres	Size of unit in hectares	Landownership (acres)			
			State	Federal	City and county	Private
<b>Crimson Hawaiian Damselfly—Lowland Wet</b>						
—Unit 1 .....	790	320	0	0	0	790
—Unit 2 .....	1,786	723	1,499	0	0	288
—Unit 3 .....	3,041	1,231	1,386	0	0	1,655
—Unit 4 .....	15,728	6,365	3,827	4,509	147	7,245
—Unit 5 .....	124	50	0	0	0	124
—Unit 6 .....	123	50	0	0	123	0
—Unit 7 .....	53	21	0	0	28	26
—Unit 8 .....	75	30	1	0	74	0
—Unit 9 .....	478	193	274	0	195	9
—Unit 10 .....	407	165	407	0	0	0
—Unit 11 .....	2,507	1,014	1,533	0	365	608
TOTAL Crimson Hawaiian Damselfly—Lowland Wet .....	25,112	10,162	8,927	4,509	932	10,745
<b>Crimson Hawaiian Damselfly—Wet Cliff</b>						
—Unit 12 .....	151	61	151	0	0	0
—Unit 13 .....	144	58	144	0	0	0
—Unit 14 .....	4,649	1,881	1,479	5	1,281	1,884
TOTAL Crimson Hawaiian Damselfly—Wet Cliff .....	4,944	2,000	1,774	5	1,281	1,884
<b>Blackline Hawaiian Damselfly—Lowland Wet</b>						
—Unit 1 .....	790	320	0	0	0	790
—Unit 2 .....	1,786	723	1,499	0	0	288
—Unit 3 .....	3,041	1,231	1,386	0	0	1,655
—Unit 4 .....	15,728	6,365	3,827	4,509	147	7,245
—Unit 5 .....	124	50	0	0	0	124
—Unit 6 .....	123	50	0	0	123	0
—Unit 7 .....	53	21	0	0	28	26
—Unit 8 .....	75	30	1	0	74	0
—Unit 9 .....	478	193	274	0	195	9
—Unit 10 .....	407	165	407	0	0	0
—Unit 11 .....	2,507	1,014	1,533	0	365	608
TOTAL Blackline Hawaiian Damselfly—Lowland Wet .....	25,112	10,162	8,927	4,509	932	10,745
<b>Oceanic Hawaiian Damselfly—Lowland Mesic</b>						
—Unit 1 .....	247	100	12	0	0	235
TOTAL Oceanic Hawaiian Damselfly—Lowland Mesic .....	247	100	12	0	0	235
<b>Oceanic Hawaiian Damselfly —Lowland Wet</b>						
—Unit 2 .....	790	320	0	0	0	790
—Unit 3 .....	1,786	723	1,499	0	0	288
—Unit 4 .....	3,041	1,231	1,386	0	0	1,655
—Unit 5 .....	15,728	6,365	3,827	4,509	147	7,245
—Unit 6 .....	123	50	0	0	0	124

TABLE 6B—CRITICAL HABITAT DESIGNATED FOR 3 OAHU DAMSELFLY SPECIES—Continued  
 [Totals may not sum due to rounding]

Critical habitat unit	Size of unit in acres	Size of unit in hectares	Landownership (acres)			
			State	Federal	City and county	Private
—Unit 7 .....	124	50	0	0	123	0
—Unit 8 .....	53	21	0	0	28	26
—Unit 9 .....	75	30	0	1	74	0
—Unit 10 .....	478	193	274	0	195	9
—Unit 11 .....	407	165	407	0	0	0
—Unit 12 .....	2,507	1,014	1,533	0	365	608
<b>TOTAL Oceanic Hawaiian Damselfly—Lowland Wet</b>	<b>25,112</b>	<b>10,162</b>	<b>8,927</b>	<b>4,509</b>	<b>932</b>	<b>10,745</b>
<b>Oceanic Hawaiian Damselfly —Wet Cliff</b>						
—Unit 13 .....	151	61	151	0	0	0
—Unit 14 .....	144	58	144	0	0	0
—Unit 15 .....	4,649	1,881	1,479	5	1,281	1,884
<b>TOTAL Oceanic Hawaiian Damselfly—Wet Cliff .....</b>	<b>4,944</b>	<b>2,000</b>	<b>1,774</b>	<b>5</b>	<b>1,281</b>	<b>1,884</b>

TABLE 7A—SPECIES FOR WHICH CRITICAL HABITAT IS DESIGNATED IN EACH ECOSYSTEM, AND SECTION 4(A)(3) EXEMPT AREAS  
 [See discussion below]

Species	Coastal	Lowland dry	Lowland mesic	Lowland wet	Montane wet	Dry cliff	Wet cliff	Critical habitat ac (ha)	Exempt from critical habitat ac (ha) under 4(a)(3)
<b>PLANTS</b>									
<i>Abutilon sandwicense</i> .....			X <sup>w</sup>			X <sup>w</sup>		7,332 (2,967)	1,726 (699)
<i>Achyranthes splendens</i> var. <i>rotundata</i> .....	X <sup>w</sup>	X <sup>w</sup>				X <sup>w</sup>		2,941 (1,190)	932 (377)
<i>Adenophorus periens</i> .....				X <sup>k-H</sup>			X <sup>k-H</sup>	30,056 (12,163)	5,901 (2,388)
<i>Alectryon macrococcus</i> .....			X <sup>w, k-H</sup>		X <sup>w</sup>	X <sup>w</sup>		9,641 (3,902)	2,250 (911)
<i>Bidens amplexans</i> .....	X <sup>w</sup>	X <sup>w</sup>						1,493 (604)	67 (27)
<i>Bonamia menziesii</i> .....		X <sup>w</sup>	X <sup>w, k</sup>			X <sup>w</sup>		9,747 (3,944)	1,919 (777)
<i>Cenchrus agrimonioides</i> .....			X <sup>w</sup>			X <sup>w</sup>		7,332 (2,967)	1,726 (699)
<i>Centaurium seabaeoides</i> .....	X <sup>w, k</sup>							1,332 (539)	0 (0)
<i>Chamaesyce celastroides</i> var. <i>kaenana</i> .....	X <sup>w</sup>	X <sup>w</sup>	X <sup>w, k-H</sup>					9,315 (3,770)	1,504 (427)
<i>Chamaesyce deppeana</i> .....							X <sup>k</sup>	4,944 (2,001)	60 (24)
<i>Chamaesyce herbstii</i> .....			X <sup>w</sup>			X <sup>w</sup>		7,332 (2,967)	1,726 (699)
<i>Chamaesyce kuwaleana</i> .....	X <sup>k-H</sup>					X <sup>w</sup>		1,764 (714)	865 (350)
<i>Chamaesyce rockii</i> .....				X <sup>k</sup>			X <sup>k</sup>	30,056 (12,163)	5,901 (2,388)
<i>Chamaesyce skottsbergii</i> var. <i>skottsbergii</i> .....		X <sup>w</sup>						345 (139)	0 (0)
<i>Colubrina oppositifolia</i> .....			X <sup>w</sup>					5,884 (2,381)	861 (349)
<i>Ctenitis squamigera</i> .....			X <sup>w, k-H</sup>					7,823 (3,166)	987 (349)
<i>Cyanea acuminata</i> .....			X <sup>w, k</sup>	X <sup>w, k</sup>	X <sup>w</sup>		X <sup>w, k</sup>	39,247 (15,883)	7,548 (3,055)
<i>Cyanea calycina</i> .....			X <sup>w, k</sup>	X <sup>w, k</sup>	X <sup>w</sup>		X <sup>w, k</sup>	39,247 (15,883)	7,548 (3,055)
<i>Cyanea crispa</i> .....			X <sup>k</sup>	X <sup>k</sup>			X <sup>k</sup>	31,995 (12,948)	6,027 (2,439)
<i>Cyanea grimesiana</i> ssp. <i>Grimesiana</i> .....			X <sup>w, k</sup>	X <sup>w, k</sup>				33,624 (13,607)	6,989 (2,828)
<i>Cyanea grimesiana</i> ssp. <i>obatae</i> .....			X <sup>w</sup>	X <sup>w</sup>		X <sup>w</sup>		8,022 (3,246)	1,887 (764)
<i>Cyanea humboldtiana</i> .....				X <sup>k</sup>			X <sup>k</sup>	30,056 (12,163)	5,901 (2,388)
<i>Cyanea koolauensis</i> .....				X <sup>k</sup>				25,112 (10,163)	5,841 (2,364)
<i>Cyanea lanceolata</i> .....			X <sup>k</sup>	X <sup>k</sup>				27,051 (10,947)	5,966 (2,415)
<i>Cyanea longiflora</i> .....			X <sup>w, k-H</sup>					7,823 (3,166)	987 (399)
<i>Cyanea pinnatifida</i> .....			X <sup>w-H</sup>					5,884 (2,381)	861 (349)
<i>Cyanea purpurellifolia</i> .....				X <sup>k</sup>			X <sup>k</sup>	30,056 (12,163)	5,901 (2,388)
<i>Cyanea st-johnii</i> .....				X <sup>k</sup>			X <sup>k</sup>	30,056 (12,163)	5,901 (2,388)
<i>Cyanea superba</i> .....			X <sup>w</sup>					5,884 (2,381)	861 (349)
<i>Cyanea truncata</i> .....			X <sup>k</sup>	X <sup>k-H</sup>			X <sup>k-H</sup>	31,995 (12,948)	6,027 (2,439)
<i>Cyperus pennatiformis</i> .....			X <sup>w-H</sup>					5,884 (2,381)	861 (349)
<i>Cyperus trachysanthos</i> .....	X <sup>w, k</sup>	X <sup>w, k</sup>						112 (45)	50 (20)
<i>Cyrtandra dentata</i> .....			X <sup>w, k</sup>	X <sup>w, k</sup>		X <sup>w</sup>		35,073 (14,194)	7,854 (3,178)
<i>Cyrtandra gracilis</i> .....				X <sup>k</sup>				25,112 (10,163)	5,841 (2,634)
<i>Cyrtandra kaulantha</i> .....				X <sup>k</sup>			X <sup>k</sup>	30,056 (12,163)	5,901 (2,388)
<i>Cyrtandra polyantha</i> .....			X <sup>k</sup>	X <sup>k</sup>				27,051 (10,947)	65,966 (2,415)
<i>Cyrtandra sessilis</i> .....				X <sup>k</sup>			X <sup>k</sup>	30,056 (12,163)	5,901 (2,388)
<i>Cyrtandra subumbellata</i> .....				X <sup>k</sup>			X <sup>k</sup>	30,056 (12,163)	5,901 (2,388)
<i>Cyrtandra viridiflora</i> .....				X <sup>k</sup>			X <sup>k</sup>	30,056 (12,163)	5,901 (2,388)
<i>Cyrtandra waiolani</i> * .....				X <sup>k-H</sup>				25,112 (10,163)	5,841 (2,364)
<i>Delissea subcordata</i> .....			X <sup>w, k-H</sup>					7,823 (3,166)	987 (399)
<i>Diellia erecta</i> .....			X <sup>k</sup>					1,939 (785)	126 (51)
<i>Diellia falcata</i> .....			X <sup>w, k-H</sup>			X <sup>w</sup>		9,271 (3,752)	1,534 (621)
<i>Diellia unisora</i> .....			X <sup>w</sup>			X <sup>w</sup>		7,332 (2,967)	1,726 (699)

TABLE 7A—SPECIES FOR WHICH CRITICAL HABITAT IS DESIGNATED IN EACH ECOSYSTEM, AND SECTION 4(A)(3) EXEMPT AREAS—Continued  
[See discussion below]

Species	Coastal	Lowland dry	Lowland mesic	Lowland wet	Montane wet	Dry cliff	Wet cliff	Critical habitat ac (ha)	Exempt from critical habitat ac (ha) under 4(a)(3)
<i>Diplazium molokaiense</i>			X <sup>W-H</sup>	X <sup>W-H</sup>				6,573 (2,660)	1,023 (414)
<i>Doryopteris takeuchii</i>		X <sup>K</sup>						301 (122)	0 (0)
<i>Dubautia herbstobatae</i>			X <sup>W</sup>			X <sup>W</sup>		7,332 (2,967)	1,726 (699)
<i>Eragrostis fosbergii</i>			X <sup>W</sup>			X <sup>W</sup>		7,332 (2,967)	1,726 (699)
<i>Eugenia koolauensis</i>			X <sup>W, K</sup>					7,823 (3,166)	987 (399)
<i>Euphorbia haeleleana</i>		X <sup>W</sup>	X <sup>W</sup>					6,359 (2,573)	929 (376)
<i>Flueggea neowawraea</i>			X <sup>W</sup>			X <sup>W</sup>		7,332 (2,967)	1,726 (699)
<i>Gardenia mannii</i>			X <sup>W, K</sup>	X <sup>W, K</sup>				33,624 (13,607)	6,989 (2,828)
<i>Gouania meyenii</i>		X <sup>W, K-H</sup>	X <sup>W</sup>			X <sup>W</sup>		8,109 (3,281)	1,793 (726)
<i>Gouania vitifolia</i>		X <sup>W</sup>	X <sup>W-H</sup>	X <sup>W</sup>		X <sup>W</sup>		8,497 (3,439)	1,955 (791)
<i>Hesperomannia arborescens</i>			X <sup>W, K</sup>	X <sup>K</sup>				32,935 (13,328)	6,827 (2,763)
<i>Hesperomannia arbuscula</i>			X <sup>W</sup>	X <sup>W</sup>				6,573 (2,660)	1,023 (414)
<i>Hibiscus brackenridgei</i>		X <sup>W</sup>	X <sup>W</sup>					6,359 (2,573)	929 (376)
<i>Huperzia nutans</i>				X <sup>K</sup>			X <sup>K</sup>	30,056 (12,163)	5,901 (2,388)
<i>Isodendron laurifolium</i>			X <sup>W, K-H</sup>			X <sup>W</sup>		9,271 (3,752)	1,852 (749)
<i>Isodendron longifolium</i>			X <sup>W, K</sup>	X <sup>W, K</sup>				33,624 (13,607)	6,989 (2,828)
<i>Isodendron pyriformum</i>		X <sup>W-H</sup>				X <sup>W-H</sup>		1,924 (779)	932 (377)
<i>Kadua coriacea</i>			X <sup>W-H, K-H</sup>					7,823 (3,166)	987 (399)
<i>Kadua degeneri</i>			X <sup>W</sup>			X <sup>W</sup>		7,332 (2,967)	1,726 (699)
<i>Kadua parvula</i>			X <sup>W</sup>			X <sup>W</sup>		7,332 (2,967)	1,726 (699)
<i>Korthalsella degeneri</i>						X <sup>W</sup>		1,449 (586)	865 (350)
<i>Labordia cyrtandrae</i>			X <sup>W, K</sup>	X <sup>W, K</sup>	X <sup>W</sup>		X <sup>W, K</sup>	39,247 (15,883)	7,548 (3,055)
<i>Lepidium arbuscula</i>						X <sup>W</sup>		1,449 (586)	865 (350)
<i>Lipochaeta lobata</i> var. <i>leptophylla</i>						X <sup>W</sup>		1,449 (586)	865 (350)
<i>Lobelia gaudichaudii</i> ssp. <i>koolauensis</i>				X <sup>K</sup>				25,112 (10,163)	5,841 (2,364)
<i>Lobelia monostachya</i>			X <sup>K</sup>					1,939 (785)	126 (51)
<i>Lobelia niihauensis</i>			X <sup>W</sup>			X <sup>W</sup>		7,372 (2,967)	1,726 (699)
<i>Lobelia oahuensis</i>				X <sup>W, K</sup>	X <sup>W</sup>		X <sup>W, K</sup>	31,425 (12,717)	6,562 (2,655)
<i>Lysimachia filifolia</i>							X <sup>K</sup>	4,944 (2,001)	60 (24)
<i>Marsilea villosa</i>	X <sup>W, K</sup>	X <sup>W, K</sup>						127 (51)	50 (20)
<i>Melanthera tenuifolia</i>		X <sup>W</sup>	X <sup>W</sup>			X <sup>W</sup>		7,808 (3,160)	1,793 (726)
<i>Melicope christophersenii</i>					X <sup>W</sup>		X <sup>W</sup>	679 (275)	499 (202)
<i>Melicope hiiakae</i>				X <sup>K</sup>				25,112 (10,163)	5,841 (2,364)
<i>Melicope lydgatei</i>			X <sup>K</sup>	X <sup>K</sup>				27,051 (10,947)	5,966 (2,415)
<i>Melicope makahae</i>			X <sup>W</sup>			X <sup>W</sup>		7,332 (2,967)	1,726 (699)
<i>Melicope pallida</i>			X <sup>W</sup>					5,884 (2,381)	861 (349)
<i>Melicope saint-johnii</i>			X <sup>W, K-H</sup>			X <sup>W</sup>		9,271 (3,752)	1,852 (749)
<i>Myrsine juddii</i>				X <sup>K</sup>				25,112 (10,163)	5,841 (2,364)
<i>Neraudia angulata</i>		X <sup>W</sup>	X <sup>W</sup>			X <sup>W</sup>		7,808 (3,160)	1,793 (726)
<i>Nototrichium humile</i>		X <sup>W</sup>	X <sup>W</sup>			X <sup>W</sup>		7,808 (3,160)	1,793 (726)
<i>Peucedanum sandwicense</i>						X <sup>W</sup>		1,449 (586)	865 (350)
<i>Phyllostegia hirsuta</i>			X <sup>W, K</sup>	X <sup>W, K</sup>	X <sup>W</sup>		X <sup>W, K</sup>	39,247 (15,883)	7,548 (3,055)
<i>Phyllostegia kaalaensis</i>			X <sup>W</sup>			X <sup>W</sup>		7,332 (2,967)	1,726 (699)
<i>Phyllostegia mollis</i>			X <sup>W, K-H</sup>	X <sup>W</sup>				8,512 (3,445)	1,148 (465)
<i>Phyllostegia parviflora</i> var. <i>lydgatei</i>			X <sup>W-H</sup>					5,884 (2,381)	861 (349)
<i>Phyllostegia parviflora</i> var. <i>parviflora</i>			X <sup>K-H</sup>				X <sup>K</sup>	31,995 (12,948)	6,027 (2,439)
<i>Plantago princeps</i> var. <i>longibracteata</i>				X <sup>K-H</sup>				25,112 (10,163)	5,841 (2,364)
<i>Plantago princeps</i> var. <i>princeps</i>			X <sup>W, K-H</sup>	X <sup>W, K</sup>		X <sup>W</sup>	X <sup>K</sup>	35,382 (14,319)	7,954 (3,219)
<i>Platanthera holochila</i>				X <sup>K</sup>				25,112 (10,163)	5,841 (2,364)
<i>Platydesma cornuta</i> var. <i>cornuta</i>				X <sup>K</sup>				25,112 (10,163)	5,841 (2,364)
<i>Platydesma cornuta</i> var. <i>decurrens</i>			X <sup>W</sup>			X <sup>W</sup>		7,332 (2,967)	1,726 (699)
<i>Pleomele forbesii</i>		X <sup>W</sup>	X <sup>W, K</sup>			X <sup>W</sup>		9,747 (3,944)	1,919 (777)
<i>Psychotria hexandra</i> ssp. <i>oahuensis</i>				X <sup>K</sup>			X <sup>K</sup>	30,056 (12,163)	5,901 (2,388)
<i>Pteralyxia macrocarpa</i>			X <sup>W, K</sup>	X <sup>W, K</sup>		X <sup>W</sup>	X <sup>W, K</sup>	40,326 (16,320)	8,014 (3,243)
<i>Pteris lidgatei</i>				X <sup>K</sup>				25,112 (10,163)	5,841 (2,364)
<i>Sanicula mariveresa</i>			X <sup>W</sup>			X <sup>W</sup>		7,332 (2,967)	1,726 (699)
<i>Sanicula purpurea</i>				X <sup>K</sup>			X <sup>K</sup>	30,056 (12,163)	5,901 (2,388)
<i>Schiedea hookeri</i>		X <sup>W</sup>	X <sup>W</sup>	X <sup>W</sup>		X <sup>W</sup>		8,806 (3,564)	2,055 (832)
<i>Schiedea kaalae</i>			X <sup>W, K</sup>	X <sup>W</sup>			X <sup>W, K</sup>	13,765 (5,571)	1,309 (529)
<i>Schiedea kealiae</i>	X <sup>W</sup>	X <sup>W</sup>						1,493 (604)	67 (27)
<i>Schiedea nuttallii</i>			X <sup>W, K-H</sup>					7,823 (3,166)	987 (399)
<i>Schiedea obovata</i>			X <sup>W</sup>			X <sup>W</sup>		7,332 (2,967)	1,726 (699)
<i>Schiedea trinervis</i>					X <sup>W</sup>	X <sup>W</sup>	X <sup>W</sup>	2,127 (861)	1,364 (552)
<i>Sesbania tomentosa</i>	X <sup>W, K</sup>							1,332 (539)	0 (0)
<i>Silene lanceolata</i>						X <sup>W</sup>		1,449 (586)	865 (350)
<i>Silene perlmanii</i>			X <sup>W</sup>			X <sup>W</sup>		7,332 (2,967)	1,726 (699)
<i>Solanum sandwicense</i>			X <sup>W-H, K-H</sup>					7,823 (3,166)	987 (399)
<i>Spermolepis hawaiiensis</i>		X <sup>W, K</sup>				X <sup>W</sup>		2,225 (900)	932 (377)
<i>Stenogyne kanehoana</i>			X <sup>W</sup>					5,884 (2,381)	861 (349)
<i>Tetramolopium filiforme</i>						X <sup>W</sup>		1,449 (586)	865 (350)
<i>Tetramolopium lepidotum</i> ssp. <i>lepidotum</i>			X <sup>W</sup>			X <sup>W</sup>		7,332 (2,967)	1,726 (699)
<i>Tetraplasandra gymnocarpa</i>			X <sup>K</sup>	X <sup>K</sup>			X <sup>K</sup>	31,995 (12,948)	6,027 (2,439)
<i>Tetraplasandra lydgatei</i>			X <sup>K</sup>					1,939 (785)	126 (51)
<i>Trematolobelia singularis</i>				X <sup>K</sup>			X <sup>K</sup>	30,056 (12,163)	5,901 (2,388)

**TABLE 7A—SPECIES FOR WHICH CRITICAL HABITAT IS DESIGNATED IN EACH ECOSYSTEM, AND SECTION 4(A)(3) EXEMPT AREAS—Continued**  
[See discussion below]

Species	Coastal	Lowland dry	Lowland mesic	Lowland wet	Montane wet	Dry cliff	Wet cliff	Critical habitat ac (ha)	Exempt from critical habitat ac (ha) under 4(a)(3)
<i>Urera kaalae</i> .....	X <sup>W-H, K-H</sup>		X <sup>W</sup>	X <sup>W</sup>				6,573 (2,660)	1,023 (414)
<i>Vigna o-wahuensis</i> .....								1,332 (539)	0 (0)
<i>Viola chamissoniana</i> ssp. <i>chamissoniana</i> .....				X <sup>W</sup>			X <sup>W</sup>	7,332 (2,967)	1,726 (699)
<i>Viola oahuensis</i> .....					X <sup>K</sup>			30,056 (12,163)	5,901 (2,388)
<i>Zanthoxylum oahuense</i> .....					X <sup>K</sup>			25,112 (10,163)	5,841 (2,364)
ANIMALS									
blackline Hawaiian damselfly .....				X <sup>W-H, K</sup>				25,112 (10,163)	5,841 (2,364)
crimson Hawaiian damselfly .....				X <sup>W-H, K</sup>			X <sup>K</sup>	30,056 (12,163)	5,901 (2,388)
oceanic Hawaiian damselfly .....			X <sup>K</sup>	X <sup>W-H, K</sup>			X <sup>K</sup>	30,303 (12,263)	6,027 (2,439)
Designated CH ac (ha) .....	1,332 (539)	776 (314)	7,823 (3,166)	25,802 (10,442)	370 (150)	1,449 (586)	5,253 (2,126)		
Exempt Area ac (ha) .....	0 (0)	335 (136)	987 (399)	6,002 (2,429)	399 (161)	865 (350)	161 (65)		
Total Area Designated as Critical Habitat (including Exempt Area) ac (ha).	1,332 (539)	1,111 (450)	8,810 (3,565)	31,804 (12,871)	769 (311)	2,314 (936)	5,414 (2,191)		

W = occurs within indicated ecosystem in the Waianae Mountain caldera complex.  
 K = occurs within indicated ecosystem in the Koolau Mountain caldera complex.  
 W-H = known historically (last observed > 20 yrs ago) from indicated ecosystem in the Waianae Mountain caldera complex.  
 K-H = known historically (last observed > 20 yrs ago) from indicated ecosystem in the Koolau Mountain caldera complex.  
 The area known to be occupied by species for which the unit is designated also provides area essential to the conservation of all of the species that occur in that particular ecosystem. Unoccupied habitat provides space and appropriate environmental conditions for activities such as seed dispersal and reproduction that will serve to expand the existing populations.  
 \*This species may no longer occur in the wild.  
**Note:** Total number of species in table is greater than 124 because we identify the applicable ecosystems and section 4(A)(3) exempt areas for the Oahu varieties of *Phyllostegia parviflora* and *Plantago princeps*.

**TABLE 7B—AREAS BY ECOSYSTEM DETERMINED TO BE EXEMPT FROM DESIGNATION UNDER SECTION 4(A)(3) OF THE ACT**

Ecosystem	Designated critical habitat		Acres (hectares) exempt from critical habitat		Total area considered	
	Ac	Ha	Ac	Ha	Ac	Ha
Coastal .....	1,332	539	0	0	1,332	539
Lowland Dry .....	776	314	335	136	1,111	450
Lowland Mesic .....	7,823	3,166	987	399	8,810	3,565
Lowland Wet .....	25,802	10,442	6,002	2,429	31,804	12,871
Montane Wet .....	370	150	399	161	769	311
Dry Cliff .....	1,449	586	865	350	2,314	936
Wet Cliff .....	4,649	1,881	161	65	5,414	2,191

**Special Management Considerations or Protections**

The term critical habitat is defined in section 3(5)(A) of the Act, in part, as geographic areas on which are found the physical or biological features essential to the conservation of the species and “which may require special management considerations or protection.”

In identifying critical habitat in occupied areas, we determine whether those areas that contain the features essential to the conservation of the species require any special management actions. Although the determination that special management may be required is not a prerequisite to designating critical habitat in

unoccupied areas, special management is needed throughout all of the critical habitat units. The following discussion of special management needs is therefore applicable to each of the 124 Oahu species for which we are designating critical habitat.

The 124 Oahu species for which we are designating critical habitat include 116 species that are currently found in the wild on Oahu; 7 plant species found currently only on other Hawaiian Islands, but which were historically found on Oahu; and 1 plant species, *Cyrtandra waiolani*, which may not be extant in the wild. For each of the 123 species currently found in the wild, we have determined that the features essential to their conservation are

primarily dependent on the successful functioning of the ecosystem(s) in which they occur (see Tables 4 and 5). As described earlier, in some cases, additional species-specific primary constituent elements were also identified (see Table 5). Special management considerations or protections are necessary throughout the critical habitat areas designated to avoid further degradation or destruction of the habitat that provides those features essential to their conservation. The primary threats to the physical or biological features essential to the conservation of all of these species include habitat destruction and modification by feral ungulates, competition with nonnative species,

hurricanes, landslides, rockfalls, flooding, fire, drought, and climate change. The Hawaiian damselflies are additionally threatened by destruction and modification of their aquatic habitat due to conversion and fill for agriculture and development, and stream alterations (diversions, channelization, and dewatering). The reduction of these threats will require the implementation of special management actions within each of the critical habitat areas identified in this rule.

All critical habitat, except in the coastal ecosystem on Oahu, requires active management to address the ongoing degradation and loss of native habitat caused by feral ungulates (pigs and goats). Feral ungulates also impact the habitat through predation and trampling. Without this special management, habitat containing the features that are essential for the conservation of these species will continue to be degraded and destroyed.

All critical habitat requires active management to address the ongoing degradation and loss of native habitat caused by nonnative plants. Special management is also required to prevent the introduction of new alien plant species into native habitats. Particular attention is required during nonnative plant control efforts to avoid creating additional disturbances that may facilitate the further introduction and establishment of invasive plant seeds. Precautions are also required to avoid the inadvertent trampling of listed plant species in the course of management activities.

The active control of nonnative plant species will help to address the threat posed by fire to 25 of the designated ecosystem critical habitat units in particular: Oahu—Coastal—Unit 1, Oahu—Coastal—Unit 9, Oahu—Coastal—Unit 10, Oahu—Coastal—Unit 11, Oahu—Coastal—Unit 12, Oahu—Coastal—Unit 13, Oahu—Coastal—Unit 14, Oahu—Coastal—Unit 15, Oahu—Lowland Dry—Unit 1, Oahu—Lowland Dry—Unit 2, Oahu—Lowland Dry—Unit 6, Oahu—Lowland Dry—Unit 7, Oahu—Lowland Dry—Unit 8, Oahu—Lowland Dry—Unit 9, Oahu—Lowland Dry—Unit 10, Oahu—Lowland Dry—Unit 11, Oahu—Lowland Mesic—Unit 2, Oahu—Lowland Mesic—Unit 3, Oahu—Lowland Mesic—Unit 7, Oahu—Dry Cliff—Unit 2, Oahu—Dry Cliff—Unit 3, Oahu—Dry Cliff—Unit 4, Oahu—Dry Cliff—Unit 6, Oahu—Dry Cliff—Unit 7 (Oahu—Dry Cliff—Unit 7a and Oahu—Dry Cliff—Unit 7b), and Oahu—Dry Cliff—Unit 8. This threat is largely a result of the presence of nonnative plant species such as the grasses *Cenchrus ciliaris* and *Melinis minutiflora* that

increase the fuel load and quickly regenerate after a fire. These nonnative grass species can outcompete native plants that are not adapted to fire, creating a grass-fire cycle that alters ecosystem functions (D'Antonio and Vitousek 1992, pp. 64–66; Brooks *et al.* 2004, p. 680).

Thirty-four of the ecosystem critical habitat units (Oahu—Coastal—Unit 1, Oahu—Lowland Dry—Unit 1, Oahu—Lowland Dry—Unit 6, Oahu—Lowland Mesic—Unit 1, Oahu—Lowland Mesic—Unit 2, Oahu—Lowland Mesic—Unit 3, Oahu—Lowland Mesic—Unit 4, Oahu—Lowland Mesic—Unit 5, Oahu—Lowland Mesic—Unit 7, Oahu—Lowland Wet—Unit 1, Oahu—Lowland Wet—Unit 2, Oahu—Lowland Wet—Unit 3, Oahu—Lowland Wet—Unit 4, Oahu—Lowland Wet—Unit 7, Oahu—Lowland Wet—Unit 8, Oahu—Lowland Wet—Unit 9, Oahu—Lowland Wet—Unit 10, Oahu—Lowland Wet—Unit 11, Oahu—Lowland Wet—Unit 12, Oahu—Lowland Wet—Unit 13, Oahu—Lowland Wet—Unit 14, Oahu—Lowland Wet—Unit 15, Oahu—Lowland Wet—Unit 16, Oahu—Dry Cliff—Unit 1, Oahu—Dry Cliff—Unit 2, Oahu—Dry Cliff—Unit 3, Oahu—Dry Cliff—Unit 4, Oahu—Dry Cliff—Unit 6, Oahu—Dry Cliff—Unit 7 (Oahu—Dry Cliff—Unit 7a and Oahu—Dry Cliff—Unit 7b), Oahu—Wet Cliff—Unit 3, Oahu—Wet Cliff—Unit 5, Oahu—Wet Cliff—Unit 6, Oahu—Wet Cliff—Unit 7, and Oahu—Wet Cliff—Unit 8) may require special management to reduce the threat of landslides, rockfalls, and flooding. These threaten to further degrade habitat conditions in these units and have the potential to eliminate some populations of 23 plants (e.g., *Cyanea grimesiana* ssp. *grimesiana*, *C. lanceolata*, *Cyrtandra dentata*, *C. kaulantha*, *C. sessilis*, *Doryopteris takeuchii*, *Huperzia nutans*, *Lobelia gaudichaudii* ssp. *koolauensis*, *Lysimachia filifolia*, *Melicope makahae*, *Phyllostegia hirsuta*, *P. mollis*, *P. parviflora*, *Plantago princeps*, *P. cornuta* var. *decurens*, *Psychotria hexandra* ssp. *oahuensis*, *Sanicula mariversa*, *Schiedea kealiae*, *S. obovata*, *Solanum sandwicense*, *Spermolepis hawaiiensis*, *Urera kaalae*, and *Viola chamissoniana* ssp. *chamissoniana*) and the 3 damselfly species found on steep slopes and cliffs, or in narrow gulches. In addition, perennial streams in 40 of the overlapping ecosystem units (blackline Hawaiian damselfly Lowland Wet units 1–11; crimson Hawaiian damselfly Lowland Wet units 1–11 and Wet Cliff units 12–14; and oceanic Hawaiian damselfly critical habitat Lowland

Mesic unit 1, Lowland Wet units 2–12, and Wet Cliff units 13–15) may require special management to reduce the threats to the blackline, crimson, and oceanic Hawaiian damselflies from diversions, dewatering, vertical wells, and stream channelization.

In summary, we find that each of the areas we are designating as critical habitat contains features essential for the conservation of the species that may require special management considerations or protection to ensure the conservation of the 124 Oahu species. These special management considerations and protections are required to preserve and maintain the essential features provided to these species by the ecosystems upon which they depend. The specific areas designated as critical habitat that are outside the geographical areas occupied by these species have been determined to be essential for their conservation.

#### Critical Habitat Designation

We are designating 42,804 ac (17,322 ha) as critical habitat in 7 ecosystem types for 124 species. The critical habitat is comprised of 62 critical habitat units for the plants and 40 critical habitat units for the damselflies (see Tables 6A and 6B, above, for details). The critical habitat includes land under State, City and County of Honolulu, Federal (Department of Defense–Navy; Department of Homeland Security–Coast Guard; Department of the Interior–Fish and Wildlife Service), and private ownership. The critical habitat units we describe below constitute our current best assessment of those areas that meet the definition of critical habitat for the 124 species of plants and animals.

#### Descriptions of Critical Habitat Units

The unit descriptions presented here represent the 7 essential ecosystem areas that we have identified for all 124 species. Critical habitat for the 121 Oahu plant species and critical habitat for the 3 Oahu damselflies are published in separate sections of the Code of Federal Regulations (CFR); critical habitat is published at 50 CFR 17.99(i) for Oahu plants and at 50 CFR 17.95(i) for the 3 damselfly species. However, the same geographic area represents designated critical habitat for both plants and damselflies in some portions of Oahu. For example, Oahu—Lowland Mesic—Unit 6 and oceanic Hawaiian damselfly—Unit 1—Lowland Mesic correspond to the same geographic area. Therefore, because the unit boundaries are the same, we are describing them only once to avoid redundancy, as indicated in the unit descriptions by the

inclusion of “(and)” following the unit name.

As provided under section 4(b)(2) of the Act, some or portions of each of these areas were considered for exclusion from critical habitat in this final rule. Exclusions are considered based weighing the benefits of inclusion against the benefits of excluding such area in critical habitat after considering all relevant impacts, including information provided during the public comment period on potential economic impacts of this critical habitat designation. The consideration of potential economic impacts applies solely to the designation of critical habitat, and is not a factor in our assessment of whether a species warrants listing as endangered or threatened under the Act.

Oahu—Coastal—Unit 1 consists of 946 ac (383 ha) of State land, 11 ac (4 ha) of Federal land, and 2 ac (1 ha) of privately owned land in the coastal ecosystem along the northwestern coast of Oahu from Kaena Point east to Kauhao Pali and southeast to Keawaula. This unit is partially within Kaena Point State Park. It is occupied by the plants *Achyranthes splendens* var. *rotundata*, *Chamaesyce celastroides* var. *kaenana*, and *Sesbania tomentosa*, and includes the mixed hermland and shrubland, the moisture regime, and subcanopy and understory native plant species identified as physical or biological features in the coastal ecosystem (see Table 4). This unit also contains unoccupied habitat that is essential to the conservation of these species by providing the PCEs necessary for the expansion of the existing wild populations. Although Oahu—Coastal—Unit 1 is not known to be occupied by *Bidens amplexans*, *Centaurium sebaeoides*, *Schiedea kealiae*, or *Vigna o-wahuensis*, we have determined this area to be essential for the conservation and recovery of these coastal species because it provides the PCEs necessary for the reestablishment of wild populations within their historical range. Due to their small numbers of individuals or low population sizes, these species require suitable habitat and space for expansion or reintroduction to achieve population levels that could achieve recovery.

Oahu—Coastal—Unit 2 consists of 12 ac (5 ha) in the coastal ecosystem on Mokuaua, an islet east of Kalanai Point on the northeastern coast of Oahu. This unit is State-owned and is classified as a State Seabird Sanctuary. It includes the mixed hermland and shrubland, the moisture regime, and subcanopy and understory native plant species identified as physical or biological

features in the coastal ecosystem (see Table 4). Although Oahu—Coastal—Unit 2 is not currently occupied by *Centaurium sebaeoides*, *Chamaesyce kuwaleana*, *Sesbania tomentosa*, or *Vigna o-wahuensis*, we have determined this area to be essential for the conservation and recovery of these coastal species because it provides the PCEs necessary for the reestablishment of wild populations within the historical ranges of the species. Due to their small numbers of individuals or low population sizes, these species require suitable habitat and space for expansion or reintroduction to achieve population levels that could achieve recovery.

Oahu—Coastal—Unit 3 consists of 15 ac (6 ha) in the coastal ecosystem, on the larger of two islets (Moku Manu) off the windward coast of Oahu near Mokapu Peninsula. This unit is State-owned, classified as a State Seabird Sanctuary, and includes the mixed hermland and shrubland, the moisture regime, and subcanopy and understory native plant species identified as PCEs in the coastal ecosystem (see Table 4). Although Oahu—Coastal—Unit 3 is not currently occupied by *Centaurium sebaeoides*, *Chamaesyce kuwaleana*, *Sesbania tomentosa*, or *Vigna o-wahuensis*, we have determined this area to be essential for the conservation and recovery of these coastal species because it provides the PCEs necessary for the reestablishment of wild populations within the historical ranges of the species. Due to their small numbers of individuals or low population sizes, these species require suitable habitat and space for expansion or reintroduction to achieve population levels that could achieve recovery.

Oahu—Coastal—Unit 4 consists of 3 ac (1 ha) in the coastal ecosystem, the smaller of two islets (Moku Manu) off the windward coast of Oahu near Mokapu Peninsula. This unit is State-owned, classified as a State Seabird Sanctuary, and includes the mixed hermland and shrubland, the moisture regime, and subcanopy and understory native plant species identified as physical or biological features in the coastal ecosystem (see Table 4). Although Oahu—Coastal—Unit 4 is not currently occupied by *Centaurium sebaeoides*, *Chamaesyce kuwaleana*, *Sesbania tomentosa*, or *Vigna o-wahuensis*, we have determined this area to be essential for the conservation and recovery of these coastal species because it provides the PCEs necessary for the reestablishment of wild populations within the historical ranges of the species. Due to their small numbers of individuals or low

population sizes, these species require suitable habitat and space for expansion or reintroduction to achieve population levels that could achieve recovery.

Oahu—Coastal—Unit 5 consists of 12 ac (5 ha) in the coastal ecosystem, the larger of two islands (Mokulua Islands) off the windward coast of Oahu near Wailea Point. This unit is State-owned, classified as a State Seabird Sanctuary, and includes the mixed hermland and shrubland, the moisture regime, and subcanopy and understory native plant species identified as physical or biological features in the coastal ecosystem (see Table 4). Although Oahu—Coastal—Unit 5 is not currently occupied by *Centaurium sebaeoides*, *Chamaesyce kuwaleana*, *Sesbania tomentosa*, or *Vigna o-wahuensis*, we have determined this area to be essential for the conservation and recovery of these coastal species because it provides the PCEs necessary for the reestablishment of wild populations within the historical ranges of the species. Due to their small numbers of individuals or low population sizes, these species require suitable habitat and space for expansion or reintroduction to achieve population levels that could achieve recovery.

Oahu—Coastal—Unit 6 consists of 9 ac (4 ha) in the coastal ecosystem, on the smaller of two islands (Mokulua Islands) off the windward coast of Oahu near Wailea Point. This unit is State-owned, classified as a State Seabird Sanctuary, and includes the mixed hermland and shrubland, the moisture regime, and subcanopy and understory native plant species identified as physical or biological features in the coastal ecosystem (see Table 4). Although Oahu—Coastal—Unit 6 is not currently occupied by *Centaurium sebaeoides*, *Chamaesyce kuwaleana*, *Sesbania tomentosa*, or *Vigna o-wahuensis*, we have determined this area to be essential for the conservation and recovery of these coastal species because it provides the PCEs necessary for the reestablishment of wild populations within the historical ranges of the species. Due to their small numbers of individuals or low population sizes, these species require suitable habitat and space for expansion or reintroduction to achieve population levels that could achieve recovery.

Oahu—Coastal—Unit 7 consists of 67 ac (27 ha) in the coastal ecosystem, on the larger of two islands (Manana Island) off the windward coast of Oahu near Makapuu Point. This unit is State-owned, classified as a State Seabird Sanctuary, and includes the mixed hermland and shrubland, the moisture regime, and subcanopy and understory

native plant species identified as physical or biological features in the coastal ecosystem (see Table 4). Although Oahu—Coastal—Unit 7 is not currently occupied by *Centaurium sebaeoides*, *Chamaesyce kuwaleana*, *Sesbania tomentosa*, or *Vigna o-wahuensis*, we have determined this area to be essential for the conservation and recovery of these coastal species because it provides the PCEs necessary for the reestablishment of wild populations within the historical ranges of the species. Due to their small numbers of individuals or low population sizes, these species require suitable habitat and space for expansion or reintroduction to achieve population levels that could achieve recovery.

Oahu—Coastal—Unit 8 consists of 10 ac (4 ha) in the coastal ecosystem, on the smaller of two islands (Kaohikaipu Island) off the windward coast of Oahu near Makapuu Point. This unit is State-owned, classified as a State Seabird Sanctuary, and includes the mixed herbland and shrubland, the moisture regime, and subcanopy and understory native plant species identified as physical or biological features in the coastal ecosystem (see Table 4). This unit is occupied by the plant *Sesbania tomentosa* and contains unoccupied habitat that is essential to the conservation of this species by providing the PCEs necessary for the expansion of the existing wild populations. Although Oahu—Coastal—Unit 8 is not currently occupied by *Centaurium sebaeoides*, *Chamaesyce kuwaleana*, or *Vigna o-wahuensis*, we have determined this area to be essential for the conservation and recovery of these coastal species because it provides the PCEs necessary for the reestablishment of wild populations within the historical ranges of the species. Due to their small numbers of individuals or low population sizes, these species require suitable habitat and space for expansion or reintroduction to achieve population levels that could achieve recovery.

Oahu—Coastal—Unit 9 consists of 80 ac (33 ha) of State land in the coastal ecosystem on the leeward side of Makapuu Point (Puuokipahulu). This unit is occupied by the plants *Cyperus trachysanthos* and *Marsilea villosa*, and includes the mixed herbland and shrubland, the moisture regime, and subcanopy and understory native plant species identified as physical or biological features in the coastal ecosystem, as well as PCEs unique for the plants *C. trachysanthos* and *M. villosa* (see Tables 4 and 5). This unit also contains unoccupied habitat that is essential to the conservation of these

species by providing the PCEs necessary for the expansion of the existing wild populations. Although Oahu—Coastal—Unit 9 is not currently occupied by *Centaurium sebaeoides*, *Chamaesyce kuwaleana*, *Sesbania tomentosa*, or *Vigna o-wahuensis*, we have determined this area to be essential for the conservation and recovery of these coastal species because it provides the PCEs necessary for the reestablishment of wild populations within the historical ranges of the species. Due to their small numbers of individuals or low population sizes, these species require suitable habitat and space for expansion or reintroduction to achieve population levels that could achieve recovery.

Oahu—Coastal—Unit 10 consists of 74 ac (30 ha) in the coastal ecosystem, owned by the City and County of Honolulu at Halona Point on the leeward side of Koko Crater, extending from Sandy Beach to Kahauloa. It is occupied by the plant *Centaurium sebaeoides* and includes the mixed herbland and shrubland, the moisture regime, and subcanopy and understory native plant species identified as physical or biological features in the coastal ecosystem (see Table 4). This unit also contains unoccupied habitat that is essential to the conservation of this species by providing the PCEs necessary for the expansion of the existing wild populations. Although Oahu—Coastal—Unit 10 is not known to be occupied by *Chamaesyce kuwaleana*, *Sesbania tomentosa*, or *Vigna o-wahuensis*, we have determined this area to be essential for the conservation and recovery of these coastal species because it provides the PCEs necessary for the reestablishment of wild populations within the historical ranges of the species. Due to their small numbers of individuals or low population sizes, these species require suitable habitat and space for expansion or reintroduction to achieve population levels that could achieve recovery.

Oahu—Coastal—Unit 11 consists of 20 ac (8 ha) of privately owned land in the coastal ecosystem, at Ihihilauakea on Koko Head (Kaihuokapuaa). This unit is occupied by the plant *Marsilea villosa*, and includes the mixed herbland and shrubland, the moisture regime, and subcanopy and understory native plant species identified as physical or biological features in the coastal ecosystem, as well as PCEs unique for this species (see Tables 4 and 5). This unit also contains unoccupied habitat that is essential to the conservation of this species by providing the PCEs necessary for the

expansion of the existing wild populations. Although Oahu—Coastal—Unit 11 is not currently occupied by *Centaurium sebaeoides*, *Chamaesyce kuwaleana*, *Cyperus trachysanthos*, *Sesbania tomentosa*, and *Vigna o-wahuensis*, we have determined this area to be essential for the conservation and recovery of these coastal species because it provides the PCEs necessary for the reestablishment of wild populations within the historical ranges of the species. Due to their small numbers of individuals or low population sizes, these species require suitable habitat and space for expansion or reintroduction to achieve population levels that could achieve recovery.

Oahu—Coastal—Unit 12 consists of 11 ac (5 ha) of City and County land in the coastal ecosystem, at Nonoula on Koko Head (Kaihuokapuaa). This unit is occupied by the plant *Marsilea villosa*, and includes the mixed herbland and shrubland, the moisture regime, and subcanopy and understory native plant species identified as physical or biological features in the coastal ecosystem, as well as PCEs unique for this species (see Tables 4 and 5). This unit also contains unoccupied habitat that is essential to the conservation of this species by providing the PCEs necessary for the expansion of the existing wild populations. Although Oahu—Coastal—Unit 12 is not currently occupied by *Centaurium sebaeoides*, *Chamaesyce kuwaleana*, *Cyperus trachysanthos*, *Sesbania tomentosa*, or *Vigna o-wahuensis*, we have determined this area to be essential for the conservation and recovery of these coastal species because it provides the PCEs necessary for the reestablishment of wild populations within the historical ranges of the species. Due to their small numbers of individuals or low population sizes, these species require suitable habitat and space for expansion or reintroduction to achieve population levels that could achieve recovery.

Oahu—Coastal—Unit 13 consists of 19 ac (8 ha) of City and County land, 1 ac (0.5 ha) of State land, and 3 ac (1 ha) of privately owned land in the coastal ecosystem at Kalaeloa. This unit is occupied by the plant *Achyranthes splendens* var. *rotundata*, and includes the mixed herbland and shrubland, the moisture regime, and subcanopy and understory native plant species identified as physical or biological features in the coastal ecosystem (see Table 4). This unit also contains unoccupied habitat that is essential to the conservation of this species by providing the PCEs necessary for the expansion of the existing wild

populations. Although Oahu—Coastal—Unit 13 is not known to be occupied by *Bidens amplexans*, *Centaurium sebaeoides*, *Chamaesyce celastroides* var. *kaenana*, *Schiedea kealiae*, *Sesbania tomentosa*, or *Vigna o-wahuensis*, we have determined this area to be essential for the conservation and recovery of these coastal species because it provides the PCEs necessary for the reestablishment of wild populations within the historical ranges of the species. Due to their small numbers of individuals or low population sizes, these species require suitable habitat and space for expansion or reintroduction to achieve population levels that could achieve recovery.

Oahu—Coastal—Unit 14 consists of 2 ac (1 ha) of City and County of Honolulu land, and 2 ac (1 ha) of Federal land (U.S. Coast Guard) in the coastal ecosystem at Kalaeloa. This unit is occupied by the plant *Achyranthes splendens* var. *rotundata*, and includes the mixed herbland and shrubland, the moisture regime, and subcanopy and understory native plant species identified as physical or biological features in the coastal ecosystem (see Table 4). This unit also contains unoccupied habitat that is essential to the conservation of this species by providing the PCEs necessary for the expansion of the existing wild populations. Although Oahu—Coastal—Unit 14 is not known to be occupied by *Bidens amplexans*, *Centaurium sebaeoides*, *Chamaesyce celastroides* var. *kaenana*, *Schiedea kealiae*, *Sesbania tomentosa*, or *Vigna o-wahuensis*, we have determined this area to be essential for the conservation and recovery of these coastal species because it provides the PCEs necessary for the reestablishment of wild populations within the historical ranges of the species. Due to their small numbers of individuals or low population sizes, these species require suitable habitat and space for expansion or reintroduction to achieve population levels that could achieve recovery.

Oahu—Coastal—Unit 15 consists of 9 ac (4 ha) of State land, 2 ac (1 ha) of privately owned land, and 21 ac (9 ha) of Federal (Pearl Harbor NWR) land at Kalaeloa. This unit is occupied by the plant *Achyranthes splendens* var. *rotundata*, and includes the mixed herbland and shrubland, the moisture regime, and subcanopy and understory native plant species identified as physical or biological features in the coastal ecosystem (see Table 4). This unit also contains unoccupied habitat that is essential to the conservation of this species by providing the PCEs necessary for the expansion of the

existing wild populations. Although Oahu—Coastal—Unit 15 is not known to be occupied by *Bidens amplexans*, *Centaurium sebaeoides*, *Chamaesyce celastroides* var. *kaenana*, *Schiedea kealiae*, *Sesbania tomentosa*, or *Vigna o-wahuensis*, we have determined this area to be essential for the conservation and recovery of these coastal species because it provides the PCEs necessary for the reestablishment of wild populations within the historical ranges of the species. Due to their small numbers of individuals or low population sizes, these species require suitable habitat and space for expansion or reintroduction to achieve population levels that could achieve recovery.

Oahu—Lowland Dry—Unit 1 consists of 49 ac (20 ha) of State land and 53 ac (22 ha) of privately owned land in the Waianae Mountains, extending from Haili Gulch to Kawaipahai. This unit is occupied by the plants *Bidens amplexans*, *Hibiscus brackenridgei*, *Nototrichium humile*, and *Schiedea kealiae*, and includes the dry forest and shrubland, the moisture regime, and canopy, subcanopy and understory native plant species identified as physical or biological features in the lowland dry ecosystem (see Table 4). This unit also contains unoccupied habitat that is essential to the conservation of these species by providing the PCEs necessary for the expansion of the existing wild populations. Although Oahu—Lowland Dry—Unit 1 is not known to be occupied by the plants *Achyranthes splendens* var. *rotundata*, *Bonamia menziesii*, *Chamaesyce celastroides* var. *kaenana*, *Euphorbia haeleeleana*, *Gouania meyenii*, *G. vitifolia*, *Isodendron pyriformis*, *Melanthera tenuifolia*, *Neraudia angulata*, *Pleomele forbesii*, *Schiedea hookeri*, or *Spermolepis hawaiiensis*, we have determined this area to be essential for the conservation and recovery of these lowland dry species because it provides the PCEs necessary for the reestablishment of wild populations within the historical ranges of the species. Due to their small numbers of individuals or low population sizes, these species require suitable habitat and space for expansion or reintroduction to achieve population levels that could achieve recovery.

Oahu—Lowland Dry—Unit 2 consists of 29 ac (12 ha) in the lowland dry ecosystem in the Waianae Mountains, on Federal land within Kaena Point State Park. This unit is occupied by the plants *Bonamia menziesii*, *Melanthera tenuifolia*, *Nototrichium humile*, and *Pleomele forbesii*, and includes the dry forest and shrubland, the moisture

regime, and canopy, subcanopy and understory native plant species identified as physical or biological features in the lowland dry ecosystem (see Table 4). This unit also contains unoccupied habitat that is essential to the conservation of these species by providing the PCEs necessary for the expansion of the existing wild populations. Although Oahu—Lowland Dry—Unit 2 is not known to be occupied by the plants *Achyranthes splendens* var. *rotundata*, *Bidens amplexans*, *Chamaesyce celastroides* var. *kaenana*, *Euphorbia haeleeleana*, *Gouania meyenii*, *G. vitifolia*, *Hibiscus brackenridgei*, *Isodendron pyriformis*, *Neraudia angulata*, *Schiedea hookeri*, *S. kealiae*, or *Spermolepis hawaiiensis*, we have determined this area to be essential for the conservation and recovery of these lowland dry species because it provides the PCEs necessary for the reestablishment of wild populations within the historical ranges of the species. Due to their small numbers of individuals or low population sizes, these species require suitable habitat and space for expansion or reintroduction to achieve population levels that could achieve recovery.

Oahu—Lowland Dry—Unit 6 consists of 287 ac (116 ha) of State land in the lowland dry ecosystem, on the outer rim of Leahi (Diamond Head) Crater within Diamond Head State Monument. This unit is occupied by the plants *Doryopteris takeuchii* and *Spermolepis hawaiiensis*, and includes the dry forest and shrubland, the moisture regime, and canopy, subcanopy and understory native plant species identified as physical or biological features in the lowland dry ecosystem (see Table 4). This unit also contains unoccupied habitat that is essential to the conservation of these species by providing the PCEs necessary for the expansion of the existing wild populations. Although Oahu—Lowland Dry—Unit 6 is not known to be occupied by the plant *Gouania meyenii*, we have determined this area to be essential for the conservation and recovery of this lowland dry species because it provides the PCEs necessary for the reestablishment of wild populations within the historical range of the species. Due to its small numbers of individuals or low population sizes, this species requires suitable habitat and space for expansion or reintroduction to achieve population levels that could achieve recovery.

Oahu—Lowland Dry—Unit 7 consists of 15 ac (6 ha) of State land in the lowland dry ecosystem, in Leahi (Diamond Head) Crater within Diamond Head State Monument. This unit is

occupied by the plant *Cyperus trachysanthos* and includes the dry forest and shrubland, the moisture regime, and canopy, subcanopy and understory native plant species identified as physical or biological features in the lowland dry ecosystem, as well as unique PCEs for this plant (see Tables 4 and 5). This unit also contains unoccupied habitat that is essential to the conservation of this species by providing the PCEs necessary for the expansion of the existing wild populations. Although Oahu—Lowland Dry—Unit 7 is not known to be occupied by the plants *Doryopteris takeuchii*, *Gouania meyenii*, *Marsilea villosa*, or *Spermolepis hawaiiensis*, we have determined this area to be essential for the conservation and recovery of these lowland dry species because it provides the PCEs necessary for the reestablishment of wild populations within the historical ranges of the species, and the unique PCEs for the species *M. villosa* (see Table 5). Due to their small numbers of individuals or low population sizes, these species require suitable habitat and space for expansion or reintroduction to achieve population levels that could achieve recovery.

Oahu—Lowland Dry—Unit 8 consists of 96 ac (40 ha) of privately owned land and 3 ac (1 ha) of State land as part of the old railroad right-of-way in the lowland dry ecosystem, at the Kalaeloa Barber's Point Harbor area. The area was occupied by *Chamaesyce skottsbergii* var. *skottsbergii* at the time the species was listed (see 47 FR 36846, August 24, 1982), although it is not currently known to be occupied by *C. skottsbergii* var. *skottsbergii*. The species was last observed on this site in 1989. However, even though the site is degraded, during two recent field surveys (November 2011 and June 2012), we verified that the area being designated contains the physical and biological features of the lowland dry ecosystem and the coral outcrop substrate that is essential for the conservation of *C. skottsbergii* var. *skottsbergii* (see Tables 4 and 5). Based on the field visits, the boundaries of the unit were revised to remove areas that were modified by construction and excavation activities, and do not contain essential features. This resulted in the reduction of the unit from the 292 ac (118 ha) that were originally proposed to the 99 ac (40 ha) that are included in this final rule.

These physical and biological features are essential to the conservation of the species in this location because the conservation of the species requires reestablishment of populations of this species in areas where it once occurred.

Based on our evaluation of the conservation needs for *Chamaesyce skottsbergii* var. *skottsbergii*, a plant requiring another individual for pollination (obligate-outcrosser) and living 10 years or less (short-lived perennial), we will need 7 to 8 populations containing a total of 10,000 mature individuals with at least 1,000 mature individuals per population in order to recover the species. The numbers of individuals and numbers of populations calculated for the 4 Lowland Dry units for akoko was based on our analysis (white paper) "Recovery Needs and Strategy for Akoko", June 20, 2012. This analysis incorporated data from the Recovery Plan for *C. skottsbergii* var. *skottsbergii* and *Achyranthes splendens* var. *rotundata* (1993), surveys/species reports from 1979, 1981, 1984, and 2012, the Revised Recovery Objective Guidelines as determined by the Hawaii and Pacific Plants Recovery Coordinating Committee (HPPRCC) 2011, and plant genetics information from Guerrant *et al.* (2004, pp. 419–441) and Neel and Cummings (2003).

Currently, *Chamaesyce skottsbergii* var. *skottsbergii* is found in 2 occurrences in the lowland dry ecosystem on the Ewa Plain in southwestern Oahu, totaling approximately 200 wild individuals and 600 outplanted individuals (Guinther and Withrow 2008, pp. 6, 9–10; Whistler 2008, pp. 7–9; U.S. Navy *et al.* 2012, pp. 19–20). In our review of areas on the Ewa Plain where the features essential to the conservation of this species are still present, we were only able to find four sites that still had the essential features; were not already modified by construction, development, or excavation activities; were large enough to provide habitat for at least one self-sustaining population; and provided adequate distribution across the historical range of the species. To the extent that portions of this unit may not have been occupied at the time of listing, they are essential to the conservation of the species because, as discussed above, conservation of this species will require establishment of additional populations and this is one of the few suitable locations. Oahu—Lowland Dry—Unit 8 is one of four locations included in this final critical habitat designation that is essential to the conservation of *Chamaesyce skottsbergii* var. *skottsbergii*. It was previously occupied by the species and still contains the features essential to its conservation, such as the unique coral outcrop substrate. Oahu—Lowland Dry—Unit 8 may be able to provide for

two separate populations of *C. skottsbergii* var. *skottsbergii*. A designation limited to areas presently occupied by the species would be inadequate to ensure the conservation of the species because the one occupied unit (only Oahu—Lowland Dry—Unit 11, see below, is occupied by wild individuals; Oahu—Lowland Dry—Unit 9 contains outplanted, propagated individuals) would not provide enough area to support 7 to 8 populations needed for recovery, as determined in the "Recovery Needs and Strategy for *Chamaesyce skottsbergii* var. *skottsbergii* (Ewa Plains akoko)" (Service 2012, entire). There are no other geographic areas that are both undeveloped and contain the species-specific PCE of coral outcrop substrate.

Oahu—Lowland Dry—Unit 8 is not known to be occupied by *Bidens amplexans*, one of the plants being listed in this rule as endangered. However, we have determined the lands within this unit are essential for the conservation of this lowland dry species, because they provide the habitat necessary for the reestablishment of wild populations within the historical ranges of the species (see Table 4). Due to their small numbers of individuals or low population sizes, this species requires suitable habitat and space for expansion or reintroduction to achieve population levels that could achieve recovery. Additionally, Oahu—Lowland Dry—Unit 8 was not occupied by the endangered plants *Achyranthes splendens* var. *rotundata*, *Bonamia menziesii*, *Chamaesyce celastroides* var. *kaenana*, *Euphorbia haeleleleana*, *Gouania meyenii*, *G. vitifolia*, *Hibiscus brackenridgei*, *Isodendron pyriformium*, *Melanthera tenuifolia*, *Neraudia angulata*, *Nototrichium humile*, *Schiedea hookeri*, *S. kealiae*, or *Spermolepis hawaiiensis* (see 51 FR 10518, March 26, 1986, and 68 FR 35950, June 17, 2003, for previous Federal actions), at the time they were listed, and is not currently known to be occupied by these 14 species. However, we have determined the lands within this unit are essential for the conservation of these lowland dry species, because they provide the habitat necessary for the reestablishment of wild populations within the historical ranges of the species (see Table 4). Due to their small numbers of individuals or low population sizes, these species require suitable habitat and space for expansion or reintroduction to achieve population levels that could achieve recovery.

Oahu—Lowland Dry—Unit 9 consists of 17 ac (7 ha) of City and County land,

3 ac (1 ha) of privately owned land, 1 ac (0.5 ha) of State land, and 16 ac (6 ha) of Federal (Pearl Harbor NWR) land in the lowland dry ecosystem at Kalaeloa. This unit was not occupied by *Chamaesyce skottsbergii* var. *skottsbergii* at the time the species was listed (see 47 FR 36846, August 24, 1982). As noted in the description of Oahu—Lowland Dry—Unit 8 above, we have determined that for *C. skottsbergii* var. *skottsbergii*, a plant requiring another individual for pollination (obligate-outcrosser) and living 10 years or less (short-lived perennial), we will need 7 to 8 populations containing at least a total of 10,000 mature individuals with at least 1,000 mature individuals per population in order to recover the species (HPPRCC 2011; Guerrant *et al.* 2004, pp. 419–441; Neel and Cummings 2003). Oahu—Lowland Dry—Unit 9 is one of the four locations included in this final critical habitat designation that is essential to the conservation of *C. skottsbergii* var. *skottsbergii*; please see discussion of the importance of these areas on the Ewa Plain, above, in the description of Oahu—Lowland Dry—Unit 8. This unit is currently occupied by recently outplanted individuals of *Chamaesyce skottsbergii* var. *skottsbergii*, and includes the dry forest and shrubland, the moisture regime, and canopy, subcanopy and understory native plant species identified as physical or biological features in the lowland dry ecosystem, and the unique PCEs for the species *C. skottsbergii* var. *skottsbergii* (see Tables 4 and 5). This unit also contains unoccupied habitat that is essential to the conservation of this species by providing the PCEs necessary for the expansion of the existing populations. Oahu—Lowland Dry—Unit 9 may be able to provide for one separate population of *C. skottsbergii* var. *skottsbergii*. Oahu—Lowland Dry—Unit 9 is not known to be occupied by another plant being listed as endangered in this rule, *Bidens amplexans*. We have determined this area to be essential for the conservation and recovery of both of these lowland dry species because it provides the habitat necessary for the reestablishment of wild populations within the historical ranges of the species (see Table 4). Due to their small numbers of individuals or low population sizes, these species require suitable habitat and space for expansion or reintroduction to achieve population levels that could achieve recovery. A designation limited to areas presently occupied by the species would be inadequate because the one occupied unit (only Oahu—Lowland

Dry—Unit 11, see below, is occupied by wild individuals; Oahu—Lowland Dry—Unit 9 contains outplanted, propagated individuals) would not provide enough area to support 7 to 8 populations needed for recovery, as determined in the “Recovery Needs and Strategy for *Chamaesyce skottsbergii* var. *skottsbergii* (Ewa Plains akoko)” (Service 2012, entire). There are no other geographic areas that are both undeveloped and contain the species-specific PCE of coral outcrop substrate.

Additionally, Oahu—Lowland Dry—Unit 9 was not occupied by the endangered plants *Achyranthes splendens* var. *rotundata*, *Bonamia menziesii*, *Chamaesyce celastroides* var. *kaenana*, *Euphorbia haeleleana*, *Gouania meyenii*, *G. vitifolia*, *Hibiscus brackenridgei*, *Isodendron pyriformis*, *Melanthera tenuifolia*, *Neraudia angulata*, *Nototrichium humile*, *Schiedea hookeri*, *S. kealiae*, or *Spermolepis hawaiiensis* (see 51 FR 10518, March 26, 1986 and 68 FR 35950, June 17, 2003), at the time they were listed, and is not currently known to be occupied by these 14 species. We have determined this area to be essential for the conservation and recovery of these lowland dry species because it provides the PCEs necessary for the reestablishment of wild populations within the historical ranges of the species (see Table 4). Due to their small numbers of individuals or low population sizes, these species require suitable habitat and space for expansion or reintroduction to achieve population levels that could achieve recovery.

Oahu—Lowland Dry—Unit 10 consists of 43 ac (17 ha) of State land (DHHL) in the lowland dry ecosystem at Kalaeloa. This unit was not occupied by *Chamaesyce skottsbergii* var. *skottsbergii* at the time the species was listed (see 47 FR 36846, August 24, 1982); however, *C. skottsbergii* var. *skottsbergii* was observed in the area in 1998, but has not been re-observed since that time. As noted in the description of Oahu—Lowland Dry—Unit 8, above, we have determined that *C. skottsbergii* var. *skottsbergii*, a plant requiring another individual for pollination (obligate-outcrosser) and living 10 years or less (short-lived perennial), we will need 7 to 8 populations containing a total of 10,000 mature individuals with at least 1,000 mature individuals per population in order to recover the species (HPPRCC 2011; Guerrant *et al.* 2004, pp. 419–441; Neel and Cummings 2003). Oahu—Lowland Dry—Unit 10 is one of the four locations included in this final critical habitat designation that is essential to the conservation of *C. skottsbergii* var. *skottsbergii*; please see discussion of the

importance of these areas on the Ewa Plain, above, in the description of Oahu—Lowland Dry—Unit 8. This unit was previously occupied by *Chamaesyce skottsbergii* var. *skottsbergii* and still contains the features essential to its conservation, such as the unique coral outcrop substrate (see Tables 4 and 5). In the future, Oahu—Lowland Dry—Unit 10 may be able to provide for one separate population of *C. skottsbergii* var. *skottsbergii*. A designation limited to areas presently occupied by the species would be inadequate to ensure the conservation of the species, because the one occupied unit (Oahu—Lowland Dry—Unit 11) would not provide enough area to support 7 to 8 populations needed for recovery, as determined in the “Recovery Needs and Strategy for *Chamaesyce skottsbergii* var. *skottsbergii* (Ewa Plains akoko)” (Service 2012, entire). There are no other geographic areas that are both undeveloped and contain the species-specific PCE of coral outcrop substrate.

Oahu—Lowland Dry—Unit 10 is not known to be occupied by another plant being listed as endangered in this rule, *Bidens amplexans*. However, we have determined this area to be essential for the conservation and recovery of this lowland dry species, because it provides the PCEs necessary for the reestablishment of wild populations within the historical ranges of the species (see Table 4). Due to its small numbers of individuals or low population sizes, this species require suitable habitat and space for expansion or reintroduction to achieve population levels that could achieve recovery. Additionally, Oahu—Lowland Dry—Unit 10 was not occupied by the endangered plants *Achyranthes splendens* var. *rotundata*, *Bonamia menziesii*, *Chamaesyce celastroides* var. *kaenana*, *Euphorbia haeleleana*, *Gouania meyenii*, *G. vitifolia*, *Hibiscus brackenridgei*, *Isodendron pyriformis*, *Melanthera tenuifolia*, *Neraudia angulata*, *Nototrichium humile*, *Schiedea hookeri*, *S. kealiae*, or *Spermolepis hawaiiensis* (see 51 FR 10518, March 26, 1986, and 68 FR 35950, June 17, 2003), at the time they were listed, and is not currently known to be occupied by these 14 species. We have determined this area to be essential for the conservation and recovery of these lowland dry species because it provides the PCEs necessary for the reestablishment of wild populations within the historical ranges of the species (see Table 4). Due to their small numbers of individuals or low population sizes, these species require

suitable habitat and space for expansion or reintroduction to achieve population levels that could achieve recovery.

We are aware of the planned development of the Kalaeloa Solar One and Two alternative energy facilities (DHHL 2011, in litt.) on lands within, and adjacent to, this unit. The facilities, which are independently owned and operated, are being developed for the purpose of reducing Oahu's dependence on fossil-fuel for power generation. The January 2011 Draft Environmental Assessment prepared for this project states that no Federal funding or Federal authorizations will be required to develop this facility. We are also unaware of any Federal nexus for this project. Accordingly, since a critical habitat designation only triggers a consultation under section 7(a)(2) of the Act for activities that have a Federal nexus, the designation of this unit as critical habitat is not anticipated to have an impact on this project as proposed.

Oahu—Lowland Dry—Unit 11 consists of 166 ac (67 ha) of federal land (U.S. Navy) in the lowland dry ecosystem at Kalaeloa. The area was occupied by *Chamaesyce skottsbergii* var. *skottsbergii* at the time the species was listed (47 FR 36846, August 24, 1982), and is currently occupied by *C. skottsbergii* var. *skottsbergii*. As noted in the description of Oahu—Lowland Dry—Unit 8, above, we have determined that for *C. skottsbergii* var. *skottsbergii*, a plant requiring another individual for pollination (obligate-outcrosser) and living 10 years or less (short-lived perennial), we will need 7 to 8 populations containing a total of 10,000 mature individuals with at least 1,000 mature individuals per population in order to recover the species (HPPRCC 2011; Guerrant *et al.* 2004, pp. 419- 441; Neel and Cummings 2003). Oahu—Lowland Dry—Unit 11 is one of the four locations included in this final critical habitat designation that is essential to the conservation of *C. skottsbergii* var. *skottsbergii*; please see discussion of the importance of these areas on the Ewa Plain, above, in the description of Oahu—Lowland Dry—Unit 8.

Oahu—Lowland Dry—Unit 11 includes the dry forest and shrubland, the moisture regime, and canopy, subcanopy and understory native plant species identified as physical or biological features in the lowland dry ecosystem, as well as unique PCEs for *Chamaesyce skottsbergii* var. *skottsbergii* (see Tables 4 and 5). This unit also contains unoccupied habitat that is essential to the conservation of this species by providing the habitat necessary for the expansion of the existing wild populations. A

designation limited to areas presently occupied by the species would be inadequate to ensure the conservation of the species because this occupied unit (only Oahu—Lowland Dry—Unit 11 is occupied by wild individuals; Oahu—Lowland Dry—Unit 9 (see above) contains outplanted, propagated individuals, not wild plants) would not provide enough area to support 7 to 8 populations needed for recovery, as determined in the “Recovery Needs and Strategy for *Chamaesyce skottsbergii* var. *skottsbergii* (Ewa Plains akoko)” (Service 2012, entire). There are no other geographic areas that are both undeveloped and contain the species-specific PCE of coral outcrop substrate. In the future, Lowland Dry—Unit 11 may be able to provide for three or four separate populations of *C. skottsbergii* var. *skottsbergii*.

Oahu—Lowland Dry—Unit 11 is not known to be occupied by another plant being listed as endangered in this rule, *Bidens amplexans*. However, we have determined this area to be essential for the conservation and recovery of these lowland dry species because it provides the PCEs necessary for the reestablishment of wild populations within the historical ranges of the species (see Table 4). Due to its small numbers of individuals or low population sizes, this species require suitable habitat and space for expansion or reintroduction to achieve population levels that could achieve recovery. Additionally, Lowland Dry—Unit 11 was not occupied by the endangered plants *Achyranthes splendens* var. *rotundata*, *Bonamia menziesii*, *Chamaesyce celastroides* var. *kaenana*, *Euphorbia haelealeana*, *Gouania meyenii*, *G. vitifolia*, *Hibiscus brackenridgei*, *Isodendron pyriformium*, *Melanthera tenuifolia*, *Neraudia angulata*, *Nototrichium humile*, *Schiedea hookeri*, *S. kealiae*, or *Spermolepis hawaiiensis* (see 51 FR 10518, March 26, 1986, and 68 FR 35950, June 17, 2003) at the time they were listed, and is not currently known to be occupied by these 14 species. We have determined this area to be essential for the conservation and recovery of these lowland dry species because it provides the PCEs necessary for the reestablishment of wild populations within the historical ranges of the species (see Table 4). Due to their small numbers of individuals or low population sizes, these species require suitable habitat and space for expansion or reintroduction to achieve population levels that could achieve recovery.

We are aware and supportive of the efforts underway by State and the Navy, in coordination with the Service, to

develop a long-term preservation or conservation plan for *Chamaesyce skottsbergii* var. *skottsbergii* within this unit. These include the development of a State of Hawaii Habitat Conservation Plan and the conditional transfer of some of the Navy lands within this unit to the Hawaii Community Development Authority (HCDA). The State of Hawaii Endangered Species Act already prohibits the take of individual listed plants by the State or any other non-Federal entity, without State review and authorization. If the lands are transferred by the Navy, the deed will require Grantees and successors to enter into a legally binding conservation and management plan approved by the Hawaii Department of Land and Natural Resources, to ensure protection of *C. skottsbergii* var. *skottsbergii* before conveying the property (U.S. Navy 2011, in litt.), based on the species being State and federally listed. The purpose of this agreement is to ensure the use or development of the transferred property does not adversely affect *C. skottsbergii* var. *skottsbergii*, as long as the species remains listed under the Act. If the Navy lands are transferred to HCDA, a portion of the lands may be used to develop a photovoltaic alternative energy project (HCDA 2012, in litt.; HDOFAW 2012, in litt.). The HCDA plans to use a portion of the revenue generated by commercial use of HCDA property to fund the conservation actions required under a conservation management plan (U.S. Navy 2011, in litt.). The Service is committed to working with the Navy and HCDA in the development of this conservation plan, to ensure it will provide for the long-term conservation of the plant and its habitat. Because of this close coordination, and because the deed restriction stipulates that *C. skottsbergii* var. *skottsbergii* will not be adversely affected, we believe the development of the photovoltaic alternative energy project, as proposed, will not be impacted by the designation of critical habitat in this unit, and it is our intent to work with our partners to facilitate this project.

Oahu—Lowland Mesic—Unit 1 consists of 3,565 ac (1,443 ha) of State land, 583 ac (236 ha) of City and County of Honolulu land, 22 ac (9 ha) of Federal land, and 277 ac (112 ha) of privately owned land in the lowland mesic ecosystem in the Waianae Mountains, encompassing a large area including the north slopes of Mt. Kaala, from the Pahole NAR to the Kaala NAR, and south to the Waianae Kai Forest Reserve (FR). This unit is occupied by the plants *Abutilon sandwicense*, *Alectryon*

*macrococcus*, *Bonamia menziesii*, *Cenchrus agrimonioides*, *Chamaesyce herbstii*, *Colubrina oppositifolia*, *Ctenitis squamigera*, *Cyanea acuminata*, *C. calycina*, *C. grimesiana* ssp. *grimesiana*, *C. grimesiana* ssp. *obatae*, *C. longiflora*, *C. superba*, *Cyrtandra dentata*, *Delissea subcordata*, *Diellia falcata*, *Dubautia herbstobatae*, *Eragrostis fosbergii*, *Euphorbia haeleleana*, *Flueggea neowawraea*, *Hesperomannia arborescens*, *H. arbuscula*, *Hibiscus brackenridgei*, *Isodendron laurifolium*, *I. longifolium*, *Kadua degeneri*, *Lobelia niihauensis*, *Melanthera tenuifolia*, *Melicope makahae*, *M. pallida*, *Neraudia angulata*, *Nototrichium humile*, *Phyllostegia kaalaensis*, *Platydesma cornuta* var. *decurrens*, *Pleomele forbesii*, *Pteralyxia macrocarpa*, *Schiedea hookeri*, *S. kaalae*, *S. nuttallii*, *S. obovata*, and *Viola chamissoniana* ssp. *chamissoniana*, and includes the mesic forest and shrubland, the moisture regime, and canopy, subcanopy and understory native plant species identified as physical or biological features in the lowland mesic ecosystem (see Table 4). This unit also contains unoccupied habitat that is essential to the conservation of these species by providing the PCEs necessary for the expansion of the existing wild populations. Although Oahu—Lowland Mesic—Unit 1 is not known to be occupied by the plants *Chamaesyce celastroides* var. *kaenana*, *Cyanea pinnatifida*, *Cyperus pennatififormis*, *Diplazium molokaiense*, *Diplazium molokaiense*, *Eugenia koolauensis*, *Gardenia mannii*, *Gouania meyenii*, *G. vitifolia*, *Kadua coriacea*, *K. parvula*, *Labordia cyrtandrae*, *Melicope saint-johnii*, *Phyllostegia hirsuta*, *P. mollis*, *P. parviflora*, *Plantago princeps*, *Sanicula marivera*, *Silene perlmanii*, *Solanum sandwicense*, *Stenogyne kanehoana*, *Tetramolopium lepidotum* ssp. *lepidotum*, or *Urera kaalae*, we have determined this area to be essential for the conservation and recovery of these lowland mesic species because it provides the PCEs necessary for the reestablishment of wild populations within the historical ranges of the species. Due to their small numbers of individuals or low population sizes, these species require suitable habitat and space for expansion or reintroduction to achieve population levels that could achieve recovery.

Oahu—Lowland Mesic—Unit 2 consists of 1,063 ac (430 ha) in the lowland mesic ecosystem on the windward side of the Waianae Mountains, from Puuhapapa south to Puukaua. This area was part of the

Honouliuli Preserve, managed by The Nature Conservancy of Hawaii, and was recently acquired by the State. This unit is occupied by the plants *Abutilon sandwicense*, *Alectryon macrococcus*, *Cenchrus agrimonioides*, *Chamaesyce herbstii*, *Cyanea calycina*, *C. grimesiana* ssp. *obatae*, *Delissea subcordata*, *Diellia falcata*, *Gardenia mannii*, *Phyllostegia hirsuta*, *P. kaalaensis*, *P. mollis*, *Platydesma cornuta* var. *decurrens*, *Pleomele forbesii*, *Pteralyxia macrocarpa*, *Schiedea hookeri*, *S. kaalae*, *Solanum sandwicense*, *Stenogyne kanehoana*, and *Urera kaalae*, and includes the mesic forest and shrubland, the moisture regime, and canopy, subcanopy and understory native plant species identified as physical or biological features in the lowland mesic ecosystem (see Table 4). This unit also contains unoccupied habitat that is essential to the conservation of these species by providing the PCEs necessary for the expansion of the existing wild populations. Although Oahu—Lowland Mesic—Unit 2 is not known to be occupied by the plants *Bonamia menziesii*, *Chamaesyce celastroides* var. *kaenana*, *Colubrina oppositifolia*, *Ctenitis squamigera*, *Cyanea acuminata*, *C. grimesiana* ssp. *grimesiana*, *C. longiflora*, *C. pinnatifida*, *C. superba*, *Cyperus pennatififormis*, *Cyrtandra dentata*, *Diellia unisora*, *Diplazium molokaiense*, *Dubautia herbstobatae*, *Eragrostis fosbergii*, *Eugenia koolauensis*, *Euphorbia haeleleana*, *Flueggea neowawraea*, *Gouania meyenii*, *G. vitifolia*, *Hesperomannia arborescens*, *H. arbuscula*, *Hibiscus brackenridgei*, *Isodendron laurifolium*, *I. longifolium*, *Kadua coriacea*, *K. degeneri*, *K. parvula*, *Labordia cyrtandrae*, *Lobelia niihauensis*, *Melanthera tenuifolia*, *Melicope makahae*, *M. pallida*, *M. saint-johnii*, *Neraudia angulata*, *Nototrichium humile*, *Phyllostegia parviflora*, *Plantago princeps*, *Sanicula marivera*, *Schiedea nuttallii*, *S. obovata*, *Silene perlmanii*, *Tetramolopium lepidotum* ssp. *lepidotum*, or *Viola chamissoniana* ssp. *chamissoniana*, we have determined this area to be essential for the conservation and recovery of these lowland mesic species because it provides the PCEs necessary for the reestablishment of wild populations within the historical ranges of the species. Due to their small numbers of individuals or low population sizes, these species require suitable habitat and space for expansion or reintroduction to achieve population levels that could achieve recovery.

Oahu—Lowland Mesic—Unit 3 consists of 353 ac (143 ha) in the lowland mesic ecosystem on the windward side of the Waianae Mountains, from Pohakea Pass to Kaiakuakai Gulch. This area was part of the Honouliuli Preserve, managed by The Nature Conservancy of Hawaii, and was recently acquired by the State. This unit is occupied by the plants *Alectryon macrococcus*, *Cenchrus agrimonioides*, *Delissea subcordata*, *Diellia falcata*, *D. unisora*, *Hesperomannia arbuscula*, *Melicope saint-johnii*, *Phyllostegia mollis*, *P. parviflora*, *Plantago princeps*, *Pleomele forbesii*, *Pteralyxia macrocarpa*, *Schiedea kaalae*, *Silene perlmanii*, and *Urera kaalae*, and includes the mesic forest and shrubland, the moisture regime, and canopy, subcanopy and understory native plant species identified as physical or biological features in the lowland mesic ecosystem (see Table 5). This unit also contains unoccupied habitat that is essential to the conservation of these species by providing the PCEs necessary for the expansion of the existing wild populations. Although Oahu—Lowland Mesic—Unit 3 is not known to be occupied by the plants *Abutilon sandwicense*, *Bonamia menziesii*, *Chamaesyce celastroides* var. *kaenana*, *C. herbstii*, *Colubrina oppositifolia*, *Ctenitis squamigera*, *Cyanea acuminata*, *C. calycina*, *C. grimesiana* ssp. *grimesiana*, *C. grimesiana* ssp. *obatae*, *C. longiflora*, *C. pinnatifida*, *C. superba*, *Cyperus pennatififormis*, *Cyrtandra dentata*, *Diplazium molokaiense*, *Dubautia herbstobatae*, *Eragrostis fosbergii*, *Eugenia koolauensis*, *Euphorbia haeleleana*, *Flueggea neowawraea*, *Gardenia mannii*, *Gouania meyenii*, *G. vitifolia*, *Hesperomannia arborescens*, *Hibiscus brackenridgei*, *Isodendron laurifolium*, *I. longifolium*, *Kadua coriacea*, *K. degeneri*, *K. parvula*, *Labordia cyrtandrae*, *Lobelia niihauensis*, *Melanthera tenuifolia*, *Melicope makahae*, *M. pallida*, *Neraudia angulata*, *Nototrichium humile*, *Phyllostegia hirsuta*, *P. kaalaensis*, *Platydesma cornuta* var. *decurrens*, *Sanicula marivera*, *Schiedea hookeri*, *S. nuttallii*, *S. obovata*, *Solanum sandwicense*, *Stenogyne kanehoana*, *Tetramolopium lepidotum* ssp. *lepidotum*, or *Viola chamissoniana* ssp. *chamissoniana*, we have determined this area to be essential for the conservation and recovery of these lowland mesic species because it provides the PCEs necessary for the reestablishment of wild populations within the historical ranges of the species. Due to their small numbers of individuals or low population sizes,

these species require suitable habitat and space for expansion or reintroduction to achieve population levels that could achieve recovery.

Oahu—Lowland Mesic—Unit 4 consists of 20 ac (8 ha) in the lowland mesic ecosystem on the windward side of the Koolau Mountains, between the Waipilopilo and Hanaimoa gulches, on State-owned land within the Hauula Forest Reserve. This unit includes the lowland mesic forest and shrubland, the moisture regime, and canopy, subcanopy and understory native plant species identified as physical or biological features in the lowland mesic ecosystem (see Table 4). Although Oahu—Lowland Mesic—Unit 4 is not known to be occupied by the plants *Alectryon macrococcus*, *Bonamia menziesii*, *Chamaesyce celastroides* var. *kaenana*, *Ctenitis squamigera*, *Cyanea acuminata*, *C. calycina*, *C. crispa*, *C. grimesiana* ssp. *grimesiana*, *C. lanceolata*, *C. longiflora*, *C. truncata*, *Cyrtandra dentata*, *C. polyantha*, *Delissea subcordata*, *Diellia erecta*, *D. falcata*, *Eugenia koolauensis*, *Gardenia mannii*, *Hesperomannia arborescens*, *Isodendron laurifolium*, *I. longifolium*, *Kadua coriacea*, *Labordia cyrtandrae*, *Lobelia monostachya*, *Melicope lydgatei*, *M. saint-johnii*, *Phyllostegia hirsuta*, *P. mollis*, *P. parviflora*, *Plantago princeps*, *Pleomele forbesii*, *Pteralyxia macrocarpa*, *Schiedea kaalae*, *S. nuttallii*, *Solanum sandwicense*, *Tetraplasandra gymnocarpa*, or *T. lydgatei*, we have determined this area to be essential for the conservation and recovery of these lowland mesic species because it provides the PCEs necessary for the reestablishment of wild populations within the historical ranges of the species. Due to their small numbers of individuals or low population sizes, these species require suitable habitat and space for expansion or reintroduction to achieve population levels that could achieve recovery.

Oahu—Lowland Mesic—Unit 5 consists of 29 ac (12 ha) in the lowland mesic ecosystem on the windward side of the Koolau Mountains, in Maakua Gulch and ridge; is State-owned; and within the Hauula FR. This unit includes the mesic forest and shrubland, the moisture regime, and canopy, subcanopy and understory native plant species identified as physical or biological features in the lowland mesic ecosystem (see Table 4). Although Oahu—Lowland Mesic—Unit 5 is not known to be occupied by the plants *Alectryon macrococcus*, *Bonamia menziesii*, *Chamaesyce celastroides* var. *kaenana*, *Ctenitis squamigera*, *Cyanea acuminata*, *C. calycina*, *C. crispa*, *C. grimesiana* ssp. *grimesiana*, *C.*

*lanceolata*, *C. longiflora*, *C. truncata*, *Cyrtandra dentata*, *C. polyantha*, *Delissea subcordata*, *Diellia erecta*, *D. falcata*, *Eugenia koolauensis*, *Gardenia mannii*, *Hesperomannia arborescens*, *Isodendron laurifolium*, *I. longifolium*, *Kadua coriacea*, *Labordia cyrtandrae*, *Lobelia monostachya*, *Melicope lydgatei*, *M. saint-johnii*, *Phyllostegia hirsuta*, *P. mollis*, *P. parviflora*, *Plantago princeps*, *Pleomele forbesii*, *Pteralyxia macrocarpa*, *Schiedea kaalae*, *S. nuttallii*, *Solanum sandwicense*, *Tetraplasandra gymnocarpa*, or *T. lydgatei*, we have determined this area to be essential for the conservation and recovery of these lowland mesic species because it provides the PCEs necessary for the reestablishment of wild populations within the historical ranges of the species. Due to their small numbers of individuals or low population sizes, these species require suitable habitat and space for expansion or reintroduction to achieve population levels that could achieve recovery.

Oahu—Lowland Mesic—Unit 6 (and) Oceanic Hawaiian Damselfly—Unit 1—Lowland Mesic

This area consists of 12 ac (5 ha) State land and 235 ac (95 ha) of privately owned land in the lowland mesic ecosystem on the windward side of the Koolau Mountains, inland of Kaaawa Point, and is partially within Ahupuaa O Kahana State Park. This area is occupied by the plants *Cyanea acuminata*, *C. crispa*, *C. truncata*, *Gardenia mannii*, *Pteralyxia macrocarpa*, and *Schiedea kaalae*; and the invertebrate, the oceanic Hawaiian damselfly. This area includes the lowland mesic forest and shrubland, the moisture regime, and canopy, subcanopy and understory native plant species identified as physical or biological features in the lowland mesic ecosystem, as well as unique PCEs for the damselfly (see Tables 4 and 5). Because the streams and upland foraging and cover areas required by the oceanic Hawaiian damselfly are dispersed in the lowland mesic ecosystem, the lowland mesic ecosystem's physical or biological features are essential to the damselfly because they provide for the proper ecological functioning of this ecosystem. This area also contains unoccupied habitat that is essential to the conservation of these species by providing the PCEs necessary for the expansion of the existing wild populations. Although this area is not known to be occupied by the plants *Alectryon macrococcus*, *Bonamia menziesii*, *Chamaesyce celastroides* var. *kaenana*, *Ctenitis squamigera*, *Cyanea*

*calycina*, *C. grimesiana* ssp. *grimesiana*, *C. lanceolata*, *C. longiflora*, *Cyrtandra dentata*, *C. polyantha*, *Delissea subcordata*, *Diellia erecta*, *D. falcata*, *Eugenia koolauensis*, *Hesperomannia arborescens*, *Isodendron laurifolium*, *I. longifolium*, *Kadua coriacea*, *Labordia cyrtandrae*, *Lobelia monostachya*, *Melicope lydgatei*, *M. saint-johnii*, *Phyllostegia hirsuta*, *P. mollis*, *P. parviflora*, *Plantago princeps*, *Pleomele forbesii*, *Schiedea nuttallii*, *Solanum sandwicense*, *Tetraplasandra gymnocarpa*, or *T. lydgatei*, we have determined this area to be essential for the conservation and recovery of these lowland mesic species because it provides the PCEs necessary for the reestablishment of wild populations within the historical ranges of the species. Due to their small numbers of individuals or low population sizes, these species require suitable habitat and space for expansion or reintroduction to achieve population levels that could achieve recovery.

Oahu—Lowland Mesic—Unit 7 consists of 681 ac (276 ha) of State land, 129 ac (52 ha) of City and County of Honolulu land, and 852 ac (345 ha) of privately-owned land in the lowland mesic ecosystem on the leeward side of the Koolau Mountains, on Waiālae Nui ridge. This unit is occupied by the plants *Bonamia menziesii*, *Cyanea acuminata*, *C. grimesiana* ssp. *grimesiana*, *C. lanceolata*, *Cyrtandra polyantha*, *Diellia erecta*, *Lobelia monostachya*, *Pleomele forbesii*, *Pteralyxia macrocarpa*, and *Tetraplasandra lydgatei*, and includes the mesic forest and shrubland, the moisture regime, and canopy, subcanopy and understory native plant species identified as physical or biological features in the lowland mesic ecosystem (see Table 4). This unit also contains unoccupied habitat that is essential to the conservation of this species by providing the PCEs necessary for the expansion of the existing wild populations. Although Oahu—Lowland Mesic—Unit 7 is not known to be occupied by the plants *Alectryon macrococcus*, *Chamaesyce celastroides* var. *kaenana*, *Ctenitis squamigera*, *Cyanea calycina*, *C. crispa*, *C. longiflora*, *C. truncata*, *Cyrtandra dentata*, *Delissea subcordata*, *Diellia falcata*, *Eugenia koolauensis*, *Gardenia mannii*, *Hesperomannia arborescens*, *Isodendron laurifolium*, *I. longifolium*, *Kadua coriacea*, *Labordia cyrtandrae*, *Melicope lydgatei*, *M. saint-johnii*, *Phyllostegia hirsuta*, *P. mollis*, *P. parviflora*, *Plantago princeps*, *Schiedea kaalae*, *S. nuttallii*, *Solanum sandwicense*, or *Tetraplasandra*

*gymnocarpa*, we have determined this area to be essential for the conservation and recovery of these lowland mesic species because it provides the PCEs necessary for the reestablishment of wild populations within the historical ranges of the species. Due to their small numbers of individuals or low population sizes, these species require suitable habitat and space for expansion or reintroduction to achieve population levels that could achieve recovery.

Oahu—Lowland Wet—Unit 1 consists of 428 ac (173 ha) of State land and 112 ac (46 ha) of City and County of Honolulu land in the lowland wet ecosystem on the windward side of the Waianae Mountains, and partially within the Mokuleia and Waianae Kai Forest Reserves. This unit is occupied by the plants *Gouania vitifolia*, *Schiedea hookeri*, and *Urera kaalae*, and includes the wet forest and shrubland, the moisture regime, and canopy, subcanopy and understory native plant species identified as physical or biological features in the lowland wet ecosystem (see Table 4). This unit also contains unoccupied habitat that is essential to the conservation of these species by providing the PCEs necessary for the expansion of the existing wild populations. Although Oahu—Lowland Wet—Unit 1 is not known to be occupied by the plants *Cyanea acuminata*, *C. calycina*, *C. grimesiana* ssp. *grimesiana*, *C. grimesiana* ssp. *obatae*, *Cyrtandra dentata*, *Diplazium molokaiense*, *Gardenia mannii*, *Hesperomannia arbuscula*, *Isodendron longifolium*, *Labordia cyrtandrae*, *Lobelia oahuensis*, *Phyllostegia hirsuta*, *P. mollis*, *Plantago princeps*, *Pteralyxia macrocarpa*, or *Schiedea kaalae*, we have determined this area to be essential for the conservation and recovery of these lowland wet species because it provides the PCEs necessary for the reestablishment of wild populations within the historical ranges of the species. Due to their small numbers of individuals or low population sizes, these species require suitable habitat and space for expansion or reintroduction to achieve population levels that could achieve recovery.

Oahu—Lowland Wet—Unit 2 consists of 19 ac (8 ha) of State land in the lowland wet ecosystem on the windward side of the Waianae Mountains at Puuhapapa. This area was part of the Honouliuli Preserve, managed by The Nature Conservancy of Hawaii, and was recently acquired by the State. This unit is occupied by the plants *Phyllostegia hirsuta*, *P. mollis*, and *Urera kaalae*, and includes the wet forest and shrubland, the moisture

regime, and canopy, subcanopy and understory native plant species identified as physical or biological features in the lowland wet ecosystem (see Table 4). This unit also contains unoccupied habitat that is essential to the conservation of these species by providing the PCEs necessary for the expansion of the existing wild populations. Although Oahu—Lowland Wet—Unit 2 is not known to be occupied by the plants *Cyanea acuminata*, *C. calycina*, *C. grimesiana* ssp. *grimesiana*, *C. grimesiana* ssp. *obatae*, *Cyrtandra dentata*, *Diplazium molokaiense*, *Gardenia mannii*, *Gouania vitifolia*, *Hesperomannia arbuscula*, *Isodendron longifolium*, *Labordia cyrtandrae*, *Lobelia oahuensis*, *Plantago princeps*, *Pteralyxia macrocarpa*, *Schiedea hookeri*, or *S. kaalae*, we have determined this area to be essential for the conservation and recovery of these lowland wet species because it provides the PCEs necessary for the reestablishment of wild populations within the historical ranges of the species. Due to their small numbers of individuals or low population sizes, these species require suitable habitat and space for expansion or reintroduction to achieve population levels that could achieve recovery.

Oahu—Lowland Wet—Unit 3 consists of 29 ac (12 ha) in the lowland wet ecosystem on the windward side of the Waianae Mountains at Puukanehoa. This area was part of the Honouliuli Preserve, managed by The Nature Conservancy of Hawaii, and was recently acquired by the State. This unit is occupied by the plants *Phyllostegia hirsuta*, *P. mollis*, and *Schiedea hookeri*, and includes the wet forest and shrubland, the moisture regime, and canopy, subcanopy and understory native plant species identified as physical or biological features in the lowland wet ecosystem (see Table 4). This unit also contains unoccupied habitat that is essential to the conservation of these species by providing the PCEs necessary for the expansion of the existing wild populations. Although Oahu—Lowland Wet—Unit 3 is not known to be occupied by the plants *Cyanea acuminata*, *C. calycina*, *C. grimesiana* ssp. *grimesiana*, *C. grimesiana* ssp. *obatae*, *Cyrtandra dentata*, *Diplazium molokaiense*, *Gardenia mannii*, *Gouania vitifolia*, *Hesperomannia arbuscula*, *Isodendron longifolium*, *Labordia cyrtandrae*, *Lobelia oahuensis*, *Plantago princeps*, *Pteralyxia macrocarpa*, *Schiedea kaalae*, or *Urera kaalae*, we have determined this area to be essential for the conservation and recovery of

these lowland wet species because it provides the PCEs necessary for the reestablishment of wild populations within the historical ranges of the species. Due to their small numbers of individuals or low population sizes, these species require suitable habitat and space for expansion or reintroduction to achieve population levels that could achieve recovery.

Oahu—Lowland Wet—Unit 4 consists of 27 ac (11 ha) in the lowland wet ecosystem on the windward side of the Waianae Mountains on State land at Puukaua. A portion of this area was part of the Honouliuli Preserve, managed by The Nature Conservancy of Hawaii, and was recently acquired by the State. This unit is occupied by the plant *Phyllostegia mollis* and includes the wet forest and shrubland, the moisture regime, and canopy, subcanopy and understory native plant species identified as physical or biological features in the lowland wet ecosystem (see Table 4). This unit also contains unoccupied habitat that is essential to the conservation of this species by providing the PCEs necessary for the expansion of the existing wild populations. Although Oahu—Lowland Wet—Unit 4 is not known to be occupied by the plants *Cyanea acuminata*, *C. calycina*, *C. grimesiana* ssp. *grimesiana*, *C. grimesiana* ssp. *obatae*, *Cyrtandra dentata*, *Diplazium molokaiense*, *Gardenia mannii*, *Gouania vitifolia*, *Hesperomannia arbuscula*, *Isodendron longifolium*, *Labordia cyrtandrae*, *Lobelia oahuensis*, *Phyllostegia hirsuta*, *Plantago princeps*, *Pteralyxia macrocarpa*, *Schiedea hookeri*, *S. kaalae*, or *Urera kaalae*, we have determined this area to be essential for the conservation and recovery of these lowland wet species because it provides the PCEs necessary for the reestablishment of wild populations within the historical ranges of the species. Due to their small numbers of individuals or low population sizes, these species require suitable habitat and space for expansion or reintroduction to achieve population levels that could achieve recovery.

Oahu—Lowland Wet—Unit 5 consists of 74 ac (30 ha) of State land in the lowland wet ecosystem, on the windward side of the Waianae Mountains at Palikea. A portion of this area was part of the Honouliuli Preserve, managed by The Nature Conservancy of Hawaii, and was recently acquired by the State. This unit is occupied by the plants *Cyanea calycina*, *C. grimesiana* ssp. *obatae*, *Hesperomannia arbuscula*, and *Schiedea kaalae*, and includes the wet forest and shrubland, the moisture

regime, and canopy, subcanopy, and understory native plant species identified as physical or biological features in the lowland wet ecosystem (see Table 4). This unit also contains unoccupied habitat that is essential to the conservation of this species by providing the PCEs necessary for the expansion of the existing wild populations. Although Oahu—Lowland Wet—Unit 5 is not known to be occupied by the plants *Cyanea acuminata*, *C. grimesiana* ssp. *grimesiana*, *Cyrtandra dentata*, *Diplazium molokaiense*, *Gardenia manni*, *Gouania vitifolia*, *Isodendron longifolium*, *Labordia cyrtandrae*, *Lobelia oahuensis*, *Phyllostegia hirsuta*, *P. mollis*, *Plantago princeps*, *Pteralyxia macrocarpa*, *Schiedea hookeri*, or *Urera kaalae*, we have determined this area to be essential for the conservation and recovery of these lowland wet species because it provides the PCEs necessary for the reestablishment of wild populations within the historical ranges of the species. Due to their small numbers of individuals or low population sizes, these species require suitable habitat and space for expansion or reintroduction to achieve population levels that could achieve recovery.

Oahu—Lowland Wet—Unit 6 (and) Blackline Hawaiian Damselfly—Unit 1—Lowland Wet (and) Crimson Hawaiian Damselfly—Unit 1—Lowland Wet (and) Oceanic Hawaiian Damselfly—Unit 2—Lowland Wet

This area consists of 790 ac (320 ha) of privately owned land in the lowland wet ecosystem, in privately owned land on the windward side of the Koolau Mountains, and includes Kahawainui, Ihihi, Waialele, and Koloa gulches. This area is occupied by the plant *Hesperomannia arborescens* and by the blackline and oceanic Hawaiian damselflies, and includes the wet forest and shrubland, the moisture regime, and canopy, subcanopy, and understory native plant species identified as physical or biological features in the lowland wet ecosystem, as well as unique PCEs for the Hawaiian damselflies (see Tables 4 and 5). Because the streams and upland foraging and cover areas required by the blackline and oceanic Hawaiian damselflies are dispersed in the lowland wet ecosystem, the lowland wet ecosystem physical or biological features are essential to the damselfly species because they provide for the proper ecological functioning of this ecosystem. This area also contains unoccupied habitat that is essential to the conservation of these species by providing the PCEs necessary for the expansion of the existing wild

populations. Although this area is not currently occupied by the plants *Adenophorus periens*, *Chamaesyce rockii*, *Cyanea acuminata*, *C. calycina*, *C. crispa*, *C. grimesiana* ssp. *grimesiana*, *C. humboldtiana*, *C. koolauensis*, *C. lanceolata*, *C. purpurellifolia*, *C. st.-johnii*, *C. truncata*, *Cyrtandra dentata*, *C. gracilis*, *C. kaulantha*, *C. polyantha*, *C. sessilis*, *C. subumbellata*, *C. viridiflora*, *C. waiolani*, *Gardenia manni*, *Huperzia nutans*, *Isodendron longifolium*, *Labordia cyrtandrae*, *Lobelia gaudichaudii* ssp. *koolauensis*, *Lobelia oahuensis*, *Melicope hiiakae*, *M. lydgatei*, *Myrsine juddii*, *Phyllostegia hirsuta*, *P. parviflora*, *Plantago princeps*, *Platanthera holochila*, *Platydesma cornuta* var. *cornuta*, *Psychotria hexandra* ssp. *oahuensis*, *Pteralyxia macrocarpa*, *Pteris lidgatei*, *Sanicula purpurea*, *Tetraplasandra gymnocarpa*, *Trematolobelia singularis*, *Viola oahuensis*, or *Zanthoxylum oahuense*, or the crimson Hawaiian damselfly, we have determined this area to be essential for the conservation and recovery of these lowland wet species because it provides the PCEs necessary for the reestablishment of wild populations within the historical ranges of the species. Due to their small numbers of individuals or low population sizes, these species require suitable habitat and space for expansion or reintroduction to achieve population levels that could achieve recovery.

Oahu—Lowland Wet—Unit 7 (and) Blackline Hawaiian Damselfly—Unit 2—Lowland Wet (and) Crimson Hawaiian Damselfly—Unit 2—Lowland Wet (and) Oceanic Hawaiian Damselfly—Unit 3—Lowland Wet

This area consists of 1,499 ac (606 ha) of State land and 288 ac (117 ha) of privately-owned land in the lowland wet ecosystem on the windward side of the Koolau Mountains, within the Kaipapau and Haula Forest Reserves and Sacred Falls State Park, from Puukainapuaa to Kaluanui (Sacred Falls). This unit is occupied by the plants *Chamaesyce rockii*, *Cyanea acuminata*, *C. calycina*, *C. humboldtiana*, *C. purpurellifolia*, *C. truncata*, *Cyrtandra viridiflora*, *Gardenia manni*, *Hesperomannia arborescens*, *Huperzia nutans*, *Myrsine juddii*, *Phyllostegia hirsuta*, *Platydesma cornuta* var. *cornuta*, *Pteralyxia macrocarpa*, *Pteris lidgatei*, *Tetraplasandra gymnocarpa*, *Viola oahuensis*, and *Zanthoxylum oahuense*, and by the blackline and oceanic Hawaiian damselflies. This area includes the wet forest and shrubland, the moisture regime, and subcanopy and understory native plant species

identified as physical or biological features in the lowland wet ecosystem, as well as unique PCEs for the Hawaiian damselflies (see Tables 4 and 5). Because the streams and upland foraging and cover areas required by the blackline and oceanic Hawaiian damselflies are dispersed in the lowland wet ecosystem, the lowland wet ecosystem's physical or biological features are essential to the damselfly species because they provide for the proper ecological functioning of this ecosystem. The streams, foraging areas, and cover areas that are occupied contain the essential PCEs, and the streams and upland areas that are not occupied are essential to the conservation of the species because they support the proper ecological functioning of the occupied areas within the ecosystem. This area also contains unoccupied habitat that is essential to the conservation of these species by providing the PCEs necessary for the expansion of the existing wild populations. Although this area is not currently occupied by the plants *Adenophorus periens*, *Cyanea crispa*, *C. grimesiana* ssp. *grimesiana*, *C. koolauensis*, *C. lanceolata*, *C. st.-johnii*, *Cyrtandra dentata*, *C. gracilis*, *C. kaulantha*, *C. polyantha*, *C. sessilis*, *C. subumbellata*, *C. waiolani*, *Isodendron longifolium*, *Labordia cyrtandrae*, *Lobelia gaudichaudii* ssp. *koolauensis*, *L. oahuensis*, *Melicope hiiakae*, *M. lydgatei*, *Phyllostegia parviflora*, *Plantago princeps*, *Platanthera holochila*, *Psychotria hexandra* ssp. *oahuensis*, *Sanicula purpurea*, or *Trematolobelia singularis*, or by the crimson Hawaiian damselfly, we have determined this area to be essential for the conservation and recovery of these lowland wet species because it provides the PCEs necessary for the reestablishment of wild populations within the historical ranges of the species. Due to their small numbers of individuals or low population sizes, these species require suitable habitat and space for expansion or reintroduction to achieve population levels that could achieve recovery.

Oahu—Lowland Wet—Unit 8 (and) Blackline Hawaiian Damselfly—Unit 3—Lowland Wet (and) Crimson Hawaiian Damselfly—Unit 3—Lowland Wet (and) Oceanic Hawaiian Damselfly—Unit 4—Lowland Wet

This area consists of 1,386 ac (561 ha) of State land and 1,655 ac (670 ha) of privately-owned land in the lowland wet ecosystem on the windward side of the Koolau Mountains, partially within the Ahupuaa O Kahana State Park, including Waihoi Springs, and Punaluu,

Kahana, Waikane, Waikēē, and Uwao streams. This area is occupied by the plant *Cyrtandra kaulantha*, and by the invertebrates, the blackline and crimson Hawaiian damselflies. This area includes the wet forest and shrubland, the moisture regime, and canopy, subcanopy, and understory native plant species identified as physical or biological features in the lowland wet ecosystem, as well as unique PCEs for the Hawaiian damselflies (see Tables 4 and 5). Because the streams and upland foraging and cover areas required by the blackline and crimson Hawaiian damselflies are dispersed in the lowland wet ecosystem, the lowland wet ecosystem's physical or biological features are essential to the damselfly species because they provide for the proper ecological functioning of this ecosystem. This area also contains unoccupied habitat that is essential to the conservation of these species by providing the PCEs necessary for the expansion of the existing wild populations. Although this area is not currently occupied by the plants *Adenophorus periens*, *Chamaesyce rockii*, *Cyanea acuminata*, *C. calycina*, *C. crispa*, *C. grimesiana* ssp. *grimesiana*, *C. humboldtiana*, *C. koolauensis*, *C. lanceolata*, *C. purpurellifolia*, *C. st.-johnii*, *C. truncata*, *Cyrtandra dentata*, *C. gracilis*, *C. polyantha*, *C. sessilis*, *C. subumbellata*, *C. viridiflora*, *C. waiolani*, *Gardenia mannii*, *Hesperomannia arborescens*, *Huperzia nutans*, *Isodendron longifolium*, *Labordia cyrtandrae*, *Lobelia gaudichaudii* ssp. *koolauensis*, *L. oahuensis*, *Melicope hiiakae*, *M. lydgatei*, *Myrsine juddii*, *Phyllostegia hirsuta*, *P. parviflora*, *Plantago princeps*, *Platanthera holochila*, *Platydesma cornuta* var. *cornuta*, *Psychotria hexandra* ssp. *oahuensis*, *Pteralyxia macrocarpa*, *Pteris lidgatei*, *Sanicula purpurea*, *Tetraplasandra gymnocarpa*, *Trematolobelia singularis*, *Viola oahuensis*, or *Zanthoxylum oahuense*, or by the oceanic Hawaiian damselfly, we have determined this area to be essential for the conservation and recovery of these lowland wet species because it provides the PCEs necessary for the reestablishment of wild populations within the historical ranges of the species. Due to their small numbers of individuals or low population sizes, these species require suitable habitat and space for expansion or reintroduction to achieve population levels that could achieve recovery.

Oahu—Lowland Wet—Unit 9 (and) Blackline Hawaiian Damselfly—Unit 4—Lowland Wet (and) Crimson Hawaiian Damselfly—Unit 4—Lowland Wet (and) Oceanic Hawaiian Damselfly—Unit 5—Lowland Wet

This area consists of 3,827 ac (1,545 ha) of State land, 147 ac (60 ha) of City and County of Honolulu land, 4,509 ac (1,825 ha) of Federal land (U.S. Fish and Wildlife Service), and 7,245 ac (2,932 ha) of privately owned land in the lowland wet ecosystem on the leeward side of the Koolau Mountains, partially within the Ewa FR Waimano Section and the Oahu Forest National Wildlife Refuge. This area extends along the Koolau summit from Waipio to Manaiki Stream, and is occupied by the plants *Chamaesyce rockii*, *Cyanea calycina*, *C. humboldtiana*, *C. koolauensis*, *C. st.-johnii*, *Cyrtandra viridiflora*, *Gardenia mannii*, *Hesperomannia arborescens*, *Labordia cyrtandrae*, *Lobelia oahuensis*, *Melicope hiiakae*, *M. lydgatei*, *Phyllostegia hirsuta*, *P. parviflora*, *Plantago princeps*, *Platydesma cornuta* var. *cornuta*, *Pteris lidgatei*, *Tetraplasandra gymnocarpa*, *Viola oahuensis*, and *Zanthoxylum oahuense*, and by the blackline and crimson Hawaiian damselflies. This area includes the wet forest and shrubland, the moisture regime, and canopy, subcanopy, and understory native plant species identified as physical or biological features in the lowland wet ecosystem, as well as unique PCEs for the Hawaiian damselflies (see Tables 4 and 5). Because the streams and upland foraging and cover areas required by the blackline and crimson Hawaiian damselflies are dispersed in the lowland wet ecosystem, the lowland wet ecosystem's physical or biological features are essential to the damselfly species because they provide for the proper ecological functioning of this ecosystem. This area also contains unoccupied habitat that is essential to the conservation of these species by providing the PCEs necessary for the expansion of the existing wild populations. Although this area is not currently occupied by the plants *Adenophorus periens*, *Cyanea acuminata*, *C. crispa*, *C. grimesiana* ssp. *grimesiana*, *C. lanceolata*, *C. purpurellifolia*, *C. st.-johnii*, *C. truncata*, *Cyrtandra dentata*, *C. gracilis*, *C. kaulantha*, *C. polyantha*, *C. sessilis*, *C. subumbellata*, *C. waiolani*, *Huperzia nutans*, *Isodendron longifolium*, *Lobelia gaudichaudii* ssp. *koolauensis*, *L. oahuensis*, *Melicope hiiakae*, *M. lydgatei*, *Myrsine juddii*, *Phyllostegia hirsuta*, *P. parviflora*, *Plantago princeps*, *Platanthera holochila*, *Psychotria hexandra* ssp. *oahuensis*, *Pteralyxia macrocarpa*, *Sanicula purpurea*, or *Trematolobelia singularis*, or by the

oceanic Hawaiian damselfly, we have determined this area to be essential for the conservation and recovery of these lowland wet species because it provides the PCEs necessary for the reestablishment of wild populations within the historical ranges of the species. Due to their small numbers of individuals or low population sizes, these species require suitable habitat and space for expansion or reintroduction to achieve population levels that could achieve recovery.

Oahu—Lowland Wet—Unit 10 (and) Blackline Hawaiian Damselfly—Unit 5—Lowland Wet (and) Crimson Hawaiian Damselfly—Unit 5—Lowland Wet (and) Oceanic Hawaiian Damselfly—Unit 6—Lowland Wet

This area consists of 124 ac (50 ha) of privately-owned land in the lowland wet ecosystem in private land on the windward side of the Koolau Mountains, along Kaalaea Stream. This area is occupied by the blackline Hawaiian damselfly, and includes the wet forest and shrubland, the moisture regime, and canopy, subcanopy, and understory native plant species identified as physical or biological features in the lowland wet ecosystem, as well as unique PCEs for the blackline Hawaiian damselfly (see Tables 4 and 5). Because the streams and upland foraging and cover areas required by the blackline Hawaiian damselfly are dispersed in the lowland wet ecosystem, the lowland wet ecosystem's physical or biological features are essential to this damselfly species because they provide for the proper ecological functioning of this ecosystem. This area also contains unoccupied habitat that is essential to the conservation of this species by providing the PCEs necessary for the expansion of the existing wild populations. Although this area is not currently occupied by the plants *Adenophorus periens*, *Chamaesyce rockii*, *Cyanea acuminata*, *C. calycina*, *C. crispa*, *C. grimesiana* ssp. *grimesiana*, *C. humboldtiana*, *C. koolauensis*, *C. lanceolata*, *C. purpurellifolia*, *C. st.-johnii*, *C. truncata*, *Cyrtandra dentata*, *C. gracilis*, *C. kaulantha*, *C. polyantha*, *C. sessilis*, *C. subumbellata*, *C. viridiflora*, *C. waiolani*, *Gardenia mannii*, *Hesperomannia arborescens*, *Huperzia nutans*, *Isodendron longifolium*, *Labordia cyrtandrae*, *Lobelia gaudichaudii* ssp. *koolauensis*, *L. oahuensis*, *Melicope hiiakae*, *M. lydgatei*, *Myrsine juddii*, *Phyllostegia hirsuta*, *P. parviflora*, *Plantago princeps*, *Platanthera holochila*, *Platydesma cornuta* var. *cornuta*, *Psychotria hexandra* ssp. *oahuensis*, *Pteralyxia macrocarpa*, *Pteris lidgatei*, *Sanicula*

*purpurea*, *Tetraplasandra gymnocarpa*, *Trematolobelia singularis*, *Viola oahuensis*, or *Zanthoxylum oahuense*, or by the crimson or oceanic Hawaiian damselflies, we have determined this area to be essential for the conservation and recovery of these lowland wet species because it provides the PCEs necessary for the reestablishment of wild populations within the historical ranges of the species. Due to their small numbers of individuals or low population sizes, these species require suitable habitat and space for expansion or reintroduction to achieve population levels that could achieve recovery.

Oahu—Lowland Wet—Unit 11 (and) Blackline Hawaiian Damselfly—Unit 6—Lowland Wet (and) Crimson Hawaiian Damselfly—Unit 6—Lowland Wet (and) Oceanic Hawaiian Damselfly—Unit 7—Lowland Wet

This area consists of 124 ac (50 ha) in the lowland wet ecosystem, owned by the City and County of Honolulu on the windward side of the Koolau Mountains, along Waihee Stream. This area is occupied by the blackline and oceanic Hawaiian damselflies, and includes the wet forest and shrubland, the moisture regime, and canopy, subcanopy, and understory native plant species identified as physical or biological features in the lowland wet ecosystem, as well as unique PCEs for the Hawaiian damselflies (see Tables 4 and 5). Because the streams and upland foraging and cover areas required by the blackline and oceanic Hawaiian damselflies are dispersed in the lowland wet ecosystem, the lowland wet ecosystem's physical or biological features are essential to these damselfly species because they provide for the proper ecological functioning of this ecosystem. This area also contains unoccupied habitat that is essential to the conservation of these species by providing the PCEs necessary for the expansion of the existing wild populations. Although this area is not currently occupied by the plants *Adenophorus periens*, *Chamaesyce rockii*, *Cyanea acuminata*, *C. calycina*, *C. crispa*, *C. grimesiana* ssp. *grimesiana*, *C. humboldtiana*, *C. koolauensis*, *C. lanceolata*, *C. purpurellifolia*, *C. st.-johnii*, *C. truncata*, *Cyrtandra dentata*, *C. gracilis*, *C. kaulanthera*, *C. polyantha*, *C. sessilis*, *C. subumbellata*, *C. viridiflora*, *C. waiolani*, *Gardenia mannii*, *Hesperomannia arborescens*, *Huperzia nutans*, *Isodendron longifolium*, *Labordia cyrtandrae*, *Lobelia gaudichaudii* ssp. *koolauensis*, *L. oahuensis*, *Melicope hiiakae*, *M. lydgatei*, *Myrsine juddii*, *Phyllostegia hirsuta*, *P. parviflora*, *Plantago princeps*,

*Platanthera holochila*, *Platydesma cornuta* var. *cornuta*, *Psychotria hexandra* ssp. *oahuensis*, *Pteralyxia macrocarpa*, *Pteris lidgatei*, *Sanicula purpurea*, *Tetraplasandra gymnocarpa*, *Trematolobelia singularis*, *Viola oahuensis*, or *Zanthoxylum oahuense*, or by the crimson Hawaiian damselfly, we have determined this area to be essential for the conservation and recovery of these lowland wet species because it provides the PCEs necessary for the reestablishment of wild populations within the historical ranges of the species. Due to their small numbers of individuals or low population sizes, these species require suitable habitat and space for expansion or reintroduction to achieve population levels that could achieve recovery.

Oahu—Lowland Wet—Unit 12 (and) Blackline Hawaiian Damselfly—Unit 7—Lowland Wet (and) Crimson Hawaiian Damselfly—Unit 7—Lowland Wet (and) Oceanic Hawaiian Damselfly—Unit 8—Lowland Wet

This area consists of 28 ac (11 ha) of City and County of Honolulu land and 26 ac (10 ha) of privately-owned land in the lowland wet ecosystem on the windward side of the Koolau Mountains, along Kahaluu Stream and tributary. This area is occupied by the blackline Hawaiian damselfly, and includes the wet forest and shrubland, the moisture regime, and canopy, subcanopy, and understory native plant species identified as physical or biological features in the lowland wet ecosystem, as well as unique PCEs for this Hawaiian damselfly (see Tables 4 and 5). Because the streams and upland foraging and cover areas required by the blackline Hawaiian damselfly are dispersed in the lowland wet ecosystem, the lowland wet ecosystem's physical or biological features are essential to this damselfly species because they provide for the proper ecological functioning of this ecosystem. This area also contains unoccupied habitat that is essential to the conservation of this species by providing the PCEs necessary for the expansion of the existing wild populations. Although this area is not currently occupied by the plants *Adenophorus periens*, *Chamaesyce rockii*, *Cyanea acuminata*, *C. calycina*, *C. crispa*, *C. grimesiana* ssp. *grimesiana*, *C. humboldtiana*, *C. koolauensis*, *C. lanceolata*, *C. purpurellifolia*, *C. st.-johnii*, *C. truncata*, *Cyrtandra dentata*, *C. gracilis*, *C. kaulanthera*, *C. polyantha*, *C. sessilis*, *C. subumbellata*, *C. viridiflora*, *C. waiolani*, *Gardenia mannii*, *Hesperomannia arborescens*, *Huperzia nutans*, *Isodendron longifolium*, *Labordia cyrtandrae*,

*Lobelia gaudichaudii* ssp. *koolauensis*, *L. oahuensis*, *Melicope hiiakae*, *M. lydgatei*, *Myrsine juddii*, *Phyllostegia hirsuta*, *P. parviflora*, *Plantago princeps*, *Platanthera holochila*, *Platydesma cornuta* var. *cornuta*, *Psychotria hexandra* ssp. *oahuensis*, *Pteralyxia macrocarpa*, *Pteris lidgatei*, *Sanicula purpurea*, *Tetraplasandra gymnocarpa*, *Trematolobelia singularis*, *Viola oahuensis*, or *Zanthoxylum oahuense*, or by the crimson or oceanic Hawaiian damselflies, we have determined this area to be essential for the conservation and recovery of these lowland wet species because it provides the PCEs necessary for the reestablishment of wild populations within the historical ranges of the species. Due to their small numbers of individuals or low population sizes, these species require suitable habitat and space for expansion or reintroduction to achieve population levels that could achieve recovery.

Oahu—Lowland Wet—Unit 13 (and) Blackline Hawaiian Damselfly—Unit 8—Lowland Wet (and) Crimson Hawaiian Damselfly—Unit 8—Lowland Wet (and) Oceanic Hawaiian Damselfly—Unit 9—Lowland Wet

This area consists of 74 ac (30 ha) of City and County of Honolulu land and 1 ac (0.5 ha) of State land in the lowland wet ecosystem on the windward side of the Koolau Mountains, along Heeia Stream and tributaries. This area is occupied by the blackline Hawaiian damselfly, and includes the wet forest and shrubland, the moisture regime, and canopy, subcanopy, and understory native plant species identified as physical or biological features in the lowland wet ecosystem, as well as unique PCEs for this Hawaiian damselfly (see Tables 4 and 5). Because the streams and upland foraging and cover areas required by the blackline Hawaiian damselfly are dispersed in the lowland wet ecosystem, the lowland wet ecosystem's physical or biological features are essential to this damselfly species because they provide for the proper ecological functioning of this ecosystem. This area also contains unoccupied habitat that is essential to the conservation of this species by providing the PCEs necessary for the expansion of the existing wild populations. Although this area is not currently occupied by the plants *Adenophorus periens*, *Chamaesyce rockii*, *Cyanea acuminata*, *C. calycina*, *C. crispa*, *C. grimesiana* ssp. *grimesiana*, *C. humboldtiana*, *C. koolauensis*, *C. lanceolata*, *C. purpurellifolia*, *C. st.-johnii*, *C. truncata*, *Cyrtandra dentata*, *C. gracilis*, *C. kaulanthera*, *C. polyantha*, *C. sessilis*, *C. subumbellata*, *C.*

*viridiflora*, *C. waiolani*, *Gardenia mannii*, *Hesperomannia arborescens*, *Huperzia nutans*, *Isodendron longifolium*, *Labordia cyrtandrae*, *Lobelia gaudichaudii* ssp. *koolauensis*, *L. oahuensis*, *Melicope hiiakae*, *M. lydgatei*, *Myrsine juddii*, *Phyllostegia hirsuta*, *P. parviflora*, *Plantago princeps*, *Platanthera holochila*, *Platydesma cornuta* var. *cornuta*, *Psychotria hexandra* ssp. *oahuensis*, *Pteralyxia macrocarpa*, *Pteris lidgatei*, *Sanicula purpurea*, *Tetraplasandra gymnocarpa*, *Trematolobelia singularis*, *Viola oahuensis*, or *Zanthoxylum oahuense*, or by the crimson or oceanic Hawaiian damselflies, we have determined this area to be essential for the conservation and recovery of these lowland wet species because it provides the PCEs necessary for the reestablishment of wild populations within the historical ranges of the species. Due to their small numbers of individuals or low population sizes, these species require suitable habitat and space for expansion or reintroduction to achieve population levels that could achieve recovery.

Oahu—Lowland Wet—Unit 14 (and) Blackline Hawaiian Damselfly—Unit 9—Lowland Wet (and) Crimson Hawaiian Damselfly—Unit 9—Lowland Wet (and) Oceanic Hawaiian Damselfly—Unit 10—Lowland Wet

This area consists of 274 ac (111 ha) of State land, 195 ac (79 ha) of City and County of Honolulu land, and 9 ac (4 ha) of privately owned land in the lowland wet ecosystem on the leeward side of the Koolau Mountains, extending from the Wilson Tunnel area southeast to Moole Stream. This area is occupied by the plant, *Cyanea koolauensis*, and by the blackline Hawaiian damselfly, and includes the wet forest and shrubland, the moisture regime, and canopy, subcanopy, and understory native plant species identified as physical or biological features in the lowland wet ecosystem, as well as unique PCEs for the Hawaiian damselfly (see Tables 4 and 5). Because the streams and upland foraging and cover areas required by the blackline Hawaiian damselfly are dispersed in the lowland wet ecosystem, the lowland wet ecosystem's physical or biological features are essential to the damselfly species because they provide for the proper ecological functioning of this ecosystem. This area also contains unoccupied habitat that is essential to the conservation of these species by providing the PCEs necessary for the expansion of the existing wild populations. Although this area is not currently occupied by the plants *Adenophorus periens*, *Chamaesyce*

*rockii*, *Cyanea acuminata*, *C. calycina*, *C. crispa*, *C. grimesiana* ssp. *grimesiana*, *C. humboldtiana*, *C. lanceolata*, *C. purpurellifolia*, *C. st.-johnii*, *C. truncata*, *Cyrtandra dentata*, *C. gracilis*, *C. kaulantha*, *C. polyantha*, *C. sessilis*, *C. subumbellata*, *C. viridiflora*, *C. waiolani*, *Gardenia mannii*, *Hesperomannia arborescens*, *Huperzia nutans*, *Isodendron longifolium*, *Labordia cyrtandrae*, *Lobelia gaudichaudii* ssp. *koolauensis*, *L. oahuensis*, *Melicope hiiakae*, *M. lydgatei*, *Myrsine juddii*, *Phyllostegia hirsuta*, *P. parviflora*, *Plantago princeps*, *Platanthera holochila*, *Platydesma cornuta* var. *cornuta*, *Psychotria hexandra* ssp. *oahuensis*, *Pteralyxia macrocarpa*, *Pteris lidgatei*, *Sanicula purpurea*, *Tetraplasandra gymnocarpa*, *Trematolobelia singularis*, *Viola oahuensis*, or *Zanthoxylum oahuense*, or by the crimson or oceanic Hawaiian damselflies, we have determined this area to be essential for the conservation and recovery of these lowland wet species because it provides the PCEs necessary for the reestablishment of wild populations within the historical ranges of the species. Due to their small numbers of individuals or low population sizes, these species require suitable habitat and space for expansion or reintroduction to achieve population levels that could achieve recovery.

Oahu—Lowland Wet—Unit 15 (and) Blackline Hawaiian Damselfly—Unit 10—Lowland Wet (and) Crimson Hawaiian Damselfly—Unit 10—Lowland Wet (and) Oceanic Hawaiian Damselfly—Unit 11—Lowland Wet

This area consists of 407 ac (165 ha) in the lowland wet ecosystem in State of Hawaii Department of Land and Natural Resources Land Division land on the windward side of the Koolau Mountains in Maunawili Valley, including Omao and Maunawili streams and Kapakahi and Pikoakea Springs. This area is occupied by the plant, *Cyanea crispa*, and by the blackline Hawaiian damselfly, and includes the wet forest and shrubland, the moisture regime, and canopy, subcanopy, and understory native plant species identified as physical or biological features in the lowland wet ecosystem, as well as unique PCEs for the Hawaiian damselfly (see Tables 4 and 5). Because the streams and upland foraging and cover areas required by the blackline Hawaiian damselfly are dispersed in the lowland wet ecosystem, the lowland wet ecosystem's physical or biological features are essential to this damselfly species because they provide for the proper ecological functioning of this ecosystem. This area also contains

unoccupied habitat that is essential to the conservation of these species by providing the PCEs necessary for the expansion of the existing wild populations. Although this area is not currently occupied by the plants *Adenophorus periens*, *Chamaesyce rockii*, *Cyanea acuminata*, *C. calycina*, *C. grimesiana* ssp. *grimesiana*, *C. humboldtiana*, *C. koolauensis*, *C. lanceolata*, *C. purpurellifolia*, *C. st.-johnii*, *C. truncata*, *Cyrtandra dentata*, *C. gracilis*, *C. kaulantha*, *C. polyantha*, *C. sessilis*, *C. subumbellata*, *C. viridiflora*, *C. waiolani*, *Gardenia mannii*, *Hesperomannia arborescens*, *Huperzia nutans*, *Isodendron longifolium*, *Labordia cyrtandrae*, *Lobelia gaudichaudii* ssp. *koolauensis*, *L. oahuensis*, *Melicope hiiakae*, *M. lydgatei*, *Myrsine juddii*, *Phyllostegia hirsuta*, *P. parviflora*, *Plantago princeps*, *Platanthera holochila*, *Platydesma cornuta* var. *cornuta*, *Psychotria hexandra* ssp. *oahuensis*, *Pteralyxia macrocarpa*, *Pteris lidgatei*, *Sanicula purpurea*, *Tetraplasandra gymnocarpa*, *Trematolobelia singularis*, *Viola oahuensis*, or *Zanthoxylum oahuense*, or by the crimson or oceanic Hawaiian damselflies, we have determined this area to be essential for the conservation and recovery of these lowland wet species because it provides the PCEs necessary for the reestablishment of wild populations within the historical ranges of the species. Due to their small numbers of individuals or low population sizes, these species require suitable habitat and space for expansion or reintroduction to achieve population levels that could achieve recovery.

Oahu—Lowland Wet—Unit 16 (and) Blackline Hawaiian Damselfly—Unit 11—Lowland Wet (and) Crimson Hawaiian Damselfly—Unit 11—Lowland Wet (and) Oceanic Hawaiian Damselfly—Unit 12—Lowland Wet

This area consists of 1,533 ac (621 ha) of State land, 365 ac (148 ha) of City and County of Honolulu land, and 608 (246 ha) of privately owned land in the lowland wet ecosystem in on the leeward side of the Koolau Mountains, partly within the Honolulu Watershed Forest Reserve, extending from the eastern side of Nuuanu Valley southeast along the Koolau summit to Kulepeamo Ridge. This area is occupied by the plants *Cyanea acuminata*, *C. calycina*, *C. crispa*, *C. humboldtiana*, *C. koolauensis*, *C. lanceolata*, *C. st.-johnii*, *Cyrtandra gracilis*, *C. polyantha*, *C. sessilis*, *Gardenia mannii*, *Hesperomannia arborescens*, *Platydesma cornuta* var. *cornuta*, *Sanicula purpurea*, and *Tetraplasandra gymnocarpa*. This area

includes the wet forest and shrubland, the moisture regime, and canopy, subcanopy, and understory native plant species identified as physical or biological features in the lowland wet ecosystem, as well as unique PCEs for the Hawaiian damselfly (see Tables 4 and 5). This area also contains unoccupied habitat that is essential to the conservation of these species by providing the PCEs necessary for the expansion of the existing wild populations. Although this area is not currently occupied by the plants *Adenophorus periens*, *Chamaesyce rockii*, *Cyanea grimesiana* ssp. *grimesiana*, *C. purpurellifolia*, *C. truncata*, *Cyrtandra dentata*, *C. kaulantha*, *C. subumbellata*, *C. viridiflora*, *C. waiolani*, *Huperzia nutans*, *Isodendron longifolium*, *Labordia cyrtandrae*, *Lobelia gaudichaudii* ssp. *koolauensis*, *L. oahuensis*, *Melicope hiiakae*, *M. lydgatei*, *Myrsine juddii*, *Phyllostegia hirsuta*, *P. parviflora*, *Plantago princeps*, *Platanthera holochila*, *Psychotria hexandra* ssp. *oahuensis*, *Pteralyxia macrocarpa*, *Pteris lidgatei*, *Trematolobelia singularis*, *Viola oahuensis*, or *Zanthoxylum oahuense*, or by the blackline, crimson or oceanic Hawaiian damselflies, we have determined this area to be essential for the conservation and recovery of these lowland wet species because it provides the PCEs necessary for the reestablishment of wild populations within the historical ranges of the species. Due to their small numbers of individuals or low population sizes, these species require suitable habitat and space for expansion or reintroduction to achieve population levels that could achieve recovery.

Oahu—Montane Wet—Unit 1 consists of 18 ac (7 ha) of City and County of Honolulu land, 352 ac (142 ha) of State land, and less than 1 ac (less than one ha) of privately-owned land in the montane wet ecosystem at the summit of the Waianae Mountains at Kaala, and partially within the Mokuleia Forest Reserve and the Kaala Natural Area Reserve. This unit is occupied by the plants *Cyanea acuminata*, *C. calycina*, *Labordia cyrtandrae*, *Melicope christophersenii*, and *Schiedea trinervis*, and includes the wet forest and shrubland, the moisture regime, and canopy, subcanopy, and understory native plant species identified as physical or biological features in the montane wet ecosystem (see Table 4). This unit also contains unoccupied habitat that is essential to the conservation of these species by providing the PCEs necessary for the

expansion of the existing wild populations. Although Oahu—Montane Wet—Unit 1 is not known to be occupied by the plants *Alectryon macrococcus*, *Lobelia oahuensis*, or *Phyllostegia hirsuta*, we have determined this area to be essential for the conservation and recovery of these montane wet species because it provides the PCEs necessary for the reestablishment of wild populations within the historical ranges of the species. Due to their small numbers of individuals or low population sizes, these species require suitable habitat and space for expansion or reintroduction to achieve population levels that could achieve recovery.

Oahu—Dry Cliff—Unit 1 consists of 49 ac (20 ha) in the dry cliff ecosystem, on the leeward side of the Waianae Mountains, along the rim of Makua Valley. This unit is on State land within the Pahole Natural Area Reserve, and includes the shrubland, the moisture regime, and subcanopy and understory native plant species identified as physical or biological features in the dry cliff ecosystem (see Table 4). This unit is occupied by the plants *Alectryon macrococcus*, *Cenchrus agrimonioides*, *Chamaesyce herbstii*, *Cyanea grimesiana* ssp. *obatae*, *Cyrtandra dentata*, *Kadua degeneri*, *Plantago princeps* var. *princeps*, and *Schiedea obovata*. This unit also contains unoccupied habitat that is essential to the conservation of these species by providing the PCEs necessary for the expansion of the existing wild populations. Although Oahu—Dry Cliff—Unit 1 is not currently occupied by *Abutilon sandwicense*, *Achyranthes splendens* var. *rotundata*, *Bonamia menziesii*, *Chamaesyce kuwaleana*, *Diellia falcata*, *D. unisora*, *Dubautia herbstobatae*, *Eragrostis fosbergii*, *Flueggea neowawraea*, *Gouania meyenii*, *G. vitifolia*, *Isodendron laurifolium*, *I. pyrifolium*, *Kadua parvula*, *Korthalsella degeneri*, *Lepidium arbuscula*, *Lipochaeta lobata* var. *leptophylla*, *Lobelia niihauensis*, *Melanthera tenuifolia*, *Melicope makahae*, *M. saint-johnii*, *Neraudia angulata*, *Nototrichium humile*, *Peucedanum sandwicense*, *Phyllostegia kaalaensis*, *Platydesma cornuta* var. *decurrens*, *Pleomele forbesii*, *Pteralyxia macrocarpa*, *Sanicula marivera*, *Schiedea hookeri*, *S. trinervis*, *Silene lanceolata*, *S. perlmanii*, *Spermolepis hawaiiensis*, *Tetramolopium filiforme*, *T. lepidotum* ssp. *lepidotum*, or *Viola chamissoniana* ssp. *chamissoniana*, we have determined this area to be essential for the conservation and recovery of these dry cliff species because it

provides the PCEs necessary for the reestablishment of wild populations within the historical ranges of the species. Due to their small numbers of individuals or low population sizes, these species require suitable habitat and space for expansion or reintroduction to achieve population levels that could achieve recovery.

Oahu—Dry Cliff—Unit 2 consists of 320 ac (130 ha) of State land and 91 ac (37 ha) of City and County of Honolulu land in the dry cliff ecosystem, on the leeward side of the Waianae Mountains, along the ridge from Keaau to Ohikilolo. This unit is almost entirely within the Makua Keaau Forest Reserve, and includes the shrubland, the moisture regime, and subcanopy and understory native plant species identified as physical or biological features in the dry cliff ecosystem (see Table 4). Dry Cliff—Unit 2 is occupied by the plants *Abutilon sandwicense*, *Alectryon macrococcus*, *Dubautia herbstobatae*, *Gouania vitifolia*, *Kadua parvula*, *Lepidium arbuscula*, *Lobelia niihauensis*, *Melanthera tenuifolia*, *Melicope makahae*, *Nototrichium humile*, *Peucedanum sandwicense*, *Platydesma cornuta* var. *decurrens*, *Pleomele forbesii*, *Sanicula marivera*, *Schiedea hookeri*, *Tetramolopium filiforme*, and *Viola chamissoniana* ssp. *chamissoniana*. This unit also contains unoccupied habitat that is essential to the conservation of these species by providing the PCEs necessary for the expansion of the existing wild populations. Although Oahu—Dry Cliff—Unit 2 is not currently occupied by *Achyranthes splendens* var. *rotundata*, *Bonamia menziesii*, *Cenchrus agrimonioides*, *Chamaesyce herbstii*, *C. kuwaleana*, *Cyanea grimesiana* ssp. *obatae*, *Cyrtandra dentata*, *Diellia falcata*, *D. unisora*, *Eragrostis fosbergii*, *Flueggea neowawraea*, *Gouania meyenii*, *Isodendron laurifolium*, *I. pyrifolium*, *Kadua degeneri*, *Korthalsella degeneri*, *Lipochaeta lobata* var. *leptophylla*, *Melicope saint-johnii*, *Neraudia angulata*, *Phyllostegia kaalaensis*, *Plantago princeps*, *Pteralyxia macrocarpa*, *Schiedea obovata*, *S. trinervis*, *Silene lanceolata*, *S. perlmanii*, *Spermolepis hawaiiensis*, or *Tetramolopium lepidotum* ssp. *lepidotum*, we have determined this area to be essential for the conservation and recovery of these dry cliff species because it provides the PCEs necessary for the reestablishment of wild populations within the historical ranges of the species. Due to their small numbers of individuals or low population sizes, these species require

suitable habitat and space for expansion or reintroduction to achieve population levels that could achieve recovery.

Oahu—Dry Cliff—Unit 3 consists of 349 ac (141 ha) of City and County of Honolulu land and 101 ac (41 ha) of State land in the dry cliff ecosystem on the leeward side of the Waianae Mountains, along the eastern rim of Makaha Valley along Kamaileunu Ridge. This unit is partially within the Waianae Kai Forest Reserve, and includes the shrubland, the moisture regime, and subcanopy and understory native plant species identified as physical or biological features in the dry cliff ecosystem (see Table 4). This unit is occupied by the plants *Abutilon sandwicense*, *Alectryon macrococcus*, *Bonamia menziesii*, *Diellia falcata*, *Dubautia herbstobatae*, *Eragrostis fosbergii*, *Flueggea neowawraea*, *Gouania meyenii*, *Isodendron laurifolium*, *Korthalsella degeneri*, *Lepidium arbuscula*, *Lipochaeta lobata* var. *leptophylla*, *Lobelia niihauensis*, *Melanthera tenuifolia*, *Melicope makahae*, *Neraudia angulata*, *Nototrichium humile*, *Peucedanum sandwicense*, *Phyllostegia kaalaensis*, *Pleomele forbesii*, *Pteralyxia macrocarpa*, *Schiedea hookeri*, *Silene lanceolata*, *Tetramolopium filiforme*, and *Viola chamissoniana* ssp. *chamissoniana*. This unit also contains unoccupied habitat that is essential to the conservation of these species by providing the PCEs necessary for the expansion of the existing wild populations. Although Oahu—Dry Cliff—Unit 3 is not currently occupied by *Achyranthes splendens* var. *rotundata*, *Cenchrus agrimonoides*, *Chamaesyce herbstii*, *C. kuwaleana*, *Cyanea grimesiana* ssp. *obatae*, *Cyrtandra dentata*, *Diellia unisora*, *Gouania vitifolia*, *Isodendron pyrifolium*, *Kadua degeneri*, *K. parvula*, *Melicope saint-johnii*, *Plantago princeps*, *Platydesma cornuta* var. *decurrens*, *Sanicula mariversa*, *Schiedea obovata*, *S. trinervis*, *Silene perlmanii*, *Spermolepis hawaiiensis*, or *Tetramolopium lepidotum* ssp. *lepidotum*, we have determined this area to be essential for the conservation and recovery of these dry cliff species because it provides the PCEs necessary for the reestablishment of wild populations within the historical ranges of the species. Due to their small numbers of individuals or low population sizes, these species require suitable habitat and space for expansion or reintroduction to achieve population levels that could achieve recovery.

Oahu—Dry Cliff—Unit 4 consists of 24 ac (10 ha) of State land in the dry cliff ecosystem on the leeward side of

the Waianae Mountains, along Kauaopuu ridge, which divides Waianae Kai and Lualualei valleys. This unit is partially within the Waianae Kai Forest Reserve, and includes the shrubland, the moisture regime, and subcanopy and understory native plant species identified as physical or biological features in the dry cliff ecosystem (see Table 4). This unit is occupied by the plants *Alectryon macrococcus*, *Chamaesyce kuwaleana*, and *Spermolepis hawaiiensis*. This unit also contains unoccupied habitat that is essential to the conservation of these species by providing the PCEs necessary for the expansion of the existing wild populations. Although Oahu—Dry Cliff—Unit 4 is not currently occupied by *Abutilon sandwicense*, *Achyranthes splendens* var. *rotundata*, *Bonamia menziesii*, *Cenchrus agrimonoides*, *Chamaesyce herbstii*, *Cyanea grimesiana* ssp. *obatae*, *Cyrtandra dentata*, *Diellia falcata*, *D. unisora*, *Dubautia herbstobatae*, *Eragrostis fosbergii*, *Flueggea neowawraea*, *Gouania meyenii*, *G. vitifolia*, *Isodendron laurifolium*, *I. pyrifolium*, *Kadua degeneri*, *K. parvula*, *Korthalsella degeneri*, *Lepidium arbuscula*, *Lipochaeta lobata* var. *leptophylla*, *Lobelia niihauensis*, *Melanthera tenuifolia*, *Melicope makahae*, *M. saint-johnii*, *Neraudia angulata*, *Nototrichium humile*, *Peucedanum sandwicense*, *Phyllostegia kaalaensis*, *Plantago princeps*, *Platydesma cornuta* var. *decurrens*, *Pleomele forbesii*, *Pteralyxia macrocarpa*, *Sanicula mariversa*, *Schiedea hookeri*, *S. obovata*, *S. trinervis*, *Silene lanceolata*, *S. perlmanii*, *Tetramolopium filiforme*, *T. lepidotum* ssp. *lepidotum*, or *Viola chamissoniana* ssp. *chamissoniana*, we have determined this area to be essential for the conservation and recovery of these dry cliff species because it provides the PCEs necessary for the reestablishment of wild populations within the historical ranges of the species. Due to their small numbers of individuals or low population sizes, these species require suitable habitat and space for expansion or reintroduction to achieve population levels that could achieve recovery.

Oahu—Dry Cliff—Unit 6 consists of 149 ac (60 ha) in the dry cliff ecosystem on the leeward side of the Waianae Mountains, on State land along the rim of Lualualei Valley from Puukanehoa to Puukaua. This area was part of the Honouliuli Preserve, managed by The Nature Conservancy of Hawaii, and was recently acquired by the State. This unit includes the shrubland, the moisture regime, and subcanopy and understory

native plant species identified as physical or biological features in the dry cliff ecosystem (see Table 4). The unit is occupied by the plants *Cenchrus agrimonoides*, *Diellia unisora*, *Flueggea neowawraea*, *Lepidium arbuscula*, *Lobelia niihauensis*, *Melicope saint-johnii*, *Neraudia angulata*, *Plantago princeps*, *Pleomele forbesii*, *Pteralyxia macrocarpa*, and *Tetramolopium lepidotum* ssp. *lepidotum*. This unit also contains unoccupied habitat that is essential to the conservation of these species by providing the PCEs necessary for the expansion of the existing wild populations. Although Oahu—Dry Cliff—Unit 6 is not currently occupied by *Abutilon sandwicense*, *Achyranthes splendens* var. *rotundata*, *Alectryon macrococcus*, *Bonamia menziesii*, *Chamaesyce herbstii*, *C. kuwaleana*, *Cyanea grimesiana* ssp. *obatae*, *Cyrtandra dentata*, *Diellia falcata*, *Dubautia herbstobatae*, *Eragrostis fosbergii*, *Gouania meyenii*, *G. vitifolia*, *Isodendron laurifolium*, *I. pyrifolium*, *Kadua degeneri*, *K. parvula*, *Korthalsella degeneri*, *Lipochaeta lobata* var. *leptophylla*, *Melanthera tenuifolia*, *Melicope makahae*, *Nototrichium humile*, *Peucedanum sandwicense*, *Phyllostegia kaalaensis*, *Platydesma cornuta* var. *decurrens*, *Sanicula mariversa*, *Schiedea hookeri*, *S. obovata*, *S. trinervis*, *Silene lanceolata*, *S. perlmanii*, *Spermolepis hawaiiensis*, *Tetramolopium filiforme*, or *Viola chamissoniana* ssp. *chamissoniana*, we have determined this area to be essential for the conservation and recovery of these dry cliff species because it provides the PCEs necessary for the reestablishment of wild populations within the historical ranges of the species. Due to their small numbers of individuals or low population sizes, these species require suitable habitat and space for expansion or reintroduction to achieve population levels that could achieve recovery.

Oahu—Dry Cliff—Unit 7a consists of 68 ac (27 ha) of State land in the dry cliff ecosystem on the leeward side of the Waianae Mountains, along the rim of Lualualei Valley to Pohakea. This area was part of the Honouliuli Preserve, managed by The Nature Conservancy of Hawaii, and was recently acquired by the State. This unit includes the shrubland, the moisture regime, and subcanopy and understory native plant species identified as physical or biological features in the dry cliff ecosystem (see Table 4), and is occupied by the plants *Flueggea neowawraea*, *Kadua parvula*, *Melicope saint-johnii*, *Plantago princeps*, *Platydesma cornuta* var. *decurrens*,

*Pleomele forbesii*, *Silene perlmannii*, and *Viola chamissoniana* ssp. *chamissoniana*. This unit also contains unoccupied habitat that is essential to the conservation of these species by providing the PCEs necessary for the expansion of the existing wild populations. Although Oahu—Dry Cliff—Unit 7a is not currently occupied by *Abutilon sandwicense*, *Achyranthes splendens* var. *rotundata*, *Alectryon macrococcus*, *Bonamia menziesii*, *Cenchrus agrimonioides*, *Chamaesyce herbstii*, *C. kuwaleana*, *Cyanea grimesiana* ssp. *obatae*, *Cyrtandra dentata*, *Diellia falcata*, *D. unisora*, *Dubautia herbstobatae*, *Eragrostis fosbergii*, *Gouania meyenii*, *G. vitifolia*, *Isodendron laurifolium*, *I. pyriformium*, *Kadua degeneri*, *Korthalsella degeneri*, *Lepidium arbuscula*, *Lipochaeta lobata* var. *leptophylla*, *Lobelia niihauensis*, *Melanthera tenuifolia*, *Melicope makahae*, *Neraudia angulata*, *Nototrichium humile*, *Peucedanum sandwicense*, *Phyllostegia kaalaensis*, *Pteralyxia macrocarpa*, *Sanicula marivera*, *Schiedea hookeri*, *S. obovata*, *S. trinervis*, *Silene lanceolata*, *Spermolepis hawaiiensis*, *Tetramolopium filiforme*, or *T. lepidotum* ssp. *lepidotum*, we have determined this area to be essential for the conservation and recovery of these dry cliff species because it provides the PCEs necessary for the reestablishment of wild populations within the historical ranges of the species. Due to their small numbers of individuals or low population sizes, these species require suitable habitat and space for expansion or reintroduction to achieve population levels that could achieve recovery.

Oahu—Dry Cliff—Unit 7b consists of 38 ac (16 ha) of State land in the dry cliff ecosystem on the leeward side of the Waianae Mountains, along the rim of Lualualei Valley at Palikea. This area was part of the Honouliuli Preserve, managed by The Nature Conservancy of Hawaii, and was recently acquired by the State. This unit includes the shrubland, the moisture regime, and subcanopy and understory native plant species identified as physical or biological features in the dry cliff ecosystem (see Table 4). Although Oahu—Dry Cliff—Unit 7b is not currently occupied by *Abutilon sandwicense*, *Achyranthes splendens* var. *rotundata*, *Alectryon macrococcus*, *Bonamia menziesii*, *Cenchrus agrimonioides*, *Chamaesyce herbstii*, *C. kuwaleana*, *Cyanea grimesiana* ssp. *obatae*, *Cyrtandra dentata*, *Diellia falcata*, *D. unisora*, *Dubautia herbstobatae*, *Eragrostis fosbergii*,

*Flueggea neowawraea*, *Gouania meyenii*, *G. vitifolia*, *Isodendron laurifolium*, *I. pyriformium*, *Kadua degeneri*, *K. parvula*, *Korthalsella degeneri*, *Lepidium arbuscula*, *Lipochaeta lobata* var. *leptophylla*, *Lobelia niihauensis*, *Melanthera tenuifolia*, *Melicope makahae*, *M. saint-johnii*, *Neraudia angulata*, *Nototrichium humile*, *Peucedanum sandwicense*, *Phyllostegia kaalaensis*, *Plantago princeps*, *Platydesma cornuta* var. *decurrens*, *Pleomele forbesii*, *Pteralyxia macrocarpa*, *Sanicula marivera*, *Schiedea hookeri*, *S. obovata*, *S. trinervis*, *Silene lanceolata*, *S. perlmannii*, *Spermolepis hawaiiensis*, *Tetramolopium filiforme*, *T. lepidotum* ssp. *lepidotum*, or *Viola chamissoniana* ssp. *chamissoniana*, we have determined this area to be essential for the conservation and recovery of these dry cliff species because it provides the PCEs necessary for the reestablishment of wild populations within the historical ranges of the species. Due to their small numbers of individuals or low population sizes, these species require suitable habitat and space for expansion or reintroduction to achieve population levels that could achieve recovery.

Oahu—Dry Cliff—Unit 8 consists of 259 ac (105 ha) in the dry cliff ecosystem on the leeward side of the Waianae Mountains, on State land along the rim of Nanakuli Valley from Palehua to Puumanawanua, and partially within the Nanakuli Forest Reserve. A small portion of this area was part of the Honouliuli Preserve, managed by The Nature Conservancy of Hawaii, and was recently acquired by the State. This unit includes the shrubland, the moisture regime, and subcanopy and understory native plant species identified as physical or biological features in the dry cliff ecosystem (see Table 4). This unit is occupied by the plants *Abutilon sandwicense*, *Bonamia menziesii*, *Flueggea neowawraea*, *Lobelia niihauensis*, *Neraudia angulata*, *Nototrichium humile*, and *Pleomele forbesii*. This unit also contains unoccupied habitat that is essential to the conservation of these species by providing the PCEs necessary for the expansion of the existing wild populations. Although Oahu—Dry Cliff—Unit 8 is not currently occupied by *Achyranthes splendens* var. *rotundata*, *Alectryon macrococcus*, *Cenchrus agrimonioides*, *Chamaesyce herbstii*, *C. kuwaleana*, *Cyanea grimesiana* ssp. *obatae*, *Cyrtandra dentata*, *Diellia falcata*, *D. unisora*, *Dubautia herbstobatae*, *Eragrostis fosbergii*, *Gouania meyenii*, *G. vitifolia*,

*Isodendron laurifolium*, *I. pyriformium*, *Kadua degeneri*, *K. parvula*, *Korthalsella degeneri*, *Lepidium arbuscula*, *Lipochaeta lobata* var. *leptophylla*, *Melanthera tenuifolia*, *Melicope makahae*, *M. saint-johnii*, *Peucedanum sandwicense*, *Phyllostegia kaalaensis*, *Plantago princeps*, *Platydesma cornuta* var. *decurrens*, *Pteralyxia macrocarpa*, *Sanicula marivera*, *Schiedea hookeri*, *S. obovata*, *S. trinervis*, *Silene lanceolata*, *S. perlmannii*, *Spermolepis hawaiiensis*, *Tetramolopium filiforme*, *T. lepidotum* ssp. *lepidotum*, or *Viola chamissoniana* ssp. *chamissoniana*, we have determined this area to be essential for the conservation and recovery of these dry cliff species because it provides the PCEs necessary for the reestablishment of wild populations within the historical ranges of the species. Due to their small numbers of individuals or low population sizes, these species require suitable habitat and space for expansion or reintroduction to achieve population levels that could achieve recovery.

Oahu—Wet Cliff—Unit 1 consists of 167 ac (68 ha) of State land, 68 ac (28 ha) of City and County of Honolulu land, and less than 1 ac (less than 1 ha) of privately owned land in the wet cliff ecosystem in the Waianae Mountains, near the summit of Kaala, and partially within the Mokuleia and Waianae Kai FRs and the Kaala Natural Area Reserve. This unit includes the shrubland, the moisture regime, and subcanopy and understory native plant species identified as physical or biological features in the wet cliff ecosystem (see Table 4). Wet Cliff—Unit 1 is occupied by the plants *Cyanea calycina*, *Melicope christophersenii*, and *Schiedea trinervis*. This unit also contains unoccupied habitat that is essential to the conservation of these species by providing the PCEs necessary for the expansion of the existing wild populations. Although Oahu—Wet Cliff—Unit 1 is not currently occupied by *Cyanea acuminata*, *Labordia cyrtandrae*, *Lobelia oahuensis*, *Phyllostegia hirsuta*, *Pteralyxia macrocarpa*, *Schiedea hookeri*, or *S. kaalae*, we have determined this area to be essential for the conservation and recovery of these wet cliff species because it provides the PCEs necessary for the reestablishment of wild populations within the historical ranges of the species. Due to their small numbers of individuals or low population sizes, these species require suitable habitat and space for expansion or reintroduction to achieve population levels that could achieve recovery.

Oahu—Wet Cliff—Unit 2 consists of 3 ac (1 ha) of State land in the wet cliff

ecosystem in the Waianae Mountains at Puuhapapa, within a small area that was part of the Honouliuli Preserve, managed by The Nature Conservancy of Hawaii, and was recently acquired by the State. This unit includes the shrubland, the moisture regime, and subcanopy and understory native plant species identified as physical or biological features in the wet cliff ecosystem (see Table 4). Wet Cliff—Unit 2 is occupied by the plants *Cyanea calycina* and *Melicope christophersenii*. This unit also contains unoccupied habitat that is essential to the conservation of these species by providing the PCEs necessary for the expansion of the existing wild populations. Although Oahu—Wet Cliff—Unit 2 is not currently occupied by *Cyanea acuminata*, *Labordia cyrtandrae*, *Lobelia oahuensis*, *Phyllostegia hirsuta*, *Pteralyxia macrocarpa*, *Schiedea hookeri*, *S. kaalae*, or *S. trinervis*, we have determined this area to be essential for the conservation and recovery of these wet cliff species because it provides the PCEs necessary for the reestablishment of wild populations within the historical ranges of the species. Due to their small numbers of individuals or low population sizes, these species require suitable habitat and space for expansion or reintroduction to achieve population levels that could achieve recovery.

Oahu—Wet Cliff—Unit 3 consists of 16 ac (6 ha) in the wet cliff ecosystem on State land in the Waianae Mountains at Puukanehoa, partially within an area that was part of the Honouliuli Preserve, managed by The Nature Conservancy of Hawaii, and was recently acquired by the State. This unit includes the shrubland, the moisture regime, and subcanopy and understory native plant species identified as physical or biological features in the wet cliff ecosystem (see Table 4). Although Oahu—Wet Cliff—Unit 3 is not currently occupied by *Cyanea acuminata*, *C. calycina*, *Labordia cyrtandrae*, *Lobelia oahuensis*, *Melicope christophersenii*, *Phyllostegia hirsuta*, *Pteralyxia macrocarpa*, *Schiedea hookeri*, *S. kaalae*, or *S. trinervis*, we have determined this area to be essential for the conservation and recovery of these wet cliff species because it provides the PCEs necessary for the reestablishment of wild populations within the historical ranges of the species. Due to their small numbers of individuals or low population sizes, these species require suitable habitat and space for expansion or

reintroduction to achieve population levels that could achieve recovery.

Oahu—Wet Cliff—Unit 4 consists of 23 ac (9 ha) in the wet cliff ecosystem on State land in the Waianae Mountains at Puukaua, partially overlapping an area that was part of the Honouliuli Preserve, managed by The Nature Conservancy of Hawaii, and recently acquired by the State. This unit includes the shrubland, the moisture regime, and subcanopy and understory native plant species identified as physical or biological features in the wet cliff ecosystem (see Table 4). This unit is occupied by the plants *Phyllostegia hirsuta* and *Schiedea hookeri*. This unit also contains unoccupied habitat that is essential to the conservation of these species by providing the PCEs necessary for the expansion of the existing wild populations. Although Oahu—Wet Cliff—Unit 4 is not currently occupied by *Cyanea acuminata*, *C. calycina*, *Labordia cyrtandrae*, *Lobelia oahuensis*, *Melicope christophersenii*, *Pteralyxia macrocarpa*, *Schiedea kaalae*, or *S. trinervis*, we have determined this area to be essential for the conservation and recovery of these wet cliff species because it provides the PCEs necessary for the reestablishment of wild populations within the historical ranges of the species. Due to their small numbers of individuals or low population sizes, these species require suitable habitat and space for expansion or reintroduction to achieve population levels that could achieve recovery.

Oahu—Wet Cliff—Unit 5 consists of 31 ac (13 ha) of State land in the wet cliff ecosystem in the Waianae Mountains, at Palikea and north of Palikea. This unit includes the shrubland, the moisture regime, and subcanopy and understory native plant species identified as physical or biological features in the wet cliff ecosystem (see Table 4). Although Oahu—Wet Cliff—Unit 5 is not currently occupied by *Cyanea acuminata*, *C. calycina*, *Labordia cyrtandrae*, *Lobelia oahuensis*, *Melicope christophersenii*, *Phyllostegia hirsuta*, *Pteralyxia macrocarpa*, *Schiedea hookeri*, *S. kaalae*, or *S. trinervis*, we have determined this area to be essential for the conservation and recovery of these wet cliff species because it provides the PCEs necessary for the reestablishment of wild populations within the historical ranges of the species. Due to their small numbers of individuals or low population sizes, these species require suitable habitat and space for expansion or reintroduction to achieve population levels that could achieve recovery.

Oahu—Wet Cliff—Unit 6 (and) Crimson Hawaiian Damselfly—Unit 12—Lowland Wet (and) Oceanic Hawaiian Damselfly—Unit 13—Lowland Wet

This area consists of 151 ac (61 ha) in the wet cliff ecosystem on State land on the windward side of the Koolau Mountains in Kaipapau Gulch, entirely within the Kaipapau Forest Reserve. This area includes the shrubland, the moisture regime, and subcanopy and understory native plant species identified as physical or biological features in the wet cliff ecosystem, and the unique features identified as PCEs for the Hawaiian damselflies (see Tables 4 and 5). Because the streams and upland foraging and cover areas required by the crimson and oceanic Hawaiian damselflies are dispersed in the wet cliff ecosystem, the wet cliff ecosystem's physical or biological features are essential to the damselfly species because they provide for the proper ecological functioning of this ecosystem. This area is occupied by the plants *Cyanea crispa*, *Huperzia nutans*, *Pteralyxia macrocarpa*, and *Schiedea kaalae*, and by the oceanic Hawaiian damselfly. This area also contains unoccupied habitat that is essential to the conservation of these species by providing the PCEs necessary for the expansion of the existing wild populations. Although this area is not currently occupied by the plants *Adenophorus perieni*, *Chamaesyce deppeana*, *C. rockii*, *Cyanea acuminata*, *C. calycina*, *C. humboldtiana*, *C. purpurellifolia*, *C. st.-johnii*, *C. truncata*, *Cyrtandra kaulantha*, *C. sessilis*, *C. subumbellata*, *C. viridiflora*, *Labordia cyrtandrae*, *Lobelia oahuensis*, *Lysimachia filifolia*, *Phyllostegia hirsuta*, *P. parviflora*, *Plantago princeps*, *Psychotria hexandra* ssp. *oahuensis*, *Sanicula purpurea*, *Tetraplasandra gymnocarpa*, *Trematolobelia singularis*, or *Viola oahuensis*, or by the crimson Hawaiian damselfly, we have determined this area to be essential for the conservation and recovery of these wet cliff species because it provides the PCEs necessary for the reestablishment of wild populations within the historical ranges of the species. Due to their small numbers of individuals or low population sizes, these species require suitable habitat and space for expansion or reintroduction to achieve population levels that could achieve recovery.

Oahu—Wet Cliff—Unit 7 (and) Crimson Hawaiian Damsselfly—Unit 13—Lowland Wet (and) Oceanic Hawaiian Damsselfly—Unit 14—Lowland Wet

This area consists of 144 ac (58 ha) in the wet cliff ecosystem in State land on the windward side of the Koolau Mountains in Hauula Gulch, entirely within the Hauula Forest Reserve. This unit includes the shrubland, the moisture regime, and subcanopy and understory native plant species identified as physical or biological features in the wet cliff ecosystem, and the unique features identified as PCEs for the crimson and oceanic Hawaiian damsselflies (see Tables 4 and 5). Because the streams and upland foraging and cover areas required by the crimson and oceanic Hawaiian damsselflies are dispersed in the wet cliff ecosystem, the wet cliff ecosystem's physical or biological features are essential to the damsselfly species because they provide for the proper ecological functioning of this ecosystem. This area is occupied by the plants *Cyanea crispa*, *Psychotria hexandra* ssp. *oahuensis*, and *Schiedea kaalae*, and by the crimson and oceanic Hawaiian damsselflies. This area also contains unoccupied habitat that is essential to the conservation of these species by providing the PCEs necessary for the expansion of the existing wild populations. Although this area is not currently occupied by the plants *Adenophorus periens*, *Chamaesyce deppeana*, *C. rockii*, *Cyanea acuminata*, *C. calycina*, *C. humboldtiana*, *C. purpurellifolia*, *C. st.-johnii*, *C. truncata*, *Cyrtandra kaulantha*, *C. sessilis*, *C. subumbellata*, *C. viridiflora*, *Huperzia nutans*, *Labordia cyrtandrae*, *Lobelia oahuensis*, *Lysimachia filifolia*, *Phyllostegia hirsuta*, *P. parviflora*, *P. princeps*, *Pteralyxia macrocarpa*, *Sanicula purpurea*, *Tetraplasandra gymnocarpa*, *Trematolobelia singularis*, or *Viola oahuensis*, we have determined this area to be essential for the conservation and recovery of these wet cliff species because it provides the PCEs necessary for the reestablishment of wild populations within the historical ranges of the species. Due to their small numbers of individuals or low population sizes, these species require suitable habitat and space for expansion or reintroduction to achieve population levels that could achieve recovery.

Oahu—Wet Cliff—Unit 8 (and) Crimson Hawaiian Damsselfly—Unit 14—Lowland Wet (and) Oceanic Hawaiian Damsselfly—Unit 15—Lowland Wet

This area consists of 1,479 ac (598 ha) of State land, 1,281 ac (519 ha) of City and County of Honolulu land, 5 ac (2 ha) of Federal land, and 1,884 ac (762 ha) of privately owned land, in the wet cliff ecosystem along the summit of the Koolau Mountains, overlapping portions of Sacred Falls State Park, the Waiahole FR (Waiahole and Iolekaa sections), the Kaneohe and Honolulu Watershed FRs, and the Nuana Pali State Wayside. This unit includes the shrubland, the moisture regime, and subcanopy and understory native plant species identified as physical or biological features in the wet cliff ecosystem, as well as unique for the species PCEs for the crimson and oceanic Hawaiian damsselflies (see Tables 4 and 5). Because the streams and upland foraging and cover areas required by the crimson and oceanic Hawaiian damsselflies are dispersed in the wet cliff ecosystem, the wet cliff ecosystem's physical or biological features are essential to the damsselfly species because they provide for the proper ecological functioning of this ecosystem. This area is occupied by the plants *Cyanea acuminata*, *C. calycina*, *C. humboldtiana*, *C. purpurellifolia*, *C. st.-johnii*, *Cyrtandra kaulantha*, *C. sessilis*, *C. subumbellata*, *C. viridiflora*, *Huperzia nutans*, *Labordia cyrtandrae*, *Lobelia oahuensis*, *Lysimachia filifolia*, *Phyllostegia hirsuta*, *P. parviflora*, *Plantago princeps*, *Pteralyxia macrocarpa*, *Sanicula purpurea*, *Tetraplasandra gymnocarpa*, *Trematolobelia singularis*, and *Viola oahuensis*. This unit also contains unoccupied habitat that is essential to the conservation of these species by providing the PCEs necessary for the expansion of the existing wild populations. Although this area is not currently occupied by the plants *Adenophorus periens*, *Chamaesyce deppeana*, *C. rockii*, *Cyanea crispa*, *C. truncata*, *Psychotria hexandra* ssp. *oahuensis*, or *Schiedea kaalae*, or by the crimson and oceanic Hawaiian damsselflies, we have determined this area to be essential for the conservation and recovery of these wet cliff species because it provides the PCEs necessary for the reestablishment of wild populations within the historical ranges of the species. Due to their small numbers of individuals or low population sizes, these species require suitable habitat and space for expansion or reintroduction to achieve population levels that could achieve recovery.

## Effects of Critical Habitat Designation

### Section 7 Consultation

Section 7(a)(2) of the Act, as amended, requires Federal agencies, including the Service, to ensure that actions they fund, authorize, or carry out are not likely to destroy or adversely modify critical habitat. Decisions by the Fifth and Ninth Circuit Court 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 remain functional (or retain those physical or biological features that relate to the ability of the area to periodically support the species) to serve its intended conservation role for the species.

If a species is listed or critical habitat is designated, 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 to destroy or adversely modify its critical habitat. 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. As a result of this consultation, we issue:

(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.

If we issue a biological opinion concluding that a project is likely to jeopardize the continued existence of a listed species or destroy or adversely modify critical habitat, we also provide reasonable and prudent alternatives to the project, if any are identifiable. We define “reasonable and prudent alternatives” at 50 CFR 402.02 as alternative actions identified during consultation that:

- Can be implemented in a manner consistent with the intended purpose of the action;

- Can be implemented consistent with the scope of the Federal agency's legal authority and jurisdiction;
- Are economically and technologically feasible; and
- Would, in the Director's opinion, avoid jeopardizing the continued existence of the listed species or 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 formal 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 may sometimes need to request reinstatement 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.

Federal activities that may adversely affect the species included in this final rule or their designated critical habitat require section 7 consultation under the Act. This includes activities on State, tribal, local, or private lands requiring 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 us under section 10 of the Act), or activities involving some other Federal action (such as funding from the Federal Highway Administration, Federal Aviation Administration, or the Federal Emergency Management Agency). These types of activities are subject to the section 7 consultation process. Federal actions not affecting listed species or critical habitat, and actions on State, tribal, local, or private lands that are not federally funded, authorized, or permitted, do not require section 7 consultations.

#### *Application of the Jeopardy and Adverse Modification Standards*

The jeopardy analysis usually expresses the survival and recovery needs of a listed species in a qualitative fashion without making distinctions between what is necessary for survival and what is necessary for recovery.

Generally, the jeopardy analysis focuses on the status of a species, the factors responsible for that condition, and what is necessary for the species to survive and recover. An emphasis is also placed on characterizing the condition of the species in the area affected by the proposed Federal action. That context is then used to determine the significance of adverse and beneficial effects of the proposed Federal action and any cumulative effects for purposes of making the jeopardy determination. The jeopardy analysis also considers any conservation measures that may be proposed by a Federal action agency to minimize or compensate for adverse project effects to the species or to promote its recovery.

#### *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, or would retain its current ability for the essential features to be functionally established. 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 124 species identified in this rule.

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, when carried out, funded, or authorized by a Federal agency, may destroy or adversely modify critical habitat for the 124 species, and therefore may be affected by this final designation, include, but are not limited to:

(1) Activities that might appreciably degrade or destroy the physical or biological features for the species including, but not limited to, the following: Overgrazing; maintaining or increasing feral ungulate levels; clearing or cutting native live trees and shrubs (e.g., woodcutting, bulldozing, construction, road building, mining, herbicide application); and taking actions that pose a risk of fire.

(2) Activities that may alter watershed characteristics in ways that would appreciably reduce groundwater recharge or alter natural, wetland, aquatic, or vegetative communities. Such activities include new water diversion or impoundment, excess

groundwater pumping, and manipulation of vegetation through activities such as the ones mentioned in (1) above.

(3) Recreational activities that may appreciably degrade vegetation.

(4) Mining sand or other minerals.

(5) Introducing or encouraging the spread of nonnative plant species.

(6) Importing nonnative species for research, agriculture, and aquaculture, and releasing biological control agents.

#### *Application of Section 4(a)(3) of the Act*

The Sikes Act Improvement Amendment 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:

- An assessment of the ecological needs on the installation, including the need to provide for the conservation of listed species;
- A statement of goals and priorities;
- A detailed description of management actions to be implemented to provide for these ecological needs; and
- 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)) 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 areas that were being considered for critical habitat designation during the development of this rule to determine if these installations may warrant consideration for exemption under section 4(a)(3) of the Act. Each of the Department of Defense (DOD) installations identified below owns or manages such lands, which have been analyzed for exemption under the authority of section 4(a)(3) of the Act.

#### *Approved INRMPs*

##### Lands Under U.S. Army Jurisdiction

The U.S. Army has six training installations under its jurisdiction on the island of Oahu: Dillingham Military Reservation (DMR), Kawaihoa Training Area (KLOA), Kahuku Training Area (KTA), Makua Military Reservation (MMR), Schofield Barracks Military Reservation (SBMR), and Schofield Barracks–East Range (SBER). These lands are administered by the Army Garrison Hawaii for various types of military training. In our 2003 final rule to designate critical habitat for 99 plant species on Oahu (68 FR 35950, June 17, 2003), we did not designate critical habitat on areas managed by the Army that met the following criteria: (1) The area was subject to a current and final INRMP that provides a conservation benefit to the species; (2) there were assurances the conservation management strategies will be implemented; and (3) there were assurances the conservation management strategies will be effective. These determinations were based primarily on section 4(b)(2) of the Act.

Our previous analysis determined the ongoing and proposed management activities described in the 2002 INRMP provide a conservation benefit to the plant species, and that the INRMP provided assurances the conservation plan would be implemented and effective (68 FR 35950, June 17, 2003). After applying the above three criteria, we determined in the 2003 final rule that 26,946 ac (10,905 ha) of Army lands were excluded from critical habitat designation. Our exclusion analysis of Army lands determined that the benefits of excluding these lands based on impacts to national security and other relevant factors outweighed the benefits of designating these lands as critical habitat. The exclusion of Army lands in the 2003 final rule was based on our review and analysis of the Army's INRMP (U.S. Army 2002), Ecosystem Management Plan (U.S. Army 1998), and Endangered Species Management

Plan (Research Corporation of Hawaii 1998). We also evaluated the monthly and annual summary reports describing natural resources management projects performed under the Ecosystems Management Programs for each of the six Oahu installations, reviewed the Army's Wildland Fire Management Plan for Makua Military Installation (U.S. Army 2000) and the Draft Wildland Fire Management Plan for the other five Oahu installations (U.S. Army 2003).

Subsequent to publication of the 2003 final rule, the National Defense Authorization Act of 2004 (Pub. L. 108–136) was enacted, which amended the Act. The Army's 2001 INRMP was updated in 2010 (see below), and we have reevaluated the conservation and management activities for the species that occur on Army lands within this statutory framework for purposes of this rule.

The Army recently updated its 2001 INRMP, which was finalized in August 2010 (U.S. Army Garrison Hawaii 2010). The INRMP identifies management actions during 2010–2014 for threatened, endangered, and candidate species, and for critical habitat for the Oahu elepaio (an endangered flycatcher) on all of their Oahu training installations (U.S. Army Garrison Hawaii 2010, p. 4–1). The INRMP incorporates management actions developed as implementation plans by a team of biologists and field experts from State, Federal, and private agencies and organizations, who are familiar with the species and their habitats (U.S. Army Garrison Hawaii 2003; 2008, U.S. Army Garrison Hawaii 2005c, Addendum). The implementation plans and addendum were prepared under the terms of biological opinions issued by the Service (USFWS 1999b, USFWS 2003b, 356 pp.; USFWS 2007c, 776 pp.).

Species conservation/management activities conducted under the Army INRMP include: (1) Propagation and outplanting of plants to augment existing populations and reintroduce species and populations to areas where they no longer occur; (2) construction of fences to protect plants from feral ungulates; (3) nonnative rodent, slug, and snail control to protect plants from fruit and seed predation and reduce predation of elepaio nests (by rats); (4) habitat restoration (e.g., restoration of fire-altered native habitats to native vegetation, erosion control); (5) control of nonnative plants, nonnative invertebrates (e.g., black-twig borer), and feral ungulate populations; (6) surveys and monitoring of rare plants and animals; (7) monitoring for weeds; and (8) monitoring fenced areas for ungulate activity (U.S. Army Garrison

Hawaii 2010, pp. 4–3–4–29). In addition, the Army contracts with field experts to monitor rare plants and conduct predator control on their lands, and supports several important research projects (e.g., developing methods to control nonnative slugs and snails; developing methods to restore nonnative, highly flammable grasslands to native forest vegetation; and determining home range and density of rats (U.S. Army Garrison Hawaii 2010, p. 4–28)). The Army provides monthly and annual summary reports to the Service regarding the natural resources management projects implemented under the implementation plans and the addendum, which are integrated in the INRMP for the six installations. These summary reports provide information on management actions implemented and whether they have proven beneficial to listed species and species proposed for listing. Examples of ecosystem management activities that protect rare species' habitat and provide conservation benefits include fence construction, removal of feral ungulates from within fenced areas, and minimizing the threat of fire through the control and eradication of fire-tolerant nonnative plant species, construction of fuel breaks, maintenance of existing roads, roadside weed clearing, and investing in firefighting equipment and training fire crews (U.S. Army Garrison Hawaii 2010, pp. 4–14, 4–65–4–66).

In 2003, the Army completed an integrated wildland fire management plan (WFMP) for all of its Oahu training installations, which is integrated in the 2010 INRMP (U.S. Army 2010, p. 4–65). The goal of the WFMP is to reduce the threat of wildfire, which represents a threat to listed and other rare species, including 6 of the 23 species listed in this final rule and 34 previously listed plant species that occur on one or more of Oahu's six Army training installations. Specific conservation/management activities for individual plant species are detailed in the implementation plans and the addendum, and are integrated in the INRMP (U.S. Army Garrison Hawaii 2010, pp. 4–20–4–22; Appendix 4). Each of these documents is available online at "U.S. Army Garrison Hawaii Natural Resource Program Reports," <http://manoa.hawaii.edu/hpicesu/dpw.htm>. We reviewed the management activities described in these plans, and have determined that they provide conservation benefits to 14 plant species that are listed in this final rule and 63 previously listed plant species that have been reported on one or more of Oahu's six Army training installations.

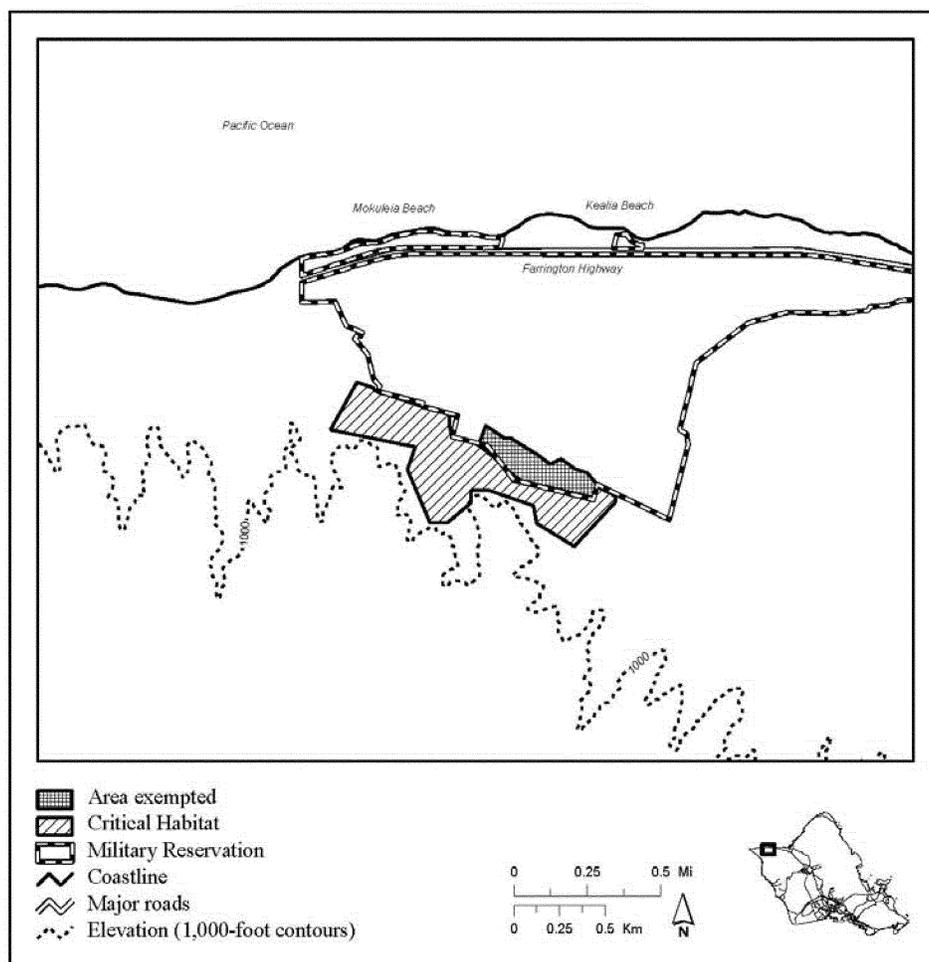
Accordingly, we have determined that 8,310 ac (3,364 ha) of land on Oahu's six Army training installations (see Figures 1–4) are exempt from critical habitat designation in accordance with section 4(a)(3)(B)(i) of the Act. The conservation actions identified in the 2010–2014 INRMP for the Army's Oahu installations, which incorporates the 2003 and 2008 implementation plans, the 2005 Addendum (USFWS 2003b, 356 pp.; U.S. Army Garrison 2005c; USFWS 2007c, 776 pp.), and the 2003 WFMP, provide conservation benefits to 14 plant species listed in this final rule that occur within the six Oahu training areas, which include *Bidens amplexans*, *Cyanea calycina*, *C. lanceolata*, *C. purpurellifolia*, *Korthalsella degeneri*, *Melicope christophersenii*, *M. hiiakae*, *M. makahae*, *Platydesma cornuta* var. *cornuta*, *P. cornuta* var. *decurrens*, *Pleomele forbesii*, *Psychotria hexandra*

ssp. *oahuensis*, *Pteralyxia macrocarpa*, and *Zanthoxylum oahuense*. The 2010–2014 INRMP also provides conservation benefits to 63 previously listed plant species that occur within the six Oahu training areas, which include *Abutilon sandwicense*, *Alectryon macrococcus*, *Bonamia menziesii*, *Cenchrus agrimonioides*, *Chamaesyce celastroides* var. *kaenana*, *C. herbstii*, *C. rockii*, *Ctenitis squamigera*, *Cyanea acuminata*, *C. crispa*, *C. grimesiana* ssp. *obatae*, *C. humboldtiana*, *C. koolauensis*, *C. longiflora*, *C. st.-johnii*, *C. superba*, *Cyrtandra dentata*, *C. subumbellata*, *C. viridiflora*, *Delissea subcordata*, *Diellia falcata*, *Dubautia herbstobatae*, *Eugenia koolauensis*, *Euphorbia haeleeleana*, *Flueggea neowawraea*, *Gardenia mannii*, *Hesperomannia arborescens*, *H. arbuscula*, *Hibiscus brackenridgei*, *Huperzia nutans*, *Isodendron laurifolium*, *Kadua degeneri*, *K. parvula*, *Labordia cyrtandrae*, *Lepidium*

*arbuscula*, *Lobelia gaudichaudii* ssp. *koolauensis*, *L. niihauensis*, *L. oahuensis*, *Melanthera tenuifolia*, *Melicope lydgatei*, *Myrsine juddii*, *Neraudia angulata*, *Nototrichium humile*, *Phyllostegia hirsuta*, *P. mollis*, *Plantago princeps*, *Pritchardia kaalae*, *Pteris lidgatei*, *Sanicula mariversa*, *S. purpurea*, *Schiedea hookeri*, *S. kaalae*, *S. nuttallii*, *S. obovata*, *S. trinervis*, *Silene lanceolata*, *Solanum sandwicense*, *Spermolepis hawaiiensis*, *Stenogyne kanehoana*, *Tetramolopium filiforme*, *Tetraplasandra gymnocarpa*, *Viola chamissoniana* ssp. *chamissoniana*, and *V. oahuensis* (see Table 7A and 7B, above) (U.S. Army Garrison 2003, 2005b, 2008, 2010; USFWS 2003b, 356 pp.; USFWS 2007c, 776 pp.). Figures 1 through 4 identify the above areas on Army-managed lands that were evaluated under section 4(a)(3)(B)(i) of the Act.

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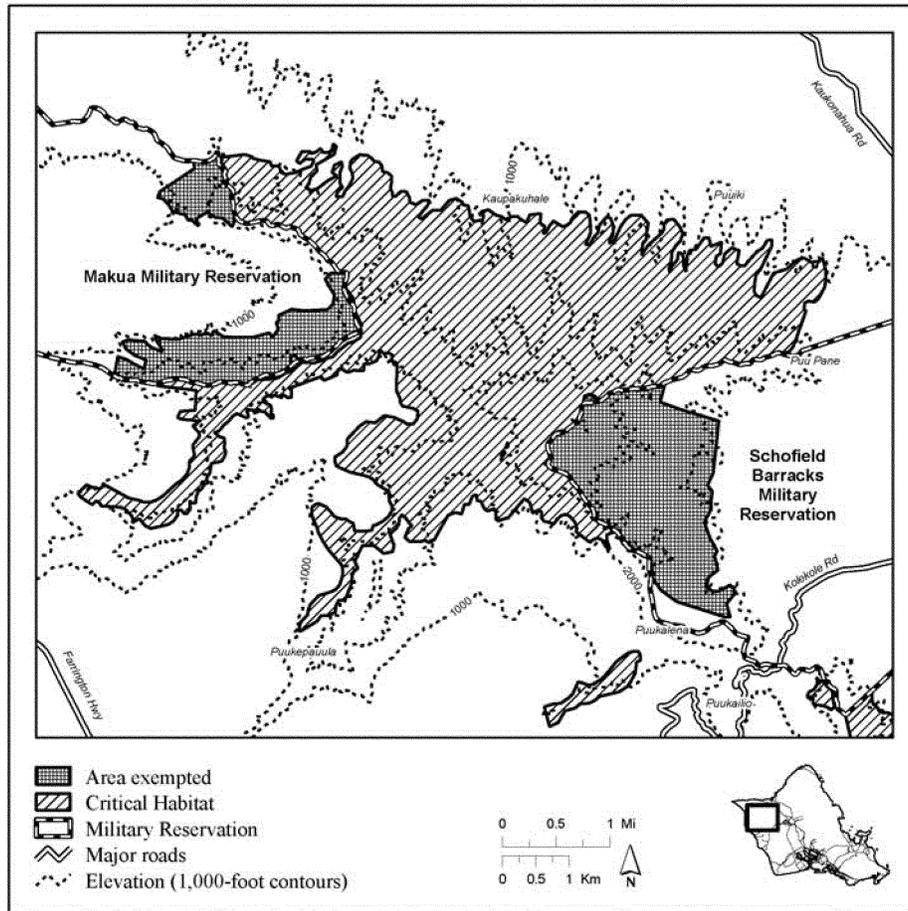
**Figure 1**  
**Dillingham Military Installation**







**Figure 4**  
**Makua Military Reservation and**  
**Schofield Barracks Military Reservation**



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**Lands Under U.S. Navy Jurisdiction**

The U.S. Navy (Navy) owns or leases much of Lualualei Valley, on Oahu's leeward coast, which is operated as a naval magazine and radio transmitting facility. The Navy lands at Lualualei are composed of two contiguous facilities, Naval Station Pearl Harbor Lualualei Branch (NAVMAG PH Lualualei) and Naval Radar Transmittal Facility at Lualualei (NRTF Lualualei). In addition, the Navy still retains ownership of land within the former Barber's Point Naval Air Station at Kalaeloa on Oahu's southwestern coast, including 166 ac (67 ha) that are within Oahu—Lowland Dry—Unit 11. We are aware that the Navy plans to transfer ownership of these 166 ac (67 ha) to the Hawaii Community Development Authority (HCDA), although this transfer has not yet occurred (City and County Real Property Assessment Division 2011). Due to the pending land transfer, these lands were not considered for

exemption from this final designation of critical habitat under section 4(a)(3)(B)(i), as the revised INRMP discussed below would not cover those lands once ownership is transferred. However, we understand that as part of the land transfer negotiations, a draft conservation plan is being specifically developed for this area.

In our June 17, 2003, final rule (68 FR 35950) to designate critical habitat for 99 plant species on Oahu, we designated approximately 972 ac (approximately 393 ha) of Navy lands as critical habitat for 21 species (*Abutilon sandwicense*, *C. kuwaleana*, *Cyanea grimesiana* ssp. *obatae*, *Diellia falcata*, *D. unisora*, *Gouania meyenii*, *Hesperomannia arbuscula*, *Kadua parvula*, *Lepidium arbuscula*, *Lipochaeta lobata* var. *leptophylla*, *Marsilea villosa*, *Melicope pallida*, *M. saint-johnii*, *Neraudia angulata*, *Phyllostegia hirsuta*, *Schiedea hookeri*, *Silene perlmanii*, *Stenogyne kanehoana*, *Tetramolopium lepidotum* ssp. *lepidotum*, *Urera kaalae*, and *Viola*

*chamissoniana* ssp. *chamissoniana*). We determined that the benefits of designating Navy lands as critical habitat outweighed the benefits of excluding these lands under section 4(b)(2) of the Act.

Subsequent to publication of our 2003 final rule, the Navy developed a revision to their 2001 INRMP, which was completed in September 2011 (2011 Joint Base Pearl Harbor-Hickam INRMP), following the publication of our August 2011 proposed rule (76 FR 46362). Since it was not completed at the time of our August 2011 proposed rule, we conducted an analysis of the Navy's 2001 INRMP to determine whether it provided a conservation benefit to the plant species for which critical habitat was proposed on Navy lands, for purposes of section 4(a)(3)(B)(i) of the Act. In our proposed rule we determined that the Navy's 2001 INRMP did not provide a conservation benefit for previously listed species or for those species proposed for listing for which we found critical habitat to be

both prudent and determinable. As a result, we proposed critical habitat for 60 plant species within 9 units that overlap Navy lands at Lualualei Valley (Oahu—Dry Cliff—Unit 4, Oahu—Dry Cliff—Unit 5, Oahu—Dry Cliff—Unit 6, Oahu—Dry Cliff—Unit 7, Oahu—

Lowland Dry—Unit 3, Oahu—Lowland Dry—Unit 4, Oahu—Lowland Dry—Unit 5, Oahu—Wet Cliff—Unit 2, and Oahu—Wet Cliff—Unit 5) and in 1 unit that overlaps Navy lands at Kalaeloa Barber’s Point (Oahu—Lowland Dry—Unit 11). Within these 10 units, 28 species occur

within one or more of the units (occupied units) and 32 species are not currently known to occur within one or more of the units (unoccupied units) (Table 8).

TABLE 8—SPECIES FOR WHICH CRITICAL HABITAT WAS PROPOSED AT NAVMAG PH LUALUALEI, NRTF LUALUALEI AND KALAELOA BARBER’S POINT

Species	Unit occupied	Unoccupied
<i>Abutilon sandwicense</i> .....	Oahu—Dry Cliff—Unit 7 .....	Oahu—Dry Cliff—Unit 4, Oahu—Dry Cliff—Unit 5, Oahu—Dry Cliff—Unit 6, Oahu—Dry Cliff—Unit 7
<i>Achyranthes splendens</i> var. <i>rotundata</i> .....	.....	Oahu—Dry Cliff—Unit 4, Oahu—Dry Cliff—Unit 5, Oahu—Dry Cliff—Unit 6, Oahu—Dry Cliff—Unit 7, Oahu—Lowland Dry—Unit 3, Oahu—Lowland Dry—Unit 4, Oahu—Lowland Dry—Unit 5, Oahu—Lowland Dry—Unit 11
<i>Alectryon macrococcus</i> .....	Oahu—Dry Cliff—Unit 4, Oahu—Dry Cliff—Unit 5 .....	Oahu—Dry Cliff—Unit 6, Oahu—Dry Cliff—Unit 7
<i>Bidens amplexans</i> .....	.....	Oahu—Lowland Dry—Unit 3, Oahu—Lowland Dry—Unit 4, Oahu—Lowland Dry—Unit 5, Oahu—Lowland Dry—Unit 11
<i>Bonamia menziesii</i> .....	.....	Oahu—Dry Cliff—Unit 4, Oahu—Dry Cliff—Unit 5, Oahu—Dry Cliff—Unit 6, Oahu—Dry Cliff—Unit 7, Oahu—Lowland Dry—Unit 3, Oahu—Lowland Dry—Unit 4, Oahu—Lowland Dry—Unit 5, Oahu—Lowland Dry—Unit 11
<i>Cenchrus agrimonioides</i> .....	Oahu—Dry Cliff—Unit 6 .....	Oahu—Dry Cliff—Unit 4, Oahu—Dry Cliff—Unit 5, Oahu—Dry Cliff—Unit 6, Oahu—Dry Cliff—Unit 7
<i>Chamaesyce celastroides</i> var. <i>kaenana</i> .....	.....	Oahu—Lowland Dry—Unit 3, Oahu—Lowland Dry—Unit 4, Oahu—Lowland Dry—Unit 5, Oahu—Lowland Dry—Unit 11
<i>Chamaesyce herbstii</i> .....	.....	Oahu—Dry Cliff—Unit 4, Oahu—Dry Cliff—Unit 5, Oahu—Dry Cliff—Unit 6, Oahu—Dry Cliff—Unit 7
<i>Chamaesyce kuwaleana</i> .....	Oahu—Dry Cliff—Unit 4 .....	Oahu—Dry Cliff—Unit 4, Oahu—Dry Cliff—Unit 5, Oahu—Dry Cliff—Unit 6, Oahu—Dry Cliff—Unit 7
<i>Chamaesyce skottsbergii</i> var. <i>skottsbergii</i> .....	Oahu—Lowland Dry—Unit 11 .....	Oahu—Lowland Dry—Unit 11
<i>Cyanea acuminata</i> .....	.....	Oahu—Wet Cliff—Unit 2, Oahu—Wet Cliff—Unit 5
<i>Cyanea calycina</i> .....	Oahu—Wet Cliff—Unit 2 .....	Oahu—Wet Cliff—Unit 2, Oahu—Wet Cliff—Unit 5
<i>Cyanea grimesiana</i> ssp. <i>obatae</i> .....	.....	Oahu—Dry Cliff—Unit 4, Oahu—Dry Cliff—Unit 5, Oahu—Dry Cliff—Unit 6, Oahu—Dry Cliff—Unit 7
<i>Cyperus trachysanthos</i> .....	Oahu—Lowland Dry—Unit 5 .....	Oahu—Lowland Dry—Unit 3, Oahu—Lowland Dry—Unit 4, Oahu—Lowland Dry—Unit 5
<i>Cyrtandra dentata</i> .....	.....	Oahu—Dry Cliff—Unit 4, Oahu—Dry Cliff—Unit 5, Oahu—Dry Cliff—Unit 6, Oahu—Dry Cliff—Unit 7
<i>Diellia falcata</i> .....	.....	Oahu—Dry Cliff—Unit 4, Oahu—Dry Cliff—Unit 5, Oahu—Dry Cliff—Unit 6, Oahu—Dry Cliff—Unit 7
<i>Diellia unisora</i> .....	Oahu—Dry Cliff—Unit 6, Oahu—Dry Cliff—Unit 7 .....	Oahu—Dry Cliff—Unit 4, Oahu—Dry Cliff—Unit 5, Oahu—Dry Cliff—Unit 6, Oahu—Dry Cliff—Unit 7
<i>Dubautia herbstobatae</i> .....	.....	Oahu—Dry Cliff—Unit 4, Oahu—Dry Cliff—Unit 5, Oahu—Dry Cliff—Unit 6, Oahu—Dry Cliff—Unit 7
<i>Eragrostis fosbergii</i> .....	.....	Oahu—Dry Cliff—Unit 4, Oahu—Dry Cliff—Unit 5, Oahu—Dry Cliff—Unit 6, Oahu—Dry Cliff—Unit 7
<i>Euphorbia haelealeana</i> .....	.....	Oahu—Lowland Dry—Unit 3, Oahu—Lowland Dry—Unit 4, Oahu—Lowland Dry—Unit 5, Oahu—Lowland Dry—Unit 11
<i>Flueggea neowawraea</i> .....	Oahu—Dry Cliff—Unit 5, Oahu—Dry Cliff—Unit 6, Oahu—Dry Cliff—Unit 7 .....	Oahu—Dry Cliff—Unit 4, Oahu—Dry Cliff—Unit 5, Oahu—Dry Cliff—Unit 6
<i>Gouania meyenii</i> .....	.....	Oahu—Lowland Dry—Unit 3, Oahu—Lowland Dry—Unit 4, Oahu—Lowland Dry—Unit 5, Oahu—Lowland Dry—Unit 11, Oahu—Dry Cliff—Unit 4, Oahu—Dry Cliff—Unit 5, Oahu—Dry Cliff—Unit 6, Oahu—Dry Cliff—Unit 7
<i>Gouania vitifolia</i> .....	.....	Oahu—Lowland Dry—Unit 3, Oahu—Lowland Dry—Unit 4, Oahu—Lowland Dry—Unit 5, Oahu—Lowland Dry—Unit 11, Oahu—Dry Cliff—Unit 4, Oahu—Dry Cliff—Unit 5, Oahu—Dry Cliff—Unit 6, Oahu—Dry Cliff—Unit 7
<i>Hibiscus brackenridgei</i> .....	.....	Oahu—Lowland Dry—Unit 3, Oahu—Lowland Dry—Unit 4, Oahu—Lowland Dry—Unit 5, Oahu—Lowland Dry—Unit 11

TABLE 8—SPECIES FOR WHICH CRITICAL HABITAT WAS PROPOSED AT NAVMAG PH LUALUALEI, NRTF LUALUALEI AND KALAELOA BARBER’S POINT—Continued

Species	Unit occupied	Unoccupied
<i>Isodendron laurifolium</i> .....	.....	Oahu—Dry Cliff—Unit 4, Oahu—Dry Cliff—Unit 5, Oahu—Dry Cliff—Unit 6, Oahu—Dry Cliff—Unit 7
<i>Isodendron pyrifolium</i> .....	.....	Oahu—Lowland Dry—Unit 3, Oahu—Lowland Dry—Unit 4, Oahu—Lowland Dry—Unit 5, Oahu—Lowland Dry—Unit 11, Oahu—Dry Cliff—Unit 4, Oahu—Dry Cliff—Unit 5, Oahu—Dry Cliff—Unit 6, Oahu—Dry Cliff—Unit 7
<i>Kadua degeneri</i> .....	.....	Oahu—Dry Cliff—Unit 4, Oahu—Dry Cliff—Unit 5, Oahu—Dry Cliff—Unit 6, Oahu—Dry Cliff—Unit 7
<i>Kadua parvula</i> .....	Oahu—Dry Cliff—Unit 7 .....	Oahu—Dry Cliff—Unit 4, Oahu—Dry Cliff—Unit 5, Oahu—Dry Cliff—Unit 6, Oahu—Dry Cliff—Unit 7
<i>Korthalsella degeneri</i> .....	.....	Oahu—Dry Cliff—Unit 4, Oahu—Dry Cliff—Unit 5, Oahu—Dry Cliff—Unit 6, Oahu—Dry Cliff—Unit 7
<i>Labordia cyrtandrae</i> .....	.....	Oahu—Wet Cliff—Unit 2, Oahu—Wet Cliff—Unit 5
<i>Lepidium arbuscula</i> .....	Oahu—Dry Cliff—Unit 6, Oahu—Dry Cliff—Unit 7 .....	Oahu—Dry Cliff—Unit 4, Oahu—Dry Cliff—Unit 5, Oahu—Dry Cliff—Unit 6, Oahu—Dry Cliff—Unit 7
<i>Lipochaeta lobata</i> var. <i>leptophylla</i> .	Oahu—Dry Cliff—Unit 5 .....	Oahu—Dry Cliff—Unit 4, Oahu—Dry Cliff—Unit 5, Oahu—Dry Cliff—Unit 6, Oahu—Dry Cliff—Unit 7
<i>Lobelia niihauensis</i> .....	Oahu—Dry Cliff—Unit 5, Oahu—Dry Cliff—Unit 6 .....	Oahu—Dry Cliff—Unit 4, Oahu—Dry Cliff—Unit 5, Oahu—Dry Cliff—Unit 6, Oahu—Dry Cliff—Unit 7
<i>Lobelia oahuensis</i> .....	.....	Oahu—Wet Cliff—Unit 2, Oahu—Wet Cliff—Unit 5
<i>Marsilea villosa</i> .....	Oahu—Lowland Dry—Unit 3, Oahu—Lowland Dry—Unit 4.	Oahu—Lowland Dry—Unit 3, Oahu—Lowland Dry—Unit 4, Oahu—Lowland Dry—Unit 5
<i>Melanthera tenuifolia</i> .....	.....	Oahu—Lowland Dry—Unit 3, Oahu—Lowland Dry—Unit 4, Oahu—Lowland Dry—Unit 5, Oahu—Lowland Dry—Unit 11, Oahu—Dry Cliff—Unit 4, Oahu—Dry Cliff—Unit 5, Oahu—Dry Cliff—Unit 6, Oahu—Dry Cliff—Unit 7
<i>Melicope christophersenii</i> ...	Oahu—Wet Cliff—Unit 2 .....	Oahu—Wet Cliff—Unit 2, Oahu—Wet Cliff—Unit 5
<i>Melicope makahae</i> .....	.....	Oahu—Dry Cliff—Unit 4, Oahu—Dry Cliff—Unit 5, Oahu—Dry Cliff—Unit 6, Oahu—Dry Cliff—Unit 7
<i>Melicope saint-johnii</i> .....	Oahu—Dry Cliff—Unit 6, Oahu—Dry Cliff—Unit 7 .....	Oahu—Dry Cliff—Unit 4, Oahu—Dry Cliff—Unit 5, Oahu—Dry Cliff—Unit 6, Oahu—Dry Cliff—Unit 7
<i>Neraudia angulata</i> .....	Oahu—Lowland Dry—Unit 3, Oahu—Lowland Dry—Unit 4, Oahu—Lowland Dry—Unit 5, Oahu—Dry Cliff—Unit 6, Oahu—Dry Cliff—Unit 7.	Oahu—Lowland Dry—Unit 3, Oahu—Lowland Dry—Unit 4, Oahu—Lowland Dry—Unit 5, Oahu—Dry Cliff—Unit 4, Oahu—Dry Cliff—Unit 5, Oahu—Dry Cliff—Unit 6, Oahu—Dry Cliff—Unit 7
<i>Nototrichium humile</i> .....	Oahu—Dry Cliff—Unit 5 .....	Oahu—Lowland Dry—Unit 3, Oahu—Lowland Dry—Unit 4, Oahu—Lowland Dry—Unit 5, Oahu—Lowland Dry—Unit 11, Oahu—Dry Cliff—Unit 4, Oahu—Dry Cliff—Unit 5, Oahu—Dry Cliff—Unit 6, Oahu—Dry Cliff—Unit 7
<i>Peucedanum sandwicense</i> ..	.....	Oahu—Dry Cliff—Unit 4, Oahu—Dry Cliff—Unit 5, Oahu—Dry Cliff—Unit 6, Oahu—Dry Cliff—Unit 7
<i>Phyllostegia hirsuta</i> .....	.....	Oahu—Wet Cliff—Unit 2, Oahu—Wet Cliff—Unit 5
<i>Phyllostegia kaalaensis</i> .....	.....	Oahu—Dry Cliff—Unit 4, Oahu—Dry Cliff—Unit 5, Oahu—Dry Cliff—Unit 6, Oahu—Dry Cliff—Unit 7
<i>Plantago princeps</i> .....	Oahu—Dry Cliff—Unit 6, Oahu—Dry Cliff—Unit 7 .....	Oahu—Dry Cliff—Unit 4, Oahu—Dry Cliff—Unit 5, Oahu—Dry Cliff—Unit 6, Oahu—Dry Cliff—Unit 7
<i>Platydesma cornuta</i> var. <i>decurrens</i> .	Oahu—Dry Cliff—Unit 5, Oahu—Dry Cliff—Unit 7 .....	Oahu—Dry Cliff—Unit 4, Oahu—Dry Cliff—Unit 5, Oahu—Dry Cliff—Unit 6, Oahu—Dry Cliff—Unit 7
<i>Pleomele forbesii</i> .....	Oahu—Dry Cliff—Unit 5, Oahu—Dry Cliff—Unit 6, Oahu—Dry Cliff—Unit 7.	Oahu—Lowland Dry—Unit 3, Oahu—Lowland Dry—Unit 4, Oahu—Lowland Dry—Unit 5, Oahu—Lowland Dry—Unit 11, Oahu—Dry Cliff—Unit 4, Oahu—Dry Cliff—Unit 5, Oahu—Dry Cliff—Unit 6, Oahu—Dry Cliff—Unit 7
<i>Pteralyxia macrocarpa</i> .....	Oahu—Dry Cliff—Unit 6 .....	Oahu—Dry Cliff—Unit 4, Oahu—Dry Cliff—Unit 5, Oahu—Dry Cliff—Unit 6, Oahu—Dry Cliff—Unit 7, Oahu—Wet Cliff—Unit 2, Oahu—Wet Cliff—Unit 5
<i>Sanicula mariversa</i> .....	.....	Oahu—Dry Cliff—Unit 4, Oahu—Dry Cliff—Unit 5, Oahu—Dry Cliff—Unit 6, Oahu—Dry Cliff—Unit 7
<i>Schiedea hookeri</i> .....	Oahu—Dry Cliff—Unit 5 .....	Oahu—Lowland Dry—Unit 3, Oahu—Lowland Dry—Unit 4, Oahu—Lowland Dry—Unit 5, Oahu—Lowland Dry—Unit 11, Oahu—Dry Cliff—Unit 4, Oahu—Dry Cliff—Unit 5, Oahu—Dry Cliff—Unit 6, Oahu—Dry Cliff—Unit 7, Oahu—Wet Cliff—Unit 2, Oahu—Wet Cliff—Unit 5
<i>Schiedea kaalae</i> .....	.....	Oahu—Wet Cliff—Unit 2, Oahu—Wet Cliff—Unit 5

TABLE 8—SPECIES FOR WHICH CRITICAL HABITAT WAS PROPOSED AT NAVMAG PH LUALUALEI, NRTF LUALUALEI AND KALAELOA BARBER’S POINT—Continued

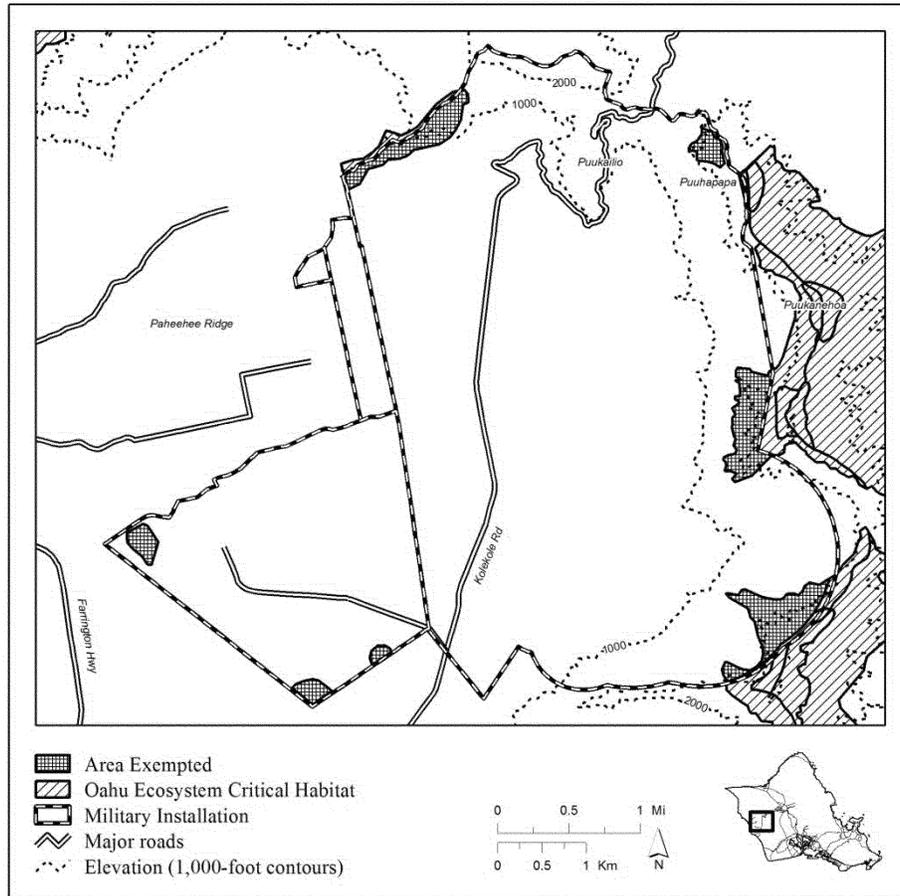
Species	Unit occupied	Unoccupied
<i>Schiedea kealiae</i> .....	.....	Oahu—Lowland Dry—Unit 3, Oahu—Lowland Dry—Unit 4, Oahu—Lowland Dry—Unit 5, Oahu—Lowland Dry—Unit 11
<i>Schiedea obovata</i> .....	.....	Oahu—Dry Cliff—Unit 4, Oahu—Dry Cliff—Unit 5, Oahu—Dry Cliff—Unit 6, Oahu—Dry Cliff—Unit 7
<i>Schiedea trinervis</i> .....	.....	Oahu—Dry Cliff—Unit 4, Oahu—Dry Cliff—Unit 5, Oahu—Dry Cliff—Unit 6, Oahu—Dry Cliff—Unit 7, Oahu—Wet Cliff—Unit 2, Oahu—Wet Cliff—Unit 5
<i>Silene lanceolata</i> .....	.....	Oahu—Dry Cliff—Unit 4, Oahu—Dry Cliff—Unit 5, Oahu—Dry Cliff—Unit 6, Oahu—Dry Cliff—Unit 7
<i>Silene perlmanii</i> .....	Oahu—Dry Cliff—Unit 7 .....	Oahu—Dry Cliff—Unit 4, Oahu—Dry Cliff—Unit 5, Oahu—Dry Cliff—Unit 6, Oahu—Dry Cliff—Unit 7
<i>Spermolepis hawaiiensis</i> .....	Oahu—Dry Cliff—Unit 4 .....	Oahu—Lowland Dry—Unit 3, Oahu—Lowland Dry—Unit 4, Oahu—Lowland Dry—Unit 5, Oahu—Lowland Dry—Unit 11, Oahu—Dry Cliff—Unit 4, Oahu—Dry Cliff—Unit 5, Oahu—Dry Cliff—Unit 6, Oahu—Dry Cliff—Unit 7
<i>Tetramolopium filiforme</i> .....	.....	Oahu—Dry Cliff—Unit 4, Oahu—Dry Cliff—Unit 5, Oahu—Dry Cliff—Unit 6, Oahu—Dry Cliff—Unit 7
<i>Tetramolopium lepidotum</i> ssp. <i>lepidotum</i> .	Oahu—Dry Cliff—Unit 6 .....	Oahu—Dry Cliff—Unit 4, Oahu—Dry Cliff—Unit 5, Oahu—Dry Cliff—Unit 6, Oahu—Dry Cliff—Unit 7
<i>Viola chamissoniana</i> ssp. <i>chamissoniana</i> .	Oahu—Dry Cliff—Unit 7 .....	Oahu—Dry Cliff—Unit 4, Oahu—Dry Cliff—Unit 5, Oahu—Dry Cliff—Unit 6, Oahu—Dry Cliff—Unit 7

On June 8, 2012, the Navy provided an Addendum to its 2011 Joint Base Pearl Harbor-Hickam INRMP. In the Addendum, the Navy provides additional information regarding primary strategies of the INRMP to meet management goals at Lualualei and additional details regarding progress made on planned projects for endangered plants found on Navy lands at Lualualei. These additional objectives or amended action or actions in progress include: (1) A survey documenting numbers and locations of endangered plant species; (2) identification of an additional population of *Marsilea villosa* in the Radio Transmitting Facility; (3) development of a *M. villosa* management plan based on recommendation strategies outlined in a dissertation, partly funded by the Navy; (4) expansion of funding for a fencing plan and fence construction for ungulate control; (5) completion of aerial surveys for feral goats, with plans for their removal beginning in 2013; (6)

nonnative plant removal within exclosures at Halona and Mikiula management areas; (7) allocation of funding for research on black twig borer control methods; (8) prioritization of production of a wildfire management plan; (9) request of permission through the chain of command to outplant endangered and threatened species to augment and stabilize populations within Navy property at Lualualei; and (10) allocated funding for development and implementation of a *Chamaesyce skottsbergii* var. *skottsbergii* management plan on Navy lands at Kalaeloa. In summary, the Navy has made progress in identifying needed management actions, recognizing the need for monitoring plans, increasing initial determinations of funding required for natural resource management, and recognizing the need for propagation and outplanting of endangered and threatened plant species on their lands.

The exemption of Navy lands from this final rule is based on our review and analysis to determine whether the area was subject to a current and final INRMP that provides a conservation benefit to the species. To evaluate whether the INRMP provides a benefit to the species, we considered (1) whether the INRMP covered the areas identified as critical habitat for the species. After applying the above three criteria, we determine that the Navy’s 2011 INRMP for Joint Base Pearl Harbor-Hickam and 2012 addendum provide conservation benefits to 60 listed plant species that occur within the NAVMAG PH Lualualei and NRTF Lualualei. As a result, we have exempted 380 ac (154 ha) of Navy lands within the NAVMAG PH Lualualei and NRTF Lualualei from this final designation of critical habitat for those species under section 4(a)(3)(B)(i) of the Act. Figure 5 identifies the above areas on Navy-managed lands that were evaluated under section 4(a)(3)(B)(i) of the Act.

**Figure 5**  
**NRTF Lualualei Military Reservation and**  
**NAVMAG Pearl Harbor Lualualei Military Reservation**



**Exclusions**

*Application of Section 4(b)(2) of the Act*

Section 4(b)(2) of the Act states that the Secretary must designate and revise 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. The Secretary may exclude an area from designated critical habitat based on economic impacts, impacts on national security, or any other relevant impacts.

When considering the benefits of inclusion for an area, we consider the additional regulatory benefits under

section 7 of the Act the 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. Benefits could include public awareness of the presence of listed species and the importance of habitat protection, and in cases where a Federal nexus exists, increased habitat protection due to the protection from adverse modification or destruction of critical habitat.

When considering the benefits of excluding an area from critical habitat, we consider whether exclusion 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 evaluating the existence of a conservation 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 essential physical or biological features; whether there is a reasonable expectation that the conservation management strategies and actions contained in the plan are likely to 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 evaluating the benefits of inclusion and the benefits of exclusion, the two sides are carefully weighed to determine whether the benefits of exclusion outweigh those of inclusion. If they do, we then determine whether exclusion of the particular area would result in the extinction of the species. If exclusion of an area from critical habitat

will result in extinction, it will not be excluded from the designation.

### 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 a draft economic analysis (DEA) of the critical habitat designation and related factors (77 FR 21936, April 21, 2012). The DEA, dated April 12, 2012, was made available for public review from April 12 through May 14, 2012 (77 FR 21936). Following the close of the comment period, a final analysis (dated July 27, 2012) of the potential economic effects of the designation was developed taking into consideration the public comments and any new information (USFWS 2012b). Substantive comments and information received on the DEA are summarized in the Summary of Comments and Recommendations section above.

The intent of the final economic analysis (FEA) is to quantify the economic impacts of all potential conservation efforts for the 124 species; some of these costs will likely be incurred regardless of whether we designate critical habitat (baseline). 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 analysis looks at baseline impacts expected to occur due to listing of these 124 species, and forecasts both baseline and incremental impacts likely to occur with the designation of critical habitat for 25 species and revision of critical habitat for 99 plant species.

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. Finally, the FEA looks and considers those costs that may occur in the 20 years following listing of the 23 species; designation of critical habitat for these 23 species and *Achyranthes splendens* var. *rotundata* and *Chamaesyce skottsbergii* var. *skottsbergii*; and costs attributed to revision of critical habitat for the 99 plant species which was determined to be the appropriate period for analysis because limited planning information was available for most activities to forecast activity levels for projects beyond a 20-year timeframe. The FEA quantifies economic impacts of conservation efforts for the 124 species associated with the following categories of activity, which represent typical conservation measures or conservation recommendations the Service may request or suggest during section 7 consultation for projects that may affect critical habitat for listed plants at Kalaeloa: Installation of silt fencing to control erosion on construction sites; containment of construction site surface runoff to avoid contamination of native plants; establishment of buffer zones around fenced areas where plants are located; cleaning procedures to reduce the introduction of non-native plants; and prohibiting the importation of earthen soil from off-site to reduce the introduction of non-native seeds (USFWS 2012b, p. 12). Baseline impacts include the potential economic impacts of all actions relating to the conservation of the 124 species, including costs associated with sections 7, 9, and 10 of the Act. Baseline impacts also include the economic impacts of protective measures taken as a result of other Federal, State, and local laws that aid habitat conservation in the area evaluated in the DEA. In other words, baseline impacts include those impacts associated with the listing of the 23 species and not associated with critical habitat, costs associated with the already listed *Achyranthes splendens* var. *rotundata* and *Chamaesyce skottsbergii* var. *skottsbergii*, and costs associated with critical habitat

designated in 2003 for the 99 plants. Incremental impacts are those potential future economic impacts of conservation actions relating to the designation of critical habitat for the 25 species; these impacts would not be expected to occur without the designation of critical habitat. In addition, incremental impacts include potential future economic impacts of conservation actions relating to the revised critical habitat for the 99 plants.

Baseline economic impacts are those impacts that result from listing and conservation efforts for the 23 species, listed status of *Achyranthes splendens* var. *rotundata* and *Chamaesyce skottsbergii* var. *skottsbergii*, and from the designation of critical habitat for the 99 plant species in 2003. The upper bound of administrative costs and conservation efforts to the Service, Federal agency, and third parties related to section 7 consultation in occupied critical habitat constitute the majority of total baseline costs (approximately 72 percent). Total future baseline impacts are estimated to be \$105,000, which equates to (1) \$54,178 in present value terms using a 7 percent discount rate over the next 20 years (2011 to 2031); (2) \$77,075 in present value terms using a 3 percent discount rate over the next 20 years; or (3) \$5000 annualized over the next 20 years.

The upper bound of administrative costs and conservation efforts to the Service, Federal agency, and third parties related to section 7 consultation in unoccupied critical habitat constitute the majority of total incremental costs (approximately 28 percent). Total future incremental impacts are estimated to be \$40,000 over the next 20 years (2011 to 2031). Annualized incremental administrative in present value terms using a 7 percent discount rate over the next 20 years is \$3,692, or \$1,905 using a 3 percent discount rate.

The FEA estimates total upper bound potential economic impacts in areas proposed as critical habitat over the next 20 years (2011 to 2031) to be \$145,000, which equates to (1) \$94,178 in present value terms using a 7 percent discount rate over the next 20 years (2011 to 2031); (2) \$117,075 in present value terms using a 3 percent discount rate over the next 20 years; (3) \$5000 annualized using a 7 percent discount rate over the next 20 years, or (4) \$6,905 using a 3 percent discount rate over the next 20 years. This value is based on an assumption of total avoidance of designated acres and thus represents the upper-bound potential cost for each project. As such, it likely overstates the expected absolute cost of future actions to protect critical habitat.

The FEA considers both economic efficiency and distributional effects. In the case of habitat conservation, efficiency effects generally reflect the “opportunity costs” associated with the commitment of resources to comply with habitat protection measures (such as lost economic opportunities associated with restrictions on land use). 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. Decision-makers can use this information to assess whether the effects of critical habitat designation might unduly burden a particular group or economic sector.

Our economic analysis did not identify any disproportionate costs that are likely to result from the designation. Consequently, the Secretary has determined not to exercise his discretion to exclude any areas from this designation of critical habitat for the 124 species based on economic impacts.

A copy of the FEA with supporting documents may be obtained by contacting the Pacific Islands Fish and Wildlife Office (see **ADDRESSES**) or by downloading from the Internet at <http://www.regulations.gov>.

#### *Exclusions Based on National Security Impacts*

Under section 4(b)(2) of the Act, we consider whether there are lands owned or managed by the Department of Defense (DOD) where a national security impact might exist. In preparing this final rule, we have exempted from the designation of critical habitat those DOD lands with completed INRMPs determined to provide a benefit to the 124 species. We have determined that certain lands owned or managed by the DOD (Department of the Navy) at Kalaeloa Barber’s Point are not being exempted from the designation of critical habitat (see discussion under “*Approved INRMPs, above*”); however, Navy lands at NAVMAG PH Lualualei Branch and NRFT Lualualei are exempted from designation as critical habitat under section 4(a)(3)(B)(i) of the Act. There are also lands owned or managed at six Department of the Army training installations (see discussion under “*Approved INRMPs, above*”) that are exempted from designation as critical habitat under section 4(a)(3)(B)(i) of the Act. We are unaware of any potential impacts to national security on any DOD lands; therefore, we are not excluding any areas from

critical habitat designation based on impacts to 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 conservation plans 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. We also consider any social impacts that might occur because of the designation.

In preparing this rule, we have determined that the landowners have not developed conservation plans or other management plans for the 99 previously listed plant species, the two previously listed plant species without designated critical habitat, or the 23 species listed as endangered in this rule. In addition, we have determined there are no conservation partnerships that would be encouraged by the exclusion from critical habitat. We anticipate no impact to partnerships, habitat conservation plans (HCPs), or other management plans from this critical habitat designation. Accordingly, we do not exert our discretion to exclude any areas from final critical habitat designation based on other relevant impacts.

In conclusion, the Secretary will not be exercising his discretion under section 4(b)(2) of the Act to exclude any particular area from this final rule, based on the conservation value of these areas.

#### **Required Determinations**

These required determinations relate to the portion of this rule designating critical habitat. Listing determinations must be made solely on the basis of the best scientific and commercial data available. 16 U.S.C. 1533(b)(1)(A).

#### *Regulatory Planning and Review—Executive Orders 12866 and 13563*

Executive Order (E.O.) 12866 provides that the Office of Information and Regulatory Affairs (OIRA) will review all significant rules. The OIRA has determined that this rule is not significant.

E.O. 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.*), an agency 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 the 124 Oahu species 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; and small businesses (13 CFR 121.201). 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 to these small entities are significant, we considered 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.

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 one or more of the 124 species are 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 the species. 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* section).

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 insure 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 may certify that the proposed critical habitat rule will not have a significant economic impact on a substantial number of small entities.

We acknowledge, however, that in some cases, third-party proponents of the action subject to permitting or funding may participate in a section 7 consultation, and thus may be indirectly affected. We believe it is good policy to assess these impacts if we have sufficient data before us to complete the necessary analysis, whether or not this analysis is strictly required by the RFA.

While this regulation does not directly regulate these entities, in our final economic analysis, we have conducted an evaluation of the potential third parties participating in consultations on an annual basis, in order to ensure a more complete examination of the incremental effects of this rule in the context of the RFA.

We are specifically aware of some potential development activities in the Barber's Point area, which could potentially affect the following critical habitat units: Oahu—Coastal—Unit 13, Oahu—Coastal—Unit 14, Oahu—Coastal—Unit 15, Oahu—Lowland Dry—Unit 8; Oahu—Lowland Dry—Unit 9, Oahu—Lowland Dry—Unit 10, and Oahu—Lowland Dry—Unit 11. These potential development activities were evaluated in the final economic analysis. Kapolei West is a master planned development within Oahu—Lowland Dry—Unit 8 that includes resort, mixed use residential, and commercial components. Kapolei Harborside is also within Oahu—Lowland Dry—Unit 8, and is part of a larger Kapolei Business-Industrial Park development. Within units Oahu—Lowland Dry—Unit 9 and Oahu—Coastal—Unit 15, there are plans to construct approximately 28,000 square feet of non-residential development over the next 7 to 20 years. The Kalaeloa Master Plan classifies this area as eco-industrial for planning purposes, targeting environmentally compatible industries (e.g., solar or hybrid energy generation, bio-filtration, or other related types of industries). Property owners within Oahu—Lowland Dry—Unit 10 have active permits to construct a large scale solar array field, and the Kalaeloa Master Plan projects this parcel to support approximately 137,000 square feet of non-residential development within the next 7 to 20 years. Oahu—Lowland Dry—Unit 11 is identified as a location for residential and non-residential development, and an energy generation project.

None of the other designated critical habitat units contains significant residential, commercial, industrial, or golf-course projects; crop farming; or intensive livestock operations, and few projects are planned for locations in the other designated critical habitat areas. This situation reflects the fact that:

(1) Most of the land is unsuitable for development, farming, or other economic activities due to the rugged mountain terrain, lack of access, and remote locations; and

(2) Existing land-use controls severely limit development and most other economic activities in the mountainous interior of Oahu.

Existing planned projects, land uses, and activities that could affect the critical habitat but have no Federal involvement would not require section 7 consultation with the Service, so they are not restricted by the requirements of the Act. Further, although some existing and continuing activities involve the operation and maintenance of existing manmade features and structures in certain areas, these areas do not contain the PCEs for the species, and would not be impacted by the designation. Finally, for the anticipated projects and activities that will have Federal involvement, many are conservation efforts that will not negatively impact the species or their habitats, so they will not be subject to a minimal level of informal section 7 consultation. We anticipate that a developer or other project proponent could modify a project or take measures to protect the 124 Oahu species. The kinds of actions that may be included if future reasonable and prudent alternatives become necessary include conservation set-asides, management of competing non-native species, restoration of degraded habitat, and regular monitoring. These measures are not likely to result in a significant economic impact to project proponents, because nearly all of the lands designated as critical habitat are unsuitable for development, as well as for most commercial projects, land uses, and activities. This is due to their remote location, lack of access, and rugged terrain.

In addition, Federal agencies may also need to reinitiate a previous consultation if discretionary involvement or control over the Federal action has been retained or is authorized by law and the activities may affect critical habitat. Since critical habitat was designated on Oahu in June 2003 (for 99 Oahu plants), and, most recently in December 2008 (for 12 picture-wing flies, 73 FR 73795), we have conducted 28 formal consultations and 137 informal consultations on this island, in addition to consultations on Federal grants to State wildlife programs that do not affect small entities. Of these, 13 formal consultations and 34 informal consultations were primarily consultations regarding Federal permits to Service employees to implement conservation actions for listed species. The remainder, 15 formal consultations and 103 informal consultations, involved the U.S. Army, U.S. Army Corps of Engineers, U.S. Marine Corps, U.S. Marine Corps Base of Hawaii, U.S. Navy, U.S. Air Force, Department of Commerce, Department of Homeland

Security, Environmental Protection Agency, Federal Aviation Administration, Federal Highways Administration, Department of Agriculture (USDA-Natural Resources Conservation Service (NRCS); USDA-Animal and Plant Health Inspection Service), General Services Administration, Housing and Urban Development, National Oceanic and Atmospheric Administration, U.S. Geological Survey, Hawaii Department of Transportation, State of Hawaii, Housing and Community Development Corporation of Hawaii, and the University of Hawaii. The majority of formal consultations were related to project effects on seabird flyways, nesting by endangered waterbirds, human disturbance such as fire from military training exercises, and research permits. The majority of informal consultations were related to project effects on seabird flyways and nesting by endangered waterbirds. About a quarter of the informal consultations were conducted with the USDA-NRCS for proposed funding for habitat restoration projects under the auspices of the Wildlife Habitat Incentives Program.

Seven of the formal consultations concerned designated critical habitat, and we concurred with each agency's determination that the project, as proposed, was not likely to adversely affect critical habitat. Of these seven formal consultations, one was conducted on behalf of the Navy in upper Halawa Valley, one was conducted on behalf of the Army regarding routine military training and transformation of the 2nd Brigade 25th Infantry (Light) at six Army installations, and five were conducted on behalf of the Army regarding reinitiation for routine military training at Makua Military Reservation. The Navy consultation involved a retrieval of remains from a remote area crash site in designated plant critical habitat, and although it was carried out in an area that is also designated critical habitat in this rule, it was a single, one-time action that is not ongoing. The project regarding training at six Army installations on Oahu is being implemented on lands that we are exempting from critical habitat in this rule. Five of the Army consultations, those that involve routine military training at Makua Military Reservation, involve actions that are still ongoing. Because these five Federal actions were subject to previous section 7 consultations, there may be a requirement to reinitiate consultation

for listed species for ongoing Federal projects on these lands.

Sixteen of the 103 informal consultations concerned designated critical habitat, and in all cases we concurred with each agency's determination that the project, as proposed, was not likely to adversely affect critical habitat. These projects were evenly divided between conservation actions that would benefit listed species, changes in labeling on pesticides for use throughout the State to manage conservation areas, and effects on listed species by routine training actions on the Army's Makua Military Reservation. For the 87 informal consultations that did not concern designated critical habitat, we concurred with each agency's determination that the project, as proposed, was not likely to adversely affect listed species.

In this rule, we are designating critical habitat on a total of 42,804 ac (17,322 ha) of land. Ninety-three percent (40,447 ac (16,369 ha)) of this critical habitat designation is already designated critical habitat for one or more species and 7 percent (3,044 ac (1,231 ha)) of the designation is on land newly designated as critical habitat. Some of the Federal actions that were subject to previous section 7 consultation are on the lands we are designating as critical habitat in this final rule. Therefore, there may be a requirement to reinitiate consultation for some ongoing Federal projects. However, as the consultations described above do not generally involve small entities, the requirement to reinitiate existing consultations is not likely to affect a significant number of small entities.

In the 2001, 2002, and 2008 economic analyses of the designation of critical habitat for the Oahu elepaio, 99 species of Oahu plants, and 12 picture-wing flies, we evaluated the potential economic effects on small business entities resulting from the protection of these species and their habitats related to the proposed designation of critical habitat and determined that it would not have a significant economic impact on a substantial number of small entities. The RFA defines "small governmental jurisdiction" as the government of a city, county, town, school district, or special district with a population of less than 50,000. By this definition, Honolulu County is not a small governmental jurisdiction because its population was 876,156 residents in 2000. Certain State agencies, such as the Department of Land and Natural Resources and the State Department of Transportation, may be affected by the critical habitat designation. However,

for the purposes of the RFA, State governments are considered independent sovereigns, not small governments. The significant overlap between the critical habitat designations for the Oahu elepaio, 99 plant species, and the 12 picture-wing flies and this critical habitat designation is further evidence that this designation will not have a significant economic impact on a substantial number of small entities.

In our final economic analysis of the critical habitat designation, we evaluated the potential economic effects on small business entities resulting from implementation of conservation actions related to the designation of critical habitat for 124 Oahu species. The analysis identifies the estimated incremental impacts associated with the proposed rulemaking, as described in the Small Business Analysis Appendix Part II of the analysis, and evaluates the potential for economic impacts related to the building construction industry. The analysis concludes that it is unlikely that every affected developer would be a small business as defined by the Small Business Administration. However, because it is difficult to predict which developers would be specifically impacted by the designation of critical habitat, the analysis conservatively assumes that every developer impacted is a small business, likely overstating the economic impacts of the designation. The analysis also conservatively assumes that one developer is associated with each affected land parcel. The analysis concluded that two small business developers would be affected within the unoccupied unit Oahu—Lowland Dry—Unit 8, and 21 small business developers would be affected in the other occupied units. Key assumptions used in the Small Business Impact Analysis were that (1) Every parcel would have one formal section 7 consultation; (2) parcels in the unoccupied unit Oahu—Lowland Dry—Unit 8 would incur property value losses; (3) a unique developer is associated with each parcel; and (4) each established reported in census data reflects a unique business. However, it is highly unlikely that every parcel would have a formal consultation because some parcels may have no consultations or only informal consultations, and every parcel is unlikely to have a Federal nexus. It is also highly unlikely the parcels in the unoccupied unit Oahu—Lowland Dry—Unit 8 would incur property value losses, since development activities that with a Federal nexus that do not adversely modify critical habitat are not

prohibited. Likewise, it is highly unlikely that a unique developer is associated with each parcel, since more than one parcel is likely to be included in a single action and developers are likely to be involved in more than a single project. It is unlikely that each establishment reported in census data reflects a unique business, since a single business can be composed of one or more establishments. Accordingly, the effect of taking the above assumptions into consideration in the final economic analysis overestimates the effect of the designation on small businesses (i.e., reflects the upper bound of economic impact). Table 4 in Part II of the Final Economic Analysis concludes that the upper bound of economic impacts to small businesses as follows: (1) Property Value Impacts (based on a total property value impact (upper-bound) of \$7,620,971 for the two unoccupied parcels in LDU8)—2 firms could potentially be affected, and realize a \$351,666 average annualized property value impact at a 7 percent discount rate (\$247,193 at a 3 percent discount rate), based on average receipts of \$14,673,156. This equates to an annualized property value impact of 2.4 percent at a 7% discount rate, or 1.7 percent at a 3 percent discount rate. Two businesses is not a substantial number of businesses impacted, and the annualized property impacts are not significant; (2) Administrative Impacts—23 firms could potentially be affected, accruing a \$3,500 cost related to section 7 consultation (2 percent of their averaged annualized receipts), which is not a significant impact. Incremental impacts are either not expected for the other types of activities considered or, if expected, will not be borne by small entities.

In summary, we considered whether the rule will result in a significant economic impact on a substantial number of small entities. For the above reasons and based on 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 124 Oahu species will not have a significant impact on a substantial number of small entities, and a regulatory flexibility analysis is not 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), we make the following findings:

(a) 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 does not apply, nor does critical habitat shift

the costs of the large entitlement programs listed above onto State governments.

(b) We do not believe that this rule will significantly or uniquely affect small governments. The lands we are designating as critical habitat are owned by the City and County of Honolulu, the State of Hawaii, private citizens, and the Federal Government. None of these entities fit the definition of “small governmental jurisdiction.” Therefore, a Small Government Agency Plan is not required.

#### *Takings—Executive Order 12630*

In accordance with E.O. 12630 (“Government Actions and Interference with Constitutionally Protected Private Property Rights”), we have analyzed the potential takings implications of designating 42,804 ac (17,322 ha) of lands in Honolulu County, Hawaii, as critical habitat for the 124 species in a takings implications assessment. The takings implications assessment concludes that this designation of critical habitat for each of these 124 species does not pose significant takings implications for lands within or affected by the designation.

#### *Federalism—Executive Order 13132*

In accordance with E.O. 13132 (Federalism), this 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 critical habitat designation with appropriate State resource agencies in Hawaii. The critical habitat designation may 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 essential features themselves are specifically identified. While making this definition and identification does not alter where and what federally sponsored activities may occur, 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 requirements of sections 3(a) and 3(b)(2) of the Order. We have designated critical habitat in accordance with the provisions of the Act. This final rule uses standard property descriptions and identifies the features essential to the conservation of the species within the designated areas to assist the public in understanding the habitat needs of each of the 124 species considered in this rule.

*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 does 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 (NEPA)*

It is our position that, outside the jurisdiction of the Circuit Court of the United States for the Tenth Circuit, we do not need to prepare environmental analyses as defined by 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.

We have determined that there are no tribal lands that are essential for the conservation of the 124 Oahu species. Therefore, we have not designated critical habitat for any of the 124 species on tribal lands.

*Energy Supply, Distribution, and Use—Executive Order 13211*

On May 18, 2001, the President issued an Executive Order (E.O. 13211; Actions Concerning Regulations That Significantly Affect Energy Supply, Distribution, or Use) on regulations that significantly affect energy supply, distribution, and use. E.O. 13211 requires agencies to prepare Statements of Energy Effects when undertaking certain actions. This rule designating critical habitat for 124 species is not a significant regulatory action under E.O. 12866, and we do not expect it to significantly affect energy supplies, distribution, or use. Regarding the proposed solar development project in Oahu—Lowland Dry—Unit 10, we do not foresee a Federal nexus for the specific project proposal, and, therefore, the designation of critical habitat is not anticipated to impact that project. Regarding the additional solar development project in Oahu—Lowland Dry—Unit 11, we support the development of a balanced conservation plan or State habitat conservation plan, which the Navy requires as a deed transfer restriction, in order to complete the proposed land transfer to the State of Hawaii. Further, we support the balanced approach planned by the Navy and the State that will allow the solar project to go forward in a portion of Oahu—Lowland Dry—Unit 11, as well as the conservation of *Chamaesyce skottsbergii* var. *skottsbergii* on the site. Therefore, since this designation of critical habitat is not anticipated to impact any of the proposed renewable energy projects, this action is not a significant energy action, and no Statement of Energy Effects is required.

*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:

- (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 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 all references cited in this rulemaking is available on the <http://www.regulations.gov> and upon request from the Pacific Islands Fish and Wildlife Office (see **ADDRESSES**).

**Authors**

The primary authors of this rulemaking are staff members of the Pacific Island Fish and Wildlife Office (see **ADDRESSES**).

**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; 16 U.S.C. 1531–1544; 16 U.S.C. 4201–4245; Pub. L. 99–625, 100 Stat. 3500; unless otherwise noted.

- 2. Amend § 17.11(h), the List of Endangered and Threatened Wildlife by adding entries for “Damsselfy, blackline Hawaiian”, “Damsselfy, crimson Hawaiian”, and “Damsselfy, oceanic Hawaiian”, in alphabetical order under **INSECTS**, 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						
INSECTS							
Damselfly, blackline Hawaiian.	<i>Megalagrion nigrohamatum nigrolineatum.</i>	U.S.A. (HI) .....	NA	E	.....	17.95(i)	NA
Damselfly, crimson Hawaiian.	<i>Megalagrion leptodemas.</i>	U.S.A. (HI) .....	NA	E	.....	17.95(i)	NA
Damselfly, oceanic Hawaiian.	<i>Megalagrion oceanicum</i>	U.S.A. (HI) .....	NA	E	.....	17.95(i)	NA

■ 3. Amend § 17.12(h), the List of Endangered and Threatened Plants, as follows:

■ a. By removing the entries for *Alsinidendron obovatum*, *Alsinidendron trinerve*, *Chamaesyce skottsbergii* var. *kalaeloana*, *Hedyotis coriacea*, *Hedyotis degeneri*, *Hedyotis parvula*, *Lipochaeta tenuifolia*, and *Mariscus pennatiformis* under FLOWERING PLANTS;

■ b. By revising the entry for *Achyranthes splendens* var. *rotundata* under FLOWERING PLANTS to read as set forth below;

■ c. By adding entries for *Bidens amplexens*, *Chamaesyce skottsbergii* var. *skottsbergii*, *Cyanea calycina*, *Cyanea lanceolata*, *Cyanea purpurellifolia*, *Cyperus pennatiformis*, *Cyrtandra gracilis*, *Cyrtandra kaulantha*, *Cyrtandra sessilis*, *Cyrtandra waiolani*, *Kadua coriacea*, *Kadua degeneri*, *Kadua parvula*, *Korthalsella degeneri*, *Melanthera tenuifolia*, *Melicope christophersenii*, *Melicope hiikae*, *Melicope makahae*, *Platydesma cornuta* var. *cornuta*, *Platydesma cornuta* var. *decurrens*, *Pleomele forbesii*, *Psychotria hexandra* ssp. *oahuensis*, *Pteralyxia macrocarpa*,

*Schiedea obovata*, *Schiedea trinervis*, *Tetraplasandra lydgatei*, and *Zanthoxylum oahuense* in alphabetical order under FLOWERING PLANTS to read as set forth below;

■ d. By removing the entry for *Phlegmariurus nutans* under FERNS AND ALLIES; and

■ e. By adding entries for *Doryopteris takeuchii* and *Huperzia nutans* in alphabetical order under FERNS AND ALLIES to read as set forth below.

§ 17.12 Endangered and threatened plants.

\* \* \* \* \*  
(h) \* \* \*

Species		Historic range	Family	Status	When listed	Critical habitat	Special rules
Scientific name	Common name						
FLOWERING PLANTS							
<i>Achyranthes splendens</i> var. <i>rotundata</i> .	Round-leaved chaff flower.	U.S.A. (HI) .....	Amaranthaceae .....	E	220	17.99(i)	NA
<i>Bidens amplexens</i> ..	Kookoolau .....	U.S.A. (HI) .....	Asteraceae .....	E	806	17.99(i)	NA
<i>Chamaesyce skottsbergii</i> var. <i>skottsbergii</i> .	Ewa plains akoko ....	U.S.A. (HI) .....	Euphorbiaceae .....	E	120	17.99(i)	NA
<i>Cyanea calycina</i> .....	Haha .....	U.S.A. (HI) .....	Campanulaceae .....	E	806	17.99(i)	NA
<i>Cyanea lanceolata</i> ...	Haha .....	U.S.A. (HI) .....	Campanulaceae .....	E	806	17.99(i)	NA
<i>Cyanea purpurellifolia</i> .	Haha .....	U.S.A. (HI) .....	Campanulaceae .....	E	806	17.99(i)	NA

Species		Historic range	Family	Status	When listed	Critical habitat	Special rules
Scientific name	Common name						
<i>Cyperus pennatiformis</i>	None	U.S.A. (HI)	Cyperaceae	E	559	17.99(a)(1), (e)(1), (g), and (i)	NA
<i>Cyrtandra gracilis</i>	Haiwale	U.S.A. (HI)	Gesneriaceae	E	806	17.99(i)	NA
<i>Cyrtandra kaulantha</i>	Haiwale	U.S.A. (HI)	Gesneriaceae	E	806	17.99(i)	NA
<i>Cyrtandra sessilis</i>	Haiwale	U.S.A. (HI)	Gesneriaceae	E	806	17.99(i)	NA
<i>Cyrtandra waiolani</i>	Haiwale	U.S.A. (HI)	Gesneriaceae	E	806	17.99(i)	NA
<i>Kadua coriacea</i>	Kioele	U.S.A. (HI)	Rubiaceae	E	467	17.99(e)(1) and (i)	NA
<i>Kadua degeneri</i>	None	U.S.A. (HI)	Rubiaceae	E	448	17.99(i)	NA
<i>Kadua parvula</i>	None	U.S.A. (HI)	Rubiaceae	E	448	17.99(i)	NA
<i>Korthalsella degeneri</i>	Hulumoa	U.S.A. (HI)	Viscaceae	E	806	17.99(i)	NA
<i>Melanthera tenuifolia</i>	Nehe	U.S.A. (HI)	Asteraceae	E	448	17.99(i)	NA
<i>Melicope christophersenii</i>	Alani	U.S.A. (HI)	Rutaceae	E	806	17.99(i)	NA
<i>Melicope hiiakae</i>	Alani	U.S.A. (HI)	Rutaceae	E	806	17.99(i)	NA
<i>Melicope makahae</i>	Alani	U.S.A. (HI)	Rutaceae	E	806	17.99(i)	NA
<i>Platydesma cornuta</i> var. <i>cornuta</i>	None	U.S.A. (HI)	Rutaceae	E	806	17.99(i)	NA
<i>Platydesma cornuta</i> var. <i>decurrens</i>	None	U.S.A. (HI)	Rutaceae	E	806	17.99(i)	NA
<i>Pleomele forbesii</i>	Hala pepe	U.S.A. (HI)	Asparagaceae	E	806	17.99(i)	NA
<i>Psychotria hexandra</i> ssp. <i>oahuensis</i>	Kopiko	U.S.A. (HI)	Rubiaceae	E	806	17.99(i)	NA
<i>Pteralyxia macrocarpa</i>	Kaulu	U.S.A. (HI)	Apocynaceae	E	806	17.99(i)	NA
<i>Schiedea obovata</i>	None	U.S.A. (HI)	Caryophyllaceae	E	448	17.99(i)	NA
<i>Schiedea trinervis</i>	None	U.S.A. (HI)	Caryophyllaceae	E	448	17.99(i)	NA
<i>Tetraplasandra lydgatei</i>	None	U.S.A. (HI)	Araliaceae	E	806	17.99(i)	NA
<i>Zanthoxylum oahuense</i>	Ae	U.S.A. (HI)	Rutaceae	E	806	17.99(i)	NA

Species		Historic range	Family	Status	When listed	Critical habitat	Special rules
Scientific name	Common name						
*	*	*	*	*	*	*	*
FERNS AND ALLIES							
*	*	*	*	*	*	*	*
<i>Doryopteris takeuchii</i>	None .....	U.S.A. (HI) .....	Pteridaceae .....	E	806	17.99(i)	NA
*	*	*	*	*	*	*	*
<i>Huperzia nutans</i> .....	Wawaeiole .....	U.S.A. (HI) .....	<i>Lycopodiaceae</i> .....	E	467	17.99(e)(1) and (i)	NA
*	*	*	*	*	*	*	*

■ 4. Amend § 17.95(i), by adding critical habitat for “Blackline Hawaiian Damselfly (*Megalagrion nigrohamatum nigrolineatum*),” “Crimson Hawaiian Damselfly (*Megalagrion leptodemas*),” and “Oceanic Hawaiian Damselfly (*Megalagrion oceanicum*)”, in the same alphabetical order as these species occur in the table at § 17.11(h), to read as set forth below.

**§ 17.95 Critical habitat—fish and wildlife.**

\* \* \* \* \*

(i) *Insects.*

\* \* \* \* \*

Blackline Hawaiian Damselfly (*Megalagrion nigrohamatum nigrolineatum*)

(1) Critical habitat units are depicted for Honolulu County, Hawaii, on the maps below.

(2) *Primary constituent elements.* The primary constituent elements of critical habitat for the blackline Hawaiian damselfly (*Megalagrion nigrohamatum nigrolineatum*) are:

- (i) Elevation: Less than 3,300 ft (1,000 m).
- (ii) Annual precipitation: Greater than 75 in (190 cm).
- (iii) Substrate: Clays; ashbeds; deep, well-drained soils; lowland bogs.
- (iv) Canopy: *Antidesma*, *Metrosideros*, *Myrsine*, *Pisonia*, *Psychotria*.
- (v) Subcanopy: *Cibotium*, *Claoxylon*, *Kadua*, *Melicope*.
- (vi) Understory: *Alyxia*, *Cyrtandra*, *Dicranopteris*, *Diplazium*, *Machaerina*, *Microlepia*.
- (vii) Perennial streams.
- (viii) Slow reaches of streams.
- (ix) Pools.
- (3) Existing manmade features and structures, such as buildings, roads, railroads, airports, runways, other paved areas, lawns, and other urban landscaped areas, existing trails, campgrounds and their immediate surrounding landscaped area, scenic lookouts, remote helicopter landing sites, and existing fences are not included in the critical habitat designation. Federal actions limited to those areas, therefore, would not trigger

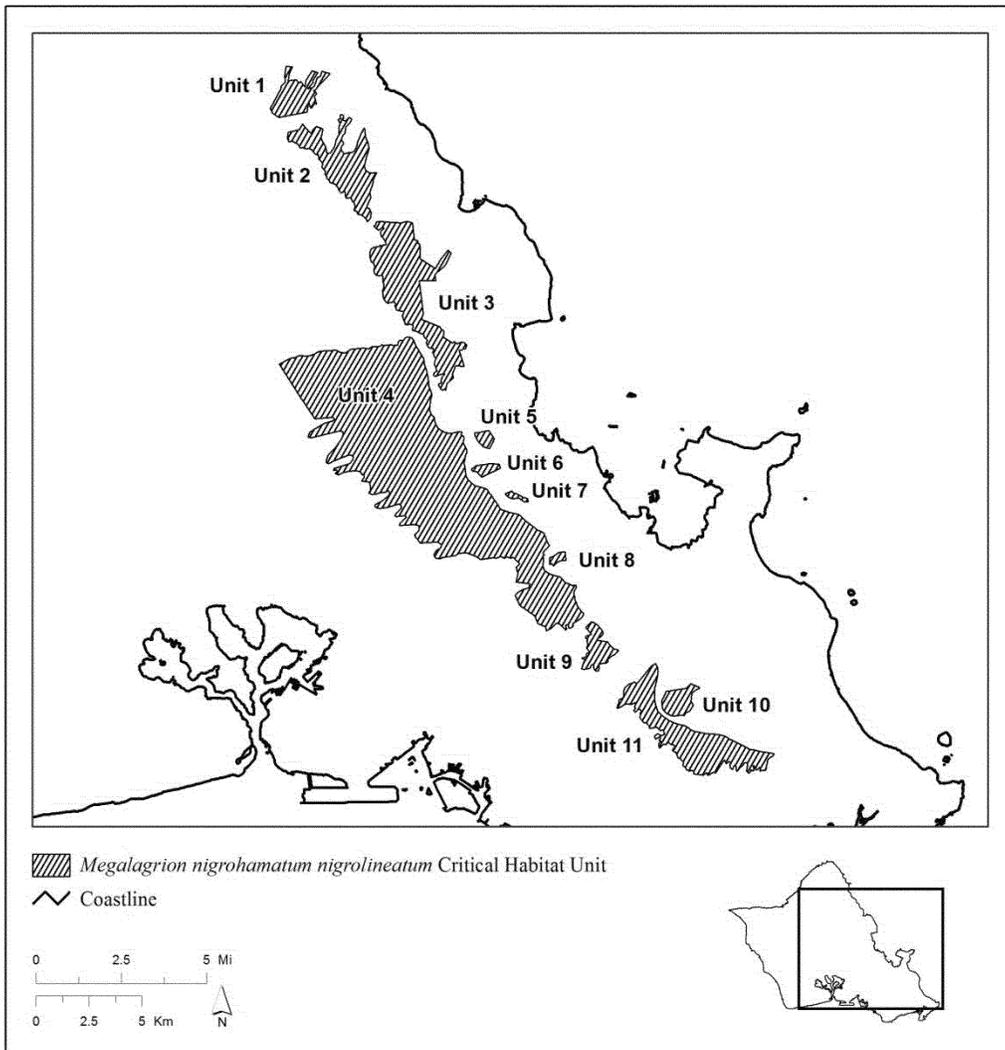
a consultation under section 7 of the Act unless they may affect the species or adjacent critical habitat.

(4) *Critical habitat maps.* Maps were created in GIS, with coordinates in UTM Zone 4, units in meters using North American datum of 1983 (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, <http://www.fws.gov/pacificislands>; at <http://www.regulations.gov> at Docket No. FWS–R1–ES–2010–0043; and at the field office responsible for the 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 of critical habitat units for the blackline Hawaiian damselfly (*Megalagrion nigrohamatum nigrolineatum*) follows:

**BILLING CODE 4310–55–P**

**Map 1**  
*Megalagrion nigrohamatum nigrolineatum*—Index Map

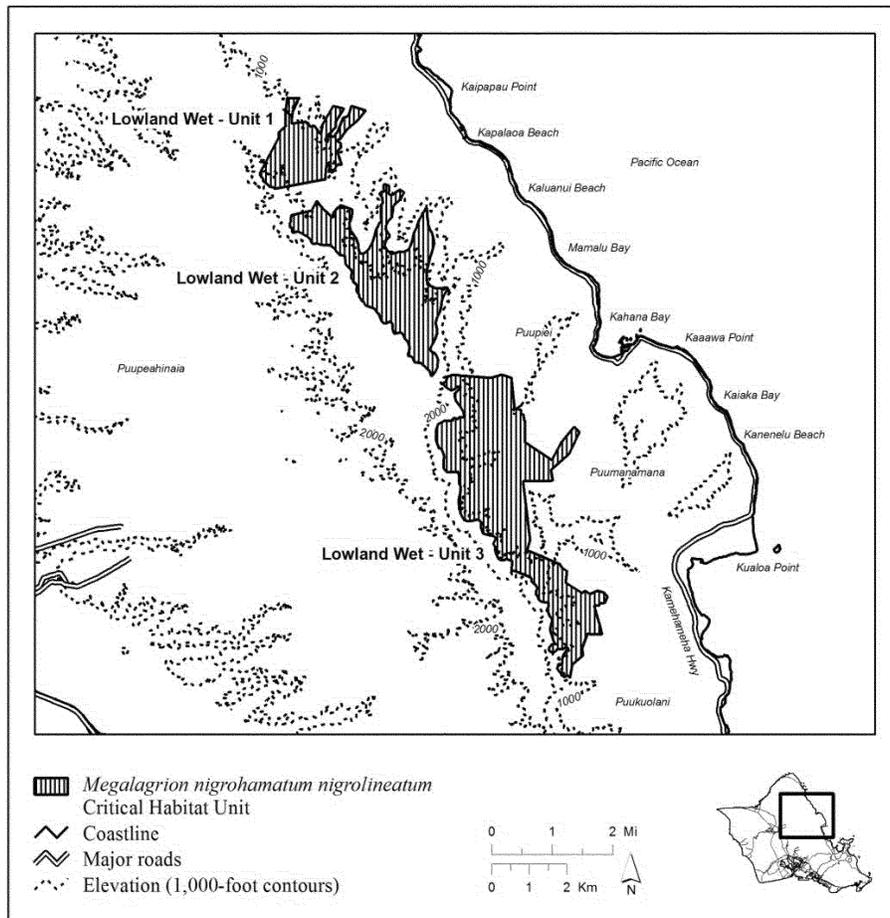


(6) *Megalagrion nigrohamatum nigrolineatum*—Unit 1—Lowland Wet, Honolulu County, Hawaii (790 ac; 320 ha); *Megalagrion nigrohamatum nigrolineatum*—Unit 2—Lowland Wet, Honolulu County, Hawaii (1,787 ac; 723 ha); and *Megalagrion nigrohamatum*

*nigrolineatum*—Unit 3—Lowland Wet, Honolulu County, Hawaii (3,041 ac; 1,231 ha). These units are critical habitat for the blackline Hawaiian damselfly, *Megalagrion nigrohamatum nigrolineatum*. Map of *Megalagrion nigrohamatum nigrolineatum*—Unit 1—

Lowland Wet, *Megalagrion nigrohamatum nigrolineatum*—Unit 2—Lowland Wet, and *Megalagrion nigrohamatum nigrolineatum*—Unit 3—Lowland Wet follows:

***Megalagrion nigrohamatum nigrolineatum*  
Lowland Wet  
Unit 1, Unit 2 and Unit 3**

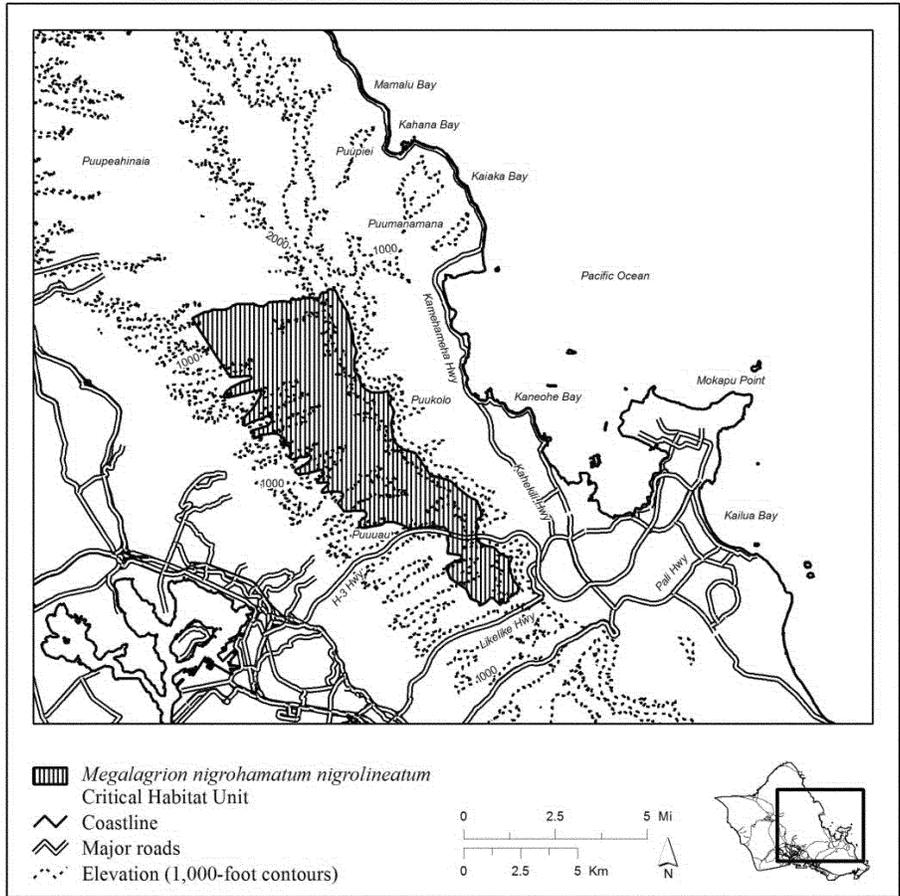


(7) *Megalagrion nigrohamatum nigrolineatum*—Unit 4—Lowland Wet, Honolulu County, Hawaii (15,728 ac;

6,365 ha). This unit is critical habitat for the blackline Hawaiian damselfly, *Megalagrion nigrohamatum*

*nigrolineatum*. Map of *Megalagrion nigrohamatum nigrolineatum*—Unit 4—Lowland Wet follows:

***Megalagrion nigrohamatum nigrolineatum*  
Lowland Wet  
Unit 4**

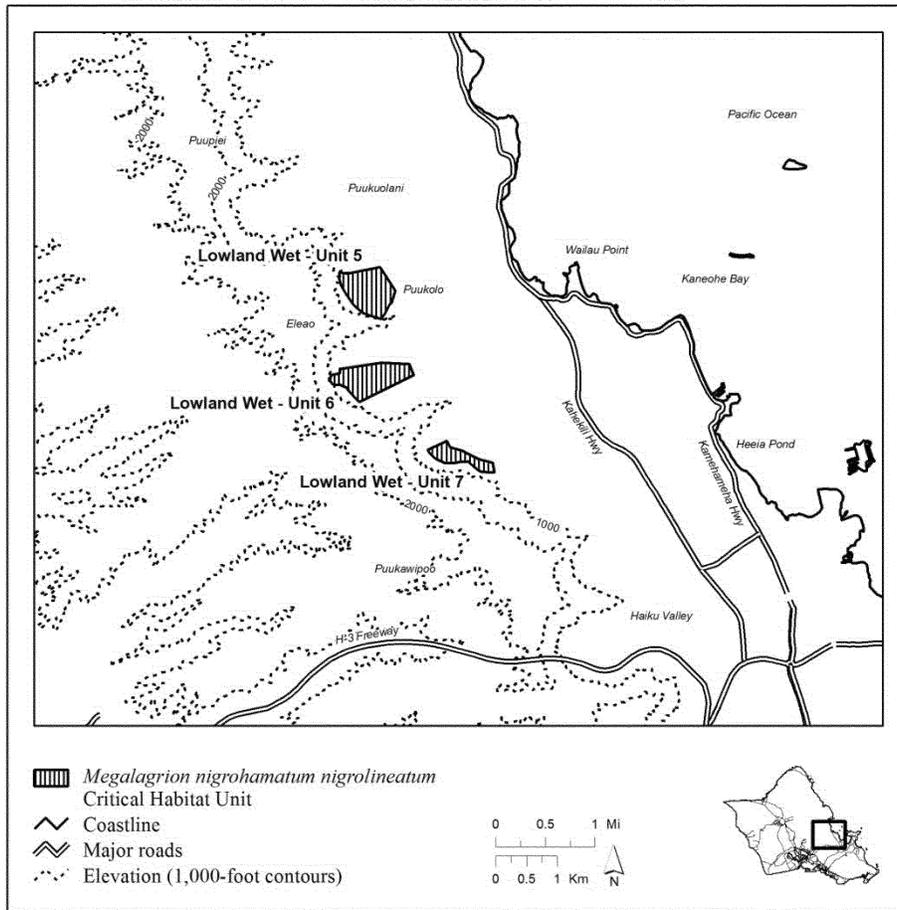


(8) *Megalagrion nigrohamatum nigrolineatum*—Unit 5—Lowland Wet, Honolulu County, Hawaii (124 ac; 50 ha); *Megalagrion nigrohamatum nigrolineatum*—Unit 6—Lowland Wet, Honolulu County, Hawaii (123 ac; 50 ha); and *Megalagrion nigrohamatum*

*nigrolineatum*—Unit 7—Lowland Wet, Honolulu County, Hawaii (53 ac; 21 ha). These units are critical habitat for the blackline Hawaiian damselfly, *Megalagrion nigrohamatum nigrolineatum*. Map of *Megalagrion nigrohamatum nigrolineatum*—Unit 5—

Lowland Wet, *Megalagrion nigrohamatum nigrolineatum*—Unit 6—Lowland Wet, and *Megalagrion nigrohamatum nigrolineatum*—Unit 7—Lowland Wet follows:

***Megalagrion nigrohamatum nigrolineatum*  
Lowland Wet  
Unit 5, Unit 6 and Unit 7**

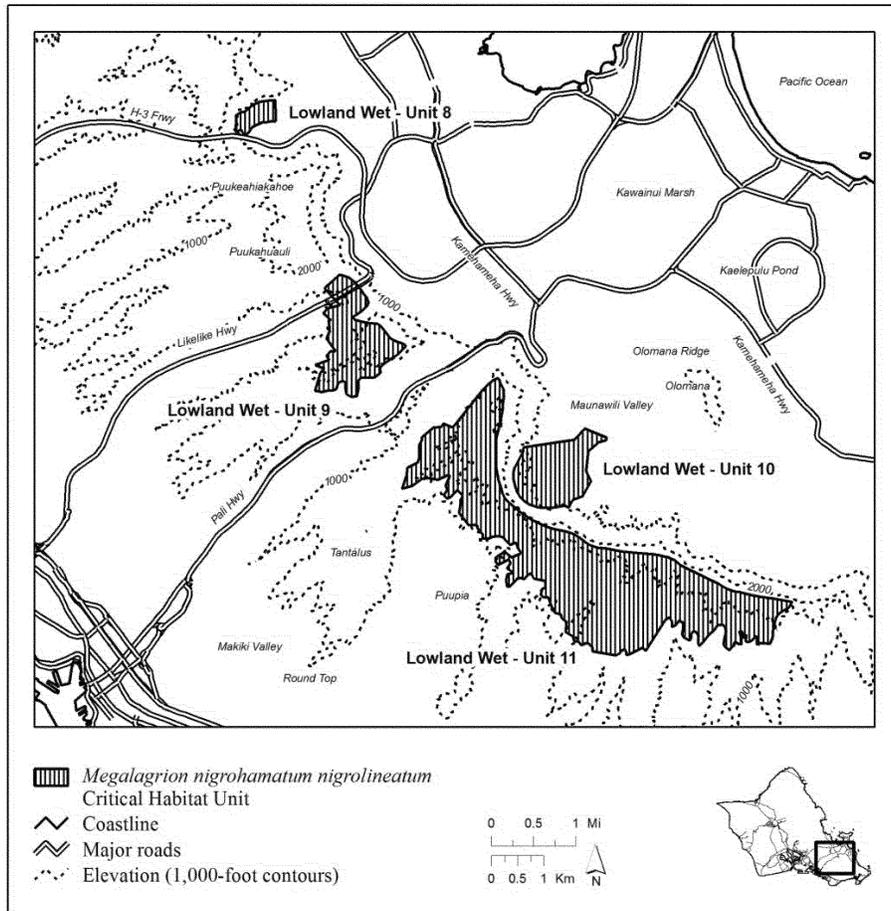


(9) *Megalagrion nigrohamatum nigrolineatum*—Unit 8—Lowland Wet, Honolulu County, Hawaii (75 ac; 30 ha); *Megalagrion nigrohamatum nigrolineatum*—Unit 9—Lowland Wet, Honolulu County, Hawaii (478 ac; 193 ha); *Megalagrion nigrohamatum nigrolineatum*—Unit 10—Lowland Wet,

Honolulu County, Hawaii (407 ac; 165 ha); and *Megalagrion nigrohamatum nigrolineatum*—Unit 11—Lowland Wet, Honolulu County, Hawaii (2,507 ac; 1,014 ha). These units are critical habitat for the blackline Hawaiian damselfly, *Megalagrion nigrohamatum nigrolineatum*. Map of *Megalagrion*

*nigrohamatum nigrolineatum*—Unit 8—Lowland Wet, *Megalagrion nigrohamatum nigrolineatum*—Unit 9—Lowland Wet, *Megalagrion nigrohamatum nigrolineatum*—Unit 10—Lowland Wet, and *Megalagrion nigrohamatum nigrolineatum*—Unit 11—Lowland Wet follows:

***Megalagrion nigrohamatum nigrolineatum*  
Lowland Wet  
Unit 8, Unit 9, Unit 10 and Unit 11**



**BILLING CODE 4310-55-C**

Crimson Hawaiian Damselfly (*Megalagrion leptodemas*)

(1) Critical habitat units are depicted for Honolulu County, Hawaii, on the maps below.

(2) Primary constituent elements.

(i) In units 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, and 11, the primary constituent elements of critical habitat for the crimson Hawaiian damselfly are:

(A) Elevation: Less than 3,300 ft (1,000 m).

(B) Annual precipitation: Greater than 75 in (190 cm).

(C) Substrate: Clays; ashbeds; deep, well-drained soils; lowland bogs.

(D) Canopy: *Antidesma*, *Metrosideros*, *Myrsine*, *Pisonia*, *Psychotria*.

(E) Subcanopy: *Cibotium*, *Glaoxylon*, *Kadua*, *Melicope*.

(F) Understory: *Alyxia*, *Cyrtandra*, *Dicranopteris*, *Diplazium*, *Machaerina*, *Microlepia*.

(G) Perennial streams.

(H) Slow reaches of streams or ponds.

(ii) In units 12, 13, and 14, the primary constituent elements of critical habitat for the crimson Hawaiian damselfly are:

(A) Elevation: Unrestricted.

(B) Annual precipitation: Greater than 75 in (190 cm).

(C) Substrate: Greater than 65 degree slope, shallow soils, weathered lava.

(D) Canopy: None.

(E) Subcanopy: *Broussaisia*, *Cheirodendron*, *Leptecophylla*, *Metrosideros*.

(F) Understory: Ferns, Bryophytes, *Coprosma*, *Dubautia*, *Kadua*, *Peperomia*.

(G) Perennial streams.

(H) Slow reaches of streams or ponds.

(3) Existing manmade features and structures, such as buildings, roads, railroads, airports, runways, other paved areas, lawns, and other urban landscaped areas, existing trails, campgrounds and their immediate surrounding landscaped area, scenic lookouts, remote helicopter landing sites, and existing fences are not

included in the critical habitat designation. Federal actions limited to those areas, therefore, would not trigger a consultation under section 7 of the Act unless they may affect the species or physical or biological features in adjacent critical habitat.

(4) *Critical habitat maps.* Maps were created in GIS, with coordinates in UTM Zone 4, units in meters using North American datum of 1983 (NAD 83). The

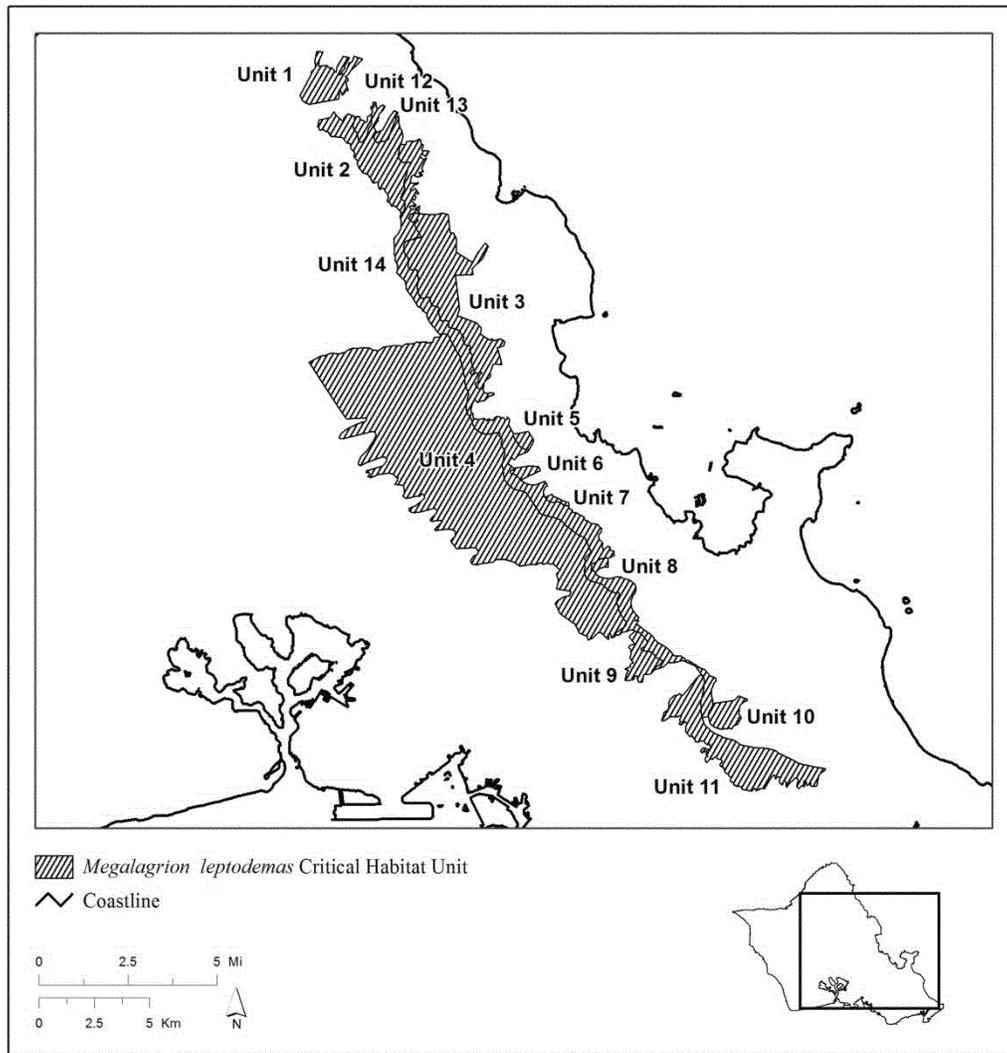
maps in this entry, as modified by any accompanying regulatory text, establish the boundaries of the critical habitat designation. The coordinates or plot points or both on which each map is based are available to the public at the Service's internet site, <http://www.fws.gov/pacificislands>; at <http://www.regulations.gov> at Docket No. FWS-R1-ES-2010-0043; and at the field office responsible for the

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 of critical habitat units for the crimson Hawaiian damselfly (*Megalagrion leptodemas*) follows:

BILLING CODE 4310-55-P

**Map 1**  
*Megalagrion leptodemas*—Index Map

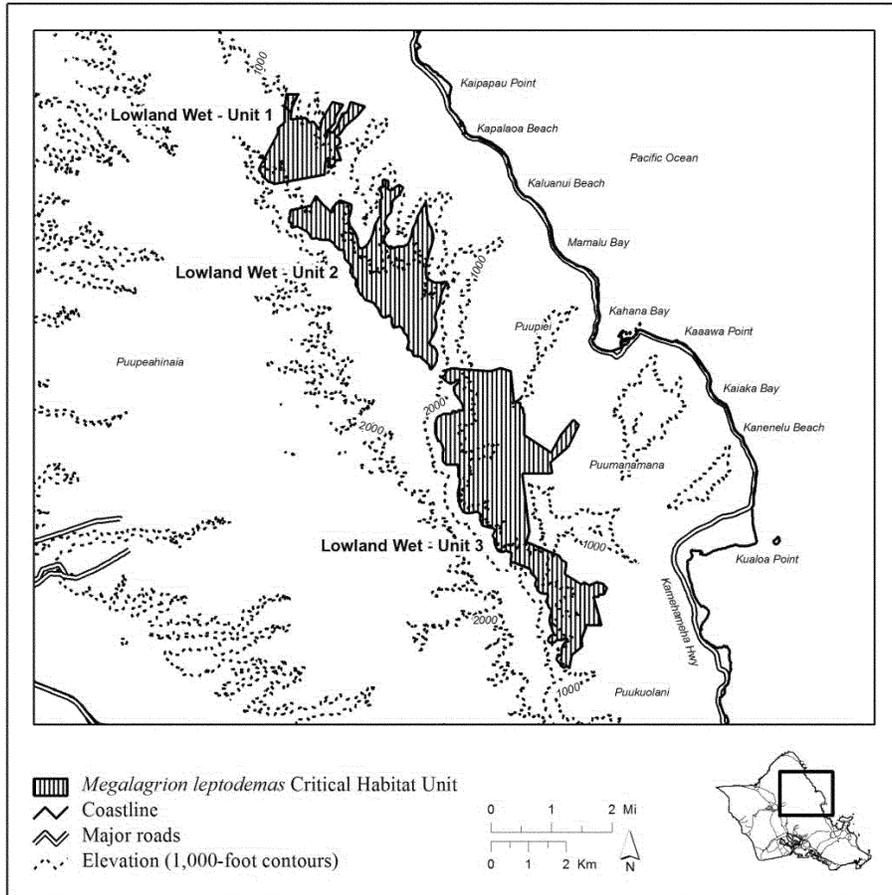


(6) *Megalagrion leptodemas*—Unit 1—Lowland Wet, Honolulu County, Hawaii (790 ac; 320 ha); *Megalagrion leptodemas*—Unit 2—Lowland Wet, Honolulu County, Hawaii (1,787ac; 723 ha); and *Megalagrion leptodemas*—Unit

3—Lowland Wet, Honolulu County, Hawaii (3,041 ac; 1,231 ha). These units are critical habitat for the crimson Hawaiian damselfly, *Megalagrion leptodemas*. Map of *Megalagrion leptodemas*—Unit 1—Lowland Wet,

*Megalagrion leptodemas*—Unit 2—Lowland Wet, and *Megalagrion leptodemas*—Unit 3—Lowland Wet follows:

***Megalagrion leptodemas*  
Lowland Wet  
Unit 1, Unit 2 and Unit 3**

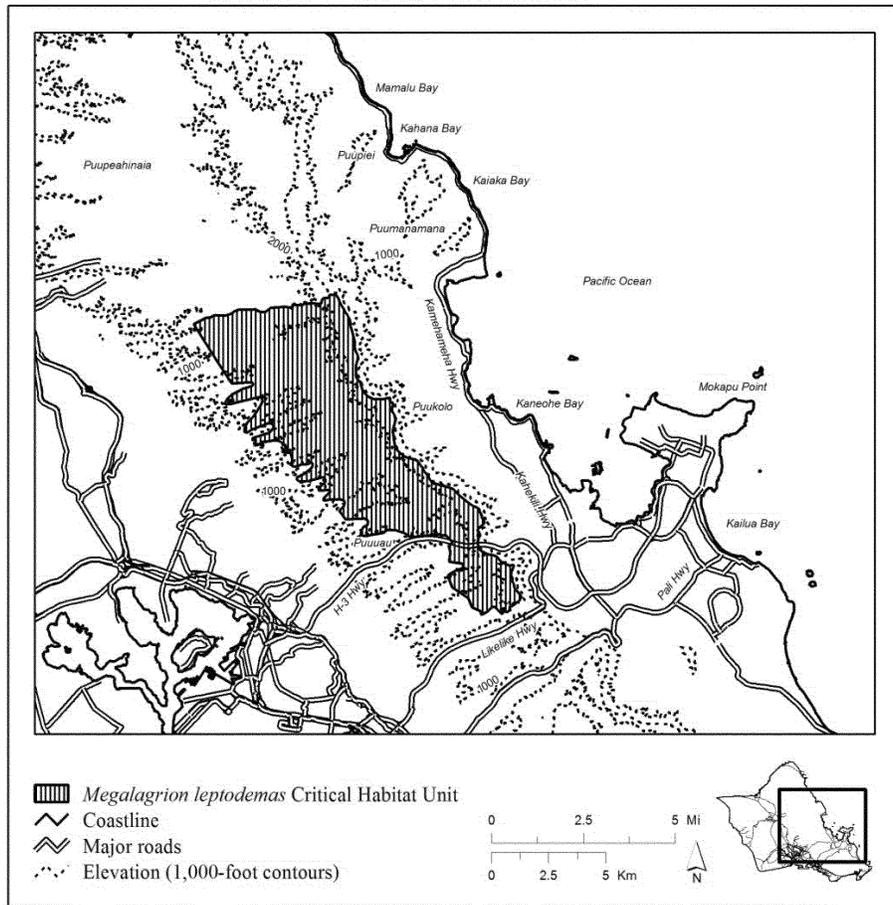


(7) *Megalagrion leptodemas*—Unit 4— Lowland Wet, Honolulu County, Hawaii (15,728 ac; 6,365 ha). This unit is

critical habitat for the crimson Hawaiian damselfly, *Megalagrion leptodemas*.

Map of *Megalagrion leptodemas*—Unit 4—Lowland Wet follows:

***Megalagrion leptodemas***  
**Lowland Wet**  
**Unit 4**

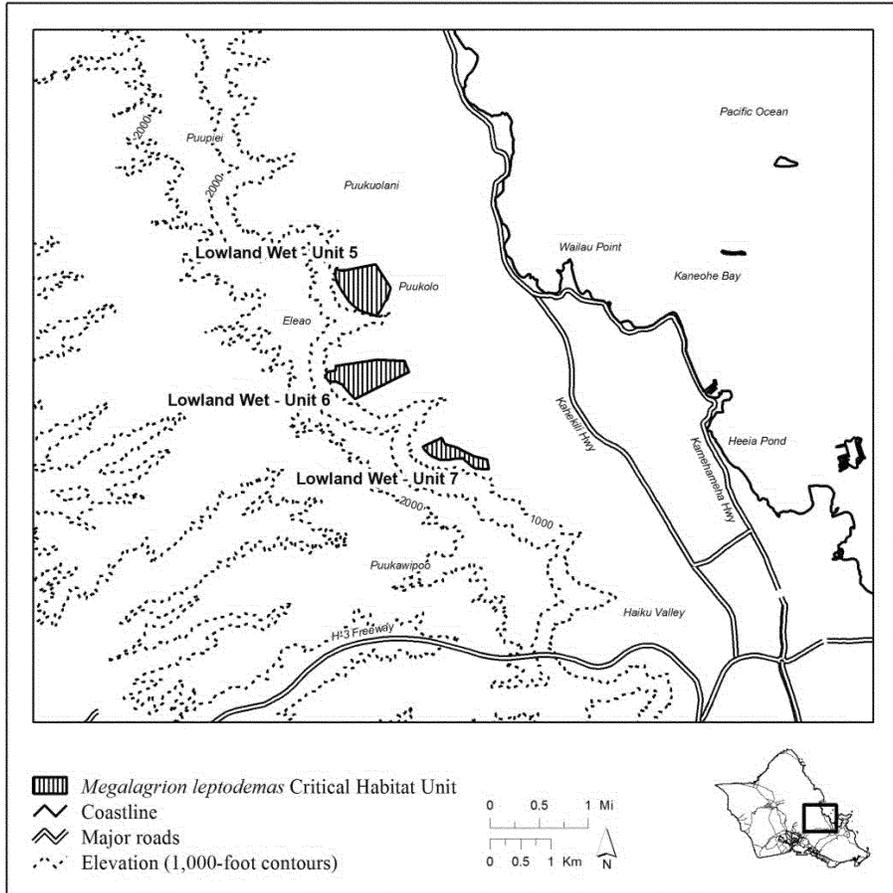


(8) *Megalagrion leptodemas*—Unit 5—Lowland Wet, Honolulu County, Hawaii (124 ac; 50 ha); *Megalagrion leptodemas*—Unit 6—Lowland Wet, Honolulu County, Hawaii (123 ac; 50

ha); and *Megalagrion leptodemas*—Unit 7—Lowland Wet, Honolulu County, Hawaii (53 ac; 21 ha). These units are critical habitat for the crimson Hawaiian damselfly, *Megalagrion leptodemas*.

Map of *Megalagrion leptodemas*—Unit 5—Lowland Wet, *Megalagrion leptodemas*—Unit 6—Lowland Wet, and *Megalagrion leptodemas*—Unit 7—Lowland Wet follows:

*Megalagrion leptodemas*  
Lowland Wet  
Unit 5, Unit 6 and Unit 7

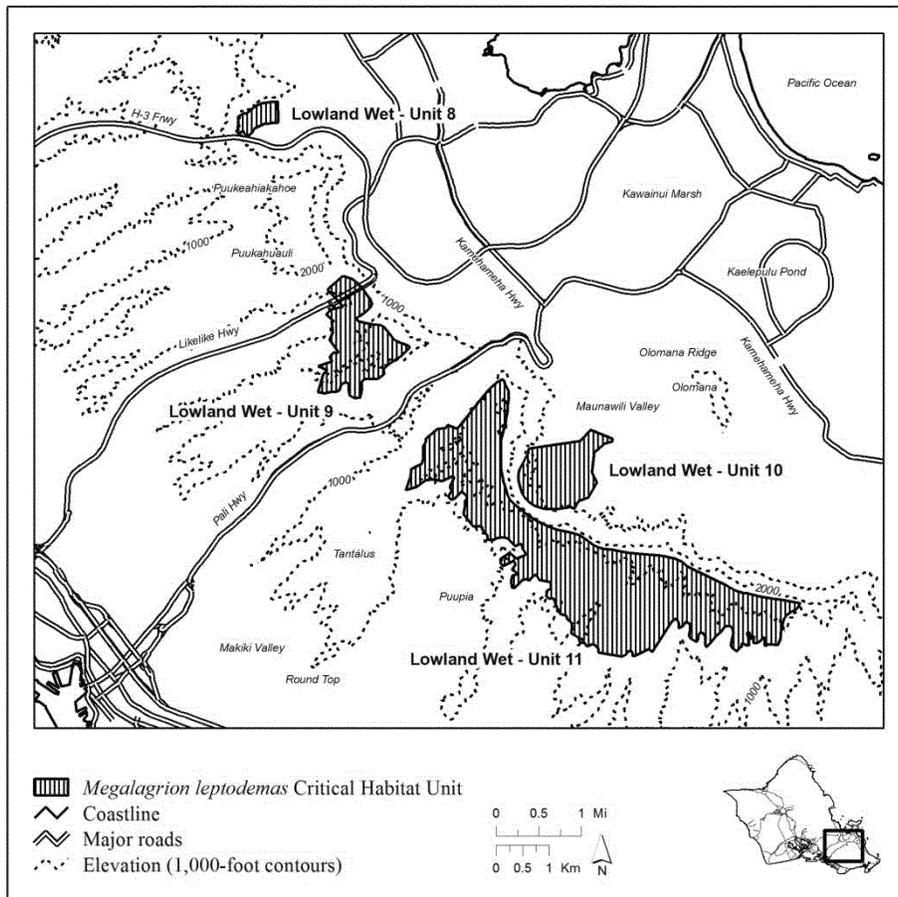


(9) *Megalagrion leptodemas*—Unit 8—Lowland Wet, Honolulu County, Hawaii (75 ac; 30 ha); *Megalagrion leptodemas*—Unit 9—Lowland Wet, Honolulu County, Hawaii (478 ac; 193 ha); *Megalagrion leptodemas*—Unit 10—Lowland Wet, Honolulu County,

Hawaii (407 ac; 165 ha); and *Megalagrion leptodemas*—Unit 11—Lowland Wet, Honolulu County, Hawaii (2,507 ac; 1,014 ha). These units are critical habitat for the crimson Hawaiian damselfly, *Megalagrion leptodemas*. Map of *Megalagrion leptodemas*—Unit

8—Lowland Wet, *Megalagrion leptodemas*—Unit 9—Lowland Wet, *Megalagrion leptodemas*—Unit 10—Lowland Wet, and *Megalagrion leptodemas*—Unit 11—Lowland Wet follows:

***Megalagrion leptodemas*  
Lowland Wet  
Unit 8, Unit 9, Unit 10 and Unit 11**

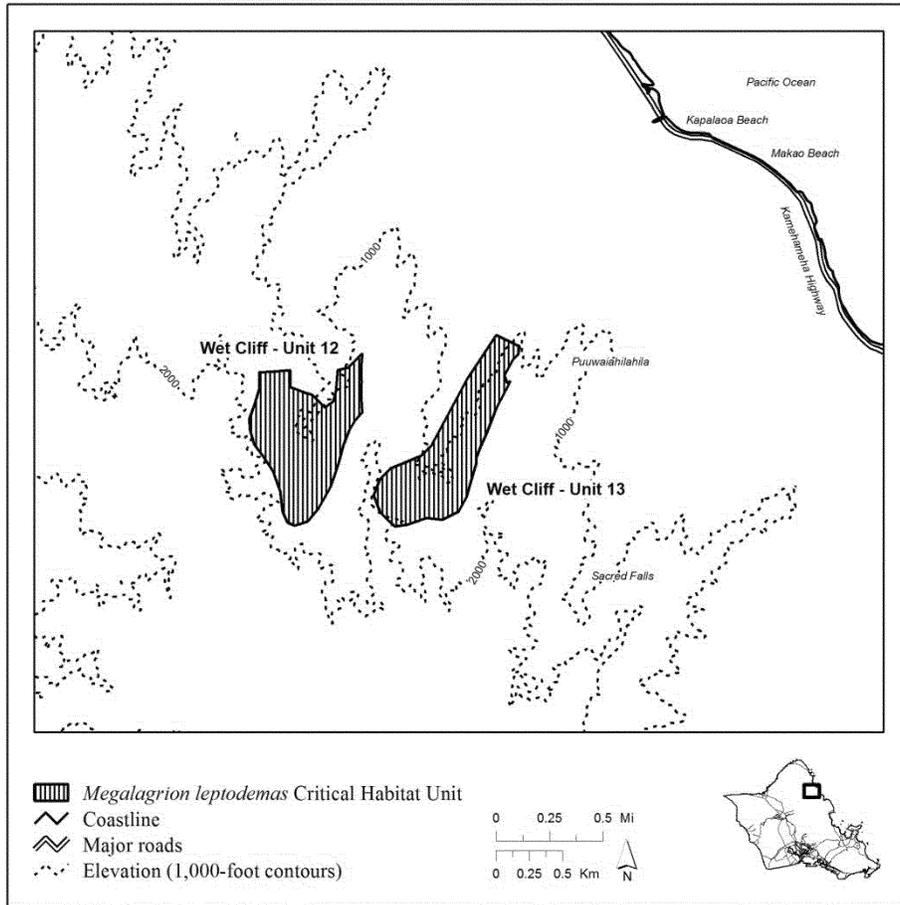


(10) *Megalagrion leptodemas*—Unit 12—Wet Cliff, Honolulu County, Hawaii (151 ac; 61 ha) and *Megalagrion leptodemas*—Unit 13—Wet Cliff,

Honolulu County, Hawaii (144 ac; 58 ha). These units are critical habitat for the crimson Hawaiian damselfly, *Megalagrion leptodemas*. Map of

*Megalagrion leptodemas*—Unit 12—Wet Cliff and *Megalagrion leptodemas*—Unit 13—Wet Cliff follows:

***Megalagrion leptodemas*  
Wet Cliff  
Unit 12 and Unit 13**

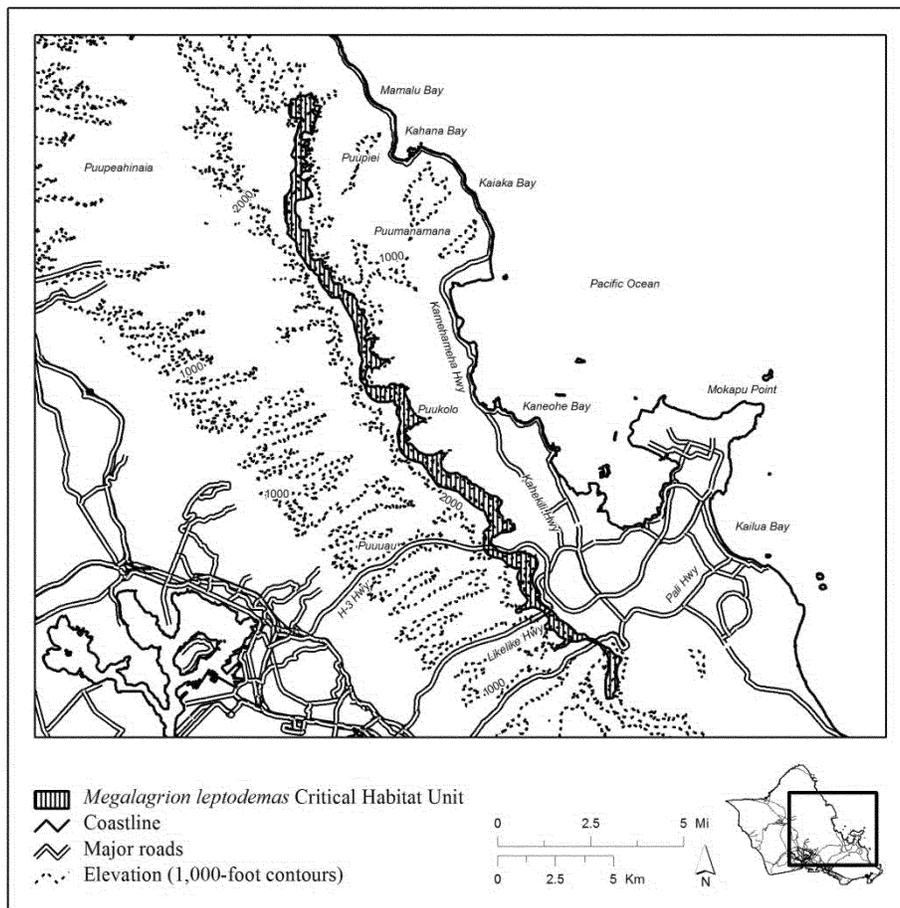


(11) *Megalagrion leptodemas*—Unit 14—Wet Cliff, Honolulu County, Hawaii (4,649 ac; 1,881 ha). This unit is critical

habitat for the crimson Hawaiian damselfly, *Megalagrion leptodemas*.

Map of *Megalagrion leptodemas*—Unit 14—Wet Cliff follows:

*Megalagrion leptodemas*  
Wet Cliff  
Unit 14



## BILLING CODE 4310-55-C

Oceanic Hawaiian Damsselfly  
(*Megalagrion oceanicum*)

(1) Critical habitat units are depicted for Honolulu County, Hawaii, on the maps below.

## (2) Primary constituent elements.

(i) In unit 1, the primary constituent elements of critical habitat for the oceanic Hawaiian damsselfly (*Megalagrion oceanicum*) are:

(A) Elevation: Less than 3,300 ft (1,000 m).

(B) Annual precipitation: 50 to 75 in (130 to 190 cm).

(C) Substrate: Shallow soils, little to no herbaceous layer.

(D) Canopy: *Acacia*, *Diospyros*, *Metrosideros*, *Myrsine*, *Pouteria*, *Santalum*.

(E) Subcanopy: *Dodonaea*, *Freycinetia*, *Leptecophylla*, *Melanthera*, *Osteomeles*, *Pleomele*, *Psydrax*.

(F) Understory: *Carex*, *Dicranopteris*, *Diplazium*, *Elaphoglossum*, *Peperomia*.

(G) Perennial streams.

(H) Swift-flowing sections and riffles of streams.

(ii) In units 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, and 12, the primary constituent elements of critical habitat for the oceanic Hawaiian damsselfly (*Megalagrion oceanicum*) are:

(A) Elevation: Less than 3,300 ft (1,000 m).

(B) Annual precipitation: Greater than 75 in (190 cm).

(C) Substrate: Clays; ashbeds; deep, well-drained soils; lowland bogs.

(D) Canopy: *Antidesma*, *Metrosideros*, *Myrsine*, *Pisonia*, *Psychotria*.

(E) Subcanopy: *Cibotium*, *Claoxylon*, *Kadua*, *Melicope*.

(F) Understory: *Alyxia*, *Cyrtandra*, *Dicranopteris*, *Diplazium*, *Machaerina*, *Microlepis*.

(G) Perennial streams.

(H) Swift-flowing sections and riffles of streams.

(iii) In units 13, 14, and 15, the primary constituent elements of critical habitat for the oceanic Hawaiian damsselfly (*Megalagrion oceanicum*) are:

(A) Elevation: Unrestricted.

(B) Annual precipitation: Greater than 75 in (190 cm).

(C) Substrate: Greater than 65 degree slope, shallow soils, weathered lava.

(D) Canopy: None.

(E) Subcanopy: *Broussaisia*, *Cheirodendron*, *Leptecophylla*, *Metrosideros*.

(F) Understory: Ferns, Bryophytes, *Coprosma*, *Dubautia*, *Kadua*, *Peperomia*.

(G) Perennial streams.

(H) Swift-flowing sections and riffles of streams.

(3) Existing manmade features and structures, such as buildings, roads, railroads, airports, runways, other paved areas, lawns, and other urban landscaped areas, existing trails, campgrounds and their immediate surrounding landscaped area, scenic lookouts, remote helicopter landing sites, and existing fences are not included in the critical habitat designation. Federal actions limited to those areas, therefore, would not trigger a consultation under section 7 of the Act unless they may affect the species or

physical and biological features in adjacent critical habitat.

(4) *Critical habitat maps.* Maps were created in GIS, with coordinates in UTM Zone 4, units in meters using North American datum of 1983 (NAD 83). The maps in this entry, as modified by any accompanying regulatory text, establish the boundaries of the critical habitat

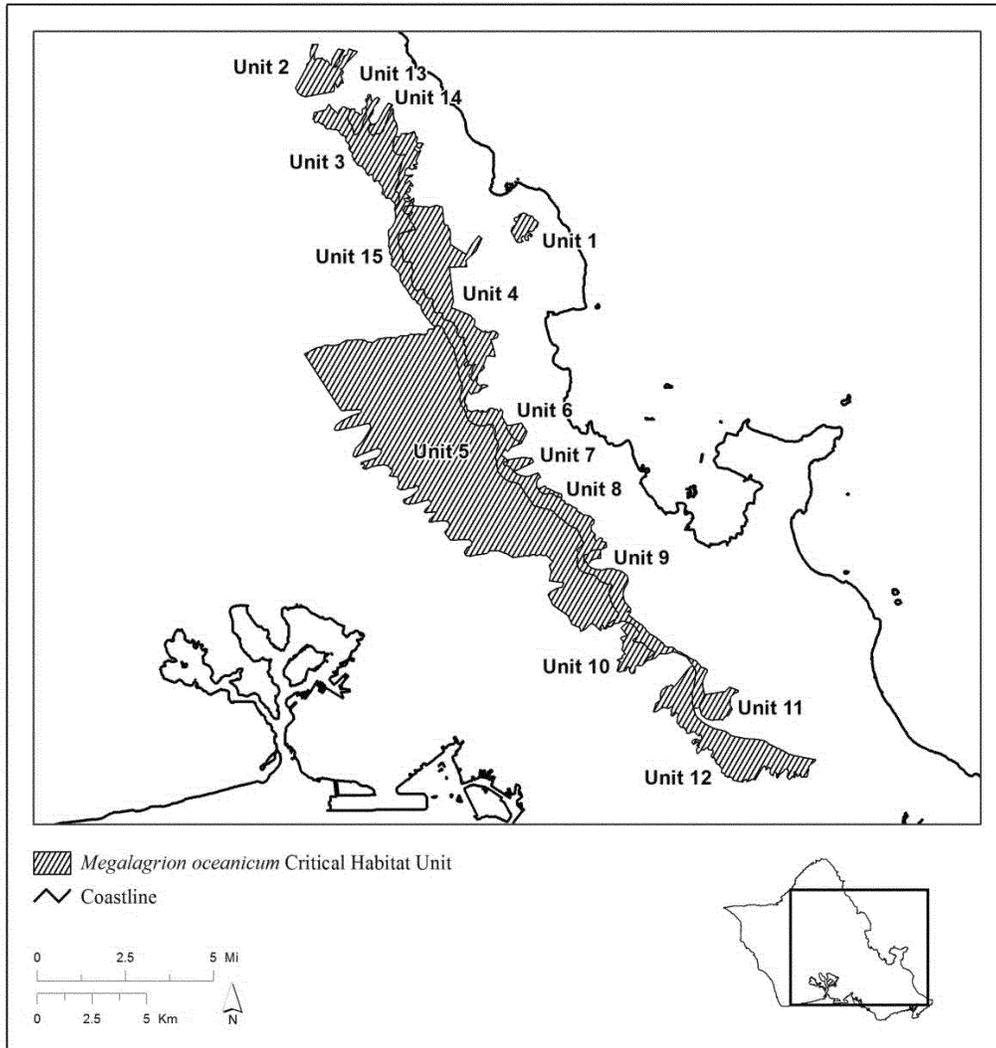
designation. The coordinates or plot points or both on which each map is based are available to the public at the Service's internet site, <http://www.fws.gov/pacificislands>; at <http://www.regulations.gov> at Docket No. FWS-R1-ES-2010-0043; and at the field office responsible for the designation. You 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 of critical habitat units for the oceanic Hawaiian damselfly (*Megalagrion oceanicum*) follows:

BILLING CODE 4310-55-P

**Map 1**  
***Megalagrion oceanicum*—Index Map**

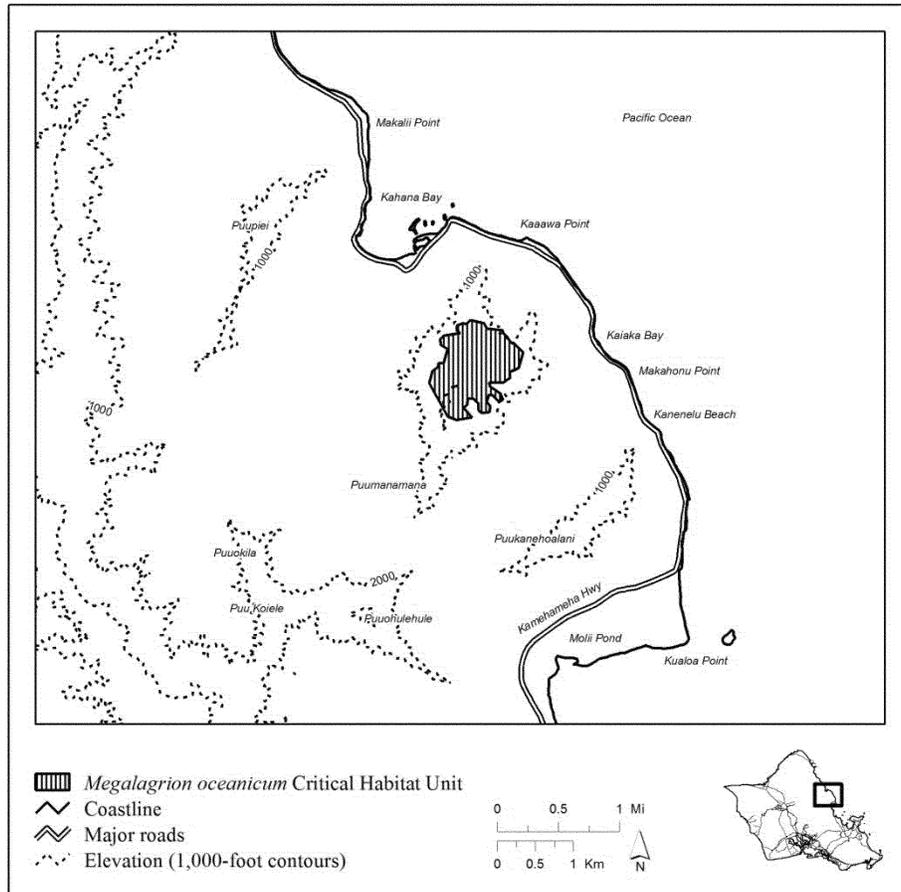


(6) *Megalagrion oceanicum*—Unit 1—  
Lowland Mesic, Honolulu County,  
Hawaii (247 ac; 100 ha). This unit is

critical habitat for the oceanic Hawaiian  
damselfly, *Megalagrion oceanicum*. Map

of *Megalagrion oceanicum*—Unit 1—  
Lowland Mesic (Map 2) follows:

***Megalagrion oceanicum*  
Lowland Mesic  
Unit 1**

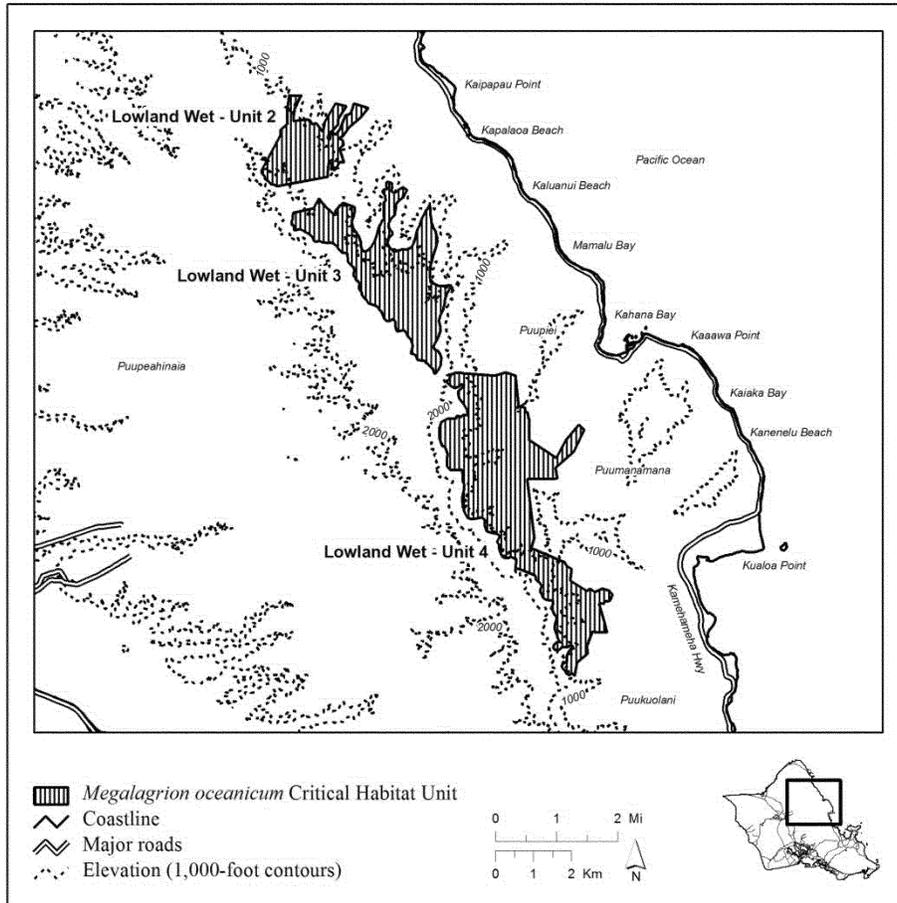


(7) *Megalagrion oceanicum*—Unit 2—Lowland Wet, Honolulu County, Hawaii (790 ac; 320 ha); *Megalagrion oceanicum*—Unit 3—Lowland Wet, Honolulu County, Hawaii (1,787 ac; 723 ha); and *Megalagrion oceanicum*—Unit

4—Lowland Wet, Honolulu County, Hawaii (3,041 ac; 1,231 ha). These units are critical habitat for the oceanic Hawaiian damselfly, *Megalagrion oceanicum*. Map of *Megalagrion oceanicum*—Unit 2—Lowland Wet,

*Megalagrion oceanicum*—Unit 3—Lowland Wet, and *Megalagrion oceanicum*—Unit 4—Lowland Wet follows:

***Megalagrion oceanicum*  
Lowland Wet  
Unit 2, Unit 3 and Unit 4**

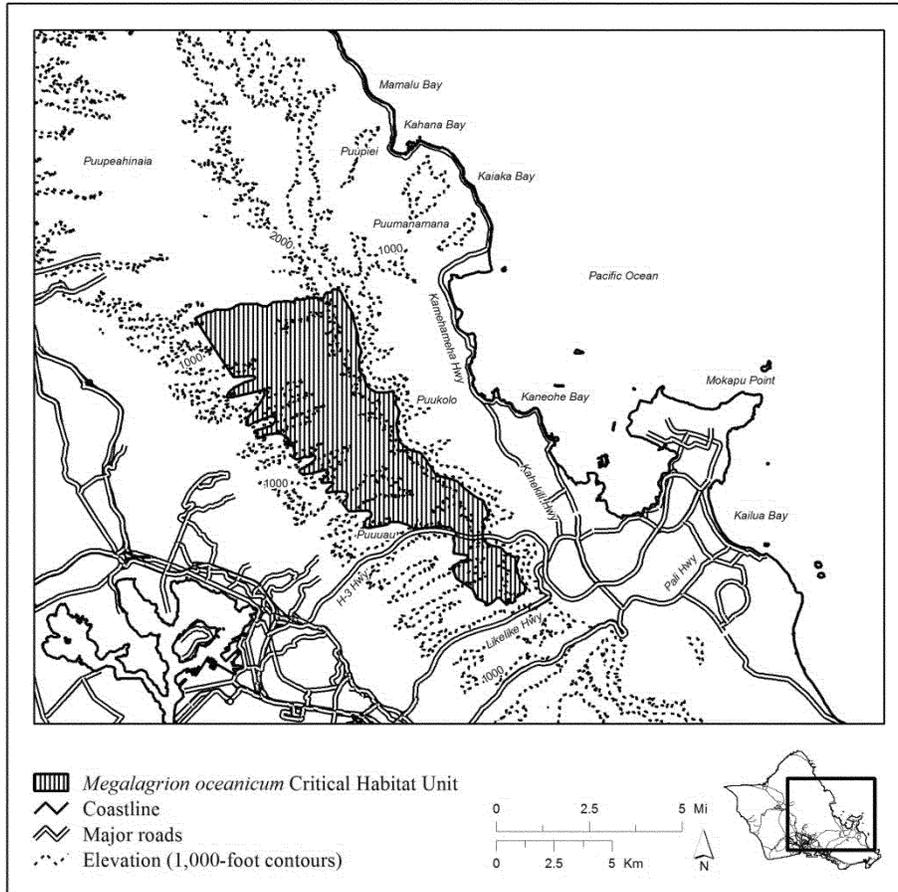


(8) *Megalagrion oceanicum*—Unit 5— Lowland Wet, Honolulu County, Hawaii (15,728 ac; 6,365 ha). This unit is

critical habitat for the oceanic Hawaiian damselfly, *Megalagrion oceanicum*. Map

of *Megalagrion oceanicum*—Unit 5— Lowland Wet follows:

***Megalagrion oceanicum*  
Lowland Wet  
Unit 5**

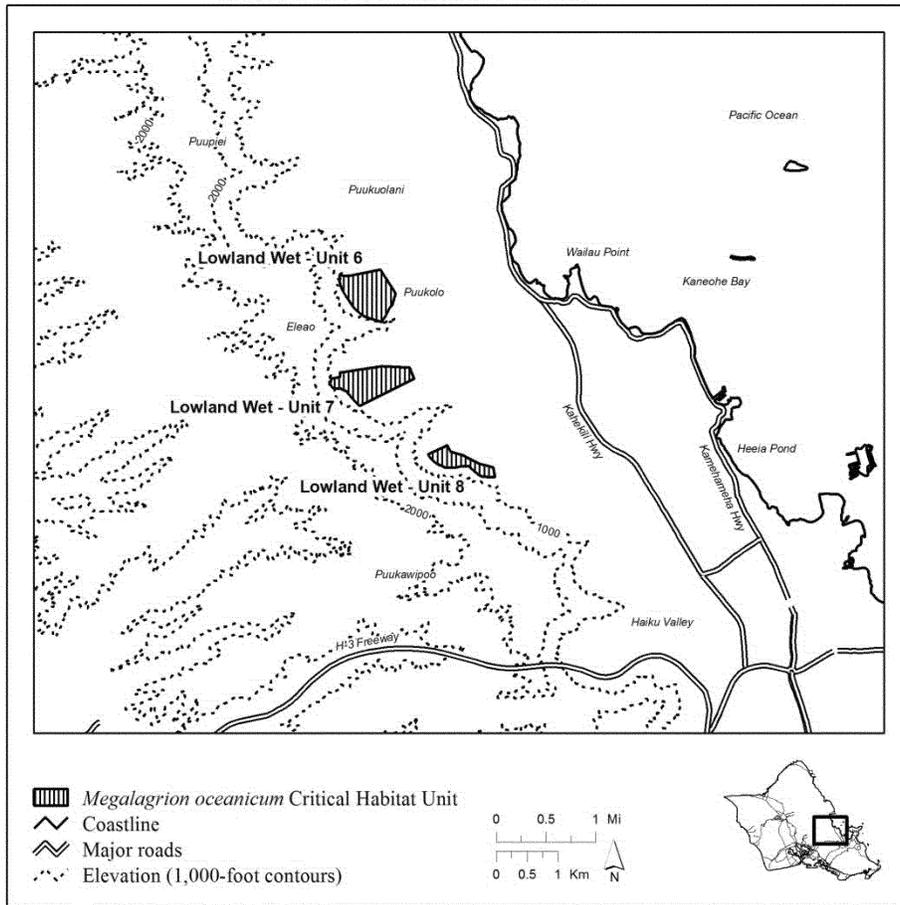


(9) *Megalagrion oceanicum*—Unit 6—Lowland Wet, Honolulu County, Hawaii (124 ac; 50 ha); *Megalagrion oceanicum*—Unit 7—Lowland Wet, Honolulu County, Hawaii (123 ac; 50

ha); and *Megalagrion oceanicum*—Unit 8—Lowland Wet, Honolulu County, Hawaii (53 ac; 21 ha). These units are critical habitat for the oceanic Hawaiian damselfly, *Megalagrion oceanicum*. Map

of *Megalagrion oceanicum*—Unit 6—Lowland Wet, *Megalagrion oceanicum*—Unit 7—Lowland Wet, and *Megalagrion oceanicum*—Unit 8—Lowland Wet follows:

***Megalagrion oceanicum*  
Lowland Wet  
Unit 6, Unit 7 and Unit 8**

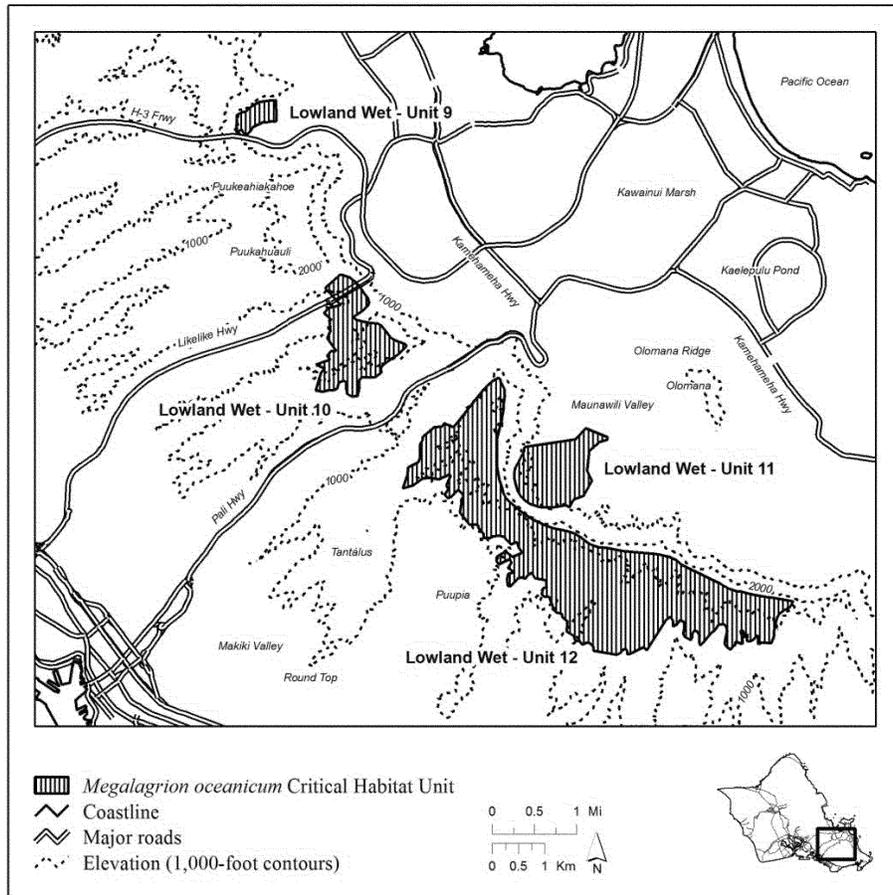


(10) *Megalagrion oceanicum*—Unit 9—Lowland Wet, Honolulu County, Hawaii (75 ac; 30 ha); *Megalagrion oceanicum*—Unit 10—Lowland Wet, Honolulu County, Hawaii (478 ac; 193 ha); *Megalagrion oceanicum*—Unit 11—Lowland Wet, Honolulu County, Hawaii

(407 ac; 165 ha); and *Megalagrion oceanicum*—Unit 12—Lowland Wet, Honolulu County, Hawaii (2,507 ac; 1,014 ha). These units are critical habitat for the oceanic Hawaiian damselfly, *Megalagrion oceanicum*. Map of *Megalagrion oceanicum*—Unit 9—

Lowland Wet, *Megalagrion oceanicum*—Unit 10—Lowland Wet, *Megalagrion oceanicum*—Unit 11—Lowland Wet, and *Megalagrion oceanicum*—Unit 12—Lowland Wet follows:

***Megalagrion oceanicum*  
Lowland Wet  
Unit 9, Unit 10, Unit 11 and Unit 12**

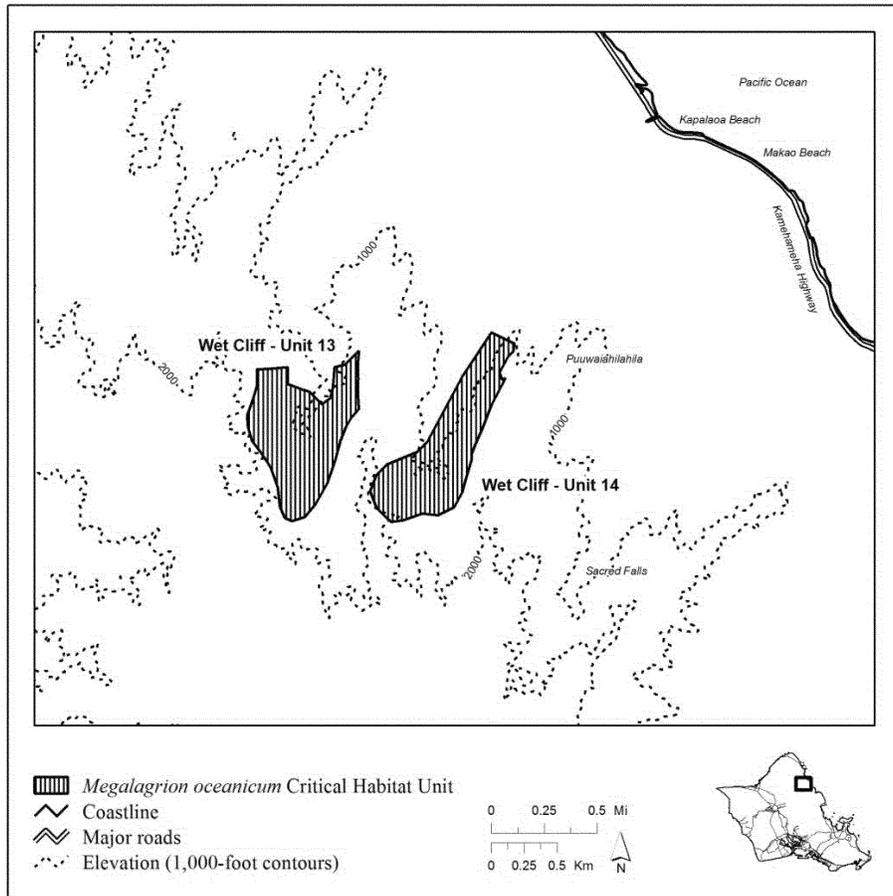


(11) *Megalagrion oceanicum*—Unit 13—Wet Cliff, Honolulu County, Hawaii (151 ac; 61 ha) and *Megalagrion oceanicum*—Unit 14—Wet Cliff,

Honolulu County, Hawaii (144 ac; 58 ha). These units are critical habitat for the oceanic Hawaiian damselfly, *Megalagrion oceanicum*. Map of

*Megalagrion oceanicum*—Unit 13—Wet Cliff and *Megalagrion oceanicum*—Unit 14—Wet Cliff follows:

***Megalagrion oceanicum*  
Wet Cliff  
Unit 13 and Unit 14**

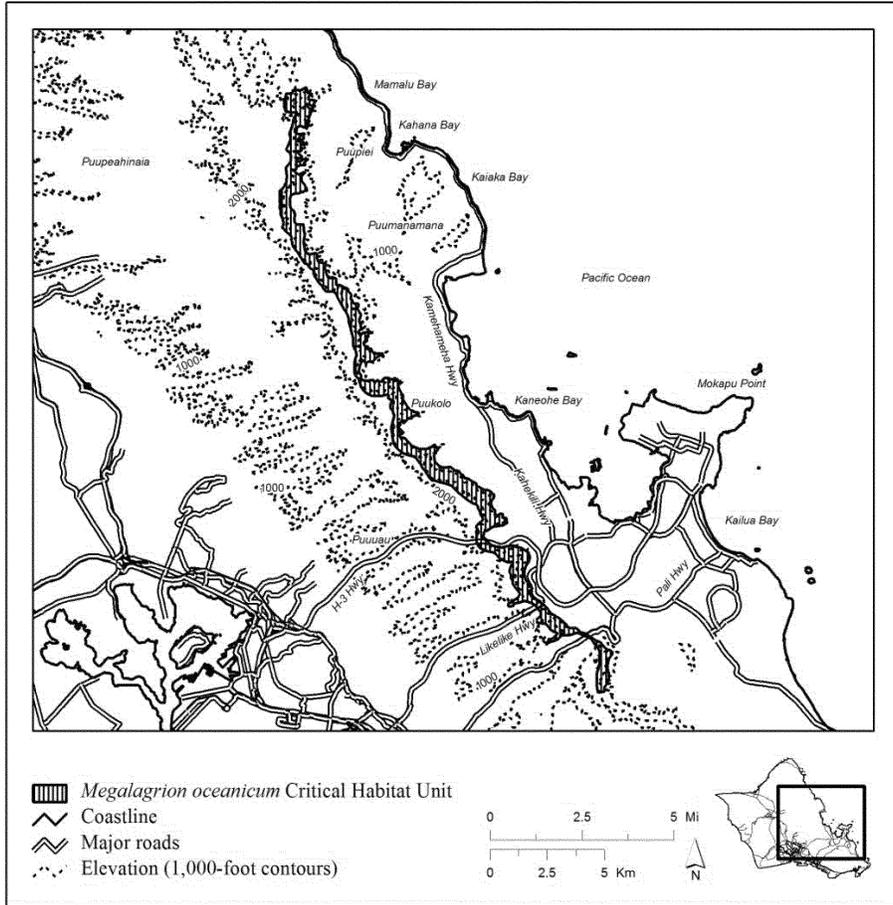


(12) *Megalagrion oceanicum*—Unit 15—Wet Cliff, Honolulu County, Hawaii (4,649 ac; 1,881 ha). This unit is critical

habitat for the oceanic Hawaiian damselfly, *Megalagrion oceanicum*. Map

of *Megalagrion oceanicum*—Unit 15—Wet Cliff follows:

*Megalagrion oceanicum*  
Wet Cliff  
Unit 15



**BILLING CODE 4310-55-C**

\* \* \* \* \*

■ 5. Amend § 17.99 as follows:

■ a. Amend paragraph (a)(1) by removing the words listed in the “Remove” column below and adding in

their place the words listed in the “Add” column below:

Paragraph designation	Remove	Add
(a)(1)(civ), the introductory text .....	Kauai 10— <i>Phlegmariurus nutans</i> —a .....	Kauai 10— <i>Huperzia nutans</i> —a.
(a)(1)(ccxl), the introductory text .....	Kauai 11— <i>Mariscus pennatifomis</i> —a .....	Kauai 11— <i>Cyperus pennatifomis</i> —a.

■ b. Amend paragraph (a)(1) by removing the maps in paragraphs (a)(1)(civ)(B) and (a)(1)(ccxl)(B), and adding in their place the maps set forth below.

■ c. In paragraph (a)(1)(cdlix), amend the Table of Protected Species Within Each Critical Habitat Unit for Kauai, by removing the words listed in the “Remove” column below and adding in

their place the words listed in the “Add” column below:

Column heading	Remove	Add
Unit name .....	Kauai 10— <i>Phlegmariurus nutans</i> —a .....	Kauai 10— <i>Huperzia nutans</i> —a.
Species unoccupied .....	<i>Phlegmariurus nutans</i> . .....	<i>Huperzia nutans</i> .
Unit name .....	Kauai 11— <i>Mariscus pennatifomis</i> —a .....	Kauai 11— <i>Cyperus pennatifomis</i> —a.
Species unoccupied .....	<i>Mariscus pennatifomis</i> .....	<i>Cyperus pennatifomis</i> .

■ d. Amend paragraph (b)(1) by removing the words listed in the

“Remove” column below in all places that they appear and adding in their

place the words listed in the “Add” column below:

Remove	Add
Family Cyperaceae: <i>Mariscus pennatiformis</i> (NCN) ..... Kauai 11— <i>Mariscus pennatiformis</i> —a ..... <i>Mariscus pennatiformis</i> .....	Family Cyperaceae: <i>Cyperus pennatiformis</i> (NCN). Kauai 11— <i>Cyperus pennatiformis</i> —a. <i>Cyperus pennatiformis</i> .

■ e. Amend paragraph (b)(2) by removing the words listed in the “Remove” column below in all places that they appear and adding in their place the words listed in the “Add” column below:

Remove	Add
Family Lycopodiaceae: <i>Phlegmariurus nutans</i> (wawaeiole) ..... Kauai 10— <i>Phlegmariurus nutans</i> —a ..... <i>Phlegmariurus nutans</i> .....	Family Lycopodiaceae: <i>Huperzia nutans</i> (wawaeiole). Kauai 10— <i>Huperzia nutans</i> —a. <i>Huperzia nutans</i> .

■ f. Amend paragraph (e)(1) by removing the words listed in the “Remove” column below and adding in their place the words listed in the “Add” column below:

Paragraph designation	Remove	Add
(e)(1)(xii), the introductory text .....	Maui 6— <i>Mariscus pennatiformis</i> —a .....	Maui 6— <i>Cyperus pennatiformis</i> —a.
(e)(1)(xiv), the introductory text .....	Maui 17— <i>Hedyotis coriacea</i> —a .....	Maui 17— <i>Kadua coriacea</i> —a.
(e)(1)(cv), the introductory text .....	Maui 17— <i>Hedyotis coriacea</i> —b .....	Maui 17— <i>Kadua coriacea</i> —b.

■ g. Amend paragraph (e)(1) by removing the maps in paragraphs (e)(1)(xii)(B), (e)(1)(xiv)(B), and (e)(1)(cv)(B), and adding in their place the maps set forth below.

■ h. In paragraph (e)(1)(cxxxviii), amend the Table of Protected Species Within Each Critical Habitat Unit for Maui, by removing the words listed in the “Remove” column below and adding in their place the words listed in the “Add” column below:

Column heading	Remove	Add
Unit name .....	Maui 6— <i>Mariscus pennatiformis</i> —a .....	Maui 6— <i>Cyperus pennatiformis</i> —a.
Species occupied .....	<i>Mariscus pennatiformis</i> .....	<i>Cyperus pennatiformis</i> .
Unit name .....	Maui 17— <i>Hedyotis coriacea</i> —a .....	Maui 17— <i>Kadua coriacea</i> —a.
Species occupied .....	<i>Hedyotis coriacea</i> .....	<i>Kadua coriacea</i> .
Unit name .....	Maui 17— <i>Hedyotis coriacea</i> —b .....	Maui 17— <i>Kadua coriacea</i> —b.
Species unoccupied .....	<i>Hedyotis coriacea</i> .....	<i>Kadua coriacea</i> .

■ i. Amend paragraph (f)(1) by removing the words listed in the “Remove” column below in all places that they appear and adding in their place the words listed in the “Add” column below:

Remove	Add
Family Cyperaceae: <i>Mariscus pennatiformis</i> (NCN). ..... Maui 6— <i>Mariscus pennatiformis</i> —a. .... <i>Mariscus pennatiformis</i> .....	Family Cyperaceae: <i>Cyperus pennatiformis</i> (NCN). Maui 6— <i>Cyperus pennatiformis</i> —a. <i>Cyperus pennatiformis</i> .
Family Rubiaceae: <i>Hedyotis coriacea</i> (kioele) ..... Maui 17— <i>Hedyotis coriacea</i> —a ..... Maui 17— <i>Hedyotis coriacea</i> —b ..... <i>Hedyotis coriacea</i> .....	Family Rubiaceae: <i>Kadua coriacea</i> (kioele). Maui 17— <i>Kadua coriacea</i> —a. Maui 17— <i>Kadua coriacea</i> —b. <i>Kadua coriacea</i> .

■ j. Amend paragraph (g) by removing the words listed in the “Remove” column below and adding in their place the words listed in the “Add” column below:

Paragraph designation	Remove	Add
(g)(7), the introductory text .....	Laysan 1— <i>Mariscus pennatiformis</i> —entire island.	Laysan 1— <i>Cyperus pennatiformis</i> —entire island.

■ k. Amend paragraph (g) by removing the map in paragraph (g)(7)(ii), and

adding in its place the map set forth below.

■ l. In paragraph (g)(9), amend the Table of Protected Species Within Each

Critical Habitat Unit for the Northwestern Hawaiian Islands, by removing the words listed in the “Remove” column below and adding in their place the words listed in the “Add” column below:

Column heading	Remove	Add
Species—Occupied .....	<i>Mariscus pennatiformis</i> .....	<i>Cyperus pennatiformis</i> .

■ m. Amend paragraph (h) by removing the words listed in the “Remove” column below in all places that they appear and adding in their place the words listed in the “Add” column below:

Remove	Add
Family Cyperaceae: <i>Mariscus pennatiformis</i> (NCN) .....	Family Cyperaceae: <i>Cyperus pennatiformis</i> (NCN).
Laysan 1— <i>Mariscus pennatiformis</i> .....	Laysan 1— <i>Cyperus pennatiformis</i> .
<i>Mariscus pennatiformis</i> .....	<i>Cyperus pennatiformis</i> .

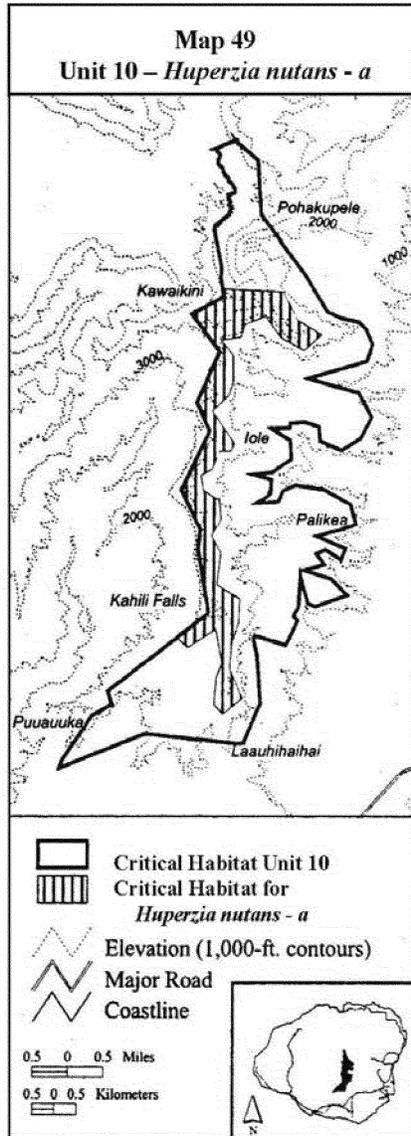
■ n. Revise paragraphs (i) and (j) to read as set forth below.

**§ 17.99 Critical habitat; plants on the islands of Kauai, Niihau, Molokai, Maui, Kahoolawe, Oahu, and Hawaii, HI, and on the Northwestern Hawaiian Islands.**

- (a) \* \* \*
- (1) \* \* \*
- (civ) \* \* \*

(B) Note: Map 49 follows:

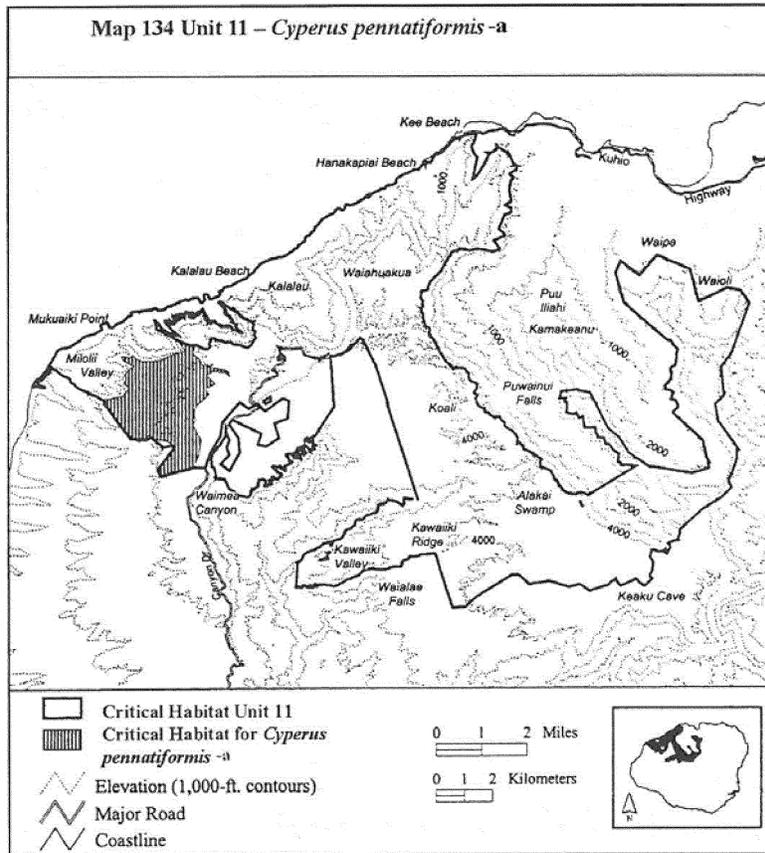
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(ccxl) \* \* \*

\* \* \* \* \*

(B) Note: Map 134 follows:



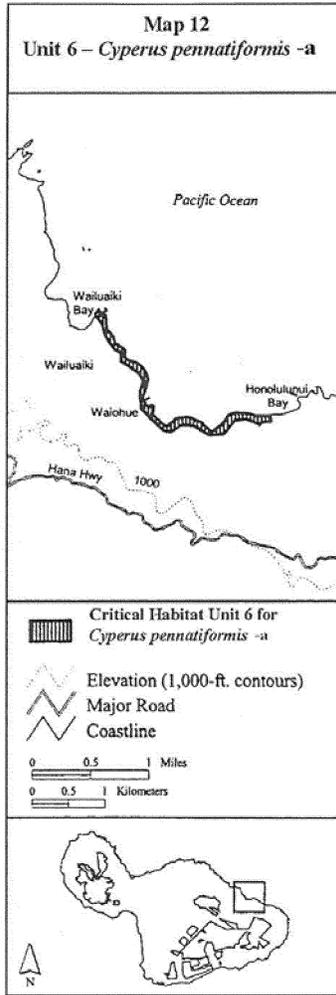
\* \* \* \* \*

(e) \* \* \*

(1) \* \* \*

(xii) \* \* \*

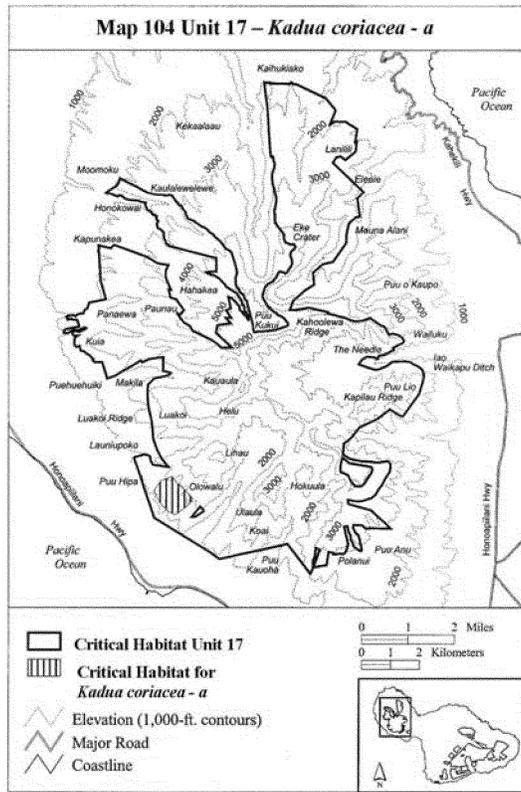
(B) Note: Map 12 follows:



(civ) \* \* \*

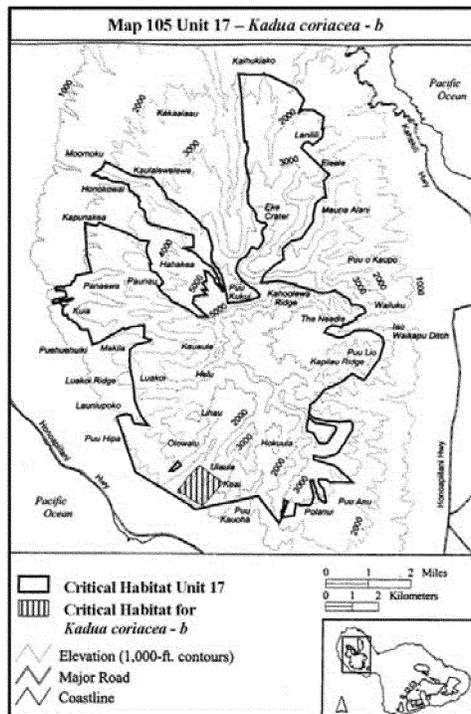
(B) Note: Map 104 follows:

\* \* \* \* \*



(cv) \* \* \*

(B) Note: Map 105 follows:

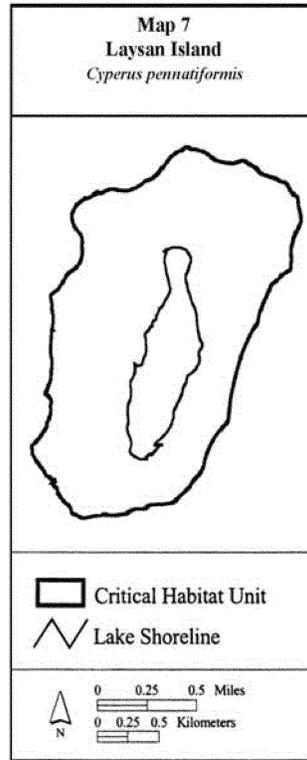


\* \* \* \* \*

(g) \* \* \*

(7) \* \* \*

(ii) Note: Map 7 follows:

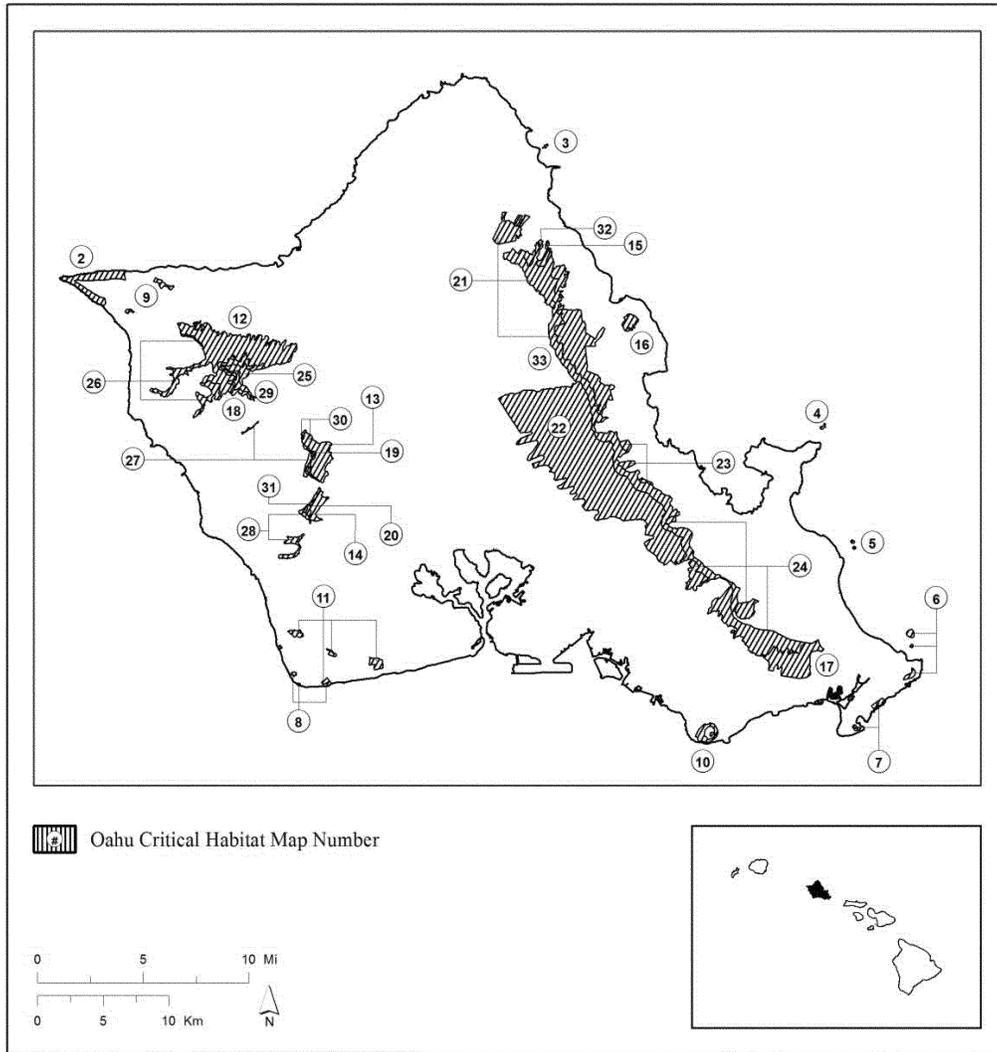


\* \* \* \* \*

(i) *Oahu*. Critical habitat units are described below. Maps were created in GIS, with coordinates in UTM Zone 4 with units in meters using North American Datum of 1983 (NAD83). 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/pacificislands>; at <http://www.regulations.gov> at Docket No. FWS-R1-ES-2010-0043; and at the field office responsible for the 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. Existing manmade features and structures, such as buildings, roads, railroads, airports, runways, other paved areas, lawns, and other urban landscaped areas, existing trails, campgrounds and their immediate surrounding landscaped area, scenic lookouts, remote helicopter landing sites, and existing fences are not included in the critical habitat designation. Federal actions limited to those areas, therefore, would not trigger a consultation under section 7 of the Act unless they may affect the species or physical or biological features in adjacent critical habitat.

(1) Map 1—Index map follows:

**Map 1**  
**Oahu Critical Habitat—Island Index Map**



(2) Oahu—Coastal—Unit 1 (958 ac; 388 ha).

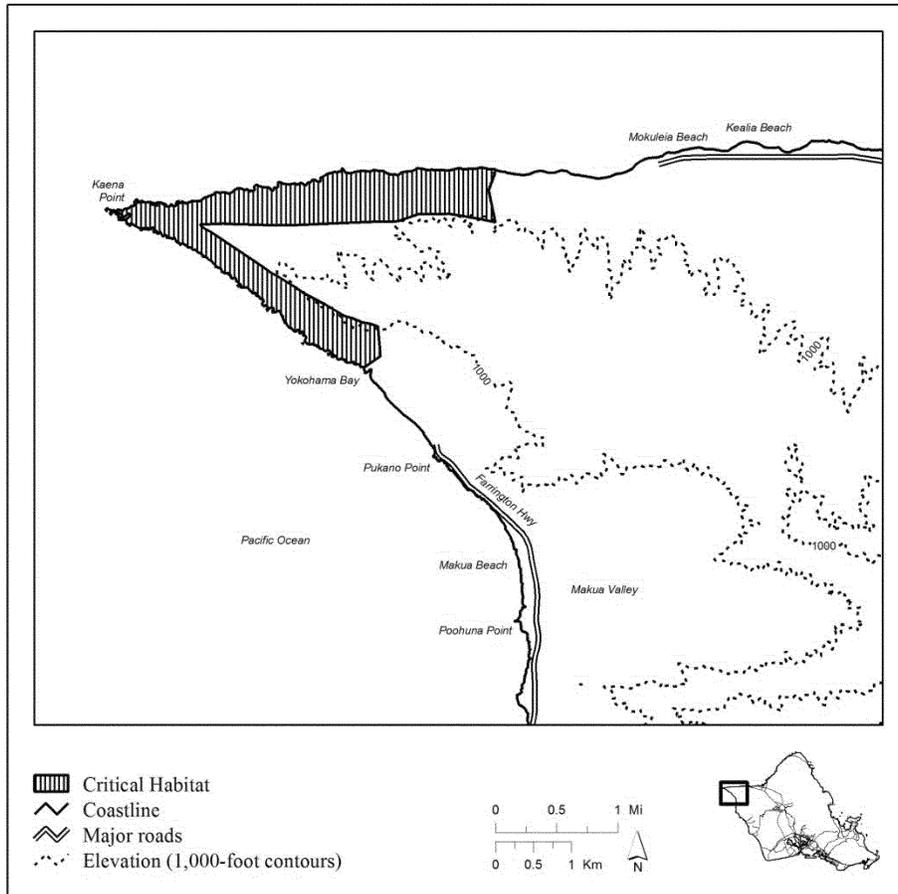
(i) This unit is critical habitat for *Achyranthes splendens* var. *rotundata*,

*Bidens amplexans*, *Centaurium sebaeoides*, *Chamaesyce celastroides* var. *kaenana*, *Schiedea kealiae*,

*Sesbania tomentosa*, and *Vigna owahuensis*.

(ii) Map of Oahu—Coastal—Unit 1 (Map 2) follows:

**Map 2**  
**Oahu—Coastal**  
**Unit 1**



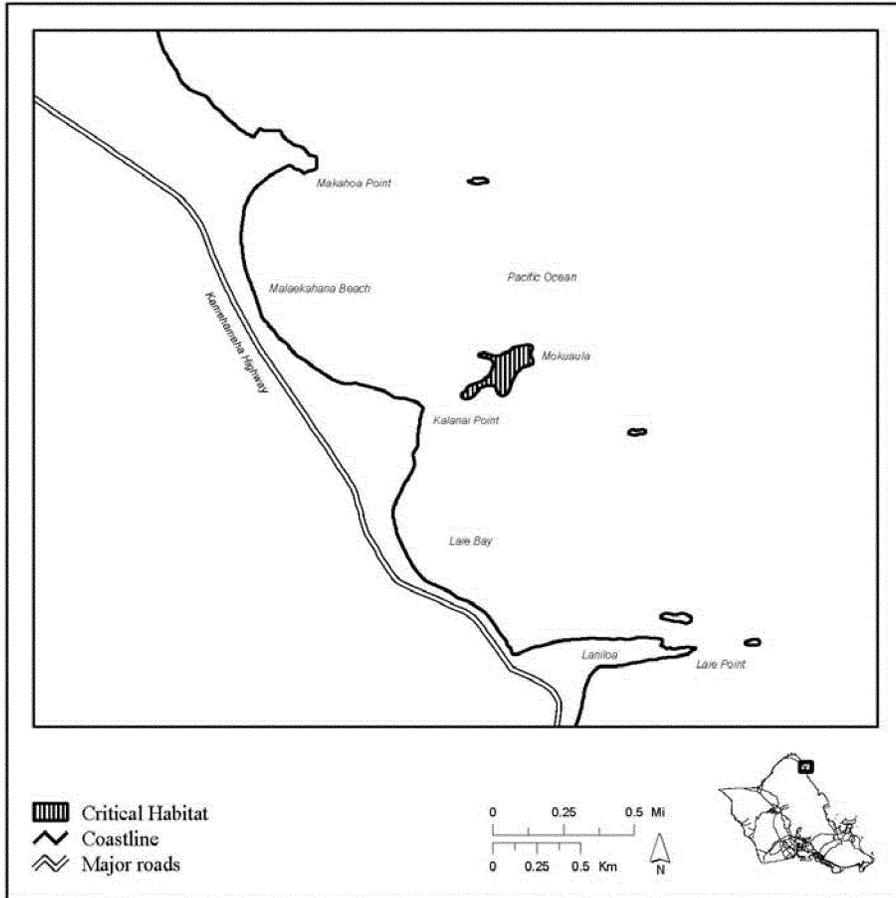
(3) Oahu—Coastal—Unit 2 (12 ac; 5 ha).

(i) This unit is critical habitat for *Centaurium sebaeoides*, *Chamaesyce*

*kuwaleana*, *Sesbania tomentosa*, and *Vigna o-wahuensis*.

(ii) Map of Oahu—Coastal—Unit 2 (Map 3) follows:

**Map 3**  
**Oahu—Coastal**  
**Unit 2**

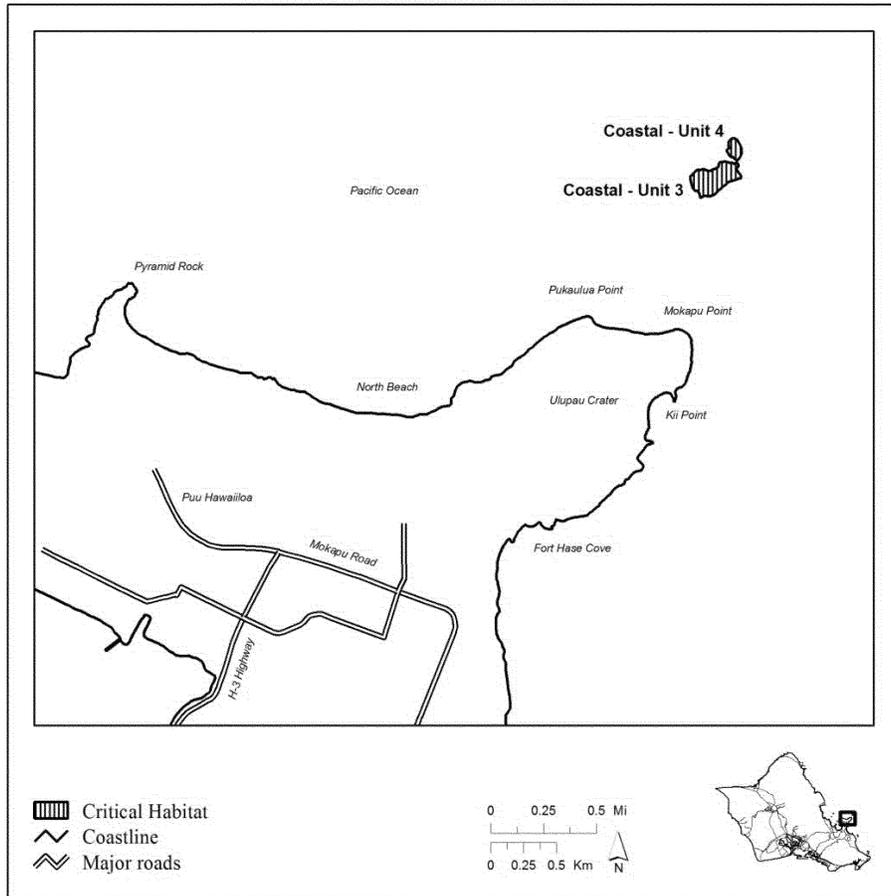


(4) Oahu—Coastal—Unit 3 (15 ac; 6 ha) and Oahu—Coastal—Unit 4 (3 ac; 1 ha).

(i) These units are critical habitat for *Centaurium sebaeoides*, *Chamaesyce kuwaleana*, *Sesbania tomentosa*, and *Vigna o-wahuensis*.

(ii) Map of Oahu—Coastal—Unit 3 and Oahu—Coastal—Unit 4 (Map 4) follows:

**Map 4**  
**Oahu—Coastal Ecosystem**  
**Unit 3 and Unit 4**

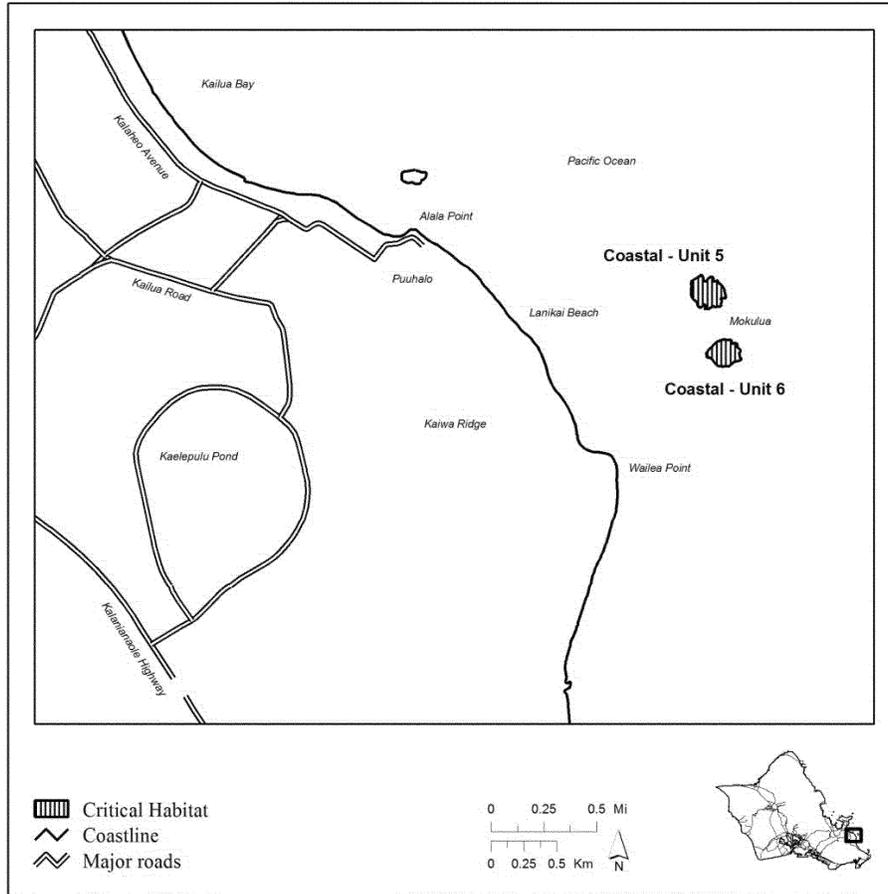


(5) Oahu—Coastal—Unit 5 (12 ac; 5 ha) and Oahu—Coastal—Unit 6 (9 ac; 4 ha).

(i) These units are critical habitat for *Centaurium sebaeoides*, *Chamaesyce kuwaleana*, *Sesbania tomentosa*, and *Vigna o-wahuensis*.

(ii) Map of Oahu—Coastal—Unit 5 and Oahu—Coastal—Unit 6 (Map 5) follows:

**Map 5**  
**Oahu—Coastal**  
**Unit 5 and Unit 6**

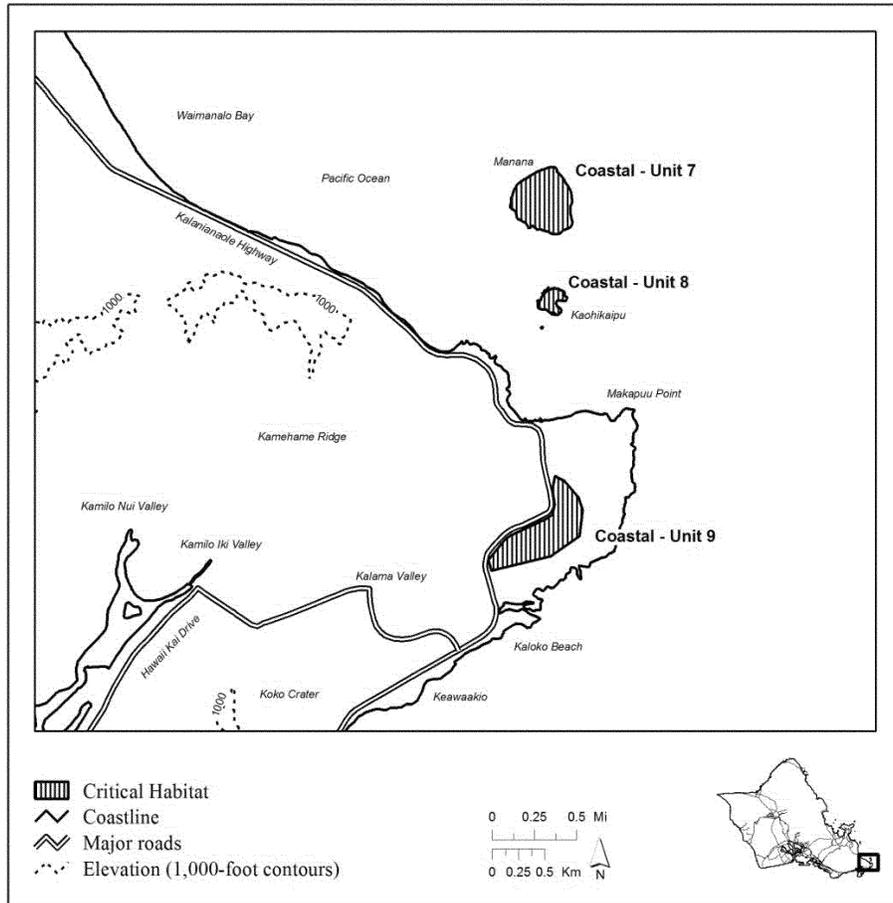


(6) Oahu—Coastal—Unit 7 (67 ac; 27 ha), Oahu—Coastal—Unit 8 (10 ac; 4 ha), and Oahu—Coastal—Unit 9 (80 ac; 33 ha).

(i) These units are critical habitat for, *Centaurium sebaeoides*, *Chamaesyce kuwaleana*, *Sesbania tomentosa*, and *Vigna o-wahuensis*.

(ii) Map of Oahu—Coastal—Unit 7, Oahu—Coastal—Unit 8, and Oahu—Coastal—Unit 9 (Map 6) follows:

**Map 6**  
**Oahu—Coastal**  
**Unit 7, Unit 8 and Unit 9**



(7) Oahu—Coastal—Unit 10 (74 ac; 30 ha), Oahu—Coastal—Unit 11 (20 ac; 8 ha), and Oahu—Coastal—Unit 12 (11 ac; 5 ha).

(i) Oahu—Coastal—Unit 10 is critical habitat for *Centaurium sebaeoides*,

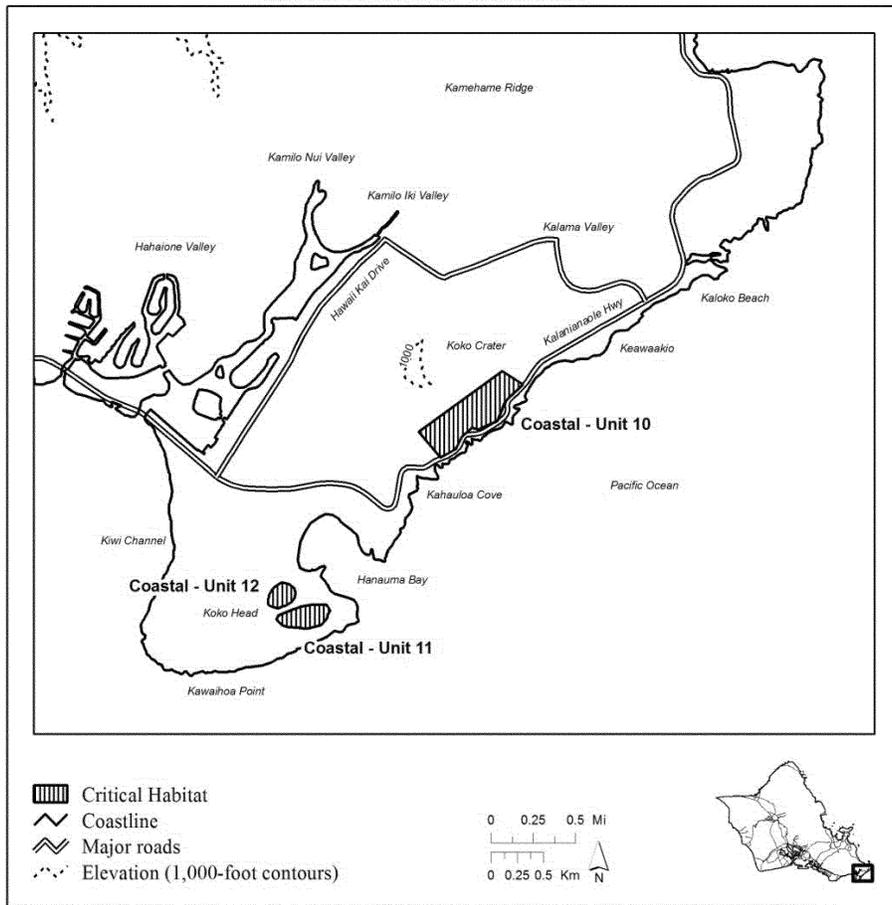
*Chamaesyce kuwaleana*, *Sesbania tomentosa*, and *Vigna o-wahuensis*.

(ii) Oahu—Coastal—Unit 11 and Oahu—Coastal—Unit 12 are critical habitat for *Centaurium sebaeoides*, *Chamaesyce kuwaleana*, *Cyperus*

*trachyanthos*, *Marsilea villosa*, *Sesbania tomentosa*, and *Vigna o-wahuensis*.

(iii) Map of Oahu—Coastal—Unit 10, Oahu—Coastal—Unit 11, and Oahu—Coastal—Unit 12 (Map 7) follows:

**Map 7**  
**Oahu—Coastal**  
**Unit 10, Unit 11 and Unit 12**



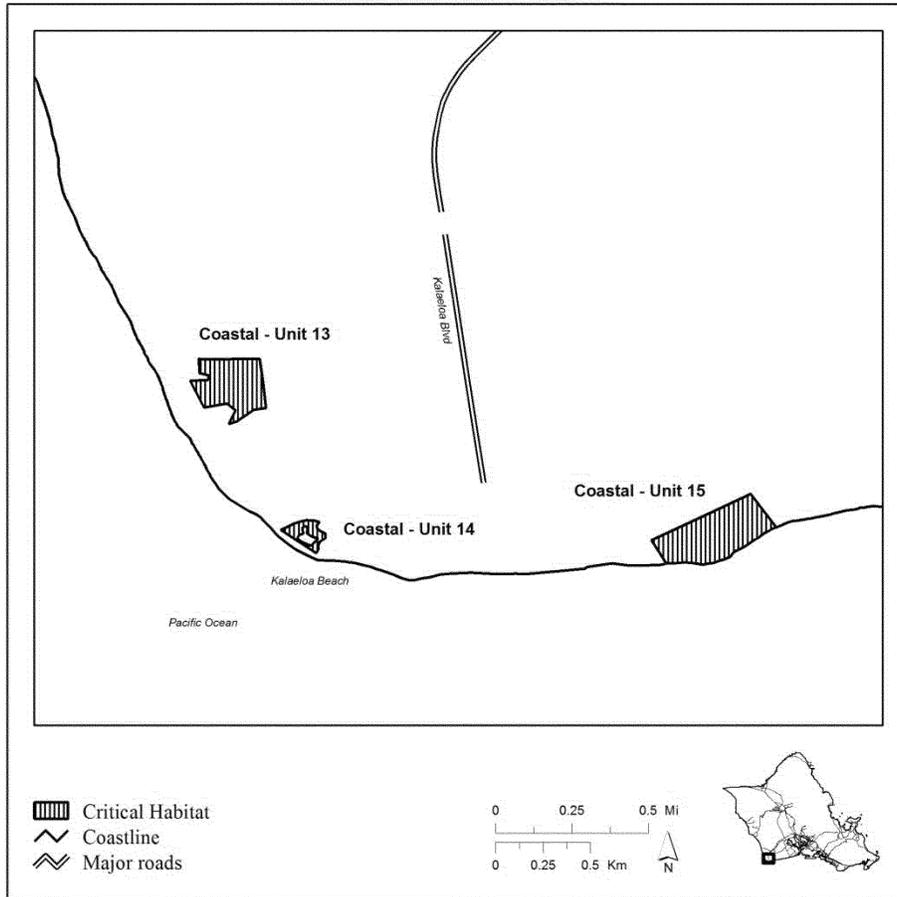
(8) Oahu—Coastal—Unit 13 (23 ac; 10 ha), Oahu—Coastal—Unit 14 (4 ac; 2 ha), and Oahu—Coastal—Unit 15 (33 ac; 13 ha).

(i) These units are critical habitat for *Achyranthes splendens* var. *rotundata*, *Bidens amplexans*, *Centaurium sebaeoides*, *Chamaesyce celastroides* var. *kaenana*, *Schiedea kealiae*,

*Sesbania tomentosa*, and *Vigna owahuensis*.

(ii) Map of Oahu—Coastal—Unit 13, Oahu—Coastal—Unit 14, and Oahu—Coastal—Unit 15 (Map 8) follows:

**Map 8**  
**Oahu—Coastal**  
**Unit 13, Unit 14 and Unit 15**



(9) Oahu—Lowland Dry—Unit 1 (102 ac; 41 ha) and Oahu—Lowland Dry—Unit 2 (29 ac; 12).

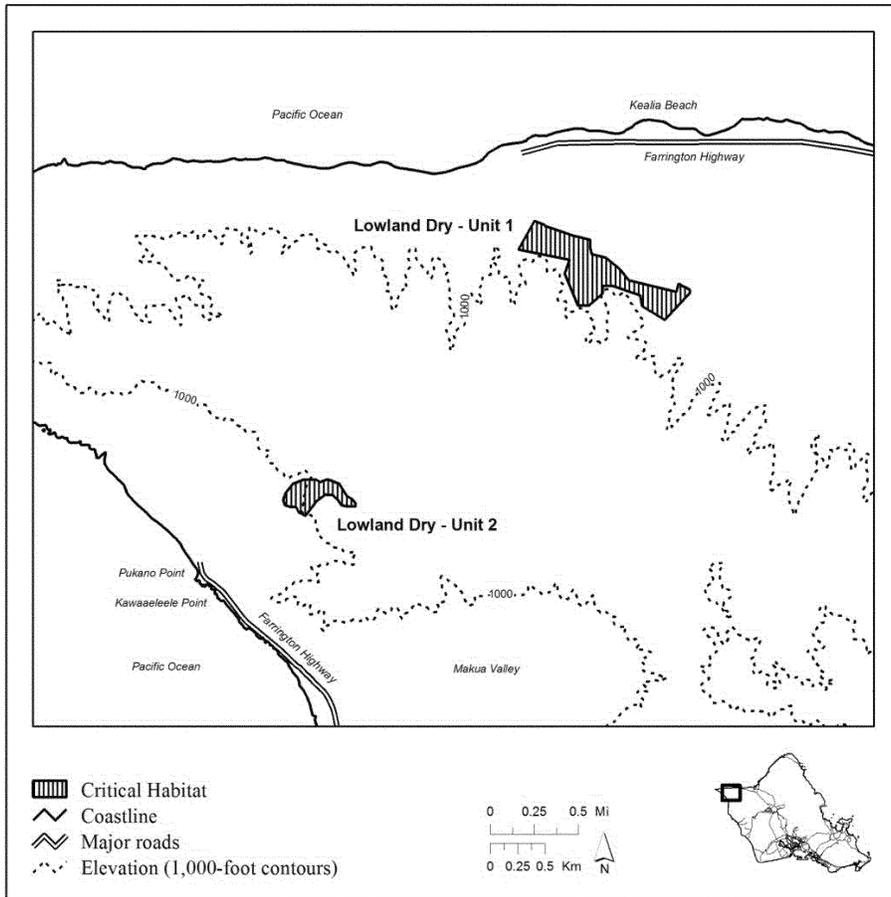
(i) These units are critical habitat for *Achyranthes splendens* var. *rotundata*, *Bidens amplexans*, *Bonamia menziesii*,

*Chamaesyce celastroides* var. *kaenana*, *Euphorbia haeleleana*, *Gouania meyenii*, *Gouania vitifolia*, *Hibiscus brackenridgei*, *Isodendron pyriformum*, *Melanthera tenuifolia*, *Neraudia angulata*, *Nototrichium humile*,

*Pleomele forbesii*, *Schiedea hookeri*, *Schiedea kealiae*, and *Spermolepis hawaiiensis*.

(ii) Map of Oahu—Lowland Dry—Unit 1 and Oahu—Lowland Dry—Unit 2 (Map 9) follows:

**Map 9**  
**Oahu—Lowland Dry**  
**Unit 1 and Unit 2**



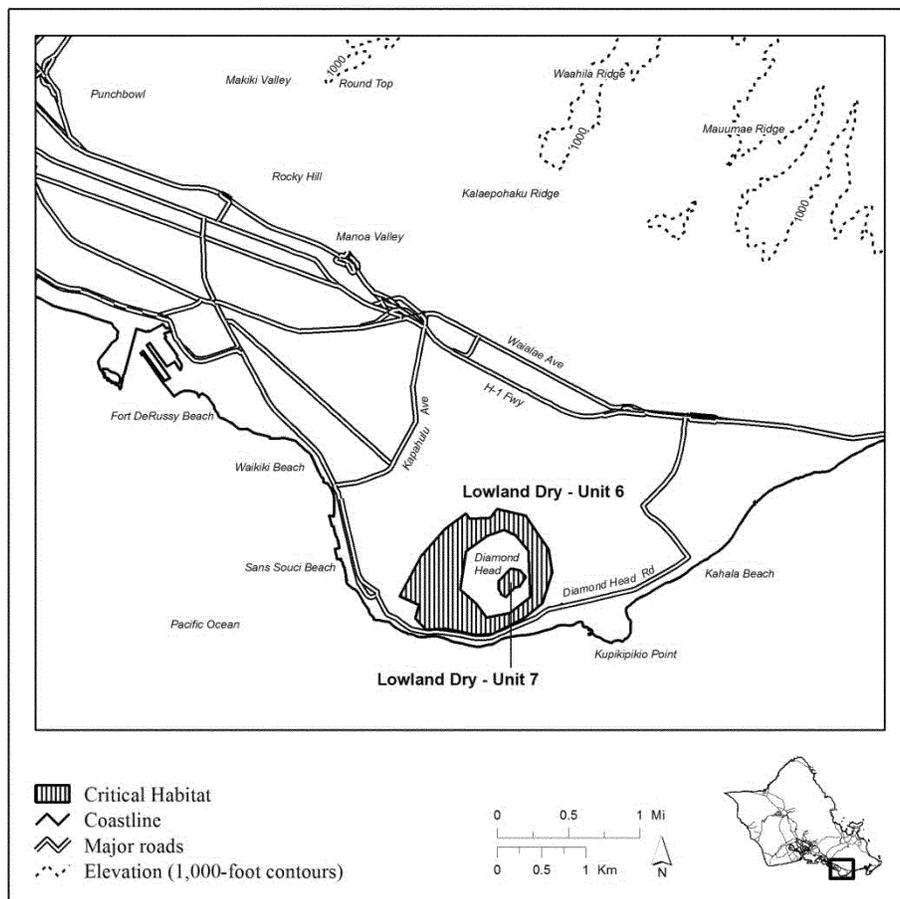
(10) [Reserved]  
 (11) Oahu—Lowland Dry—Unit 6 (287 ac; 116 ha) and Oahu—Lowland Dry—Unit 7 (15 ac; 6 ha).  
 (i) Oahu—Lowland Dry—Unit 6 is critical habitat for *Doryopteris takeuchii*,

*Gouania meyenii*, and *Spermolepis hawaiiensis*.  
 (ii) Oahu—Lowland Dry—Unit 7 is critical habitat for *Cyperus trachysanthos*, *Doryopteris takeuchii*,

*Gouania meyenii*, *Marsilea villosa*, and *Spermolepis hawaiiensis*.

(iii) Map of Oahu—Lowland Dry—Unit 6 and Oahu—Lowland Dry—Unit 7 (Map 10) follows:

**Map 10**  
**Oahu—Lowland Dry**  
**Unit 6 and Unit 7**



(12) Oahu—Lowland Dry—Unit 8 (99 ac; 40 ha), Oahu—Lowland Dry—Unit 9 (37 ac; 15 ha), Oahu—Lowland Dry—Unit 10 (43 ac; 17 ha), and Oahu—Lowland Dry—Unit 11 (166 ac; 67 ha).

(i) These units are critical habitat for *Achyranthes splendens* var. *rotundata*, *Bidens amplexans*, *Bonamia menziesii*,

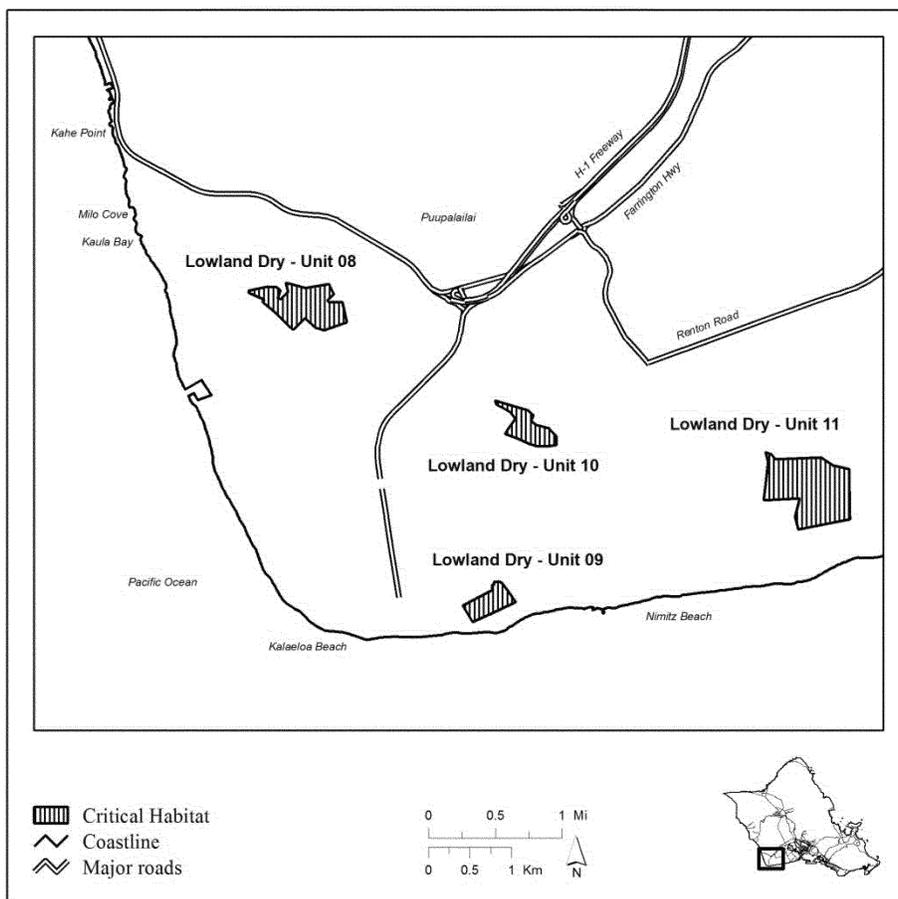
*Chamaesyce celastroides* var. *kaenana*, *Chamaesyce skottsbergii* var. *skottsbergii*, *Euphorbia haeleleana*, *Gouania meyenii*, *Gouania vitifolia*, *Hibiscus brackenridgei*, *Isodendron pyriforme*, *Melanthera tenuifolia*, *Neraudia angulata*, *Nototrichum*

*humile*, *Schiedea hookeri*, *Schiedea kealiae*, and *Spermolepis hawaiiensis*.

(ii) Map of Oahu—Lowland Dry—Unit 8, Oahu—Lowland Dry—Unit 9, Oahu—Lowland Dry—Unit 10, and Oahu—Lowland Dry—Unit 11 (Map 11) follows:

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**Map 11**  
**Oahu—Lowland Dry**  
**Unit 8, Unit 9, Unit 10 and Unit 11**



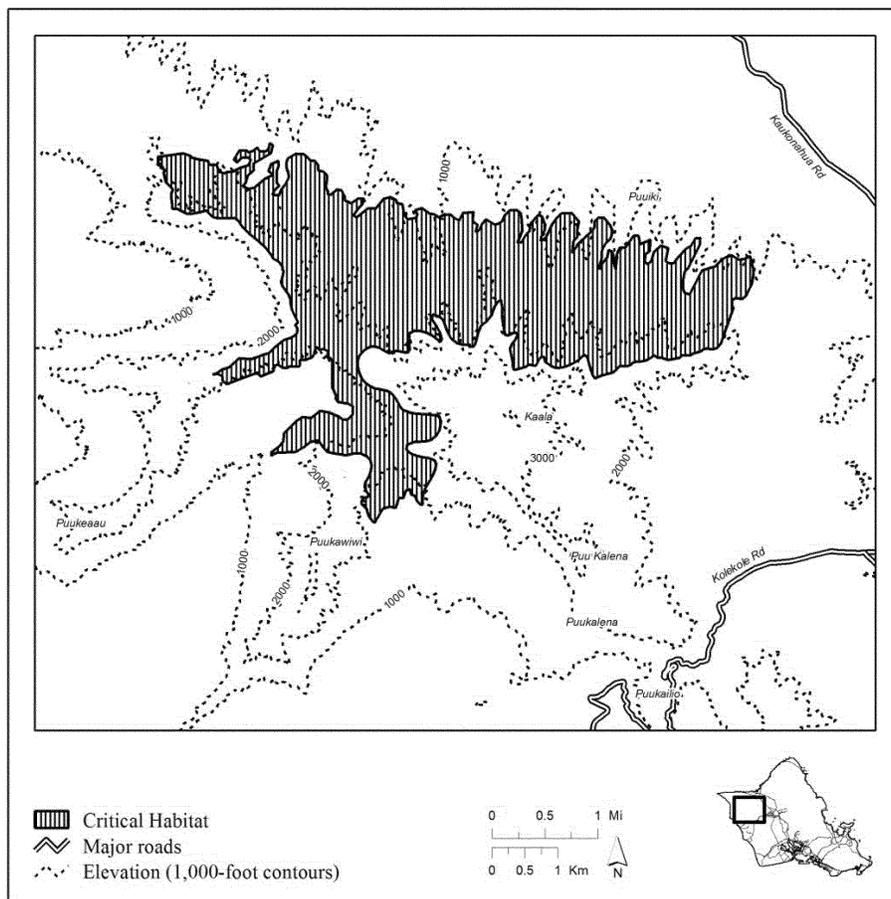
(13) Oahu—Lowland Mesic—Unit 1 (4,448 ac; 1,800 ha).

(i) This unit is critical habitat for *Abutilon sandwicense*, *Alectryon macrococcus*, *Bonamia menziesii*, *Cenchrus agrimonioides*, *Chamaesyce celastroides* var. *kaenana*, *Chamaesyce herbstii*, *Colubrina oppositifolia*, *Ctenitis squamigera*, *Cyanea acuminata*, *Cyanea calycina*, *Cyanea grimesiana* ssp. *grimesiana*, *Cyanea grimesiana* ssp. *obatae*, *Cyanea longiflora*, *Cyanea pinnatifida*, *Cyanea superba*, *Cyperus pennatifolius*, *Cyrtandra dentata*, *Delissea subcordata*, *Diellia falcata*, *Diellia unisora*, *Diplazium molokaiense*,

*Dubautia herbstobatae*, *Eragrostis fosbergii*, *Eugenia koolauensis*, *Euphorbia haeleeleana*, *Flueggea neowawraea*, *Gardenia mannii*, *Gouania meyenii*, *Gouania vitifolia*, *Hesperomannia arborescens*, *Hesperomannia arbuscula*, *Hibiscus brackenridgei*, *Isodendron laurifolium*, *Isodendron longifolium*, *Kadua coriacea*, *Kadua degeneri*, *Kadua parvula*, *Labordia cyrtandrae*, *Lobelia niihauensis*, *Melanthera tenuifolia*, *Melicope makahae*, *Melicope pallida*, *Melicope saint-johnii*, *Neraudia angulata*, *Nototrichium humile*, *Phyllostegia hirsuta*, *Phyllostegia*

*kaalaensis*, *Phyllostegia mollis*, *Phyllostegia parviflora* var. *lydgatei*, *Plantago princeps* var. *princeps*, *Platydesma cornuta* var. *decurrens*, *Pleomele forbesii*, *Pteralyxia macrocarpa*, *Sanicula mariversa*, *Schiedea hookeri*, *Schiedea kaalae*, *Schiedea nuttallii*, *Schiedea obovata*, *Silene perlmanni*, *Solanum sandwicense*, *Stenogyne kanehoana*, *Tetramolopium lepidotum* ssp. *lepidotum*, *Urera kaalae*, and *Viola chamissoniana* ssp. *chamissoniana*. Map of Oahu—Lowland Mesic—Unit 1 (Map 12) follows:

**Map 12**  
**Oahu—Lowland Mesic**  
**Unit 1**



(14) Oahu—Lowland Mesic—Unit 2  
 (1,063 ac; 430 ha).

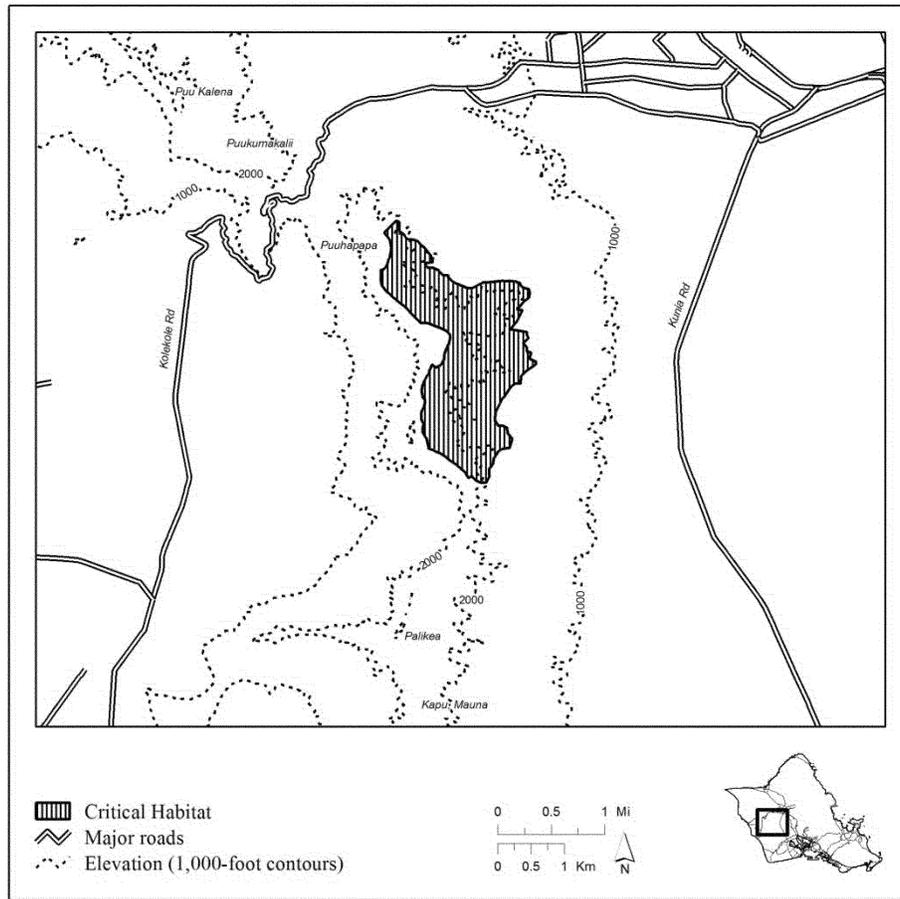
(i) This unit is critical habitat for *Abutilon sandwicense*, *Alectryon macrococcus*, *Bonamia menziesii*, *Cenchrus agrimonioides*, *Chamaesyce celastroides* var. *kaenana*, *Chamaesyce herbstii*, *Colubrina oppositifolia*, *Ctenitis squamigera*, *Cyanea acuminata*, *Cyanea calycina*, *Cyanea grimesiana* ssp. *grimesiana*, *Cyanea grimesiana* ssp. *obatae*, *Cyanea longiflora*, *Cyanea pinnatifida*, *Cyanea superba*, *Cyperus pennatifolius*, *Cyrtandra dentata*, *Delissea subcordata*, *Diellia falcata*, *Diellia unisora*, *Diplazium molokaiense*,

*Dubautia herbstobatae*, *Eragrostis fosbergii*, *Eugenia koolauensis*, *Euphorbia haeleleana*, *Flueggea neowawraea*, *Gardenia mannii*, *Gouania meyenii*, *Gouania vitifolia*, *Hesperomannia arborescens*, *Hesperomannia arbuscula*, *Hibiscus brackenridgei*, *Isodendron laurifolium*, *Isodendron longifolium*, *Kadua coriacea*, *Kadua degeneri*, *Kadua parvula*, *Labordia cyrtandrae*, *Lobelia niihauensis*, *Melanthera tenuifolia*, *Melicope makahae*, *Melicope pallida*, *Melicope saint-johnii*, *Neraudia angulata*, *Nototrichium humile*, *Phyllostegia hirsuta*, *Phyllostegia*

*kaalaensis*, *Phyllostegia mollis*, *Phyllostegia parviflora* var. *lydgatei*, *Plantago princeps* var. *princeps*, *Platydesma cornuta* var. *decurrens*, *Pleomele forbesii*, *Pteralyxia macrocarpa*, *Sanicula mariversa*, *Schiedea hookeri*, *Schiedea kaalae*, *Schiedea nuttallii*, *Schiedea obovata*, *Silene perlmanii*, *Solanum sandwicense*, *Stenogyne kanehoana*, *Tetramolopium lepidotum* ssp. *lepidotum*, *Urera kaalae*, and *Viola chamissoniana* ssp. *chamissoniana*.

(ii) Map of Oahu—Lowland Mesic—Unit 2 (Map 13) follows:

**Map 13**  
**Oahu—Lowland Mesic**  
**Unit 2**



(15) Oahu—Lowland Mesic—Unit 3 (353 ac; 143 ha).

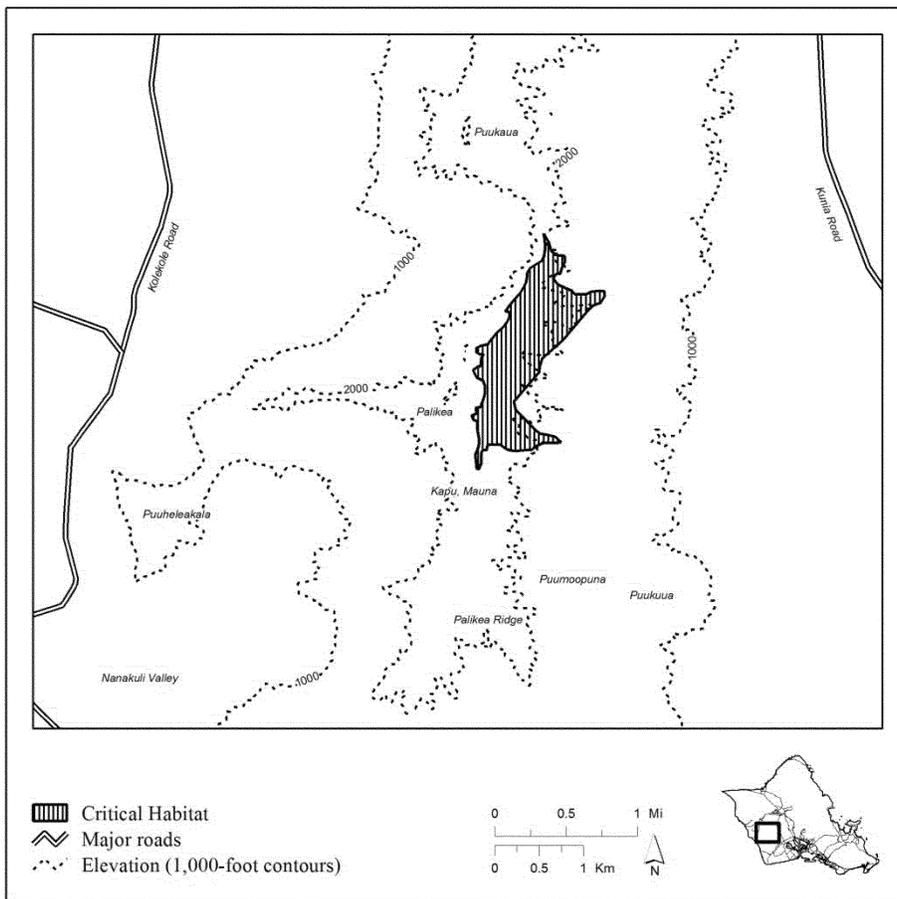
(i) This unit is critical habitat for *Abutilon sandwicense*, *Alectryon macrococcus*, *Bonamia menziesii*, *Cenchrus agrimonioides*, *Chamaesyce celastroides* var. *kaenana*, *Chamaesyce herbstii*, *Colubrina oppositifolia*, *Ctenitis squamigera*, *Cyanea acuminata*, *Cyanea calycina*, *Cyanea grimesiana* ssp. *grimesiana*, *Cyanea grimesiana* ssp. *obatae*, *Cyanea longiflora*, *Cyanea pinnatifida*, *Cyanea superba*, *Cyperus pennatifolius*, *Cyrtandra dentata*, *Delissea subcordata*, *Diellia falcata*, *Diellia unisora*, *Diplazium molokaiense*,

*Dubautia herbstobatae*, *Eragrostis fosbergii*, *Eugenia koolauensis*, *Euphorbia haeleleana*, *Flueggea neowawraea*, *Gardenia mannii*, *Gouania meyenii*, *Gouania vitifolia*, *Hesperomannia arborescens*, *Hesperomannia arbuscula*, *Hibiscus brackenridgei*, *Isodendron longifolium*, *Kadua coriacea*, *Kadua degeneri*, *Kadua parvula*, *Labordia cyrtandrae*, *Lobelia niuhauensis*, *Melanthera tenuifolia*, *Melicope makahae*, *Melicope pallida*, *Melicope saint-johnii*, *Neraudia angulata*, *Nototrichium humile*, *Phyllostegia hirsuta*, *Phyllostegia kaalaensis*, *Phyllostegia mollis*,

*Phyllostegia parviflora* var. *lydgatei*, *Plantago princeps* var. *princeps*, *Platydesma cornuta* var. *decurrens*, *Pleomele forbesii*, *Pteralyxia macrocarpa*, *Sanicula mariversa*, *Schiedea hookeri*, *Schiedea kaalae*, *Schiedea nuttallii*, *Schiedea obovata*, *Silene perlmannii*, *Solanum sandwicense*, *Stenogyne kanehoana*, *Tetramolopium lepidotum* ssp. *lepidotum*, *Urera kaalae*, and *Viola chamissoniana* ssp. *chamissoniana*.

(ii) Map of Oahu—Lowland Mesic—Unit 3 (Map 14) follows:

**Map 14**  
**Oahu—Lowland Mesic**  
**Unit 3**



(16) Oahu—Lowland Mesic—Unit 4 (20 ac; 8 ha) and Oahu—Lowland Mesic—Unit 5 (29 ac; 12 ha).

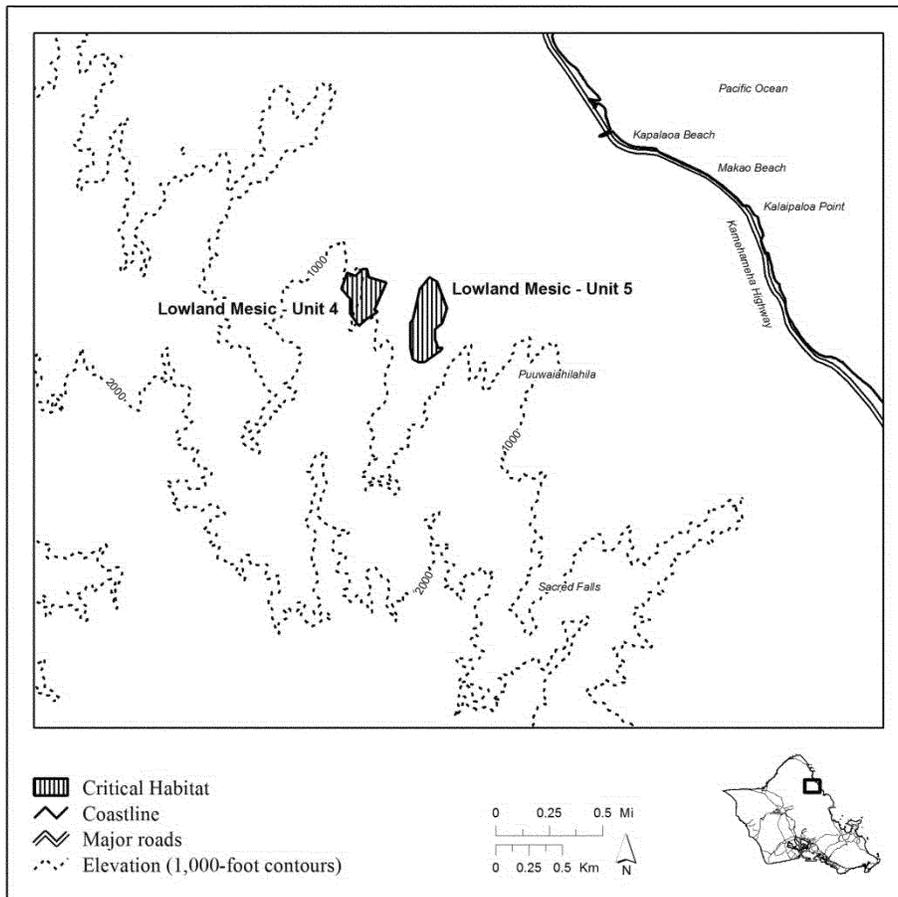
(i) These units are critical habitat for *Alectryon macrococcus*, *Bonamia menziesii*, *Chamaesyce celastroides* var. *kaenana*, *Ctenitis squamigera*, *Cyanea acuminata*, *Cyanea calycina*, *Cyanea crispa*, *Cyanea grimesiana* ssp. *grimesiana*, *Cyanea lanceolata*, *Cyanea*

*longiflora*, *Cyanea truncata*, *Cyrtandra dentata*, *Cyrtandra polyantha*, *Delissea subcordata*, *Diellia erecta*, *Diellia falcata*, *Eugenia koolauensis*, *Gardenia mannii*, *Hesperomannia arborescens*, *Isodendrion laurifolium*, *Isodendrion longifolium*, *Kadua coriacea*, *Labordia cyrtandrae*, *Lobelia monostachya*, *Melicope lydgatei*, *Melicope saint-johnii*, *Phyllostegia hirsuta*, *Phyllostegia*

*mollis*, *Phyllostegia parviflora* var. *parviflora*, *Plantago princeps* var. *princeps*, *Pleomele forbesii*, *Pteralyxia macrocarpa*, *Schiedea kaalae*, *Schiedea nuttallii*, *Solanum sandwicense*, *Tetraplasandra gymnocarpa*, and *Tetraplasandra lydgatei*.

(ii) Map of Oahu—Lowland Mesic—Unit 4 and Oahu—Lowland Mesic—Unit 5 (Map 15) follows:

**Map 15**  
**Oahu—Lowland Mesic**  
**Unit 4 and Unit 5**



(17) Oahu—Lowland Mesic—Unit 6 (247 ac; 100 ha).

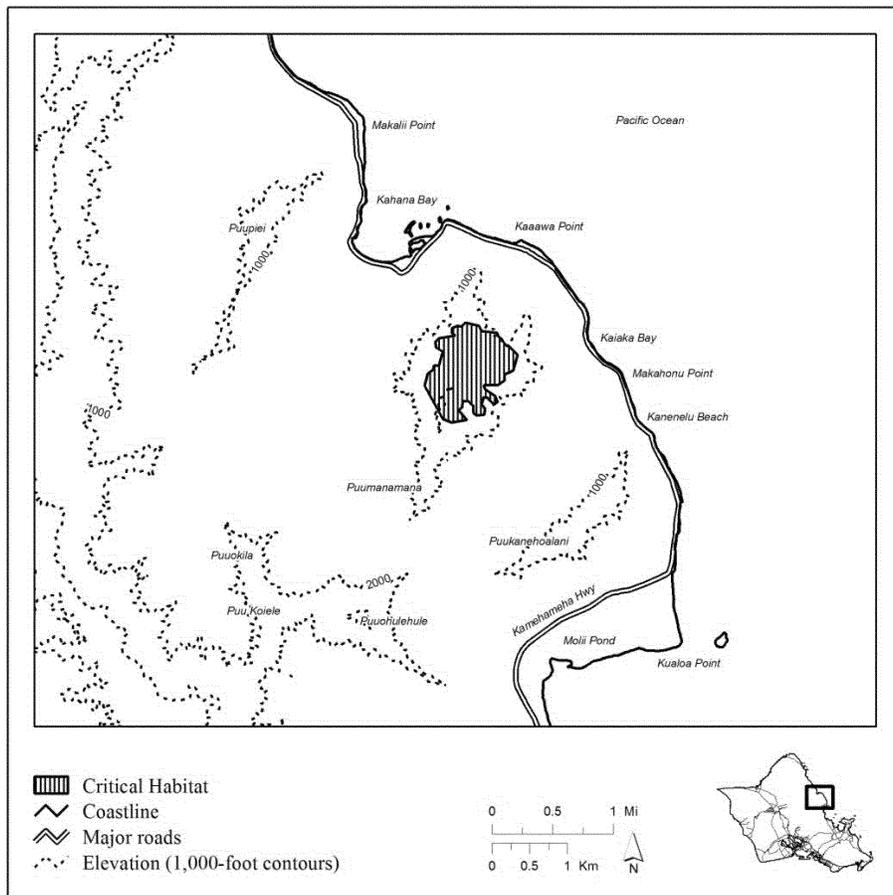
(i) This unit is critical habitat for *Alectryon macrococcus*, *Bonamia menziesii*, *Chamaesyce celastroides* var. *kaenana*, *Ctenitis squamigera*, *Cyanea acuminata*, *Cyanea calycina*, *Cyanea crispa*, *Cyanea grimesiana* ssp. *grimesiana*, *Cyanea lanceolata*, *Cyanea longiflora*, *Cyanea truncata*, *Cyrtandra*

*dentata*, *Cyrtandra polyantha*, *Delissea subcordata*, *Diellia erecta*, *Diellia falcata*, *Eugenia koolauensis*, *Gardenia mannii*, *Hesperomannia arborescens*, *Isodendron laurifolium*, *Isodendron longifolium*, *Kadua coriacea*, *Labordia cyrtandrae*, *Lobelia monostachya*, *Melicope lydgatei*, *Melicope saint-johnii*, *Phyllostegia hirsuta*, *Phyllostegia*

*mollis*, *Phyllostegia parviflora* var. *parviflora*, *Plantago princeps* var. *princeps*, *Pleomele forbesii*, *Pteralyxia macrocarpa*, *Schiedea kaalae*, *Schiedea nuttallii*, *Solanum sandwicense*, *Tetraplasandra gymnocarpa*, and *Tetraplasandra lydgatei*.

(ii) Map of Oahu—Lowland Mesic—Unit 6 (Map 16) follows:

**Map 16**  
**Oahu—Lowland Mesic**  
**Unit 6**



(18) Oahu—Lowland Mesic—Unit 7 (1,669 ac; 676 ha).

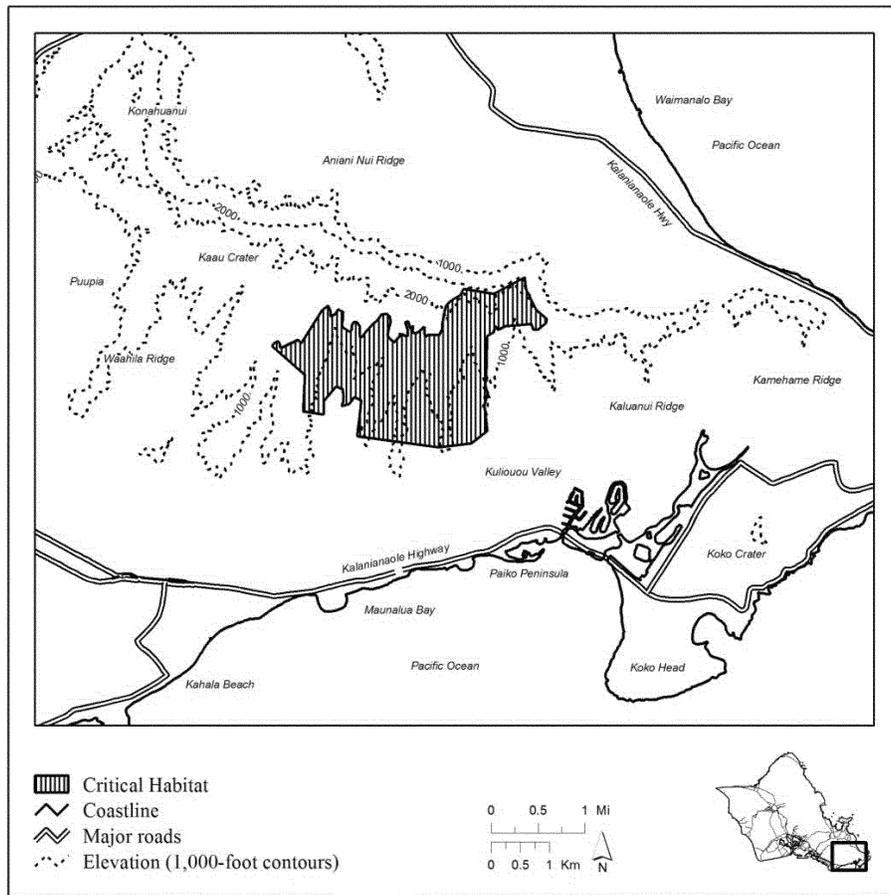
(ii) This unit is critical habitat for *Alectryon macrococcus*, *Bonamia menziesii*, *Chamaesyce celastroides* var. *kaenana*, *Ctenitis squamigera*, *Cyanea acuminata*, *Cyanea calycina*, *Cyanea crispa*, *Cyanea grimesiana* ssp. *grimesiana*, *Cyanea lanceolata*, *Cyanea longiflora*, *Cyanea truncata*, *Cyrtandra*

*dentata*, *Cyrtandra polyantha*, *Delissea subcordata*, *Diellia erecta*, *Diellia falcata*, *Eugenia koolauensis*, *Gardenia mannii*, *Hesperomannia arborescens*, *Isodendron laurifolium*, *Isodendron longifolium*, *Kadua coriacea*, *Labordia cyrtandrae*, *Lobelia monostachya*, *Melicope lydgatei*, *Melicope saint-johnii*, *Phyllostegia hirsuta*, *Phyllostegia*

*mollis*, *Phyllostegia parviflora* var. *parviflora*, *Plantago princeps* var. *princeps*, *Pleomele forbesii*, *Pteralyxia macrocarpa*, *Schiedea kaalae*, *Schiedea nuttallii*, *Solanum sandwicense*, *Tetraplasandra gymnocarpa*, and *Tetraplasandra lydgatei*.

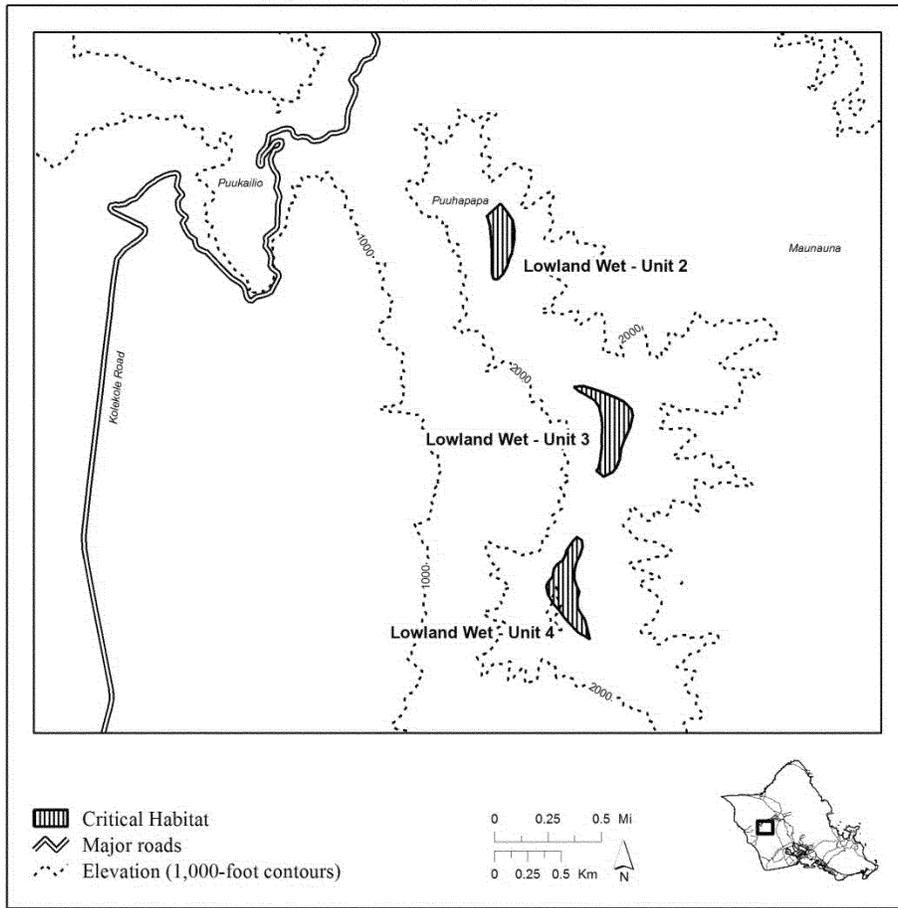
(ii) Map of Oahu—Lowland Mesic—Unit 7 (Map 17) follows:

**Map 17**  
**Oahu—Lowland Mesic**  
**Unit 7**





**Map 19**  
**Oahu—Lowland Wet**  
**Unit 2, Unit 3 and Unit 4**



(21) Oahu—Lowland Wet—Unit 5 (74 ac; 30 ha).

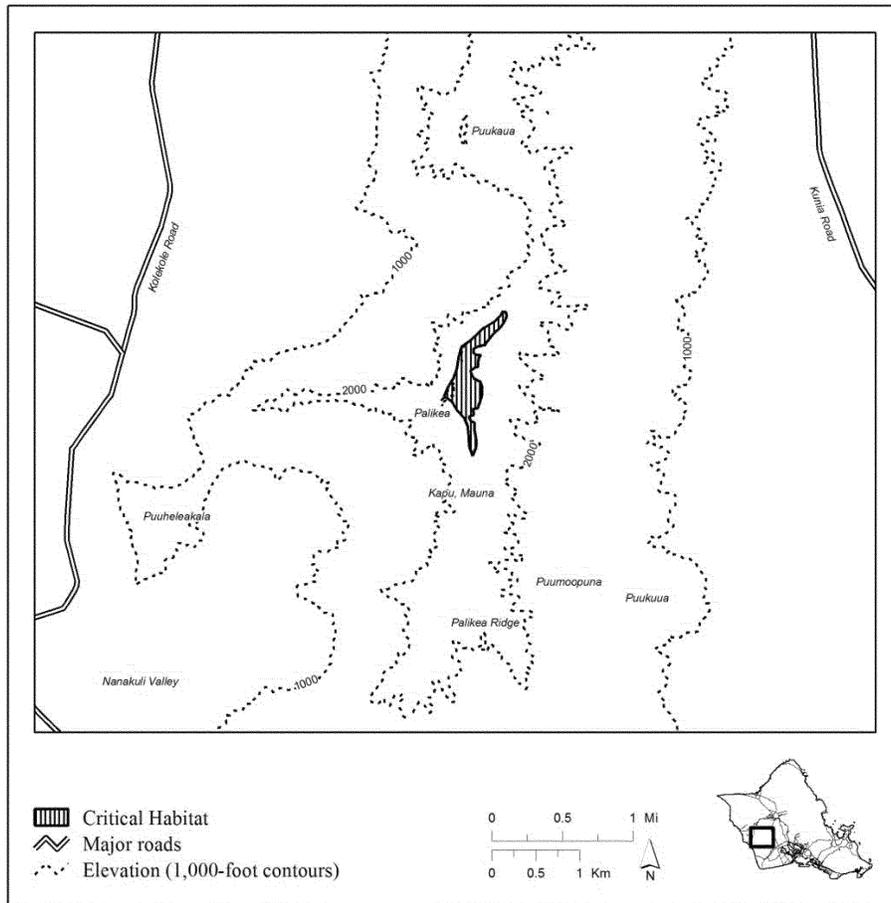
(i) This unit is critical habitat for *Cyanea acuminata*, *Cyanea calycina*, *Cyanea grimesiana* ssp. *grimesiana*, *Cyanea grimesiana* ssp. *obatae*,

*Cyrtandra dentata*, *Diplazium molokaiense*, *Gardenia mannii*, *Gouania vitifolia*, *Hesperomannia arbuscula*, *Isodendron longifolium*, *Labordia cyrtandrae*, *Lobelia oahuensis*, *Phyllostegia hirsuta*, *Phyllostegia mollis*,

*Plantago princeps* var. *princeps*, *Pteralyxia macrocarpa*, *Schiedea hookeri*, *Schiedea kaalae*, and *Urera kaalae*.

(ii) Map of Oahu—Lowland Wet—Unit 5 (Map 20) follows:

**Map 20**  
**Oahu—Lowland Wet**  
**Unit 5**



(22) Oahu—Lowland Wet—Unit 6 (790 ac; 320 ha), Oahu—Lowland Wet—Unit 7 (1,787 ac; 723 ha), and Oahu—Lowland Wet—Unit 8 (3,041 ac; 1,231 ha).

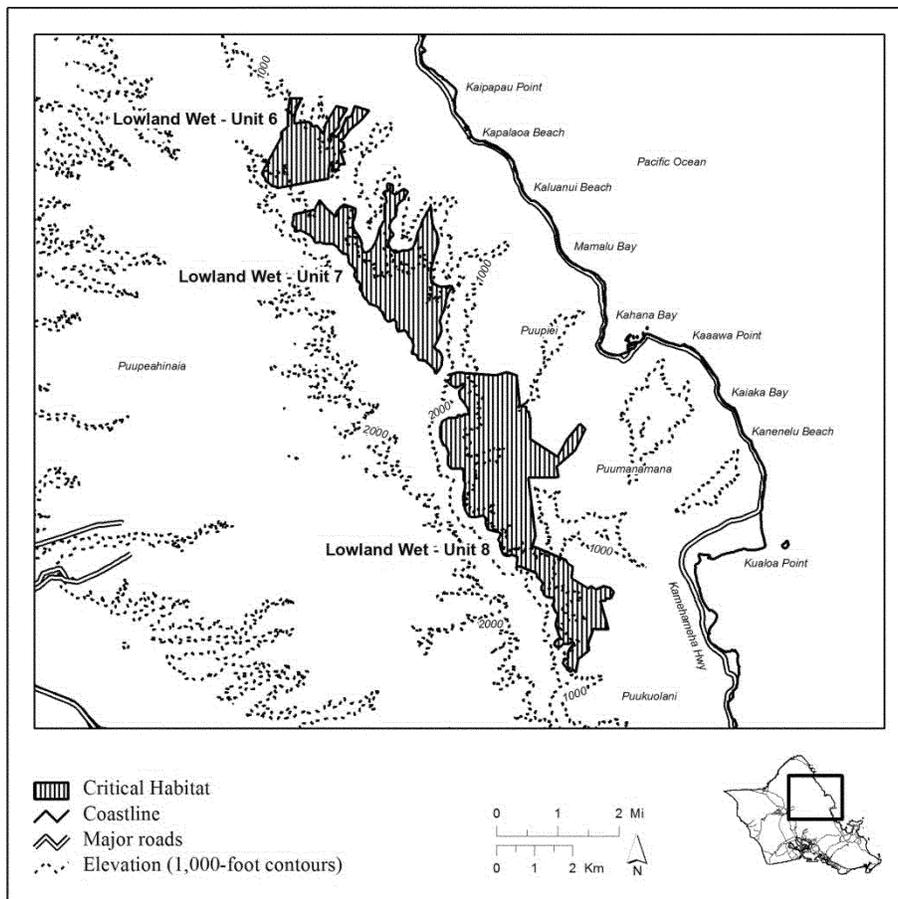
(i) These units are critical habitat for *Adenophorus periens*, *Chamaesyce rockii*, *Cyanea acuminata*, *Cyanea calycina*, *Cyanea crispa*, *Cyanea grimesiana* ssp. *grimesiana*, *Cyanea humboldtiana*, *Cyanea koolauensis*, *Cyanea lanceolata*, *Cyanea purpurellifolia*, *Cyanea st.-johnii*, *Cyanea truncata*, *Cyrtandra dentata*,

*Cyrtandra gracilis*, *Cyrtandra kaulantha*, *Cyrtandra polyantha*, *Cyrtandra sessilis*, *Cyrtandra subumbellata*, *Cyrtandra viridiflora*, *Cyrtandra waiolani*, *Gardenia mannii*, *Hesperomannia arborescens*, *Huperzia nutans*, *Isodendron longifolium*, *Labordia cyrtandrae*, *Lobelia gaudichaudii* ssp. *koolauensis*, *Lobelia oahuensis*, *Melicope hiiakae*, *Melicope lydgatei*, *Myrsine juddii*, *Phyllostegia hirsuta*, *Phyllostegia parviflora* var. *parviflora*, *Plantago princeps* var.

*longibracteata*, *Plantago princeps* var. *princeps*, *Platanthera holochila*, *Platydesma cornuta* var. *cornuta*, *Psychotria hexandra* ssp. *oahuensis*, *Pteralyxia macrocarpa*, *Pteris lidgatei*, *Sanicula purpurea*, *Tetraplasandra gymnocarpa*, *Trematolobelia singularis*, *Viola oahuensis*, and *Zanthoxylum oahuense*.

(ii) Map of Oahu—Lowland Wet—Unit 6, Oahu—Lowland Wet—Unit 7, and Oahu—Lowland Wet—Unit 8 (Map 21) follows:

**Map 21**  
**Oahu—Lowland Wet**  
**Unit 6, Unit 7 and Unit 8**



(23) Oahu—Lowland Wet—Unit 9 (15,728 ac; 6,365 ha).

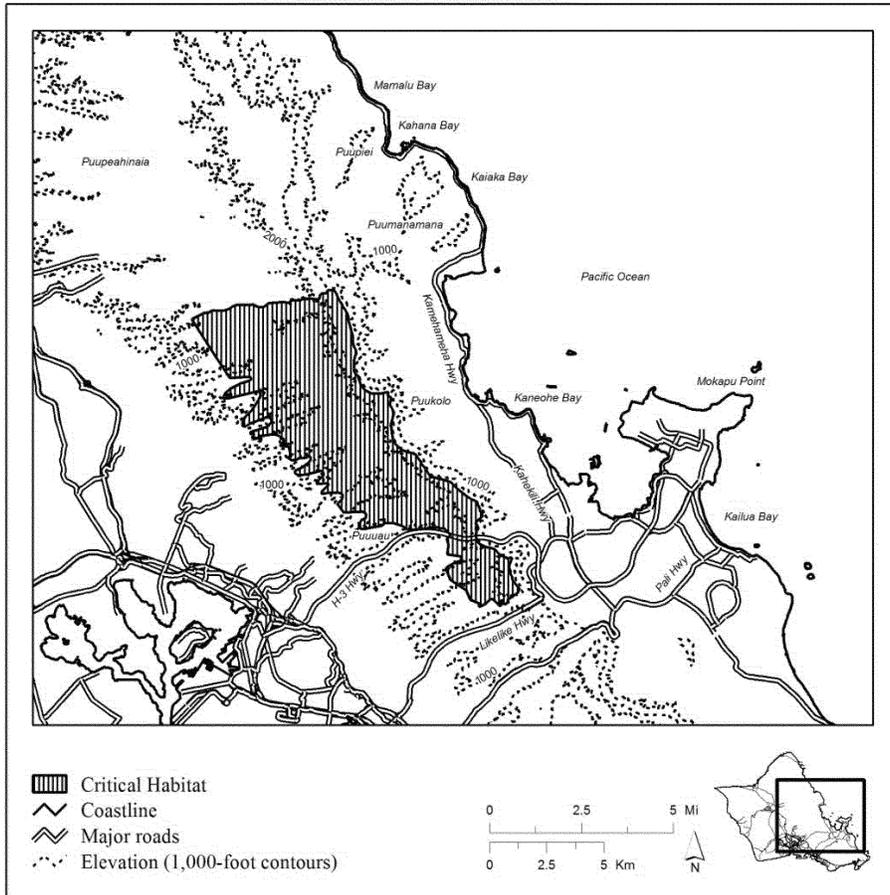
(i) This unit is critical habitat for *Adenophorus periens*, *Chamaesyce rockii*, *Cyanea acuminata*, *Cyanea calycina*, *Cyanea crispa*, *Cyanea grimesiana* ssp. *grimesiana*, *Cyanea humboldtiana*, *Cyanea koolauensis*, *Cyanea lanceolata*, *Cyanea purpurellifolia*, *Cyanea st.-johnii*, *Cyanea truncata*, *Cyrtandra dentata*, *Cyrtandra gracilis*, *Cyrtandra*

*kaulantha*, *Cyrtandra polyantha*, *Cyrtandra sessilis*, *Cyrtandra subumbellata*, *Cyrtandra viridiflora*, *Cyrtandra waiolani*, *Gardenia mannii*, *Hesperomannia arborescens*, *Huperzia nutans*, *Isodendron longifolium*, *Labordia cyrtandrae*, *Lobelia gaudichaudii* ssp. *koolauensis*, *Lobelia oahuensis*, *Melicope hiiakae*, *Melicope lydgatei*, *Myrsine juddii*, *Phyllostegia hirsuta*, *Phyllostegia parviflora* var. *parviflora*, *Plantago princeps* var.

*longibracteata*, *Plantago princeps* var. *princeps*, *Platanthera holochila*, *Platydesma cornuta* var. *cornuta*, *Psychotria hexandra* ssp. *oahuensis*, *Pteralyxia macrocarpa*, *Pteris lidgatei*, *Sanicula purpurea*, *Tetraplasandra gymnocarpa*, *Trematolobelia singularis*, *Viola oahuensis*, and *Zanthoxylum oahuense*.

(ii) Map of Oahu—Lowland Wet—Unit 9 (Map 22) follows:

**Map 22**  
**Oahu—Lowland Wet**  
**Unit 9**



(24) Oahu—Lowland Wet—Unit 10 (124 ac; 50 ha), Oahu—Lowland Wet—Unit 11 (124 ac; 50 ha), and Oahu—Lowland Wet—Unit 12 (53 ac; 21 ha).

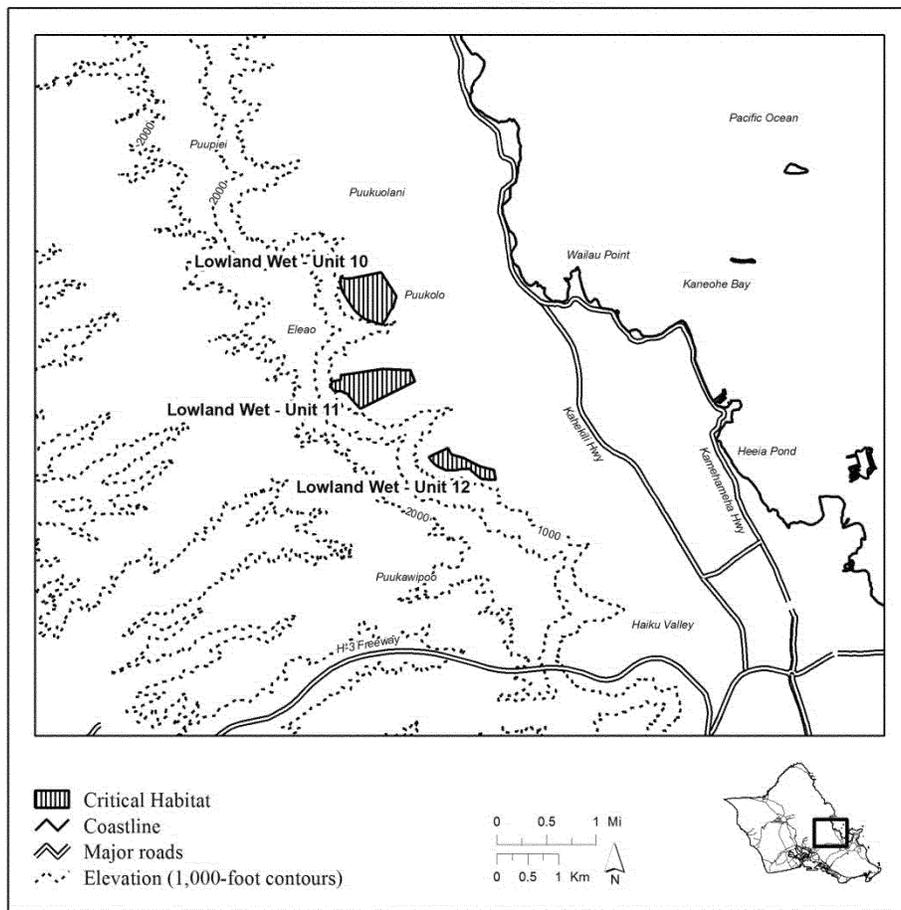
(i) These units are critical habitat for *Adenophorus periens*, *Chamaesyce rockii*, *Cyanea acuminata*, *Cyanea calycina*, *Cyanea crispa*, *Cyanea grimesiana* ssp. *grimesiana*, *Cyanea humboldtiana*, *Cyanea koolauensis*, *Cyanea lanceolata*, *Cyanea purpurellifolia*, *Cyanea st.-johnii*, *Cyanea truncata*, *Cyrtandra dentata*,

*Cyrtandra gracilis*, *Cyrtandra kaulantha*, *Cyrtandra polyantha*, *Cyrtandra sessilis*, *Cyrtandra subumbellata*, *Cyrtandra viridiflora*, *Cyrtandra waiolani*, *Gardenia mannii*, *Hesperomannia arborescens*, *Huperzia nutans*, *Isodendron longifolium*, *Labordia cyrtandrae*, *Lobelia gaudichaudii* ssp. *koolauensis*, *Lobelia oahuensis*, *Melicope hiiakae*, *Melicope lydgatei*, *Myrsine juddii*, *Phyllostegia hirsuta*, *Phyllostegia parviflora* var. *parviflora*, *Plantago princeps* var.

*longibracteata*, *Plantago princeps* var. *princeps*, *Platanthera holochila*, *Platydesma cornuta* var. *cornuta*, *Psychotria hexandra* ssp. *oahuensis*, *Pteralyxia macrocarpa*, *Pteris lidgatei*, *Sanicula purpurea*, *Tetraplasandra gymnocarpa*, *Trematolobelia singularis*, *Viola oahuensis*, and *Zanthoxylum oahuense*.

(ii) Map of Oahu—Lowland Wet—Unit 10, Oahu—Lowland Wet—Unit 11, and Oahu—Lowland Wet—Unit 12 (Map 23) follows:

**Map 23**  
**Oahu—Lowland Wet**  
**Unit 10, Unit 11 and Unit 12**



(25) Oahu—Lowland Wet—Unit 13 (75 ac; 30 ha), Oahu—Lowland Wet—Unit 14 (478 ac; 193 ha), Oahu—Lowland Wet—Unit 15 (407 ac; 165 ha), and Oahu—Lowland Wet—Unit 16 (2,507 ac; 1,014 ha).

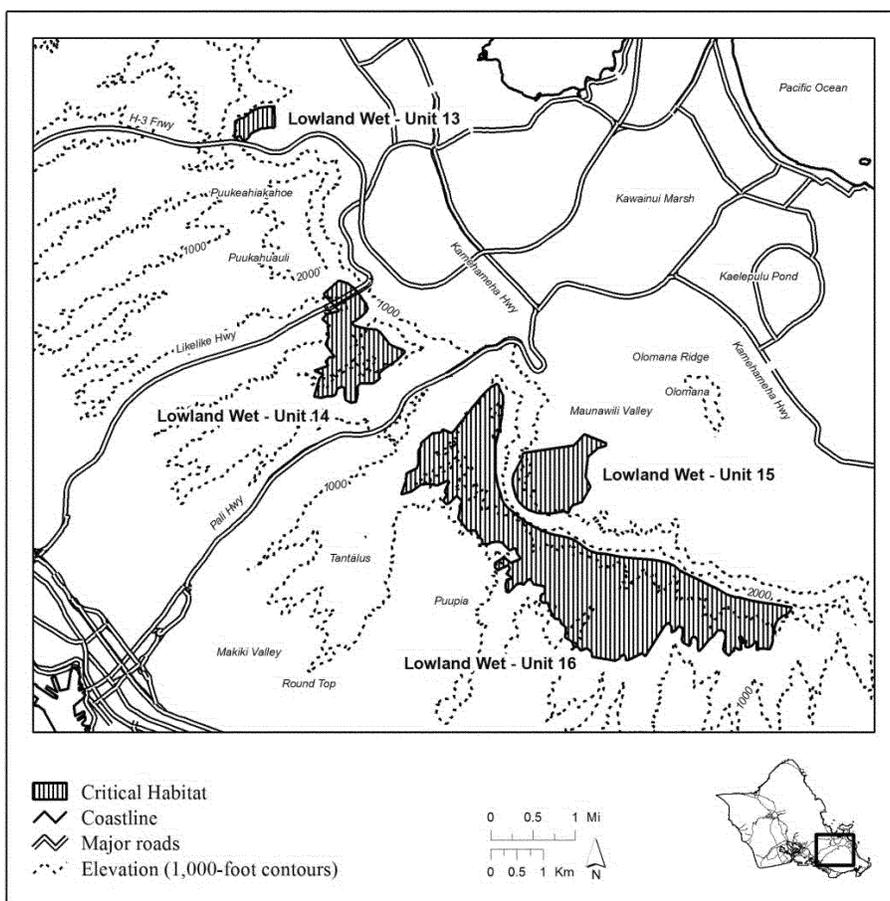
(i) These units are critical habitat for *Adenophorus periens*, *Chamaesyce rockii*, *Cyanea acuminata*, *Cyanea calycina*, *Cyanea crispa*, *Cyanea grimesiana* ssp. *grimesiana*, *Cyanea humboldtiana*, *Cyanea koolauensis*, *Cyanea lanceolata*, *Cyanea purpurellifolia*, *Cyanea st.-johnii*,

*Cyanea truncata*, *Cyrtandra dentata*, *Cyrtandra gracilis*, *Cyrtandra kaulantha*, *Cyrtandra polyantha*, *Cyrtandra sessilis*, *Cyrtandra subumbellata*, *Cyrtandra viridiflora*, *Cyrtandra waiolani*, *Gardenia mannii*, *Hesperomannia arborescens*, *Huperzia nutans*, *Isodendron longifolium*, *Labordia cyrtandrae*, *Lobelia gaudichaudii* ssp. *koolauensis*, *Lobelia oahuensis*, *Melicope hiiakae*, *Melicope lydgatei*, *Myrsine juddii*, *Phyllostegia hirsuta*, *Phyllostegia parviflora* var. *parviflora*, *Plantago princeps* var.

*longibracteata*, *Plantago princeps* var. *princeps*, *Platanthera holochila*, *Platydesma cornuta* var. *cornuta*, *Psychotria hexandra* ssp. *oahuensis*, *Pteralyxia macrocarpa*, *Pteris lidgatei*, *Sanicula purpurea*, *Tetraplasandra gymnocarpa*, *Trematolobelia singularis*, *Viola oahuensis*, and *Zanthoxylum oahuense*.

(ii) Map of Oahu—Lowland Wet—Unit 13, Oahu—Lowland Wet—Unit 14, Oahu—Lowland Wet—Unit 15, and Oahu—Lowland Wet—Unit 16 (Map 24) follows:

**Map 24**  
**Oahu—Lowland Wet**  
**Unit 13, Unit 14, Unit 15 and Unit 16**



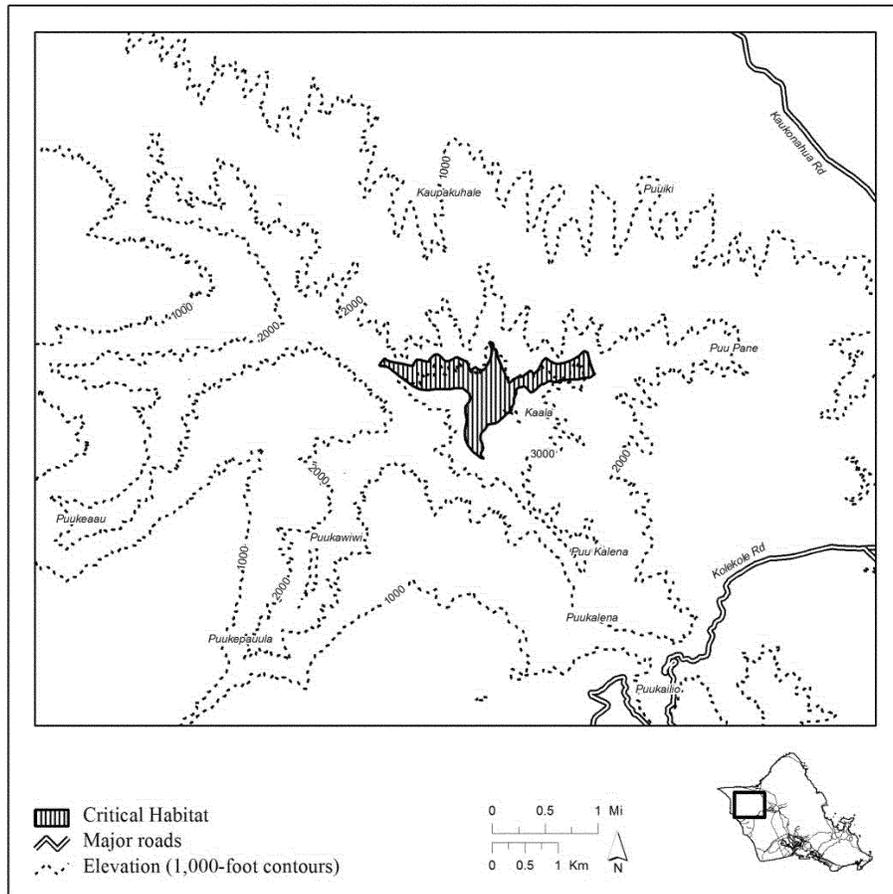
(26) Oahu—Montane Wet—Unit 1 (370 ac; 150 ha).

(i) This unit is critical habitat for *Alectryon macrococcus*, *Cyanea*

*acuminata*, *Cyanea calycina*, *Labordia cyrtandrae*, *Lobelia oahuensis*, *Melicope christophersenii*, *Phyllostegia hirsuta*, and *Schiedea trinervis*.

(ii) Map of Oahu—Montane Wet—Unit 1 (Map 25) follows:

**Map 25**  
**Oahu—Montane Wet**  
**Unit 1**



(27) Oahu—Dry Cliff—Unit 1 (49 ac; 20 ha), Oahu—Dry Cliff—Unit 2 (412 ac; 167 ha), and Oahu—Dry Cliff—Unit 3 (450 ac; 182 ha).

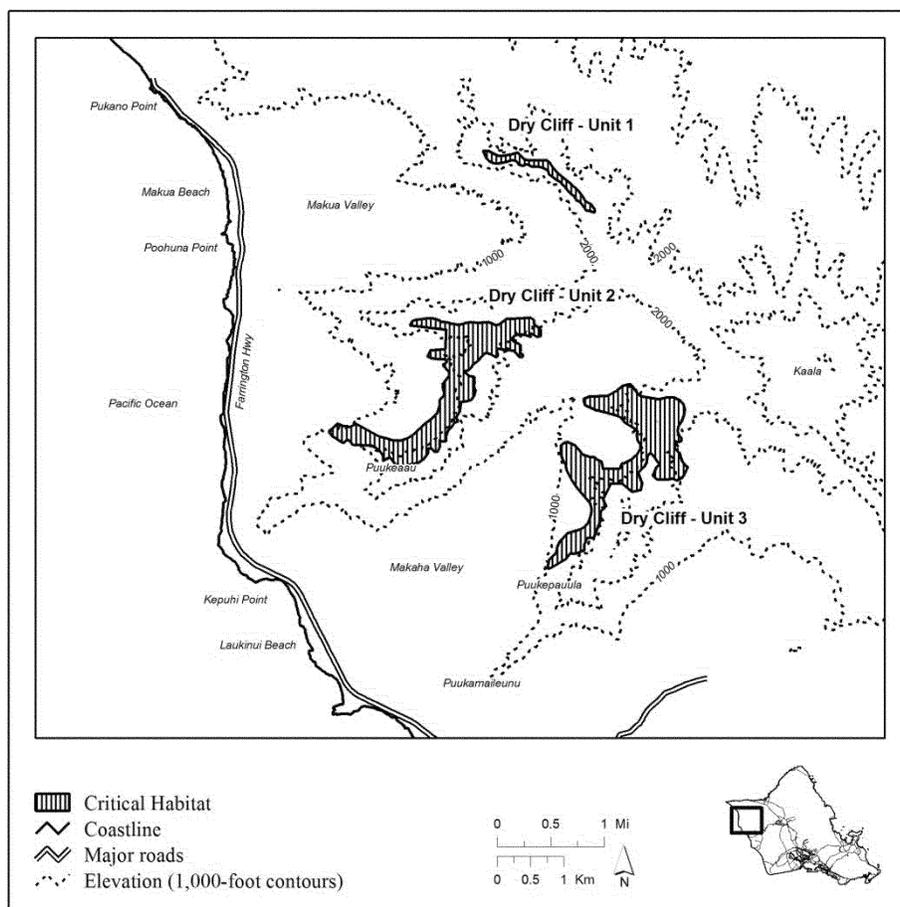
(i) These units are critical habitat for *Abutilon sandwicense*, *Achyranthes splendens* var. *rotundata*, *Alectryon macrococcus*, *Bonamia menziesii*, *Cenchrus agrimonioides*, *Chamaesyce herbstii*, *Chamaesyce kuwaleana*, *Cyanea grimesiana* ssp. *obatae*, *Cyrtandra dentata*, *Diellia falcata*, *Diellia unisora*, *Dubautia herbstobatae*,

*Eragrostis fosbergii*, *Flueggea neowawraea*, *Gouania meyenii*, *Gouania vitifolia*, *Isodendron laurifolium*, *Isodendron pyriformium*, *Kadua degeneri*, *Kadua parvula*, *Korthalsella degeneri*, *Lepidium arbuscula*, *Lipochaeta lobata* var. *leptophylla*, *Lobelia niihauensis*, *Melanthera tenuifolia*, *Melicope makahae*, *Melicope saint-johnii*, *Neraudia angulata*, *Nototrichium humile*, *Peucedanum sandwicense*, *Phyllostegia kaalaensis*, *Plantago princeps* var. *princeps*,

*Platydesma cornuta* var. *decurrens*, *Pleomele forbesii*, *Pteralyxia macrocarpa*, *Sanicula mariversa*, *Schiedea hookeri*, *Schiedea obovata*, *Schiedea trinervis*, *Silene lanceolata*, *Silene perlmanii*, *Spermolepis hawaiiensis*, *Tetramolopium filiforme*, *Tetramolopium lepidotum* ssp. *lepidotum*, and *Viola chamissoniana* ssp. *chamissoniana*.

(ii) Map of Oahu—Dry Cliff—Unit 1, Oahu—Dry Cliff—Unit 2, and Oahu—Dry Cliff—Unit 3 (Map 26) follows:

**Map 26**  
**Oahu—Dry Cliff**  
**Unit 1, Unit 2 and Unit 3**



(28) Oahu—Dry Cliff—Unit 4 (24 ac; 10 ha) and Oahu—Dry Cliff—Unit 6 (149 ac; 60 ha).

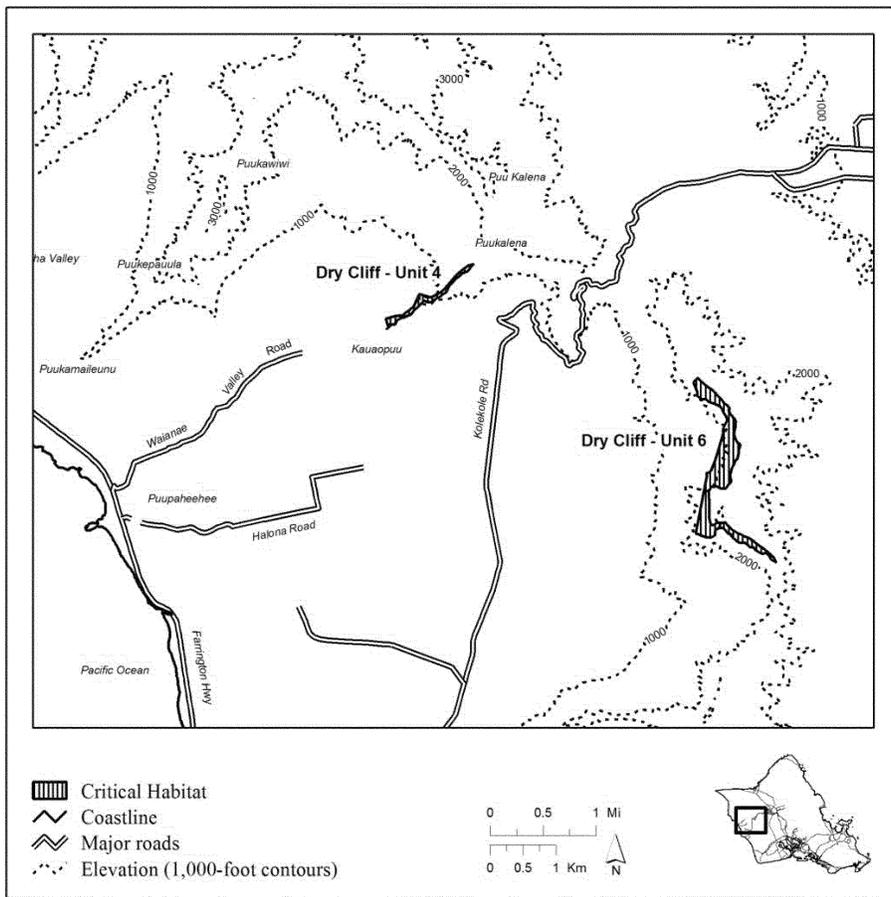
(i) These units are critical habitat for *Abutilon sandwicense*, *Achyranthes splendens* var. *rotundata*, *Alectryon macrococcus*, *Bonamia menziesii*, *Cenchrus agrimonioides*, *Chamaesyce herbstii*, *Chamaesyce kuwaleana*, *Cyanea grimesiana* ssp. *obatae*, *Cyrtandra dentata*, *Diellia falcata*, *Diellia unisora*, *Dubautia herbstobatae*, *Eragrostis fosbergii*, *Flueggea*

*neowawraea*, *Gouania meyenii*, *Gouania vitifolia*, *Isodendrion laurifolium*, *Isodendrion pyriforme*, *Kadua degeneri*, *Kadua parvula*, *Korthalsella degeneri*, *Lepidium arbuscula*, *Lipochaeta lobata* var. *leptophylla*, *Lobelia niihauensis*, *Melanthera tenuifolia*, *Melicope makahae*, *Melicope saint-johnii*, *Neraudia angulata*, *Nototrichium humile*, *Peucedanum sandwicense*, *Phyllostegia kaalaensis*, *Plantago princeps* var. *princeps*, *Platydesma cornuta* var. *decurrens*,

*Pleomele forbesii*, *Pteralyxia macrocarpa*, *Sanicula mariversa*, *Schiedea hookeri*, *Schiedea obovata*, *Schiedea trinervis*, *Silene lanceolata*, *Silene perlmanni*, *Spermolepis hawaiiensis*, *Tetramolopium filiforme*, *Tetramolopium lepidotum* ssp. *lepidotum*, and *Viola chamissoniana* ssp. *chamissoniana*.

(ii) Map of Oahu—Dry Cliff—Unit 4 and Oahu—Dry Cliff—Unit 6 (Map 27) follows:

**Map 27**  
**Oahu—Dry Cliff**  
**Unit 4 and Unit 6**



(29) Oahu—Dry Cliff—Unit 7a (68 ac; 27 ha), Oahu—Dry Cliff—Unit 7b (38 ac; 16 ha), and Oahu—Dry Cliff—Unit 8 (259 ac; 105 ha).

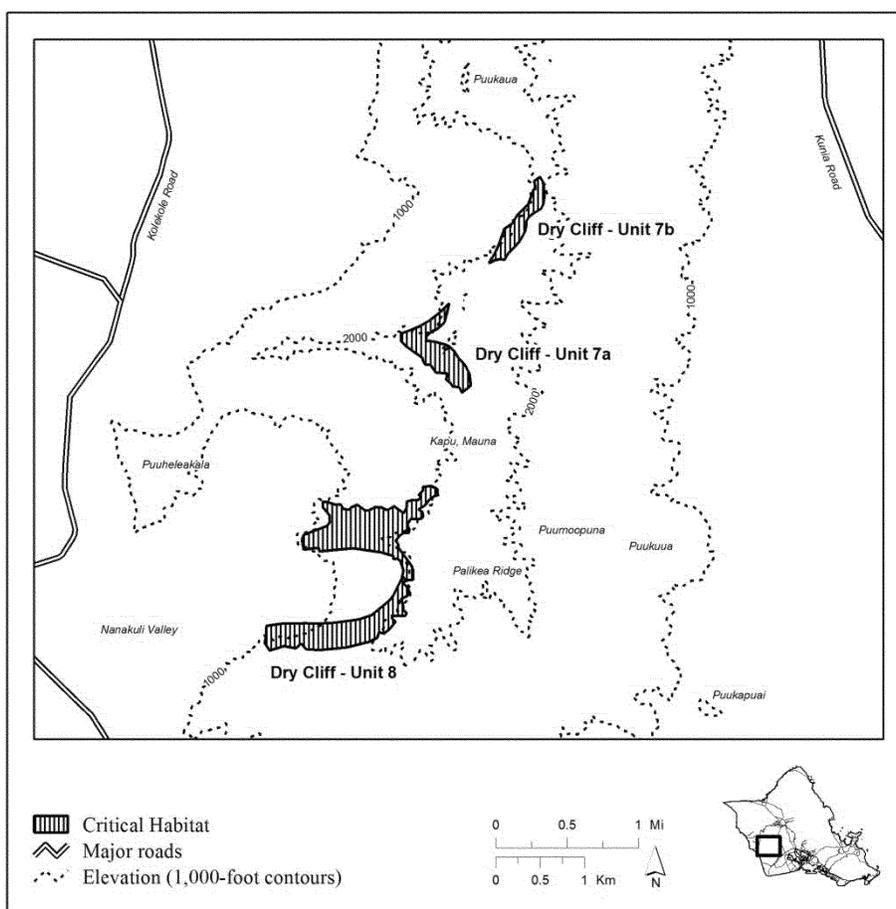
(i) These units are critical habitat for *Abutilon sandwicense*, *Achyranthes splendens* var. *rotundata*, *Alectryon macrococcus*, *Bonamia menziesii*, *Cenchrus agrimonioides*, *Chamaesyce herbstii*, *Chamaesyce kuwaleana*, *Cyanea grimesiana* ssp. *obatae*, *Cyrtandra dentata*, *Diellia falcata*, *Diellia unisora*, *Dubautia herbstobatae*,

*Eragrostis fosbergii*, *Flueggea neowawraea*, *Gouania meyenii*, *Gouania vitifolia*, *Isodendron laurifolium*, *Isodendron pyriformis*, *Kadua degeneri*, *Kadua parvula*, *Korthalsella degeneri*, *Lepidium arbuscula*, *Lipochaeta lobata* var. *leptophylla*, *Lobelia niihauensis*, *Melanthera tenuifolia*, *Melicope makahae*, *Melicope saint-johnii*, *Neraudia angulata*, *Nototrichium humile*, *Peucedanum sandwicense*, *Phyllostegia kaalaensis*, *Plantago princeps* var. *princeps*,

*Platydesma cornuta* var. *decurrens*, *Pleomele forbesii*, *Pteralyxia macrocarpa*, *Sanicula mariversa*, *Schiedea hookeri*, *Schiedea obovata*, *Schiedea trinervis*, *Silene lanceolata*, *Silene perlmanii*, *Spermolepis hawaiiensis*, *Tetramolopium filiforme*, *Tetramolopium lepidotum* ssp. *lepidotum*, and *Viola chamissoniana* ssp. *chamissoniana*.

(ii) Map of Oahu—Dry Cliff—Unit 7a, Oahu—Dry Cliff—Unit 7b, and Oahu—Dry Cliff—Unit 8 (Map 28) follows:

**Map 28**  
**Oahu—Dry Cliff**  
**Unit 7a, Unit 7b and Unit 8**





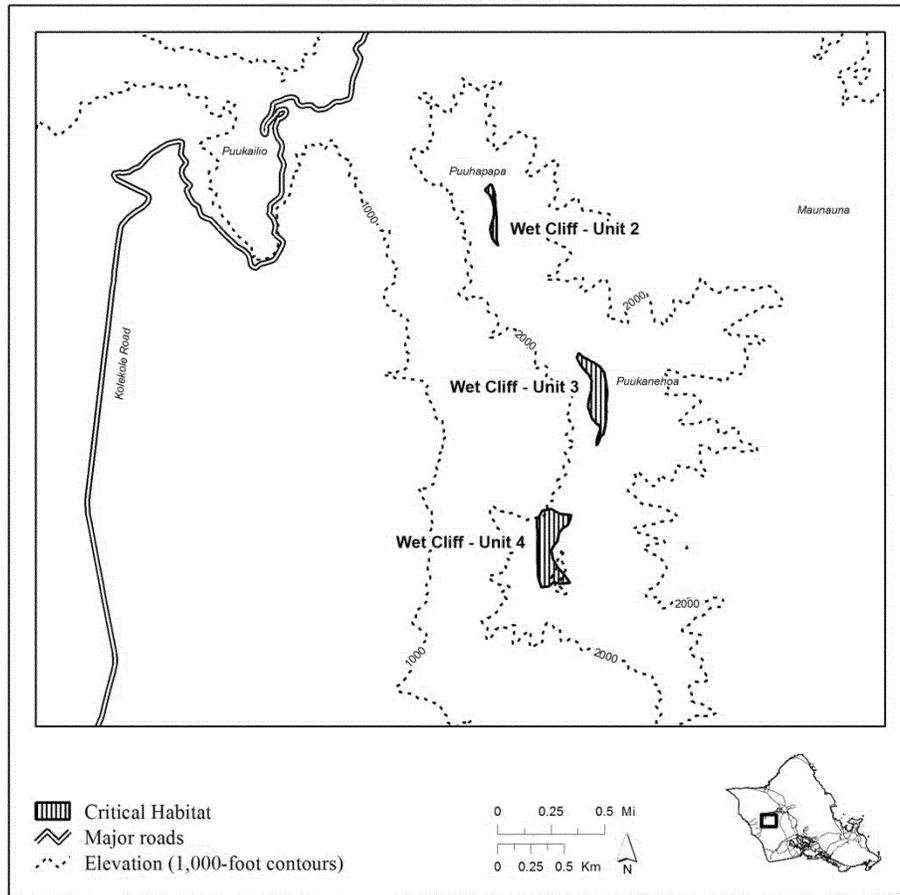
(31) Oahu—Wet Cliff—Unit 2 (3 ac; 1 ha), Oahu—Wet Cliff—Unit 3 (16 ac; 6 ha), and Oahu—Wet Cliff—Unit 4 (23 ac; 9 ha).

(i) These units are critical habitat for *Cyanea acuminata*, *Cyanea calycina*, *Labordia cyrtandrae*, *Lobelia oahuensis*, *Melicope christophersenii*, *Phyllostegia hirsuta*, *Pteralyxia macrocarpa*,

*Schiedea hookeri*, *Schiedea kaalae*, and *Schiedea trinervis*.

(ii) Map of Oahu—Wet Cliff—Unit 2, Oahu—Wet Cliff—Unit 3, and Oahu—Wet Cliff—Unit 4 (Map 30) follows:

**Map 30**  
**Oahu—Wet Cliff**  
**Unit 2, Unit 3 and Unit 4**



(32) Oahu—Wet Cliff—Unit 5 (31 ac; 13 ha).

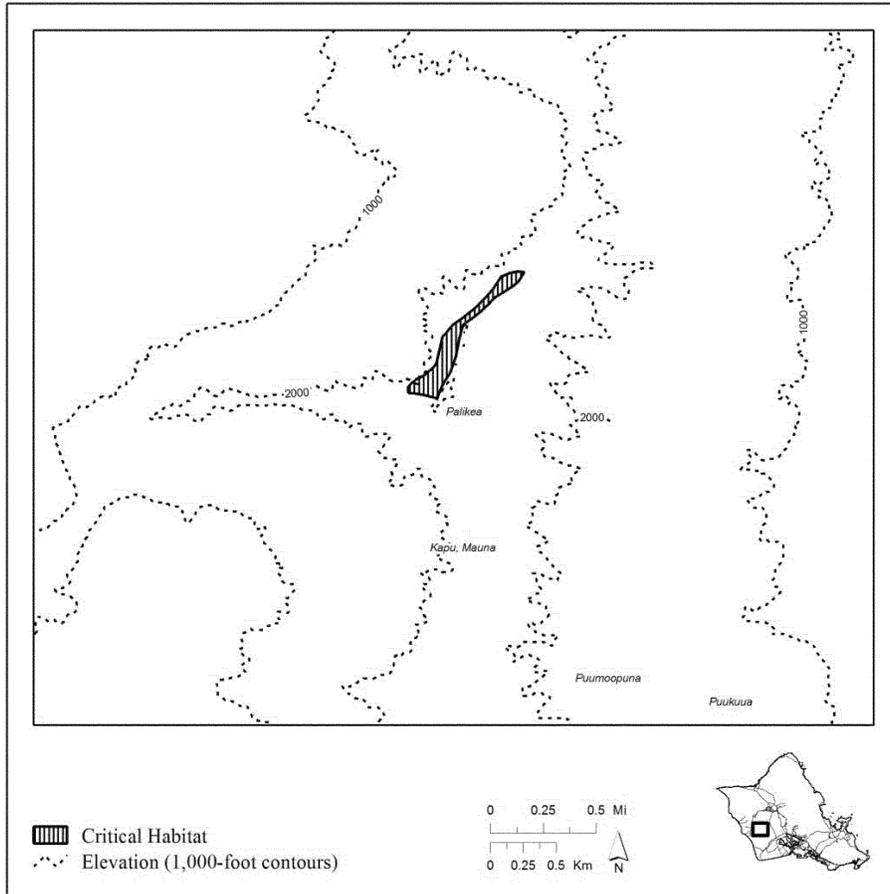
(i) This unit is critical habitat for *Cyanea acuminata*, *Cyanea calycina*,

*Labordia cyrtandrae*, *Lobelia oahuensis*, *Melicope christophersenii*, *Phyllostegia hirsuta*, *Pteralyxia macrocarpa*,

*Schiedea hookeri*, *Schiedea kaalae*, and *Schiedea trinervis*.

(ii) Map of Oahu—Wet Cliff—Unit 5 (Map 31) follows:

**Map 31**  
**Oahu—Wet Cliff**  
**Unit 5**



(33) Oahu—Wet Cliff—Unit 6 (151 ac; 61 ha) and Oahu—Wet Cliff—Unit 7 (144 ac; 58 ha).

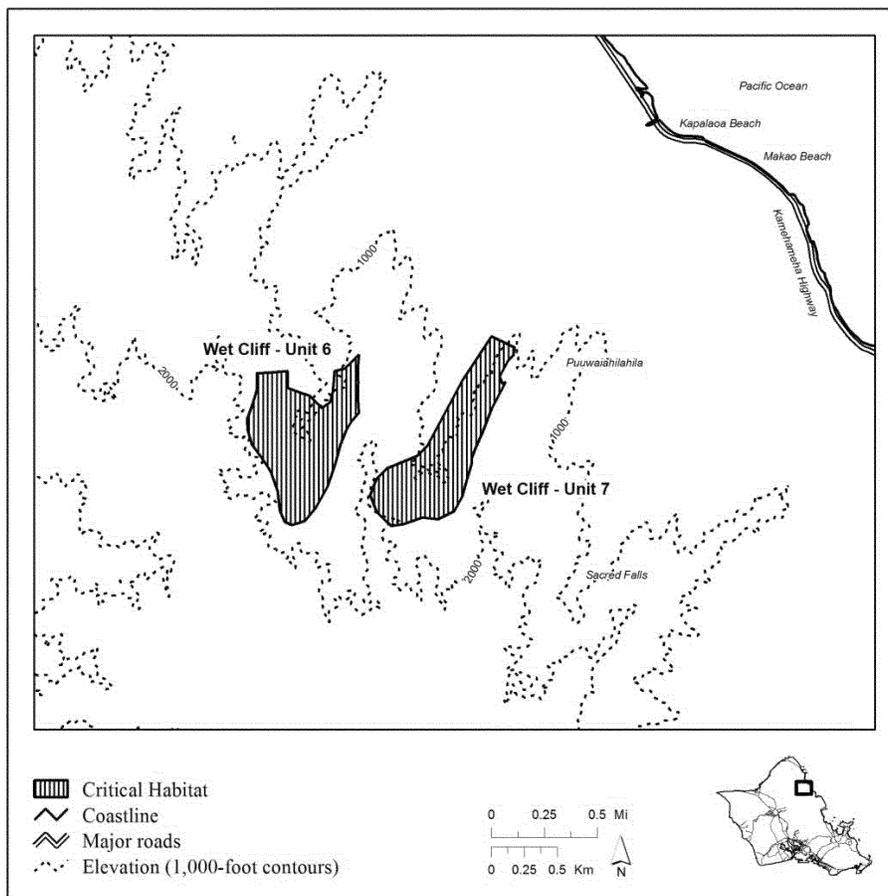
(i) These units are critical habitat for *Adenophorus periens*, *Chamaesyce deppeana*, *Chamaesyce rockii*, *Cyanea acuminata*, *Cyanea calycina*, *Cyanea crispa*, *Cyanea humboldtiana*, *Cyanea purpurellifolia*, *Cyanea st.-johnii*,

*Cyanea truncata*, *Cyrtandra kaulantha*, *Cyrtandra sessilis*, *Cyrtandra subumbellata*, *Cyrtandra viridiflora*, *Huperzia nutans*, *Labordia cyrtandrae*, *Lobelia oahuensis*, *Lysimachia filifolia*, *Phyllostegia hirsuta*, *Phyllostegia parviflora* var. *parviflora*, *Plantago princeps* var. *princeps*, *Psychotria*

*hexandra* ssp. *oahuensis*, *Pteralyxia macrocarpa*, *Sanicula purpurea*, *Schiedea kaalae*, *Tetraplasandra gymnocarpa*, *Trematolobelia singularis*, and *Viola oahuensis*.

(ii) Map of Oahu—Wet Cliff—Unit 6 and Oahu—Wet Cliff—Unit 7 (Map 32) follows:

**Map 32**  
**Oahu—Wet Cliff**  
**Unit 6 and Unit 7**



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(34) Oahu—Wet Cliff—Unit 8 (4,649 ac; 1,881 ha).

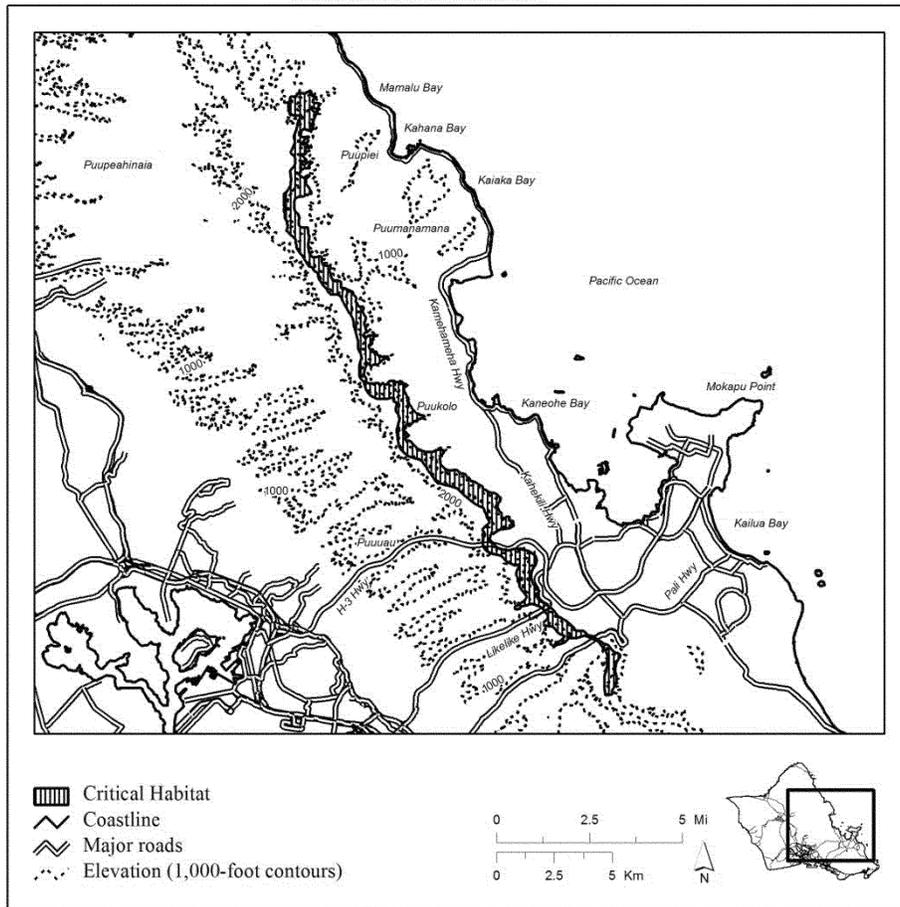
(i) This unit is critical habitat for *Adenophorus periens*, *Chamaesyce deppeana*, *Chamaesyce rockii*, *Cyanea acuminata*, *Cyanea calycina*, *Cyanea crispa*, *Cyanea humboldtiana*, *Cyanea*

*purpurellifolia*, *Cyanea st.-johnii*, *Cyanea truncata*, *Cyrtandra kaulantha*, *Cyrtandra sessilis*, *Cyrtandra subumbellata*, *Cyrtandra viridiflora*, *Huperzia nutans*, *Labordia cyrtandrae*, *Lobelia oahuensis*, *Lysimachia filifolia*, *Phyllostegia hirsuta*, *Phyllostegia parviflora* var. *parviflora*, *Plantago*

*princeps* var. *princeps*, *Psychotria hexandra* ssp. *oahuensis*, *Pteralyxia macrocarpa*, *Sanicula purpurea*, *Schiedea kaalae*, *Tetraplasandra gymnocarpa*, *Trematolobelia singularis*, and *Viola oahuensis*.

(ii) Map of Oahu—Wet Cliff—Unit 8 (Map 33) follows:

**Map 33**  
**Oahu—Wet Cliff**  
**Unit 8**



(35) TABLE OF PROTECTED SPECIES WITHIN EACH CRITICAL HABITAT UNIT FOR OAHU

Unit name	Species occupied	Species unoccupied
Oahu—Coastal—Unit 1	<i>Achyranthes splendens</i> var. <i>rotundata</i> ..... <i>Chamaesyce celastroides</i> var. <i>kaenana</i> ..... <i>Sesbania tomentosa</i> .....	<i>Achyranthes splendens</i> var. <i>rotundata</i> <i>Bidens amplexans</i> <i>Centaurium sebaeoides</i> <i>Chamaesyce celastroides</i> var. <i>kaenana</i> <i>Schiedea kealiae</i> <i>Sesbania tomentosa</i> <i>Vigna o-wahuensis</i>
Oahu—Coastal—Unit 2		<i>Centaurium sebaeoides</i> <i>Chamaesyce kuwaleana</i> <i>Sesbania tomentosa</i> <i>Vigna o-wahuensis</i>
Oahu—Coastal—Unit 3		<i>Centaurium sebaeoides</i> <i>Chamaesyce kuwaleana</i> <i>Sesbania tomentosa</i> <i>Vigna o-wahuensis</i>
Oahu—Coastal—Unit 4		<i>Centaurium sebaeoides</i> <i>Chamaesyce kuwaleana</i> <i>Sesbania tomentosa</i> <i>Vigna o-wahuensis</i>
Oahu—Coastal—Unit 5		<i>Centaurium sebaeoides</i> <i>Chamaesyce kuwaleana</i> <i>Sesbania tomentosa</i>

## (35) TABLE OF PROTECTED SPECIES WITHIN EACH CRITICAL HABITAT UNIT FOR OAHU—Continued

Unit name	Species occupied	Species unoccupied
Oahu—Coastal—Unit 6		<i>Vigna o-wahuensis</i> <i>Centaurium sebaeoides</i> <i>Chamaesyce kuwaleana</i> <i>Sesbania tomentosa</i> <i>Vigna o-wahuensis</i>
Oahu—Coastal—Unit 7		<i>Centaurium sebaeoides</i> <i>Chamaesyce kuwaleana</i> <i>Sesbania tomentosa</i> <i>Vigna o-wahuensis</i>
Oahu—Coastal—Unit 8		<i>Centaurium sebaeoides</i> <i>Chamaesyce kuwaleana</i> <i>Sesbania tomentosa</i> <i>Vigna o-wahuensis</i>
Oahu—Coastal—Unit 9	<i>Sesbania tomentosa</i> .....	<i>Centaurium sebaeoides</i> <i>Chamaesyce kuwaleana</i> <i>Sesbania tomentosa</i> <i>Vigna o-wahuensis</i>
Oahu—Coastal—Unit 10	<i>Cyperus trachysanthos</i> ..... <i>Marsilea villosa</i> .....	<i>Centaurium sebaeoides</i> <i>Chamaesyce kuwaleana</i> <i>Cyperus trachysanthos</i> <i>Marsilea villosa</i> <i>Sesbania tomentosa</i> <i>Vigna o-wahuensis</i>
Oahu—Coastal—Unit 11	<i>Centaurium sebaeoides</i> .....	<i>Centaurium sebaeoides</i> <i>Chamaesyce kuwaleana</i> <i>Sesbania tomentosa</i> <i>Vigna o-wahuensis</i>
Oahu—Coastal—Unit 12	<i>Marsilea villosa</i> .....	<i>Centaurium sebaeoides</i> <i>Chamaesyce kuwaleana</i> <i>Cyperus trachysanthos</i> <i>Marsilea villosa</i> <i>Sesbania tomentosa</i> <i>Vigna o-wahuensis</i>
Oahu—Coastal—Unit 13	<i>Marsilea villosa</i> .....	<i>Centaurium sebaeoides</i> <i>Chamaesyce kuwaleana</i> <i>Cyperus trachysanthos</i> <i>Marsilea villosa</i> <i>Sesbania tomentosa</i> <i>Vigna o-wahuensis</i>
Oahu—Coastal—Unit 14	<i>Achyranthes splendens</i> var. <i>rotundata</i> .....	<i>Achyranthes splendens</i> var. <i>rotundata</i> <i>Bidens amplexens</i> <i>Centaurium sebaeoides</i> <i>Chamaesyce celastroides</i> var. <i>kaenana</i> <i>Schiedea kealiae</i> <i>Sesbania tomentosa</i> <i>Vigna o-wahuensis</i>
Oahu—Coastal—Unit 15	<i>Achyranthes splendens</i> var. <i>rotundata</i> .....	<i>Achyranthes splendens</i> var. <i>rotundata</i> <i>Bidens amplexens</i> <i>Centaurium sebaeoides</i> <i>Chamaesyce celastroides</i> var. <i>kaenana</i> <i>Schiedea kealiae</i> <i>Sesbania tomentosa</i> <i>Vigna o-wahuensis</i>
Oahu—Coastal—Unit 15	<i>Achyranthes splendens</i> var. <i>rotundata</i> .....	<i>Achyranthes splendens</i> var. <i>rotundata</i> <i>Bidens amplexens</i> <i>Centaurium sebaeoides</i> <i>Chamaesyce celastroides</i> var. <i>kaenana</i> <i>Schiedea kealiae</i> <i>Sesbania tomentosa</i> <i>Vigna o-wahuensis</i>
Oahu—Lowland Dry—Unit 1	<i>Bidens amplexens</i> .....	<i>Achyranthes splendens</i> var. <i>rotundata</i> <i>Bidens amplexens</i> <i>Bonamia menziesii</i> <i>Chamaesyce celastroides</i> var. <i>kaenana</i> <i>Euphorbia haeleleana</i>

(35) TABLE OF PROTECTED SPECIES WITHIN EACH CRITICAL HABITAT UNIT FOR OAHU—Continued

Unit name	Species occupied	Species unoccupied
Oahu—Lowland Dry—Unit 2	<i>Hibiscus brackenridgei</i> .....  <i>Nototrichium humile</i> .....  <i>Schiedea kealiae</i> .....    <i>Bonamia menziesii</i> .....    <i>Melanthera tenuifolia</i> ..... <i>Nototrichium humile</i> ..... <i>Pleomele forbesii</i> .....	<i>Gouania meyenii</i> <i>Gouania vitifolia</i> <i>Hibiscus brackenridgei</i> <i>Isodendron pyrifolium</i> <i>Melanthera tenuifolia</i> <i>Neraudia angulata</i> <i>Nototrichium humile</i> <i>Pleomele forbesii</i> <i>Schiedea hookeri</i> <i>Schiedea kealiae</i> <i>Spermolepis hawaiiensis</i>  <i>Achyranthes splendens</i> var. <i>rotundata</i> <i>Bidens amplexens</i> <i>Bonamia menziesii</i> <i>Chamaesyce celastroides</i> var. <i>kaenana</i> <i>Euphorbia haeleleana</i> <i>Gouania meyenii</i> <i>Gouania vitifolia</i> <i>Hibiscus brackenridgei</i> <i>Isodendron pyrifolium</i> <i>Melanthera tenuifolia</i> <i>Neraudia angulata</i> <i>Nototrichium humile</i> <i>Pleomele forbesii</i> <i>Schiedea hookeri</i> <i>Schiedea kealiae</i> <i>Spermolepis hawaiiensis</i>
Oahu—Lowland Dry—Unit 6	<i>Doryopteris takeuchii</i> .....	<i>Doryopteris takeuchii</i> <i>Gouania meyenii</i>
Oahu—Lowland Dry—Unit 7	<i>Spermolepis hawaiiensis</i> .....	<i>Spermolepis hawaiiensis</i>
Oahu—Lowland Dry—Unit 8	<i>Cyperus trachysanthos</i> .....	<i>Cyperus trachysanthos</i> <i>Doryopteris takeuchii</i> <i>Gouania meyenii</i> <i>Marsilea villosa</i> <i>Spermolepis hawaiiensis</i>
Oahu—Lowland Dry—Unit 9	<i>Achyranthes splendens</i> var. <i>rotundata</i> .....	<i>Achyranthes splendens</i> var. <i>rotundata</i> <i>Bidens amplexens</i> <i>Bonamia menziesii</i> <i>Chamaesyce celastroides</i> var. <i>kaenana</i> <i>Chamaesyce skottsbergii</i> var. <i>skottsbergii</i> <i>Euphorbia haeleleana</i> <i>Gouania meyenii</i> <i>Gouania vitifolia</i> <i>Hibiscus brackenridgei</i> <i>Isodendron pyrifolium</i> <i>Melanthera tenuifolia</i> <i>Neraudia angulata</i> <i>Nototrichium humile</i> <i>Schiedea hookeri</i> <i>Schiedea kealiae</i> <i>Spermolepis hawaiiensis</i>
		<i>Achyranthes splendens</i> var. <i>rotundata</i> <i>Bidens amplexens</i> <i>Bonamia menziesii</i> <i>Chamaesyce celastroides</i> var. <i>kaenana</i> <i>Chamaesyce skottsbergii</i> var. <i>skottsbergii</i> <i>Euphorbia haeleleana</i> <i>Gouania meyenii</i> <i>Gouania vitifolia</i> <i>Hibiscus brackenridgei</i> <i>Isodendron pyrifolium</i> <i>Melanthera tenuifolia</i> <i>Neraudia angulata</i> <i>Nototrichium humile</i> <i>Schiedea hookeri</i> <i>Schiedea kealiae</i> <i>Spermolepis hawaiiensis</i>



(35) TABLE OF PROTECTED SPECIES WITHIN EACH CRITICAL HABITAT UNIT FOR OAHU—Continued

Unit name	Species occupied	Species unoccupied
Oahu—Lowland Mesic—Unit 2	<i>Lobelia niihauensis</i> .....	<i>Labordia cyrtandrae</i>
	<i>Melanthera tenuifolia</i> .....	<i>Lobelia niihauensis</i>
	<i>Melicope makahae</i> .....	<i>Melanthera tenuifolia</i>
	<i>Melicope pallida</i> .....	<i>Melicope makahae</i>
	<i>Neraudia angulate</i> .....	<i>Melicope pallida</i>
	<i>Nototrichium humile</i> .....	<i>Melicope saint-johnii</i>
	<i>Phyllostegia kaalaensis</i> .....	<i>Neraudia angulata</i>
	<i>Platydesma cornuta</i> var. <i>decurrens</i> .....	<i>Nototrichium humile</i>
	<i>Pleomele forbesii</i> .....	<i>Phyllostegia hirsuta</i>
	<i>Pteralyxia macrocarpa</i> .....	<i>Phyllostegia kaalaensis</i>
	<i>Schiedea hookeri</i> .....	<i>Phyllostegia mollis</i>
	<i>Schiedea kaalae</i> .....	<i>Phyllostegia parviflora</i>
	<i>Schiedea nuttallii</i> .....	<i>Plantago princeps</i>
	<i>Schiedea obovata</i> .....	<i>Platydesma cornuta</i> var. <i>decurrens</i>
	<i>Viola chamissoniana</i> ssp. <i>Chamissoniana</i> .....	<i>Pleomele forbesii</i>
	<i>Abutilon sandwicense</i> .....	<i>Pteralyxia macrocarpa</i>
	<i>Alectryon macrococcus</i> .....	<i>Sanicula marivera</i>
	<i>Cenchrus agrimonioides</i> .....	<i>Schiedea hookeri</i>
	<i>Chamaesyce herbstii</i> .....	<i>Schiedea kaalae</i>
	<i>Cyanea calycina</i> .....	<i>Schiedea nuttallii</i>
	<i>Cyanea grimesiana</i> ssp. <i>Obatae</i> .....	<i>Schiedea obovata</i>
	<i>Delissea subcordata</i> .....	<i>Silene perlmanii</i>
	<i>Diellia falcata</i> .....	<i>Solanum sandwicense</i>
	<i>Gardenia mannii</i> .....	<i>Stenogyne kanehoana</i>
	<i>Abutilon sandwicense</i> .....	<i>Tetramolopium lepidotum</i> ssp. <i>lepidotum</i>
	<i>Alectryon macrococcus</i> .....	<i>Urera kaalae</i>
	<i>Cenchrus agrimonioides</i> .....	<i>Viola chamissoniana</i> ssp. <i>chamissoniana</i>
	<i>Chamaesyce herbstii</i> .....	<i>Abutilon sandwicense</i>
	<i>Cyanea calycina</i> .....	<i>Alectryon macrococcus</i>
	<i>Cyanea grimesiana</i> ssp. <i>Obatae</i> .....	<i>Bonamia menziesii</i>
	<i>Delissea subcordata</i> .....	<i>Cenchrus agrimonioides</i>
	<i>Diellia falcata</i> .....	<i>Chamaesyce celastroides</i> var. <i>kaenana</i>
	<i>Gardenia mannii</i> .....	<i>Chamaesyce herbstii</i>
	<i>Abutilon sandwicense</i> .....	<i>Colubrina oppositifolia</i>
	<i>Alectryon macrococcus</i> .....	<i>Ctenitis squamigera</i>
	<i>Cenchrus agrimonioides</i> .....	<i>Cyanea acuminata</i>
	<i>Chamaesyce herbstii</i> .....	<i>Cyanea calycina</i>
	<i>Cyanea calycina</i> .....	<i>Cyanea grimesiana</i> ssp. <i>grimesiana</i>
<i>Cyanea grimesiana</i> ssp. <i>Obatae</i> .....	<i>Cyanea grimesiana</i> ssp. <i>obatae</i>	
<i>Delissea subcordata</i> .....	<i>Cyanea longiflora</i>	
<i>Diellia falcata</i> .....	<i>Cyanea pinnatifida</i>	
<i>Gardenia mannii</i> .....	<i>Cyanea superba</i>	
<i>Abutilon sandwicense</i> .....	<i>Cyperus pennatififormis</i>	
<i>Alectryon macrococcus</i> .....	<i>Cyrtandra dentata</i>	
<i>Cenchrus agrimonioides</i> .....	<i>Delissea subcordata</i>	
<i>Chamaesyce herbstii</i> .....	<i>Diellia falcata</i>	
<i>Cyanea calycina</i> .....	<i>Diellia unisora</i>	
<i>Cyanea grimesiana</i> ssp. <i>Obatae</i> .....	<i>Diplazium molokaiense</i>	
<i>Delissea subcordata</i> .....	<i>Dubautia herbstobatae</i>	
<i>Diellia falcata</i> .....	<i>Eragrostis fosbergii</i>	
<i>Gardenia mannii</i> .....	<i>Eugenia koolauensis</i>	
<i>Abutilon sandwicense</i> .....	<i>Euphorbia haeleleleana</i>	
<i>Alectryon macrococcus</i> .....	<i>Flueggea neowawraea</i>	
<i>Cenchrus agrimonioides</i> .....	<i>Gardenia mannii</i>	
<i>Chamaesyce herbstii</i> .....	<i>Gouania meyenii</i>	
<i>Cyanea calycina</i> .....	<i>Gouania vitifolia</i>	
<i>Cyanea grimesiana</i> ssp. <i>Obatae</i> .....	<i>Hesperomannia arborescens</i>	
<i>Delissea subcordata</i> .....	<i>Hesperomannia arbuscula</i>	
<i>Diellia falcata</i> .....	<i>Hibiscus brackenridgei</i>	
<i>Gardenia mannii</i> .....	<i>Isodendron laurifolium</i>	
<i>Abutilon sandwicense</i> .....	<i>Isodendron longifolium</i>	
<i>Alectryon macrococcus</i> .....	<i>Kadua coriacea</i>	
<i>Cenchrus agrimonioides</i> .....	<i>Kadua degeneri</i>	
<i>Chamaesyce herbstii</i> .....	<i>Kadua parvula</i>	
<i>Cyanea calycina</i> .....	<i>Labordia cyrtandrae</i>	
<i>Cyanea grimesiana</i> ssp. <i>Obatae</i> .....	<i>Lobelia niihauensis</i>	
<i>Delissea subcordata</i> .....	<i>Melanthera tenuifolia</i>	
<i>Diellia falcata</i> .....	<i>Melicope makahae</i>	
<i>Gardenia mannii</i> .....	<i>Melicope pallida</i>	
<i>Abutilon sandwicense</i> .....	<i>Melicope saint-johnii</i>	
<i>Alectryon macrococcus</i> .....	<i>Neraudia angulata</i>	

## (35) TABLE OF PROTECTED SPECIES WITHIN EACH CRITICAL HABITAT UNIT FOR OAHU—Continued

Unit name	Species occupied	Species unoccupied	
Oahu—Lowland Mesic—Unit 3	<i>Phyllostegia hirsute</i> .....	<i>Nototrichium humile</i>	
	<i>Phyllostegia kaalaensis</i> .....	<i>Phyllostegia hirsuta</i>	
	<i>Phyllostegia mollis</i> .....	<i>Phyllostegia kaalaensis</i>	
		<i>Phyllostegia mollis</i>	
		<i>Phyllostegia parviflora</i>	
		<i>Plantago princeps</i>	
		<i>Platydesma cornuta</i> var. <i>decurrens</i> .....	<i>Platydesma cornuta</i> var. <i>decurrens</i>
		<i>Pleomele forbesii</i> .....	<i>Pleomele forbesii</i>
		<i>Pteralyxia macrocarpa</i> .....	<i>Pteralyxia macrocarpa</i>
			<i>Sanicula marivera</i>
		<i>Schiedea hookeri</i> .....	<i>Schiedea hookeri</i>
		<i>Schiedea kaalae</i> .....	<i>Schiedea kaalae</i>
			<i>Schiedea nuttallii</i>
			<i>Schiedea obovata</i>
			<i>Silene perlmanii</i>
		<i>Solanum sandwicense</i> .....	<i>Solanum sandwicense</i>
		<i>Stenogyne kanehoana</i> .....	<i>Stenogyne kanehoana</i>
			<i>Tetramolopium lepidotum</i> ssp. <i>lepidotum</i>
		<i>Urera kaalae</i> .....	<i>Urera kaalae</i>
			<i>Viola chamissoniana</i> ssp. <i>chamissoniana</i>
			<i>Abutilon sandwicense</i>
		<i>Alectryon macrococcus</i> .....	<i>Alectryon macrococcus</i>
			<i>Bonamia menziesii</i>
		<i>Cenchrus agrimonioides</i> .....	<i>Cenchrus agrimonioides</i>
			<i>Chamaesyce celastroides</i> var. <i>kaenana</i>
			<i>Chamaesyce herbstii</i>
			<i>Colubrina oppositifolia</i>
			<i>Ctenitis squamigera</i>
			<i>Cyanea acuminata</i>
			<i>Cyanea calycina</i>
			<i>Cyanea grimesiana</i> ssp. <i>grimesiana</i>
			<i>Cyanea grimesiana</i> ssp. <i>obatae</i>
			<i>Cyanea longiflora</i>
			<i>Cyanea pinnatifida</i>
			<i>Cyanea superba</i>
		<i>Cyperus pennatififormis</i>	
		<i>Cyrtandra dentata</i>	
	<i>Delissea subcordata</i> .....	<i>Delissea subcordata</i>	
	<i>Diellia falcate</i> .....	<i>Diellia falcata</i>	
	<i>Diellia unisora</i> .....	<i>Diellia unisora</i>	
		<i>Diplazium molokaiense</i>	
		<i>Dubautia herbstobatae</i>	
		<i>Eragrostis fosbergii</i>	
		<i>Eugenia koolauensis</i>	
		<i>Euphorbia haeleleleana</i>	
		<i>Flueggea neowawraea</i>	
		<i>Gardenia mannii</i>	
		<i>Gouania meyenii</i>	
		<i>Gouania vitifolia</i>	
		<i>Hesperomannia arborescens</i>	
	<i>Hesperomannia arbuscula</i> .....	<i>Hesperomannia arbuscula</i>	
		<i>Hibiscus brackenridgei</i>	
		<i>Isodendron laurifolium</i>	
		<i>Isodendron longifolium</i>	
		<i>Kadua coriacea</i>	
		<i>Kadua degeneri</i>	
		<i>Kadua parvula</i>	
		<i>Labordia cyrtandrae</i>	
		<i>Lobelia niihauensis</i>	
		<i>Melanthera tenuifolia</i>	
		<i>Melicope makahae</i>	
		<i>Melicope pallida</i>	
	<i>Melicope saint-johnii</i> .....	<i>Melicope saint-johnii</i>	
		<i>Neraudia angulata</i>	
		<i>Nototrichium humile</i>	
	<i>Phyllostegia mollis</i> .....	<i>Phyllostegia hirsuta</i>	
	<i>Phyllostegia parviflora</i> .....	<i>Phyllostegia kaalaensis</i>	
	<i>Plantago princeps</i> .....	<i>Phyllostegia parviflora</i>	
		<i>Plantago princeps</i>	
		<i>Platydesma cornuta</i> var. <i>decurrens</i>	

(35) TABLE OF PROTECTED SPECIES WITHIN EACH CRITICAL HABITAT UNIT FOR OAHU—Continued

Unit name	Species occupied	Species unoccupied	
Oahu—Lowland Mesic—Unit 4	<i>Pleomele forbesii</i> .....	<i>Pleomele forbesii</i>	
	<i>Pteralyxia macrocarpa</i> .....	<i>Pteralyxia macrocarpa</i>	
		<i>Sanicula marivera</i>	
		<i>Schiedea hookeri</i>	
	<i>Schiedea kaalae</i> .....	<i>Schiedea kaalae</i>	
Oahu—Lowland Mesic—Unit 5		<i>Schiedea nuttallii</i>	
		<i>Schiedea obovata</i>	
	<i>Silene perlmanii</i> .....	<i>Silene perlmanii</i>	
		<i>Solanum sandwicense</i>	
		<i>Stenogyne kanehoana</i>	
		<i>Tetramolopium lepidotum</i> ssp. <i>lepidotum</i>	
	<i>Urera kaalae</i> .....	<i>Urera kaalae</i>	
		<i>Viola chamissoniana</i> ssp. <i>chamissoniana</i>	
	Oahu—Lowland Mesic—Unit 5		<i>Alectryon macrococcus</i>
			<i>Bonamia menziesii</i>
		<i>Chamaesyce celastroides</i> var. <i>kaenana</i>	
		<i>Ctenitis squamigera</i>	
		<i>Cyanea acuminata</i>	
		<i>Cyanea calycina</i>	
		<i>Cyanea crispa</i>	
		<i>Cyanea grimesiana</i> ssp. <i>grimesiana</i>	
		<i>Cyanea lanceolata</i>	
		<i>Cyanea longiflora</i>	
Oahu—Lowland Mesic—Unit 5		<i>Cyanea truncata</i>	
		<i>Cyrtandra dentata</i>	
		<i>Cyrtandra polyantha</i>	
		<i>Delissea subcordata</i>	
		<i>Diellia erecta</i>	
		<i>Diellia falcata</i>	
		<i>Eugenia koolauensis</i>	
		<i>Gardenia mannii</i>	
		<i>Hesperomannia arborescens</i>	
		<i>Isodendron laurifolium</i>	
Oahu—Lowland Mesic—Unit 5		<i>Isodendron longifolium</i>	
		<i>Kadua coriacea</i>	
		<i>Labordia cyrtandrae</i>	
		<i>Lobelia monostachya</i>	
		<i>Melicope lydgatei</i>	
		<i>Melicope saint-johnii</i>	
		<i>Phyllostegia hirsuta</i>	
		<i>Phyllostegia mollis</i>	
		<i>Phyllostegia parviflora</i>	
		<i>Plantago princeps</i>	
Oahu—Lowland Mesic—Unit 5		<i>Pleomele forbesii</i>	
		<i>Pteralyxia macrocarpa</i>	
		<i>Schiedea kaalae</i>	
		<i>Schiedea nuttallii</i>	
		<i>Solanum sandwicense</i>	
		<i>Tetraplasandra gymnocarpa</i>	
		<i>Tetraplasandra lydgatei</i>	
	Oahu—Lowland Mesic—Unit 5		<i>Alectryon macrococcus</i>
			<i>Bonamia menziesii</i>
			<i>Chamaesyce celastroides</i> var. <i>kaenana</i>
		<i>Ctenitis squamigera</i>	
		<i>Cyanea acuminata</i>	
		<i>Cyanea calycina</i>	
		<i>Cyanea crispa</i>	
		<i>Cyanea grimesiana</i> ssp. <i>grimesiana</i>	
		<i>Cyanea lanceolata</i>	
		<i>Cyanea longiflora</i>	
Oahu—Lowland Mesic—Unit 5		<i>Cyanea truncata</i>	
		<i>Cyrtandra dentata</i>	
		<i>Cyrtandra polyantha</i>	
		<i>Delissea subcordata</i>	
		<i>Diellia erecta</i>	
		<i>Diellia falcata</i>	
		<i>Eugenia koolauensis</i>	
		<i>Gardenia mannii</i>	
		<i>Hesperomannia arborescens</i>	
		<i>Isodendron laurifolium</i>	

(35) TABLE OF PROTECTED SPECIES WITHIN EACH CRITICAL HABITAT UNIT FOR OAHU—Continued

Unit name	Species occupied	Species unoccupied
Oahu—Lowland Mesic—Unit 6	<p><i>Cyanea acuminata</i> .....</p> <p><i>Cyanea crispa</i> .....</p> <p><i>Cyanea truncate</i> .....</p> <p><i>Gardenia mannii</i> .....</p> <p><i>Pteralyxia macrocarpa</i> .....</p> <p><i>Schiedea kaalae</i> .....</p>	<p><i>Isodendron longifolium</i>  <i>Kadua coriacea</i>  <i>Labordia cyrtandrae</i>  <i>Lobelia monostachya</i>  <i>Melicope lydgatei</i>  <i>Melicope saint-johnii</i>  <i>Phyllostegia hirsuta</i>  <i>Phyllostegia mollis</i>  <i>Phyllostegia parviflora</i>  <i>Plantago princeps</i>  <i>Pleomele forbesii</i>  <i>Pteralyxia macrocarpa</i>  <i>Schiedea kaalae</i>  <i>Schiedea nuttallii</i>  <i>Solanum sandwicense</i>  <i>Tetraplasandra gymnocarpa</i>  <i>Tetraplasandra lydgatei</i></p> <p><i>Alectryon macrococcus</i>  <i>Bonamia menziesii</i>  <i>Chamaesyce celastroides</i> var. <i>kaenana</i>  <i>Ctenitis squamigera</i>  <i>Cyanea acuminata</i>  <i>Cyanea calycina</i>  <i>Cyanea crispa</i>  <i>Cyanea grimesiana</i> ssp. <i>grimesiana</i>  <i>Cyanea lanceolata</i>  <i>Cyanea longiflora</i>  <i>Cyanea truncata</i>  <i>Cyrtandra dentata</i>  <i>Cyrtandra polyantha</i>  <i>Delissea subcordata</i>  <i>Diellia erecta</i>  <i>Diellia falcata</i>  <i>Eugenia koolauensis</i>  <i>Gardenia mannii</i>  <i>Hesperomannia arborescens</i>  <i>Isodendron laurifolium</i>  <i>Isodendron longifolium</i>  <i>Kadua coriacea</i>  <i>Labordia cyrtandrae</i>  <i>Lobelia monostachya</i>  <i>Melicope lydgatei</i>  <i>Melicope saint-johnii</i>  <i>Phyllostegia hirsuta</i>  <i>Phyllostegia mollis</i>  <i>Phyllostegia parviflora</i>  <i>Plantago princeps</i>  <i>Pleomele forbesii</i>  <i>Pteralyxia macrocarpa</i>  <i>Schiedea kaalae</i>  <i>Schiedea nuttallii</i>  <i>Solanum sandwicense</i>  <i>Tetraplasandra gymnocarpa</i>  <i>Tetraplasandra lydgatei</i></p>
Oahu—Lowland Mesic—Unit 7	<p><i>Bonamia menziesii</i> .....</p> <p><i>Cyanea acuminata</i> .....</p> <p><i>Cyanea grimesiana</i> ssp. <i>Grimesiana</i> .....</p> <p><i>Cyanea lanceolata</i> .....</p> <p><i>Cyrtandra polyantha</i> .....</p> <p><i>Diellia erecta</i> .....</p>	<p><i>Alectryon macrococcus</i>  <i>Bonamia menziesii</i>  <i>Chamaesyce celastroides</i> var. <i>kaenana</i>  <i>Ctenitis squamigera</i>  <i>Cyanea acuminata</i>  <i>Cyanea calycina</i>  <i>Cyanea crispa</i>  <i>Cyanea grimesiana</i> ssp. <i>grimesiana</i>  <i>Cyanea lanceolata</i>  <i>Cyanea longiflora</i>  <i>Cyanea truncata</i>  <i>Cyrtandra dentata</i>  <i>Cyrtandra polyantha</i>  <i>Delissea subcordata</i>  <i>Diellia erecta</i>  <i>Diellia falcata</i></p>

(35) TABLE OF PROTECTED SPECIES WITHIN EACH CRITICAL HABITAT UNIT FOR OAHU—Continued

Unit name	Species occupied	Species unoccupied
Oahu—Lowland Wet—Unit 1	<p><i>Lobelia monostachya</i> .....</p> <p><i>Pleomele forbesii</i> .....</p> <p><i>Pteralyxia macrocarpa</i> .....</p> <p><i>Tetraplasandra lydgatei</i> .....</p>	<p><i>Eugenia koolauensis</i>  <i>Gardenia mannii</i>  <i>Hesperomannia arborescens</i>  <i>Isodendrion laurifolium</i>  <i>Isodendrion longifolium</i>  <i>Kadua coriacea</i>  <i>Labordia cyrtandrae</i>  <i>Lobelia monostachya</i>  <i>Melicope lydgatei</i>  <i>Melicope saint-johnii</i>  <i>Phyllostegia hirsuta</i>  <i>Phyllostegia mollis</i>  <i>Phyllostegia parviflora</i>  <i>Plantago princeps</i>  <i>Pleomele forbesii</i>  <i>Pteralyxia macrocarpa</i>  <i>Schiedea kaalae</i>  <i>Schiedea nuttallii</i>  <i>Solanum sandwicense</i>  <i>Tetraplasandra gymnocarpa</i>  <i>Tetraplasandra lydgatei</i></p>
Oahu—Lowland Wet—Unit 2	<p><i>Gouania vitifolia</i> .....</p> <p><i>Schiedea hookeri</i> .....</p> <p><i>Urera kaalae</i> .....</p>	<p><i>Cyanea acuminata</i>  <i>Cyanea calycina</i>  <i>Cyanea grimesiana</i> ssp. <i>grimesiana</i>  <i>Cyanea grimesiana</i> ssp. <i>obatae</i>  <i>Cyrtandra dentata</i>  <i>Diplazium molokaiense</i>  <i>Gardenia mannii</i>  <i>Gouania vitifolia</i>  <i>Hesperomannia arbuscula</i>  <i>Isodendrion longifolium</i>  <i>Labordia cyrtandrae</i>  <i>Lobelia oahuensis</i>  <i>Phyllostegia hirsuta</i>  <i>Phyllostegia mollis</i>  <i>Plantago princeps</i>  <i>Pteralyxia macrocarpa</i>  <i>Schiedea hookeri</i>  <i>Schiedea kaalae</i>  <i>Urera kaalae</i></p>
Oahu—Lowland Wet—Unit 3	<p><i>Phyllostegia hirsute</i> .....</p> <p><i>Phyllostegia mollis</i> .....</p> <p><i>Urera kaalae</i> .....</p>	<p><i>Cyanea acuminata</i>  <i>Cyanea calycina</i>  <i>Cyanea grimesiana</i> ssp. <i>grimesiana</i>  <i>Cyanea grimesiana</i> ssp. <i>obatae</i>  <i>Cyrtandra dentata</i>  <i>Diplazium molokaiense</i>  <i>Gardenia mannii</i>  <i>Gouania vitifolia</i>  <i>Hesperomannia arbuscula</i>  <i>Isodendrion longifolium</i>  <i>Labordia cyrtandrae</i>  <i>Lobelia oahuensis</i>  <i>Phyllostegia hirsuta</i>  <i>Phyllostegia mollis</i>  <i>Plantago princeps</i>  <i>Pteralyxia macrocarpa</i>  <i>Schiedea hookeri</i>  <i>Schiedea kaalae</i>  <i>Urera kaalae</i></p>
		<p><i>Cyanea acuminata</i>  <i>Cyanea calycina</i>  <i>Cyanea grimesiana</i> ssp. <i>grimesiana</i>  <i>Cyanea grimesiana</i> ssp. <i>obatae</i>  <i>Cyrtandra dentata</i>  <i>Diplazium molokaiense</i>  <i>Gardenia mannii</i>  <i>Gouania vitifolia</i>  <i>Hesperomannia arbuscula</i>  <i>Isodendrion longifolium</i></p>

## (35) TABLE OF PROTECTED SPECIES WITHIN EACH CRITICAL HABITAT UNIT FOR OAHU—Continued

Unit name	Species occupied	Species unoccupied
Oahu—Lowland Wet—Unit 4	<i>Phyllostegia hirsute</i> ..... <i>Phyllostegia mollis</i> .....  <i>Schiedea hookeri</i> .....	<i>Labordia cyrtandrae</i> <i>Lobelia oahuensis</i> <i>Phyllostegia hirsuta</i> <i>Phyllostegia mollis</i> <i>Plantago princeps</i> <i>Pteralyxia macrocarpa</i> <i>Schiedea hookeri</i> <i>Schiedea kaalae</i> <i>Urera kaalae</i>  <i>Cyanea acuminata</i> <i>Cyanea calycina</i> <i>Cyanea grimesiana</i> ssp. <i>grimesiana</i> <i>Cyanea grimesiana</i> ssp. <i>obatae</i> <i>Cyrtandra dentata</i> <i>Diplazium molokaiense</i> <i>Gardenia mannii</i> <i>Gouania vitifolia</i> <i>Hesperomannia arbuscula</i> <i>Isodendrion longifolium</i> <i>Labordia cyrtandrae</i> <i>Lobelia oahuensis</i> <i>Phyllostegia hirsuta</i> <i>Phyllostegia mollis</i> <i>Plantago princeps</i> <i>Pteralyxia macrocarpa</i> <i>Schiedea hookeri</i> <i>Schiedea kaalae</i> <i>Urera kaalae</i>
Oahu—Lowland Wet—Unit 5	<i>Phyllostegia mollis</i> .....  <i>Cyanea calycina</i> ..... <i>Cyanea grimesiana</i> ssp. <i>Obatae</i> .....  <i>Hesperomannia arbuscula</i> .....	<i>Cyanea acuminata</i> <i>Cyanea calycina</i> <i>Cyanea grimesiana</i> ssp. <i>grimesiana</i> <i>Cyanea grimesiana</i> ssp. <i>obatae</i> <i>Cyrtandra dentata</i> <i>Diplazium molokaiense</i> <i>Gardenia mannii</i> <i>Gouania vitifolia</i> <i>Hesperomannia arbuscula</i> <i>Isodendrion longifolium</i> <i>Labordia cyrtandrae</i> <i>Lobelia oahuensis</i> <i>Phyllostegia hirsuta</i> <i>Phyllostegia mollis</i> <i>Plantago princeps</i> <i>Pteralyxia macrocarpa</i> <i>Schiedea hookeri</i> <i>Schiedea kaalae</i> <i>Urera kaalae</i>
Oahu—Lowland Wet—Unit 6	<i>Schiedea kaalae</i> .....  <i>Hesperomannia arborescens</i> .....	<i>Adenophorus periens</i> <i>Chamaesyce rockii</i> <i>Cyanea acuminata</i> <i>Cyanea calycina</i> <i>Cyanea crispa</i> <i>Cyanea grimesiana</i> ssp. <i>grimesiana</i> <i>Cyanea humboldtiana</i> <i>Cyanea koolauensis</i> <i>Cyanea lanceolata</i> <i>Cyanea purplellifolia</i> <i>Cyanea st.-johnii</i> <i>Cyanea truncata</i> <i>Cyrtandra dentata</i> <i>Cyrtandra gracilis</i> <i>Cyrtandra kaulantha</i> <i>Cyrtandra polyantha</i> <i>Cyrtandra sessilis</i> <i>Cyrtandra subumbellata</i> <i>Cyrtandra viridiflora</i> <i>Cyrtandra waiolani</i> <i>Gardenia mannii</i> <i>Hesperomannia arborescens</i>



(35) TABLE OF PROTECTED SPECIES WITHIN EACH CRITICAL HABITAT UNIT FOR OAHU—Continued

Unit name	Species occupied	Species unoccupied
Oahu—Lowland Wet—Unit 9	<p><i>Cyrtandra kaulantha</i> .....</p>	<p><i>Cyanea humboldtiana</i>  <i>Cyanea koolauensis</i>  <i>Cyanea lanceolata</i>  <i>Cyanea purpurellifolia</i>  <i>Cyanea st.-johnii</i>  <i>Cyanea truncata</i>  <i>Cyrtandra dentata</i>  <i>Cyrtandra gracilis</i>  <i>Cyrtandra kaulantha</i>  <i>Cyrtandra polyantha</i>  <i>Cyrtandra sessilis</i>  <i>Cyrtandra subumbellata</i>  <i>Cyrtandra viridiflora</i>  <i>Cyrtandra waiolani</i>  <i>Gardenia mannii</i>  <i>Hesperomannia arborescens</i>  <i>Huperzia nutans</i>  <i>Isodendron longifolium</i>  <i>Labordia cyrtandrae</i>  <i>Lobelia gaudichaudii</i> ssp. <i>koolauensis</i>  <i>Lobelia oahuensis</i>  <i>Melicope hiiakae</i>  <i>Melicope lydgatei</i>  <i>Myrsine juddii</i>  <i>Phyllostegia hirsuta</i>  <i>Phyllostegia parviflora</i>  <i>Plantago princeps</i>  <i>Platanthera holochila</i>  <i>Platydesma cornuta</i> var. <i>cornuta</i>  <i>Psychotria hexandra</i> ssp. <i>oahuensis</i>  <i>Pteralyxia macrocarpa</i>  <i>Pteris lidgatei</i>  <i>Sanicula purpurea</i>  <i>Tetraplasandra gymnocarpa</i>  <i>Trematolobelia singularis</i>  <i>Viola oahuensis</i>  <i>Zanthoxylum oahuense</i></p>
	<p><i>Chamaesyce rockii</i> .....</p>	<p><i>Adenophorus perieni</i>  <i>Chamaesyce rockii</i></p>
	<p><i>Cyanea calycina</i> .....</p>	<p><i>Cyanea acuminata</i>  <i>Cyanea calycina</i>  <i>Cyanea crispa</i></p>
	<p><i>Cyanea humboldtiana</i> .....</p>	<p><i>Cyanea grimesiana</i> ssp. <i>grimesiana</i>  <i>Cyanea humboldtiana</i></p>
	<p><i>Cyanea koolauensis</i> .....</p>	<p><i>Cyanea koolauensis</i>  <i>Cyanea lanceolata</i></p>
	<p><i>Cyanea st.-johnii</i> .....</p>	<p><i>Cyanea purpurellifolia</i>  <i>Cyanea st.-johnii</i>  <i>Cyanea truncata</i></p>
	<p><i>Cyrtandra viridiflora</i> .....</p>	<p><i>Cyrtandra dentata</i>  <i>Cyrtandra gracilis</i>  <i>Cyrtandra kaulantha</i>  <i>Cyrtandra polyantha</i>  <i>Cyrtandra sessilis</i>  <i>Cyrtandra subumbellata</i>  <i>Cyrtandra viridiflora</i></p>
	<p><i>Gardenia mannii</i> .....</p>	<p><i>Cyrtandra waiolani</i>  <i>Gardenia mannii</i></p>
	<p><i>Hesperomannia arborescens</i> .....</p>	<p><i>Hesperomannia arborescens</i>  <i>Huperzia nutans</i></p>
	<p><i>Labordia cyrtandrae</i> .....</p>	<p><i>Isodendron longifolium</i>  <i>Labordia cyrtandrae</i></p>
	<p><i>Lobelia oahuensis</i> .....</p>	<p><i>Lobelia gaudichaudii</i> ssp. <i>koolauensis</i>  <i>Lobelia oahuensis</i></p>
	<p><i>Melicope hiiakae</i> .....</p>	<p><i>Melicope hiiakae</i></p>
	<p><i>Melicope lydgatei</i> .....</p>	<p><i>Melicope lydgatei</i>  <i>Myrsine juddii</i></p>
	<p><i>Phyllostegia hirsuta</i> .....</p>	<p><i>Phyllostegia hirsuta</i></p>
	<p><i>Phyllostegia parviflora</i> .....</p>	<p><i>Phyllostegia parviflora</i></p>
	<p><i>Plantago princeps</i> .....</p>	<p><i>Plantago princeps</i>  <i>Platanthera holochila</i></p>

(35) TABLE OF PROTECTED SPECIES WITHIN EACH CRITICAL HABITAT UNIT FOR OAHU—Continued

Unit name	Species occupied	Species unoccupied
Oahu—Lowland Wet—Unit 10	<p><i>Platydesma cornuta</i> var. <i>cornuta</i> .....</p> <p><i>Pteris lidgatei</i> .....</p> <p><i>Tetraplasandra gymnocarpa</i> .....</p> <p><i>Viola oahuensis</i> .....</p> <p><i>Zanthoxylum oahuense</i> .....</p>	<p><i>Platydesma cornuta</i> var. <i>cornuta</i>  <i>Psychotria hexandra</i> ssp. <i>oahuensis</i>  <i>Pteralyxia macrocarpa</i>  <i>Pteris lidgatei</i>  <i>Sanicula purpurea</i>  <i>Tetraplasandra gymnocarpa</i>  <i>Trematolobelia singularis</i>  <i>Viola oahuensis</i>  <i>Zanthoxylum oahuense</i></p> <p><i>Adenophorus periens</i>  <i>Chamaesyce rockii</i>  <i>Cyanea acuminata</i>  <i>Cyanea calycina</i>  <i>Cyanea crispa</i>  <i>Cyanea grimesiana</i> ssp. <i>grimesiana</i>  <i>Cyanea humboldtiana</i>  <i>Cyanea koolauensis</i>  <i>Cyanea lanceolata</i>  <i>Cyanea purpurellifolia</i>  <i>Cyanea st.-johnii</i>  <i>Cyanea truncata</i>  <i>Cyrtandra dentata</i>  <i>Cyrtandra gracilis</i>  <i>Cyrtandra kaulantha</i>  <i>Cyrtandra polyantha</i>  <i>Cyrtandra sessilis</i>  <i>Cyrtandra subumbellata</i>  <i>Cyrtandra viridiflora</i>  <i>Cyrtandra waiolani</i>  <i>Gardenia mannii</i>  <i>Hesperomannia arborescens</i>  <i>Huperzia nutans</i>  <i>Isodendrion longifolium</i>  <i>Labordia cyrtandrae</i>  <i>Lobelia gaudichaudii</i> ssp. <i>koolauensis</i>  <i>Lobelia oahuensis</i>  <i>Melicope hiiakae</i>  <i>Melicope lydgatei</i>  <i>Myrsine juddii</i>  <i>Phyllostegia hirsuta</i>  <i>Phyllostegia parviflora</i>  <i>Plantago princeps</i>  <i>Platanthera holochila</i>  <i>Platydesma cornuta</i> var. <i>cornuta</i>  <i>Psychotria hexandra</i> ssp. <i>oahuensis</i>  <i>Pteralyxia macrocarpa</i>  <i>Pteris lidgatei</i>  <i>Sanicula purpurea</i>  <i>Tetraplasandra gymnocarpa</i>  <i>Trematolobelia singularis</i>  <i>Viola oahuensis</i>  <i>Zanthoxylum oahuense</i></p>
Oahu—Lowland Wet—Unit 11		<p><i>Adenophorus periens</i>  <i>Chamaesyce rockii</i>  <i>Cyanea acuminata</i>  <i>Cyanea calycina</i>  <i>Cyanea crispa</i>  <i>Cyanea grimesiana</i> ssp. <i>grimesiana</i>  <i>Cyanea humboldtiana</i>  <i>Cyanea koolauensis</i>  <i>Cyanea lanceolata</i>  <i>Cyanea purpurellifolia</i>  <i>Cyanea st.-johnii</i>  <i>Cyanea truncata</i>  <i>Cyrtandra dentata</i>  <i>Cyrtandra gracilis</i>  <i>Cyrtandra kaulantha</i>  <i>Cyrtandra polyantha</i>  <i>Cyrtandra sessilis</i>  <i>Cyrtandra subumbellata</i></p>

## (35) TABLE OF PROTECTED SPECIES WITHIN EACH CRITICAL HABITAT UNIT FOR OAHU—Continued

Unit name	Species occupied	Species unoccupied
Oahu—Lowland Wet—Unit 12		<i>Cyrtandra viridiflora</i> <i>Cyrtandra waiolani</i> <i>Gardenia mannii</i> <i>Hesperomannia arborescens</i> <i>Huperzia nutans</i> <i>Isodendron longifolium</i> <i>Labordia cyrtandrae</i> <i>Lobelia gaudichaudii</i> ssp. <i>koolauensis</i> <i>Lobelia oahuensis</i> <i>Melicope hiiakae</i> <i>Melicope lydgatei</i> <i>Myrsine juddii</i> <i>Phyllostegia hirsuta</i> <i>Phyllostegia parviflora</i> <i>Plantago princeps</i> <i>Platanthera holochila</i> <i>Platydesma cornuta</i> var. <i>cornuta</i> <i>Psychotria hexandra</i> ssp. <i>oahuensis</i> <i>Pteralyxia macrocarpa</i> <i>Pteris lidgatei</i> <i>Sanicula purpurea</i> <i>Tetraplasandra gymnocarpa</i> <i>Trematolobelia singularis</i> <i>Viola oahuensis</i> <i>Zanthoxylum oahuense</i>
Oahu—Lowland Wet—Unit 13		<i>Adenophorus periens</i> <i>Chamaesyce rockii</i> <i>Cyanea acuminata</i> <i>Cyanea calycina</i> <i>Cyanea crista</i> <i>Cyanea grimesiana</i> ssp. <i>grimesiana</i> <i>Cyanea humboldtiana</i> <i>Cyanea koolauensis</i> <i>Cyanea lanceolata</i> <i>Cyanea purpurellifolia</i> <i>Cyanea st.-johnii</i> <i>Cyanea truncata</i> <i>Cyrtandra dentata</i> <i>Cyrtandra gracilis</i> <i>Cyrtandra kaulantha</i> <i>Cyrtandra polyantha</i> <i>Cyrtandra sessilis</i> <i>Cyrtandra subumbellata</i> <i>Cyrtandra viridiflora</i> <i>Cyrtandra waiolani</i> <i>Gardenia mannii</i> <i>Hesperomannia arborescens</i> <i>Huperzia nutans</i> <i>Isodendron longifolium</i> <i>Labordia cyrtandrae</i> <i>Lobelia gaudichaudii</i> ssp. <i>koolauensis</i> <i>Lobelia oahuensis</i> <i>Melicope hiiakae</i> <i>Melicope lydgatei</i> <i>Myrsine juddii</i> <i>Phyllostegia hirsuta</i> <i>Phyllostegia parviflora</i> <i>Plantago princeps</i> <i>Platanthera holochila</i> <i>Platydesma cornuta</i> var. <i>cornuta</i> <i>Psychotria hexandra</i> ssp. <i>oahuensis</i> <i>Pteralyxia macrocarpa</i> <i>Pteris lidgatei</i> <i>Sanicula purpurea</i> <i>Tetraplasandra gymnocarpa</i> <i>Trematolobelia singularis</i> <i>Viola oahuensis</i> <i>Zanthoxylum oahuense</i>  <i>Adenophorus periens</i> <i>Chamaesyce rockii</i>

(35) TABLE OF PROTECTED SPECIES WITHIN EACH CRITICAL HABITAT UNIT FOR OAHU—Continued

Unit name	Species occupied	Species unoccupied
Oahu—Lowland Wet—Unit 14	<p><i>Cyanea koolauensis</i> .....</p>	<p> <i>Cyanea acuminata</i>  <i>Cyanea calycina</i>  <i>Cyanea crispa</i>  <i>Cyanea grimesiana</i> ssp. <i>grimesiana</i>  <i>Cyanea humboldtiana</i>  <i>Cyanea koolauensis</i>  <i>Cyanea lanceolata</i>  <i>Cyanea purpurellifolia</i>  <i>Cyanea st.-johnii</i>  <i>Cyanea truncata</i>  <i>Cyrtandra dentata</i>  <i>Cyrtandra gracilis</i>  <i>Cyrtandra kaulantha</i>  <i>Cyrtandra polyantha</i>  <i>Cyrtandra sessilis</i>  <i>Cyrtandra subumbellata</i>  <i>Cyrtandra viridiflora</i>  <i>Cyrtandra waiolani</i>  <i>Gardenia mannii</i>  <i>Hesperomannia arborescens</i>  <i>Huperzia nutans</i>  <i>Isodendron longifolium</i>  <i>Labordia cyrtandrae</i>  <i>Lobelia gaudichaudii</i> ssp. <i>koolauensis</i>  <i>Lobelia oahuensis</i>  <i>Melicope hiiakae</i>  <i>Melicope lydgatei</i>  <i>Myrsine juddii</i>  <i>Phyllostegia hirsuta</i>  <i>Phyllostegia parviflora</i>  <i>Plantago princeps</i>  <i>Platanthera holochila</i>  <i>Platydesma cornuta</i> var. <i>cornuta</i>  <i>Psychotria hexandra</i> ssp. <i>oahuensis</i>  <i>Pteralyxia macrocarpa</i>  <i>Pteris lidgatei</i>  <i>Sanicula purpurea</i>  <i>Tetraplasandra gymnocarpa</i>  <i>Trematolobelia singularis</i>  <i>Viola oahuensis</i>  <i>Zanthoxylum oahuense</i>    <i>Adenophorus periens</i>  <i>Chamaesyce rockii</i>  <i>Cyanea acuminata</i>  <i>Cyanea calycina</i>  <i>Cyanea crispa</i>  <i>Cyanea grimesiana</i> ssp. <i>grimesiana</i>  <i>Cyanea humboldtiana</i>  <i>Cyanea koolauensis</i>  <i>Cyanea lanceolata</i>  <i>Cyanea purpurellifolia</i>  <i>Cyanea st.-johnii</i>  <i>Cyanea truncata</i>  <i>Cyrtandra dentata</i>  <i>Cyrtandra gracilis</i>  <i>Cyrtandra kaulantha</i>  <i>Cyrtandra polyantha</i>  <i>Cyrtandra sessilis</i>  <i>Cyrtandra subumbellata</i>  <i>Cyrtandra viridiflora</i>  <i>Cyrtandra waiolani</i>  <i>Gardenia mannii</i>  <i>Hesperomannia arborescens</i>  <i>Huperzia nutans</i>  <i>Isodendron longifolium</i>  <i>Labordia cyrtandrae</i>  <i>Lobelia gaudichaudii</i> ssp. <i>koolauensis</i>  <i>Lobelia oahuensis</i>  <i>Melicope hiiakae</i>  <i>Melicope lydgatei</i>  <i>Myrsine juddii</i> </p>

(35) TABLE OF PROTECTED SPECIES WITHIN EACH CRITICAL HABITAT UNIT FOR OAHU—Continued

Unit name	Species occupied	Species unoccupied
Oahu—Lowland Wet—Unit 15	<p><i>Cyanea crispa</i> .....</p>	<p><i>Phyllostegia hirsuta</i>  <i>Phyllostegia parviflora</i>  <i>Plantago princeps</i>  <i>Platanthera holochila</i>  <i>Platydesma cornuta</i> var. <i>cornuta</i>  <i>Psychotria hexandra</i> ssp. <i>oahuensis</i>  <i>Pteralyxia macrocarpa</i>  <i>Pteris lidgatei</i>  <i>Sanicula purpurea</i>  <i>Tetraplasandra gymnocarpa</i>  <i>Trematolobelia singularis</i>  <i>Viola oahuensis</i>  <i>Zanthoxylum oahuense</i></p> <p><i>Adenophorus periens</i>  <i>Chamaesyce rockii</i>  <i>Cyanea acuminata</i>  <i>Cyanea calycina</i>  <i>Cyanea crispa</i>  <i>Cyanea grimesiana</i> ssp. <i>grimesiana</i>  <i>Cyanea humboldtiana</i>  <i>Cyanea koolauensis</i>  <i>Cyanea lanceolata</i>  <i>Cyanea purpurellifolia</i>  <i>Cyanea st.-johnii</i>  <i>Cyanea truncata</i>  <i>Cyrtandra dentata</i>  <i>Cyrtandra gracilis</i>  <i>Cyrtandra kaulantha</i>  <i>Cyrtandra polyantha</i>  <i>Cyrtandra sessilis</i>  <i>Cyrtandra subumbellata</i>  <i>Cyrtandra viridiflora</i>  <i>Cyrtandra waiolani</i>  <i>Gardenia mannii</i>  <i>Hesperomannia arborescens</i>  <i>Huperzia nutans</i>  <i>Isodendron longifolium</i>  <i>Labordia cyrtandrae</i>  <i>Lobelia gaudichaudii</i> ssp. <i>koolauensis</i>  <i>Lobelia oahuensis</i>  <i>Melicope hiiakae</i>  <i>Melicope lydgatei</i>  <i>Myrsine juddii</i>  <i>Phyllostegia hirsuta</i>  <i>Phyllostegia parviflora</i>  <i>Plantago princeps</i>  <i>Platanthera holochila</i>  <i>Platydesma cornuta</i> var. <i>cornuta</i>  <i>Psychotria hexandra</i> ssp. <i>oahuensis</i>  <i>Pteralyxia macrocarpa</i>  <i>Pteris lidgatei</i>  <i>Sanicula purpurea</i>  <i>Tetraplasandra gymnocarpa</i>  <i>Trematolobelia singularis</i>  <i>Viola oahuensis</i>  <i>Zanthoxylum oahuense</i></p>
Oahu—Lowland Wet—Unit 16	<p><i>Cyanea acuminata</i> .....</p> <p><i>Cyanea calycina</i> .....</p> <p><i>Cyanea crispa</i> .....</p> <p><i>Cyanea humboldtiana</i> .....</p> <p><i>Cyanea koolauensis</i> .....</p> <p><i>Cyanea lanceolata</i> .....</p> <p><i>Cyanea st.-johnii</i> .....</p> <p><i>Cyrtandra gracilis</i> .....</p>	<p><i>Adenophorus periens</i>  <i>Chamaesyce rockii</i>  <i>Cyanea acuminata</i>  <i>Cyanea calycina</i>  <i>Cyanea crispa</i>  <i>Cyanea grimesiana</i> ssp. <i>grimesiana</i>  <i>Cyanea humboldtiana</i>  <i>Cyanea koolauensis</i>  <i>Cyanea lanceolata</i>  <i>Cyanea purpurellifolia</i>  <i>Cyanea st.-johnii</i>  <i>Cyanea truncata</i>  <i>Cyrtandra dentata</i>  <i>Cyrtandra gracilis</i></p>



## (35) TABLE OF PROTECTED SPECIES WITHIN EACH CRITICAL HABITAT UNIT FOR OAHU—Continued

Unit name	Species occupied	Species unoccupied
Oahu—Dry Cliff—Unit 2	<i>Schiedea obovata</i> .....  <i>Abutilon sandwicense</i> ..... <i>Alectryon macrococcus</i> .....  <i>Dubautia herbstobatae</i> .....  <i>Gouania vitifolia</i> .....  <i>Kadua parvula</i> ..... <i>Lepidium arbuscula</i> ..... <i>Lobelia niihauensis</i> ..... <i>Melanthera tenuifolia</i> ..... <i>Melicope makahae</i> .....  <i>Nototrichium humile</i> ..... <i>Peucedanum sandwicense</i> .....  <i>Platydesma cornuta</i> var. <i>decurrens</i> ..... <i>Pleomele forbesii</i> .....  <i>Sanicula marivera</i> ..... <i>Schiedea hookeri</i> .....  <i>Tetramolopium filiforme</i> ..... <i>Viola chamissoniana</i> ssp. <i>Chamissoniana</i> .....	<i>Pleomele forbesii</i> <i>Pteralyxia macrocarpa</i> <i>Sanicula marivera</i> <i>Schiedea hookeri</i> <i>Schiedea obovata</i> <i>Schiedea trinervis</i> <i>Silene lanceolata</i> <i>Silene perlmanii</i> <i>Spermolepis hawaiiensis</i> <i>Tetramolopium filiforme</i> <i>Tetramolopium lepidotum</i> ssp. <i>lepidotum</i> <i>Viola chamissoniana</i> ssp. <i>chamissoniana</i>  <i>Abutilon sandwicense</i> <i>Achyranthes splendens</i> var. <i>rotundata</i> <i>Alectryon macrococcus</i> <i>Bonamia menziesii</i> <i>Cenchrus agrimonioides</i> <i>Chamaesyce herbstii</i> <i>Chamaesyce kuwaleana</i> <i>Cyanea grimesiana</i> ssp. <i>obatae</i> <i>Cyrtandra dentata</i> <i>Diellia falcata</i> <i>Diellia unisora</i> <i>Dubautia herbstobatae</i> <i>Eragrostis fosbergii</i> <i>Flueggea neowawraea</i> <i>Gouania meyenii</i> <i>Gouania vitifolia</i> <i>Isodendrion laurifolium</i> <i>Isodendrion pyrifolium</i> <i>Kadua degeneri</i> <i>Kadua parvula</i> <i>Korthalsella degeneri</i> <i>Lepidium arbuscula</i> <i>Lipochaeta lobata</i> var. <i>leptophylla</i> <i>Lobelia niihauensis</i> <i>Melanthera tenuifolia</i> <i>Melicope makahae</i> <i>Melicope saint-johnii</i> <i>Neraudia angulata</i> <i>Nototrichium humile</i> <i>Peucedanum sandwicense</i> <i>Phyllostegia kaalaensis</i> <i>Plantago princeps</i> <i>Platydesma cornuta</i> var. <i>decurrens</i> <i>Pleomele forbesii</i> <i>Pteralyxia macrocarpa</i> <i>Sanicula marivera</i> <i>Schiedea hookeri</i> <i>Schiedea obovata</i> <i>Schiedea trinervis</i> <i>Silene lanceolata</i> <i>Silene perlmanii</i> <i>Spermolepis hawaiiensis</i> <i>Tetramolopium filiforme</i> <i>Tetramolopium lepidotum</i> ssp. <i>lepidotum</i> <i>Viola chamissoniana</i> ssp. <i>chamissoniana</i>
Oahu—Dry Cliff—Unit 3	<i>Abutilon sandwicense</i> ..... <i>Alectryon macrococcus</i> ..... <i>Bonamia menziesii</i> .....  <i>Diellia falcate</i> ..... <i>Dubautia herbstobatae</i> ..... <i>Eragrostis fosbergii</i> .....	<i>Abutilon sandwicense</i> <i>Achyranthes splendens</i> var. <i>rotundata</i> <i>Alectryon macrococcus</i> <i>Bonamia menziesii</i> <i>Cenchrus agrimonioides</i> <i>Chamaesyce herbstii</i> <i>Chamaesyce kuwaleana</i> <i>Cyanea grimesiana</i> ssp. <i>obatae</i> <i>Cyrtandra dentata</i> <i>Diellia falcata</i> <i>Diellia unisora</i> <i>Dubautia herbstobatae</i> <i>Eragrostis fosbergii</i>



## (35) TABLE OF PROTECTED SPECIES WITHIN EACH CRITICAL HABITAT UNIT FOR OAHU—Continued

Unit name	Species occupied	Species unoccupied
Oahu—Dry Cliff—Unit 6	<i>Spermolepis hawaiiensis</i> .....  <i>Cenchrus agrimonioides</i> .....  <i>Diellia unisora</i> .....  <i>Flueggea neowawraea</i> .....  <i>Lepidium arbuscula</i> ..... <i>Lobelia niihauensis</i> .....  <i>Melicope saint-johnii</i> ..... <i>Neraudia angulate</i> .....  <i>Plantago princeps</i> .....  <i>Pleomele forbesii</i> ..... <i>Pteralyxia macrocarpa</i> .....	<i>Silene lanceolata</i> <i>Silene perlmanii</i> <i>Spermolepis hawaiiensis</i> <i>Tetramolopium filiforme</i> <i>Tetramolopium lepidotum</i> ssp. <i>lepidotum</i> <i>Viola chamissoniana</i> ssp. <i>chamissoniana</i>  <i>Abutilon sandwicense</i> <i>Achyranthes splendens</i> var. <i>rotundata</i> <i>Alectryon macrococcus</i> <i>Bonamia menziesii</i> <i>Cenchrus agrimonioides</i> <i>Chamaesyce herbstii</i> <i>Chamaesyce kuwaleana</i> <i>Cyanea grimesiana</i> ssp. <i>obatae</i> <i>Cyrtandra dentata</i> <i>Diellia falcata</i> <i>Diellia unisora</i> <i>Dubautia herbstobatae</i> <i>Eragrostis fosbergii</i> <i>Flueggea neowawraea</i> <i>Gouania meyenii</i> <i>Gouania vitifolia</i> <i>Isodendrion laurifolium</i> <i>Isodendrion pyrifolium</i> <i>Kadua degeneri</i> <i>Kadua parvula</i> <i>Korthalsella degeneri</i> <i>Lepidium arbuscula</i> <i>Lipochaeta lobata</i> var. <i>leptophylla</i> <i>Lobelia niihauensis</i> <i>Melanthera tenuifolia</i> <i>Melicope makahae</i> <i>Melicope saint-johnii</i> <i>Neraudia angulata</i> <i>Nototrichium humile</i> <i>Peucedanum sandwicense</i> <i>Phyllostegia kaalaensis</i> <i>Plantago princeps</i> <i>Platydesma cornuta</i> var. <i>decurrens</i> <i>Pleomele forbesii</i> <i>Pteralyxia macrocarpa</i> <i>Sanicula marivera</i> <i>Schiedea hookeri</i> <i>Schiedea obovata</i> <i>Schiedea trinervis</i> <i>Silene lanceolata</i> <i>Silene perlmanii</i> <i>Spermolepis hawaiiensis</i> <i>Tetramolopium filiforme</i> <i>Tetramolopium lepidotum</i> ssp. <i>lepidotum</i> <i>Viola chamissoniana</i> ssp. <i>chamissoniana</i>
Oahu—Dry Cliff—Unit 7a	<i>Flueggea neowawraea</i> .....	<i>Abutilon sandwicense</i> <i>Achyranthes splendens</i> var. <i>rotundata</i> <i>Alectryon macrococcus</i> <i>Bonamia menziesii</i> <i>Cenchrus agrimonioides</i> <i>Chamaesyce herbstii</i> <i>Chamaesyce kuwaleana</i> <i>Cyanea grimesiana</i> ssp. <i>obatae</i> <i>Cyrtandra dentata</i> <i>Diellia falcata</i> <i>Diellia unisora</i> <i>Dubautia herbstobatae</i> <i>Eragrostis fosbergii</i> <i>Flueggea neowawraea</i> <i>Gouania meyenii</i> <i>Gouania vitifolia</i> <i>Isodendrion laurifolium</i> <i>Isodendrion pyrifolium</i> <i>Kadua degeneri</i>

(35) TABLE OF PROTECTED SPECIES WITHIN EACH CRITICAL HABITAT UNIT FOR OAHU—Continued

Unit name	Species occupied	Species unoccupied
Oahu—Dry Cliff—Unit 7b	<i>Kadua parvula</i> .....	<i>Kadua parvula</i> <i>Korthalsella degeneri</i> <i>Lepidium arbuscula</i> <i>Lipochaeta lobata</i> var. <i>leptophylla</i> <i>Lobelia niihauensis</i> <i>Melanthera tenuifolia</i> <i>Melicope makahae</i>
	<i>Melicope saint-johnii</i> .....	<i>Melicope saint-johnii</i> <i>Neraudia angulata</i> <i>Nototrichium humile</i> <i>Peucedanum sandwicense</i> <i>Phyllostegia kaalaensis</i>
	<i>Plantago princeps</i> .....	<i>Plantago princeps</i>
	<i>Platydesma cornuta</i> var. <i>decurrens</i> .....	<i>Platydesma cornuta</i> var. <i>decurrens</i>
	<i>Pleomele forbesii</i> .....	<i>Pleomele forbesii</i> <i>Pteralyxia macrocarpa</i> <i>Sanicula mariversa</i> <i>Schiedea hookeri</i> <i>Schiedea obovata</i> <i>Schiedea trinervis</i> <i>Silene lanceolata</i>
	<i>Silene perlmantii</i> .....	<i>Silene perlmantii</i> <i>Spermolepis hawaiiensis</i> <i>Tetramolopium filiforme</i> <i>Tetramolopium lepidotum</i> ssp. <i>lepidotum</i>
	<i>Viola chamissoniana</i> ssp. <i>Chamissoniana</i> .....	<i>Viola chamissoniana</i> ssp. <i>chamissoniana</i>
		<i>Abutilon sandwicense</i> <i>Achyranthes splendens</i> var. <i>rotundata</i> <i>Alectryon macrococcus</i> <i>Bonamia menziesii</i> <i>Cenchrus agrimonioides</i> <i>Chamaesyce herbstii</i> <i>Chamaesyce kuwaleana</i> <i>Cyanea grimesiana</i> ssp. <i>obatae</i> <i>Cyrtandra dentata</i> <i>Diellia falcata</i> <i>Diellia unisora</i> <i>Dubautia herbstobatae</i> <i>Eragrostis fosbergii</i> <i>Flueggea neowawraea</i> <i>Gouania meyenii</i> <i>Gouania vitifolia</i> <i>Isodendrion laurifolium</i> <i>Isodendrion pyrifolium</i> <i>Kadua degeneri</i> <i>Kadua parvula</i> <i>Korthalsella degeneri</i> <i>Lepidium arbuscula</i> <i>Lipochaeta lobata</i> var. <i>leptophylla</i> <i>Lobelia niihauensis</i> <i>Melanthera tenuifolia</i> <i>Melicope makahae</i> <i>Melicope saint-johnii</i> <i>Neraudia angulata</i> <i>Nototrichium humile</i> <i>Peucedanum sandwicense</i> <i>Phyllostegia kaalaensis</i> <i>Plantago princeps</i> <i>Platydesma cornuta</i> var. <i>decurrens</i> <i>Pleomele forbesii</i> <i>Pteralyxia macrocarpa</i> <i>Sanicula mariversa</i> <i>Schiedea hookeri</i> <i>Schiedea obovata</i> <i>Schiedea trinervis</i> <i>Silene lanceolata</i> <i>Silene perlmantii</i> <i>Spermolepis hawaiiensis</i> <i>Tetramolopium filiforme</i> <i>Tetramolopium lepidotum</i> ssp. <i>lepidotum</i> <i>Viola chamissoniana</i> ssp. <i>chamissoniana</i>



(35) TABLE OF PROTECTED SPECIES WITHIN EACH CRITICAL HABITAT UNIT FOR OAHU—Continued

Unit name	Species occupied	Species unoccupied
Oahu—Wet Cliff—Unit 4		<i>Lobelia oahuensis</i> <i>Melicope christophersenii</i> <i>Phyllostegia hirsuta</i> <i>Pteralyxia macrocarpa</i> <i>Schiedea hookeri</i> <i>Schiedea kaalae</i> <i>Schiedea trinervis</i>  <i>Cyanea acuminata</i> <i>Cyanea calycina</i> <i>Labordia cyrtandrae</i> <i>Lobelia oahuensis</i> <i>Melicope christophersenii</i> <i>Phyllostegia hirsuta</i> <i>Pteralyxia macrocarpa</i> <i>Schiedea hookeri</i> <i>Schiedea kaalae</i> <i>Schiedea trinervis</i>
Oahu—Wet Cliff—Unit 5	<i>Phyllostegia hirsuta</i> ..... <i>Schiedea hookeri</i> .....	<i>Cyanea acuminata</i> <i>Cyanea calycina</i> <i>Labordia cyrtandrae</i> <i>Lobelia oahuensis</i> <i>Melicope christophersenii</i> <i>Phyllostegia hirsuta</i> <i>Pteralyxia macrocarpa</i> <i>Schiedea hookeri</i> <i>Schiedea kaalae</i> <i>Schiedea trinervis</i>
Oahu—Wet Cliff—Unit 6	<i>Cyanea crispa</i> .....  <i>Huperzia nutans</i> .....  <i>Pteralyxia macrocarpa</i> ..... <i>Schiedea kaalae</i> .....	<i>Adenophorus periens</i> <i>Chamaesyce deppeana</i> <i>Chamaesyce rockii</i> <i>Cyanea acuminata</i> <i>Cyanea calycina</i> <i>Cyanea crispa</i> <i>Cyanea humboldtiana</i> <i>Cyanea purpurellifolia</i> <i>Cyanea st.-johnii</i> <i>Cyanea truncata</i> <i>Cyrtandra kaulantha</i> <i>Cyrtandra sessilis</i> <i>Cyrtandra subumbellata</i> <i>Cyrtandra viridiflora</i> <i>Huperzia nutans</i> <i>Labordia cyrtandrae</i> <i>Lobelia oahuensis</i> <i>Lysimachia filifolia</i> <i>Phyllostegia hirsuta</i> <i>Phyllostegia parviflora</i> <i>Plantago princeps</i> <i>Psychotria hexandra</i> ssp. <i>oahuensis</i> <i>Pteralyxia macrocarpa</i> <i>Sanicula purpurea</i> <i>Schiedea kaalae</i> <i>Tetraplasandra gymnocarpa</i> <i>Trematolobelia singularis</i> <i>Viola oahuensis</i>
Oahu—Wet Cliff—Unit 7	<i>Cyanea crispa</i> .....	<i>Adenophorus periens</i> <i>Chamaesyce deppeana</i> <i>Chamaesyce rockii</i> <i>Cyanea acuminata</i> <i>Cyanea calycina</i> <i>Cyanea crispa</i> <i>Cyanea humboldtiana</i> <i>Cyanea purpurellifolia</i> <i>Cyanea st.-johnii</i> <i>Cyanea truncata</i> <i>Cyrtandra kaulantha</i> <i>Cyrtandra sessilis</i> <i>Cyrtandra subumbellata</i>

(35) TABLE OF PROTECTED SPECIES WITHIN EACH CRITICAL HABITAT UNIT FOR OAHU—Continued

Unit name	Species occupied	Species unoccupied
Oahu—Wet Cliff—Unit 8	<p><i>Psychotria hexandra</i> ssp. <i>Oahuensis</i> .....</p> <p><i>Schiedea kaalae</i> .....</p> <p><i>Cyanea acuminata</i> .....</p> <p><i>Cyanea calycina</i> .....</p> <p><i>Cyanea humboldtiana</i> .....</p> <p><i>Cyanea purpurellifolia</i> .....</p> <p><i>Cyanea st.-johnii</i> .....</p> <p><i>Cyrtandra kaulantha</i> .....</p> <p><i>Cyrtandra sessilis</i> .....</p> <p><i>Cyrtandra subumbellata</i> .....</p> <p><i>Cyrtandra viridiflora</i> .....</p> <p><i>Huperzia nutans</i> .....</p> <p><i>Labordia cyrtandrae</i> .....</p> <p><i>Lobelia oahuensis</i> .....</p> <p><i>Lysimachia filifolia</i> .....</p> <p><i>Phyllostegia hirsuta</i> .....</p> <p><i>Phyllostegia parviflora</i> .....</p> <p><i>Plantago princeps</i> .....</p> <p><i>Pteralyxia macrocarpa</i> .....</p> <p><i>Sanicula purpurea</i> .....</p> <p><i>Tetraplasandra gymnocarpa</i> .....</p> <p><i>Trematolobelia singularis</i> .....</p> <p><i>Viola oahuensis</i> .....</p>	<p><i>Cyrtandra viridiflora</i></p> <p><i>Huperzia nutans</i></p> <p><i>Labordia cyrtandrae</i></p> <p><i>Lobelia oahuensis</i></p> <p><i>Lysimachia filifolia</i></p> <p><i>Phyllostegia hirsuta</i></p> <p><i>Phyllostegia parviflora</i></p> <p><i>Plantago princeps</i></p> <p><i>Psychotria hexandra</i> ssp. <i>oahuensis</i></p> <p><i>Pteralyxia macrocarpa</i></p> <p><i>Sanicula purpurea</i></p> <p><i>Schiedea kaalae</i></p> <p><i>Tetraplasandra gymnocarpa</i></p> <p><i>Trematolobelia singularis</i></p> <p><i>Viola oahuensis</i></p> <p><i>Adenophorus perieni</i></p> <p><i>Chamaesyce deppeana</i></p> <p><i>Chamaesyce rockii</i></p> <p><i>Cyanea acuminata</i></p> <p><i>Cyanea calycina</i></p> <p><i>Cyanea crispa</i></p> <p><i>Cyanea humboldtiana</i></p> <p><i>Cyanea purpurellifolia</i></p> <p><i>Cyanea st.-johnii</i></p> <p><i>Cyanea truncata</i></p> <p><i>Cyrtandra kaulantha</i></p> <p><i>Cyrtandra sessilis</i></p> <p><i>Cyrtandra subumbellata</i></p> <p><i>Cyrtandra viridiflora</i></p> <p><i>Huperzia nutans</i></p> <p><i>Labordia cyrtandrae</i></p> <p><i>Lobelia oahuensis</i></p> <p><i>Lysimachia filifolia</i></p> <p><i>Phyllostegia hirsuta</i></p> <p><i>Phyllostegia parviflora</i></p> <p><i>Plantago princeps</i></p> <p><i>Psychotria hexandra</i> ssp. <i>oahuensis</i></p> <p><i>Pteralyxia macrocarpa</i></p> <p><i>Sanicula purpurea</i></p> <p><i>Schiedea kaalae</i></p> <p><i>Tetraplasandra gymnocarpa</i></p> <p><i>Trematolobelia singularis</i></p> <p><i>Viola oahuensis</i></p>

(j) *Plants on Oahu; Constituent elements.*

(1) *Flowering plants.*

**FAMILY AMARANTHACEAE**

*Achyranthes splendens* var. *rotundata* (round-leaved chaff flower)

Oahu—Coastal—Unit 1, Oahu—Coastal—Unit 13, Oahu—Coastal—Unit 14, Oahu—Coastal—Unit 15, Oahu—Lowland Dry—Unit 1, Oahu—Lowland Dry—Unit 2, Oahu—Lowland Dry—Unit 8, Oahu—Lowland Dry—Unit 9, Oahu—Lowland Dry—Unit 10, Oahu—Lowland Dry—Unit 11, Oahu—Dry Cliff—Unit 1, Oahu—Dry Cliff—Unit 2, Oahu—Dry Cliff—Unit 3, Oahu—Dry Cliff—Unit 4, Oahu—Dry Cliff—Unit 6, Oahu—Dry Cliff—Unit 7a, Oahu—Dry Cliff—Unit 7b, and Oahu—Dry Cliff—Unit 8, identified in the legal descriptions in paragraph (i) of this section, constitute

critical habitat for *Achyranthes splendens* var. *rotundata* on Oahu.

(i) In units Oahu—Coastal—Unit 1, Oahu—Coastal—Unit 13, Oahu—Coastal—Unit 14, and Oahu—Coastal—Unit 15, the physical and biological features of critical habitat are:

(A) Elevation: Less than 980 ft (300 m).

(B) Annual precipitation: Less than 20 in (50 cm).

(C) Substrate: Well-drained, calcareous, talus slopes; weathered clay soils; ephemeral pools; mudflats.

(D) Canopy: *Hibiscus*, *Myoporum*, *Santalum*, *Scaevola*.

(E) Subcanopy: *Gossypium*, *Sida*, *Vitex*.

(F) Understory: *Eragrostis*, *Jacquemontia*, *Lyceum*, *Nama*, *Sesuvium*, *Sporobolus*, *Vigna*.

(ii) In Oahu—Lowland Dry—Unit 1, Oahu—Lowland Dry—Unit 2, Oahu—

Lowland Dry—Unit 8, Oahu—Lowland Dry—Unit 9, Oahu—Lowland Dry—Unit 10, and Oahu—Lowland Dry—Unit 11, the physical and biological features of critical habitat are:

(A) Elevation: Less than 3,300 ft (1,000 m).

(B) Annual precipitation: Less than 50 in (130 cm).

(C) Substrate: Weathered silty loams to stony clay, rocky ledges, little-weathered lava.

(D) Canopy: *Diospyros*, *Myoporum*, *Pleomele*, *Santalum*, *Sapindus*.

(E) Subcanopy: *Chamaesyce*, *Dodonaea*, *Leptecophylla*, *Osteomeles*, *Psydrax*, *Scaevola*, *Wikstroemia*.

(F) Understory: *Alyxia*, *Artemisia*, *Bidens*, *Chenopodium*, *Nephrolepis*, *Peperomia*, *Plumbago*, *Sicyos*, *Sida*, *Waltheria*.

(iii) In units Oahu—Dry Cliff—Unit 1, Oahu—Dry Cliff—Unit 2, Oahu—Dry

Cliff—Unit 3, Oahu—Dry Cliff—Unit 4, Oahu—Dry Cliff—Unit 6, Oahu—Dry Cliff—Unit 7a, Oahu—Dry Cliff—Unit 7b, and Oahu—Dry Cliff—Unit 8, the physical and biological features of critical habitat are:

(A) Elevation: Unrestricted.

(B) Annual precipitation: Less than 75 in (190 cm).

(C) Substrate: Greater than 65 degree slope, rocky talus.

(D) Canopy: None.

(E) Subcanopy: *Antidesma*, *Chamaesyce*, *Diospyros*, *Dodonaea*.  
(F) Understory: *Bidens*, *Eragrostis*, *Melanthera*, *Schiedea*.

*Nototrichium humile* (KULUI)

Oahu—Lowland Dry—Unit 1, Oahu—Lowland Dry—Unit 2, Oahu—Lowland Dry—Unit 8, Oahu—Lowland Dry—Unit 9, Oahu—Lowland Dry—Unit 10, Oahu—Lowland Dry—Unit 11, Oahu—Lowland Mesic—Unit 1, Oahu—Lowland Mesic—Unit 2, Oahu—Lowland Mesic—Unit 3, Oahu—Dry Cliff—Unit 1, Oahu—Dry Cliff—Unit 2, Oahu—Dry Cliff—Unit 3, Oahu—Dry Cliff—Unit 4, Oahu—Dry Cliff—Unit 6, Oahu—Dry Cliff—Unit 7a, Oahu—Dry Cliff—Unit 7b, and Oahu—Dry Cliff—Unit 8, identified in the legal descriptions in paragraph (i) of this section, constitute critical habitat for *Nototrichium humile* on Oahu.

(i) In units Oahu—Lowland Dry—Unit 1, Oahu—Lowland Dry—Unit 2, Oahu—Lowland Dry—Unit 8, Oahu—Lowland Dry—Unit 9, Oahu—Lowland Dry—Unit 10, and Oahu—Lowland Dry—Unit 11, the physical and biological features of critical habitat are:

(A) Elevation: Less than 3,300 ft (1,000 m).

(B) Annual precipitation: Less than 50 in (130 cm).

(C) Substrate: Weathered silty loams to stony clay, rocky ledges, little-weathered lava.

(D) Canopy: *Diospyros*, *Myoporum*, *Pleomele*, *Santalum*, *Sapindus*.

(E) Subcanopy: *Chamaesyce*, *Dodonaea*, *Leptecophylla*, *Osteomeles*, *Psydrax*, *Scaevola*, *Wikstroemia*.

(F) Understory: *Alyxia*, *Artemisia*, *Bidens*, *Chenopodium*, *Nephrolepis*, *Peperomia*, *Plumbago*, *Sicyos*, *Sida*, *Waltheria*.

(ii) In units Oahu—Lowland Mesic—Unit 1, Oahu—Lowland Mesic—Unit 2, and Oahu—Lowland Mesic—Unit 3, the physical and biological features of critical habitat are:

(A) Elevation: Less than 3,300 ft (1,000 m).

(B) Annual precipitation: 50 to 75 in (130 to 190 cm).

(C) Substrate: Shallow soils, little to no herbaceous layer.

(D) Canopy: *Acacia*, *Diospyros*, *Metrosideros*, *Myrsine*, *Pouteria*, *Santalum*.

(E) Subcanopy: *Dodonaea*, *Freycinetia*, *Leptecophylla*, *Melanthera*, *Osteomeles*, *Pleomele*, *Psydrax*.

(F) Understory: *Carex*, *Dicranopteris*, *Diplazium*, *Elaphoglossum*, *Peperomia*.

(iii) In units Oahu—Dry Cliff—Unit 1, Oahu—Dry Cliff—Unit 2, Oahu—Dry Cliff—Unit 3, Oahu—Dry Cliff—Unit 4, Oahu—Dry Cliff—Unit 6, Oahu—Dry Cliff—Unit 7a, Oahu—Dry Cliff—Unit 7b, and Oahu—Dry Cliff—Unit 8, the physical and biological features of critical habitat are:

(A) Elevation: Unrestricted.

(B) Annual precipitation: Less than 75 in (190 cm).

(C) Substrate: Greater than 65 degree slope, rocky talus.

(D) Canopy: None.

(E) Subcanopy: *Antidesma*, *Chamaesyce*, *Diospyros*, *Dodonaea*.

(F) Understory: *Bidens*, *Eragrostis*, *Melanthera*, *Schiedea*.

**FAMILY APIACEAE**

*Peucedanum sandwicense* (MAKOU)

Oahu—Dry Cliff—Unit 1, Oahu—Dry Cliff—Unit 2, Oahu—Dry Cliff—Unit 3, Oahu—Dry Cliff—Unit 4, Oahu—Dry Cliff—Unit 6, Oahu—Dry Cliff—Unit 7a, Oahu—Dry Cliff—Unit 7b, and Oahu—Dry Cliff—Unit 8, identified in the legal descriptions in paragraph (i) of this section, constitute critical habitat for *Peucedanum sandwicense* on Oahu.

Within these units, the physical and biological features of critical habitat are:

(i) Elevation: Unrestricted.

(ii) Annual precipitation: Less than 75 in (190 cm).

(iii) Substrate: Greater than 65 degree slope, rocky talus.

(iv) Canopy: None.

(v) Subcanopy: *Antidesma*, *Chamaesyce*, *Diospyros*, *Dodonaea*.

(vi) Understory: *Bidens*, *Eragrostis*, *Melanthera*, *Schiedea*.

*Sanicula mariversa* (NCN)

Oahu—Lowland Mesic—Unit 1, Oahu—Lowland Mesic—Unit 2, Oahu—Lowland Mesic—Unit 3, Oahu—Dry Cliff—Unit 1, Oahu—Dry Cliff—Unit 2, Oahu—Dry Cliff—Unit 3, Oahu—Dry Cliff—Unit 4, Oahu—Dry Cliff—Unit 6, Oahu—Dry Cliff—Unit 7a, Oahu—Dry Cliff—Unit 7b, and Oahu—Dry Cliff—Unit 8, identified in the legal descriptions in paragraph (i) of this section, constitute critical habitat for *Sanicula mariversa* on Oahu.

(i) In units Oahu—Lowland Mesic—Unit 1, Oahu—Lowland Mesic—Unit 2, and Oahu—Lowland Mesic—Unit 3, the physical and biological features of critical habitat are:

(A) Elevation: Less than 3,300 ft (1,000 m).

(B) Annual precipitation: 50 to 75 in (130 to 190 cm).

(C) Substrate: Shallow soils, little to no herbaceous layer.

(D) Canopy: *Acacia*, *Diospyros*, *Metrosideros*, *Myrsine*, *Pouteria*, *Santalum*.

(E) Subcanopy: *Dodonaea*, *Freycinetia*, *Leptecophylla*, *Melanthera*, *Osteomeles*, *Pleomele*, *Psydrax*.

(F) Understory: *Carex*, *Dicranopteris*, *Diplazium*, *Elaphoglossum*, *Peperomia*.

(ii) In units Oahu—Dry Cliff—Unit 1, Oahu—Dry Cliff—Unit 2, Oahu—Dry Cliff—Unit 3, Oahu—Dry Cliff—Unit 4, Oahu—Dry Cliff—Unit 6, Oahu—Dry Cliff—Unit 7a, Oahu—Dry Cliff—Unit 7b, and Oahu—Dry Cliff—Unit 8, the physical and biological features of critical habitat are:

(A) Elevation: Unrestricted.

(B) Annual precipitation: Less than 75 in (190 cm).

(C) Substrate: Greater than 65 degree slope, rocky talus.

(D) Canopy: None.

(E) Subcanopy: *Antidesma*, *Chamaesyce*, *Diospyros*, *Dodonaea*.

(F) Understory: *Bidens*, *Eragrostis*, *Melanthera*, *Schiedea*.

*Sanicula purpurea* (NCN)

Oahu—Lowland Wet—Unit 6, Oahu—Lowland Wet—Unit 7, Oahu—Lowland Wet—Unit 8, Oahu—Lowland Wet—Unit 9, Oahu—Lowland Wet—Unit 10, Oahu—Lowland Wet—Unit 11, Oahu—Lowland Wet—Unit 12, Oahu—Lowland Wet—Unit 13, Oahu—Lowland Wet—Unit 14, Oahu—Lowland Wet—Unit 15, Oahu—Lowland Wet—Unit 16, Oahu—Wet Cliff—Unit 6, Oahu—Wet Cliff—Unit 7, and Oahu—Wet Cliff—Unit 8, identified in the legal descriptions in paragraph (i) of this section, constitute critical habitat for *Sanicula purpurea* on Oahu.

(i) In units Oahu—Lowland Wet—Unit 6, Oahu—Lowland Wet—Unit 7, Oahu—Lowland Wet—Unit 8, Oahu—Lowland Wet—Unit 9, Oahu—Lowland Wet—Unit 10, Oahu—Lowland Wet—Unit 11, Oahu—Lowland Wet—Unit 12, Oahu—Lowland Wet—Unit 13, Oahu—Lowland Wet—Unit 14, Oahu—Lowland Wet—Unit 15, and Oahu—Lowland Wet—Unit 16, the physical and biological features of critical habitat are:

(A) Elevation: Less than 3,300 ft (1,000 m).

(B) Annual precipitation: Greater than 75 in (190 cm).

(C) Substrate: Clays; ashbeds; deep, well-drained soils; lowland bogs.

(D) Canopy: *Antidesma*, *Metrosideros*, *Myrsine*, *Pisonia*, *Psychotria*.

(E) Subcanopy: *Cibotium*, *Claoxylon*, *Kadua*, *Melicope*.

(F) Understory: *Alyxia*, *Cyrtandra*, *Dicranopteris*, *Diplazium*, *Machaerina*, *Microlepia*.

(ii) In units Oahu—Wet Cliff—Unit 6, Oahu—Wet Cliff—Unit 7, and Oahu—Wet Cliff—Unit 8, the physical and biological features of critical habitat are:

(A) Elevation: Unrestricted.

(B) Annual precipitation: Greater than 75 in (190 cm).

(C) Substrate: Greater than 65 degree slope, shallow soils, weathered lava, bogs.

(D) Canopy: None.

(E) Subcanopy: *Broussaisia*, *Cheirodendron*, *Leptecophylla*, *Metrosideros*.

(F) Understory: Ferns, Bryophytes, *Coprosma*, *Dubautia*, *Kadua*, *Peperomia*.

#### *Spermolepis hawaiiensis* (NCN)

Oahu—Lowland Dry—Unit 1, Oahu—Lowland Dry—Unit 2, Oahu—Lowland Dry—Unit 6, Oahu—Lowland Dry—Unit 7, Oahu—Lowland Dry—Unit 8, Oahu—Lowland Dry—Unit 9, Oahu—Lowland Dry—Unit 10, Oahu—Lowland Dry—Unit 11, Oahu—Dry Cliff—Unit 1, Oahu—Dry Cliff—Unit 2, Oahu—Dry Cliff—Unit 3, Oahu—Dry Cliff—Unit 4, Oahu—Dry Cliff—Unit 6, Oahu—Dry Cliff—Unit 7a, Oahu—Dry Cliff—Unit 7b, and Oahu—Dry Cliff—Unit 8, identified in the legal descriptions in paragraph (i) of this section, constitute critical habitat for *Spermolepis hawaiiensis* on Oahu.

(i) In units Oahu—Lowland Dry—Unit 1, Oahu—Lowland Dry—Unit 2, Oahu—Lowland Dry—Unit 6, Oahu—Lowland Dry—Unit 7, Oahu—Lowland Dry—Unit 8, Oahu—Lowland Dry—Unit 9, Oahu—Lowland Dry—Unit 10, and Oahu—Lowland Dry—Unit 11, the physical or biological features of critical habitat are:

(A) Elevation: Less than 3,300 ft (1,000 m).

(B) Annual precipitation: Less than 50 in (130 cm).

(C) Substrate: Weathered silty loams to stony clay, rocky ledges, little-weathered lava.

(D) Canopy: *Diospyros*, *Myoporum*, *Pleomele*, *Santalum*, *Sapindus*.

(E) Subcanopy: *Chamaesyce*, *Dodonaea*, *Leptecophylla*, *Osteomeles*, *Psydrax*, *Scaevola*, *Wikstroemia*.

(F) Understory: *Alyxia*, *Artemisia*, *Bidens*, *Chenopodium*, *Nephrolepis*, *Peperomia*, *Plumbago*, *Sicyos*, *Sida*, *Waltheria*.

(ii) In units Oahu—Dry Cliff—Unit 1, Oahu—Dry Cliff—Unit 2, Oahu—Dry Cliff—Unit 3, Oahu—Dry Cliff—Unit 4, Oahu—Dry Cliff—Unit 6, Oahu—Dry Cliff—Unit 7a, Oahu—Dry Cliff—Unit

7b, and Oahu—Dry Cliff—Unit 8, the physical and biological features of critical habitat are:

(A) Elevation: Unrestricted.

(B) Annual precipitation: Less than 75 in (190 cm).

(C) Substrate: Greater than 65 degree slope, rocky talus.

(D) Canopy: None.

(E) Subcanopy: *Antidesma*, *Chamaesyce*, *Diospyros*, *Dodonaea*.

(F) Understory: *Bidens*, *Eragrostis*, *Melanthera*, *Schiedea*.

#### FAMILY APOCYNACEAE

##### *Pteralyxia macrocarpa* (KAULU)

Oahu—Lowland Mesic—Unit 1, Oahu—Lowland Mesic—Unit 2, Oahu—Lowland Mesic—Unit 3, Oahu—Lowland Mesic—Unit 4, Oahu—Lowland Mesic—Unit 5, Oahu—Lowland Mesic—Unit 6, Oahu—Lowland Mesic—Unit 7, Oahu—Lowland Wet—Unit 1, Oahu—Lowland Wet—Unit 2, Oahu—Lowland Wet—Unit 3, Oahu—Lowland Wet—Unit 4, Oahu—Lowland Wet—Unit 5, Oahu—Lowland Wet—Unit 6, Oahu—Lowland Wet—Unit 7, Oahu—Lowland Wet—Unit 8, Oahu—Lowland Wet—Unit 9, Oahu—Lowland Wet—Unit 10, Oahu—Lowland Wet—Unit 11, Oahu—Lowland Wet—Unit 12, Oahu—Lowland Wet—Unit 13, Oahu—Lowland Wet—Unit 14, Oahu—Lowland Wet—Unit 15, Oahu—Lowland Wet—Unit 16, Oahu—Dry Cliff—Unit 1, Oahu—Dry Cliff—Unit 2, Oahu—Dry Cliff—Unit 3, Oahu—Dry Cliff—Unit 4, Oahu—Dry Cliff—Unit 6, Oahu—Dry Cliff—Unit 7a, Oahu—Dry Cliff—Unit 7b, Oahu—Dry Cliff—Unit 8, Oahu—Wet Cliff—Unit 1, Oahu—Wet Cliff—Unit 2, Oahu—Wet Cliff—Unit 3, Oahu—Wet Cliff—Unit 4, Oahu—Wet Cliff—Unit 5, Oahu—Wet Cliff—Unit 6, Oahu—Wet Cliff—Unit 7, and Oahu—Wet Cliff—Unit 8, identified in the legal descriptions in paragraph (i) of this section, constitute critical habitat for *Pteralyxia macrocarpa* on Oahu.

(i) In units Oahu—Lowland Mesic—Unit 1, Oahu—Lowland Mesic—Unit 2, Oahu—Lowland Mesic—Unit 3, Oahu—Lowland Mesic—Unit 4, Oahu—Lowland Mesic—Unit 5, Oahu—Lowland Mesic—Unit 6, and Oahu—Lowland Mesic—Unit 7, the physical and biological features of critical habitat are:

(A) Elevation: Less than 3,300 ft (1,000 m).

(B) Annual precipitation: 50 to 75 in (130 to 190 cm).

(C) Substrate: Shallow soils, little to no herbaceous layer.

(D) Canopy: *Acacia*, *Diospyros*, *Metrosideros*, *Myrsine*, *Pouteria*, *Santalum*.

(E) Subcanopy: *Dodonaea*, *Freycinetia*, *Leptecophylla*, *Melanthera*, *Osteomeles*, *Pleomele*, *Psydrax*.

(F) Understory: *Carex*, *Dicranopteris*, *Diplazium*, *Elaphoglossum*, *Peperomia*.

(ii) In units Oahu—Lowland Wet—Unit 1, Oahu—Lowland Wet—Unit 2, Oahu—Lowland Wet—Unit 3, Oahu—Lowland Wet—Unit 4, Oahu—Lowland Wet—Unit 5, Oahu—Lowland Wet—Unit 6, Oahu—Lowland Wet—Unit 7, Oahu—Lowland Wet—Unit 8, Oahu—Lowland Wet—Unit 9, Oahu—Lowland Wet—Unit 10, Oahu—Lowland Wet—Unit 11, Oahu—Lowland Wet—Unit 12, Oahu—Lowland Wet—Unit 13, Oahu—Lowland Wet—Unit 14, Oahu—Lowland Wet—Unit 15, and Oahu—Lowland Wet—Unit 16, the physical and biological features of critical habitat are:

(A) Elevation: Less than 3,300 ft (1,000 m).

(B) Annual precipitation: Greater than 75 in (190 cm).

(C) Substrate: Clays; ashbeds; deep, well-drained soils; lowland bogs.

(D) Canopy: *Antidesma*, *Metrosideros*, *Myrsine*, *Pisonia*, *Psychotria*.

(E) Subcanopy: *Cibotium*, *Claoxylon*, *Kadua*, *Melicope*.

(F) Understory: *Alyxia*, *Cyrtandra*, *Dicranopteris*, *Diplazium*, *Machaerina*, *Microlepia*.

(iii) In units Oahu—Dry Cliff—Unit 1, Oahu—Dry Cliff—Unit 2, Oahu—Dry Cliff—Unit 3, Oahu—Dry Cliff—Unit 4, Oahu—Dry Cliff—Unit 6, Oahu—Dry Cliff—Unit 7a, Oahu—Dry Cliff—Unit 7b, and Oahu—Dry Cliff—Unit 8, the physical and biological features of critical habitat are:

(A) Elevation: Unrestricted.

(B) Annual precipitation: Less than 75 in (190 cm).

(C) Substrate: Greater than 65 degree slope, rocky talus.

(D) Canopy: None.

(E) Subcanopy: *Antidesma*, *Chamaesyce*, *Diospyros*, *Dodonaea*.

(F) Understory: *Bidens*, *Eragrostis*, *Melanthera*, *Schiedea*.

(iv) In units Oahu—Wet Cliff—Unit 1, Oahu—Wet Cliff—Unit 2, Oahu—Wet Cliff—Unit 3, Oahu—Wet Cliff—Unit 4, Oahu—Wet Cliff—Unit 5, Oahu—Wet Cliff—Unit 6, Oahu—Wet Cliff—Unit 7, and Oahu—Wet Cliff—Unit 8, the physical and biological features of critical habitat are:

(A) Elevation: Unrestricted.

(B) Annual precipitation: Greater than 75 in (190 cm).

(C) Substrate: Greater than 65 degree slope, shallow soils, weathered lava.

(D) Canopy: None.

(E) Subcanopy: *Broussaisia*, *Cheirodendron*, *Leptecophylla*, *Metrosideros*.

(F) Understory: Ferns, Bryophytes, *Coprosma*, *Dubautia*, *Kadua*, *Peperomia*.

#### FAMILY ARALIACEAE

*Tetraplasandra gymnocarpa* (OHE OHE)

Oahu—Lowland Mesic—Unit 4, Oahu—Lowland Mesic—Unit 5, Oahu—Lowland Mesic—Unit 6, Oahu—Lowland Mesic—Unit 7, Oahu—Lowland Wet—Unit 6, Oahu—Lowland Wet—Unit 7, Oahu—Lowland Wet—Unit 8, Oahu—Lowland Wet—Unit 9, Oahu—Lowland Wet—Unit 10, Oahu—Lowland Wet—Unit 11, Oahu—Lowland Wet—Unit 12, Oahu—Lowland Wet—Unit 13, Oahu—Lowland Wet—Unit 14, Oahu—Lowland Wet—Unit 15, Oahu—Lowland Wet—Unit 16, Oahu—Wet Cliff—Unit 6, Oahu—Wet Cliff—Unit 7, and Oahu—Wet Cliff—Unit 8, identified in the legal descriptions in paragraph (i) of this section, constitute critical habitat for *Tetraplasandra gymnocarpa* on Oahu.

(i) In units Oahu—Lowland Mesic—Unit 4, Oahu—Lowland Mesic—Unit 5, Oahu—Lowland Mesic—Unit 6, and Oahu—Lowland Mesic—Unit 7, the physical and biological features of critical habitat are:

(A) Elevation: Less than 3,300 ft (1,000 m).

(B) Annual precipitation: 50 to 75 in (130 to 190 cm).

(C) Substrate: Shallow soils, little to no herbaceous layer.

(D) Canopy: *Acacia*, *Diospyros*, *Metrosideros*, *Myrsine*, *Pouteria*, *Santalum*.

(E) Subcanopy: *Dodonaea*, *Freycinetia*, *Leptecophylla*, *Melanthera*, *Osteomeles*, *Pleomele*, *Psydrax*.

(F) Understory: *Carex*, *Dicranopteris*, *Diplazium*, *Elaphoglossum*, *Peperomia*.

(ii) In units Oahu—Lowland Wet—Unit 6, Oahu—Lowland Wet—Unit 7, Oahu—Lowland Wet—Unit 8, Oahu—Lowland Wet—Unit 9, Oahu—Lowland Wet—Unit 10, Oahu—Lowland Wet—Unit 11, Oahu—Lowland Wet—Unit 12, Oahu—Lowland Wet—Unit 13, Oahu—Lowland Wet—Unit 14, Oahu—Lowland Wet—Unit 15, and Oahu—Lowland Wet—Unit 16, the physical and biological features of critical habitat are:

(A) Elevation: Less than 3,300 ft (1,000 m).

(B) Annual precipitation: Greater than 75 in (190 cm).

(C) Substrate: Clays; ashbeds; deep, well-drained soils; lowland bogs.

(D) Canopy: *Antidesma*, *Metrosideros*, *Myrsine*, *Pisonia*, *Psychotria*.

(E) Subcanopy: *Cibotium*, *Claoxylon*, *Kadua*, *Melicope*.

(F) Understory: *Alyxia*, *Cyrtandra*, *Dicranopteris*, *Diplazium*, *Machaerina*, *Mirolepia*.

(iii) In units Oahu—Wet Cliff—Unit 6, Oahu—Wet Cliff—Unit 7, and Oahu—Wet Cliff—Unit 8, the physical and biological features of critical habitat are:

(A) Elevation: Unrestricted.

(B) Annual precipitation: Greater than 75 in (190 cm).

(C) Substrate: Greater than 65 degree slope, shallow soils, weathered lava.

(D) Canopy: None.

(E) Subcanopy: *Broussaisia*, *Cheirodendron*, *Leptecophylla*, *Metrosideros*.

(F) Understory: Ferns, Bryophytes, *Coprosma*, *Dubautia*, *Kadua*, *Peperomia*.

*Tetraplasandra lydgatei* (NGN)

Oahu—Lowland Mesic—Unit 4, Oahu—Lowland Mesic—Unit 5, Oahu—Lowland Mesic—Unit 6, and Oahu—Lowland Mesic—Unit 7, identified in the legal descriptions in paragraph (i) of this section, constitute critical habitat for *Tetraplasandra lydgatei* on Oahu.

Within these units, the physical and biological features of critical habitat are:

(i) Elevation: Less than 3,300 ft (1,000 m).

(ii) Annual precipitation: 50 to 75 in (130 to 190 cm).

(iii) Substrate: Shallow soils, little to no herbaceous layer.

(iv) Canopy: *Acacia*, *Diospyros*, *Metrosideros*, *Myrsine*, *Pouteria*, *Santalum*.

(v) Subcanopy: *Dodonaea*, *Freycinetia*, *Leptecophylla*, *Melanthera*, *Osteomeles*, *Pleomele*, *Psydrax*.

(vi) Understory: *Carex*, *Dicranopteris*, *Diplazium*, *Elaphoglossum*, *Peperomia*.

#### FAMILY ASPARAGACEAE

*Pleomele forbesii* (HALA PEPE)

Oahu—Lowland Dry—Unit 1, Oahu—Lowland Dry—Unit 2, Oahu—Lowland Mesic—Unit 1, Oahu—Lowland Mesic—Unit 2, Oahu—Lowland Mesic—Unit 3, Oahu—Lowland Mesic—Unit 4, Oahu—Lowland Mesic—Unit 5, Oahu—Lowland Mesic—Unit 6, Oahu—Lowland Mesic—Unit 7, Oahu—Dry Cliff—Unit 1, Oahu—Dry Cliff—Unit 2, Oahu—Dry Cliff—Unit 3, Oahu—Dry Cliff—Unit 4, Oahu—Dry Cliff—Unit 6, Oahu—Dry Cliff—Unit 7a, Oahu—Dry Cliff—Unit 7b, and Oahu—Dry Cliff—Unit 8, identified in the legal descriptions in paragraph (i) of this section, constitute critical habitat for *Pleomele forbesii* on Oahu.

(i) In units Oahu—Lowland Dry—Unit 1 and Oahu—Lowland Dry—Unit 2, the physical and biological features of critical habitat are:

(A) Elevation: Less than 3,300 ft (1,000 m).

(B) Annual precipitation: Less than 50 in (130 cm).

(C) Substrate: Weathered silty loams to stony clay, rocky ledges, little-weathered lava.

(D) Canopy: *Diospyros*, *Myoporum*, *Pleomele*, *Santalum*, *Sapindus*.

(E) Subcanopy: *Chamaesyce*, *Dodonaea*, *Leptecophylla*, *Osteomeles*, *Psydrax*, *Scaevola*, *Wikstroemia*.

(F) Understory: *Alyxia*, *Artemisia*, *Bidens*, *Chenopodium*, *Nephrolepis*, *Peperomia*, *Plumbago*, *Sicyos*, *Sida*, *Waltheria*.

(ii) In units Oahu—Lowland Mesic—Unit 1, Oahu—Lowland Mesic—Unit 2, Oahu—Lowland Mesic—Unit 3, Oahu—Lowland Mesic—Unit 4, Oahu—Lowland Mesic—Unit 5, Oahu—Lowland Mesic—Unit 6, and Oahu—Lowland Mesic—Unit 7, the physical and biological features of critical habitat are:

(A) Elevation: Less than 3,300 ft (1,000 m).

(B) Annual precipitation: 50 to 75 in (130 to 190 cm).

(C) Substrate: Shallow soils, little to no herbaceous layer.

(D) Canopy: *Acacia*, *Diospyros*, *Metrosideros*, *Myrsine*, *Pouteria*, *Santalum*.

(E) Subcanopy: *Dodonaea*, *Freycinetia*, *Leptecophylla*, *Melanthera*, *Osteomeles*, *Pleomele*, *Psydrax*.

(F) Understory: *Carex*, *Dicranopteris*, *Diplazium*, *Elaphoglossum*, *Peperomia*.

(iii) In units Oahu—Dry Cliff—Unit 1, Oahu—Dry Cliff—Unit 2, Oahu—Dry Cliff—Unit 3, Oahu—Dry Cliff—Unit 4, Oahu—Dry Cliff—Unit 6, Oahu—Dry Cliff—Unit 7a, Oahu—Dry Cliff—Unit 7b, and Oahu—Dry Cliff—Unit 8, the physical and biological features of critical habitat are:

(A) Elevation: Unrestricted.

(B) Annual precipitation: Less than 75 in (190 cm).

(C) Substrate: Greater than 65 degree slope, rocky talus.

(D) Canopy: None.

(E) Subcanopy: *Antidesma*, *Chamaesyce*, *Diospyros*, *Dodonaea*.

(F) Understory: *Bidens*, *Eragrostis*, *Melanthera*, *Schiedea*.

#### FAMILY ASTERACEAE

*Bidens amplexans* (KOOKOOLAU)

Oahu—Coastal—Unit 1, Oahu—Coastal—Unit 13, Oahu—Coastal—Unit 14, Oahu—Coastal—Unit 15, Oahu—Lowland Dry—Unit 1, Oahu—Lowland Dry—Unit 2, Oahu—Lowland Dry—Unit 8, Oahu—Lowland Dry—Unit 9, Oahu—Lowland Dry—Unit 10, and Oahu—Lowland Dry—Unit 11, identified in the

legal descriptions in paragraph (i) of this section, constitute critical habitat for *Bidens amplexans* on Oahu.

(i) In units Oahu—Coastal—Unit 1, Oahu—Coastal—Unit 13, Oahu—Coastal—Unit 14, and Oahu—Coastal—Unit 15, the physical and biological features of critical habitat are:

(A) Elevation: Less than 980 ft (300 m).

(B) Annual precipitation: Less than 20 in (50 cm).

(C) Substrate: Well-drained, calcareous, talus slopes; weathered clay soils; ephemeral pools; mudflats.

(D) Canopy: *Hibiscus*, *Myoporum*, *Santalum*, *Scaevola*.

(E) Subcanopy: *Gossypium*, *Sida*, *Vitex*.

(F) Understory: *Eragrostis*, *Jacquemontia*, *Lyceum*, *Nama*, *Sesuvium*, *Sporobolus*, *Vigna*.

(ii) In units Oahu—Lowland Dry—Unit 1, Oahu—Lowland Dry—Unit 2, Oahu—Lowland Dry—Unit 8, Oahu—Lowland Dry—Unit 9, Oahu—Lowland Dry—Unit 10, and Oahu—Lowland Dry—Unit 11, the physical and biological features of critical habitat are:

(A) Elevation: Less than 3,300 ft (1,000 m).

(B) Annual precipitation: Less than 50 in (130 cm).

(C) Substrate: Weathered silty loams to stony clay, rocky ledges, little-weathered lava.

(D) Canopy: *Diospyros*, *Myoporum*, *Pleomele*, *Santalum*, *Sapindus*.

(E) Subcanopy: *Chamaesyce*, *Dodonaea*, *Leptecophylla*, *Osteomeles*, *Psydrax*, *Scaevola*, *Wikstroemia*.

(F) Understory: *Alyxia*, *Artemisia*, *Bidens*, *Chenopodium*, *Nephrolepis*, *Peperomia*, *Plumbago*, *Sicyos*, *Sida*, *Waltheria*.

*Dubautia herbstobatae* (NAENAE)

Oahu—Lowland Mesic—Unit 1, Oahu—Lowland Mesic—Unit 2, Oahu—Lowland Mesic—Unit 3, Oahu—Dry Cliff—Unit 1, Oahu—Dry Cliff—Unit 2, Oahu—Dry Cliff—Unit 3, Oahu—Dry Cliff—Unit 4, Oahu—Dry Cliff—Unit 6, Oahu—Dry Cliff—Unit 7a, Oahu—Dry Cliff—Unit 7b, and Oahu—Dry Cliff—Unit 8, identified in the legal descriptions in paragraph (i) of this section, constitute critical habitat for *Dubautia herbstobatae* on Oahu.

(i) In units Oahu—Lowland Mesic—Unit 1, Oahu—Lowland Mesic—Unit 2, and Oahu—Lowland Mesic—Unit 3, the physical and biological features of critical habitat are:

(A) Elevation: Less than 3,300 ft (1,000 m).

(B) Annual precipitation: 50 to 75 in (130 to 190 cm).

(C) Substrate: Shallow soils, little to no herbaceous layer.

(D) Canopy: *Acacia*, *Diospyros*, *Metrosideros*, *Myrsine*, *Pouteria*, *Santalum*.

(E) Subcanopy: *Dodonaea*, *Freycinetia*, *Leptecophylla*, *Melanthera*, *Osteomeles*, *Pleomele*, *Psydrax*.

(F) Understory: *Carex*, *Dicranopteris*, *Diplazium*, *Elaphoglossum*, *Peperomia*.

(ii) In units Oahu—Dry Cliff—Unit 1, Oahu—Dry Cliff—Unit 2, Oahu—Dry Cliff—Unit 3, Oahu—Dry Cliff—Unit 4, Oahu—Dry Cliff—Unit 6, Oahu—Dry Cliff—Unit 7a, Oahu—Dry Cliff—Unit 7b, and Oahu—Dry Cliff—Unit 8, the physical and biological features of critical habitat are:

(A) Elevation: Unrestricted.

(B) Annual precipitation: Less than 75 in (190 cm).

(C) Substrate: Greater than 65 degree slope, rocky talus.

(D) Canopy: None.

(E) Subcanopy: *Antidesma*, *Chamaesyce*, *Diospyros*, *Dodonaea*.

(F) Understory: *Bidens*, *Eragrostis*, *Melanthera*, *Schiedea*.

*Hesperomannia arborescens* (NCN)

Oahu—Lowland Mesic—Unit 1, Oahu—Lowland Mesic—Unit 2, Oahu—Lowland Mesic—Unit 3, Oahu—Lowland Mesic—Unit 4, Oahu—Lowland Mesic—Unit 5, Oahu—Lowland Mesic—Unit 6, Oahu—Lowland Mesic—Unit 7, Oahu—Lowland Wet—Unit 6, Oahu—Lowland Wet—Unit 7, Oahu—Lowland Wet—Unit 8, Oahu—Lowland Wet—Unit 9, Oahu—Lowland Wet—Unit 10, Oahu—Lowland Wet—Unit 11, Oahu—Lowland Wet—Unit 12, Oahu—Lowland Wet—Unit 13, Oahu—Lowland Wet—Unit 14, Oahu—Lowland Wet—Unit 15, and Oahu—Lowland Wet—Unit 16, identified in the legal descriptions in paragraph (i) of this section, constitute critical habitat for *Hesperomannia arborescens* on Oahu.

(i) In units Oahu—Lowland Mesic—Unit 1, Oahu—Lowland Mesic—Unit 2, Oahu—Lowland Mesic—Unit 3, Oahu—Lowland Mesic—Unit 4, Oahu—Lowland Mesic—Unit 5, Oahu—Lowland Mesic—Unit 6, and Oahu—Lowland Mesic—Unit 7, the physical and biological features of critical habitat are:

(A) Elevation: Less than 3,300 ft (1,000 m).

(B) Annual precipitation: 50 to 75 in (130 to 190 cm).

(C) Substrate: Shallow soils, little to no herbaceous layer.

(D) Canopy: *Acacia*, *Diospyros*, *Metrosideros*, *Myrsine*, *Pouteria*, *Santalum*.

(E) Subcanopy: *Dodonaea*, *Freycinetia*, *Leptecophylla*, *Melanthera*, *Osteomeles*, *Pleomele*, *Psydrax*.

(F) Understory: *Carex*, *Dicranopteris*, *Diplazium*, *Elaphoglossum*, *Peperomia*.

(ii) In units Oahu—Lowland Wet—Unit 6, Oahu—Lowland Wet—Unit 7, Oahu—Lowland Wet—Unit 8, Oahu—Lowland Wet—Unit 9, Oahu—Lowland Wet—Unit 10, Oahu—Lowland Wet—Unit 11, Oahu—Lowland Wet—Unit 12, Oahu—Lowland Wet—Unit 13, Oahu—Lowland Wet—Unit 14, Oahu—Lowland Wet—Unit 15, and Oahu—Lowland Wet—Unit 16, the physical and biological features of critical habitat are:

(A) Elevation: Less than 3,300 ft (1,000 m).

(B) Annual precipitation: Greater than 75 in (190 cm).

(C) Substrate: Clays; ashbeds; deep, well-drained soils; lowland bogs.

(D) Canopy: *Antidesma*, *Metrosideros*, *Myrsine*, *Pisonia*, *Psychotria*.

(E) Subcanopy: *Cibotium*, *Claoxylon*, *Kadua*, *Melicope*.

(F) Understory: *Alyxia*, *Cyrtandra*, *Dicranopteris*, *Diplazium*, *Machaerina*, *Microlepia*.

*Hesperomannia arbuscula* (NCN)

Oahu—Lowland Mesic—Unit 1, Oahu—Lowland Mesic—Unit 2, Oahu—Lowland Mesic—Unit 3, Oahu—Lowland Wet—Unit 1, Oahu—Lowland Wet—Unit 2, Oahu—Lowland Wet—Unit 3, Oahu—Lowland Wet—Unit 4, and Oahu—Lowland Wet—Unit 5, identified in the legal descriptions in paragraph (i) of this section, constitute critical habitat for *Hesperomannia arbuscula* on Oahu.

(i) In units Oahu—Lowland Mesic—Unit 1, Oahu—Lowland Mesic—Unit 2, and Oahu—Lowland Mesic—Unit 3, the physical and biological features of critical habitat are:

(A) Elevation: Less than 3,300 ft (1,000 m).

(B) Annual precipitation: 50 to 75 in (130 to 190 cm).

(C) Substrate: Shallow soils, little to no herbaceous layer.

(D) Canopy: *Acacia*, *Diospyros*, *Metrosideros*, *Myrsine*, *Pouteria*, *Santalum*.

(E) Subcanopy: *Dodonaea*, *Freycinetia*, *Leptecophylla*, *Melanthera*, *Osteomeles*, *Pleomele*, *Psydrax*.

(F) Understory: *Carex*, *Dicranopteris*, *Diplazium*, *Elaphoglossum*, *Peperomia*.

(ii) In units Oahu—Lowland Wet—Unit 1, Oahu—Lowland Wet—Unit 2, Oahu—Lowland Wet—Unit 3, Oahu—Lowland Wet—Unit 4, and Oahu—Lowland Wet—Unit 5, the physical and biological features of critical habitat are:

(A) Elevation: Less than 3,300 ft (1,000 m).

(B) Annual precipitation: Greater than 75 in (190 cm).

(C) Substrate: Clays; ashbeds; deep, well-drained soils; lowland bogs.

(D) Canopy: *Antidesma*, *Metrosideros*, *Myrsine*, *Pisonia*, *Psychotria*.

(E) Subcanopy: *Cibotium*, *Claoxylon*, *Kadua*, *Melicope*.

(F) Understory: *Alyxia*, *Cyrtandra*, *Dicranopteris*, *Diplazium*, *Machaerina*, *Microlepia*.

*Lipochaeta lobata* var. *leptophylla* (NEHE)

Oahu—Dry Cliff—Unit 1, Oahu—Dry Cliff—Unit 2, Oahu—Dry Cliff—Unit 3, Oahu—Dry Cliff—Unit 4, Oahu—Dry Cliff—Unit 6, Oahu—Dry Cliff—Unit 7a, Oahu—Dry Cliff—Unit 7b, and Oahu—Dry Cliff—Unit 8, identified in the legal descriptions in paragraph (i) of this section, constitute critical habitat for *Lipochaeta lobata* var. *leptophylla* on Oahu. Within these units, the physical and biological features of critical habitat are:

(i) Elevation: Unrestricted.

(ii) Annual precipitation: Less than 75 in (190 cm).

(iii) Substrate: Greater than 65 degree slope, rocky talus.

(iv) Canopy: None.

(v) Subcanopy: *Antidesma*, *Chamaesyce*, *Diospyros*, *Dodonaea*.

(vi) Understory: *Bidens*, *Eragrostis*, *Melanthera*, *Schiedea*.

*Melanthera tenuifolia* (NEHE)

Oahu—Lowland Dry—Unit 1, Oahu—Lowland Dry—Unit 2, Oahu—Lowland Dry—Unit 8, Oahu—Lowland Dry—Unit 9, Oahu—Lowland Dry—Unit 10, Oahu—Lowland Dry—Unit 11, Oahu—Lowland Mesic—Unit 1, Oahu—Lowland Mesic—Unit 2, Oahu—Lowland Mesic—Unit 3, Oahu—Dry Cliff—Unit 1, Oahu—Dry Cliff—Unit 2, Oahu—Dry Cliff—Unit 3, Oahu—Dry Cliff—Unit 4, Oahu—Dry Cliff—Unit 6, Oahu—Dry Cliff—Unit 7a, Oahu—Dry Cliff—Unit 7b, and Oahu—Dry Cliff—Unit 8, identified in the legal descriptions in paragraph (i) of this section, constitute critical habitat for *Melanthera tenuifolia* on Oahu.

(i) In units Oahu—Lowland Dry—Unit 1, Oahu—Lowland Dry—Unit 2, Oahu—Lowland Dry—Unit 8, Oahu—Lowland Dry—Unit 9, Oahu—Lowland Dry—Unit 10, and Oahu—Lowland Dry—Unit 11, the physical and biological features of critical habitat are:

(A) Elevation: Less than 3,300 ft (1,000 m).

(B) Annual precipitation: Less than 50 in (130 cm).

(C) Substrate: Weathered silty loams to stony clay, rocky ledges, little-weathered lava.

(D) Canopy: *Diospyros*, *Myoporum*, *Pleomele*, *Santalum*, *Sapindus*.

(E) Subcanopy: *Chamaesyce*, *Dodonaea*, *Leptecophylla*, *Osteomeles*, *Psydrax*, *Scaevola*, *Wikstroemia*.

(F) Understory: *Alyxia*, *Artemisia*, *Bidens*, *Chenopodium*, *Nephrolepis*, *Peperomia*, *Plumbago*, *Sicyos*, *Sida*, *Waltheria*.

(ii) In units Oahu—Lowland Mesic—Unit 1, Oahu—Lowland Mesic—Unit 2, and Oahu—Lowland Mesic—Unit 3, the physical and biological features of critical habitat are:

(A) Elevation: Less than 3,300 ft (1,000 m).

(B) Annual precipitation: 50 to 75 in (130 to 190 cm).

(C) Substrate: Shallow soils, little to no herbaceous layer.

(D) Canopy: *Acacia*, *Diospyros*, *Metrosideros*, *Myrsine*, *Pouteria*, *Santalum*.

(E) Subcanopy: *Dodonaea*, *Freycinetia*, *Leptecophylla*, *Melanthera*, *Osteomeles*, *Pleomele*, *Psydrax*.

(F) Understory: *Carex*, *Dicranopteris*, *Diplazium*, *Elaphoglossum*, *Peperomia*.

(iii) In units Oahu—Dry Cliff—Unit 1, Oahu—Dry Cliff—Unit 2, Oahu—Dry Cliff—Unit 3, Oahu—Dry Cliff—Unit 4, Oahu—Dry Cliff—Unit 6, Oahu—Dry Cliff—Unit 7a, Oahu—Dry Cliff—Unit 7b, and Oahu—Dry Cliff—Unit 8, the physical and biological features of critical habitat are:

(A) Elevation: Unrestricted.

(B) Annual precipitation: Less than 75 in (190 cm).

(C) Substrate: Greater than 65 degree slope, rocky talus.

(D) Canopy: None.

(E) Subcanopy: *Antidesma*, *Chamaesyce*, *Diospyros*, *Dodonaea*.

(F) Understory: *Bidens*, *Eragrostis*, *Melanthera*, *Schiedea*.

*Tetramolopium filiforme* (NCN)

Oahu—Dry Cliff—Unit 1, Oahu—Dry Cliff—Unit 2, Oahu—Dry Cliff—Unit 3, Oahu—Dry Cliff—Unit 4, Oahu—Dry Cliff—Unit 6, Oahu—Dry Cliff—Unit 7a, Oahu—Dry Cliff—Unit 7b, and Oahu—Dry Cliff—Unit 8, identified in the legal descriptions in paragraph (i) of this section, constitute critical habitat for *Tetramolopium filiforme* on Oahu. Within these units, the physical and biological features of critical habitat are:

(i) Elevation: Unrestricted.

(ii) Annual precipitation: Less than 75 in (190 cm).

(iii) Substrate: Greater than 65 degree slope, rocky talus.

(iv) Canopy: None.

(v) Subcanopy: *Antidesma*, *Chamaesyce*, *Diospyros*, *Dodonaea*.

(vi) Understory: *Bidens*, *Eragrostis*, *Melanthera*, *Schiedea*.

*Tetramolopium lepidotum* ssp. *lepidotum* (NCN)

Oahu—Lowland Mesic—Unit 1, Oahu—Lowland Mesic—Unit 2, Oahu—Lowland Mesic—Unit 3, Oahu—Dry Cliff—Unit 1, Oahu—Dry Cliff—Unit 2, Oahu—Dry Cliff—Unit 3, Oahu—Dry Cliff—Unit 4, Oahu—Dry Cliff—Unit 6, Oahu—Dry Cliff—Unit 7a, Oahu—Dry Cliff—Unit 7b, and Oahu—Dry Cliff—Unit 8, identified in the legal descriptions in paragraph (i) of this section, constitute critical habitat for *Tetramolopium lepidotum* ssp. *lepidotum* on Oahu.

(i) In units Oahu—Lowland Mesic—Unit 1, Oahu—Lowland Mesic—Unit 2, and Oahu—Lowland Mesic—Unit 3, the physical and biological features of critical habitat are:

(A) Elevation: Less than 3,300 ft (1,000 m).

(B) Annual precipitation: 50 to 75 in (130 to 190 cm).

(C) Substrate: Shallow soils, little to no herbaceous layer.

(D) Canopy: *Acacia*, *Diospyros*, *Metrosideros*, *Myrsine*, *Pouteria*, *Santalum*.

(E) Subcanopy: *Dodonaea*, *Freycinetia*, *Leptecophylla*, *Melanthera*, *Osteomeles*, *Pleomele*, *Psydrax*.

(F) Understory: *Carex*, *Dicranopteris*, *Diplazium*, *Elaphoglossum*, *Peperomia*.

(ii) In units Oahu—Dry Cliff—Unit 1, Oahu—Dry Cliff—Unit 2, Oahu—Dry Cliff—Unit 3, Oahu—Dry Cliff—Unit 4, Oahu—Dry Cliff—Unit 6, Oahu—Dry Cliff—Unit 7a, Oahu—Dry Cliff—Unit 7b, and Oahu—Dry Cliff—Unit 8, the physical and biological features of critical habitat are:

(A) Elevation: Unrestricted.

(B) Annual precipitation: Less than 75 in (190 cm).

(C) Substrate: Greater than 65 degree slope, rocky talus.

(D) Canopy: None.

(E) Subcanopy: *Antidesma*, *Chamaesyce*, *Diospyros*, *Dodonaea*.

(F) Understory: *Bidens*, *Eragrostis*, *Melanthera*, *Schiedea*.

## FAMILY BRASSICACEAE

*Lepidium arbuscula* (ANAUNAU)

Oahu—Dry Cliff—Unit 1, Oahu—Dry Cliff—Unit 2, Oahu—Dry Cliff—Unit 3, Oahu—Dry Cliff—Unit 4, Oahu—Dry Cliff—Unit 6, Oahu—Dry Cliff—Unit 7a, Oahu—Dry Cliff—Unit 7b, and Oahu—Dry Cliff—Unit 8, identified in the legal descriptions in paragraph (i) of this section, constitute critical habitat for *Lepidium arbuscula* on Oahu. Within these units, the physical and biological features of critical habitat are:

(i) Elevation: Unrestricted.

(ii) Annual precipitation: Less than 75 in (190 cm).

(iii) Substrate: Greater than 65 degree slope, rocky talus.

(iv) Canopy: None.

(v) Subcanopy: *Antidesma*, *Chamaesyce*, *Diospyros*, *Dodonaea*.

(vi) Understory: *Bidens*, *Eragrostis*, *Melanthera*, *Schiedea*.

#### FAMILY CAMPANULACEAE

##### *Cyanea acuminata* (HAHA)

Oahu—Lowland Mesic—Unit 1, Oahu—Lowland Mesic—Unit 2, Oahu—Lowland Mesic—Unit 3, Oahu—Lowland Mesic—Unit 4, Oahu—Lowland Mesic—Unit 5, Oahu—Lowland Mesic—Unit 6, Oahu—Lowland Mesic—Unit 7, Oahu—Lowland Wet—Unit 1, Oahu—Lowland Wet—Unit 2, Oahu—Lowland Wet—Unit 3, Oahu—Lowland Wet—Unit 4, Oahu—Lowland Wet—Unit 5, Oahu—Lowland Wet—Unit 6, Oahu—Lowland Wet—Unit 7, Oahu—Lowland Wet—Unit 8, Oahu—Lowland Wet—Unit 9, Oahu—Lowland Wet—Unit 10, Oahu—Lowland Wet—Unit 11, Oahu—Lowland Wet—Unit 12, Oahu—Lowland Wet—Unit 13, Oahu—Lowland Wet—Unit 14, Oahu—Lowland Wet—Unit 15, Oahu—Lowland Wet—Unit 16, Oahu—Montane Wet—Unit 1, Oahu—Wet Cliff—Unit 1, Oahu—Wet Cliff—Unit 2, Oahu—Wet Cliff—Unit 3, Oahu—Wet Cliff—Unit 4, Oahu—Wet Cliff—Unit 5, Oahu—Wet Cliff—Unit 6, Oahu—Wet Cliff—Unit 7, and Oahu—Wet Cliff—Unit 8, identified in the legal descriptions in paragraph (i) of this section, constitute critical habitat for *Cyanea acuminata* on Oahu.

(i) In units Oahu—Lowland Mesic—Unit 1, Oahu—Lowland Mesic—Unit 2, Oahu—Lowland Mesic—Unit 3, Oahu—Lowland Mesic—Unit 4, Oahu—Lowland Mesic—Unit 5, Oahu—Lowland Mesic—Unit 6, and Oahu—Lowland Mesic—Unit 7, the physical and biological features of critical habitat are:

(A) Elevation: Less than 3,300 ft (1,000 m).

(B) Annual precipitation: 50 to 75 in (130 to 190 cm).

(C) Substrate: Shallow soils, little to no herbaceous layer.

(D) Canopy: *Acacia*, *Diospyros*, *Metrosideros*, *Myrsine*, *Pouteria*, *Santalum*.

(E) Subcanopy: *Dodonaea*, *Freycinetia*, *Leptecophylla*, *Melanthera*, *Osteomeles*, *Pleomele*, *Psychradax*.

(F) Understory: *Carex*, *Dicranopteris*, *Diplazium*, *Elaphoglossum*, *Peperomia*.

(ii) In units Oahu—Lowland Wet—Unit 1, Oahu—Lowland Wet—Unit 2, Oahu—Lowland Wet—Unit 3, Oahu—Lowland Wet—Unit 4, Oahu—Lowland

Wet—Unit 5, Oahu—Lowland Wet—Unit 6, Oahu—Lowland Wet—Unit 7, Oahu—Lowland Wet—Unit 8, Oahu—Lowland Wet—Unit 9, Oahu—Lowland Wet—Unit 10, Oahu—Lowland Wet—Unit 11, Oahu—Lowland Wet—Unit 12, Oahu—Lowland Wet—Unit 13, Oahu—Lowland Wet—Unit 14, Oahu—Lowland Wet—Unit 15, and Oahu—Lowland Wet—Unit 16, the physical and biological features of critical habitat are:

(A) Elevation: Less than 3,300 ft (1,000 m).

(B) Annual precipitation: Greater than 75 in (190 cm).

(C) Substrate: Clays; ashbeds; deep, well-drained soils; lowland bogs.

(D) Canopy: *Antidesma*, *Metrosideros*, *Myrsine*, *Pisonia*, *Psychotria*.

(E) Subcanopy: *Cibotium*, *Claoxylon*, *Kadua*, *Melicope*.

(F) Understory: *Alyxia*, *Cyrtandra*, *Dicranopteris*, *Diplazium*, *Machaerina*, *Microlepia*.

(iii) In unit Oahu—Montane Wet—Unit 1, the physical and biological features of critical habitat are:

(A) Elevation: 3,300 to 6,600 ft (1,000 to 2,000 m).

(B) Annual precipitation: Greater than 75 in (190 cm).

(C) Substrate: Well-developed soils, montane bogs.

(D) Canopy: *Acacia*, *Charpentiera*, *Cheirodendron*, *Metrosideros*.

(E) Subcanopy: *Broussaisia*, *Cibotium*, *Eurya*, *Ilex*, *Myrsine*.

(F) Understory: Ferns, *Carex*, *Coprosma*, *Leptecophylla*, *Oreobolus*, *Rhynchospora*, *Vaccinium*.

(iv) In units Oahu—Wet Cliff—Unit 1, Oahu—Wet Cliff—Unit 2, Oahu—Wet Cliff—Unit 3, Oahu—Wet Cliff—Unit 4, Oahu—Wet Cliff—Unit 5, Oahu—Wet Cliff—Unit 6, Oahu—Wet Cliff—Unit 7, and Oahu—Wet Cliff—Unit 8, the physical and biological features of critical habitat are:

(A) Elevation: Unrestricted.

(B) Annual precipitation: Greater than 75 in (190 cm).

(C) Substrate: Greater than 65 degree slope, shallow soils, weathered lava.

(D) Canopy: None.

(E) Subcanopy: *Broussaisia*, *Cheirodendron*, *Leptecophylla*, *Metrosideros*.

(F) Understory: Ferns, Bryophytes, *Coprosma*, *Dubautia*, *Kadua*, *Peperomia*.

##### *Cyanea calycina* (HAHA)

Oahu—Lowland Mesic—Unit 1, Oahu—Lowland Mesic—Unit 2, Oahu—Lowland Mesic—Unit 3, Oahu—Lowland Mesic—Unit 4, Oahu—Lowland Mesic—Unit 5, Oahu—Lowland Mesic—Unit 6, Oahu—

Lowland Mesic—Unit 7, Oahu—Lowland Wet—Unit 1, Oahu—Lowland Wet—Unit 2, Oahu—Lowland Wet—Unit 3, Oahu—Lowland Wet—Unit 4, Oahu—Lowland Wet—Unit 5, Oahu—Lowland Wet—Unit 6, Oahu—Lowland Wet—Unit 7, Oahu—Lowland Wet—Unit 8, Oahu—Lowland Wet—Unit 9, Oahu—Lowland Wet—Unit 10, Oahu—Lowland Wet—Unit 11, Oahu—Lowland Wet—Unit 12, Oahu—Lowland Wet—Unit 13, Oahu—Lowland Wet—Unit 14, Oahu—Lowland Wet—Unit 15, Oahu—Lowland Wet—Unit 16, Oahu—Montane Wet—Unit 1, Oahu—Wet Cliff—Unit 1, Oahu—Wet Cliff—Unit 2, Oahu—Wet Cliff—Unit 3, Oahu—Wet Cliff—Unit 4, Oahu—Wet Cliff—Unit 5, Oahu—Wet Cliff—Unit 6, Oahu—Wet Cliff—Unit 7, and Oahu—Wet Cliff—Unit 8, identified in the legal descriptions in paragraph (i) of this section, constitute critical habitat for *Cyanea calycina* on Oahu.

(i) In units Oahu—Lowland Mesic—Unit 1, Oahu—Lowland Mesic—Unit 2, Oahu—Lowland Mesic—Unit 3, Oahu—Lowland Mesic—Unit 4, Oahu—Lowland Mesic—Unit 5, Oahu—Lowland Mesic—Unit 6, and Oahu—Lowland Mesic—Unit 7, the physical and biological features of critical habitat are:

(A) Elevation: Less than 3,300 ft (1,000 m).

(B) Annual precipitation: 50 to 75 in (130 to 190 cm).

(C) Substrate: Shallow soils, little to no herbaceous layer.

(D) Canopy: *Acacia*, *Diospyros*, *Metrosideros*, *Myrsine*, *Pouteria*, *Santalum*.

(E) Subcanopy: *Dodonaea*, *Freycinetia*, *Leptecophylla*, *Melanthera*, *Osteomeles*, *Pleomele*, *Psychradax*.

(F) Understory: *Carex*, *Dicranopteris*, *Diplazium*, *Elaphoglossum*, *Peperomia*.

(ii) In units Oahu—Lowland Wet—Unit 1, Oahu—Lowland Wet—Unit 2, Oahu—Lowland Wet—Unit 3, Oahu—Lowland Wet—Unit 4, Oahu—Lowland Wet—Unit 5, Oahu—Lowland Wet—Unit 6, Oahu—Lowland Wet—Unit 7, Oahu—Lowland Wet—Unit 8, Oahu—Lowland Wet—Unit 9, Oahu—Lowland Wet—Unit 10, Oahu—Lowland Wet—Unit 11, Oahu—Lowland Wet—Unit 12, Oahu—Lowland Wet—Unit 13, Oahu—Lowland Wet—Unit 14, Oahu—Lowland Wet—Unit 15, and Oahu—Lowland Wet—Unit 16, the physical and biological features of critical habitat are:

(A) Elevation: Less than 3,300 ft (1,000 m).

(B) Annual precipitation: Greater than 75 in (190 cm).

(C) Substrate: Clays; ashbeds; deep, well-drained soils; lowland bogs.

(D) Canopy: *Antidesma, Metrosideros, Myrsine, Pisonia, Psychotria*.

(E) Subcanopy: *Cibotium, Claoxylon, Kadua, Melicope*.

(F) Understory: *Alyxia, Cyrtandra, Dicranopteris, Diplazium, Machaerina, Microlepidia*.

(iii) In units Oahu—Montane Wet—Unit 1, the physical and biological features of critical habitat are:

(A) Elevation: 3,300 to 6,600 ft (1,000 to 2,000 m).

(B) Annual precipitation: Greater than 75 in (190 cm).

(C) Substrate: Well-developed soils, montane bogs.

(D) Canopy: *Acacia, Charpentiera, Cheirodendron, Metrosideros*.

(E) Subcanopy: *Broussaisia, Cibotium, Eurya, Ilex, Myrsine*.

(F) Understory: Ferns, *Carex, Coprosma, Leptecophylla, Oreobolus, Rhynchospora, Vaccinium*.

(iv) In units Oahu—Wet Cliff—Unit 1, Oahu—Wet Cliff—Unit 2, Oahu—Wet Cliff—Unit 3, Oahu—Wet Cliff—Unit 4, Oahu—Wet Cliff—Unit 5, Oahu—Wet Cliff—Unit 6, Oahu—Wet Cliff—Unit 7, and Oahu—Wet Cliff—Unit 8, the physical and biological features of critical habitat are:

(A) Elevation: Unrestricted.

(B) Annual precipitation: Greater than 75 in (190 cm).

(C) Substrate: Greater than 65 degree slope, shallow soils, weathered lava.

(D) Canopy: None.

(E) Subcanopy: *Broussaisia, Cheirodendron, Leptecophylla, Metrosideros*.

(F) Understory: Bryophytes, Ferns, *Coprosma, Dubautia, Kadua, Peperomia*.

#### *Cyanea crispa* (NCN)

Oahu—Lowland Mesic—Unit 4, Oahu—Lowland Mesic—Unit 5, Oahu—Lowland Mesic—Unit 6, Oahu—Lowland Mesic—Unit 7, Oahu—Lowland Wet—Unit 6, Oahu—Lowland Wet—Unit 7, Oahu—Lowland Wet—Unit 8, Oahu—Lowland Wet—Unit 9, Oahu—Lowland Wet—Unit 10, Oahu—Lowland Wet—Unit 11, Oahu—Lowland Wet—Unit 12, Oahu—Lowland Wet—Unit 13, Oahu—Lowland Wet—Unit 14, Oahu—Lowland Wet—Unit 15, Oahu—Lowland Wet—Unit 16, Oahu—Wet Cliff—Unit 6, Oahu—Wet Cliff—Unit 7, and Oahu—Wet Cliff—Unit 8, identified in the legal descriptions in paragraph (i) of this section, constitute critical habitat for *Cyanea crispa* on Oahu.

(i) In units Oahu—Lowland Mesic—Unit 4, Oahu—Lowland Mesic—Unit 5, Oahu—Lowland Mesic—Unit 6, and

Oahu—Lowland Mesic—Unit 7, the physical and biological features of critical habitat are:

(A) Elevation: Less than 3,300 ft (1,000 m).

(B) Annual precipitation: 50 to 75 in (130 to 190 cm).

(C) Substrate: Shallow soils, little to no herbaceous layer.

(D) Canopy: *Acacia, Diospyros, Metrosideros, Myrsine, Pouteria, Santalum*.

(E) Subcanopy: *Dodonaea, Freycinetia, Leptecophylla, Melanthera, Osteomeles, Pleomele, Psydrax*.

(F) Understory: *Carex, Dicranopteris, Diplazium, Elaphoglossum, Peperomia*.

(ii) In units Oahu—Lowland Wet—Unit 6, Oahu—Lowland Wet—Unit 7, Oahu—Lowland Wet—Unit 8, Oahu—Lowland Wet—Unit 9, Oahu—Lowland Wet—Unit 10, Oahu—Lowland Wet—Unit 11, Oahu—Lowland Wet—Unit 12, Oahu—Lowland Wet—Unit 13, Oahu—Lowland Wet—Unit 14, Oahu—Lowland Wet—Unit 15, and Oahu—Lowland Wet—Unit 16, the physical and biological features of critical habitat are:

(A) Elevation: Less than 3,300 ft (1,000 m).

(B) Annual precipitation: Greater than 75 in (190 cm).

(C) Substrate: Clays; ashbeds; deep, well-drained soils; lowland bogs.

(D) Canopy: *Antidesma, Metrosideros, Myrsine, Pisonia, Psychotria*.

(E) Subcanopy: *Cibotium, Claoxylon, Kadua, Melicope*.

(F) Understory: *Alyxia, Cyrtandra, Dicranopteris, Diplazium, Machaerina, Microlepidia*.

(iii) In units Oahu—Wet Cliff—Unit 6, Oahu—Wet Cliff—Unit 7, and Oahu—Wet Cliff—Unit 8, the physical and biological features of critical habitat are:

(A) Elevation: Unrestricted.

(B) Annual precipitation: Greater than 75 in (190 cm).

(C) Substrate: Greater than 65 degree slope, shallow soils, weathered lava.

(D) Canopy: None.

(E) Subcanopy: *Broussaisia, Cheirodendron, Leptecophylla, Metrosideros*.

(F) Understory: Bryophytes, Ferns, *Coprosma, Dubautia, Kadua, Peperomia*.

#### *Cyanea grimesiana* ssp. *grimesiana* (HAHA)

Oahu—Lowland Mesic—Unit 1, Oahu—Lowland Mesic—Unit 2, Oahu—Lowland Mesic—Unit 3, Oahu—Lowland Mesic—Unit 4, Oahu—Lowland Mesic—Unit 5, Oahu—Lowland Mesic—Unit 6, Oahu—Lowland Mesic—Unit 7, Oahu—Lowland Wet—Unit 1, Oahu—Lowland

Wet—Unit 2, Oahu—Lowland Wet—Unit 3, Oahu—Lowland Wet—Unit 4, Oahu—Lowland Wet—Unit 5, Oahu—Lowland Wet—Unit 6, Oahu—Lowland Wet—Unit 7, Oahu—Lowland Wet—Unit 8, Oahu—Lowland Wet—Unit 9, Oahu—Lowland Wet—Unit 10, Oahu—Lowland Wet—Unit 11, Oahu—Lowland Wet—Unit 12, Oahu—Lowland Wet—Unit 13, Oahu—Lowland Wet—Unit 14, Oahu—Lowland Wet—Unit 15, and Oahu—Lowland Wet—Unit 16, identified in the legal descriptions in paragraph (i) of this section, constitute critical habitat for *Cyanea grimesiana* ssp. *grimesiana* on Oahu.

(i) In units Oahu—Lowland Mesic—Unit 1, Oahu—Lowland Mesic—Unit 2, Oahu—Lowland Mesic—Unit 3, Oahu—Lowland Mesic—Unit 4, Oahu—Lowland Mesic—Unit 5, Oahu—Lowland Mesic—Unit 6, and Oahu—Lowland Mesic—Unit 7, the physical and biological features of critical habitat are:

(A) Elevation: Less than 3,300 ft (1,000 m).

(B) Annual precipitation: 50 to 75 in (130 to 190 cm).

(C) Substrate: Shallow soils, little to no herbaceous layer.

(D) Canopy: *Acacia, Diospyros, Metrosideros, Myrsine, Pouteria, Santalum*.

(E) Subcanopy: *Dodonaea, Freycinetia, Leptecophylla, Melanthera, Osteomeles, Pleomele, Psydrax*.

(F) Understory: *Carex, Dicranopteris, Diplazium, Elaphoglossum, Peperomia*.

(ii) In units Oahu—Lowland Wet—Unit 1, Oahu—Lowland Wet—Unit 2, Oahu—Lowland Wet—Unit 3, Oahu—Lowland Wet—Unit 4, Oahu—Lowland Wet—Unit 5, Oahu—Lowland Wet—Unit 6, Oahu—Lowland Wet—Unit 7, Oahu—Lowland Wet—Unit 8, Oahu—Lowland Wet—Unit 9, Oahu—Lowland Wet—Unit 10, Oahu—Lowland Wet—Unit 11, Oahu—Lowland Wet—Unit 12, Oahu—Lowland Wet—Unit 13, Oahu—Lowland Wet—Unit 14, Oahu—Lowland Wet—Unit 15, and Oahu—Lowland Wet—Unit 16, the physical and biological features of critical habitat are:

(A) Elevation: Less than 3,300 ft (1,000 m).

(B) Annual precipitation: Greater than 75 in (190 cm).

(C) Substrate: Clays; ashbeds; deep, well-drained soils; lowland bogs.

(D) Canopy: *Antidesma, Metrosideros, Myrsine, Pisonia, Psychotria*.

(E) Subcanopy: *Cibotium, Claoxylon, Kadua, Melicope*.

(F) Understory: *Alyxia, Cyrtandra, Dicranopteris, Diplazium, Machaerina, Microlepidia*.

*Cyanea grimesiana* ssp. *obatae* (HAHA)

Oahu—Lowland Mesic—Unit 1, Oahu—Lowland Mesic—Unit 2, Oahu—Lowland Mesic—Unit 3, Oahu—Lowland Wet—Unit 1, Oahu—Lowland Wet—Unit 2, Oahu—Lowland Wet—Unit 3, Oahu—Lowland Wet—Unit 4, Oahu—Lowland Wet—Unit 5, Oahu—Dry Cliff—Unit 1, Oahu—Dry Cliff—Unit 2, Oahu—Dry Cliff—Unit 3, Oahu—Dry Cliff—Unit 4, Oahu—Dry Cliff—Unit 6, Oahu—Dry Cliff—Unit 7a, Oahu—Dry Cliff—Unit 7b, and Oahu—Dry Cliff—Unit 8, identified in the legal descriptions in paragraph (i) of this section, constitute critical habitat for *Cyanea grimesiana* ssp. *obatae* on Oahu.

(i) In units Oahu—Lowland Mesic—Unit 1, Oahu—Lowland Mesic—Unit 2, and Oahu—Lowland Mesic—Unit 3, the physical and biological features of critical habitat are:

(A) Elevation: Less than 3,300 ft (1,000 m).

(B) Annual precipitation: 50 to 75 in (130 to 190 cm).

(C) Substrate: Shallow soils, little to no herbaceous layer.

(D) Canopy: *Acacia*, *Diospyros*, *Metrosideros*, *Myrsine*, *Pouteria*, *Santalum*.

(E) Subcanopy: *Dodonaea*, *Freycinetia*, *Leptecophylla*, *Melanthera*, *Osteomeles*, *Pleomele*, *Psydrax*.

(F) Understory: *Carex*, *Dicranopteris*, *Diplazium*, *Elaphoglossum*, *Peperomia*.

(ii) In units Oahu—Lowland Wet—Unit 1, Oahu—Lowland Wet—Unit 2, Oahu—Lowland Wet—Unit 3, Oahu—Lowland Wet—Unit 4, and Oahu—Lowland Wet—Unit 5, the physical and biological features of critical habitat are:

(A) Elevation: Less than 3,300 ft (1,000 m).

(B) Annual precipitation: Greater than 75 in (190 cm).

(C) Substrate: Clays; ashbeds; deep, well-drained soils; lowland bogs.

(D) Canopy: *Antidesma*, *Metrosideros*, *Myrsine*, *Pisonia*, *Psychotria*.

(E) Subcanopy: *Cibotium*, *Claoxylon*, *Kadua*, *Melicope*.

(F) Understory: *Alyxia*, *Cyrtandra*, *Dicranopteris*, *Diplazium*, *Machaerina*, *Microlepia*.

(iii) In units Oahu—Dry Cliff—Unit 1, Oahu—Dry Cliff—Unit 2, Oahu—Dry Cliff—Unit 3, Oahu—Dry Cliff—Unit 4, Oahu—Dry Cliff—Unit 6, Oahu—Dry Cliff—Unit 7a, Oahu—Dry Cliff—Unit 7b, and Oahu—Dry Cliff—Unit 8, the physical and biological features of critical habitat are:

(A) Elevation: Unrestricted.

(B) Annual precipitation: Less than 75 in (190 cm).

(C) Substrate: Greater than 65 degree slope, rocky talus.

(D) Canopy: None.

(E) Subcanopy: *Antidesma*, *Chamaesyce*, *Diospyros*, *Dodonaea*.

(F) Understory: *Bidens*, *Eragrostis*, *Melanthera*, *Schiedea*.

*Cyanea humboldtiana* (HAHA)

Oahu—Lowland Wet—Unit 6, Oahu—Lowland Wet—Unit 7, Oahu—Lowland Wet—Unit 8, Oahu—Lowland Wet—Unit 9, Oahu—Lowland Wet—Unit 10, Oahu—Lowland Wet—Unit 11, Oahu—Lowland Wet—Unit 12, Oahu—Lowland Wet—Unit 13, Oahu—Lowland Wet—Unit 14, Oahu—Lowland Wet—Unit 15, Oahu—Lowland Wet—Unit 16, Oahu—Wet Cliff—Unit 6, Oahu—Wet Cliff—Unit 7, and Oahu—Wet Cliff—Unit 8, identified in the legal descriptions in paragraph (i) of this section, constitute critical habitat for *Cyanea humboldtiana* on Oahu.

(i) In units Oahu—Lowland Wet—Unit 6, Oahu—Lowland Wet—Unit 7, Oahu—Lowland Wet—Unit 8, Oahu—Lowland Wet—Unit 9, Oahu—Lowland Wet—Unit 10, Oahu—Lowland Wet—Unit 11, Oahu—Lowland Wet—Unit 12, Oahu—Lowland Wet—Unit 13, Oahu—Lowland Wet—Unit 14, Oahu—Lowland Wet—Unit 15, and Oahu—Lowland Wet—Unit 16, the physical and biological features of critical habitat are:

(A) Elevation: Less than 3,300 ft (1,000 m).

(B) Annual precipitation: Greater than 75 in (190 cm).

(C) Substrate: Clays; ashbeds; deep, well-drained soils; lowland bogs.

(D) Canopy: *Antidesma*, *Metrosideros*, *Myrsine*, *Pisonia*, *Psychotria*.

(E) Subcanopy: *Cibotium*, *Claoxylon*, *Kadua*, *Melicope*.

(F) Understory: *Alyxia*, *Cyrtandra*, *Dicranopteris*, *Diplazium*, *Machaerina*, *Microlepia*.

(ii) In units Oahu—Wet Cliff—Unit 6, Oahu—Wet Cliff—Unit 7, and Oahu—Wet Cliff—Unit 8, the physical and biological features of critical habitat are:

(A) Elevation: Unrestricted.

(B) Annual precipitation: Greater than 75 in (190 cm).

(C) Substrate: Greater than 65 degree slope, shallow soils, weathered lava.

(D) Canopy: None.

(E) Subcanopy: *Broussaisia*, *Cheirodendron*, *Leptecophylla*, *Metrosideros*.

(F) Understory: Bryophytes, Ferns, *Coprosma*, *Dubautia*, *Kadua*, *Peperomia*.

*Cyanea koolauensis* (HAHA)

Oahu—Lowland Wet—Unit 6, Oahu—Lowland Wet—Unit 7, Oahu—Lowland Wet—Unit 8, Oahu—Lowland Wet—Unit 9, Oahu—Lowland Wet—Unit 10,

Oahu—Lowland Wet—Unit 11, Oahu—Lowland Wet—Unit 12, Oahu—Lowland Wet—Unit 13, Oahu—Lowland Wet—Unit 14, Oahu—Lowland Wet—Unit 15, and Oahu—Lowland Wet—Unit 16, identified in the legal descriptions in paragraph (i) of this section, constitute critical habitat for *Cyanea koolauensis* on Oahu. Within these units, the physical and biological features of critical habitat are:

(i) Elevation: Less than 3,300 ft (1,000 m).

(ii) Annual precipitation: Greater than 75 in (190 cm).

(iii) Substrate: Clays; ashbeds; deep, well-drained soils; lowland bogs.

(iv) Canopy: *Antidesma*, *Metrosideros*, *Myrsine*, *Pisonia*, *Psychotria*.

(v) Subcanopy: *Cibotium*, *Claoxylon*, *Kadua*, *Melicope*.

(vi) Understory: *Alyxia*, *Cyrtandra*, *Dicranopteris*, *Diplazium*, *Machaerina*, *Microlepia*.

*Cyanea lanceolata* (HAHA)

Oahu—Lowland Mesic—Unit 4, Oahu—Lowland Mesic—Unit 5, Oahu—Lowland Mesic—Unit 6, Oahu—Lowland Mesic—Unit 7, Oahu—Lowland Wet—Unit 6, Oahu—Lowland Wet—Unit 7, Oahu—Lowland Wet—Unit 8, Oahu—Lowland Wet—Unit 9, Oahu—Lowland Wet—Unit 10, Oahu—Lowland Wet—Unit 11, Oahu—Lowland Wet—Unit 12, Oahu—Lowland Wet—Unit 13, Oahu—Lowland Wet—Unit 14, Oahu—Lowland Wet—Unit 15, and Oahu—Lowland Wet—Unit 16, identified in the legal descriptions in paragraph (i) of this section, constitute critical habitat for *Cyanea lanceolata* on Oahu.

(i) In units Oahu—Lowland Mesic—Unit 4, Oahu—Lowland Mesic—Unit 5, Oahu—Lowland Mesic—Unit 6, and Oahu—Lowland Mesic—Unit 7, the physical and biological features of critical habitat are:

(A) Elevation: Less than 3,300 ft (1,000 m).

(B) Annual precipitation: 50 to 75 in (130 to 190 cm).

(C) Substrate: Shallow soils, little to no herbaceous layer.

(D) Canopy: *Acacia*, *Diospyros*, *Metrosideros*, *Myrsine*, *Pouteria*, *Santalum*.

(E) Subcanopy: *Dodonaea*, *Freycinetia*, *Leptecophylla*, *Melanthera*, *Osteomeles*, *Pleomele*, *Psydrax*.

(F) Understory: *Carex*, *Dicranopteris*, *Diplazium*, *Elaphoglossum*, *Peperomia*.

(ii) In units Oahu—Lowland Wet—Unit 6, Oahu—Lowland Wet—Unit 7, Oahu—Lowland Wet—Unit 8, Oahu—Lowland Wet—Unit 9, Oahu—Lowland Wet—Unit 10, Oahu—Lowland Wet—Unit 11, Oahu—Lowland Wet—Unit 12,

Oahu—Lowland Wet—Unit 13, Oahu—Lowland Wet—Unit 14, Oahu—Lowland Wet—Unit 15, and Oahu—Lowland Wet—Unit 16, the physical and biological features of critical habitat are:

(A) Elevation: Less than 3,300 ft (1,000 m).

(B) Annual precipitation: Greater than 75 in (190 cm).

(C) Substrate: Clays; ashbeds; deep, well-drained soils; lowland bogs.

(D) Canopy: *Antidesma*, *Metrosideros*, *Myrsine*, *Pisonia*, *Psychotria*.

(E) Subcanopy: *Cibotium*, *Claoxylon*, *Kadua*, *Melicope*.

(F) Understory: *Alyxia*, *Cyrtandra*, *Dicranopteris*, *Diplazium*, *Machaerina*, *Microlepia*.

*Cyanea longiflora* (HAHA)

Oahu—Lowland Mesic—Unit 1, Oahu—Lowland Mesic—Unit 2, Oahu—Lowland Mesic—Unit 3, Oahu—Lowland Mesic—Unit 4, Oahu—Lowland Mesic—Unit 5, Oahu—Lowland Mesic—Unit 6, and Oahu—Lowland Mesic—Unit 7, identified in the legal descriptions in paragraph (i) of this section, constitute critical habitat for *Cyanea longiflora* on Oahu. Within these units, the physical and biological features of critical habitat are:

(i) Elevation: Less than 3,300 ft (1,000 m).

(ii) Annual precipitation: 50 to 75 in (130 to 190 cm).

(iii) Substrate: Shallow soils, little to no herbaceous layer.

(iv) Canopy: *Acacia*, *Diospyros*, *Metrosideros*, *Myrsine*, *Pouteria*, *Santalum*.

(v) Subcanopy: *Dodonaea*, *Freycinetia*, *Leptecophylla*, *Melanthera*, *Osteomeles*, *Pleomele*, *Psydrax*.

(vi) Understory: *Carex*, *Dicranopteris*, *Diplazium*, *Elaphoglossum*, *Peperomia*.

*Cyanea pinnatifida* (HAHA)

Oahu—Lowland Mesic—Unit 1, Oahu—Lowland Mesic—Unit 2, and Oahu—Lowland Mesic—Unit 3, identified in the legal descriptions in paragraph (i) of this section, constitute critical habitat for *Cyanea pinnatifida* on Oahu. Within these units, the physical and biological features of critical habitat are:

(i) Elevation: Less than 3,300 ft (1,000 m).

(ii) Annual precipitation: 50 to 75 in (130 to 190 cm).

(iii) Substrate: Shallow soils, little to no herbaceous layer.

(iv) Canopy: *Acacia*, *Diospyros*, *Metrosideros*, *Myrsine*, *Pouteria*, *Santalum*.

(v) Subcanopy: *Dodonaea*, *Freycinetia*, *Leptecophylla*, *Melanthera*, *Osteomeles*, *Pleomele*, *Psydrax*.

(vi) Understory: *Carex*, *Dicranopteris*, *Diplazium*, *Elaphoglossum*, *Peperomia*.

*Cyanea purpurellifolia* (HAHA)

Oahu—Lowland Wet—Unit 6, Oahu—Lowland Wet—Unit 7, Oahu—Lowland Wet—Unit 8, Oahu—Lowland Wet—Unit 9, Oahu—Lowland Wet—Unit 10, Oahu—Lowland Wet—Unit 11, Oahu—Lowland Wet—Unit 12, Oahu—Lowland Wet—Unit 13, Oahu—Lowland Wet—Unit 14, Oahu—Lowland Wet—Unit 15, Oahu—Lowland Wet—Unit 16, Oahu—Wet Cliff—Unit 6, Oahu—Wet Cliff—Unit 7, and Oahu—Wet Cliff—Unit 8, identified in the legal descriptions in paragraph (i) of this section, constitute critical habitat for *Cyanea purpurellifolia* on Oahu.

(i) In units Oahu—Lowland Wet—Unit 6, Oahu—Lowland Wet—Unit 7, Oahu—Lowland Wet—Unit 8, Oahu—Lowland Wet—Unit 9, Oahu—Lowland Wet—Unit 10, Oahu—Lowland Wet—Unit 11, Oahu—Lowland Wet—Unit 12, Oahu—Lowland Wet—Unit 13, Oahu—Lowland Wet—Unit 14, Oahu—Lowland Wet—Unit 15, and Oahu—Lowland Wet—Unit 16, the physical and biological features of critical habitat are:

(A) Elevation: Less than 3,300 ft (1,000 m).

(B) Annual precipitation: Greater than 75 in (190 cm).

(C) Substrate: Clays; ashbeds; deep, well-drained soils; lowland bogs.

(D) Canopy: *Antidesma*, *Metrosideros*, *Myrsine*, *Pisonia*, *Psychotria*.

(E) Subcanopy: *Cibotium*, *Claoxylon*, *Kadua*, *Melicope*.

(F) Understory: *Alyxia*, *Cyrtandra*, *Dicranopteris*, *Diplazium*, *Machaerina*, *Microlepia*.

(ii) In units Oahu—Wet Cliff—Unit 6, Oahu—Wet Cliff—Unit 7, and Oahu—Wet Cliff—Unit 8, the physical or biological features of critical habitat are:

(A) Elevation: Unrestricted.

(B) Annual precipitation: Greater than 75 in (190 cm).

(C) Substrate: Greater than 65 degree slope, shallow soils, weathered lava.

(D) Canopy: None.

(E) Subcanopy: *Broussaisia*, *Cheirodendron*, *Leptecophylla*, *Metrosideros*.

(F) Understory: Bryophytes, Ferns, *Coprosma*, *Dubautia*, *Kadua*, *Peperomia*.

*Cyanea st.-johnii* (HAHA)

Oahu—Lowland Wet—Unit 6, Oahu—Lowland Wet—Unit 7, Oahu—Lowland Wet—Unit 8, Oahu—Lowland Wet—Unit 9, Oahu—Lowland Wet—Unit 10, Oahu—Lowland Wet—Unit 11, Oahu—Lowland Wet—Unit 12, Oahu—Lowland Wet—Unit 13, Oahu—

Lowland Wet—Unit 14, Oahu—Lowland Wet—Unit 15, Oahu—Lowland Wet—Unit 16, Oahu—Wet Cliff—Unit 6, Oahu—Wet Cliff—Unit 7, and Oahu—Wet Cliff—Unit 8, identified in the legal descriptions in paragraph (i) of this section, constitute critical habitat for *Cyanea st.-johnii* on Oahu.

(i) In units Oahu—Lowland Wet—Unit 6, Oahu—Lowland Wet—Unit 7, Oahu—Lowland Wet—Unit 8, Oahu—Lowland Wet—Unit 9, Oahu—Lowland Wet—Unit 10, Oahu—Lowland Wet—Unit 11, Oahu—Lowland Wet—Unit 12, Oahu—Lowland Wet—Unit 13, Oahu—Lowland Wet—Unit 14, Oahu—Lowland Wet—Unit 15, and Oahu—Lowland Wet—Unit 16, the physical and biological features of critical habitat are:

(A) Elevation: Less than 3,300 ft (1,000 m).

(B) Annual precipitation: Greater than 75 in (190 cm).

(C) Substrate: Clays; ashbeds; deep, well-drained soils; lowland bogs.

(D) Canopy: *Antidesma*, *Metrosideros*, *Myrsine*, *Pisonia*, *Psychotria*.

(E) Subcanopy: *Cibotium*, *Claoxylon*, *Kadua*, *Melicope*.

(F) Understory: *Alyxia*, *Cyrtandra*, *Dicranopteris*, *Diplazium*, *Machaerina*, *Microlepia*.

(ii) In units Oahu—Wet Cliff—Unit 6, Oahu—Wet Cliff—Unit 7, and Oahu—Wet Cliff—Unit 8, the physical and biological features of critical habitat are:

(A) Elevation: Unrestricted.

(B) Annual precipitation: Greater than 75 in (190 cm).

(C) Substrate: Greater than 65 degree slope, shallow soils, weathered lava.

(D) Canopy: None.

(E) Subcanopy: *Broussaisia*, *Cheirodendron*, *Leptecophylla*, *Metrosideros*.

(F) Understory: Bryophytes, Ferns, *Coprosma*, *Dubautia*, *Kadua*, *Peperomia*.

*Cyanea superba* (NGN)

Oahu—Lowland Mesic—Unit 1, Oahu—Lowland Mesic—Unit 2, and Oahu—Lowland Mesic—Unit 3, identified in the legal descriptions in paragraph (i) of this section, constitute critical habitat for *Cyanea superba* on Oahu. Within these units, the physical and biological features of critical habitat are:

(i) Elevation: Less than 3,300 ft (1,000 m).

(ii) Annual precipitation: 50 to 75 in (130 to 190 cm).

(iii) Substrate: Shallow soils, little to no herbaceous layer.

(iv) Canopy: *Acacia*, *Diospyros*, *Metrosideros*, *Myrsine*, *Pouteria*, *Santalum*.

(v) Subcanopy: *Dodonaea*, *Freycinetia*, *Leptecophylla*, *Melanthera*, *Osteomeles*, *Pleomele*, *Psydrax*.

(vi) Understory: *Carex*, *Dicranopteris*, *Diplazium*, *Elaphoglossum*, *Peperomia*.

*Cyanea truncata* (HAHA)

Oahu—Lowland Mesic—Unit 4, Oahu—Lowland Mesic—Unit 5, Oahu—Lowland Mesic—Unit 6, Oahu—Lowland Mesic—Unit 7, Oahu—Lowland Wet—Unit 6, Oahu—Lowland Wet—Unit 7, Oahu—Lowland Wet—Unit 8, Oahu—Lowland Wet—Unit 9, Oahu—Lowland Wet—Unit 10, Oahu—Lowland Wet—Unit 11, Oahu—Lowland Wet—Unit 12, Oahu—Lowland Wet—Unit 13, Oahu—Lowland Wet—Unit 14, Oahu—Lowland Wet—Unit 15, Oahu—Lowland Wet—Unit 16, Oahu—Wet Cliff—Unit 6, Oahu—Wet Cliff—Unit 7, and Oahu—Wet Cliff—Unit 8, identified in the legal descriptions in paragraph (i) of this section, constitute critical habitat for *Cyanea truncata* on Oahu.

(i) In units Oahu—Lowland Mesic—Unit 4, Oahu—Lowland Mesic—Unit 5, Oahu—Lowland Mesic—Unit 6, and Oahu—Lowland Mesic—Unit 7, the physical and biological features of critical habitat are:

(A) Elevation: Less than 3,300 ft (1,000 m).

(B) Annual precipitation: 50 to 75 in (130 to 190 cm).

(C) Substrate: Shallow soils, little to no herbaceous layer.

(D) Canopy: *Acacia*, *Diospyros*, *Metrosideros*, *Myrsine*, *Pouteria*, *Santalum*.

(E) Subcanopy: *Dodonaea*, *Freycinetia*, *Leptecophylla*, *Melanthera*, *Osteomeles*, *Pleomele*, *Psydrax*.

(F) Understory: *Carex*, *Dicranopteris*, *Diplazium*, *Elaphoglossum*, *Peperomia*.

(ii) In units Oahu—Lowland Wet—Unit 6, Oahu—Lowland Wet—Unit 7, Oahu—Lowland Wet—Unit 8, Oahu—Lowland Wet—Unit 9, Oahu—Lowland Wet—Unit 10, Oahu—Lowland Wet—Unit 11, Oahu—Lowland Wet—Unit 12, Oahu—Lowland Wet—Unit 13, Oahu—Lowland Wet—Unit 14, Oahu—Lowland Wet—Unit 15, and Oahu—Lowland Wet—Unit 16, the physical and biological features of critical habitat are:

(A) Elevation: Less than 3,300 ft (1,000 m).

(B) Annual precipitation: Greater than 75 in (190 cm).

(C) Substrate: Clays; ashbeds; deep, well-drained soils; lowland bogs.

(D) Canopy: *Antidesma*, *Metrosideros*, *Myrsine*, *Pisonia*, *Psychotria*.

(E) Subcanopy: *Cibotium*, *Claoxylon*, *Kadua*, *Melicope*.

(F) Understory: *Alyxia*, *Cyrtandra*, *Dicranopteris*, *Diplazium*, *Machaerina*, *Microlepia*.

(iii) In units Oahu—Wet Cliff—Unit 6, Oahu—Wet Cliff—Unit 7, and Oahu—Wet Cliff—Unit 8, the physical and biological features of critical habitat are:

(A) Elevation: Unrestricted.

(B) Annual precipitation: Greater than 75 in (190 cm).

(C) Substrate: Greater than 65 degree slope, shallow soils, weathered lava.

(D) Canopy: None.

(E) Subcanopy: *Broussaisia*, *Cheirodendron*, *Leptecophylla*, *Metrosideros*.

(F) Understory: *Bryophytes*, *Ferns*, *Coprosma*, *Dubautia*, *Kadua*, *Peperomia*.

*Delissea subcordata* (OHA)

Oahu—Lowland Mesic—Unit 1, Oahu—Lowland Mesic—Unit 2, Oahu—Lowland Mesic—Unit 3, Oahu—Lowland Mesic—Unit 4, Oahu—Lowland Mesic—Unit 5, Oahu—Lowland Mesic—Unit 6, and Oahu—Lowland Mesic—Unit 7, identified in the legal descriptions in paragraph (i) of this section, constitute critical habitat for *Delissea subcordata* on Oahu. Within these units, the physical and biological features of critical habitat are:

(i) Elevation: Less than 3,300 ft (1,000 m).

(ii) Annual precipitation: 50 to 75 in (130 to 190 cm).

(iii) Substrate: Shallow soils, little to no herbaceous layer.

(iv) Canopy: *Acacia*, *Diospyros*, *Metrosideros*, *Myrsine*, *Pouteria*, *Santalum*.

(v) Subcanopy: *Dodonaea*, *Freycinetia*, *Leptecophylla*, *Melanthera*, *Osteomeles*, *Pleomele*, *Psydrax*.

(vi) Understory: *Carex*, *Dicranopteris*, *Diplazium*, *Elaphoglossum*, *Peperomia*.

*Lobelia gaudichaudii* ssp. *koolauensis* (NCN)

Oahu—Lowland Wet—Unit 6, Oahu—Lowland Wet—Unit 7, Oahu—Lowland Wet—Unit 8, Oahu—Lowland Wet—Unit 9, Oahu—Lowland Wet—Unit 10, Oahu—Lowland Wet—Unit 11, Oahu—Lowland Wet—Unit 12, Oahu—Lowland Wet—Unit 13, Oahu—Lowland Wet—Unit 14, Oahu—Lowland Wet—Unit 15, and Oahu—Lowland Wet—Unit 16, identified in the legal descriptions in paragraph (i) of this section, constitute critical habitat for *Lobelia gaudichaudii* ssp. *koolauensis* on Oahu. Within these units, the physical and biological features of critical habitat are:

(i) Elevation: Less than 3,300 ft (1,000 m).

(ii) Annual precipitation: Greater than 75 in (190 cm).

(iii) Substrate: Clays; ashbeds; deep, well-drained soils; lowland bogs.

(iv) Canopy: *Antidesma*, *Metrosideros*, *Myrsine*, *Pisonia*, *Psychotria*.

(v) Subcanopy: *Cibotium*, *Claoxylon*, *Kadua*, *Melicope*.

(vi) Understory: *Alyxia*, *Cyrtandra*, *Dicranopteris*, *Diplazium*, *Machaerina*, *Microlepia*.

*Lobelia monostachya* (NCN)

Oahu—Lowland Mesic—Unit 4, Oahu—Lowland Mesic—Unit 5, Oahu—Lowland Mesic—Unit 6, and Oahu—Lowland Mesic—Unit 7, identified in the legal descriptions in paragraph (i) of this section, constitute critical habitat for *Lobelia monostachya* on Oahu. Within these units, the physical and biological features of critical habitat are:

(i) Elevation: Less than 3,300 ft (1,000 m).

(ii) Annual precipitation: 50 to 75 in (130 to 190 cm).

(iii) Substrate: Shallow soils, little to no herbaceous layer.

(iv) Canopy: *Acacia*, *Diospyros*, *Metrosideros*, *Myrsine*, *Pouteria*, *Santalum*.

(v) Subcanopy: *Dodonaea*, *Freycinetia*, *Leptecophylla*, *Melanthera*, *Osteomeles*, *Pleomele*, *Psydrax*.

(vi) Understory: *Carex*, *Dicranopteris*, *Diplazium*, *Elaphoglossum*, *Peperomia*.

*Lobelia niihauensis* (NCN)

Oahu—Lowland Mesic—Unit 1, Oahu—Lowland Mesic—Unit 2, Oahu—Lowland Mesic—Unit 3, Oahu—Dry Cliff—Unit 1, Oahu—Dry Cliff—Unit 2, Oahu—Dry Cliff—Unit 3, Oahu—Dry Cliff—Unit 4, Oahu—Dry Cliff—Unit 6, Oahu—Dry Cliff—Unit 7a, Oahu—Dry Cliff—Unit 7b, and Oahu—Dry Cliff—Unit 8, identified in the legal descriptions in paragraph (i) of this section, constitute critical habitat for *Lobelia niihauensis* on Oahu.

(i) In units Oahu—Lowland Mesic—Unit 1, Oahu—Lowland Mesic—Unit 2, and Oahu—Lowland Mesic—Unit 3, the physical and biological features of critical habitat are:

(A) Elevation: Less than 3,300 ft (1,000 m).

(B) Annual precipitation: 50 to 75 in (130 to 190 cm).

(C) Substrate: Shallow soils, little to no herbaceous layer.

(D) Canopy: *Acacia*, *Diospyros*, *Metrosideros*, *Myrsine*, *Pouteria*, *Santalum*.

(E) Subcanopy: *Dodonaea*, *Freycinetia*, *Leptecophylla*, *Melanthera*, *Osteomeles*, *Psydrax*, *Pleomele*.

(F) Understory: *Carex*, *Dicranopteris*, *Diplazium*, *Elaphoglossum*, *Peperomia*.

(ii) In units Oahu—Dry Cliff—Unit 1, Oahu—Dry Cliff—Unit 2, Oahu—Dry

Cliff—Unit 3, Oahu—Dry Cliff—Unit 4, Oahu—Dry Cliff—Unit 6, Oahu—Dry Cliff—Unit 7a, Oahu—Dry Cliff—Unit 7b, and Oahu—Dry Cliff—Unit 8, the physical and biological features of critical habitat are:

- (A) Elevation: Unrestricted.
- (B) Annual precipitation: Less than 75 in (190 cm).
- (C) Substrate: Greater than 65 degree slope, rocky talus.
- (D) Canopy: None.
- (E) Subcanopy: *Antidesma*, *Chamaesyce*, *Diospyros*, *Dodonaea*.
- (F) Understory: *Bidens*, *Eragrostis*, *Melanthera*, *Schiedea*.

*Lobelia oahuensis* (NCN)

Oahu—Lowland Wet—Unit 1, Oahu—Lowland Wet—Unit 2, Oahu—Lowland Wet—Unit 3, Oahu—Lowland Wet—Unit 4, Oahu—Lowland Wet—Unit 5, Oahu—Lowland Wet—Unit 6, Oahu—Lowland Wet—Unit 7, Oahu—Lowland Wet—Unit 8, Oahu—Lowland Wet—Unit 9, Oahu—Lowland Wet—Unit 10, Oahu—Lowland Wet—Unit 11, Oahu—Lowland Wet—Unit 12, Oahu—Lowland Wet—Unit 13, Oahu—Lowland Wet—Unit 14, Oahu—Lowland Wet—Unit 15, Oahu—Lowland Wet—Unit 16, Oahu—Montane Wet—Unit 1, Oahu—Wet Cliff—Unit 1, Oahu—Wet Cliff—Unit 2, Oahu—Wet Cliff—Unit 3, Oahu—Wet Cliff—Unit 4, Oahu—Wet Cliff—Unit 5, Oahu—Wet Cliff—Unit 6, Oahu—Wet Cliff—Unit 7, and Oahu—Wet Cliff—Unit 8, identified in the legal descriptions in paragraph (i) of this section, constitute critical habitat for *Lobelia oahuensis* on Oahu.

(i) In units Oahu—Lowland Wet—Unit 1, Oahu—Lowland Wet—Unit 2, Oahu—Lowland Wet—Unit 3, Oahu—Lowland Wet—Unit 4, Oahu—Lowland Wet—Unit 5, Oahu—Lowland Wet—Unit 6, Oahu—Lowland Wet—Unit 7, Oahu—Lowland Wet—Unit 8, Oahu—Lowland Wet—Unit 9, Oahu—Lowland Wet—Unit 10, Oahu—Lowland Wet—Unit 11, Oahu—Lowland Wet—Unit 12, Oahu—Lowland Wet—Unit 13, Oahu—Lowland Wet—Unit 14, Oahu—Lowland Wet—Unit 15, and Oahu—Lowland Wet—Unit 16, the physical and biological features of critical habitat are:

- (A) Elevation: Less than 3,300 ft (1,000 m).
- (B) Annual precipitation: Greater than 75 in (190 cm).
- (C) Substrate: Clays; ashbeds; deep, well-drained soils; lowland bogs.
- (D) Canopy: *Antidesma*, *Metrosideros*, *Myrsine*, *Pisonia*, *Psychotria*.
- (E) Subcanopy: *Cibotium*, *Claoxylon*, *Kadua*, *Melicope*.

(F) Understory: *Alyxia*, *Cyrtandra*, *Dicranopteris*, *Diplazium*, *Machaerina*, *Microlepia*.

- (ii) In unit Oahu—Montane Wet—Unit 1, the physical and biological features of critical habitat are:
  - (A) Elevation: 3,300 to 6,600 ft (1,000 to 2,000 m).
  - (B) Annual precipitation: Greater than 75 in (190 cm).
  - (C) Substrate: Well-developed soils, montane bogs.
  - (D) Canopy: *Acacia*, *Charpentiera*, *Cheirodendron*, *Metrosideros*.
  - (E) Subcanopy: *Broussaisia*, *Cibotium*, *Eurya*, *Ilex*, *Myrsine*.
  - (F) Understory: *Ferns*, *Carex*, *Coprosma*, *Leptecophylla*, *Oreobolus*, *Rhynchospora*, *Vaccinium*.

(iii) In units Oahu—Wet Cliff—Unit 1, Oahu—Wet Cliff—Unit 2, Oahu—Wet Cliff—Unit 3, Oahu—Wet Cliff—Unit 4, Oahu—Wet Cliff—Unit 5, Oahu—Wet Cliff—Unit 6, Oahu—Wet Cliff—Unit 7, and Oahu—Wet Cliff—Unit 8, the physical and biological features of critical habitat are:

- (A) Elevation: Unrestricted.
- (B) Annual precipitation: Greater than 75 in (190 cm).
- (C) Substrate: Greater than 65 degree slope, shallow soils, weathered lava.
- (D) Canopy: None.
- (E) Subcanopy: *Broussaisia*, *Cheirodendron*, *Leptecophylla*, *Metrosideros*.
- (F) Understory: *Bryophytes*, *Ferns*, *Coprosma*, *Dubautia*, *Kadua*, *Peperomia*.

*Trematolobelia singularis* (NCN)

Oahu—Lowland Wet—Unit 6, Oahu—Lowland Wet—Unit 7, Oahu—Lowland Wet—Unit 8, Oahu—Lowland Wet—Unit 9, Oahu—Lowland Wet—Unit 10, Oahu—Lowland Wet—Unit 11, Oahu—Lowland Wet—Unit 12, Oahu—Lowland Wet—Unit 13, Oahu—Lowland Wet—Unit 14, Oahu—Lowland Wet—Unit 15, Oahu—Lowland Wet—Unit 16, Oahu—Wet Cliff—Unit 6, Oahu—Wet Cliff—Unit 7, and Oahu—Wet Cliff—Unit 8, identified in the legal descriptions in paragraph (i) of this section, constitute critical habitat for *Trematolobelia singularis* on Oahu.

(i) In units Oahu—Lowland Wet—Unit 6, Oahu—Lowland Wet—Unit 7, Oahu—Lowland Wet—Unit 8, Oahu—Lowland Wet—Unit 9, Oahu—Lowland Wet—Unit 10, Oahu—Lowland Wet—Unit 11, Oahu—Lowland Wet—Unit 12, Oahu—Lowland Wet—Unit 13, Oahu—Lowland Wet—Unit 14, Oahu—Lowland Wet—Unit 15, and Oahu—Lowland Wet—Unit 16, the physical and biological features of critical habitat are:

- (A) Elevation: Less than 3,300 ft (1,000 m).

(B) Annual precipitation: Greater than 75 in (190 cm).

(C) Substrate: Clays; ashbeds; deep, well-drained soils; lowland bogs.

(D) Canopy: *Antidesma*, *Metrosideros*, *Myrsine*, *Pisonia*, *Psychotria*.

(E) Subcanopy: *Cibotium*, *Claoxylon*, *Kadua*, *Melicope*.

(F) Understory: *Alyxia*, *Cyrtandra*, *Dicranopteris*, *Diplazium*, *Machaerina*, *Microlepia*.

(ii) In units Oahu—Wet Cliff—Unit 6, Oahu—Wet Cliff—Unit 7, and Oahu—Wet Cliff—Unit 8, the physical or biological features of critical habitat are:

- (A) Elevation: Unrestricted.
- (B) Annual precipitation: Greater than 75 in (190 cm).
- (C) Substrate: Greater than 65 degree slope, shallow soils, weathered lava.
- (D) Canopy: None.
- (E) Subcanopy: *Broussaisia*, *Cheirodendron*, *Leptecophylla*, *Metrosideros*.
- (F) Understory: *Bryophytes*, *Ferns*, *Coprosma*, *Dubautia*, *Kadua*, *Peperomia*.

**FAMILY CARYOPHYLLACEAE**

*Schiedea hookeri* (NCN)

Oahu—Lowland Dry—Unit 1, Oahu—Lowland Dry—Unit 2, Oahu—Lowland Dry—Unit 8, Oahu—Lowland Dry—Unit 9, Oahu—Lowland Dry—Unit 10, Oahu—Lowland Dry—Unit 11, Oahu—Lowland Mesic—Unit 1, Oahu—Lowland Mesic—Unit 2, Oahu—Lowland Mesic—Unit 3, Oahu—Lowland Wet—Unit 1, Oahu—Lowland Wet—Unit 2, Oahu—Lowland Wet—Unit 3, Oahu—Lowland Wet—Unit 4, Oahu—Lowland Wet—Unit 5, Oahu—Dry Cliff—Unit 1, Oahu—Dry Cliff—Unit 2, Oahu—Dry Cliff—Unit 3, Oahu—Dry Cliff—Unit 4, Oahu—Dry Cliff—Unit 6, Oahu—Dry Cliff—Unit 7a, Oahu—Dry Cliff—Unit 7b, Oahu—Dry Cliff—Unit 8, Oahu—Wet Cliff—Unit 1, Oahu—Wet Cliff—Unit 2, Oahu—Wet Cliff—Unit 3, Oahu—Wet Cliff—Unit 4, and Oahu—Wet Cliff—Unit 5, identified in the legal descriptions in paragraph (i) of this section, constitute critical habitat for *Schiedea hookeri* on Oahu.

(i) In units Oahu—Lowland Dry—Unit 1, Oahu—Lowland Dry—Unit 2, Oahu—Lowland Dry—Unit 8, Oahu—Lowland Dry—Unit 9, Oahu—Lowland Dry—Unit 10, and Oahu—Lowland Dry—Unit 11, the physical and biological features of critical habitat are:

- (A) Elevation: Less than 3,300 ft (1,000 m).
- (B) Annual precipitation: Less than 50 in (130 cm).
- (C) Substrate: Weathered silty loams to stony clay, rocky ledges, little-weathered lava.

(D) Canopy: *Diospyros*, *Myoporum*, *Pleomele*, *Santalum*, *Sapindus*.

(E) Subcanopy: *Chamaesyce*, *Dodonaea*, *Leptecophylla*, *Osteomeles*, *Psydrax*, *Scaevola*, *Wikstroemia*.

(F) Understory: *Alyxia*, *Artemisia*, *Bidens*, *Chenopodium*, *Nephrolepis*, *Peperomia*, *Sicyos*.

(ii) In units Oahu—Lowland Mesic—Unit 1, Oahu—Lowland Mesic—Unit 2, and Oahu—Lowland Mesic—Unit 3, the physical and biological features of critical habitat are:

(A) Elevation: Less than 3,300 ft (1,000 m).

(B) Annual precipitation: 50 to 75 in (130 to 190 cm).

(C) Substrate: Shallow soils, little to no herbaceous layer.

(D) Canopy: *Acacia*, *Diospyros*, *Metrosideros*, *Myrsine*, *Pouteria*, *Santalum*.

(E) Subcanopy: *Dodonaea*, *Freycinetia*, *Leptecophylla*, *Melanthera*, *Osteomeles*, *Pleomele*, *Psydrax*.

(F) Understory: *Carex*, *Dicranopteris*, *Diplazium*, *Elaphoglossum*, *Peperomia*.

(iii) In units Oahu—Lowland Wet—Unit 1, Oahu—Lowland Wet—Unit 2, Oahu—Lowland Wet—Unit 3, Oahu—Lowland Wet—Unit 4, and Oahu—Lowland Wet—Unit 5, the physical and biological features of critical habitat are:

(A) Elevation: Less than 3,300 ft (1,000 m).

(B) Annual precipitation: Greater than 75 in (190 cm).

(C) Substrate: Clays; ashbeds; deep, well-drained soils; lowland bogs.

(D) Canopy: *Antidesma*, *Metrosideros*, *Myrsine*, *Pisonia*, *Psychotria*.

(E) Subcanopy: *Cibotium*, *Claoxylon*, *Kadua*, *Melicope*.

(F) Understory: *Alyxia*, *Cyrtandra*, *Dicranopteris*, *Diplazium*, *Machaerina*, *Microlepia*.

(iv) In units Oahu—Dry Cliff—Unit 1, Oahu—Dry Cliff—Unit 2, Oahu—Dry Cliff—Unit 3, Oahu—Dry Cliff—Unit 4, Oahu—Dry Cliff—Unit 6, Oahu—Dry Cliff—Unit 7a, Oahu—Dry Cliff—Unit 7b, and Oahu—Dry Cliff—Unit 8, the physical and biological features of critical habitat are:

(A) Elevation: Unrestricted.

(B) Annual precipitation: Less than 75 in (190 cm).

(C) Substrate: Greater than 65 degree slope, rocky talus.

(D) Canopy: None.

(E) Subcanopy: *Antidesma*, *Chamaesyce*, *Diospyros*, *Dodonaea*.

(F) Understory: *Bidens*, *Eragrostis*, *Melanthera*, *Schiedea*.

(v) In units Oahu—Wet Cliff—Unit 1, Oahu—Wet Cliff—Unit 2, Oahu—Wet Cliff—Unit 3, Oahu—Wet Cliff—Unit 4, and Oahu—Wet Cliff—Unit 5, the physical and biological features of critical habitat are:

(A) Elevation: Unrestricted.

(B) Annual precipitation: Greater than 75 in (190 cm).

(C) Substrate: Greater than 65 degree slope, shallow soils, weathered lava.

(D) Canopy: None.

(E) Subcanopy: *Broussaisia*, *Cheirodendron*, *Leptecophylla*, *Metrosideros*.

(F) Understory: Bryophytes, Ferns, *Coprosma*, *Dubautia*, *Kadua*, *Peperomia*.

#### *Schiedea kaalae* (NCN)

Oahu—Lowland Mesic—Unit 1, Oahu—Lowland Mesic—Unit 2, Oahu—Lowland Mesic—Unit 3, Oahu—Lowland Mesic—Unit 4, Oahu—Lowland Mesic—Unit 5, Oahu—Lowland Mesic—Unit 6, Oahu—Lowland Mesic—Unit 7, Oahu—Lowland Wet—Unit 1, Oahu—Lowland Wet—Unit 2, Oahu—Lowland Wet—Unit 3, Oahu—Lowland Wet—Unit 4, Oahu—Lowland Wet—Unit 5, Oahu—Wet Cliff—Unit 1, Oahu—Wet Cliff—Unit 2, Oahu—Wet Cliff—Unit 3, Oahu—Wet Cliff—Unit 4, Oahu—Wet Cliff—Unit 5, Oahu—Wet Cliff—Unit 6, Oahu—Wet Cliff—Unit 7, and Oahu—Wet Cliff—Unit 8, identified in the legal descriptions in paragraph (i) of this section, constitute critical habitat for *Schiedea kaalae* on Oahu.

(i) In units Oahu—Lowland Mesic—Unit 1, Oahu—Lowland Mesic—Unit 2, Oahu—Lowland Mesic—Unit 3, Oahu—Lowland Mesic—Unit 4, Oahu—Lowland Mesic—Unit 5, Oahu—Lowland Mesic—Unit 6, and Oahu—Lowland Mesic—Unit 7, the physical and biological features of critical habitat are:

(A) Elevation: Less than 3,300 ft (1,000 m).

(B) Annual precipitation: 50 to 75 in (130 to 190 cm).

(C) Substrate: Shallow soils, little to no herbaceous layer.

(D) Canopy: *Acacia*, *Diospyros*, *Metrosideros*, *Myrsine*, *Pouteria*, *Santalum*.

(E) Subcanopy: *Dodonaea*, *Freycinetia*, *Leptecophylla*, *Melanthera*, *Osteomeles*, *Pleomele*, *Psydrax*.

(F) Understory: *Carex*, *Dicranopteris*, *Diplazium*, *Elaphoglossum*, *Peperomia*.

(ii) In units Oahu—Lowland Wet—Unit 1, Oahu—Lowland Wet—Unit 2, Oahu—Lowland Wet—Unit 3, Oahu—Lowland Wet—Unit 4, and Oahu—Lowland Wet—Unit 5, the physical and biological features of critical habitat are:

(A) Elevation: Less than 3,300 ft (1,000 m).

(B) Annual precipitation: Greater than 75 in (190 cm).

(C) Substrate: Clays; ashbeds; deep, well-drained soils; lowland bogs.

(D) Canopy: *Antidesma*, *Metrosideros*, *Myrsine*, *Pisonia*, *Psychotria*.

(E) Subcanopy: *Cibotium*, *Claoxylon*, *Kadua*, *Melicope*.

(F) Understory: *Alyxia*, *Cyrtandra*, *Dicranopteris*, *Diplazium*, *Machaerina*, *Microlepia*.

(iii) In units Oahu—Wet Cliff—Unit 1, Oahu—Wet Cliff—Unit 2, Oahu—Wet Cliff—Unit 3, Oahu—Wet Cliff—Unit 4, Oahu—Wet Cliff—Unit 5, Oahu—Wet Cliff—Unit 6, Oahu—Wet Cliff—Unit 7, and Oahu—Wet Cliff—Unit 8, the physical and biological features of critical habitat are:

(A) Elevation: Unrestricted.

(B) Annual precipitation: Greater than 75 in (190 cm).

(C) Substrate: Greater than 65 degree slope, shallow soils, weathered lava.

(D) Canopy: None.

(E) Subcanopy: *Broussaisia*, *Cheirodendron*, *Leptecophylla*, *Metrosideros*.

(F) Understory: Bryophytes, Ferns, *Coprosma*, *Dubautia*, *Kadua*, *Peperomia*.

#### *Schiedea kealiae* (MAOLIOLI)

Oahu—Coastal—Unit 1, Oahu—Coastal—Unit 13, Oahu—Coastal—Unit 14, Oahu—Coastal—Unit 15, Oahu—Lowland Dry—Unit 1, Oahu—Lowland Dry—Unit 2, Oahu—Lowland Dry—Unit 8, Oahu—Lowland Dry—Unit 9, Oahu—Lowland Dry—Unit 10, and Oahu—Lowland Dry—Unit 11, identified in the legal descriptions in paragraph (i) of this section, constitute critical habitat for *Schiedea kealiae* on Oahu.

(i) In unit Oahu—Coastal—Unit 1, Oahu—Coastal—Unit 13, Oahu—Coastal—Unit 14, and Oahu—Coastal—Unit 15, the physical and biological features of critical habitat are:

(A) Elevation: Less than 980 ft (300 m).

(B) Annual precipitation: Less than 20 in (50 cm).

(C) Substrate: Well-drained, calcareous, talus slopes; weathered clay soils; ephemeral pools; mudflats.

(D) Canopy: *Hibiscus*, *Myoporum*, *Santalum*, *Scaevola*.

(E) Subcanopy: *Gossypium*, *Sida*, *Vitex*.

(F) Understory: *Eragrostis*, *Jacquemontia*, *Lyceum*, *Nama*, *Sesuvium*, *Sporobolus*, *Vigna*.

(ii) In units Oahu—Lowland Dry—Unit 1, Oahu—Lowland Dry—Unit 2, Oahu—Lowland Dry—Unit 8, Oahu—Lowland Dry—Unit 9, Oahu—Lowland Dry—Unit 10, and Oahu—Lowland Dry—Unit 11, the physical and biological features of critical habitat are:

(A) Elevation: Less than 3,300 ft (1,000 m).

(B) Annual precipitation: Less than 50 in (130 cm).

(C) Substrate: Weathered silty loams to stony clay, rocky ledges, little-weathered lava.

(D) Canopy: *Diospyros*, *Myoporum*, *Pleomele*, *Santalum*, *Sapindus*.

(E) Subcanopy: *Chamaesyce*, *Dodonaea*, *Leptecophylla*, *Osteomeles*, *Psydrax*, *Scaevola*, *Wikstroemia*.

(F) Understory: *Alyxia*, *Artemisia*, *Bidens*, *Chenopodium*, *Nephrolepis*, *Peperomia*, *Plumbago*, *Sicyos*, *Sida*, *Waltheria*.

*Schiedea nuttallii* (NCN)

Oahu—Lowland Mesic—Unit 1, Oahu—Lowland Mesic—Unit 2, Oahu—Lowland Mesic—Unit 3, Oahu—Lowland Mesic—Unit 4, Oahu—Lowland Mesic—Unit 5, Oahu—Lowland Mesic—Unit 6, and Oahu—Lowland Mesic—Unit 7, identified in the legal descriptions in paragraph (i) of this section, constitute critical habitat for *Schiedea nuttallii* on Oahu. Within these units, the physical and biological features of critical habitat are:

(i) Elevation: Less than 3,300 ft (1,000 m).

(ii) Annual precipitation: 50 to 75 in (130 to 190 cm).

(iii) Substrate: Shallow soils, little to no herbaceous layer.

(iv) Canopy: *Acacia*, *Diospyros*, *Metrosideros*, *Myrsine*, *Pouteria*, *Santalum*.

(v) Subcanopy: *Dodonaea*, *Freycinetia*, *Leptecophylla*, *Melanthera*, *Osteomeles*, *Pleomele*, *Psydrax*.

(vi) Understory: *Carex*, *Dicranopteris*, *Diplazium*, *Elaphoglossum*, *Peperomia*.

*Schiedea obovata* (NCN)

Oahu—Lowland Mesic—Unit 1, Oahu—Lowland Mesic—Unit 2, Oahu—Lowland Mesic—Unit 3, Oahu—Dry Cliff—Unit 1, Oahu—Dry Cliff—Unit 2, Oahu—Dry Cliff—Unit 3, Oahu—Dry Cliff—Unit 4, Oahu—Dry Cliff—Unit 6, Oahu—Dry Cliff—Unit 7a, Oahu—Dry Cliff—Unit 7b, and Oahu—Dry Cliff—Unit 8, identified in the legal descriptions in paragraph (i) of this section, constitute critical habitat for *Schiedea obovata* on Oahu.

(i) In units Oahu—Lowland Mesic—Unit 1, Oahu—Lowland Mesic—Unit 2, and Oahu—Lowland Mesic—Unit 3, the physical and biological features of critical habitat are:

(A) Elevation: Less than 3,300 ft (1,000 m).

(B) Annual precipitation: 50 to 75 in (130 to 190 cm).

(C) Substrate: Shallow soils, little to no herbaceous layer.

(D) Canopy: *Acacia*, *Diospyros*, *Metrosideros*, *Myrsine*, *Pouteria*, *Santalum*.

(E) Subcanopy: *Dodonaea*, *Freycinetia*, *Leptecophylla*, *Melanthera*, *Osteomeles*, *Pleomele*, *Psydrax*.

(F) Understory: *Carex*, *Dicranopteris*, *Diplazium*, *Elaphoglossum*, *Peperomia*.

(ii) In units Oahu—Dry Cliff—Unit 1, Oahu—Dry Cliff—Unit 2, Oahu—Dry Cliff—Unit 3, Oahu—Dry Cliff—Unit 4, Oahu—Dry Cliff—Unit 6, Oahu—Dry Cliff—Unit 7a, Oahu—Dry Cliff—Unit 7b, and Oahu—Dry Cliff—Unit 8, the physical and biological features of critical habitat are:

(A) Elevation: Unrestricted.

(B) Annual precipitation: Less than 75 in (190 cm).

(C) Substrate: Greater than 65 degree slope, rocky talus.

(D) Canopy: None.

(E) Subcanopy: *Antidesma*, *Chamaesyce*, *Diospyros*, *Dodonaea*.

(F) Understory: *Bidens*, *Eragrostis*, *Melanthera*, *Schiedea*.

*Schiedea trinervis* (NCN)

Oahu—Montane Wet—Unit 1, Oahu—Dry Cliff—Unit 1, Oahu—Dry Cliff—Unit 2, Oahu—Dry Cliff—Unit 3, Oahu—Dry Cliff—Unit 4, Oahu—Dry Cliff—Unit 6, Oahu—Dry Cliff—Unit 7a, Oahu—Dry Cliff—Unit 7b, Oahu—Dry Cliff—Unit 8, Oahu—Wet Cliff—Unit 1, Oahu—Wet Cliff—Unit 2, Oahu—Wet Cliff—Unit 3, Oahu—Wet Cliff—Unit 4, and Oahu—Wet Cliff—Unit 5, identified in the legal descriptions in paragraph (i) of this section, constitute critical habitat for *Schiedea trinervis* on Oahu.

(i) In unit Oahu—Montane Wet—Unit 1, the physical and biological features of critical habitat are:

(A) Elevation: 3,300 to 6,600 ft (1,000 to 2,000 m).

(B) Annual precipitation: Greater than 75 in (190 cm).

(C) Substrate: Well-developed soils, montane bogs.

(D) Canopy: *Acacia*, *Charpentiera*, *Cheirodendron*, *Metrosideros*.

(E) Subcanopy: *Broussaisia*, *Cibotium*, *Eurya*, *Ilex*, *Myrsine*.

(F) Understory: Ferns, *Carex*, *Coprosma*, *Leptecophylla*, *Oreobolus*, *Rhynchospora*, *Vaccinium*.

(ii) In units Oahu—Dry Cliff—Unit 1, Oahu—Dry Cliff—Unit 2, Oahu—Dry Cliff—Unit 3, Oahu—Dry Cliff—Unit 4, Oahu—Dry Cliff—Unit 6, Oahu—Dry Cliff—Unit 7a, Oahu—Dry Cliff—Unit 7b, and Oahu—Dry Cliff—Unit 8, the physical and biological features of critical habitat are:

(A) Elevation: Unrestricted.

(B) Annual precipitation: Less than 75 in (190 cm).

(C) Substrate: Greater than 65 degree slope, rocky talus.

(D) Canopy: None.

(E) Subcanopy: *Antidesma*, *Chamaesyce*, *Diospyros*, *Dodonaea*.

(F) Understory: *Bidens*, *Eragrostis*, *Melanthera*, *Schiedea*.

(iii) In units Oahu—Wet Cliff—Unit 1, Oahu—Wet Cliff—Unit 2, Oahu—Wet Cliff—Unit 3, Oahu—Wet Cliff—Unit 4, and Oahu—Wet Cliff—Unit 5, the physical and biological features of critical habitat are:

(A) Elevation: Unrestricted.

(B) Annual precipitation: Greater than 75 in (190 cm).

(C) Substrate: Greater than 65 degree slope, shallow soils, weathered lava.

(D) Canopy: None.

(E) Subcanopy: *Broussaisia*, *Cheirodendron*, *Leptecophylla*, *Metrosideros*.

(F) Understory: Bryophytes, Ferns, *Coprosma*, *Dubautia*, *Kadua*, *Peperomia*.

*Silene lanceolata* (NCN)

Oahu—Dry Cliff—Unit 1, Oahu—Dry Cliff—Unit 2, Oahu—Dry Cliff—Unit 3, Oahu—Dry Cliff—Unit 4, Oahu—Dry Cliff—Unit 6, Oahu—Dry Cliff—Unit 7a, Oahu—Dry Cliff—Unit 7b, and Oahu—Dry Cliff—Unit 8, identified in the legal descriptions in paragraph (i) of this section, constitute critical habitat for *Silene lanceolata* on Oahu. Within these units, the physical and biological features of critical habitat are:

(i) Elevation: Unrestricted.

(ii) Annual precipitation: Less than 75 in (190 cm).

(iii) Substrate: Greater than 65 degree slope, rocky talus.

(iv) Canopy: None.

(v) Subcanopy: *Antidesma*, *Chamaesyce*, *Diospyros*, *Dodonaea*.

(vi) Understory: *Bidens*, *Eragrostis*, *Melanthera*, *Schiedea*.

*Silene perlmanii* (NCN)

Oahu—Lowland Mesic—Unit 1, Oahu—Lowland Mesic—Unit 2, Oahu—Lowland Mesic—Unit 3, Oahu—Dry Cliff—Unit 1, Oahu—Dry Cliff—Unit 2, Oahu—Dry Cliff—Unit 3, Oahu—Dry Cliff—Unit 4, Oahu—Dry Cliff—Unit 6, Oahu—Dry Cliff—Unit 7a, Oahu—Dry Cliff—Unit 7b, and Oahu—Dry Cliff—Unit 8, identified in the legal descriptions in paragraph (i) of this section, constitute critical habitat for *Silene perlmanii* on Oahu.

(i) In units Oahu—Lowland Mesic—Unit 1, Oahu—Lowland Mesic—Unit 2, and Oahu—Lowland Mesic—Unit 3, the physical or biological features of critical habitat are:

(A) Elevation: Less than 3,300 ft (1,000 m).

(B) Annual precipitation: 50 to 75 in (130 to 190 cm).

(C) Substrate: Shallow soils, little to no herbaceous layer.

(D) Canopy: *Acacia*, *Diospyros*, *Metrosideros*, *Myrsine*, *Pouteria*, *Santalum*.

(E) Subcanopy: *Dodonaea*, *Freycinetia*, *Leptecophylla*, *Melanthera*, *Osteomeles*, *Pleomele*, *Psydrax*.

(F) Understory: *Carex*, *Dicranopteris*, *Diplazium*, *Elaphoglossum*, *Peperomia*.  
(ii) In units Oahu—Dry Cliff—Unit 1, Oahu—Dry Cliff—Unit 2, Oahu—Dry Cliff—Unit 3, Oahu—Dry Cliff—Unit 4, Oahu—Dry Cliff—Unit 6, Oahu—Dry Cliff—Unit 7a, Oahu—Dry Cliff—Unit 7b, and Oahu—Dry Cliff—Unit 8, the physical and biological features of critical habitat are:

(A) Elevation: Unrestricted.

(B) Annual precipitation: Less than 75 in (190 cm).

(C) Substrate: Greater than 65 degree slope, rocky talus.

(D) Canopy: None.

(E) Subcanopy: *Antidesma*, *Chamaesyce*, *Diospyros*, *Dodonaea*.

(F) Understory: *Bidens*, *Eragrostis*, *Melanthera*, *Schiedea*.

#### FAMILY CONVULVACEAE

*Bonamia menziesii* (NCN)

Oahu—Lowland Dry—Unit 1, Oahu—Lowland Dry—Unit 2, Oahu—Lowland Dry—Unit 8, Oahu—Lowland Dry—Unit 9, Oahu—Lowland Dry—Unit 10, Oahu—Lowland Dry—Unit 11, Oahu—Lowland Mesic—Unit 1, Oahu—Lowland Mesic—Unit 2, Oahu—Lowland Mesic—Unit 3, Oahu—Lowland Mesic—Unit 4, Oahu—Lowland Mesic—Unit 5, Oahu—Lowland Mesic—Unit 6, Oahu—Lowland Mesic—Unit 7, Oahu—Dry Cliff—Unit 1, Oahu—Dry Cliff—Unit 2, Oahu—Dry Cliff—Unit 3, Oahu—Dry Cliff—Unit 4, Oahu—Dry Cliff—Unit 6, Oahu—Dry Cliff—Unit 7a, Oahu—Dry Cliff—Unit 7b, and Oahu—Dry Cliff—Unit 8, identified in the legal descriptions in paragraph (i) of this section, constitute critical habitat for *Bonamia menziesii* on Oahu.

(i) In units Oahu—Lowland Dry—Unit 1, Oahu—Lowland Dry—Unit 2, Oahu—Lowland Dry—Unit 8, Oahu—Lowland Dry—Unit 9, Oahu—Lowland Dry—Unit 10, and Oahu—Lowland Dry—Unit 11, the physical and biological features of critical habitat are:

(A) Elevation: Less than 3,300 ft (1,000 m).

(B) Annual precipitation: Less than 50 in (130 cm).

(C) Substrate: Weathered silty loams to stony clay, rocky ledges, little-weathered lava.

(D) Canopy: *Diospyros*, *Myoporum*, *Pleomele*, *Santalum*, *Sapindus*.

(E) Subcanopy: *Chamaesyce*, *Dodonaea*, *Leptecophylla*, *Osteomeles*, *Psydrax*, *Scaevola*, *Wikstroemia*.

(F) Understory: *Alyxia*, *Artemisia*, *Bidens*, *Chenopodium*, *Nephrolepis*, *Peperomia*, *Plumbago*, *Sicyos*, *Sida*, *Waltheria*.

(ii) In units Oahu—Lowland Mesic—Unit 1, Oahu—Lowland Mesic—Unit 2, Oahu—Lowland Mesic—Unit 3, Oahu—Lowland Mesic—Unit 4, Oahu—Lowland Mesic—Unit 5, Oahu—Lowland Mesic—Unit 6, and Oahu—Lowland Mesic—Unit 7, the physical and biological features of critical habitat are:

(A) Elevation: Less than 3,300 ft (1,000 m).

(B) Annual precipitation: 50 to 75 in (130 to 190 cm).

(C) Substrate: Shallow soils, little to no herbaceous layer.

(D) Canopy: *Acacia*, *Diospyros*, *Metrosideros*, *Myrsine*, *Pouteria*, *Santalum*.

(E) Subcanopy: *Dodonaea*, *Freycinetia*, *Leptecophylla*, *Melanthera*, *Osteomeles*, *Pleomele*, *Psydrax*.

(F) Understory: *Carex*, *Dicranopteris*, *Diplazium*, *Elaphoglossum*, *Peperomia*.

(iii) In units Oahu—Dry Cliff—Unit 1, Oahu—Dry Cliff—Unit 2, Oahu—Dry Cliff—Unit 3, Oahu—Dry Cliff—Unit 4, Oahu—Dry Cliff—Unit 6, Oahu—Dry Cliff—Unit 7a, Oahu—Dry Cliff—Unit 7b, and Oahu—Dry Cliff—Unit 8, the physical and biological features of critical habitat are:

(A) Elevation: Unrestricted.

(B) Annual precipitation: Less than 75 in (190 cm).

(C) Substrate: Greater than 65 degree slope, rocky talus.

(D) Canopy: None.

(E) Subcanopy: *Antidesma*, *Chamaesyce*, *Diospyros*, *Dodonaea*.

(F) Understory: *Bidens*, *Eragrostis*, *Melanthera*, *Schiedea*.

#### FAMILY CYPERACEAE

*Cyperus pennatififormis* (NCN)

Oahu—Lowland Mesic—Unit 1, Oahu—Lowland Mesic—Unit 2, and Oahu—Lowland Mesic—Unit 3, identified in the legal descriptions in paragraph (i) of this section, constitute critical habitat for *Cyperus pennatififormis* on Oahu. Within these units, the physical and biological features of critical habitat are:

(i) Elevation: Less than 3,300 ft (1,000 m).

(ii) Annual precipitation: 50 to 75 in (130 to 190 cm).

(iii) Substrate: Shallow soils, little to no herbaceous layer.

(iv) Canopy: *Acacia*, *Diospyros*, *Metrosideros*, *Myrsine*, *Pouteria*, *Santalum*.

(v) Subcanopy: *Dodonaea*, *Freycinetia*, *Leptecophylla*, *Melanthera*, *Osteomeles*, *Pleomele*, *Psydrax*.

(vi) Understory: *Carex*, *Dicranopteris*, *Diplazium*, *Elaphoglossum*, *Peperomia*.

*Cyperus trachysanthos* (PUUKAA)

Oahu—Coastal—Unit 9, Oahu—Coastal—Unit 11, Oahu—Coastal—Unit 12, and Oahu—Lowland Dry—Unit 7, identified in the legal descriptions in paragraph (i) of this section, constitute critical habitat for *Cyperus trachysanthos* on Oahu.

(i) In units Oahu—Coastal—Unit 9, Oahu—Coastal—Unit 11, and Oahu—Coastal—Unit 12, the physical and biological features of critical habitat are:

(A) Elevation: Less than 980 ft (300 m).

(B) Annual precipitation: Less than 20 in (50 cm).

(C) Substrate: Well-drained, calcareous, talus slopes; weathered clay soils; seasonal wetlands; mudflats.

(D) Canopy: *Hibiscus*, *Myoporum*, *Santalum*, *Scaevola*.

(E) Subcanopy: *Gossypium*, *Sida*, *Vitex*.

(F) Understory: *Eragrostis*, *Jacquemontia*, *Lyceum*, *Nama*, *Sesuvium*, *Sporobolus*, *Vigna*.

(ii) In unit Oahu—Lowland Dry—Unit 7, the physical and biological features of critical habitat are:

(A) Elevation: Less than 3,300 ft (1,000 m).

(B) Annual precipitation: Less than 50 in (130 cm).

(C) Substrate: Weathered silty loams to stony clay, rocky ledges, little-weathered lava, seasonal wetlands.

(D) Canopy: *Diospyros*, *Myoporum*, *Pleomele*, *Santalum*, *Sapindus*.

(E) Subcanopy: *Chamaesyce*, *Dodonaea*, *Leptecophylla*, *Osteomeles*, *Psydrax*, *Scaevola*, *Wikstroemia*.

(F) Understory: *Alyxia*, *Artemisia*, *Bidens*, *Chenopodium*, *Nephrolepis*, *Peperomia*, *Plumbago*, *Sicyos*, *Sida*, *Waltheria*.

#### FAMILY EUPHORBIACEAE

*Chamaesyce celastroides* var. *kaenana* (AKOKO)

Oahu—Coastal—Unit 1, Oahu—Coastal—Unit 13, Oahu—Coastal—Unit 14, Oahu—Coastal—Unit 15, Oahu—Lowland Dry—Unit 1, Oahu—Lowland Dry—Unit 2, Oahu—Lowland Dry—Unit 8, Oahu—Lowland Dry—Unit 9, Oahu—Lowland Dry—Unit 10, Oahu—Lowland Dry—Unit 11, Oahu—Lowland Mesic—Unit 1, Oahu—Lowland Mesic—Unit 2, Oahu—Lowland Mesic—Unit 3, Oahu—Lowland Mesic—Unit 4, Oahu—Lowland Mesic—Unit 5, Oahu—Lowland Mesic—Unit 6, and Oahu—Lowland Mesic—Unit 7, identified in the legal descriptions in paragraph (i) of this section, constitute critical habitat

for *Chamaesyce celastroides* var. *kaenana* on Oahu.

(i) In units Oahu—Coastal—Unit 1, Oahu—Coastal—Unit 13, Oahu—Coastal—Unit 14, and Oahu—Coastal—Unit 15, the physical and biological features of critical habitat are:

(A) Elevation: Less than 980 ft (300 m).

(B) Annual precipitation: Less than 20 in (50 cm).

(C) Substrate: Well-drained, calcareous, talus slopes; weathered clay soils; ephemeral pools; mudflats.

(D) Canopy: *Hibiscus*, *Myoporum*, *Santalum*, *Scaevola*.

(E) Subcanopy: *Gossypium*, *Sida*, *Vitex*.

(F) Understory: *Eragrostis*, *Jacquemontia*, *Lyceum*, *Nama*, *Sesuvium*, *Sporobolus*, *Vigna*.

(ii) In units Oahu—Lowland Dry—Unit 1, Oahu—Lowland Dry—Unit 2, Oahu—Lowland Dry—Unit 8, Oahu—Lowland Dry—Unit 9, Oahu—Lowland Dry—Unit 10, and Oahu—Lowland Dry—Unit 11, the physical and biological features of critical habitat are:

(A) Elevation: Less than 3,300 ft (1,000 m).

(B) Annual precipitation: Less than 50 in (130 cm).

(C) Substrate: Weathered silty loams to stony clay, rocky ledges, little-weathered lava.

(D) Canopy: *Diospyros*, *Myoporum*, *Pleomele*, *Santalum*, *Sapindus*.

(E) Subcanopy: *Chamaesyce*, *Dodonaea*, *Leptecophylla*, *Osteomeles*, *Psydrax*, *Scaevola*, *Wikstroemia*.

(F) Understory: *Alyxia*, *Artemisia*, *Bidens*, *Chenopodium*, *Nephrolepis*, *Peperomia*, *Plumbago*, *Sicyos*, *Sida*, *Waltheria*.

(iii) In units Oahu—Lowland Mesic—Unit 1, Oahu—Lowland Mesic—Unit 2, Oahu—Lowland Mesic—Unit 3, Oahu—Lowland Mesic—Unit 4, Oahu—Lowland Mesic—Unit 5, Oahu—Lowland Mesic—Unit 6, and Oahu—Lowland Mesic—Unit 7, the physical and biological features of critical habitat are:

(A) Elevation: Less than 3,300 ft (1,000 m).

(B) Annual precipitation: 50 to 75 in (130 to 190 cm).

(C) Substrate: Shallow soils, little to no herbaceous layer.

(D) Canopy: *Acacia*, *Diospyros*, *Metrosideros*, *Myrsine*, *Pouteria*, *Santalum*.

(E) Subcanopy: *Dodonaea*, *Freycinetia*, *Leptecophylla*, *Melanthera*, *Osteomeles*, *Pleomele*, *Psydrax*.

(F) Understory: *Carex*, *Dicranopteris*, *Diplazium*, *Elaphoglossum*, *Peperomia*.

*Chamaesyce deppeana* (AKOKO)

Oahu—Wet Cliff—Unit 6, Oahu—Wet Cliff—Unit 7, and Oahu—Wet Cliff—Unit 8, identified in the legal descriptions in paragraph (i) of this section, constitute critical habitat for *Chamaesyce deppeana* on Oahu. Within these units, the physical and biological features of critical habitat are:

(i) Elevation: Unrestricted.

(ii) Annual precipitation: Greater than 75 in (190 cm).

(iii) Substrate: Greater than 65 degree slope, shallow soils, weathered lava.

(iv) Canopy: None.

(v) Subcanopy: *Broussaisia*, *Cheirodendron*, *Leptecophylla*, *Metrosideros*.

(vi) Understory: *Bryophytes*, *Ferns*, *Coprosma*, *Dubautia*, *Kadua*, *Peperomia*.

*Chamaesyce herbstii* (AKOKO)

Oahu—Lowland Mesic—Unit 1, Oahu—Lowland Mesic—Unit 2, Oahu—Lowland Mesic—Unit 3, Oahu—Dry Cliff—Unit 1, Oahu—Dry Cliff—Unit 2, Oahu—Dry Cliff—Unit 3, Oahu—Dry Cliff—Unit 4, Oahu—Dry Cliff—Unit 6, Oahu—Dry Cliff—Unit 7a, Oahu—Dry Cliff—Unit 7b, and Oahu—Dry Cliff—Unit 8, identified in the legal descriptions in paragraph (i) of this section, constitute critical habitat for *Chamaesyce herbstii* on Oahu.

(i) In units Oahu—Lowland Mesic—Unit 1, Oahu—Lowland Mesic—Unit 2, and Oahu—Lowland Mesic—Unit 3, the physical and biological features of critical habitat are:

(A) Elevation: Less than 3,300 ft (1,000 m).

(B) Annual precipitation: 50 to 75 in (130 to 190 cm).

(C) Substrate: Shallow soils, little to no herbaceous layer.

(D) Canopy: *Acacia*, *Diospyros*, *Metrosideros*, *Myrsine*, *Pouteria*, *Santalum*.

(E) Subcanopy: *Dodonaea*, *Freycinetia*, *Leptecophylla*, *Melanthera*, *Osteomeles*, *Pleomele*, *Psydrax*.

(F) Understory: *Carex*, *Dicranopteris*, *Diplazium*, *Elaphoglossum*, *Peperomia*.

(ii) In units Oahu—Dry Cliff—Unit 1, Oahu—Dry Cliff—Unit 2, Oahu—Dry Cliff—Unit 3, Oahu—Dry Cliff—Unit 4, Oahu—Dry Cliff—Unit 6, Oahu—Dry Cliff—Unit 7a, Oahu—Dry Cliff—Unit 7b, and Oahu—Dry Cliff—Unit 8, the physical and biological features of critical habitat are:

(A) Elevation: Unrestricted.

(B) Annual precipitation: Less than 75 in (190 cm).

(C) Substrate: Greater than 65 degree slope, rocky talus.

(D) Canopy: None.

(E) Subcanopy: *Antidesma*, *Chamaesyce*, *Diospyros*, *Dodonaea*.

(F) Understory: *Bidens*, *Eragrostis*, *Melanthera*, *Schiedea*.

*Chamaesyce kuwaleana* (AKOKO)

Oahu—Coastal—Unit 2, Oahu—Coastal—Unit 3, Oahu—Coastal—Unit 4, Oahu—Coastal—Unit 5, Oahu—Coastal—Unit 6, Oahu—Coastal—Unit 7, Oahu—Coastal—Unit 8, Oahu—Coastal—Unit 9, Oahu—Coastal—Unit 10, Oahu—Coastal—Unit 11, Oahu—Coastal—Unit 12, Oahu—Dry Cliff—Unit 1, Oahu—Dry Cliff—Unit 2, Oahu—Dry Cliff—Unit 3, Oahu—Dry Cliff—Unit 4, Oahu—Dry Cliff—Unit 6, Oahu—Dry Cliff—Unit 7a, Oahu—Dry Cliff—Unit 7b, and Oahu—Dry Cliff—Unit 8, identified in the legal descriptions in paragraph (i) of this section, constitute critical habitat for *Chamaesyce kuwaleana* on Oahu.

(i) In units Oahu—Coastal—Unit 2, Oahu—Coastal—Unit 3, Oahu—Coastal—Unit 4, Oahu—Coastal—Unit 5, Oahu—Coastal—Unit 6, Oahu—Coastal—Unit 7, Oahu—Coastal—Unit 8, Oahu—Coastal—Unit 9, Oahu—Coastal—Unit 10, Oahu—Coastal—Unit 11, and Oahu—Coastal—Unit 12, the physical and biological features of critical habitat are:

(A) Elevation: Less than 980 ft (300 m).

(B) Annual precipitation: Less than 20 in (50 cm).

(C) Substrate: Well-drained, calcareous, talus slopes; weathered clay soils; ephemeral pools; mudflats.

(D) Canopy: *Hibiscus*, *Myoporum*, *Santalum*, *Scaevola*.

(E) Subcanopy: *Gossypium*, *Sida*, *Vitex*.

(F) Understory: *Eragrostis*, *Jacquemontia*, *Lyceum*, *Nama*, *Sesuvium*, *Sporobolus*, *Vigna*.

(ii) In units Oahu—Dry Cliff—Unit 1, Oahu—Dry Cliff—Unit 2, Oahu—Dry Cliff—Unit 3, Oahu—Dry Cliff—Unit 4, Oahu—Dry Cliff—Unit 6, Oahu—Dry Cliff—Unit 7a, Oahu—Dry Cliff—Unit 7b, and Oahu—Dry Cliff—Unit 8, the physical and biological features of critical habitat are:

(A) Elevation: Unrestricted.

(B) Annual precipitation: Less than 75 in (190 cm).

(C) Substrate: Greater than 65 degree slope, rocky talus.

(D) Canopy: None.

(E) Subcanopy: *Antidesma*, *Chamaesyce*, *Diospyros*, *Dodonaea*.

(F) Understory: *Bidens*, *Eragrostis*, *Melanthera*, *Schiedea*.

*Chamaesyce rockii* (AKOKO)

Oahu—Lowland Wet—Unit 6, Oahu—Lowland Wet—Unit 7, Oahu—Lowland

Wet—Unit 8, Oahu—Lowland Wet—Unit 9, Oahu—Lowland Wet—Unit 10, Oahu—Lowland Wet—Unit 11, Oahu—Lowland Wet—Unit 12, Oahu—Lowland Wet—Unit 13, Oahu—Lowland Wet—Unit 14, Oahu—Lowland Wet—Unit 15, Oahu—Lowland Wet—Unit 16, Oahu—Wet Cliff—Unit 6, Oahu—Wet Cliff—Unit 7, and Oahu—Wet Cliff—Unit 8, identified in the legal descriptions in paragraph (i) of this section, constitute critical habitat for *Chamaesyce rockii* on Oahu.

(i) In units Oahu—Lowland Wet—Unit 6, Oahu—Lowland Wet—Unit 7, Oahu—Lowland Wet—Unit 8, Oahu—Lowland Wet—Unit 9, Oahu—Lowland Wet—Unit 10, Oahu—Lowland Wet—Unit 11, Oahu—Lowland Wet—Unit 12, Oahu—Lowland Wet—Unit 13, Oahu—Lowland Wet—Unit 14, Oahu—Lowland Wet—Unit 15, and Oahu—Lowland Wet—Unit 16, the physical and biological features of critical habitat are:

(A) Elevation: Less than 3,300 ft (1,000 m).

(B) Annual precipitation: Greater than 75 in (190 cm).

(C) Substrate: Clays; ashbeds; deep, well-drained soils; lowland bogs.

(D) Canopy: *Antidesma*, *Metrosideros*, *Myrsine*, *Pisonia*, *Psychotria*.

(E) Subcanopy: *Cibotium*, *Claoxylon*, *Kadua*, *Melicope*.

(F) Understory: *Alyxia*, *Cyrtandra*, *Dicranopteris*, *Diplazium*, *Machaerina*, *Microlepia*.

(ii) In units Oahu—Wet Cliff—Unit 6, Oahu—Wet Cliff—Unit 7, and Oahu—Wet Cliff—Unit 8, the physical and biological features of critical habitat are:

(A) Elevation: Unrestricted.

(B) Annual precipitation: Greater than 75 in (190 cm).

(C) Substrate: Greater than 65 degree slope, shallow soils, weathered lava.

(D) Canopy: None.

(E) Subcanopy: *Broussaisia*, *Cheirodendron*, *Leptecophylla*, *Metrosideros*.

(F) Understory: Bryophytes, Ferns, *Coprosma*, *Dubautia*, *Kadua*, *Peperomia*.

*Chamaesyce skottsbergii* var. *skottsbergii* (EWA PLAINS AKOKO)

Oahu—Lowland Dry—Unit 8, Oahu—Lowland Dry—Unit 9, Oahu—Lowland Dry—Unit 10, and Oahu—Lowland Dry—Unit 11, identified in the legal descriptions in paragraph (i) of this section, constitute critical habitat for *Chamaesyce skottsbergii* var. *skottsbergii* on Oahu. Within these units, the physical and biological features of critical habitat are:

(i) Elevation: Less than 3,300 ft (1,000 m).

(ii) Annual precipitation: Less than 50 in (130 cm).

(iii) Substrate: Weathered silty loams to stony clay, rocky ledges, little-weathered lava.

(iv) Canopy: *Diospyros*, *Myoporum*, *Pleomele*, *Santalum*, *Sapindus*.

(v) Subcanopy: *Chamaesyce*, *Dodonaea*, *Leptecophylla*, *Osteomeles*, *Psydrax*, *Scaevola*, *Wikstroemia*.

(vi) Understory: *Alyxia*, *Artemisia*, *Bidens*, *Chenopodium*, *Nephrolepis*, *Peperomia*, *Plumbago*, *Sicyos*, *Sida*, *Waltheria*.

(vii) Coral outcrop substrate.

*Euphorbia haeleleana* (AKOKO)

Oahu—Lowland Dry—Unit 1, Oahu—Lowland Dry—Unit 2, Oahu—Lowland Dry—Unit 8, Oahu—Lowland Dry—Unit 9, Oahu—Lowland Dry—Unit 10, Oahu—Lowland Dry—Unit 11, Oahu—Lowland Mesic—Unit 1, Oahu—Lowland Mesic—Unit 2, and Oahu—Lowland Mesic—Unit 3, identified in the legal descriptions in paragraph (i) of this section, constitute critical habitat for *Euphorbia haeleleana* on Oahu.

(i) In units Oahu—Lowland Dry—Unit 1, Oahu—Lowland Dry—Unit 2, Oahu—Lowland Dry—Unit 8, Oahu—Lowland Dry—Unit 9, Oahu—Lowland Dry—Unit 10, and Oahu—Lowland Dry—Unit 11, the physical and biological features of critical habitat are:

(A) Elevation: Less than 3,300 ft (1,000 m).

(B) Annual precipitation: Less than 50 in (130 cm).

(C) Substrate: Weathered silty loams to stony clay, rocky ledges, little-weathered lava.

(D) Canopy: *Diospyros*, *Myoporum*, *Pleomele*, *Santalum*, *Sapindus*.

(E) Subcanopy: *Chamaesyce*, *Dodonaea*, *Leptecophylla*, *Osteomeles*, *Psydrax*, *Scaevola*, *Wikstroemia*.

(F) Understory: *Alyxia*, *Artemisia*, *Bidens*, *Chenopodium*, *Nephrolepis*, *Peperomia*, *Plumbago*, *Sicyos*, *Sida*, *Waltheria*.

(ii) In units Oahu—Lowland Mesic—Unit 1, Oahu—Lowland Mesic—Unit 2, and Oahu—Lowland Mesic—Unit 3, the physical and biological features of critical habitat are:

(A) Elevation: Less than 3,300 ft (1,000 m).

(B) Annual precipitation: 50 to 75 in (130 to 190 cm).

(C) Substrate: Shallow soils, little to no herbaceous layer.

(D) Canopy: *Acacia*, *Diospyros*, *Metrosideros*, *Myrsine*, *Pouteria*, *Santalum*.

(E) Subcanopy: *Dodonaea*, *Freycinetia*, *Leptecophylla*, *Melanthera*, *Osteomeles*, *Pleomele*, *Psydrax*.

(F) Understory: *Carex*, *Dicranopteris*, *Diplazium*, *Elaphoglossum*, *Peperomia*.

*Flueggea neowawraea* (MEHAMEHAME)

Oahu—Lowland Mesic—Unit 1, Oahu—Lowland Mesic—Unit 2, Oahu—Lowland Mesic—Unit 3, Oahu—Dry Cliff—Unit 1, Oahu—Dry Cliff—Unit 2, Oahu—Dry Cliff—Unit 3, Oahu—Dry Cliff—Unit 4, Oahu—Dry Cliff—Unit 6, Oahu—Dry Cliff—Unit 7a, Oahu—Dry Cliff—Unit 7b, and Oahu—Dry Cliff—Unit 8, identified in the legal descriptions in paragraph (i) of this section, constitute critical habitat for *Flueggea neowawraea* on Oahu.

(i) In units Oahu—Lowland Mesic—Unit 1, Oahu—Lowland Mesic—Unit 2, and Oahu—Lowland Mesic—Unit 3, the physical and biological features of critical habitat are:

(A) Elevation: Less than 3,300 ft (1,000 m).

(B) Annual precipitation: 50 to 75 in (130 to 190 cm).

(C) Substrate: Shallow soils, little to no herbaceous layer.

(D) Canopy: *Acacia*, *Diospyros*, *Metrosideros*, *Myrsine*, *Pouteria*, *Santalum*.

(E) Subcanopy: *Dodonaea*, *Freycinetia*, *Leptecophylla*, *Melanthera*, *Osteomeles*, *Pleomele*, *Psydrax*.

(F) Understory: *Carex*, *Dicranopteris*, *Diplazium*, *Elaphoglossum*, *Peperomia*.

(ii) In units Oahu—Dry Cliff—Unit 1, Oahu—Dry Cliff—Unit 2, Oahu—Dry Cliff—Unit 3, Oahu—Dry Cliff—Unit 4, Oahu—Dry Cliff—Unit 6, Oahu—Dry Cliff—Unit 7a, Oahu—Dry Cliff—Unit 7b, and Oahu—Dry Cliff—Unit 8, the physical and biological features of critical habitat are:

(A) Elevation: Unrestricted.

(B) Annual precipitation: Less than 75 in (190 cm).

(C) Substrate: Greater than 65 degree slope, rocky talus.

(D) Canopy: None.

(E) Subcanopy: *Antidesma*, *Chamaesyce*, *Diospyros*, *Dodonaea*.

(F) Understory: *Bidens*, *Eragrostis*, *Melanthera*, *Schiedea*.

#### FAMILY FABACEAE

*Sesbania tomentosa* (OHAI)

Oahu—Coastal—Unit 1, Oahu—Coastal—Unit 2, Oahu—Coastal—Unit 3, Oahu—Coastal—Unit 4, Oahu—Coastal—Unit 5, Oahu—Coastal—Unit 6, Oahu—Coastal—Unit 7, Oahu—Coastal—Unit 8, Oahu—Coastal—Unit 9, Oahu—Coastal—Unit 10, Oahu—Coastal—Unit 11, Oahu—Coastal—Unit 12, Oahu—Coastal—Unit 13, Oahu—Coastal—Unit 14, and Oahu—Coastal—Unit 15, identified in the legal descriptions in paragraph (i) of this section, constitute critical habitat for *Sesbania tomentosa* on Oahu. Within

these units, the physical and biological features of critical habitat are:

- (i) Elevation: Less than 980 ft (300 m).
- (ii) Annual precipitation: Less than 20 in (50 cm).
- (iii) Substrate: Well-drained, calcareous, talus slopes; weathered clay soils; ephemeral pools; mudflats.
- (iv) Canopy: *Hibiscus*, *Myoporum*, *Santalum*, *Scaevola*.
- (v) Subcanopy: *Gossypium*, *Sida*, *Vitex*.
- (vi) Understory: *Eragrostis*, *Jacquemontia*, *Lyceum*, *Nama*, *Sesuvium*, *Sporobolus*, *Vigna*.

*Vigna o-wahuensis* (NCN)

Oahu—Coastal—Unit 1, Oahu—Coastal—Unit 2, Oahu—Coastal—Unit 3, Oahu—Coastal—Unit 4, Oahu—Coastal—Unit 5, Oahu—Coastal—Unit 6, Oahu—Coastal—Unit 7, Oahu—Coastal—Unit 8, Oahu—Coastal—Unit 9, Oahu—Coastal—Unit 10, Oahu—Coastal—Unit 11, Oahu—Coastal—Unit 12, Oahu—Coastal—Unit 13, Oahu—Coastal—Unit 14, and Oahu—Coastal—Unit 15, identified in the legal descriptions in paragraph (i) of this section, constitute critical habitat for *Vigna o-wahuensis* on Oahu. Within these units, the physical and biological features of critical habitat are:

- (i) Elevation: Less than 980 ft (300 m).
- (ii) Annual precipitation: Less than 20 in (50 cm).
- (iii) Substrate: Well-drained, calcareous, talus slopes; weathered clay soils; ephemeral pools; mudflats.
- (iv) Canopy: *Hibiscus*, *Myoporum*, *Santalum*, *Scaevola*.
- (v) Subcanopy: *Gossypium*, *Sida*, *Vitex*.
- (vi) Understory: *Eragrostis*, *Jacquemontia*, *Lyceum*, *Nama*, *Sesuvium*, *Sporobolus*, *Vigna*.

**FAMILY GENTIANACEAE**

*Centaurium sebaeoides* (AWIWI)

Oahu—Coastal—Unit 1, Oahu—Coastal—Unit 2, Oahu—Coastal—Unit 3, Oahu—Coastal—Unit 4, Oahu—Coastal—Unit 5, Oahu—Coastal—Unit 6, Oahu—Coastal—Unit 7, Oahu—Coastal—Unit 8, Oahu—Coastal—Unit 9, Oahu—Coastal—Unit 10, Oahu—Coastal—Unit 11, Oahu—Coastal—Unit 12, Oahu—Coastal—Unit 13, Oahu—Coastal—Unit 14, and Oahu—Coastal—Unit 15, identified in the legal descriptions in paragraph (i) of this section, constitute critical habitat for *Centaurium sebaeoides* on Oahu. Within these units, the physical and biological features of critical habitat are:

- (i) Elevation: Less than 980 ft (300 m).
- (ii) Annual precipitation: Less than 20 in (50 cm).

(iii) Substrate: Well-drained, calcareous, talus slopes; weathered clay soils; ephemeral pools; mudflats.

(iv) Canopy: *Hibiscus*, *Myoporum*, *Santalum*, *Scaevola*.

(v) Subcanopy: *Gossypium*, *Sida*, *Vitex*.

(vi) Understory: *Eragrostis*, *Jacquemontia*, *Lyceum*, *Nama*, *Sesuvium*, *Sporobolus*, *Vigna*.

**FAMILY GESNERIACEAE**

*Cyrtandra dentata* (HAIWALE)

Oahu—Lowland Mesic—Unit 1, Oahu—Lowland Mesic—Unit 2, Oahu—Lowland Mesic—Unit 3, Oahu—Lowland Mesic—Unit 4, Oahu—Lowland Mesic—Unit 5, Oahu—Lowland Mesic—Unit 6, Oahu—Lowland Mesic—Unit 7, Oahu—Lowland Wet—Unit 1, Oahu—Lowland Wet—Unit 2, Oahu—Lowland Wet—Unit 3, Oahu—Lowland Wet—Unit 4, Oahu—Lowland Wet—Unit 5, Oahu—Lowland Wet—Unit 6, Oahu—Lowland Wet—Unit 7, Oahu—Lowland Wet—Unit 8, Oahu—Lowland Wet—Unit 9, Oahu—Lowland Wet—Unit 10, Oahu—Lowland Wet—Unit 11, Oahu—Lowland Wet—Unit 12, Oahu—Lowland Wet—Unit 13, Oahu—Lowland Wet—Unit 14, Oahu—Lowland Wet—Unit 15, Oahu—Lowland Wet—Unit 16, Oahu—Dry Cliff—Unit 1, Oahu—Dry Cliff—Unit 2, Oahu—Dry Cliff—Unit 3, Oahu—Dry Cliff—Unit 4, Oahu—Dry Cliff—Unit 6, Oahu—Dry Cliff—Unit 7a, Oahu—Dry Cliff—Unit 7b, and Oahu—Dry Cliff—Unit 8, identified in the legal descriptions in paragraph (i) of this section, constitute critical habitat for *Cyrtandra dentata* on Oahu.

(i) In units Oahu—Lowland Mesic—Unit 1, Oahu—Lowland Mesic—Unit 2, Oahu—Lowland Mesic—Unit 3, Oahu—Lowland Mesic—Unit 4, Oahu—Lowland Mesic—Unit 5, Oahu—Lowland Mesic—Unit 6, and Oahu—Lowland Mesic—Unit 7, the physical and biological features of critical habitat are:

- (A) Elevation: Less than 3,300 ft (1,000 m).
- (B) Annual precipitation: 50 to 75 in (130 to 190 cm).
- (C) Substrate: Shallow soils, little to no herbaceous layer.
- (D) Canopy: *Acacia*, *Diospyros*, *Metrosideros*, *Myrsine*, *Pouteria*, *Santalum*.
- (E) Subcanopy: *Dodonaea*, *Freycinetia*, *Leptecophylla*, *Melanthera*, *Osteomeles*, *Pleomeles*, *Psyrdrax*.
- (F) Understory: *Carex*, *Dicranopteris*, *Diplazium*, *Elaphoglossum*, *Peperomia*.
- (ii) In units Oahu—Lowland Wet—Unit 1, Oahu—Lowland Wet—Unit 2,

Oahu—Lowland Wet—Unit 3, Oahu—Lowland Wet—Unit 4, Oahu—Lowland Wet—Unit 5, Oahu—Lowland Wet—Unit 6, Oahu—Lowland Wet—Unit 7, Oahu—Lowland Wet—Unit 8, Oahu—Lowland Wet—Unit 9, Oahu—Lowland Wet—Unit 10, Oahu—Lowland Wet—Unit 11, Oahu—Lowland Wet—Unit 12, Oahu—Lowland Wet—Unit 13, Oahu—Lowland Wet—Unit 14, Oahu—Lowland Wet—Unit 15, and Oahu—Lowland Wet—Unit 16, the physical and biological features of critical habitat are:

- (A) Elevation: Less than 3,300 ft (1,000 m).
- (B) Annual precipitation: Greater than 75 in (190 cm).
- (C) Substrate: Clays; ashbeds; deep, well-drained soils; lowland bogs.
- (D) Canopy: *Antidesma*, *Metrosideros*, *Myrsine*, *Pisonia*, *Psychotria*.
- (E) Subcanopy: *Cibotium*, *Claoxylon*, *Kadua*, *Melicope*.
- (F) Understory: *Alyxia*, *Cyrtandra*, *Dicranopteris*, *Diplazium*, *Machaerina*, *Microlepia*.
- (iii) In units Oahu—Dry Cliff—Unit 1, Oahu—Dry Cliff—Unit 2, Oahu—Dry Cliff—Unit 3, Oahu—Dry Cliff—Unit 4, Oahu—Dry Cliff—Unit 6, Oahu—Dry Cliff—Unit 7a, Oahu—Dry Cliff—Unit 7b, and Oahu—Dry Cliff—Unit 8, the physical and biological features of critical habitat are:
- (A) Elevation: Unrestricted.
- (B) Annual precipitation: Less than 75 in (190 cm).
- (C) Substrate: Greater than 65 degree slope, rocky talus.
- (D) Canopy: None.
- (E) Subcanopy: *Antidesma*, *Chamaesyce*, *Diospyros*, *Dodonaea*.
- (F) Understory: *Bidens*, *Eragrostis*, *Melanthera*, *Schiedea*.

*Cyrtandra gracilis* (HAIWALE)

Oahu—Lowland Wet—Unit 6, Oahu—Lowland Wet—Unit 7, Oahu—Lowland Wet—Unit 8, Oahu—Lowland Wet—Unit 9, Oahu—Lowland Wet—Unit 10, Oahu—Lowland Wet—Unit 11, Oahu—Lowland Wet—Unit 12, Oahu—Lowland Wet—Unit 13, Oahu—Lowland Wet—Unit 14, Oahu—Lowland Wet—Unit 15, and Oahu—Lowland Wet—Unit 16, identified in the legal descriptions in paragraph (i) of this section, constitute critical habitat for *Cyrtandra gracilis* on Oahu. Within these units, the physical and biological features of critical habitat are:

- (i) Elevation: Less than 3,300 ft (1,000 m).
- (ii) Annual precipitation: Greater than 75 in (190 cm).
- (iii) Substrate: Clays; ashbeds; deep, well-drained soils; lowland bogs.
- (iv) Canopy: *Antidesma*, *Metrosideros*, *Myrsine*, *Pisonia*, *Psychotria*.

(v) Subcanopy: *Cibotium*, *Claoxylon*, *Kadua*, *Melicope*.

(vi) Understory: *Alyxia*, *Cyrtandra*, *Dicranopteris*, *Diplazium*, *Machaerina*, *Microlepia*.

*Cyrtandra kaulantha* (HAIWALE)

Oahu—Lowland Wet—Unit 6, Oahu—Lowland Wet—Unit 7, Oahu—Lowland Wet—Unit 8, Oahu—Lowland Wet—Unit 9, Oahu—Lowland Wet—Unit 10, Oahu—Lowland Wet—Unit 11, Oahu—Lowland Wet—Unit 12, Oahu—Lowland Wet—Unit 13, Oahu—Lowland Wet—Unit 14, Oahu—Lowland Wet—Unit 15, Oahu—Lowland Wet—Unit 16, Oahu—Wet Cliff—Unit 6, Oahu—Wet Cliff—Unit 7, and Oahu—Wet Cliff—Unit 8, identified in the legal descriptions in paragraph (i) of this section, constitute critical habitat for *Cyrtandra kaulantha* on Oahu.

(i) In units Oahu—Lowland Wet—Unit 6, Oahu—Lowland Wet—Unit 7, Oahu—Lowland Wet—Unit 8, Oahu—Lowland Wet—Unit 9, Oahu—Lowland Wet—Unit 10, Oahu—Lowland Wet—Unit 11, Oahu—Lowland Wet—Unit 12, Oahu—Lowland Wet—Unit 13, Oahu—Lowland Wet—Unit 14, Oahu—Lowland Wet—Unit 15, and Oahu—Lowland Wet—Unit 16, the physical and biological features of critical habitat are:

(A) Elevation: Less than 3,300 ft (1,000 m).

(B) Annual precipitation: Greater than 75 in (190 cm).

(C) Substrate: Clays; ashbeds; deep, well-drained soils; lowland bogs.

(D) Canopy: *Antidesma*, *Metrosideros*, *Myrsine*, *Pisonia*, *Psychotria*.

(E) Subcanopy: *Cibotium*, *Claoxylon*, *Kadua*, *Melicope*.

(F) Understory: *Alyxia*, *Cyrtandra*, *Dicranopteris*, *Diplazium*, *Machaerina*, *Microlepia*.

(ii) In units Oahu—Wet Cliff—Unit 6, Oahu—Wet Cliff—Unit 7, and Oahu—Wet Cliff—Unit 8, the physical and biological features of critical habitat are:

(A) Elevation: Unrestricted.

(B) Annual precipitation: Greater than 75 in (190 cm).

(C) Substrate: Greater than 65 degree slope, shallow soils, weathered lava.

(D) Canopy: None.

(E) Subcanopy: *Broussaisia*, *Cheirodendron*, *Leptecophylla*, *Metrosideros*.

(F) Understory: Bryophytes, Ferns, *Coprosma*, *Dubautia*, *Kadua*, *Peperomia*.

*Cyrtandra polyantha* (HAIWALE)

Oahu—Lowland Mesic—Unit 4, Oahu—Lowland Mesic—Unit 5, Oahu—Lowland Mesic—Unit 6, Oahu—Lowland Mesic—Unit 7, Oahu—

Lowland Wet—Unit 6, Oahu—Lowland Wet—Unit 7, Oahu—Lowland Wet—Unit 8, Oahu—Lowland Wet—Unit 9, Oahu—Lowland Wet—Unit 10, Oahu—Lowland Wet—Unit 11, Oahu—Lowland Wet—Unit 12, Oahu—Lowland Wet—Unit 13, Oahu—Lowland Wet—Unit 14, Oahu—Lowland Wet—Unit 15, and Oahu—Lowland Wet—Unit 16, identified in the legal descriptions in paragraph (i) of this section, constitute critical habitat for *Cyrtandra polyantha* on Oahu.

(i) In units Oahu—Lowland Mesic—Unit 4, Oahu—Lowland Mesic—Unit 5, Oahu—Lowland Mesic—Unit 6, and Oahu—Lowland Mesic—Unit 7, the physical and biological features of critical habitat are:

(A) Elevation: Less than 3,300 ft (1,000 m).

(B) Annual precipitation: 50 to 75 in (130 to 190 cm).

(C) Substrate: Shallow soils, little to no herbaceous layer.

(D) Canopy: *Acacia*, *Diospyros*, *Metrosideros*, *Myrsine*, *Pouteria*, *Santalum*.

(E) Subcanopy: *Dodonaea*, *Freycinetia*, *Leptecophylla*, *Melanthera*, *Osteomeles*, *Pleomele*, *Psydrax*.

(F) Understory: *Carex*, *Dicranopteris*, *Diplazium*, *Elaphoglossum*, *Peperomia*.

(ii) In units Oahu—Lowland Wet—Unit 6, Oahu—Lowland Wet—Unit 7, Oahu—Lowland Wet—Unit 8, Oahu—Lowland Wet—Unit 9, Oahu—Lowland Wet—Unit 10, Oahu—Lowland Wet—Unit 11, Oahu—Lowland Wet—Unit 12, Oahu—Lowland Wet—Unit 13, Oahu—Lowland Wet—Unit 14, Oahu—Lowland Wet—Unit 15, and Oahu—Lowland Wet—Unit 16, the physical and biological features of critical habitat are:

(A) Elevation: Less than 3,300 ft (1,000 m).

(B) Annual precipitation: Greater than 75 in (190 cm).

(C) Substrate: Clays; ashbeds; deep, well-drained soils; lowland bogs.

(D) Canopy: *Antidesma*, *Metrosideros*, *Myrsine*, *Pisonia*, *Psychotria*.

(E) Subcanopy: *Cibotium*, *Claoxylon*, *Kadua*, *Melicope*.

(F) Understory: *Alyxia*, *Cyrtandra*, *Dicranopteris*, *Diplazium*, *Machaerina*, *Microlepia*.

*Cyrtandra sessilis* (HAIWALE)

Oahu—Lowland Wet—Unit 6, Oahu—Lowland Wet—Unit 7, Oahu—Lowland Wet—Unit 8, Oahu—Lowland Wet—Unit 9, Oahu—Lowland Wet—Unit 10, Oahu—Lowland Wet—Unit 11, Oahu—Lowland Wet—Unit 12, Oahu—Lowland Wet—Unit 13, Oahu—Lowland Wet—Unit 14, Oahu—Lowland Wet—Unit 15, Oahu—

Lowland Wet—Unit 16, Oahu—Wet Cliff—Unit 6, Oahu—Wet Cliff—Unit 7, and Oahu—Wet Cliff—Unit 8, identified in the legal descriptions in paragraph (i) of this section, constitute critical habitat for *Cyrtandra sessilis* Oahu.

(i) In units Oahu—Lowland Wet—Unit 6, Oahu—Lowland Wet—Unit 7, Oahu—Lowland Wet—Unit 8, Oahu—Lowland Wet—Unit 9, Oahu—Lowland Wet—Unit 10, Oahu—Lowland Wet—Unit 11, Oahu—Lowland Wet—Unit 12, Oahu—Lowland Wet—Unit 13, Oahu—Lowland Wet—Unit 14, Oahu—Lowland Wet—Unit 15, and Oahu—Lowland Wet—Unit 16, the physical and biological features of critical habitat are:

(A) Elevation: Less than 3,300 ft (1,000 m).

(B) Annual precipitation: Greater than 75 in (190 cm).

(C) Substrate: Clays; ashbeds; deep, well-drained soils, lowland bogs.

(D) Canopy: *Antidesma*, *Metrosideros*, *Myrsine*, *Pisonia*, *Psychotria*.

(E) Subcanopy: *Cibotium*, *Claoxylon*, *Kadua*, *Melicope*.

(F) Understory: *Alyxia*, *Cyrtandra*, *Dicranopteris*, *Diplazium*, *Machaerina*, *Microlepia*.

(ii) In units Oahu—Wet Cliff—Unit 6, Oahu—Wet Cliff—Unit 7, and Oahu—Wet Cliff—Unit 8, the physical and biological features of critical habitat are:

(A) Elevation: Unrestricted.

(B) Annual precipitation: Greater than 75 in (190 cm).

(C) Substrate: Greater than 65 degree slope, shallow soils, weathered lava.

(D) Canopy: None.

(E) Subcanopy: *Broussaisia*, *Cheirodendron*, *Leptecophylla*, *Metrosideros*.

(F) Understory: Bryophytes, Ferns, *Coprosma*, *Dubautia*, *Kadua*, *Peperomia*.

*Cyrtandra subumbellata* (HAIWALE)

Oahu—Lowland Wet—Unit 6, Oahu—Lowland Wet—Unit 7, Oahu—Lowland Wet—Unit 8, Oahu—Lowland Wet—Unit 9, Oahu—Lowland Wet—Unit 10, Oahu—Lowland Wet—Unit 11, Oahu—Lowland Wet—Unit 12, Oahu—Lowland Wet—Unit 13, Oahu—Lowland Wet—Unit 14, Oahu—Lowland Wet—Unit 15, Oahu—Lowland Wet—Unit 16, Oahu—Wet Cliff—Unit 6, Oahu—Wet Cliff—Unit 7, and Oahu—Wet Cliff—Unit 8, identified in the legal descriptions in paragraph (i) of this section, constitute critical habitat for *Cyrtandra subumbellata* on Oahu.

(i) In units Oahu—Lowland Wet—Unit 6, Oahu—Lowland Wet—Unit 7, Oahu—Lowland Wet—Unit 8, Oahu—Lowland Wet—Unit 9, Oahu—Lowland Wet—Unit 10, Oahu—Lowland Wet—

Unit 11, Oahu—Lowland Wet—Unit 12, Oahu—Lowland Wet—Unit 13, Oahu—Lowland Wet—Unit 14, Oahu—Lowland Wet—Unit 15, and Oahu—Lowland Wet—Unit 16, the physical and biological features of critical habitat are:

(A) Elevation: Less than 3,300 ft (1,000 m).

(B) Annual precipitation: Greater than 75 in (190 cm).

(C) Substrate: Clays; ashbeds; deep, well-drained soils; lowland bogs.

(D) Canopy: *Antidesma*, *Metrosideros*, *Myrsine*, *Pisonia*, *Psychotria*.

(E) Subcanopy: *Cibotium*, *Claoxylon*, *Kadua*, *Melicope*.

(F) Understory: *Alyxia*, *Cyrtandra*, *Dicranopteris*, *Diplazium*, *Machaerina*, *Microlepia*.

(ii) In units Oahu—Wet Cliff—Unit 6, Oahu—Wet Cliff—Unit 7, and Oahu—Wet Cliff—Unit 8, the physical and biological features of critical habitat are:

(A) Elevation: Unrestricted.

(B) Annual precipitation: Greater than 75 in (190 cm).

(C) Substrate: Greater than 65 degree slope, shallow soils, weathered lava.

(D) Canopy: None.

(E) Subcanopy: *Broussaisia*, *Cheirodendron*, *Leptecophylla*, *Metrosideros*.

(F) Understory: Bryophytes, Ferns, *Coprosma*, *Dubautia*, *Kadua*, *Peperomia*.

#### *Cyrtandra viridiflora* (HAIWALE)

Oahu—Lowland Wet—Unit 6, Oahu—Lowland Wet—Unit 7, Oahu—Lowland Wet—Unit 8, Oahu—Lowland Wet—Unit 9, Oahu—Lowland Wet—Unit 10, Oahu—Lowland Wet—Unit 11, Oahu—Lowland Wet—Unit 12, Oahu—Lowland Wet—Unit 13, Oahu—Lowland Wet—Unit 14, Oahu—Lowland Wet—Unit 15, Oahu—Lowland Wet—Unit 16, Oahu—Wet Cliff—Unit 6, Oahu—Wet Cliff—Unit 7, and Oahu—Wet Cliff—Unit 8, identified in the legal descriptions in paragraph (i) of this section, constitute critical habitat for *Cyrtandra viridiflora* on Oahu.

(i) In units Oahu—Lowland Wet—Unit 6, Oahu—Lowland Wet—Unit 7, Oahu—Lowland Wet—Unit 8, Oahu—Lowland Wet—Unit 9, Oahu—Lowland Wet—Unit 10, Oahu—Lowland Wet—Unit 11, Oahu—Lowland Wet—Unit 12, Oahu—Lowland Wet—Unit 13, Oahu—Lowland Wet—Unit 14, Oahu—Lowland Wet—Unit 15, and Oahu—Lowland Wet—Unit 16, the physical and biological features of critical habitat are:

(A) Elevation: Less than 3,300 ft (1,000 m).

(B) Annual precipitation: Greater than 75 in (190 cm).

(C) Substrate: Clays; ashbeds; deep, well-drained soils; lowland bogs.

(D) Canopy: *Antidesma*, *Metrosideros*, *Myrsine*, *Pisonia*, *Psychotria*.

(E) Subcanopy: *Cibotium*, *Claoxylon*, *Kadua*, *Melicope*.

(F) Understory: *Alyxia*, *Cyrtandra*, *Dicranopteris*, *Diplazium*, *Machaerina*, *Microlepia*.

(ii) In units Oahu—Wet Cliff—Unit 6, Oahu—Wet Cliff—Unit 7, and Oahu—Wet Cliff—Unit 8, the physical and biological features of critical habitat are:

(A) Elevation: Unrestricted.

(B) Annual precipitation: Greater than 75 in (190 cm).

(C) Substrate: Greater than 65 degree slope, shallow soils, weathered lava.

(D) Canopy: None.

(E) Subcanopy: *Broussaisia*, *Cheirodendron*, *Leptecophylla*, *Metrosideros*.

(F) Understory: Bryophytes, Ferns, *Coprosma*, *Dubautia*, *Kadua*, *Peperomia*.

#### *Cyrtandra waiolani* (HAIWALE)

Oahu—Lowland Wet—Unit 6, Oahu—Lowland Wet—Unit 7, Oahu—Lowland Wet—Unit 8, Oahu—Lowland Wet—Unit 9, Oahu—Lowland Wet—Unit 10, Oahu—Lowland Wet—Unit 11, Oahu—Lowland Wet—Unit 12, Oahu—Lowland Wet—Unit 13, Oahu—Lowland Wet—Unit 14, Oahu—Lowland Wet—Unit 15, and Oahu—Lowland Wet—Unit 16, identified in the legal descriptions in paragraph (i) of this section, constitute critical habitat for *Cyrtandra waiolani* on Oahu. Within these units, the physical and biological features of critical habitat are:

(i) Elevation: Less than 3,300 ft (1,000 m).

(ii) Annual precipitation: Greater than 75 in (190 cm).

(iii) Substrate: Clays; ashbeds; deep, well-drained soils; lowland bogs.

(iv) Canopy: *Antidesma*, *Metrosideros*, *Myrsine*, *Pisonia*, *Psychotria*.

(v) Subcanopy: *Cibotium*, *Claoxylon*, *Kadua*, *Melicope*.

(vi) Understory: *Alyxia*, *Cyrtandra*, *Dicranopteris*, *Diplazium*, *Machaerina*, *Microlepia*.

### FAMILY LAMIACEAE

#### *Phyllostegia hirsuta* (NCN)

Oahu—Lowland Mesic—Unit 1, Oahu—Lowland Mesic—Unit 2, Oahu—Lowland Mesic—Unit 3, Oahu—Lowland Mesic—Unit 4, Oahu—Lowland Mesic—Unit 5, Oahu—Lowland Mesic—Unit 6, Oahu—Lowland Mesic—Unit 7, Oahu—Lowland Wet—Unit 1, Oahu—Lowland Wet—Unit 2, Oahu—Lowland Wet—Unit 3, Oahu—Lowland Wet—Unit 4,

Oahu—Lowland Wet—Unit 5, Oahu—Lowland Wet—Unit 6, Oahu—Lowland Wet—Unit 7, Oahu—Lowland Wet—Unit 8, Oahu—Lowland Wet—Unit 9, Oahu—Lowland Wet—Unit 10, Oahu—Lowland Wet—Unit 11, Oahu—Lowland Wet—Unit 12, Oahu—Lowland Wet—Unit 13, Oahu—Lowland Wet—Unit 14, Oahu—Lowland Wet—Unit 15, Oahu—Lowland Wet—Unit 16, Oahu—Montane Wet—Unit 1, Oahu—Wet Cliff—Unit 1, Oahu—Wet Cliff—Unit 2, Oahu—Wet Cliff—Unit 3, Oahu—Wet Cliff—Unit 4, Oahu—Wet Cliff—Unit 5, Oahu—Wet Cliff—Unit 6, Oahu—Wet Cliff—Unit 7, and Oahu—Wet Cliff—Unit 8, identified in the legal descriptions in paragraph (i) of this section, constitute critical habitat for *Phyllostegia hirsuta* on Oahu.

(i) In units Oahu—Lowland Mesic—Unit 1, Oahu—Lowland Mesic—Unit 2, Oahu—Lowland Mesic—Unit 3, Oahu—Lowland Mesic—Unit 4, Oahu—Lowland Mesic—Unit 5, Oahu—Lowland Mesic—Unit 6, and Oahu—Lowland Mesic—Unit 7, the physical and biological features of critical habitat are:

(A) Elevation: Less than 3,300 ft (1,000 m).

(B) Annual precipitation: 50 to 75 in (130 to 190 cm).

(C) Substrate: Shallow soils, little to no herbaceous layer.

(D) Canopy: *Acacia*, *Diospyros*, *Metrosideros*, *Myrsine*, *Pouteria*, *Santalum*.

(E) Subcanopy: *Dodonaea*, *Freycinetia*, *Leptecophylla*, *Melanthera*, *Osteomeles*, *Pleomele*, *Psydrax*.

(F) Understory: *Carex*, *Dicranopteris*, *Diplazium*, *Elaphoglossum*, *Peperomia*.

(ii) In units Oahu—Lowland Wet—Unit 1, Oahu—Lowland Wet—Unit 2, Oahu—Lowland Wet—Unit 3, Oahu—Lowland Wet—Unit 4, Oahu—Lowland Wet—Unit 5, Oahu—Lowland Wet—Unit 6, Oahu—Lowland Wet—Unit 7, Oahu—Lowland Wet—Unit 8, Oahu—Lowland Wet—Unit 9, Oahu—Lowland Wet—Unit 10, Oahu—Lowland Wet—Unit 11, Oahu—Lowland Wet—Unit 12, Oahu—Lowland Wet—Unit 13, Oahu—Lowland Wet—Unit 14, Oahu—Lowland Wet—Unit 15, and Oahu—Lowland Wet—Unit 16, the physical and biological features of critical habitat are:

(A) Elevation: Less than 3,300 ft (1,000 m).

(B) Annual precipitation: Greater than 75 in (190 cm).

(C) Substrate: Clays; ashbeds; deep, well-drained soils; lowland bogs.

(D) Canopy: *Antidesma*, *Metrosideros*, *Myrsine*, *Pisonia*, *Psychotria*.

(E) Subcanopy: *Cibotium*, *Claoxylon*, *Kadua*, *Melicope*.

(F) Understory: *Alyxia*, *Cyrtandra*, *Dicranopteris*, *Diplazium*, *Machaerina*, *Microlepia*.

(iii) In unit Oahu—Montane Wet—Unit 1, the physical and biological features of critical habitat are:

(A) Elevation: 3,300 to 6,600 ft (1,000 to 2,000 m).

(B) Annual precipitation: Greater than 75 in (190 cm).

(C) Substrate: Well-developed soils, montane bogs.

(D) Canopy: *Acacia*, *Charpentiera*, *Cheirodendron*, *Metrosideros*.

(E) Subcanopy: *Broussaisia*, *Cibotium*, *Eurya*, *Ilex*, *Myrsine*.

(F) Understory: Ferns, *Carex*, *Coprosma*, *Leptecophylla*, *Oreobolus*, *Rhynchospora*, *Vaccinium*.

(iv) In units Oahu—Wet Cliff—Unit 1, Oahu—Wet Cliff—Unit 2, Oahu—Wet Cliff—Unit 3, Oahu—Wet Cliff—Unit 4, Oahu—Wet Cliff—Unit 5, Oahu—Wet Cliff—Unit 6, Oahu—Wet Cliff—Unit 7, and Oahu—Wet Cliff—Unit 8, the physical and biological features of critical habitat are:

(A) Elevation: Unrestricted.

(B) Annual precipitation: Greater than 75 in (190 cm).

(C) Substrate: Greater than 65 degree slope, shallow soils, weathered lava.

(D) Canopy: None.

(E) Subcanopy: *Broussaisia*, *Cheirodendron*, *Leptecophylla*, *Metrosideros*.

(F) Understory: Bryophytes, Ferns, *Coprosma*, *Dubautia*, *Kadua*, *Peperomia*.

#### *Phyllostegia kaalaensis* (NCN)

Oahu—Lowland Mesic—Unit 1, Oahu—Lowland Mesic—Unit 2, Oahu—Lowland Mesic—Unit 3, Oahu—Dry Cliff—Unit 1, Oahu—Dry Cliff—Unit 2, Oahu—Dry Cliff—Unit 3, Oahu—Dry Cliff—Unit 4, Oahu—Dry Cliff—Unit 6, Oahu—Dry Cliff—Unit 7a, Oahu—Dry Cliff—Unit 7b, and Oahu—Dry Cliff—Unit 8, identified in the legal descriptions in paragraph (i) of this section, constitute critical habitat for *Phyllostegia kaalaensis* on Oahu.

(i) In units Oahu—Lowland Mesic—Unit 1, Oahu—Lowland Mesic—Unit 2, and Oahu—Lowland Mesic—Unit 3, the physical and biological features of critical habitat are:

(A) Elevation: Less than 3,300 ft (1,000 m).

(B) Annual precipitation: 50 to 75 in (130 to 190 cm).

(C) Substrate: Shallow soils, little to no herbaceous layer.

(D) Canopy: *Acacia*, *Diospyros*, *Metrosideros*, *Myrsine*, *Pouteria*, *Santalum*.

(E) Subcanopy: *Dodonaea*, *Freycinetia*, *Leptecophylla*, *Melanthera*, *Osteomeles*, *Pleomele*, *Psydrax*.

(F) Understory: *Carex*, *Dicranopteris*, *Diplazium*, *Elaphoglossum*, *Peperomia*.

(ii) In units Oahu—Dry Cliff—Unit 1, Oahu—Dry Cliff—Unit 2, Oahu—Dry Cliff—Unit 3, Oahu—Dry Cliff—Unit 4, Oahu—Dry Cliff—Unit 6, Oahu—Dry Cliff—Unit 7a, Oahu—Dry Cliff—Unit 7b, and Oahu—Dry Cliff—Unit 8, the physical and biological features of critical habitat are:

(A) Elevation: Unrestricted.

(B) Annual precipitation: Less than 75 in (190 cm).

(C) Substrate: Greater than 65 degree slope, rocky talus.

(D) Canopy: None.

(E) Subcanopy: *Antidesma*, *Chamaesyce*, *Diospyros*, *Dodonaea*.

(F) Understory: *Bidens*, *Eragrostis*, *Melanthera*, *Schiedea*.

#### *Phyllostegia mollis* (NCN)

Oahu—Lowland Mesic—Unit 1, Oahu—Lowland Mesic—Unit 2, Oahu—Lowland Mesic—Unit 3, Oahu—Lowland Mesic—Unit 4, Oahu—Lowland Mesic—Unit 5, Oahu—Lowland Mesic—Unit 6, Oahu—Lowland Mesic—Unit 7, Oahu—Lowland Wet—Unit 1, Oahu—Lowland Wet—Unit 2, Oahu—Lowland Wet—Unit 3, Oahu—Lowland Wet—Unit 4, and Oahu—Lowland Wet—Unit 5, identified in the legal descriptions in paragraph (i) of this section, constitute critical habitat for *Phyllostegia mollis* on Oahu.

(i) In units Oahu—Lowland Mesic—Unit 1, Oahu—Lowland Mesic—Unit 2, Oahu—Lowland Mesic—Unit 3, Oahu—Lowland Mesic—Unit 4, Oahu—Lowland Mesic—Unit 5, Oahu—Lowland Mesic—Unit 6, and Oahu—Lowland Mesic—Unit 7, the physical and biological features of critical habitat are:

(A) Elevation: Less than 3,300 ft (1,000 m).

(B) Annual precipitation: 50 to 75 in (130 to 190 cm).

(C) Substrate: Shallow soils, little to no herbaceous layer.

(D) Canopy: *Acacia*, *Diospyros*, *Metrosideros*, *Myrsine*, *Pouteria*, *Santalum*.

(E) Subcanopy: *Dodonaea*, *Freycinetia*, *Leptecophylla*, *Melanthera*, *Osteomeles*, *Pleomele*, *Psydrax*.

(F) Understory: *Carex*, *Dicranopteris*, *Diplazium*, *Elaphoglossum*, *Peperomia*.

(ii) In units Oahu—Lowland Wet—Unit 1, Oahu—Lowland Wet—Unit 2, Oahu—Lowland Wet—Unit 3, Oahu—Lowland Wet—Unit 4, and Oahu—Lowland Wet—Unit 5, the physical and biological features of critical habitat are:

(A) Elevation: Less than 3,300 ft (1,000 m).

(B) Annual precipitation: Greater than 75 in (190 cm).

(C) Substrate: Clays; ashbeds; deep, well-drained soils; lowland bogs.

(D) Canopy: *Antidesma*, *Metrosideros*, *Myrsine*, *Pisonia*, *Psychotria*.

(E) Subcanopy: *Cibotium*, *Claoxylon*, *Kadua*, *Melicope*.

(F) Understory: *Alyxia*, *Cyrtandra*, *Dicranopteris*, *Diplazium*, *Machaerina*, *Microlepia*.

#### *Phyllostegia parviflora* (NCN)

Oahu—Lowland Mesic—Unit 1, Oahu—Lowland Mesic—Unit 2, Oahu—Lowland Mesic—Unit 3, Oahu—Lowland Mesic—Unit 4, Oahu—Lowland Mesic—Unit 5, Oahu—Lowland Mesic—Unit 6, Oahu—Lowland Mesic—Unit 7, Oahu—Lowland Wet—Unit 6, Oahu—Lowland Wet—Unit 7, Oahu—Lowland Wet—Unit 8, Oahu—Lowland Wet—Unit 9, Oahu—Lowland Wet—Unit 10, Oahu—Lowland Wet—Unit 11, Oahu—Lowland Wet—Unit 12, Oahu—Lowland Wet—Unit 13, Oahu—Lowland Wet—Unit 14, Oahu—Lowland Wet—Unit 15, Oahu—Lowland Wet—Unit 16, Oahu—Wet Cliff—Unit 6, Oahu—Wet Cliff—Unit 7, and Oahu—Wet Cliff—Unit 8, identified in the legal descriptions in paragraph (i) of this section, constitute critical habitat for *Phyllostegia parviflora* on Oahu.

(i) In units Oahu—Lowland Mesic—Unit 1, Oahu—Lowland Mesic—Unit 2, and Oahu—Lowland Mesic—Unit 3, the physical and biological features of critical habitat for *Phyllostegia parviflora* var. *lydgatei* are:

(A) Elevation: Less than 3,300 ft (1,000 m).

(B) Annual precipitation: 50 to 75 in (130 to 190 cm).

(C) Substrate: Shallow soils, little to no herbaceous layer.

(D) Canopy: *Acacia*, *Diospyros*, *Metrosideros*, *Myrsine*, *Pouteria*, *Santalum*.

(E) Subcanopy: *Dodonaea*, *Freycinetia*, *Leptecophylla*, *Melanthera*, *Osteomeles*, *Pleomele*, *Psydrax*.

(F) Understory: *Carex*, *Dicranopteris*, *Diplazium*, *Elaphoglossum*, *Peperomia*.

(ii) In units Oahu—Lowland Mesic—Unit 4, Oahu—Lowland Mesic—Unit 5, Oahu—Lowland Mesic—Unit 6, and Oahu—Lowland Mesic—Unit 7, the physical and biological features of critical habitat for *Phyllostegia parviflora* var. *parviflora* are:

(A) Elevation: Less than 3,300 ft (1,000 m).

(B) Annual precipitation: 50 to 75 in (130 to 190 cm).

(C) Substrate: Shallow soils, little to no herbaceous layer.

(D) Canopy: *Acacia*, *Diospyros*, *Metrosideros*, *Myrsine*, *Pouteria*, *Santalum*.

(E) Subcanopy: *Dodonaea*, *Freycinetia*, *Leptecophylla*, *Melanthera*, *Osteomeles*, *Pleomele*, *Psydrax*.

(F) Understory: *Carex*, *Dicranopteris*, *Diplazium*, *Elaphoglossum*, *Peperomia*.

(iii) In units Oahu—Lowland Wet—Unit 6, Oahu—Lowland Wet—Unit 7, Oahu—Lowland Wet—Unit 8, Oahu—Lowland Wet—Unit 9, Oahu—Lowland Wet—Unit 10, Oahu—Lowland Wet—Unit 11, Oahu—Lowland Wet—Unit 12, Oahu—Lowland Wet—Unit 13, Oahu—Lowland Wet—Unit 14, Oahu—Lowland Wet—Unit 15, and Oahu—Lowland Wet—Unit 16, the physical and biological features of critical habitat for *Phyllostegia parviflora* var. *parviflora* are:

(A) Elevation: Less than 3,300 ft (1,000 m).

(B) Annual precipitation: Greater than 75 in (190 cm).

(C) Substrate: Clays; ashbeds; deep, well-drained soils; lowland bogs.

(D) Canopy: *Antidesma*, *Metrosideros*, *Myrsine*, *Pisonia*, *Psychotria*.

(E) Subcanopy: *Cibotium*, *Claoxylon*, *Kadua*, *Melicope*.

(F) Understory: *Alyxia*, *Cyrtandra*, *Dicranopteris*, *Diplazium*, *Machaerina*, *Microlepia*.

(iv) In units Oahu—Wet Cliff—Unit 6, Oahu—Wet Cliff—Unit 7, and Oahu—Wet Cliff—Unit 8, the physical and biological features of critical habitat for *Phyllostegia parviflora* var. *parviflora* are:

(A) Elevation: Unrestricted.

(B) Annual precipitation: Greater than 75 in (190 cm).

(C) Substrate: Greater than 65 degree slope, shallow soils, weathered lava.

(D) Canopy: None.

(E) Subcanopy: *Broussaisia*, *Cheirodendron*, *Leptecophylla*, *Metrosideros*.

(F) Understory: Bryophytes, Ferns, *Coprosma*, *Dubautia*, *Kadua*, *Peperomia*.

#### *Stenogyne kanehoana* (NCN)

Oahu—Lowland Mesic—Unit 1, Oahu—Lowland Mesic—Unit 2, and Oahu—Lowland Mesic—Unit 3, identified in the legal descriptions in paragraph (i) of this section, constitute critical habitat for *Stenogyne kanehoana* on Oahu. Within these units, the physical and biological features of critical habitat are:

(i) Elevation: Less than 3,300 ft (1,000 m).

(ii) Annual precipitation: 50 to 75 in (130 to 190 cm).

(iii) Substrate: Shallow soils, little to no herbaceous layer.

(iv) Canopy: *Acacia*, *Diospyros*, *Metrosideros*, *Myrsine*, *Pouteria*, *Santalum*.

(v) Subcanopy: *Dodonaea*, *Freycinetia*, *Leptecophylla*, *Melanthera*, *Osteomeles*, *Pleomele*, *Psydrax*.

(vi) Understory: *Carex*, *Dicranopteris*, *Diplazium*, *Elaphoglossum*, *Peperomia*.

#### FAMILY LOGANIACEAE

##### *Labordia cyrtandrae* (KAMAKAHALA)

Oahu—Lowland Mesic—Unit 1, Oahu—Lowland Mesic—Unit 2, Oahu—Lowland Mesic—Unit 3, Oahu—Lowland Mesic—Unit 4, Oahu—Lowland Mesic—Unit 5, Oahu—Lowland Mesic—Unit 6, Oahu—Lowland Mesic—Unit 7, Oahu—Lowland Wet—Unit 1, Oahu—Lowland Wet—Unit 2, Oahu—Lowland Wet—Unit 3, Oahu—Lowland Wet—Unit 4, Oahu—Lowland Wet—Unit 5, Oahu—Lowland Wet—Unit 6, Oahu—Lowland Wet—Unit 7, Oahu—Lowland Wet—Unit 8, Oahu—Lowland Wet—Unit 9, Oahu—Lowland Wet—Unit 10, Oahu—Lowland Wet—Unit 11, Oahu—Lowland Wet—Unit 12, Oahu—Lowland Wet—Unit 13, Oahu—Lowland Wet—Unit 14, Oahu—Lowland Wet—Unit 15, Oahu—Lowland Wet—Unit 16, Oahu—Montane Wet—Unit 1, Oahu—Wet Cliff—Unit 1, Oahu—Wet Cliff—Unit 2, Oahu—Wet Cliff—Unit 3, Oahu—Wet Cliff—Unit 4, Oahu—Wet Cliff—Unit 5, Oahu—Wet Cliff—Unit 6, Oahu—Wet Cliff—Unit 7, and Oahu—Wet Cliff—Unit 8, identified in the legal descriptions in paragraph (i) of this section, constitute critical habitat for *Labordia cyrtandrae* on Oahu.

(i) In units Oahu—Lowland Mesic—Unit 1, Oahu—Lowland Mesic—Unit 2, Oahu—Lowland Mesic—Unit 3, Oahu—Lowland Mesic—Unit 4, Oahu—Lowland Mesic—Unit 5, Oahu—Lowland Mesic—Unit 6, and Oahu—Lowland Mesic—Unit 7, the physical and biological features of critical habitat are:

(A) Elevation: Less than 3,300 ft (1,000 m).

(B) Annual precipitation: 50 to 75 in (130 to 190 cm).

(C) Substrate: Shallow soils, little to no herbaceous layer.

(D) Canopy: *Acacia*, *Diospyros*, *Metrosideros*, *Myrsine*, *Pouteria*, *Santalum*.

(E) Subcanopy: *Dodonaea*, *Freycinetia*, *Leptecophylla*, *Melanthera*, *Osteomeles*, *Pleomele*, *Psydrax*.

(F) Understory: *Carex*, *Dicranopteris*, *Diplazium*, *Elaphoglossum*, *Peperomia*.

(ii) In units Oahu—Lowland Wet—Unit 1, Oahu—Lowland Wet—Unit 2, Oahu—Lowland Wet—Unit 3, Oahu—

Lowland Wet—Unit 4, Oahu—Lowland Wet—Unit 5, Oahu—Lowland Wet—Unit 6, Oahu—Lowland Wet—Unit 7, Oahu—Lowland Wet—Unit 8, Oahu—Lowland Wet—Unit 9, Oahu—Lowland Wet—Unit 10, Oahu—Lowland Wet—Unit 11, Oahu—Lowland Wet—Unit 12, Oahu—Lowland Wet—Unit 13, Oahu—Lowland Wet—Unit 14, Oahu—Lowland Wet—Unit 15, and Oahu—Lowland Wet—Unit 16, the physical and biological features of critical habitat are:

(A) Elevation: Less than 3,300 ft (1,000 m).

(B) Annual precipitation: Greater than 75 in (190 cm).

(C) Substrate: Clays; ashbeds; deep, well-drained soils; lowland bogs.

(D) Canopy: *Antidesma*, *Metrosideros*, *Myrsine*, *Pisonia*, *Psychotria*.

(E) Subcanopy: *Cibotium*, *Claoxylon*, *Kadua*, *Melicope*.

(F) Understory: *Alyxia*, *Cyrtandra*, *Dicranopteris*, *Diplazium*, *Machaerina*, *Microlepia*.

(iii) In unit Oahu—Montane Wet—Unit 1, the physical and biological features of critical habitat are:

(A) Elevation: 3,300 to 6,600 ft (1,000 to 2,000 m).

(B) Annual precipitation: Greater than 75 in (190 cm).

(C) Substrate: Well-developed soils, montane bogs.

(D) Canopy: *Acacia*, *Charpentiera*, *Cheirodendron*, *Metrosideros*.

(E) Subcanopy: *Broussaisia*, *Cibotium*, *Eurya*, *Ilex*, *Myrsine*.

(F) Understory: Ferns, *Carex*, *Coprosma*, *Leptecophylla*, *Oreobolus*, *Rhynchospora*, *Vaccinium*.

(iv) In units Oahu—Wet Cliff—Unit 1, Oahu—Wet Cliff—Unit 2, Oahu—Wet Cliff—Unit 3, Oahu—Wet Cliff—Unit 4, Oahu—Wet Cliff—Unit 5, Oahu—Wet Cliff—Unit 6, Oahu—Wet Cliff—Unit 7, and Oahu—Wet Cliff—Unit 8, the physical and biological features of critical habitat are:

(A) Elevation: Unrestricted.

(B) Annual precipitation: Greater than 75 in (190 cm).

(C) Substrate: Greater than 65 degree slope, shallow soils, weathered lava.

(D) Canopy: None.

(E) Subcanopy: *Broussaisia*, *Cheirodendron*, *Leptecophylla*, *Metrosideros*.

(F) Understory: Bryophytes, Ferns, *Coprosma*, *Dubautia*, *Kadua*, *Peperomia*.

#### FAMILY MALVACEAE

##### *Abutilon sandwicense* (NCN)

Oahu—Lowland Mesic—Unit 1, Oahu—Lowland Mesic—Unit 2, Oahu—Lowland Mesic—Unit 3, Oahu—Dry

Cliff—Unit 1, Oahu—Dry Cliff—Unit 2, Oahu—Dry Cliff—Unit 3, Oahu—Dry Cliff—Unit 4, Oahu—Dry Cliff—Unit 6, Oahu—Dry Cliff—Unit 7a, Oahu—Dry Cliff—Unit 7b, and Oahu—Dry Cliff—Unit 8, identified in the legal descriptions in paragraph (i) of this section, constitute critical habitat for *Abutilon sandwicense* on Oahu.

(i) In units Oahu—Lowland Mesic—Unit 1, Oahu—Lowland Mesic—Unit 2, and Oahu—Lowland Mesic—Unit 3, the physical and biological features of critical habitat are:

(A) Elevation: Less than 3,300 ft (1,000 m).

(B) Annual precipitation: 50 to 75 in (130 to 190 cm).

(C) Substrate: Shallow soils, little to no herbaceous layer.

(D) Canopy: *Acacia*, *Diospyros*, *Metrosideros*, *Myrsine*, *Pouteria*, *Santalum*.

(E) Subcanopy: *Dodonaea*, *Freycinetia*, *Leptecophylla*, *Melanthera*, *Osteomeles*, *Pleomele*, *Psydrax*.

(F) Understory: *Carex*, *Dicranopteris*, *Diplazium*, *Elaphoglossum*, *Peperomia*.

(ii) In units Oahu—Dry Cliff—Unit 1, Oahu—Dry Cliff—Unit 2, Oahu—Dry Cliff—Unit 3, Oahu—Dry Cliff—Unit 4, Oahu—Dry Cliff—Unit 6, Oahu—Dry Cliff—Unit 7a, Oahu—Dry Cliff—Unit 7b, and Oahu—Dry Cliff—Unit 8, the physical and biological features of critical habitat are:

(A) Elevation: Unrestricted.

(B) Annual precipitation: Less than 75 in (190 cm).

(C) Substrate: Greater than 65 degree slope, rocky talus.

(D) Canopy: None.

(E) Subcanopy: *Antidesma*, *Chamaesyce*, *Diospyros*, *Dodonaea*.

(F) Understory: *Bidens*, *Eragrostis*, *Melanthera*, *Schiedea*.

*Hibiscus brackenridgei* (MAO HAU HELE)

Oahu—Lowland Dry—Unit 1, Oahu—Lowland Dry—Unit 2, Oahu—Lowland Dry—Unit 8, Oahu—Lowland Dry—Unit 9, Oahu—Lowland Dry—Unit 10, Oahu—Lowland Dry—Unit 11, Oahu—Lowland Mesic—Unit 1, Oahu—Lowland Mesic—Unit 2, and Oahu—Lowland Mesic—Unit 3, identified in the legal descriptions in paragraph (i) of this section, constitute critical habitat for *Hibiscus brackenridgei* var. *mokuleianus* and *Hibiscus brackenridgei* var. *molokaiana* on Oahu.

(i) In units Oahu—Lowland Dry—Unit 1, Oahu—Lowland Dry—Unit 2, Oahu—Lowland Dry—Unit 8, Oahu—Lowland Dry—Unit 9, Oahu—Lowland Dry—Unit 10, and Oahu—Lowland Dry—Unit 11, the physical and biological features of critical habitat for *Hibiscus*

*brackenridgei* var. *mokuleianus* and *Hibiscus brackenridgei* var. *molokaiana* are:

(A) Elevation: Less than 3,300 ft (1,000 m).

(B) Annual precipitation: Less than 50 in (130 cm).

(C) Substrate: Weathered silty loams to stony clay, rocky ledges, little-weathered lava.

(D) Canopy: *Diospyros*, *Myoporum*, *Pleomele*, *Santalum*, *Sapindus*.

(E) Subcanopy: *Chamaesyce*, *Dodonaea*, *Leptecophylla*, *Osteomeles*, *Psydrax*, *Scaevola*, *Wikstroemia*.

(F) Understory: *Alyxia*, *Artemisia*, *Bidens*, *Chenopodium*, *Nephrolepis*, *Peperomia*, *Plumbago*, *Sicyos*, *Sida*, *Waltheria*.

(ii) In units Oahu—Lowland Mesic—Unit 1, Oahu—Lowland Mesic—Unit 2, and Oahu—Lowland Mesic—Unit 3, the physical and biological features of critical habitat for *Hibiscus brackenridgei* var. *mokuleianus* and *Hibiscus brackenridgei* var. *molokaiana* are:

(A) Elevation: Less than 3,300 ft (1,000 m).

(B) Annual precipitation: 50 to 75 in (130 to 190 cm).

(C) Substrate: Shallow soils, little to no herbaceous layer.

(D) Canopy: *Acacia*, *Diospyros*, *Metrosideros*, *Myrsine*, *Pouteria*, *Santalum*.

(E) Subcanopy: *Dodonaea*, *Freycinetia*, *Leptecophylla*, *Melanthera*, *Osteomeles*, *Pleomele*, *Psydrax*.

(F) Understory: *Carex*, *Dicranopteris*, *Diplazium*, *Elaphoglossum*, *Peperomia*.

#### FAMILY MYRSINACEAE

*Myrsine juddii* (KOLEA)

Oahu—Lowland Wet—Unit 6, Oahu—Lowland Wet—Unit 7, Oahu—Lowland Wet—Unit 8, Oahu—Lowland Wet—Unit 9, Oahu—Lowland Wet—Unit 10, Oahu—Lowland Wet—Unit 11, Oahu—Lowland Wet—Unit 12, Oahu—Lowland Wet—Unit 13, Oahu—Lowland Wet—Unit 14, Oahu—Lowland Wet—Unit 15, and Oahu—Lowland Wet—Unit 16, identified in the legal descriptions in paragraph (i) of this section, constitute critical habitat for *Myrsine juddii* on Oahu. Within these units, the physical and biological features of critical habitat are:

(i) Elevation: Less than 3,300 ft (1,000 m).

(ii) Annual precipitation: Greater than 75 in (190 cm).

(iii) Substrate: Clays; ashbeds; deep, well-drained soils; lowland bogs.

(iv) Canopy: *Antidesma*, *Metrosideros*, *Myrsine*, *Pisonia*, *Psychotria*.

(v) Subcanopy: *Cibotium*, *Claoxylon*, *Kadua*, *Melicope*.

(vi) Understory: *Alyxia*, *Cyrtandra*, *Dicranopteris*, *Diplazium*, *Machaerina*, *Microlepia*.

#### FAMILY MYRTACEAE

*Eugenia koolauensis* (NIOI)

Oahu—Lowland Mesic—Unit 1, Oahu—Lowland Mesic—Unit 2, Oahu—Lowland Mesic—Unit 3, Oahu—Lowland Mesic—Unit 4, Oahu—Lowland Mesic—Unit 5, Oahu—Lowland Mesic—Unit 6, and Oahu—Lowland Mesic—Unit 7, identified in the legal descriptions in paragraph (i) of this section, constitute critical habitat for *Eugenia koolauensis* on Oahu.

Within these units, the physical and biological features of critical habitat are:

(i) Elevation: Less than 3,300 ft (1,000 m).

(ii) Annual precipitation: 50 to 75 in (130 to 190 cm).

(iii) Substrate: Shallow soils, little to no herbaceous layer.

(iv) Canopy: *Acacia*, *Diospyros*, *Metrosideros*, *Myrsine*, *Pouteria*, *Santalum*.

(v) Subcanopy: *Dodonaea*, *Freycinetia*, *Leptecophylla*, *Melanthera*, *Osteomeles*, *Pleomele*, *Psydrax*.

(vi) Understory: *Carex*, *Dicranopteris*, *Diplazium*, *Elaphoglossum*, *Peperomia*.

#### FAMILY ORCHIDACEAE

*Platanthera holochila* (NCN)

Oahu—Lowland Wet—Unit 6, Oahu—Lowland Wet—Unit 7, Oahu—Lowland Wet—Unit 8, Oahu—Lowland Wet—Unit 9, Oahu—Lowland Wet—Unit 10, Oahu—Lowland Wet—Unit 11, Oahu—Lowland Wet—Unit 12, Oahu—Lowland Wet—Unit 13, Oahu—Lowland Wet—Unit 14, Oahu—Lowland Wet—Unit 15, and Oahu—Lowland Wet—Unit 16, identified in the legal descriptions in paragraph (i) of this section, constitute critical habitat for *Platanthera holochila* on Oahu. Within these units, the physical and biological features of critical habitat are:

(i) Elevation: Less than 3,300 ft (1,000 m).

(ii) Annual precipitation: Greater than 75 in (190 cm).

(iii) Substrate: Clays; ashbeds; deep, well-drained soils; lowland bogs and bog hummocks.

(iv) Canopy: *Antidesma*, *Metrosideros*, *Myrsine*, *Pisonia*, *Psychotria*.

(v) Subcanopy: *Cibotium*, *Claoxylon*, *Kadua*, *Melicope*.

(vi) Understory: *Alyxia*, *Cyrtandra*, *Dicranopteris*, *Diplazium*, *Machaerina*, *Microlepia*.

**FAMILY PLANTAGINACEAE***Plantago princeps* (LAUKAHI KUAHIWI)

Oahu—Lowland Mesic—Unit 1, Oahu—Lowland Mesic—Unit 2, Oahu—Lowland Mesic—Unit 3, Oahu—Lowland Mesic—Unit 4, Oahu—Lowland Mesic—Unit 5, Oahu—Lowland Mesic—Unit 6, Oahu—Lowland Mesic—Unit 7, Oahu—Lowland Wet—Unit 1, Oahu—Lowland Wet—Unit 2, Oahu—Lowland Wet—Unit 3, Oahu—Lowland Wet—Unit 4, Oahu—Lowland Wet—Unit 5, Oahu—Lowland Wet—Unit 6, Oahu—Lowland Wet—Unit 7, Oahu—Lowland Wet—Unit 8, Oahu—Lowland Wet—Unit 9, Oahu—Lowland Wet—Unit 10, Oahu—Lowland Wet—Unit 11, Oahu—Lowland Wet—Unit 12, Oahu—Lowland Wet—Unit 13, Oahu—Lowland Wet—Unit 14, Oahu—Lowland Wet—Unit 15, Oahu—Lowland Wet—Unit 16, Oahu—Dry Cliff—Unit 1, Oahu—Dry Cliff—Unit 2, Oahu—Dry Cliff—Unit 3, Oahu—Dry Cliff—Unit 4, Oahu—Dry Cliff—Unit 6, Oahu—Dry Cliff—Unit 7a, Oahu—Dry Cliff—Unit 7b, Oahu—Dry Cliff—Unit 8, Oahu—Wet Cliff—Unit 6, Oahu—Wet Cliff—Unit 7, and Oahu—Wet Cliff—Unit 8, identified in the legal descriptions in paragraph (i) of this section, constitute critical habitat for *Plantago princeps* on Oahu.

(i) In units Oahu—Lowland Mesic—Unit 1, Oahu—Lowland Mesic—Unit 2, Oahu—Lowland Mesic—Unit 3, Oahu—Lowland Mesic—Unit 4, Oahu—Lowland Mesic—Unit 5, Oahu—Lowland Mesic—Unit 6, and Oahu—Lowland Mesic—Unit 7, the physical and biological features of critical habitat for *Plantago princeps* var. *princeps* are:

(A) Elevation: Less than 3,300 ft (1,000 m).

(B) Annual precipitation: 50 to 75 in (130 to 190 cm).

(C) Substrate: Shallow soils, little to no herbaceous layer.

(D) Canopy: *Acacia*, *Diospyros*, *Metrosideros*, *Myrsine*, *Pouteria*, *Santalum*.

(E) Subcanopy: *Dodonaea*, *Freycinetia*, *Leptecophylla*, *Melanthera*, *Osteomeles*, *Pleomele*, *Psydrax*.

(F) Understory: *Carex*, *Dicranopteris*, *Diplazium*, *Elaphoglossum*, *Peperomia*.

(ii) In units Oahu—Lowland Wet—Unit 6, Oahu—Lowland Wet—Unit 7, Oahu—Lowland Wet—Unit 8, Oahu—Lowland Wet—Unit 9, Oahu—Lowland Wet—Unit 10, Oahu—Lowland Wet—Unit 11, Oahu—Lowland Wet—Unit 12, Oahu—Lowland Wet—Unit 13, Oahu—Lowland Wet—Unit 14, Oahu—Lowland Wet—Unit 15, and Oahu—Lowland Wet—Unit 16, the physical

and biological features of critical habitat for *Plantago princeps* var.

*longibracteata* are:

(A) Elevation: Less than 3,300 ft (1,000 m).

(B) Annual precipitation: Greater than 75 in (190 cm).

(C) Substrate: Clays; ashbeds; deep, well-drained soils; lowland bogs.

(D) Canopy: *Antidesma*, *Metrosideros*, *Myrsine*, *Pisonia*, *Psychotria*.

(E) Subcanopy: *Cibotium*, *Claoxylon*, *Kadua*, *Melicope*.

(F) Understory: *Alyxia*, *Cyrtandra*, *Dicranopteris*, *Diplazium*, *Machaerina*, *Microlepia*.

(iii) In units Oahu—Lowland Wet—Unit 1, Oahu—Lowland Wet—Unit 2, Oahu—Lowland Wet—Unit 3, Oahu—Lowland Wet—Unit 4, Oahu—Lowland Wet—Unit 5, Oahu—Lowland Wet—Unit 6, Oahu—Lowland Wet—Unit 7, Oahu—Lowland Wet—Unit 8, Oahu—Lowland Wet—Unit 9, Oahu—Lowland Wet—Unit 10, Oahu—Lowland Wet—Unit 11, Oahu—Lowland Wet—Unit 12, Oahu—Lowland Wet—Unit 13, Oahu—Lowland Wet—Unit 14, Oahu—Lowland Wet—Unit 15, and Oahu—Lowland Wet—Unit 16, the physical and biological features of critical habitat for *Plantago princeps* var. *princeps* are:

(A) Elevation: Less than 3,300 ft (1,000 m).

(B) Annual precipitation: Greater than 75 in (190 cm).

(C) Substrate: Clays; ashbeds; deep, well-drained soils; lowland bogs.

(D) Canopy: *Antidesma*, *Metrosideros*, *Myrsine*, *Pisonia*, *Psychotria*.

(E) Subcanopy: *Cibotium*, *Claoxylon*, *Kadua*, *Melicope*.

(F) Understory: *Alyxia*, *Cyrtandra*, *Dicranopteris*, *Diplazium*, *Machaerina*, *Microlepia*.

(iv) In units Oahu—Dry Cliff—Unit 1, Oahu—Dry Cliff—Unit 2, Oahu—Dry Cliff—Unit 3, Oahu—Dry Cliff—Unit 4, Oahu—Dry Cliff—Unit 6, Oahu—Dry Cliff—Unit 7a, Oahu—Dry Cliff—Unit 7b, and Oahu—Dry Cliff—Unit 8, the physical and biological features of critical habitat for *Plantago princeps* var. *princeps* are:

(A) Elevation: Unrestricted.

(B) Annual precipitation: Less than 75 in (190 cm).

(C) Substrate: Greater than 65 degree slope, rocky talus.

(D) Canopy: None.

(E) Subcanopy: *Antidesma*, *Chamaesyce*, *Diospyros*, *Dodonaea*.

(F) Understory: *Bidens*, *Eragrostis*, *Melanthera*, *Schiedea*.

(v) In units Oahu—Wet Cliff—Unit 6, Oahu—Wet Cliff—Unit 7, and Oahu—Wet Cliff—Unit 8, the physical and biological features of critical habitat for *Plantago princeps* var. *princeps* are:

(A) Elevation: Unrestricted.

(B) Annual precipitation: Greater than 75 in (190 cm).

(C) Substrate: Greater than 65 degree slope, shallow soils, weathered lava.

(D) Canopy: None.

(E) Subcanopy: *Broussaisia*, *Cheirodendron*, *Leptecophylla*, *Metrosideros*.

(F) Understory: Bryophytes, Ferns, *Coprosma*, *Dubautia*, *Kadua*, *Peperomia*.

**FAMILY POACEAE***Cenchrus agrimonioides* (KAMANOMANO)

Oahu—Lowland Mesic—Unit 1, Oahu—Lowland Mesic—Unit 2, Oahu—Lowland Mesic—Unit 3, Oahu—Dry Cliff—Unit 1, Oahu—Dry Cliff—Unit 2, Oahu—Dry Cliff—Unit 3, Oahu—Dry Cliff—Unit 4, Oahu—Dry Cliff—Unit 6, Oahu—Dry Cliff—Unit 7a, Oahu—Dry Cliff—Unit 7b, and Oahu—Dry Cliff—Unit 8, identified in the legal descriptions in paragraph (i) of this section, constitute critical habitat for *Cenchrus agrimonioides* on Oahu.

(i) In units Oahu—Lowland Mesic—Unit 1, Oahu—Lowland Mesic—Unit 2, and Oahu—Lowland Mesic—Unit 3, the physical and biological features of critical habitat are:

(A) Elevation: Less than 3,300 ft (1,000 m).

(B) Annual precipitation: 50 to 75 in (130 to 190 cm).

(C) Substrate: Shallow soils, little to no herbaceous layer.

(D) Canopy: *Acacia*, *Diospyros*, *Metrosideros*, *Myrsine*, *Pouteria*, *Santalum*.

(E) Subcanopy: *Dodonaea*, *Freycinetia*, *Leptecophylla*, *Melanthera*, *Osteomeles*, *Pleomele*, *Psydrax*.

(F) Understory: *Carex*, *Dicranopteris*, *Diplazium*, *Elaphoglossum*, *Peperomia*.

(ii) In units Oahu—Dry Cliff—Unit 1, Oahu—Dry Cliff—Unit 2, Oahu—Dry Cliff—Unit 3, Oahu—Dry Cliff—Unit 4, Oahu—Dry Cliff—Unit 6, Oahu—Dry Cliff—Unit 7a, Oahu—Dry Cliff—Unit 7b, and Oahu—Dry Cliff—Unit 8, the physical and biological features of critical habitat are:

(A) Elevation: Unrestricted.

(B) Annual precipitation: Less than 75 in (190 cm).

(C) Substrate: Greater than 65 degree slope, rocky talus.

(D) Canopy: None.

(E) Subcanopy: *Antidesma*, *Chamaesyce*, *Diospyros*, *Dodonaea*.

(F) Understory: *Bidens*, *Eragrostis*, *Melanthera*, *Schiedea*.

*Eragrostis fosbergii* (FOSBERG'S LOVE GRASS)

Oahu—Lowland Mesic—Unit 1, Oahu—Lowland Mesic—Unit 2, Oahu—

Lowland Mesic—Unit 3, Oahu—Dry Cliff—Unit 1, Oahu—Dry Cliff—Unit 2, Oahu—Dry Cliff—Unit 3, Oahu—Dry Cliff—Unit 4, Oahu—Dry Cliff—Unit 6, Oahu—Dry Cliff—Unit 7a, Oahu—Dry Cliff—Unit 7b, and Oahu—Dry Cliff—Unit 8, identified in the legal descriptions in paragraph (i) of this section, constitute critical habitat for *Eragrostis fosbergii* on Oahu.

(i) In units Oahu—Lowland Mesic—Unit 1, Oahu—Lowland Mesic—Unit 2, and Oahu—Lowland Mesic—Unit 3, the physical and biological features of critical habitat are:

(A) Elevation: Less than 3,300 ft (1,000 m).

(B) Annual precipitation: 50 to 75 in (130 to 190 cm).

(C) Substrate: Shallow soils, little to no herbaceous layer.

(D) Canopy: *Acacia*, *Diospyros*, *Metrosideros*, *Myrsine*, *Pouteria*, *Santalum*.

(E) Subcanopy: *Dodonaea*, *Freycinetia*, *Leptecophylla*, *Melanthera*, *Osteomeles*, *Pleomele*, *Psydrax*.

(F) Understory: *Carex*, *Dicranopteris*, *Diplazium*, *Elaphoglossum*, *Peperomia*.

(ii) In units Oahu—Dry Cliff—Unit 1, Oahu—Dry Cliff—Unit 2, Oahu—Dry Cliff—Unit 3, Oahu—Dry Cliff—Unit 4, Oahu—Dry Cliff—Unit 6, Oahu—Dry Cliff—Unit 7a, Oahu—Dry Cliff—Unit 7b, and Oahu—Dry Cliff—Unit 8, the physical and biological features of critical habitat are:

(A) Elevation: Unrestricted.

(B) Annual precipitation: Less than 75 in (190 cm).

(C) Substrate: Greater than 65 degree slope, rocky talus.

(D) Canopy: None.

(E) Subcanopy: *Antidesma*, *Chamaesyce*, *Diospyros*, *Dodonaea*.

(F) Understory: *Bidens*, *Eragrostis*, *Melanthera*, *Schiedea*.

#### FAMILY PRIMULACEAE

##### *Lysimachia filifolia* (NCN)

Oahu—Wet Cliff—Unit 6, Oahu—Wet Cliff—Unit 7, and Oahu—Wet Cliff—Unit 8, identified in the legal descriptions in paragraph (i) of this section, constitute critical habitat for *Lysimachia filifolia* on Oahu. Within these units, the physical and biological features of critical habitat are:

(i) Elevation: Unrestricted.

(ii) Annual precipitation: Greater than 75 in (190 cm).

(iii) Substrate: Greater than 65 degree slope, shallow soils, weathered lava.

(iv) Canopy: None.

(v) Subcanopy: *Broussaisia*, *Cheirodendron*, *Leptecophylla*, *Metrosideros*.

(vi) Understory: Bryophytes, Ferns, *Coprosma*, *Dubautia*, *Kadua*, *Peperomia*.

#### FAMILY RHAMNACEAE

##### *Colubrina oppositifolia* (KAUILA)

Oahu—Lowland Mesic—Unit 1, Oahu—Lowland Mesic—Unit 2, and Oahu—Lowland Mesic—Unit 3, identified in the legal descriptions in paragraph (i) of this section, constitute critical habitat for *Colubrina oppositifolia* on Oahu. Within these units, the physical and biological features of critical habitat are:

(i) Elevation: Less than 3,300 ft (1,000 m).

(ii) Annual precipitation: 50 to 75 in (130 to 190 cm).

(iii) Substrate: Shallow soils, little to no herbaceous layer.

(iv) Canopy: *Acacia*, *Diospyros*, *Metrosideros*, *Myrsine*, *Pouteria*, *Santalum*.

(v) Subcanopy: *Dodonaea*, *Freycinetia*, *Leptecophylla*, *Melanthera*, *Osteomeles*, *Pleomele*, *Psydrax*.

(vi) Understory: *Carex*, *Dicranopteris*, *Diplazium*, *Elaphoglossum*, *Peperomia*.

##### *Gouania meyenii* (NCN)

Oahu—Lowland Dry—Unit 1, Oahu—Lowland Dry—Unit 2, Oahu—Lowland Dry—Unit 6, Oahu—Dry Cliff—Unit 7a, Oahu—Dry Cliff—Unit 7b, Oahu—Lowland Dry—Unit 8, Oahu—Lowland Dry—Unit 9, Oahu—Lowland Dry—Unit 10, Oahu—Lowland Dry—Unit 11, Oahu—Lowland Mesic—Unit 1, Oahu—Lowland Mesic—Unit 2, Oahu—Lowland Mesic—Unit 3, Oahu—Dry Cliff—Unit 1, Oahu—Dry Cliff—Unit 2, Oahu—Dry Cliff—Unit 3, Oahu—Dry Cliff—Unit 4, Oahu—Dry Cliff—Unit 6, Oahu—Dry Cliff—Unit 7a, Oahu—Dry Cliff—Unit 7b, and Oahu—Dry Cliff—Unit 8, identified in the legal descriptions in paragraph (i) of this section, constitute critical habitat for *Gouania meyenii* on Oahu.

(i) In units Oahu—Lowland Dry—Unit 1, Oahu—Lowland Dry—Unit 2, Oahu—Lowland Dry—Unit 6, Oahu—Lowland Dry—Unit 7, Oahu—Lowland Dry—Unit 8, Oahu—Lowland Dry—Unit 9, Oahu—Lowland Dry—Unit 10, and Oahu—Lowland Dry—Unit 11, the physical and biological features of critical habitat are:

(A) Elevation: Less than 3,300 ft (1,000 m).

(B) Annual precipitation: Less than 50 in (130 cm).

(C) Substrate: Weathered silty loams to stony clay, rocky ledges, little-weathered lava.

(D) Canopy: *Diospyros*, *Myoporum*, *Pleomele*, *Santalum*, *Sapindus*.

(E) Subcanopy: *Chamaesyce*, *Dodonaea*, *Leptecophylla*, *Osteomeles*, *Psydrax*, *Scaevola*, *Wikstroemia*.

(F) Understory: *Alyxia*, *Artemisia*, *Bidens*, *Chenopodium*, *Nephrolepis*, *Peperomia*, *Sicyos*.

(ii) In units Oahu—Lowland Mesic—Unit 1, Oahu—Lowland Mesic—Unit 2, and Oahu—Lowland Mesic—Unit 3, the physical and biological features of critical habitat are:

(A) Elevation: Less than 3,300 ft (1,000 m).

(B) Annual precipitation: 50 to 75 in (130 to 190 cm).

(C) Substrate: Shallow soils, little to no herbaceous layer.

(D) Canopy: *Acacia*, *Diospyros*, *Metrosideros*, *Myrsine*, *Pouteria*, *Santalum*.

(E) Subcanopy: *Dodonaea*, *Freycinetia*, *Leptecophylla*, *Melanthera*, *Osteomeles*, *Pleomele*, *Psydrax*.

(F) Understory: *Carex*, *Dicranopteris*, *Diplazium*, *Elaphoglossum*, *Peperomia*.

(iii) In units Oahu—Dry Cliff—Unit 1, Oahu—Dry Cliff—Unit 2, Oahu—Dry Cliff—Unit 3, Oahu—Dry Cliff—Unit 4, Oahu—Dry Cliff—Unit 6, Oahu—Dry Cliff—Unit 7a, Oahu—Dry Cliff—Unit 7b, and Oahu—Dry Cliff—Unit 8, the physical and biological features of critical habitat are:

(A) Elevation: Unrestricted.

(B) Annual precipitation: Less than 75 in (190 cm).

(C) Substrate: Greater than 65 degree slope, rocky talus.

(D) Canopy: None.

(E) Subcanopy: *Antidesma*, *Chamaesyce*, *Diospyros*, *Dodonaea*.

(F) Understory: *Bidens*, *Eragrostis*, *Melanthera*, *Schiedea*.

##### *Gouania vitifolia* (NCN)

Oahu—Lowland Dry—Unit 1, Oahu—Lowland Dry—Unit 2, Oahu—Lowland Dry—Unit 8, Oahu—Lowland Dry—Unit 9, Oahu—Lowland Dry—Unit 10, Oahu—Lowland Dry—Unit 11, Oahu—Lowland Mesic—Unit 1, Oahu—Lowland Mesic—Unit 2, Oahu—Lowland Mesic—Unit 3, Oahu—Lowland Wet—Unit 1, Oahu—Lowland Wet—Unit 2, Oahu—Lowland Wet—Unit 3, Oahu—Lowland Wet—Unit 4, Oahu—Lowland Wet—Unit 5, Oahu—Dry Cliff—Unit 1, Oahu—Dry Cliff—Unit 2, Oahu—Dry Cliff—Unit 3, Oahu—Dry Cliff—Unit 4, Oahu—Dry Cliff—Unit 6, Oahu—Dry Cliff—Unit 7a, Oahu—Dry Cliff—Unit 7b, and Oahu—Dry Cliff—Unit 8, identified in the legal descriptions in paragraph (i) of this section, constitute critical habitat for *Gouania vitifolia* on Oahu.

(i) In units Oahu—Lowland Dry—Unit 1, Oahu—Lowland Dry—Unit 2, Oahu—Lowland Dry—Unit 8, Oahu—Lowland

Dry—Unit 9, Oahu—Lowland Dry—Unit 10, and Oahu—Lowland Dry—Unit 11, the physical and biological features of critical habitat are:

(A) Elevation: Less than 3,300 ft (1,000 m).

(B) Annual precipitation: Less than 50 in (130 cm).

(C) Substrate: Weathered silty loams to stony clay, rocky ledges, little-weathered lava.

(D) Canopy: *Diospyros*, *Myoporum*, *Pleomele*, *Santalum*, *Sapindus*.

(E) Subcanopy: *Chamaesyce*, *Dodonaea*, *Leptecophylla*, *Osteomeles*, *Psydrax*, *Scaevola*, *Wikstroemia*.

(F) Understory: *Alyxia*, *Artemisia*, *Bidens*, *Chenopodium*, *Nephrolepis*, *Peperomia*, *Sicyos*.

(ii) In units Oahu—Lowland Mesic—Unit 1, Oahu—Lowland Mesic—Unit 2, and Oahu—Lowland Mesic—Unit 3, the physical and biological features of critical habitat are:

(A) Elevation: Less than 3,300 ft (1,000 m).

(B) Annual precipitation: 50 to 75 in (130 to 190 cm).

(C) Substrate: Shallow soils, little to no herbaceous layer.

(D) Canopy: *Acacia*, *Diospyros*, *Metrosideros*, *Myrsine*, *Pouteria*, *Santalum*.

(E) Subcanopy: *Dodonaea*, *Freycinetia*, *Leptecophylla*, *Melanthera*, *Osteomeles*, *Pleomele*, *Psydrax*.

(F) Understory: *Carex*, *Dicranopteris*, *Diplazium*, *Elaphoglossum*, *Peperomia*.

(iii) In units Oahu—Lowland Wet—Unit 1, Oahu—Lowland Wet—Unit 2, Oahu—Lowland Wet—Unit 3, Oahu—Lowland Wet—Unit 4, and Oahu—Lowland Wet—Unit 5, the physical and biological features of critical habitat are:

(A) Elevation: Less than 3,300 ft (1,000 m).

(B) Annual precipitation: Greater than 75 in (190 cm).

(C) Substrate: Clays; ashbeds; deep, well-drained soils; lowland bogs.

(D) Canopy: *Antidesma*, *Metrosideros*, *Myrsine*, *Pisonia*, *Psychotria*.

(E) Subcanopy: *Cibotium*, *Claoxylon*, *Kadua*, *Melicope*.

(F) Understory: *Alyxia*, *Cyrtandra*, *Dicranopteris*, *Diplazium*, *Machaerina*, *Microlepia*.

(iv) In units Oahu—Dry Cliff—Unit 1, Oahu—Dry Cliff—Unit 2, Oahu—Dry Cliff—Unit 3, Oahu—Dry Cliff—Unit 4, Oahu—Dry Cliff—Unit 6, Oahu—Dry Cliff—Unit 7a, Oahu—Dry Cliff—Unit 7b, and Oahu—Dry Cliff—Unit 8, the physical and biological features of critical habitat are:

(A) Elevation: Unrestricted.

(B) Annual precipitation: Less than 75 in (190 cm).

(C) Substrate: Greater than 65 degree slope, rocky talus.

(D) Canopy: None.

(E) Subcanopy: *Antidesma*, *Chamaesyce*, *Diospyros*, *Dodonaea*.

(F) Understory: *Bidens*, *Eragrostis*, *Melanthera*, *Schiedea*.

#### FAMILY RUBIACEAE

*Gardenia mannii* (NANU)

Oahu—Lowland Mesic—Unit 1, Oahu—Lowland Mesic—Unit 2, Oahu—Lowland Mesic—Unit 3, Oahu—Lowland Mesic—Unit 4, Oahu—Lowland Mesic—Unit 5, Oahu—Lowland Mesic—Unit 6, Oahu—Lowland Mesic—Unit 7, Oahu—Lowland Wet—Unit 1, Oahu—Lowland Wet—Unit 2, Oahu—Lowland Wet—Unit 3, Oahu—Lowland Wet—Unit 4, Oahu—Lowland Wet—Unit 5, Oahu—Lowland Wet—Unit 6, Oahu—Lowland Wet—Unit 7, Oahu—Lowland Wet—Unit 8, Oahu—Lowland Wet—Unit 9, Oahu—Lowland Wet—Unit 10, Oahu—Lowland Wet—Unit 11, Oahu—Lowland Wet—Unit 12, Oahu—Lowland Wet—Unit 13, Oahu—Lowland Wet—Unit 14, Oahu—Lowland Wet—Unit 15, and Oahu—Lowland Wet—Unit 16, identified in the legal descriptions in paragraph (i) of this section, constitute critical habitat for *Gardenia mannii* on Oahu.

(i) In units Oahu—Lowland Mesic—Unit 1, Oahu—Lowland Mesic—Unit 2, Oahu—Lowland Mesic—Unit 3, Oahu—Lowland Mesic—Unit 4, Oahu—Lowland Mesic—Unit 5, Oahu—Lowland Mesic—Unit 6, and Oahu—Lowland Mesic—Unit 7, the physical and biological features of critical habitat are:

(A) Elevation: Less than 3,300 ft (1,000 m).

(B) Annual precipitation: 50 to 75 in (130 to 190 cm).

(C) Substrate: Shallow soils, little to no herbaceous layer.

(D) Canopy: *Acacia*, *Diospyros*, *Metrosideros*, *Myrsine*, *Pouteria*, *Santalum*.

(E) Subcanopy: *Dodonaea*, *Freycinetia*, *Leptecophylla*, *Melanthera*, *Osteomeles*, *Pleomele*, *Psydrax*.

(F) Understory: *Carex*, *Dicranopteris*, *Diplazium*, *Elaphoglossum*, *Peperomia*.

(ii) In units Oahu—Lowland Wet—Unit 1, Oahu—Lowland Wet—Unit 2, Oahu—Lowland Wet—Unit 3, Oahu—Lowland Wet—Unit 4, Oahu—Lowland Wet—Unit 5, Oahu—Lowland Wet—Unit 6, Oahu—Lowland Wet—Unit 7, Oahu—Lowland Wet—Unit 8, Oahu—Lowland Wet—Unit 9, Oahu—Lowland Wet—Unit 10, Oahu—Lowland Wet—Unit 11, Oahu—Lowland Wet—Unit 12, Oahu—Lowland Wet—Unit 13, Oahu—Lowland Wet—Unit 14, Oahu—Lowland Wet—Unit 15, and Oahu—

Lowland Wet—Unit 16, the physical and biological features of critical habitat are:

(A) Elevation: Less than 3,300 ft (1,000 m).

(B) Annual precipitation: Greater than 75 in (190 cm).

(C) Substrate: Clays; ashbeds; deep, well-drained soils; lowland bogs.

(D) Canopy: *Antidesma*, *Metrosideros*, *Myrsine*, *Pisonia*, *Psychotria*.

(E) Subcanopy: *Cibotium*, *Claoxylon*, *Kadua*, *Melicope*.

(F) Understory: *Alyxia*, *Cyrtandra*, *Dicranopteris*, *Diplazium*, *Machaerina*, *Microlepia*.

*Kadua coriacea* (KIOELE)

Oahu—Lowland Mesic—Unit 1, Oahu—Lowland Mesic—Unit 2, Oahu—Lowland Mesic—Unit 3, Oahu—Lowland Mesic—Unit 4, Oahu—Lowland Mesic—Unit 5, Oahu—Lowland Mesic—Unit 6, and Oahu—Lowland Mesic—Unit 7, identified in the legal descriptions in paragraph (i) of this section, constitute critical habitat for *Kadua coriacea* on Oahu. Within these units, the physical and biological features of critical habitat are:

(i) Elevation: Less than 3,300 ft (1,000 m).

(ii) Annual precipitation: 50 to 75 in (130 to 190 cm).

(iii) Substrate: Shallow soils, little to no herbaceous layer.

(iv) Canopy: *Acacia*, *Diospyros*, *Metrosideros*, *Myrsine*, *Pouteria*, *Santalum*.

(v) Subcanopy: *Dodonaea*, *Freycinetia*, *Leptecophylla*, *Melanthera*, *Osteomeles*, *Pleomele*, *Psydrax*.

(vi) Understory: *Carex*, *Dicranopteris*, *Diplazium*, *Elaphoglossum*, *Peperomia*.

*Kadua degeneri* (NCN)

Oahu—Lowland Mesic—Unit 1, Oahu—Lowland Mesic—Unit 2, Oahu—Lowland Mesic—Unit 3, Oahu—Dry Cliff—Unit 1, Oahu—Dry Cliff—Unit 2, Oahu—Dry Cliff—Unit 3, Oahu—Dry Cliff—Unit 4, Oahu—Dry Cliff—Unit 6, Oahu—Dry Cliff—Unit 7a, Oahu—Dry Cliff—Unit 7b, and Oahu—Dry Cliff—Unit 8, identified in the legal descriptions in paragraph (i) of this section, constitute critical habitat for *Kadua degeneri* on Oahu.

(i) In units Oahu—Lowland Mesic—Unit 1, Oahu—Lowland Mesic—Unit 2, and Oahu—Lowland Mesic—Unit 3, the physical and biological features of critical habitat are:

(A) Elevation: Less than 3,300 ft (1,000 m).

(B) Annual precipitation: 50 to 75 in (130 to 190 cm).

(C) Substrate: Shallow soils, little to no herbaceous layer.

(D) Canopy: *Acacia*, *Diospyros*, *Metrosideros*, *Myrsine*, *Pouteria*, *Santalum*.

(E) Subcanopy: *Dodonaea*, *Freycinetia*, *Leptecophylla*, *Melanthera*, *Osteomeles*, *Pleomele*, *Psydrax*.

(F) Understory: *Carex*, *Dicranopteris*, *Diplazium*, *Elaphoglossum*, *Peperomia*.  
(ii) In units Oahu—Dry Cliff—Unit 1, Oahu—Dry Cliff—Unit 2, Oahu—Dry Cliff—Unit 3, Oahu—Dry Cliff—Unit 4, Oahu—Dry Cliff—Unit 6, Oahu—Dry Cliff—Unit 7a, Oahu—Dry Cliff—Unit 7b, and Oahu—Dry Cliff—Unit 8, the physical and biological features of critical habitat are:

(A) Elevation: Unrestricted.

(B) Annual precipitation: Less than 75 in (190 cm).

(C) Substrate: Greater than 65 degree slope, rocky talus.

(D) Canopy: None.

(E) Subcanopy: *Antidesma*, *Chamaesyce*, *Diospyros*, *Dodonaea*.

(F) Understory: *Bidens*, *Eragrostis*, *Melanthera*, *Schiedea*.

#### *Kadua parvula* (NCN)

Oahu—Lowland Mesic—Unit 1, Oahu—Lowland Mesic—Unit 2, Oahu—Lowland Mesic—Unit 3, Oahu—Dry Cliff—Unit 1, Oahu—Dry Cliff—Unit 2, Oahu—Dry Cliff—Unit 3, Oahu—Dry Cliff—Unit 4, Oahu—Dry Cliff—Unit 6, Oahu—Dry Cliff—Unit 7a, Oahu—Dry Cliff—Unit 7b, and Oahu—Dry Cliff—Unit 8, identified in the legal descriptions in paragraph (i) of this section, constitute critical habitat for *Kadua parvula* on Oahu.

(i) In units Oahu—Lowland Mesic—Unit 1, Oahu—Lowland Mesic—Unit 2, and Oahu—Lowland Mesic—Unit 3, the physical and biological features of critical habitat are:

(A) Elevation: Less than 3,300 ft (1,000 m).

(B) Annual precipitation: 50 to 75 in (130 to 190 cm).

(C) Substrate: Shallow soils, little to no herbaceous layer.

(D) Canopy: *Acacia*, *Diospyros*, *Metrosideros*, *Myrsine*, *Pouteria*, *Santalum*.

(E) Subcanopy: *Dodonaea*, *Freycinetia*, *Leptecophylla*, *Melanthera*, *Osteomeles*, *Pleomele*, *Psydrax*.

(F) Understory: *Carex*, *Dicranopteris*, *Diplazium*, *Elaphoglossum*, *Peperomia*.

(ii) In units Oahu—Dry Cliff—Unit 1, Oahu—Dry Cliff—Unit 2, Oahu—Dry Cliff—Unit 3, Oahu—Dry Cliff—Unit 4, Oahu—Dry Cliff—Unit 6, Oahu—Dry Cliff—Unit 7a, Oahu—Dry Cliff—Unit 7b, and Oahu—Dry Cliff—Unit 8, the physical and biological features of critical habitat are:

(A) Elevation: Unrestricted.

(B) Annual precipitation: Less than 75 in (190 cm).

(C) Substrate: Greater than 65 degree slope, rocky talus.

(D) Canopy: None.

(E) Subcanopy: *Antidesma*, *Chamaesyce*, *Diospyros*, *Dodonaea*.

(F) Understory: *Bidens*, *Eragrostis*, *Melanthera*, *Schiedea*.

#### *Psychotria hexandra* ssp. *oahuensis* (KOPIKO)

Oahu—Lowland Wet—Unit 6, Oahu—Lowland Wet—Unit 7, Oahu—Lowland Wet—Unit 8, Oahu—Lowland Wet—Unit 9, Oahu—Lowland Wet—Unit 10, Oahu—Lowland Wet—Unit 11, Oahu—Lowland Wet—Unit 12, Oahu—Lowland Wet—Unit 13, Oahu—Lowland Wet—Unit 14, Oahu—Lowland Wet—Unit 15, Oahu—Lowland Wet—Unit 16, Oahu—Wet Cliff—Unit 6, Oahu—Wet Cliff—Unit 7, and Oahu—Wet Cliff—Unit 8, identified in the legal descriptions in paragraph (i) of this section, constitute critical habitat for *Psychotria hexandra* ssp. *oahuensis* on Oahu.

(i) In units Oahu—Lowland Wet—Unit 6, Oahu—Lowland Wet—Unit 7, Oahu—Lowland Wet—Unit 8, Oahu—Lowland Wet—Unit 9, Oahu—Lowland Wet—Unit 10, Oahu—Lowland Wet—Unit 11, Oahu—Lowland Wet—Unit 12, Oahu—Lowland Wet—Unit 13, Oahu—Lowland Wet—Unit 14, Oahu—Lowland Wet—Unit 15, and Oahu—Lowland Wet—Unit 16, the physical and biological features of critical habitat are:

(A) Elevation: Less than 3,300 ft (1,000 m).

(B) Annual precipitation: Greater than 75 in (190 cm).

(C) Substrate: Clays; ashbeds; deep, well-drained soils; lowland bogs.

(D) Canopy: *Antidesma*, *Metrosideros*, *Myrsine*, *Pisonia*, *Psychotria*.

(E) Subcanopy: *Cibotium*, *Claoxylon*, *Kadua*, *Melicope*.

(F) Understory: *Alyxia*, *Cyrtandra*, *Dicranopteris*, *Diplazium*, *Machaerina*, *Microlepia*.

(ii) In units Oahu—Wet Cliff—Unit 6, Oahu—Wet Cliff—Unit 7, and Oahu—Wet Cliff—Unit 8, the physical and biological features of critical habitat are:

(A) Elevation: Unrestricted.

(B) Annual precipitation: Greater than 75 in (190 cm).

(C) Substrate: Greater than 65 degree slope, shallow soils, weathered lava.

(D) Canopy: None.

(E) Subcanopy: *Broussaisia*, *Cheirodendron*, *Leptecophylla*, *Metrosideros*.

(F) Understory: *Bryophytes*, *Ferns*, *Coprosma*, *Dubautia*, *Kadua*, *Peperomia*.

## FAMILY RUTACEAE

### *Melicope christophersenii* (ALANI)

Oahu—Montane Wet—Unit 1, Oahu—Wet Cliff—Unit 1, Oahu—Wet Cliff—Unit 2, Oahu—Wet Cliff—Unit 3, Oahu—Wet Cliff—Unit 4, and Oahu—Wet Cliff—Unit 5, identified in the legal descriptions in paragraph (i) of this section, constitute critical habitat for *Melicope christophersenii* on Oahu.

(i) In unit Oahu—Montane Wet—Unit 1, the physical and biological features of critical habitat are:

(A) Elevation: 3,300 to 6,600 ft (1,000 to 2,000 m).

(B) Annual precipitation: Greater than 75 in (190 cm).

(C) Substrate: Well-developed soils, montane bogs.

(D) Canopy: *Acacia*, *Charpentiera*, *Cheirodendron*, *Metrosideros*.

(E) Subcanopy: *Broussaisia*, *Cibotium*, *Eurya*, *Ilex*, *Myrsine*.

(F) Understory: *Ferns*, *Carex*, *Coprosma*, *Leptecophylla*, *Oreobolus*, *Rhynchospora*, *Vaccinium*.

(ii) In unit Oahu—Wet Cliff—Unit 1, Oahu—Wet Cliff—Unit 2, Oahu—Wet Cliff—Unit 3, Oahu—Wet Cliff—Unit 4, and Oahu—Wet Cliff—Unit 5, the physical and biological features of critical habitat are:

(A) Elevation: Unrestricted.

(B) Annual precipitation: Greater than 75 in (190 cm).

(C) Substrate: Greater than 65 degree slope, shallow soils, weathered lava.

(D) Canopy: None.

(E) Subcanopy: *Broussaisia*, *Cheirodendron*, *Leptecophylla*, *Metrosideros*.

(F) Understory: *Bryophytes*, *Ferns*, *Coprosma*, *Dubautia*, *Kadua*, *Peperomia*.

### *Melicope hiiakae* (ALANI)

Oahu—Lowland Wet—Unit 6, Oahu—Lowland Wet—Unit 7, Oahu—Lowland Wet—Unit 8, Oahu—Lowland Wet—Unit 9, Oahu—Lowland Wet—Unit 10, Oahu—Lowland Wet—Unit 11, Oahu—Lowland Wet—Unit 12, Oahu—Lowland Wet—Unit 13, Oahu—Lowland Wet—Unit 14, Oahu—Lowland Wet—Unit 15, and Oahu—Lowland Wet—Unit 16, identified in the legal descriptions in paragraph (i) of this section, constitute critical habitat for *Melicope hiiakae* on Oahu. Within these units, the physical and biological features of critical habitat are:

(i) Elevation: Less than 3,300 ft (1,000 m).

(ii) Annual precipitation: Greater than 75 in (190 cm).

(iii) Substrate: Clays; ashbeds; deep, well-drained soils; lowland bogs.

(iv) Canopy: *Antidesma*, *Metrosideros*, *Myrsine*, *Pisonia*, *Psychotria*.

(v) Subcanopy: *Cibotium*, *Claoxylon*, *Kadua*, *Melicope*.

(vi) Understory: *Alyxia*, *Cyrtandra*, *Dicranopteris*, *Diplazium*, *Machaerina*, *Microlepia*.

*Melicope lydgatei* (ALANI)

Oahu—Lowland Mesic—Unit 4, Oahu—Lowland Mesic—Unit 5, Oahu—Lowland Mesic—Unit 6, Oahu—Lowland Mesic—Unit 7, Oahu—Lowland Wet—Unit 6, Oahu—Lowland Wet—Unit 7, Oahu—Lowland Wet—Unit 8, Oahu—Lowland Wet—Unit 9, Oahu—Lowland Wet—Unit 10, Oahu—Lowland Wet—Unit 11, Oahu—Lowland Wet—Unit 12, Oahu—Lowland Wet—Unit 13, Oahu—Lowland Wet—Unit 14, Oahu—Lowland Wet—Unit 15, and Oahu—Lowland Wet—Unit 16, identified in the legal descriptions in paragraph (i) of this section, constitute critical habitat for *Melicope lydgatei* on Oahu.

(i) In units Oahu—Lowland Mesic—Unit 4, Oahu—Lowland Mesic—Unit 5, Oahu—Lowland Mesic—Unit 6, and Oahu—Lowland Mesic—Unit 7, the physical and biological features of critical habitat are:

(A) Elevation: Less than 3,300 ft (1,000 m).

(B) Annual precipitation: 50 to 75 in (130 to 190 cm).

(C) Substrate: Shallow soils, little to no herbaceous layer.

(D) Canopy: *Acacia*, *Diospyros*, *Metrosideros*, *Myrsine*, *Pouteria*, *Santalum*.

(E) Subcanopy: *Dodonaea*, *Freycinetia*, *Leptecophylla*, *Melanthera*, *Osteomeles*, *Pleomele*, *Psydrax*.

(F) Understory: *Carex*, *Dicranopteris*, *Diplazium*, *Elaphoglossum*, *Peperomia*.

(ii) In units Oahu—Lowland Wet—Unit 6, Oahu—Lowland Wet—Unit 7, Oahu—Lowland Wet—Unit 8, Oahu—Lowland Wet—Unit 9, Oahu—Lowland Wet—Unit 10, Oahu—Lowland Wet—Unit 11, Oahu—Lowland Wet—Unit 12, Oahu—Lowland Wet—Unit 13, Oahu—Lowland Wet—Unit 14, Oahu—Lowland Wet—Unit 15, and Oahu—Lowland Wet—Unit 16, the physical and biological features of critical habitat are:

(A) Elevation: Less than 3,300 ft (1,000 m).

(B) Annual precipitation: Greater than 75 in (190 cm).

(C) Substrate: Clays; ashbeds; deep, well-drained soils; lowland bogs.

(D) Canopy: *Antidesma*, *Metrosideros*, *Myrsine*, *Pisonia*, *Psychotria*.

(E) Subcanopy: *Cibotium*, *Claoxylon*, *Kadua*, *Melicope*.

(F) Understory: *Alyxia*, *Cyrtandra*, *Dicranopteris*, *Diplazium*, *Machaerina*, *Microlepia*.

*Melicope makahae* (ALANI)

Oahu—Lowland Mesic—Unit 1, Oahu—Lowland Mesic—Unit 2, Oahu—Lowland Mesic—Unit 3, Oahu—Dry Cliff—Unit 1, Oahu—Dry Cliff—Unit 2, Oahu—Dry Cliff—Unit 3, Oahu—Dry Cliff—Unit 4, Oahu—Dry Cliff—Unit 6, Oahu—Dry Cliff—Unit 7a, Oahu—Dry Cliff—Unit 7b, and Oahu—Dry Cliff—Unit 8, identified in the legal descriptions in paragraph (i) of this section, constitute critical habitat for *Melicope makahae* on Oahu.

(i) In units Oahu—Lowland Mesic—Unit 1, Oahu—Lowland Mesic—Unit 2, and Oahu—Lowland Mesic—Unit 3, the physical and biological features of critical habitat are:

(A) Elevation: Less than 3,300 ft (1,000 m).

(B) Annual precipitation: 50 to 75 in (130 to 190 cm).

(C) Substrate: Shallow soils, little to no herbaceous layer.

(D) Canopy: *Acacia*, *Diospyros*, *Metrosideros*, *Myrsine*, *Pouteria*, *Santalum*.

(E) Subcanopy: *Dodonaea*, *Freycinetia*, *Leptecophylla*, *Melanthera*, *Osteomeles*, *Pleomele*, *Psydrax*.

(F) Understory: *Carex*, *Dicranopteris*, *Diplazium*, *Elaphoglossum*, *Peperomia*.

(ii) In units Oahu—Dry Cliff—Unit 1, Oahu—Dry Cliff—Unit 2, Oahu—Dry Cliff—Unit 3, Oahu—Dry Cliff—Unit 4, Oahu—Dry Cliff—Unit 6, Oahu—Dry Cliff—Unit 7a, Oahu—Dry Cliff—Unit 7b, and Oahu—Dry Cliff—Unit 8, the physical and biological features of critical habitat are:

(A) Elevation: Unrestricted.

(B) Annual precipitation: Less than 75 in (190 cm).

(C) Substrate: Greater than 65 degree slope, rocky talus.

(D) Canopy: None.

(E) Subcanopy: *Antidesma*, *Chamaesyce*, *Diospyros*, *Dodonaea*.

(F) Understory: *Bidens*, *Eragrostis*, *Melanthera*, *Schiedea*.

*Melicope pallida* (ALANI)

Oahu—Lowland Mesic—Unit 1, Oahu—Lowland Mesic—Unit 2, and Oahu—Lowland Mesic—Unit 3, identified in the legal descriptions in paragraph (i) of this section, constitute critical habitat for *Melicope pallida* on Oahu. Within these units, the physical and biological features of critical habitat are:

(i) Elevation: Less than 3,300 ft (1,000 m).

(ii) Annual precipitation: 50 to 75 in (130 to 190 cm).

(iii) Substrate: Shallow soils, little to no herbaceous layer.

(iv) Canopy: *Acacia*, *Diospyros*, *Metrosideros*, *Myrsine*, *Pouteria*, *Santalum*.

(v) Subcanopy: *Dodonaea*, *Freycinetia*, *Leptecophylla*, *Melanthera*, *Osteomeles*, *Pleomele*, *Psydrax*.

(vi) Understory: *Carex*, *Dicranopteris*, *Diplazium*, *Elaphoglossum*, *Peperomia*.

*Melicope saint-johnii* (ALANI)

Oahu—Lowland Mesic—Unit 1, Oahu—Lowland Mesic—Unit 2, Oahu—Lowland Mesic—Unit 3, Oahu—Lowland Mesic—Unit 4, Oahu—Lowland Mesic—Unit 5, Oahu—Lowland Mesic—Unit 6, Oahu—Lowland Mesic—Unit 7, Oahu—Dry Cliff—Unit 1, Oahu—Dry Cliff—Unit 2, Oahu—Dry Cliff—Unit 3, Oahu—Dry Cliff—Unit 4, Oahu—Dry Cliff—Unit 6, Oahu—Dry Cliff—Unit 7a, Oahu—Dry Cliff—Unit 7b, and Oahu—Dry Cliff—Unit 8, identified in the legal descriptions in paragraph (i) of this section, constitute critical habitat for *Melicope saint-johnii* on Oahu.

(i) In units Oahu—Lowland Mesic—Unit 1, Oahu—Lowland Mesic—Unit 2, Oahu—Lowland Mesic—Unit 3, Oahu—Lowland Mesic—Unit 4, Oahu—Lowland Mesic—Unit 5, Oahu—Lowland Mesic—Unit 6, and Oahu—Lowland Mesic—Unit 7, the physical and biological features of critical habitat are:

(A) Elevation: Less than 3,300 ft (1,000 m).

(B) Annual precipitation: 50 to 75 in (130 to 190 cm).

(C) Substrate: Shallow soils, little to no herbaceous layer.

(D) Canopy: *Acacia*, *Diospyros*, *Metrosideros*, *Myrsine*, *Pouteria*, *Santalum*.

(E) Subcanopy: *Dodonaea*, *Freycinetia*, *Leptecophylla*, *Melanthera*, *Osteomeles*, *Pleomele*, *Psydrax*.

(F) Understory: *Carex*, *Dicranopteris*, *Diplazium*, *Elaphoglossum*, *Peperomia*.

(ii) In units Oahu—Dry Cliff—Unit 1, Oahu—Dry Cliff—Unit 2, Oahu—Dry Cliff—Unit 3, Oahu—Dry Cliff—Unit 4, Oahu—Dry Cliff—Unit 6, Oahu—Dry Cliff—Unit 7a, Oahu—Dry Cliff—Unit 7b, and Oahu—Dry Cliff—Unit 8, the physical and biological features of critical habitat are:

(A) Elevation: Unrestricted.

(B) Annual precipitation: Less than 75 in (190 cm).

(C) Substrate: Greater than 65 degree slope, rocky talus.

(D) Canopy: None.

(E) Subcanopy: *Antidesma*, *Chamaesyce*, *Diospyros*, *Dodonaea*.

(F) Understory: *Bidens*, *Eragrostis*, *Melanthera*, *Schiedea*.

*Platydesma cornuta* var. *cornuta* (NCN)

Oahu—Lowland Wet—Unit 6, Oahu—Lowland Wet—Unit 7, Oahu—Lowland Wet—Unit 8, Oahu—Lowland Wet—Unit 9, Oahu—Lowland Wet—Unit 10, Oahu—Lowland Wet—Unit 11, Oahu—Lowland Wet—Unit 12, Oahu—Lowland Wet—Unit 13, Oahu—Lowland Wet—Unit 14, Oahu—Lowland Wet—Unit 15, and Oahu—Lowland Wet—Unit 16, identified in the legal descriptions in paragraph (i) of this section, constitute critical habitat for *Platydesma cornuta* var. *cornuta* on Oahu. Within these units, the physical and biological features of critical habitat are:

(i) Elevation: Less than 3,300 ft (1,000 m).

(ii) Annual precipitation: Greater than 75 in (190 cm).

(iii) Substrate: Clays; ashbeds; deep, well-drained soils; lowland bogs.

(iv) Canopy: *Antidesma*, *Metrosideros*, *Myrsine*, *Pisonia*, *Psychotria*.

(v) Subcanopy: *Cibotium*, *Claoxylon*, *Kadua*, *Melicope*.

(vi) Understory: *Alyxia*, *Cyrtandra*, *Dicranopteris*, *Diplazium*, *Machaerina*, *Microlepia*.

*Platydesma cornuta* var. *decurrens* (NCN)

Oahu—Lowland Mesic—Unit 1, Oahu—Lowland Mesic—Unit 2, Oahu—Lowland Mesic—Unit 3, Oahu—Dry Cliff—Unit 1, Oahu—Dry Cliff—Unit 2, Oahu—Dry Cliff—Unit 3, Oahu—Dry Cliff—Unit 4, Oahu—Dry Cliff—Unit 6, Oahu—Dry Cliff—Unit 7a, Oahu—Dry Cliff—Unit 7b, and Oahu—Dry Cliff—Unit 8, identified in the legal descriptions in paragraph (i) of this section, constitute critical habitat for *Platydesma cornuta* var. *decurrens* on Oahu.

(i) In units Oahu—Lowland Mesic—Unit 1, Oahu—Lowland Mesic—Unit 2, and Oahu—Lowland Mesic—Unit 3, the physical and biological features of critical habitat are:

(A) Elevation: Less than 3,300 ft (1,000 m).

(B) Annual precipitation: 50 to 75 in (130 to 190 cm).

(C) Substrate: Shallow soils, little to no herbaceous layer.

(D) Canopy: *Acacia*, *Diospyros*, *Metrosideros*, *Myrsine*, *Pouteria*, *Santalum*.

(E) Subcanopy: *Dodonaea*, *Freycinetia*, *Leptecophylla*, *Melanthera*, *Osteomeles*, *Pleomele*, *Psydrax*.

(F) Understory: *Carex*, *Dicranopteris*, *Diplazium*, *Elaphoglossum*, *Peperomia*.

(ii) In units Oahu—Dry Cliff—Unit 1, Oahu—Dry Cliff—Unit 2, Oahu—Dry Cliff—Unit 3, Oahu—Dry Cliff—Unit 4,

Oahu—Dry Cliff—Unit 6, Oahu—Dry Cliff—Unit 7a, Oahu—Dry Cliff—Unit 7b, and Oahu—Dry Cliff—Unit 8, the physical and biological features of critical habitat are:

(A) Elevation: Unrestricted.

(B) Annual precipitation: Less than 75 in (190 cm).

(C) Substrate: Greater than 65 degree slope, rocky talus.

(D) Canopy: None.

(E) Subcanopy: *Antidesma*, *Chamaesyce*, *Diospyros*, *Dodonaea*.

(F) Understory: *Bidens*, *Eragrostis*, *Melanthera*, *Schiedea*.

*Zanthoxylum oahuense* (AE)

Oahu—Lowland Wet—Unit 6, Oahu—Lowland Wet—Unit 7, Oahu—Lowland Wet—Unit 8, Oahu—Lowland Wet—Unit 9, Oahu—Lowland Wet—Unit 10, Oahu—Lowland Wet—Unit 11, Oahu—Lowland Wet—Unit 12, Oahu—Lowland Wet—Unit 13, Oahu—Lowland Wet—Unit 14, Oahu—Lowland Wet—Unit 15, and Oahu—Lowland Wet—Unit 16, identified in the legal descriptions in paragraph (i) of this section, constitute critical habitat for *Zanthoxylum oahuense* on Oahu. Within these units, the physical and biological features of critical habitat are:

(i) Elevation: Less than 3,300 ft (1,000 m).

(ii) Annual precipitation: Greater than 75 in (190 cm).

(iii) Substrate: Clays; ashbeds; deep, well-drained soils; lowland bogs.

(iv) Canopy: *Antidesma*, *Metrosideros*, *Myrsine*, *Pisonia*, *Psychotria*.

(v) Subcanopy: *Cibotium*, *Claoxylon*, *Kadua*, *Melicope*.

(vi) Understory: *Alyxia*, *Cyrtandra*, *Dicranopteris*, *Diplazium*, *Machaerina*, *Microlepia*.

## FAMILY SAPINDACEAE

*Alectryon macrococcus* (MAHOE)

Oahu—Lowland Mesic—Unit 1, Oahu—Lowland Mesic—Unit 2, Oahu—Lowland Mesic—Unit 3, Oahu—Lowland Mesic—Unit 4, Oahu—Lowland Mesic—Unit 5, Oahu—Lowland Mesic—Unit 6, Oahu—Lowland Mesic—Unit 7, Oahu—Montane Wet—Unit 1, Oahu—Dry Cliff—Unit 1, Oahu—Dry Cliff—Unit 2, Oahu—Dry Cliff—Unit 3, Oahu—Dry Cliff—Unit 4, Oahu—Dry Cliff—Unit 6, Oahu—Dry Cliff—Unit 7a, Oahu—Dry Cliff—Unit 7b, and Oahu—Dry Cliff—Unit 8, identified in the legal descriptions in paragraph (i) of this section, constitute critical habitat for *Alectryon macrococcus* var. *macrococcus* on Oahu.

(i) In units Oahu—Lowland Mesic—Unit 1, Oahu—Lowland Mesic—Unit 2,

Oahu—Lowland Mesic—Unit 3, Oahu—Lowland Mesic—Unit 4, Oahu—Lowland Mesic—Unit 5, Oahu—Lowland Mesic—Unit 6, and Oahu—Lowland Mesic—Unit 7, the physical and biological features of critical habitat are:

(A) Elevation: Less than 3,300 ft (1,000 m).

(B) Annual precipitation: 50 to 75 in (130 to 190 cm).

(C) Substrate: Shallow soils, little to no herbaceous layer.

(D) Canopy: *Acacia*, *Diospyros*, *Metrosideros*, *Myrsine*, *Pouteria*, *Santalum*.

(E) Subcanopy: *Dodonaea*, *Freycinetia*, *Leptecophylla*, *Melanthera*, *Osteomeles*, *Pleomele*, *Psydrax*.

(F) Understory: *Carex*, *Dicranopteris*, *Diplazium*, *Elaphoglossum*, *Peperomia*.

(ii) In unit Oahu—Montane Wet—Unit 1, the physical and biological features of critical habitat are:

(A) Elevation: 3,300 to 6,600 ft (1,000 to 2,000 m).

(B) Annual precipitation: Greater than 75 in (190 cm).

(C) Substrate: Well-developed soils, montane bogs.

(D) Canopy: *Acacia*, *Charpentiera*, *Cheirodendron*, *Metrosideros*.

(E) Subcanopy: *Broussaia*, *Cibotium*, *Eurya*, *Ilex*, *Myrsine*.

(F) Understory: Ferns, *Carex*, *Coprosma*, *Leptecophylla*, *Oreobolus*, *Rhynchospora*, *Vaccinium*.

(iii) In units Oahu—Dry Cliff—Unit 1, Oahu—Dry Cliff—Unit 2, Oahu—Dry Cliff—Unit 3, Oahu—Dry Cliff—Unit 4, Oahu—Dry Cliff—Unit 6, Oahu—Dry Cliff—Unit 7a, Oahu—Dry Cliff—Unit 7b, and Oahu—Dry Cliff—Unit 8, the physical and biological features of critical habitat are:

(A) Elevation: Unrestricted.

(B) Annual precipitation: Less than 75 in (190 cm).

(C) Substrate: Greater than 65 degree slope, rocky talus.

(D) Canopy: None.

(E) Subcanopy: *Antidesma*, *Chamaesyce*, *Diospyros*, *Dodonaea*.

(F) Understory: *Bidens*, *Eragrostis*, *Melanthera*, *Schiedea*.

## FAMILY SOLANACEAE

*Solanum sandwicense* (POPOLO, AIAKEAKUA)

Oahu—Lowland Mesic—Unit 1, Oahu—Lowland Mesic—Unit 2, Oahu—Lowland Mesic—Unit 3, Oahu—Lowland Mesic—Unit 4, Oahu—Lowland Mesic—Unit 5, Oahu—Lowland Mesic—Unit 6, and Oahu—Lowland Mesic—Unit 7, identified in the legal descriptions in paragraph (i) of this section, constitute critical habitat

for *Solanum sandwicense* on Oahu. Within these units, the physical and biological features of critical habitat are:

(i) Elevation: Less than 3,300 ft (1,000 m).

(ii) Annual precipitation: 50 to 75 in (130 to 190 cm).

(iii) Substrate: Shallow soils, little to no herbaceous layer.

(iv) Canopy: *Acacia*, *Diospyros*, *Metrosideros*, *Myrsine*, *Pouteria*, *Santalum*.

(v) Subcanopy: *Dodonaea*, *Freycinetia*, *Leptecophylla*, *Melanthera*, *Osteomeles*, *Pleomele*, *Psydrax*.

(vi) Understory: *Carex*, *Dicranopteris*, *Diplazium*, *Elaphoglossum*, *Peperomia*.

#### FAMILY URTICACEAE

*Neraudia angulata* (NCN)

Oahu—Lowland Dry—Unit 1, Oahu—Lowland Dry—Unit 2, Oahu—Lowland Dry—Unit 8, Oahu—Lowland Dry—Unit 9, Oahu—Lowland Dry—Unit 10, Oahu—Lowland Dry—Unit 11, Oahu—Lowland Mesic—Unit 1, Oahu—Lowland Mesic—Unit 2, Oahu—Lowland Mesic—Unit 3, Oahu—Dry Cliff—Unit 1, Oahu—Dry Cliff—Unit 2, Oahu—Dry Cliff—Unit 3, Oahu—Dry Cliff—Unit 4, Oahu—Dry Cliff—Unit 6, Oahu—Dry Cliff—Unit 7a, Oahu—Dry Cliff—Unit 7b, and Oahu—Dry Cliff—Unit 8, identified in the legal descriptions in paragraph (i) of this section, constitute critical habitat for *Neraudia angulata* on Oahu.

(i) In units Oahu—Lowland Dry—Unit 1, Oahu—Lowland Dry—Unit 2, Oahu—Lowland Dry—Unit 8, Oahu—Lowland Dry—Unit 9, Oahu—Lowland Dry—Unit 10, and Oahu—Lowland Dry—Unit 11, the physical and biological features of critical habitat for *Neraudia angulata* var. *angulata* and *Neraudia angulata* var. *dentata* are:

(A) Elevation: Less than 3,300 ft (1,000 m).

(B) Annual precipitation: Less than 50 in (130 cm).

(C) Substrate: Weathered silty loams to stony clay, rocky ledges, little-weathered lava.

(D) Canopy: *Diospyros*, *Myoporum*, *Pleomele*, *Santalum*, *Sapindus*.

(E) Subcanopy: *Chamaesyce*, *Dodonaea*, *Leptecophylla*, *Osteomeles*, *Psydrax*, *Scaevola*, *Wikstroemia*.

(F) Understory: *Alyxia*, *Artemisia*, *Bidens*, *Chenopodium*, *Nephrolepis*, *Peperomia*, *Sicyos*.

(ii) In units Oahu—Lowland Mesic—Unit 1, Oahu—Lowland Mesic—Unit 2, and Oahu—Lowland Mesic—Unit 3, the physical and biological features of critical habitat for *Neraudia angulata* var. *angulata* and *Neraudia angulata* var. *dentata* are:

(A) Elevation: Less than 3,300 ft (1,000 m).

(B) Annual precipitation: 50 to 75 in (130 to 190 cm).

(C) Substrate: Shallow soils, little to no herbaceous layer.

(D) Canopy: *Acacia*, *Diospyros*, *Metrosideros*, *Myrsine*, *Pouteria*, *Santalum*.

(E) Subcanopy: *Dodonaea*, *Freycinetia*, *Leptecophylla*, *Melanthera*, *Osteomeles*, *Pleomele*, *Psydrax*.

(F) Understory: *Carex*, *Dicranopteris*, *Diplazium*, *Elaphoglossum*, *Peperomia*.

(iii) In units Oahu—Dry Cliff—Unit 1, Oahu—Dry Cliff—Unit 2, Oahu—Dry Cliff—Unit 3, Oahu—Dry Cliff—Unit 4, Oahu—Dry Cliff—Unit 6, Oahu—Dry Cliff—Unit 7a, Oahu—Dry Cliff—Unit 7b, and Oahu—Dry Cliff—Unit 8, the physical and biological features of critical habitat for *Neraudia angulata* var. *angulata* and *Neraudia angulata* var. *dentata* are:

(A) Elevation: Unrestricted.

(B) Annual precipitation: Less than 75 in (190 cm).

(C) Substrate: Greater than 65 degree slope, rocky talus.

(D) Canopy: None.

(E) Subcanopy: *Antidesma*, *Chamaesyce*, *Diospyros*, *Dodonaea*.

(F) Understory: *Bidens*, *Eragrostis*, *Melanthera*, *Schiedea*.

*Urera kaalae* (OPUHE)

Oahu—Lowland Mesic—Unit 1, Oahu—Lowland Mesic—Unit 2, Oahu—Lowland Mesic—Unit 3, Oahu—Lowland Wet—Unit 1, Oahu—Lowland Wet—Unit 2, Oahu—Lowland Wet—Unit 3, Oahu—Lowland Wet—Unit 4, and Oahu—Lowland Wet—Unit 5, identified in the legal descriptions in paragraph (i) of this section, constitute critical habitat for *Urera kaalae* on Oahu.

(i) In units Oahu—Lowland Mesic—Unit 1, Oahu—Lowland Mesic—Unit 2, and Oahu—Lowland Mesic—Unit 3, the physical and biological features of critical habitat are:

(A) Elevation: Less than 3,300 ft (1,000 m).

(B) Annual precipitation: 50 to 75 in (130 to 190 cm).

(C) Substrate: Shallow soils, little to no herbaceous layer.

(D) Canopy: *Acacia*, *Diospyros*, *Metrosideros*, *Myrsine*, *Pouteria*, *Santalum*.

(E) Subcanopy: *Dodonaea*, *Freycinetia*, *Leptecophylla*, *Melanthera*, *Osteomeles*, *Pleomele*, *Psydrax*.

(F) Understory: *Carex*, *Dicranopteris*, *Diplazium*, *Elaphoglossum*, *Peperomia*.

(ii) In units Oahu—Lowland Wet—Unit 1, Oahu—Lowland Wet—Unit 2, Oahu—Lowland Wet—Unit 3, Oahu—

Lowland Wet—Unit 4, and Oahu—Lowland Wet—Unit 5, the physical and biological features of critical habitat are:

(A) Elevation: Less than 3,300 ft (1,000 m).

(B) Annual precipitation: Greater than 75 in (190 cm).

(C) Substrate: Clays; ashbeds; deep, well-drained soils; lowland bogs.

(D) Canopy: *Antidesma*, *Metrosideros*, *Myrsine*, *Pisonia*, *Psychotria*.

(E) Subcanopy: *Cibotium*, *Claoxylon*, *Kadua*, *Melicope*.

(F) Understory: *Alyxia*, *Cyrtandra*, *Dicranopteris*, *Diplazium*, *Machaerina*, *Microlepia*.

#### FAMILY VIOLACEAE

*Isodendrion laurifolium* (AUPAKA)

Oahu—Lowland Mesic—Unit 1, Oahu—Lowland Mesic—Unit 2, Oahu—Lowland Mesic—Unit 3, Oahu—Lowland Mesic—Unit 4, Oahu—Lowland Mesic—Unit 5, Oahu—Lowland Mesic—Unit 6, Oahu—Lowland Mesic—Unit 7, Oahu—Dry Cliff—Unit 1, Oahu—Dry Cliff—Unit 2, Oahu—Dry Cliff—Unit 3, Oahu—Dry Cliff—Unit 4, Oahu—Dry Cliff—Unit 6, Oahu—Dry Cliff—Unit 7a, Oahu—Dry Cliff—Unit 7b, and Oahu—Dry Cliff—Unit 8, identified in the legal descriptions in paragraph (i) of this section, constitute critical habitat for *Isodendrion laurifolium* on Oahu.

(i) In units Oahu—Lowland Mesic—Unit 1, Oahu—Lowland Mesic—Unit 2, Oahu—Lowland Mesic—Unit 3, Oahu—Lowland Mesic—Unit 4, Oahu—Lowland Mesic—Unit 5, Oahu—Lowland Mesic—Unit 6, and Oahu—Lowland Mesic—Unit 7, the physical and biological features of critical habitat are:

(A) Elevation: Less than 3,300 ft (1,000 m).

(B) Annual precipitation: 50 to 75 in (130 to 190 cm).

(C) Substrate: Shallow soils, little to no herbaceous layer.

(D) Canopy: *Acacia*, *Diospyros*, *Metrosideros*, *Myrsine*, *Pouteria*, *Santalum*.

(E) Subcanopy: *Dodonaea*, *Freycinetia*, *Leptecophylla*, *Melanthera*, *Osteomeles*, *Pleomele*, *Psydrax*.

(F) Understory: *Carex*, *Dicranopteris*, *Diplazium*, *Elaphoglossum*, *Peperomia*.

(ii) In units Oahu—Dry Cliff—Unit 1, Oahu—Dry Cliff—Unit 2, Oahu—Dry Cliff—Unit 3, Oahu—Dry Cliff—Unit 4, Oahu—Dry Cliff—Unit 6, Oahu—Dry Cliff—Unit 7a, Oahu—Dry Cliff—Unit 7b, and Oahu—Dry Cliff—Unit 8, the physical and biological features of critical habitat are:

(A) Elevation: Unrestricted.

(B) Annual precipitation: Less than 75 in (190 cm).

(C) Substrate: Greater than 65 degree slope, rocky talus.

(D) Canopy: None.

(E) Subcanopy: *Antidesma*, *Chamaesyce*, *Diospyros*, *Dodonaea*.

(F) Understory: *Bidens*, *Eragrostis*, *Melanthera*, *Schiedea*.

*Isodendron longifolium* (AUPAKA)

Oahu—Lowland Mesic—Unit 1, Oahu—Lowland Mesic—Unit 2, Oahu—Lowland Mesic—Unit 3, Oahu—Lowland Mesic—Unit 4, Oahu—Lowland Mesic—Unit 5, Oahu—Lowland Mesic—Unit 6, Oahu—Lowland Mesic—Unit 7, Oahu—Lowland Mesic—Unit 8, Oahu—Lowland Mesic—Unit 9, Oahu—Lowland Mesic—Unit 10, Oahu—Lowland Mesic—Unit 11, Oahu—Lowland Mesic—Unit 12, Oahu—Lowland Mesic—Unit 13, Oahu—Lowland Mesic—Unit 14, Oahu—Lowland Mesic—Unit 15, and Oahu—Lowland Mesic—Unit 16, identified in the legal descriptions in paragraph (i) of this section, constitute critical habitat for *Isodendron longifolium* on Oahu.

(i) In units Oahu—Lowland Mesic—Unit 1, Oahu—Lowland Mesic—Unit 2, Oahu—Lowland Mesic—Unit 3, Oahu—Lowland Mesic—Unit 4, Oahu—Lowland Mesic—Unit 5, Oahu—Lowland Mesic—Unit 6, and Oahu—Lowland Mesic—Unit 7, the physical and biological features of critical habitat are:

(A) Elevation: Less than 3,300 ft (1,000 m).

(B) Annual precipitation: 50 to 75 in (130 to 190 cm).

(C) Substrate: Shallow soils, little to no herbaceous layer.

(D) Canopy: *Acacia*, *Diospyros*, *Metrosideros*, *Myrsine*, *Pouteria*, *Santalum*.

(E) Subcanopy: *Dodonaea*, *Freycinetia*, *Leptecophylla*, *Melanthera*, *Osteomeles*, *Pleomele*, *Psychrax*.

(F) Understory: *Carex*, *Dicranopteris*, *Diplazium*, *Elaphoglossum*, *Peperomia*.

(ii) In units Oahu—Lowland Wet—Unit 1, Oahu—Lowland Wet—Unit 2, Oahu—Lowland Wet—Unit 3, Oahu—Lowland Wet—Unit 4, Oahu—Lowland Wet—Unit 5, Oahu—Lowland Wet—Unit 6, Oahu—Lowland Wet—Unit 7, Oahu—Lowland Wet—Unit 8, Oahu—Lowland Wet—Unit 9, Oahu—Lowland Wet—Unit 10, Oahu—Lowland Wet—Unit 11, Oahu—Lowland Wet—Unit 12, Oahu—Lowland Wet—Unit 13, Oahu—Lowland Wet—Unit 14, Oahu—Lowland Wet—Unit 15, and Oahu—

Lowland Wet—Unit 16, the physical and biological features of critical habitat are:

(A) Elevation: Less than 3,300 ft (1,000 m).

(B) Annual precipitation: Greater than 75 in (190 cm).

(C) Substrate: Clays; ashbeds; deep, well-drained soils; lowland bogs.

(D) Canopy: *Antidesma*, *Metrosideros*, *Myrsine*, *Pisonia*, *Psychotria*.

(E) Subcanopy: *Cibotium*, *Claoxylon*, *Kadua*, *Melicope*.

(F) Understory: *Alyxia*, *Cyrtandra*, *Dicranopteris*, *Diplazium*, *Machaerina*, *Microlepia*.

*Isodendron pyriforme* (WAHINE NOHO KULA)

Oahu—Lowland Dry—Unit 1, Oahu—Lowland Dry—Unit 2, Oahu—Lowland Dry—Unit 8, Oahu—Lowland Dry—Unit 9, Oahu—Lowland Dry—Unit 10, Oahu—Lowland Dry—Unit 11, Oahu—Dry Cliff—Unit 1, Oahu—Dry Cliff—Unit 2, Oahu—Dry Cliff—Unit 3, Oahu—Dry Cliff—Unit 4, Oahu—Dry Cliff—Unit 6, Oahu—Dry Cliff—Unit 7a, Oahu—Dry Cliff—Unit 7b, and Oahu—Dry Cliff—Unit 8, identified in the legal descriptions in paragraph (i) of this section, constitute critical habitat for *Isodendron pyriforme* on Oahu.

(i) In units Oahu—Lowland Dry—Unit 1, Oahu—Lowland Dry—Unit 2, Oahu—Lowland Dry—Unit 8, Oahu—Lowland Dry—Unit 9, Oahu—Lowland Dry—Unit 10, and Oahu—Lowland Dry—Unit 11, the physical and biological features of critical habitat are:

(A) Elevation: Less than 3,300 ft (1,000 m).

(B) Annual precipitation: Less than 50 in (130 cm).

(C) Substrate: Weathered silty loams to stony clay, rocky ledges, little-weathered lava.

(D) Canopy: *Diospyros*, *Myoporum*, *Pleomele*, *Santalum*, *Sapindus*.

(E) Subcanopy: *Chamaesyce*, *Dodonaea*, *Leptecophylla*, *Osteomeles*, *Psychrax*, *Scaevola*, *Wikstroemia*.

(F) Understory: *Alyxia*, *Artemisia*, *Bidens*, *Chenopodium*, *Nephrolepis*, *Peperomia*, *Sicyos*.

(ii) In units Oahu—Dry Cliff—Unit 1, Oahu—Dry Cliff—Unit 2, Oahu—Dry Cliff—Unit 3, Oahu—Dry Cliff—Unit 4, Oahu—Dry Cliff—Unit 6, Oahu—Dry Cliff—Unit 7a, Oahu—Dry Cliff—Unit 7b, and Oahu—Dry Cliff—Unit 8, the physical and biological features of critical habitat are:

(A) Elevation: Unrestricted.

(B) Annual precipitation: Less than 75 in (190 cm).

(C) Substrate: Greater than 65 degree slope, rocky talus.

(D) Canopy: None.

(E) Subcanopy: *Antidesma*, *Chamaesyce*, *Diospyros*, *Dodonaea*.

(F) Understory: *Bidens*, *Eragrostis*, *Melanthera*, *Schiedea*.

*Viola chamissoniana* ssp. *chamissoniana* (PAMAKANI)

Oahu—Lowland Mesic—Unit 1, Oahu—Lowland Mesic—Unit 2, Oahu—Lowland Mesic—Unit 3, Oahu—Dry Cliff—Unit 1, Oahu—Dry Cliff—Unit 2, Oahu—Dry Cliff—Unit 3, Oahu—Dry Cliff—Unit 4, Oahu—Dry Cliff—Unit 6, Oahu—Dry Cliff—Unit 7a, Oahu—Dry Cliff—Unit 7b, and Oahu—Dry Cliff—Unit 8, identified in the legal descriptions in paragraph (i) of this section, constitute critical habitat for *Viola chamissoniana* ssp. *chamissoniana* on Oahu.

(i) In units Oahu—Lowland Mesic—Unit 1, Oahu—Lowland Mesic—Unit 2, and Oahu—Lowland Mesic—Unit 3, the physical and biological features of critical habitat are:

(A) Elevation: Less than 3,300 ft (1,000 m).

(B) Annual precipitation: 50 to 75 in (130 to 190 cm).

(C) Substrate: Shallow soils, little to no herbaceous layer.

(D) Canopy: *Acacia*, *Diospyros*, *Metrosideros*, *Myrsine*, *Pouteria*, *Santalum*.

(E) Subcanopy: *Dodonaea*, *Freycinetia*, *Leptecophylla*, *Melanthera*, *Osteomeles*, *Pleomele*, *Psychrax*.

(F) Understory: *Carex*, *Dicranopteris*, *Diplazium*, *Elaphoglossum*, *Peperomia*.

(ii) In units Oahu—Dry Cliff—Unit 1, Oahu—Dry Cliff—Unit 2, Oahu—Dry Cliff—Unit 3, Oahu—Dry Cliff—Unit 4, Oahu—Dry Cliff—Unit 6, Oahu—Dry Cliff—Unit 7a, Oahu—Dry Cliff—Unit 7b, and Oahu—Dry Cliff—Unit 8, the physical and biological features of critical habitat are:

(A) Elevation: Unrestricted.

(B) Annual precipitation: Less than 75 in (190 cm).

(C) Substrate: Greater than 65 degree slope, rocky talus.

(D) Canopy: None.

(E) Subcanopy: *Antidesma*, *Chamaesyce*, *Diospyros*, *Dodonaea*.

(F) Understory: *Bidens*, *Eragrostis*, *Melanthera*, *Schiedea*.

*Viola oahuensis* (NCN)

Oahu—Lowland Wet—Unit 6, Oahu—Lowland Wet—Unit 7, Oahu—Lowland Wet—Unit 8, Oahu—Lowland Wet—Unit 9, Oahu—Lowland Wet—Unit 10, Oahu—Lowland Wet—Unit 11, Oahu—Lowland Wet—Unit 12, Oahu—Lowland Wet—Unit 13, Oahu—Lowland Wet—Unit 14, Oahu—Lowland Wet—Unit 15, Oahu—Lowland Wet—Unit 16, Oahu—Wet

Cliff—Unit 6, Oahu—Wet Cliff—Unit 7, and Oahu—Wet Cliff—Unit 8, identified in the legal descriptions in paragraph (i) of this section, constitute critical habitat for *Viola oahuensis* on Oahu.

(i) In units Oahu—Lowland Wet—Unit 6, Oahu—Lowland Wet—Unit 7, Oahu—Lowland Wet—Unit 8, Oahu—Lowland Wet—Unit 9, Oahu—Lowland Wet—Unit 10, Oahu—Lowland Wet—Unit 11, Oahu—Lowland Wet—Unit 12, Oahu—Lowland Wet—Unit 13, Oahu—Lowland Wet—Unit 14, Oahu—Lowland Wet—Unit 15, and Oahu—Lowland Wet—Unit 16, the physical and biological features of critical habitat are:

(A) Elevation: Less than 3,300 ft (1,000 m).

(B) Annual precipitation: Greater than 75 in (190 cm).

(C) Substrate: Clays; ashbeds; deep, well-drained soils; lowland bogs.

(D) Canopy: *Antidesma*, *Metrosideros*, *Myrsine*, *Pisonia*, *Psychotria*.

(E) Subcanopy: *Cibotium*, *Claoxylon*, *Kadua*, *Melicope*.

(F) Understory: *Alyxia*, *Cyrtandra*, *Dicranopteris*, *Diplazium*, *Machaerina*, *Microlepia*.

(ii) In units Oahu—Wet Cliff—Unit 6, Oahu—Wet Cliff—Unit 7, and Oahu—Wet Cliff—Unit 8, the physical and biological features of critical habitat are:

(A) Elevation: Unrestricted.

(B) Annual precipitation: Greater than 75 in (190 cm).

(C) Substrate: Greater than 65 degree slope, shallow soils, weathered lava.

(D) Canopy: None.

(E) Subcanopy: *Broussaisia*, *Cheirodendron*, *Leptecophylla*, *Metrosideros*.

(F) Understory: Bryophytes, Ferns, *Coprosma*, *Dubautia*, *Kadua*, *Peperomia*.

#### FAMILY VISCACEAE

##### *Korthalsella degeneri* (HULUMOA)

Oahu—Dry Cliff—Unit 1, Oahu—Dry Cliff—Unit 2, Oahu—Dry Cliff—Unit 3, Oahu—Dry Cliff—Unit 4, Oahu—Dry Cliff—Unit 6, Oahu—Dry Cliff—Unit 7a, Oahu—Dry Cliff—Unit 7b, and Oahu—Dry Cliff—Unit 8, identified in the legal descriptions in paragraph (i) of this section, constitute critical habitat for *Korthalsella degeneri* on Oahu. Within these units, the physical and biological features of critical habitat are:

(i) Elevation: Unrestricted.

(ii) Annual precipitation: Less than 75 in (190 cm).

(iii) Substrate: Greater than 65 degree slope, rocky talus.

(iv) Canopy: None.

(v) Subcanopy: *Antidesma*, *Chamaesyce*, *Diospyros*, *Dodonaea*.

(vi) Understory: *Bidens*, *Eragrostis*, *Melanthera*, *Schiedea*.

(vii) Host plants *Sapindus oahuensis* and *Nestigis sandwicensis*.

(2) *Ferns and allies*.

#### FAMILY ADIANTACEAE

##### *Pteris lidgatei* (NCN)

Oahu—Lowland Wet—Unit 6, Oahu—Lowland Wet—Unit 7, Oahu—Lowland Wet—Unit 8, Oahu—Lowland Wet—Unit 9, Oahu—Lowland Wet—Unit 10, Oahu—Lowland Wet—Unit 11, Oahu—Lowland Wet—Unit 12, Oahu—Lowland Wet—Unit 13, Oahu—Lowland Wet—Unit 14, Oahu—Lowland Wet—Unit 15, and Oahu—Lowland Wet—Unit 16, identified in the legal descriptions in paragraph (i) of this section, constitute critical habitat for *Pteris lidgatei* on Oahu. Within these units, the physical and biological features of critical habitat are:

(i) Elevation: Less than 3,300 ft (1,000 m).

(ii) Annual precipitation: Greater than 75 in (190 cm).

(iii) Substrate: Clays; ashbeds; deep, well-drained soils; lowland bogs.

(iv) Canopy: *Antidesma*, *Metrosideros*, *Myrsine*, *Pisonia*, *Psychotria*.

(v) Subcanopy: *Cibotium*, *Claoxylon*, *Kadua*, *Melicope*.

(vi) Understory: *Alyxia*, *Cyrtandra*, *Dicranopteris*, *Diplazium*, *Machaerina*, *Microlepia*.

#### FAMILY ASPLENIACEAE

##### *Ctenitis squamigera* (PAUOA)

Oahu—Lowland Mesic—Unit 1, Oahu—Lowland Mesic—Unit 2, Oahu—Lowland Mesic—Unit 3, Oahu—Lowland Mesic—Unit 4, Oahu—Lowland Mesic—Unit 5, Oahu—Lowland Mesic—Unit 6, and Oahu—Lowland Mesic—Unit 7, identified in the legal descriptions in paragraph (i) of this section, constitute critical habitat for *Ctenitis squamigera* on Oahu. Within these units, the physical and biological features of critical habitat are:

(i) Elevation: Less than 3,300 ft (1,000 m).

(ii) Annual precipitation: 50 to 75 in (130 to 190 cm).

(iii) Substrate: Shallow soils, little to no herbaceous layer.

(iv) Canopy: *Acacia*, *Diospyros*, *Metrosideros*, *Myrsine*, *Pouteria*, *Santalum*.

(v) Subcanopy: *Dodonaea*, *Freycinetia*, *Leptecophylla*, *Melanthera*, *Osteomeles*, *Pleomele*, *Psydrax*.

(vi) Understory: *Carex*, *Dicranopteris*, *Diplazium*, *Elaphoglossum*, *Peperomia*.

*Diellia erecta* (ASPLENIUM—LEAVED DIELLIA)

Oahu—Lowland Mesic—Unit 4, Oahu—Lowland Mesic—Unit 5, Oahu—Lowland Mesic—Unit 6, and Oahu—Lowland Mesic—Unit 7, identified in the legal descriptions in paragraph (i) of this section, constitute critical habitat for *Diellia erecta* on Oahu. Within these units, the physical and biological features of critical habitat are:

(i) Elevation: Less than 3,300 ft (1,000 m).

(ii) Annual precipitation: 50 to 75 in (130 to 190 cm).

(iii) Substrate: Shallow soils, little to no herbaceous layer.

(iv) Canopy: *Acacia*, *Diospyros*, *Metrosideros*, *Myrsine*, *Pouteria*, *Santalum*.

(v) Subcanopy: *Dodonaea*, *Freycinetia*, *Leptecophylla*, *Melanthera*, *Osteomeles*, *Pleomele*, *Psydrax*.

(vi) Understory: *Carex*, *Dicranopteris*, *Diplazium*, *Elaphoglossum*, *Peperomia*.

##### *Diellia falcata* (NCN)

Oahu—Lowland Mesic—Unit 1, Oahu—Lowland Mesic—Unit 2, Oahu—Lowland Mesic—Unit 3, Oahu—Lowland Mesic—Unit 4, Oahu—Lowland Mesic—Unit 5, Oahu—Lowland Mesic—Unit 6, Oahu—Lowland Mesic—Unit 7, Oahu—Dry Cliff—Unit 1, Oahu—Dry Cliff—Unit 2, Oahu—Dry Cliff—Unit 3, Oahu—Dry Cliff—Unit 4, Oahu—Dry Cliff—Unit 6, Oahu—Dry Cliff—Unit 7a, Oahu—Dry Cliff—Unit 7b, and Oahu—Dry Cliff—Unit 8, identified in the legal descriptions in paragraph (i) of this section, constitute critical habitat for *Diellia falcata* on Oahu.

(i) In units Oahu—Lowland Mesic—Unit 1, Oahu—Lowland Mesic—Unit 2, Oahu—Lowland Mesic—Unit 3, Oahu—Lowland Mesic—Unit 4, Oahu—Lowland Mesic—Unit 5, Oahu—Lowland Mesic—Unit 6, and Oahu—Lowland Mesic—Unit 7, the physical and biological features of critical habitat are:

(A) Elevation: Less than 3,300 ft (1,000 m).

(B) Annual precipitation: 50 to 75 in (130 to 190 cm).

(C) Substrate: Shallow soils, little to no herbaceous layer.

(D) Canopy: *Acacia*, *Diospyros*, *Metrosideros*, *Myrsine*, *Pouteria*, *Santalum*.

(E) Subcanopy: *Dodonaea*, *Freycinetia*, *Leptecophylla*, *Melanthera*, *Osteomeles*, *Pleomele*, *Psydrax*.

(F) Understory: *Carex*, *Dicranopteris*, *Diplazium*, *Elaphoglossum*, *Peperomia*.

(ii) In units Oahu—Dry Cliff—Unit 1, Oahu—Dry Cliff—Unit 2, Oahu—Dry

Cliff—Unit 3, Oahu—Dry Cliff—Unit 4, Oahu—Dry Cliff—Unit 6, Oahu—Dry Cliff—Unit 7a, Oahu—Dry Cliff—Unit 7b, and Oahu—Dry Cliff—Unit 8, the physical and biological features of critical habitat are:

(A) Elevation: Unrestricted.

(B) Annual precipitation: Less than 75 in (190 cm).

(C) Substrate: Greater than 65 degree slope, rocky talus.

(D) Canopy: None.

(E) Subcanopy: *Antidesma*, *Chamaesyce*, *Diospyros*, *Dodonaea*.

(F) Understory: *Bidens*, *Eragrostis*, *Melanthera*, *Schiedea*.

*Diellia unisora* (NCN)

Oahu—Lowland Mesic—Unit 1, Oahu—Lowland Mesic—Unit 2, Oahu—Lowland Mesic—Unit 3, Oahu—Dry Cliff—Unit 1, Oahu—Dry Cliff—Unit 2, Oahu—Dry Cliff—Unit 3, Oahu—Dry Cliff—Unit 4, Oahu—Dry Cliff—Unit 6, Oahu—Dry Cliff—Unit 7a, Oahu—Dry Cliff—Unit 7b, and Oahu—Dry Cliff—Unit 8, identified in the legal descriptions in paragraph (i) of this section, constitute critical habitat for *Diellia unisora* on Oahu.

(i) In units Oahu—Lowland Mesic—Unit 1, Oahu—Lowland Mesic—Unit 2, and Oahu—Lowland Mesic—Unit 3, the physical and biological features of critical habitat are:

(A) Elevation: Less than 3,300 ft (1,000 m).

(B) Annual precipitation: 50 to 75 in (130 to 190 cm).

(C) Substrate: Shallow soils, little to no herbaceous layer.

(D) Canopy: *Acacia*, *Diospyros*, *Metrosideros*, *Myrsine*, *Pouteria*, *Santalum*.

(E) Subcanopy: *Dodonaea*, *Freycinetia*, *Leptecophylla*, *Melanthera*, *Osteomeles*, *Pleomele*, *Psydrax*.

(F) Understory: *Carex*, *Dicranopteris*, *Diplazium*, *Elaphoglossum*, *Peperomia*.

(ii) In units Oahu—Dry Cliff—Unit 1, Oahu—Dry Cliff—Unit 2, Oahu—Dry Cliff—Unit 3, Oahu—Dry Cliff—Unit 4, Oahu—Dry Cliff—Unit 6, Oahu—Dry Cliff—Unit 7a, Oahu—Dry Cliff—Unit 7b, and Oahu—Dry Cliff—Unit 8, the physical and biological features of critical habitat are:

(A) Elevation: Unrestricted.

(B) Annual precipitation: Less than 75 in (190 cm).

(C) Substrate: Greater than 65 degree slope, rocky talus.

(D) Canopy: None.

(E) Subcanopy: *Antidesma*, *Chamaesyce*, *Diospyros*, *Dodonaea*.

(F) Understory: *Bidens*, *Eragrostis*, *Melanthera*, *Schiedea*.

*Diplazium molokaiense* (NCN)

Oahu—Lowland Mesic—Unit 1, Oahu—Lowland Mesic—Unit 2, Oahu—Lowland Mesic—Unit 3, Oahu—Lowland Wet—Unit 1, Oahu—Lowland Wet—Unit 2, Oahu—Lowland Wet—Unit 3, Oahu—Lowland Wet—Unit 4, and Oahu—Lowland Wet—Unit 5, identified in the legal descriptions in paragraph (i) of this section, constitute critical habitat for *Diplazium molokaiense* on Oahu.

(i) In units Oahu—Lowland Mesic—Unit 1, Oahu—Lowland Mesic—Unit 2, and Oahu—Lowland Mesic—Unit 3, the physical and biological features of critical habitat are:

(A) Elevation: Less than 3,300 ft (1,000 m).

(B) Annual precipitation: 50 to 75 in (130 to 190 cm).

(C) Substrate: Shallow soils, little to no herbaceous layer.

(D) Canopy: *Acacia*, *Diospyros*, *Metrosideros*, *Myrsine*, *Pouteria*, *Santalum*.

(E) Subcanopy: *Dodonaea*, *Freycinetia*, *Leptecophylla*, *Melanthera*, *Osteomeles*, *Pleomele*, *Psydrax*.

(F) Understory: *Carex*, *Dicranopteris*, *Diplazium*, *Elaphoglossum*, *Peperomia*.

(ii) In units Oahu—Lowland Wet—Unit 1, Oahu—Lowland Wet—Unit 2, Oahu—Lowland Wet—Unit 3, Oahu—Lowland Wet—Unit 4, and Oahu—Lowland Wet—Unit 5, the physical and biological features of critical habitat are:

(A) Elevation: Less than 3,300 ft (1,000 m).

(B) Annual precipitation: Greater than 75 in (190 cm).

(C) Substrate: Clays; ashbeds; deep, well-drained soils; lowland bogs.

(D) Canopy: *Antidesma*, *Metrosideros*, *Myrsine*, *Pisonia*, *Psychotria*.

(E) Subcanopy: *Cibotium*, *Claoxylon*, *Kadua*, *Melicope*.

(F) Understory: *Alyxia*, *Cyrtandra*, *Dicranopteris*, *Diplazium*, *Machaerina*, *Microlepia*.

#### FAMILY GRAMMITIDACEAE

*Adenophorus periens* (PENDANT KIHIFERN)

Oahu—Lowland Wet—Unit 6, Oahu—Lowland Wet—Unit 7, Oahu—Lowland Wet—Unit 8, Oahu—Lowland Wet—Unit 9, Oahu—Lowland Wet—Unit 10, Oahu—Lowland Wet—Unit 11, Oahu—Lowland Wet—Unit 12, Oahu—Lowland Wet—Unit 13, Oahu—Lowland Wet—Unit 14, Oahu—Lowland Wet—Unit 15, Oahu—Lowland Wet—Unit 16, Oahu—Wet Cliff—Unit 6, Oahu—Wet Cliff—Unit 7, and Oahu—Wet Cliff—Unit 8, identified in the legal descriptions in paragraph (i) of this section, constitute critical habitat for *Adenophorus periens* on Oahu.

(i) In units Oahu—Lowland Wet—Unit 6, Oahu—Lowland Wet—Unit 7, Oahu—Lowland Wet—Unit 8, Oahu—Lowland Wet—Unit 9, Oahu—Lowland Wet—Unit 10, Oahu—Lowland Wet—Unit 11, Oahu—Lowland Wet—Unit 12, Oahu—Lowland Wet—Unit 13, Oahu—Lowland Wet—Unit 14, Oahu—Lowland Wet—Unit 15, and Oahu—Lowland Wet—Unit 16, the physical and biological features of critical habitat are:

(A) Elevation: Less than 3,300 ft (1,000 m).

(B) Annual precipitation: Greater than 75 in (190 cm).

(C) Substrate: Clays; ashbeds; deep, well-drained soils; lowland bogs.

(D) Canopy: *Antidesma*, *Metrosideros*, *Myrsine*, *Pisonia*, *Psychotria*.

(E) Subcanopy: *Cibotium*, *Claoxylon*, *Kadua*, *Melicope*.

(F) Understory: *Alyxia*, *Cyrtandra*, *Dicranopteris*, *Diplazium*, *Machaerina*, *Microlepia*.

(ii) In units Oahu—Wet Cliff—Unit 6, Oahu—Wet Cliff—Unit 7, and Oahu—Wet Cliff—Unit 8, the physical and biological features of critical habitat are:

(A) Elevation: Unrestricted.

(B) Annual precipitation: Greater than 75 in (190 cm).

(C) Substrate: Greater than 65 degree slope, shallow soils, weathered lava.

(D) Canopy: None.

(E) Subcanopy: *Broussaia*, *Cheirodendron*, *Leptecophylla*, *Metrosideros*.

(F) Understory: Bryophytes, Ferns, *Coprosma*, *Dubautia*, *Kadua*, *Peperomia*.

#### FAMILY LYCOPODIACEAE

*Huperzia nutans* (WAWAEIOLE)

Oahu—Lowland Wet—Unit 6, Oahu—Lowland Wet—Unit 7, Oahu—Lowland Wet—Unit 8, Oahu—Lowland Wet—Unit 9, Oahu—Lowland Wet—Unit 10, Oahu—Lowland Wet—Unit 11, Oahu—Lowland Wet—Unit 12, Oahu—Lowland Wet—Unit 13, Oahu—Lowland Wet—Unit 14, Oahu—Lowland Wet—Unit 15, Oahu—Lowland Wet—Unit 16, Oahu—Wet Cliff—Unit 6, Oahu—Wet Cliff—Unit 7, and Oahu—Wet Cliff—Unit 8, identified in the legal descriptions in paragraph (i) of this section, constitute critical habitat for *Huperzia nutans* on Oahu.

(i) In units Oahu—Lowland Wet—Unit 6, Oahu—Lowland Wet—Unit 7, Oahu—Lowland Wet—Unit 8, Oahu—Lowland Wet—Unit 9, Oahu—Lowland Wet—Unit 10, Oahu—Lowland Wet—Unit 11, Oahu—Lowland Wet—Unit 12, Oahu—Lowland Wet—Unit 13, Oahu—Lowland Wet—Unit 14, Oahu—Lowland Wet—Unit 15, and Oahu—

Lowland Wet—Unit 16, the physical and biological features of critical habitat are:

- (A) Elevation: Less than 3,300 ft (1,000 m).
- (B) Annual precipitation: Greater than 75 in (190 cm).
- (C) Substrate: Clays; ashbeds; deep, well-drained soils; lowland bogs.
- (D) Canopy: *Antidesma*, *Metrosideros*, *Myrsine*, *Pisonia*, *Psychotria*.
- (E) Subcanopy: *Cibotium*, *Claoxylon*, *Kadua*, *Melicope*.
- (F) Understory: *Alyxia*, *Cyrtandra*, *Dicranopteris*, *Diplazium*, *Machaerina*, *Microlepis*.
  - (ii) In units Oahu—Wet Cliff—Unit 6, Oahu—Wet Cliff—Unit 7, and Oahu—Wet Cliff—Unit 8, the physical and biological features of critical habitat are:
    - (A) Elevation: Unrestricted.
    - (B) Annual precipitation: Greater than 75 in (190 cm).
    - (C) Substrate: Greater than 65 degree slope, shallow soils, weathered lava.
    - (D) Canopy: None.
    - (E) Subcanopy: *Broussaisia*, *Cheirodendron*, *Leptecophylla*, *Metrosideros*.
    - (F) Understory: *Bryophytes*, *Ferns*, *Coprosma*, *Dubautia*, *Kadua*, *Peperomia*.

**FAMILY MARSILEACEAE**

*Marsilea villosa* (IHI IHI)

Oahu—Coastal—Unit 9, Oahu—Coastal—Unit 11, Oahu—Coastal—Unit

12, and Oahu—Lowland Dry—Unit 7, identified in the legal descriptions in paragraph (i) of this section, constitute critical habitat for *Marsilea villosa* on Oahu.

- (i) In units Oahu—Coastal—Unit 9, Oahu—Coastal—Unit 11, and Oahu—Coastal—Unit 12, the physical and biological features of critical habitat are:
  - (A) Elevation: Less than 980 ft (300 m).
  - (B) Annual precipitation: Less than 20 in (50 cm).
  - (C) Substrate: Well-drained, calcareous, talus slopes; weathered clay soils; seasonal wetlands; mudflats.
  - (D) Canopy: *Hibiscus*, *Myoporum*, *Santalum*, *Scaevola*.
  - (E) Subcanopy: *Gossypium*, *Sida*, *Vitex*.
  - (F) Understory: *Eragrostis*, *Jacquemontia*, *Lyceum*, *Nama*, *Sesuvium*, *Sporobolus*, *Vigna*.
  - (ii) In unit Oahu—Lowland Dry—Unit 7, the physical and biological features of critical habitat are:
    - (A) Elevation: Less than 3,300 ft (1,000 m).
    - (B) Annual precipitation: Less than 50 in (130 cm).
    - (C) Substrate: Weathered silty loams to stony clay, rocky ledges, little-weathered lava, seasonal wetlands.
    - (D) Canopy: *Diospyros*, *Myoporum*, *Pleomele*, *Santalum*, *Sapindus*.
    - (E) Subcanopy: *Chamaesyce*, *Dodonaea*, *Leptecophylla*, *Osteomeles*, *Psydrax*, *Scaevola*, *Wikstroemia*.

(F) Understory: *Alyxia*, *Artemisia*, *Bidens*, *Chenopodium*, *Nephrolepis*, *Peperomia*, *Sicyos*.

**FAMILY PTERIDACEAE**

*Doryopteris takeuchii* (NCN)

Oahu—Lowland Dry—Unit 6 and Oahu—Lowland Dry—Unit 7, identified in the legal descriptions in paragraph (i) of this section, constitute critical habitat for *Doryopteris takeuchii* on Oahu. Within these units, the physical and biological features of critical habitat are:

- (i) Elevation: Less than 3,300 ft (1,000 m).
- (ii) Annual precipitation: Less than 50 in (130 cm).
- (iii) Substrate: Weathered silty loams to stony clay, rocky ledges, little-weathered lava.
- (iv) Canopy: *Diospyros*, *Myoporum*, *Pleomele*, *Santalum*, *Sapindus*.
- (v) Subcanopy: *Chamaesyce*, *Dodonaea*, *Leptecophylla*, *Osteomeles*, *Psydrax*, *Scaevola*, *Wikstroemia*.
- (vi) Understory: *Alyxia*, *Artemisia*, *Bidens*, *Chenopodium*, *Nephrolepis*, *Peperomia*, *Sicyos*.

\* \* \* \* \*

Dated: August 2, 2012.

**Eileen Sobek**,

Deputy Assistant Secretary for Fish and Wildlife and Parks.

[FR Doc. 2012–19561 Filed 9–17–12; 8:45 am]

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Part III

## Environmental Protection Agency

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40 CFR Part 52

Approval and Promulgation of Implementation Plans; State of Montana; State Implementation Plan and Regional Haze Federal Implementation Plan; Final Rules

**ENVIRONMENTAL PROTECTION AGENCY****40 CFR Part 52**

[EPA-R08-OAR-2011-0851, FRL 9719-9]

**Approval and Promulgation of Implementation Plans; State of Montana; State Implementation Plan and Regional Haze Federal Implementation Plan****AGENCY:** Environmental Protection Agency (EPA).**ACTION:** Final rule.

**SUMMARY:** The Environmental Protection Agency (EPA) is promulgating a Federal Implementation Plan (FIP) to address regional haze in the State of Montana. EPA developed this FIP in response to the State's decision in 2006 to not submit a regional haze State Implementation Plan (SIP) revision. The FIP satisfies requirements of the Clean Air Act (CAA or "the Act") that require states, or EPA in promulgating a FIP, to assure reasonable progress towards the national goal of preventing any future and remedying any existing man-made impairment of visibility in mandatory Class I areas. In addition, EPA is approving one of the revisions to the Montana SIP submitted by the State of Montana through the Montana Department of Environmental Quality on February 17, 2012, specifically, the revision to the Montana Visibility Plan that includes amendments to the "Smoke Management" section, which adds a reference to Best Available Control Technology (BACT) as the visibility control measure for open burning as currently administered through the State's air quality permit program. This change was made to meet the requirements of the Regional Haze Rule. EPA will act on the remaining February 17, 2012 revisions in the State's submittal in a future action.

**DATES:** This final rule is effective October 18, 2012.

**ADDRESSES:** EPA has established a docket for this action under Docket ID No. EPA-R08-OAR-2011-0851. All documents in the docket are listed on the [www.regulations.gov](http://www.regulations.gov) Web site. Although listed in the index, some information is not publicly available, e.g., Confidential Business Information (CBI) or other information whose disclosure 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

[www.regulations.gov](http://www.regulations.gov), or in hard copy at the Air Program, Environmental Protection Agency (EPA), Region 8, 1595 Wynkoop Street, Denver, Colorado 80202-1129. EPA requests that if at all possible, you contact the individual listed in the **FOR FURTHER INFORMATION CONTACT** section to view the hard copy of the docket. You may view the hard copy of the docket Monday through Friday, 8 a.m. to 4 p.m., excluding Federal holidays.

**FOR FURTHER INFORMATION CONTACT:** Scott Jackson, Air Program, Mailcode 8P-AR, Environmental Protection Agency, Region 8, 1595 Wynkoop Street, Denver, Colorado 80202-1129, (303) 312-6107, or [Jackson.Scott@epa.gov](mailto:Jackson.Scott@epa.gov).

**SUPPLEMENTARY INFORMATION:****Definitions**

For the purpose of this document, we are giving meaning to certain words or initials as follows:

- The words or initials *Act* or *CAA* mean or refer to the Clean Air Act, unless the context indicates otherwise.
- The initials *A/F* mean or refer to air-to-fuel.
- The initials *ALM* mean or refer to Ammonia Limiting Method
- The initials *ARM* mean or refer to Administrative Rule of Montana.
- The initials *ARP* mean or refer to the acid rain program.
- The initials *ARS* mean or refer to Air Resources Specialists.
- The initials *ASOFA* mean or refer to advanced separated overfire air.
- The initials *BACT* mean or refer to Best Available Control Technology.
- The initials *BART* mean or refer to Best Available Retrofit Technology.
- The initials *CAA* mean or refer to the Clean Air Act.
- The initials *CAM* mean or refer to compliance assurance monitoring.
- The initials *CAMD* mean or refer to EPA Clean Air Markets Division.
- The initials *CAMx* mean or refer to Comprehensive Air Quality Model.
- The initials *CBI* mean or refer to confidential business information.
- The initials *CCM* mean or refer to EPA Control Cost Manual.
- The initials *CCOFA* mean or refer to close-coupled overfire air system.
- The initials *CDS* mean or refer to circulating dry scrubber.
- The initials *CGA* mean or refer to gas cylinder audit.
- The initials *CELP* mean or refer to Colstrip Energy Limited Partnership.
- The initials *CEMS* mean or refer to continuous emissions monitoring systems.
- The initials *CEPCI* mean or refer to Chemical Engineering Plant Cost Index.

- The initials *CFAC* mean or refer to Columbia Falls Aluminum Company.
- The initials *CFB* mean or refer to circulating fluidized bed.
- The initials *CKD* mean or refer to cement kiln dust.
- The initials *CMAQ* mean or refer to Community Multi-Scale Air Quality modeling system.
- The initials *CPMS* mean or refer to continuous parametric monitoring system.
- The initials *CO* mean or refer to carbon monoxide.
- The initials *CPI* mean or refer to Consumer Price Index.
- The initials *CRF* mean or refer to Capital Recovery Factor.
- The initials *CSAPR* mean or refer to Cross-State Air Pollution Rule.
- The initials *DAA* mean or refer to Dry Absorbent Addition.
- The initials *DPCS* mean or refer to digital process control system.
- The initials *D-R* mean or refer to Dresser-Rand.
- The initials *DSI* mean or refer to dry sorbent injection.
- The initials *EC* mean or refer to elemental carbon.
- The initials *EGU* mean or refer to Electric Generating Units.
- The words *EPA*, *we*, *us* or *our* mean or refer to the United States Environmental Protection Agency.
- The initials *ESP* mean or refer to electrostatic precipitator.
- The initials *FCCU* mean or refer to fluid catalytic cracking unit.
- The initials *FGD* mean or refer to flue gas desulfurization.
- The initials *FGR* mean or refer to flue gas recirculation.
- The initials *FIP* mean or refer to Federal Implementation Plan.
- The initials *FLMs* mean or refer to Federal Land Managers.
- The initials *HAR* mean or refer to hydrated ash reinjection.
- The initials *HDSCR* mean or refer to high-dust selective catalytic reduction.
- The initials *HC* mean or refer to hydrocarbons.
- The initials *gr/scf* mean or refer to grains per standard cubic foot.
- The initials *IMPROVE* mean or refer to Interagency Monitoring of Protected Visual Environments monitoring network.
- The initials *IPM* mean or refer to Integrated Planning Model.
- The initials *IWAQM* refer to Interagency Workgroup on Air Quality Modeling.
- The initials *LDSCR* mean or refer to low-dust selective catalytic reduction.
- The initials *LEA* mean or refer to low excess air.
- The initials *LNBs* mean or refer to low NO<sub>x</sub> burners.

- The initials *LSD* mean or refer to lime spray drying.
- The initials *LSFO* mean or refer to limestone forced oxidation.
- The initials *LTS* mean or refer to Long-Term Strategy.
- The initials *MACT* mean or refer to maximum achievable control technology.
- The initials *MATB* mean or refer to Montanan's Against Toxic Burning.
- The initials *MDEQ* mean or refer to Montana's Department of Environmental Quality.
- The initials *MDF* mean or refer to medium density fiberboard.
- The initials *MISO* mean or refer to Midwest Independent Transmission System Operator.
- The initials *MDU* mean or refer to Montana-Dakota Utilities Company.
- The initials *MEL* mean magnesium-enhanced lime.
- The initials *MKF* mean or refer to mid-kiln firing of solid fuel.
- The words *Montana* and *State* mean the State of Montana.
- The initials *MSCC* mean or refer to Montana Sulphur and Chemical Company.
- The initials *NAAQS* mean or refer to National Ambient Air Quality Standards.
- The initials *NC* mean or refer to North Carolina.
- The initials *ND* mean or refer to North Dakota.
- The initials *NEI* mean or refer to National Emission Inventory.
- The initials *NESHAP* mean or refer to National Emission Standards for Hazardous Air Pollutants.
- The initials *NH<sub>3</sub>* mean or refer to ammonia.
- The initials *NO<sub>x</sub>* mean or refer to nitrogen oxides.
- The initials *NP* mean or refer to National Park.
- The initials *NPS* mean or refer to National Parks Service.
- The initials *NSCR* mean or refer to non-selective catalytic reduction.
- The initials *NSPS* mean or refer to New Source Performance Standards.
- The initials *NWR* mean or refer to National Wildlife Reserve.
- The initials *OMB* mean or refer to the Office of Management and Budget.
- The initials *OC* mean or refer to organic carbon.
- The initials *OFA* mean or refer to overfire air.
- The initials *PC* mean or refer to pulverized coal.
- The initials *PH/PC* mean or refer to preheater/precalciner.
- The initials *PM* mean or refer to particulate matter.
- The initials *PM<sub>2.5</sub>* mean or refer to particulate matter with an aerodynamic

diameter of less than 2.5 micrometers (fine particulate matter).

- The initials *PM<sub>10</sub>* mean or refer to particulate matter with an aerodynamic diameter of less than 10 micrometers (coarse particulate matter).
- The initials *PMCD* mean or refer to particulate matter control device.
- The initials *ppb* mean or refer to parts per billion.
- The initials *ppm* mean or refer to parts per million.
- The initials *PRB* mean or refer to Powder River Basin.
- The initials *PSAT* mean or refer to Particulate Matter Source Apportionment Technology.
- The initials *PSD* mean or refer to Prevention of Significant Deterioration.
- The fraction *Q/D* means quantity of emissions over distance.
- The initials *RAA* mean or refer to relative accuracy audit.
- The initials *RATA* mean or refer to relative accuracy test audit.
- The initials *RAVI* mean or refer to Reasonably Attributable Visibility Impairment.
- The initials *RICE* mean or refer to Reciprocating Internal Combustion Engines.
- The initials *RMC* mean or refer to Regional Modeling Center.
- The initials *ROFA* mean or refer to rotating opposed fire air.
- The initials *RP* mean or refer to Reasonable Progress.
- The initials *RPG* or *RPGs* mean or refer to Reasonable Progress Goal(s).
- The initials *RPOs* mean or refer to regional planning organizations.
- The initials *RRI* mean or refer to rich reagent injection.
- The initials *RSCR* mean or refer to regenerative selective catalytic reduction.
- The initials *SCOT* mean or refer to Shell Claus Off-Gas Treatment.
- The initials *SCR* mean or refer to selective catalytic reduction.
- The initials *SDA* mean or refer to spray dryer absorbers.
- The initials *SIP* mean or refer to State Implementation Plan.
- The initials *SMOKE* mean or refer to Sparse Matrix Operator Kernel Emissions.
- The initials *SNCR* mean or refer to selective non-catalytic reduction.
- The initials *SO<sub>2</sub>* mean or refer to sulfur dioxide.
- The initials *SOFA* mean or refer to separated overfire air.
- The initials *SRU* mean or refer to sulfur recovery unit.
- The initials *TAC* mean or refer to Texas Administrative Code.
- The initials *TESCR* mean or refer to tail-end selective catalytic reduction.

- The initials *TCEQ* mean or refer to Texas Commission on Environmental Quality.
- The initials *tpy* mean tons per year.
- The initials *TSD* mean or refer to Technical Support Document.
- The initials *URP* mean or refer to Uniform Rate of Progress.
- The initials *USFWS* mean or refer to U.S. Fish and Wildlife Service.
- The initials *VOC* mean or refer to volatile organic compounds.
- The initials *WA* mean or refer to Wilderness Area.
- The initials *WEG* mean or refer to WildEarth Guardians.
- The initials *WEP* mean or refer to Weighted Emissions Potential.
- The initials *WETA* mean or refer to Western Environmental Trade Association.
- The initials *WRAP* mean or refer to the Western Regional Air Partnership.
- The initials *YELP* mean or refer to Yellowstone Energy Limited Partnership.

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**I. Background**

We signed our notice of proposed rulemaking on March 20, 2012, and it was published in the **Federal Register** on April 20, 2012. In that notice, we proposed a FIP to address regional haze in the State of Montana for the first implementation period (through 2018) including determinations of Best Available Retrofit Technology (BART) for specific sources subject to that requirement. 77 FR 23988. Montana did not submit a SIP, knowing that as a consequence EPA would be required to propose and finalize a FIP. A detailed explanation of the CAA’s visibility requirements and the Regional Haze Rule as it applies to Montana was provided in the notice of proposed rulemaking and will not be restated here. In that notice, we also proposed to

approve a revision to the Montana SIP submitted by the State of Montana through the Montana Department of Environmental Quality on February 17, 2012. The State’s submittal contained revisions to the Montana Visibility Plan that included amendments to the “Smoke Management” section, which adds a reference to Best Available Control Technology (BACT) as the visibility control measure for open burning as currently administered through the State’s air quality permit program. EPA’s rationale for proposing approval of the revisions to the Montana Visibility Plan that included amendments to the “Smoke Management” section was described in detail in the proposal and will not be restated here. We note that in the future, Montana retains the option of submitting a SIP meeting the requirements of the Regional Haze Rule, to replace the FIP.

**II. Basis for Our Final Action**

We have fully considered all significant comments on our proposal, and, except as noted in section V, below, have concluded that no other changes from our proposal are warranted. Our action is based on an evaluation of Montana’s Visibility SIP submittal and our FIP against the regional haze requirements at 40 CFR 51.300—51.309 and CAA sections 169A and 169B. All general SIP requirements

contained in CAA section 110, other provisions of the CAA, and our regulations applicable to this action were also evaluated. The purpose of this action is to ensure compliance with these requirements. Our authority for action on Montana’s Visibility SIP submittal is based on CAA section 110(k). Our authority to promulgate our FIP is based on CAA section 110(c).

**III. Final Action**

With this final action we are approving Montana’s submittal containing revisions to the “Smoke Management” section of Montana’s Visibility Plan that was submitted by the State through the Montana DEQ on February 17, 2012. The SIP includes amendments to the “Smoke Management” section, which adds a reference to BACT as the visibility control measure for open burning as currently administered through the State’s air quality permit program as meeting the requirement of 40 CFR 308(d)(3)(v) to consider smoke management techniques for agricultural and forestry management purposes including plans as they currently exist within the state for these purposes. We are promulgating a FIP for the remaining parts of the regional haze requirements. Table 1 shows the control technologies, associated cost, and emission reductions for each source that is subject to the FIP.

TABLE 1—CONTROL TECHNOLOGIES, COST, EMISSIONS REDUCTIONS AND COST-EFFECTIVENESS

Source	Technology <sup>1</sup>	Total capital cost (\$)	Total annualized cost (\$)	Annual NO <sub>x</sub> /SO <sub>2</sub> emissions reductions (tpy)	Cost effectiveness (\$/ton)
Ash Grove Cement .....	LNB + SNCR .....	1,191,632	2,238,893	1,088 NO <sub>x</sub> .....	2,058
Holcim, Inc .....	SNCR .....	1,312,800	650,399	556 NO <sub>x</sub> .....	1,170
Colstrip Unit 1 .....	SOFA + SNCR .....	13,380,673	3,278,964	2,097 NO <sub>x</sub> .....	1,564
Colstrip Unit 2 .....	Lime Injection + Additional Scrubber Vessel.	28,000,000	4,093,200	4,486 SO <sub>2</sub> .....	912
Colstrip Unit 2 .....	SOFA + SNCR .....	13,380,673	3,256,127	2,072 NO <sub>x</sub> .....	1,571
Colstrip Unit 2 .....	Lime Injection + Additional Scrubber Vessel.	28,000,000	4,093,200	4,129 SO <sub>2</sub> .....	991
Devon Energy, Blaine County #1 Compressor Station, Engine #1.	NSCR .....	—	105,000	335 NO <sub>x</sub> .....	282
Devon Energy, Blaine County #1 Compressor Station, Engine #2.	NSCR .....	—	105,000	335 NO <sub>x</sub> .....	282
Cumulative Total Annual Cost.	.....	.....	13,727,583		

— Total Capital Cost was not calculated.

<sup>1</sup> The technology listed is the technology evaluated as BART, but sources can choose to use another technology or combination of technologies to meet established emission limits. Also where additional control technologies are not required, existing controls may still be necessary to meet established emission limits.

**IV. Issues Raised by Commenters and EPA’s Responses**

This action addresses comments on the Montana Regional Haze FIP. The

publication of EPA’s proposed rule on April 20, 2012 resulted in a 60-day public comment period that ended on June 19, 2012. We held four public

hearings for this proposal. Two hearings were held in Helena, Montana on Tuesday, May 1, 2012 and two hearings were held in Billings, Montana on

Wednesday, May 2, 2012. During the public comment period we received numerous written comments from individual citizens, members of various organizations, and also from Ash Grove Cement (Ash Grove), Columbia Falls Aluminum Corporation (CFAC), EarthJustice, the U.S. Fish and Wildlife Service (USFWS), Holcim Inc. (Holcim), Montana Dakota Utilities (MDU), Montana Sulphur and Chemical Company, the National Parks Service (NPS), the owners of Colstrip Units 1–4, the State of Montana, and WildEarth Guardians (WEG). We have reviewed the comments and provided our responses below. Transcripts from the public hearings and full copies of the comment letters are available in the docket for review.

*A. Comments on Modeling*

*Comment:* PPL and others stated that the proposed BART at Colstrip 1 and 2 for both NO<sub>x</sub> and SO<sub>2</sub> would result in no reasonably anticipated visibility benefit, even assuming that EPA’s emissions reduction estimates and modeling are correct. In one specific comment, the commenter stated:

A projected 0.066 dv is not a visibility improvement that ‘may reasonably be anticipated to result from the use’ of additional scrubber vessels at Colstrip Units 1 and 2. 42 U.S.C. 7491(g)(2). Such an insignificant projected visibility change is beyond the modeling capability of the CALPUFF model version EPA used and is far below the threshold for human perceptibility.

*Response:* We disagree that any controls required by our action must demonstrate a perceptible visibility improvement. In a situation where the installation of BART may not result in a perceptible improvement in visibility, the visibility benefit may still be significant. The Regional Haze Rule states:

even though the visibility improvement from an individual source may not be perceptible, it should still be considered in setting BART because the contribution to haze may be significant relative to other source contributions in the Class I area. Failing to consider less-than-perceptible contributions to visibility impairment would ignore the CAA’s intent to have BART requirements apply to sources that contribute to, as well as cause, such impairment.

70 FR 39129.

Visibility impacts below the thresholds of perceptibility cannot be ignored because regional haze is produced by a multitude of sources and activities which are located across a broad geographic area. As stated in our proposal, with respect to Colstrip 1 and 2, we weighed the relatively low costs for lime injection with the additional

scrubber vessel against the anticipated visibility impacts and determined that the cost was justified by the visibility improvement. Similarly, we weighed the relatively low cost of separated overfire air (SOFA) + selective noncatalytic reduction (SNCR) against the anticipated visibility benefit and determined that the cost was justified by the visibility benefit.

We respond to the modeling capabilities of CALPUFF in a response to a later comment.

*Comment:* A commenter asserted that EPA’s modeling assumes constant levels of ammonia and failed to consider monitoring data showing that ammonia levels are lower during the winter months.

*Response:* EPA recognizes that there can be seasonal variability in ambient ammonia concentrations and that it is preferable to use ambient ammonia measurements when such data are available rather than using default background ammonia concentrations. Ammonia monitoring data is not available in Montana, however, ammonia monitoring data is available in western North Dakota at the Beulah monitoring site. Theodore Roosevelt NP, located in western North Dakota, is impacted by Montana BART sources and EPA determined that it would be more appropriate to use the North Dakota ammonia monitoring data instead of using CALPUFF default ammonia concentrations. Therefore EPA used monthly average measured ammonia concentrations shown in Table 2 that were measured by North Dakota at their Beulah monitoring site.<sup>1</sup> The monthly average ammonia concentrations values were derived from data collected during years 2001–2002 and the ambient data were filtered to eliminate data from wind directions associated with sources causing a local bias. North Dakota concluded in its regional haze modeling analysis that these monthly average ammonia values are generally representative of background ammonia concentrations in western North Dakota. As a result, we did not assume a constant level of ammonia as asserted by the commenter, and we did represent seasonal variability in ammonia concentrations.

Additionally, EPA used the POSTUTIL<sup>2</sup> program with the

<sup>1</sup> Protocol for BART-Related Visibility Impairment Modeling Analyses in North Dakota (Final), North Dakota Department of Health, Division of Air Quality, 1200 Missouri Avenue Bismarck, ND (Nov 2005), p 32–33.

<sup>2</sup> POSTUTIL is a part of the suite of programs associated with the CALPUFF modeling system and is used to repartition ammonia in overlapping puffs. The model is available at: <http://www.src.com/calpuff/calpuff1.htm>.

Ammonia Limiting Method (ALM) to post-process the CALPUFF output to correct the assumption of constant ammonia availability in the model. The CALPUFF model represents multiple plumes that can overlap. The default model approach assumes that background ammonia is fully available to form nitrate in each plume. The ALM method corrects this assumption by partitioning the ammonia between overlapping plumes. Therefore, EPA has fully accounted for non-constant ammonia levels by using monthly measured background ammonia and by using the ALM in the analysis of CALPUFF model results.

TABLE 2—MONTHLY AMMONIA BACKGROUND CONCENTRATIONS

Month	Value (ppb)
Jan .....	1.22
Feb .....	1.23
Mar .....	1.60
Apr .....	1.94
May .....	2.29
Jun .....	1.63
Jul .....	1.65
Aug .....	1.69
Sep .....	0.98
Oct .....	1.04
Nov .....	1.37
Dec .....	1.06

*Comment:* A commenter stated that EPA failed to acknowledge uncertainty in the CALPUFF model at short distances, and the commenter further argues that model uncertainty increases at distances greater than 200 km and has a tendency to over predict impacts at greater distances.

*Response:* The Interagency Workgroup on Air Quality Modeling (IWAQM) Phase 2 report (EPA, 1998)<sup>3</sup> reviewed model performance evaluations of CALPUFF as a function of distance from the source and concluded that:

Based on the tracer comparison results presented in Section 4.6, it appears that CALPUFF provides reasonable correspondence with observations for transport distances of over 100 km. Most of these comparisons involved concentration values averaged over 5 to 12 hours. The CAPTEX comparisons, which involved comparisons at receptors that were 300 km to 1000 km from the release, suggest that CALPUFF can overestimate surface concentrations by a factor of 3 to 4. Use of

<sup>3</sup> Interagency Workgroup on Air Quality Modeling (IWAQM) Phase 2 Report and Recommendations for Long-Range Transport Impacts. EPA-454/R-98-019. U.S. Environmental Protection Agency. Research Triangle Park, NC (“IWAQM Phase II Report”) (1998), p 18.

the puff splitting option in CALPUFF might have improved these comparisons, but there are serious conceptual concerns with the use of puff dispersion for very long-range transport (300 km and beyond). As the puffs enlarge due to dispersion, it becomes problematic to characterize the transport by a single wind vector, as significant wind direction shear may well exist over the puff dimensions. With the above thoughts in mind, IWAQM recommends use of CALPUFF for transport distances of order 200 km and less. Use of CALPUFF for characterizing transport beyond 200 to 300 km should be done cautiously with an awareness of the likely problems involved.

Therefore, we modeled Class I areas within 300 km of each BART sources but did not model impacts at distances exceeding 300 km.

EPA has acknowledged that there is uncertainty in the CALPUFF model predicted visibility impacts. However, the CALPUFF model can both underpredict and overpredict visibility impacts. For example, in a presentation for the 2010 annual Community Modeling and Analysis System conference, Anderson et al. (2010)<sup>4</sup> found that the CALPUFF model frequently predicted lower nitrate concentrations compared to the CAMx photochemical grid model which has a much more rigorous treatment of photochemical reactions. EPA recognized the uncertainty in the CALPUFF modeling results when EPA made the decision, in the final BART Guidelines, to recommend that the model be used to estimate the 98th percentile visibility impairment rather than the highest daily impact value. While recognizing the limitations of the CALPUFF model in the BART Guidelines Preamble, EPA concluded that, for the specific purposes of the Regional Haze Rule's BART provisions, CALPUFF is sufficiently reliable to inform the decision making process. The Preamble states:

Because of the scale of the predicted impacts from these sources, CALPUFF is an appropriate or a reasonable application to determine whether such a facility can reasonably be anticipated to cause or contribute to any impairment of visibility. In other words, to find that a source with a predicted maximum impact greater than 2 or 3 deciviews meets the contribution threshold adopted by the States does not require the degree of certainty in the results of the model

<sup>4</sup> Anderson, B., K. Baker, R. Morris, C. Emery, A. Hawkins, E. Snyder "Proof-of-Concept Evaluation of Use of Photochemical Grid Model Source Apportionment Techniques for Prevention of Significant Deterioration of Air Quality Analysis Requirements" Presentation for Community Modeling and Analysis System (CMAS) 2010 Annual Conference, (October 11–15, 2010) can be found at <http://www.cmascenter.org/conference/2010/agenda.cfm>.

that might be required for other regulatory purposes. In the unlikely case that a State were to find that a 750 MW power plant's predicted contribution to visibility impairment is within a very narrow range between exemption from or being subject to BART, the State can work with EPA and the FLM to evaluate the CALPUFF results in combination with information derived from other appropriate techniques for estimating visibility impacts to inform the BART applicability determination. Similarly for other types of BART eligible sources, States can work with the EPA and FLM to determine appropriate methods for assessing a single source's impacts on visibility.

77 FR 39123.

Therefore, given that the IWAQM guidance provides for the use of the CALPUFF model at receptor distances of up to 200 to 300 km, and given that EPA has already addressed uncertainty in the CALPUFF model, we believe it is reasonable to use CALPUFF to evaluate visibility impacts up to 300 km.

*Comment:* A commenter stated that the CALPUFF model cannot accurately predict visibility changes at the levels EPA predicted for Holcim using indirect firing alone (0.125 deciview) or even for the additional improvement from the combination of SNCR + indirect firing as compared to SNCR alone. The commenter believes that the EPA predicted visibility improvement of 0.424 deciview for the combination of SNCR + indirect firing is within the uncertainty range of the CALPUFF model and cannot reliably predict visibility improvements.

*Response:* We disagree. EPA has previously addressed the issue of uncertainty in the CALPUFF model. EPA recognized the uncertainty in the CALPUFF modeling results when EPA made the decision in the final BART Guideline to recommend that the model be used to estimate the 98th percentile visibility impairment rather than the highest daily impact value. While recognizing the limitations of the CALPUFF model in the Preamble, EPA concluded that, for the specific purposes of the Regional Haze Rule's BART provisions, CALPUFF is sufficiently reliable to inform the decision making process. 70 FR 39123. We continue to maintain that it is appropriate to use CALPUFF for BART modeling for Holcim and other Montana BART sources.

*Comment:* Some commenters stated that we should have modeled impacts to additional Class I areas. Some commenters stated that EPA should have modeled visibility impacts on Class I areas at a distance of up to 500 km from the BART source and some commenters specified certain Class I areas that they thought should be

included in the modeling for a particular source.

Some commenters stated that the Western Regional Air Partnership (WRAP) subject to BART modeling indicated impacts from BART sources to additional Class I areas that we did not assess. One commenter stated that when assessing the impacts from the Big Stone I facility in the South Dakota SIP, EPA evaluated visibility as far away as Badlands National Park (NP), 470 km, Theodore Roosevelt NP, 555 km, and Boundary Waters Wilderness Area (WA) and Voyageurs NP, 431 and 438 km, respectively, and the commenter stated that, EPA should evaluate visibility impacts at more distant Class I areas for the Montana FIP.

*Response:* We modeled all Class I areas within 300 km of the BART source. As discussed in a response to a previous comment, the IWAQM Phase 2 report concluded that CALPUFF can overestimate surface concentrations at distances of 300 to 1,000 km by a factor of 3 to 4. Therefore, IWAQM recommends use of CALPUFF for transport distances of approximately 200 km or less. Use of CALPUFF for characterizing transport beyond 200 to 300 km should be done cautiously with an awareness of the likely problems involved. Therefore, we modeled Class I areas within 300 km of each BART source. We did not model impacts at distances exceeding 300 km.

In the case of the Big Stone I facility in South Dakota, there were no Class I areas within a distance of 300 km of the source. Therefore, the State and the facility agreed in their modeling protocol to evaluate visibility impacts at more distant sources by using a non-regulatory option in CALPUFF called "puff splitting". As discussed in the IWAQM Guidance,<sup>5</sup> the use of the puff splitting option in CALPUFF might improve model performance at long distances, but there are also serious conceptual concerns with the use puff splitting to represent puff dispersion for very long-range transport at distances of more than 300 km. EPA concurred with South Dakota on this approach for Big Stone I because there were no Class I areas within 300 km of the source, and EPA approved the South Dakota SIP using these modeling results. In the case of Montana, there are several Class I areas less than 300 km from each BART source, and EPA based its analysis on CALPUFF visibility model results for these areas.

EPA did not use the non-regulatory puff splitting option in CALPUFF to model more distant sources because of

<sup>5</sup> IWAQM Phase 2 report, p. 27.

the greater uncertainty in model results at distances of more than 300 km, as we have explained in previous responses.

While WRAP performed CALPUFF modeling at Class I areas more distant than 300 km from Colstrip, WRAP also recognized the larger uncertainty in the model results for distances greater than 300 km. and included the following caveat in their modeling protocol:

Relevant guidance suggests that the CALPUFF model is generally applicable at distances from 50 km to 300 km downwind and may be used for distance less than 50 km when complex flows exist on a case by case basis. [citation omitted] Class I areas in the west generally are located in complex terrain resulting in complex flows. Consequently, the BART screening modeling conducted by the RMC will include results for potential BART eligible sources that reside within 50 km of a Class I area. The WRAP RMC BART screening modeling may also apply CALPUFF to downwind distances greater than 300 km. When providing results to the States, the downwind distance between the BART source and the Class I area will be included, and a recommendation from the RMC as to the utility of applying the results for Class I areas less than 50 km and greater than 300 km from the source. The individual States will need to make their own regulatory assessment of the applicability of the model results at those distances less than 50 km and greater than 300 km.<sup>6</sup>

It also should be noted that WRAP found smaller visibility impacts at the distances of more than 300 km compared to Class I areas at distances of less than 300 km.<sup>7</sup> The BART Guidelines explain that if the highest modeled effects are observed at the nearest Class I area, it may not be necessary to model other Class I areas. The BART Guidelines state:

One important element of the protocol is in establishing the receptors that will be used in the model. The receptors that you use should be located in the nearest Class I area with sufficient density to identify the likely visibility effects of the source. For other Class I areas in relatively close proximity to a BART-eligible source, you may model a few strategic receptors to determine whether effects at those areas may be greater than at the nearest Class I area. For example, you might choose to locate receptors at these areas at the closest point to the source, at the highest and lowest elevation in the Class I area, at the IMPROVE monitor, and at the approximate expected plume release height. If the highest modeled effects are observed at the nearest Class I area, you may choose not

to analyze the other Class I areas any further as additional analyses might be unwarranted.

70 FR 39170.

*Comment:* Commenters stated that EPA should have added the visibility impacts at each Class I area to assess cumulative visibility impacts.

*Response:* Contrary to the commenter's assertion, we did assess cumulative visibility impacts. In our analysis of visibility impacts, we considered the visibility improvement at all Class I areas within 300 km of the subject BART unit. For example, in our analysis of BART control options for Corette, we considered the visibility improvement at all Class I areas within 300 km (Gates of the Mountains WA, North Absaroka WA, Red Rock Lakes WA, Teton WA, UL Bend WA, Washakie WA, and Yellowstone NP). 77 FR 24042 and 77 FR 24046. In our proposal, for each of the BART sources we assessed the visibility improvement at each Class I area within 300 km of the source associated with the controls under consideration, as well as the number of days with a greater than 0.5 deciview impact at each of these Class I areas. Therefore, our proposed rule did not ignore the visibility improvement that would be achieved at areas other than the most impacted Class I area, and we disagree with the assertions that we did not consider the impacts at multiple Class I areas. We did, however, in the proposed rule focus on the visibility benefits at those Class I areas with the most meaningful visibility impacts in determining whether NO<sub>x</sub> or SO<sub>2</sub> controls should be determined to be BART. We took a similar approach for all the Montana BART units. We did not ignore the visibility benefits at the other Class I areas but did not consider the benefits sufficient to warrant a change in our determination as to the appropriate level of control.

*Comment:* USFWS stated that for the three SO<sub>2</sub> control alternatives, EPA made judgments on cost per deciview based on only the most impacted Class I area, Washakie WA and that USFWS continued to believe that it is appropriate to consider both the degree of visibility improvement in a given Class I area as well as the cumulative effects of improving visibility across all of the Class I areas affected. USFWS stated that it does not make sense to use the same metric to evaluate the effects of reducing emissions from a BART source that impacts only one Class I area as for a BART source that impacts multiple Class I areas and that it does not make sense to evaluate impacts at one Class I area, while ignoring others that are similarly significantly impaired.

USFWS stated that if emissions from Corette are reduced, the benefits will be spread well beyond only the most impacted Class I area, and this must be accounted for. USFWS stated that, in the context of the multiple Class I areas that are affected by Corette, the Lime Spray Dryer (LSD) SO<sub>2</sub> control alternative, the cumulative Class I area impact is \$12.7 million per deciview of visibility improvement and costs \$4,981 per ton of SO<sub>2</sub> removed USFWS stated that LSD should be considered as being a viable candidate for BART for Corette. USFWS made similar comments regarding NO<sub>x</sub> controls for Corette.

*Response:* We disagree. In our analysis of visibility impacts, we considered the visibility improvement at all Class I areas within 300 km of the subject BART unit. As explained in the response to the previous comment, in our analysis of BART control options for Corette, we considered the visibility improvement at all Class I areas within 300 km. In our proposal, for each of the BART sources we assessed the visibility improvement at each Class I area within 300 km of the source associated with the controls under consideration, as well as the number of days with a greater than 0.5 deciview impact at each of these Class I areas. Therefore, our proposed rule did not ignore the visibility improvement that would be achieved at areas other than the most impacted Class I area, and we disagree with the assertions that we did not consider the impacts at multiple Class I areas. We did, however, in the proposed rule focus on the visibility benefits at those Class I areas with the most meaningful visibility impacts in determining whether NO<sub>x</sub> or SO<sub>2</sub> controls should be determined to be BART. We did not ignore the visibility benefits at the other Class I areas but did not consider the benefits sufficient to warrant a change in our determination as to the appropriate level of control. As we explained in other responses, we did not use the \$/deciview ratio as a basis for our decision.

*Comment:* EarthJustice's consultant Air Resources Specialists (ARS) performed additional analysis on possible visibility benefits of SCR at Colstrip Units 1 and 2 combined with the benefits of BART controls on SO<sub>2</sub> emissions. The commenter stated that the ARS analysis "demonstrates that EPA's analysis of visibility benefits of selective catalytic reduction (SCR) controls is incomplete and inadequate." The commenter also stated, "the evidence demonstrates that with SCR and SO<sub>2</sub> controls, the visibility impairment at UL Bend WA and Theodore Roosevelt NP attributable to

<sup>6</sup> CALMET/CALPUFF Protocol for BART Exemption Screening Analysis for Class I areas in the Western United States Available at [http://pah.cert.ucr.edu/aqm/308/bart/WRAP\\_RMC\\_BART\\_Protocol\\_Aug15\\_2006.pdf](http://pah.cert.ucr.edu/aqm/308/bart/WRAP_RMC_BART_Protocol_Aug15_2006.pdf).

<sup>7</sup> Summary of WRAP RMC BART Modeling for Montana, Draft #5 May 30, 2007. More information can be found at <http://pah.cert.ucr.edu/aqm/308/bart.shtml>.

Colstrip would be virtually eliminated, the very goal of the CAA haze requirements.”

The commenter also stated that when SCR + SOFA is coupled with a dry scrubber/baghouse, it is likely that Corette would no longer have any noticeable impact on haze in any Class I area, and this result complies with the Congressional directive to eliminate haze in Class I areas.

*Response:* We disagree that our analysis was incomplete or inadequate. We analyzed visibility benefits for both SO<sub>2</sub> and NO<sub>x</sub> emissions reductions following procedures established in the BART Guidelines, and we proposed emissions reductions consistent with the five factor analysis. The Regional Haze Rule has a goal that anthropogenic visibility impairment be eliminated by 2064; however, it does not require that all anthropogenic contributions to visibility impacts be fully eliminated in the near term, nor is that the goal of the BART element of the Regional Haze program. 40 CFR 51.308 (e)(1)(ii)(A) requires that EPA consider the cost of compliance; the energy and nonair quality environmental impacts; any pollution control equipment in use at the source; the remaining useful life of the source; and the degree of improvement which may be reasonably anticipated to result from the use of such technology. Visibility improvement is only one of the five factors that are required to be considered. Our proposed BART controls achieve significant reductions in contributions to visibility impairment while also considering other components of the five factor analysis.

*Comment:* EarthJustice stated that, “ARS concluded that the incremental benefit of SCR compared to SNCR at Colstrip Units 1 and 2 is larger when viewed in combination with the SO<sub>2</sub> emission controls at either emission rate.”

*Response:* ARS estimated the relative improvement in SCR compared to SNCR for the case with baseline SO<sub>2</sub> emissions and for the case with our proposed BART SO<sub>2</sub> emissions. The ARS analysis showed that the incremental improvement in SCR compared to SNCR was almost identical for the 98% worst days regardless of the level of SO<sub>2</sub> emissions used. For example, in EPA’s analysis the incremental improvement of SCR over SNCR for Theodore Roosevelt NP was 0.27, 0.23, and 0.28 deciview, respectively, for 2006, 2007 and 2008. The ARS analysis found incremental improvements of 0.28, 0.26, and 0.28 deciview, respectively, for 2006, 2007 and 2008. Moreover, ARS did not perform additional CALPUFF

simulations for this analysis, but only combined estimates of extinction contributions from different CALPUFF simulations.

*Comment:* EarthJustice stated that that we aggregated Colstrip Units 1 and 2 for assessing visibility benefits of SNCR, but arbitrarily kept our assessment of benefits of SCR segregated by unit.

*Response:* We disagree. Modeling was performed in the same manner for SCR as for SNCR. The modeling protocol, results, and final report were available in the docket. Our evaluation of the visibility benefits was made in consideration of all of the modeling results, which includes a visibility improvement assessment for application of SCR at Colstrip Units 1 and 2 individually, as well as an assessment of the total visibility benefit from application of SCR at both units collectively.

*Comment:* A commenter stated that we failed to examine the collective visibility benefit of SCR in combination with SO<sub>2</sub> upgrades at Colstrip Units 1 and 2.

*Response:* We examined the individual benefits of NO<sub>x</sub> and SO<sub>2</sub> controls to be able to assess the difference between pollutant-specific control options. Our evaluation of the visibility benefits was made in consideration of all of the modeling results.

*Comment:* EarthJustice stated that their contractor (ARS) performed AERMOD simulations to evaluate the impacts of Colstrip SO<sub>2</sub> emissions relative to the 1-hour average SO<sub>2</sub> National Ambient Air Quality Standard (NAAQS) and reported modeled violations of the SO<sub>2</sub> NAAQS.

*Response:* EPA will address compliance with the 1-hour average SO<sub>2</sub> NAAQS separately from Regional Haze requirements. It is beyond the scope of this rulemaking. It will be addressed by EPA at a later date.

*Comment:* Holcim commented that EPA discarded all prior modeling and developed a new modeling analysis in 2011. Holcim stated that EPA did not explain why it used a new modeling analysis and that EPA’s BART conclusions are therefore based on modeling that is not transparent and not available for review.

*Response:* We disagree. As we explained in our proposal, we used CALPUFF modeling to evaluate emissions control scenarios that were consistent with the application of control scenarios for the Montana sources that were subject to BART. We did this because we were unable to obtain the modeling files from some of the sources and we wanted each source

to be modeled consistently. The modeling protocol, final report, and all related files were available for review in the docket.

*Comment:* The Western Environmental Trade Organization (WETA) commented that the EPA recently approved the SIP for regional haze developed by the State of North Dakota. WETA explained that the North Dakota plan relied on extensive modeling that demonstrated emissions control technology installations at certain facilities would result in insignificant improvement in visibility. WETA requested that the EPA develop a visibility plan for Montana that offers the same flexibility and cost-effective standards included in North Dakota’s plan.

*Response:* WETA did not explain what flexibility it was seeking; therefore, we are not able to evaluate whether such flexibility could be accommodated. To the extent that WETA is stating that our proposed requirements are not cost-effective, we disagree. To the extent that WETA is stating that we are being inconsistent with decisions we made for regional haze in North Dakota, we disagree. We have responded to more specific comments on the cost-effectiveness of controls elsewhere.

*Comment:* The commenter stated that EPA’s proposed BART determinations for Colstrip Units 1& 2 are erroneous because EPA’s modeling failed to include actual air quality measurements, including visual quality measurements, in its inputs to its regional haze model. The commenter further stated that real air quality data for Class I areas is critical to determining what the degree of visibility improvement may be in a given Class I area.

*Response:* EPA used ambient monitoring data to evaluate the CMAQ and CAMx grid model simulations that were used for modeling the uniform rate of progress toward natural visibility conditions. However, the commenter appears to be referring specifically to the CALPUFF model simulations used to evaluate visibility impacts of BART sources. The BART Guidelines require that visibility impacts from BART sources be evaluated in comparison to natural visibility conditions. The procedures used to estimate natural visibility conditions are described in the “Guidance for Estimating Natural Visibility Conditions Under the Regional Haze Rule.”<sup>8</sup> It would be

<sup>8</sup>Guidance for Estimating Natural Visibility Conditions Under the Regional Haze Rule, U.S. Environmental Protection Agency, September 2003.

inappropriate to use ambient monitoring data for current degraded visibility conditions in the evaluation of BART source visibility impacts. EPA previously considered and responded to the comment that current visibility conditions should be used in BART source evaluations in 40 CFR part 51, appendix Y, promulgated at 70 FR 39104. EPA considered the approach of assessing a BART-eligible source's impacts on visibility by using current or near-term future conditions, and EPA determined that BART visibility impacts should be evaluated in comparison to natural background visibility. In the final rulemaking EPA wrote:

Using existing conditions as the baseline for single source visibility impact determinations would create the following paradox: The dirtier the existing air, the less likely it would be that any control is required. This is true because of the nonlinear nature of visibility impairment. In other words, as a Class I area becomes more polluted, any individual source's contribution to changes in impairment becomes geometrically less. Therefore the more polluted the Class I area would become, the less control would seem to be needed from an individual source. We agree that this kind of calculation would essentially raise the "cause or contribute" applicability threshold to a level that would never allow enough emission control to significantly improve visibility. Such a reading would render the visibility provisions meaningless, as EPA and the States would be prevented from assuring "reasonable progress" and fulfilling the statutorily-defined goals of the visibility program. Conversely, measuring improvement against clean conditions would ensure reasonable progress toward those clean conditions.

70 FR 39124.

Therefore, EPA correctly used estimates of natural visibility conditions in our evaluation of BART source visibility impacts, and we disagree with the comment that we failed to appropriately use air quality data at Class I areas.

*Comment:* EarthJustice stated that they do not agree with EPA's approach to use the fifth factor in determining the degree of visibility improvement from emissions control technologies where EPA adds an additional incremental benefit factor with an apparent but unstated threshold for improvement sufficiency that is contrary to the purpose and direction of the CAA.

*Response:* We disagree that we only evaluated visibility benefit on an incremental basis and that we used a threshold for improvement sufficiency. In the proposed FIP, we included tables showing the visibility improvement for

control options as compared to baseline conditions. Incremental improvement can be easily calculated from the data in the tables, however, we did not calculate this separately for each option. In addition, our modeling protocol, modeling report and tables of results were included in the docket.

*Comment:* Commenters stated that we used incorrect baselines for modeling impacts from sources at Corette and Colstrip.

*Response:* We explain our rationale for the chosen baseline periods in responses to other comments.

#### B. General Comments on BART

*Comments:* Montana Department of Environmental Quality (MDEQ) stated that EPA should have used a dollar-per-deciview (\$/deciview) metric rather than the \$/ton metric to evaluate BART and reasonable progress. MDEQ argued that the use of deciviews is consistent with the Regional Haze Rule, which expresses Reasonable Progress Goals (RPGs), baseline visibility, current visibility conditions and natural conditions in deciviews. MDEQ also referenced both the BART Guidance and the Reasonable Progress Guidance to support this argument.

The NPS stated that one of the options suggested by the BART Guidelines to evaluate cost-effectiveness is cost/deciview and that the NPS believes that visibility improvement must be a critical factor in any program designed to improve visibility. The NPS stated that compared to the typical control cost analysis in which estimates fall into the range of \$2,000–\$10,000 per ton of pollutant removed, spending millions of dollars per deciview to improve visibility may appear extraordinarily expensive, but that the NPS compilation of BART analyses across the United States reveals that the average cost per deciview proposed by either a state or a BART source is \$14–\$18 million, with a maximum of \$51 million per deciview proposed by South Dakota at the Big Stone I power plant. The NPS noted that even though it has no Class I areas, Nebraska Department of Environmental Quality has chosen \$40 million/deciview as a cost criterion, which is also above the national average. The NPS compared its estimates for annual cost of adding SOFA + SCR to EPA's estimates for visibility impacts and stated that the cost-effectiveness of adding SOFA + SCR to improve visibility at the five Class I areas modeled by EPA is less than \$10 million/deciview and significantly less than the \$14–\$18 million/deciview national average of BART proposals and determinations.

*Response:* For BART, the BART Guidelines require that cost effectiveness be calculated in terms of annualized dollars per ton of pollutant removed, or \$/ton. 70 FR 39167. MDEQ and the NPS are correct in that the BART Guidelines allows for the \$/deciview ratio as an additional cost effectiveness metric that can be employed along with \$/ton for use in a BART evaluation. However, the use of this metric further implies that additional thresholds or notions of acceptability, separate from the \$/ton metric, would need to be developed for BART determinations. We have not used this metric for BART purposes because (1) It is unnecessary in judging the cost effectiveness of BART, (2) it complicates the BART analysis, and (3) it is difficult to judge. The \$/deciview metric has not been widely used and is not well-understood as a comparative tool. In our experience, \$/deciview values tend to be very large because the metric is based on impacts at one Class I area on one day and does not take into account the number of affected Class I areas or the number of days of improvement that result from controlling emissions. In addition, the use of the \$/deciview suggests a level of precision in the CALPUFF model that may not be warranted. As a result, the \$/deciview can be misleading. We conclude that it is sufficient to analyze the cost effectiveness of potential BART controls using \$/ton, in conjunction with an assessment of the modeled visibility benefits of the BART control. Within the context of reasonable progress, the Guidance for Setting Reasonable Progress Goals Under the Regional Haze Program, states that "[y]ou should evaluate both average and incremental costs."<sup>9</sup> This is consistent with the approach under BART. As commenters note, the guidance then stated that "simple cost effectiveness estimates based on a dollar-per-ton calculation may not be as meaningful as a dollar-per-deciview calculation, especially if the strategies reduce different groups of pollutants." However, the guidance makes this statement on the basis that "different pollutants differently impact visibility impairment." That is, for example, a one ton reduction in SO<sub>2</sub> would have a greater visibility benefit than a one ton reduction of coarse mass. As only SO<sub>2</sub> and NO<sub>x</sub> controls were evaluated for the reasonable progress point sources, the use of the \$/deciview is not particularly

<sup>9</sup> Guidance for Setting Reasonable Progress Goals Under the Regional Haze Program, U.S. Environmental Protection Agency, June 1, 2007, p.5–2.

relevant or informative. In addition, we did not use the \$/deciview metric for our evaluation of reasonable progress controls for largely the same reasons as stated above for BART controls.

*Comment:* The NPS stated that we used inconsistent criteria in selecting BART controls.

*Response:* We disagree. As explained later, pursuant to 40 CFR 51.308(e)(1)(ii)(A) we considered the following five factors in our analysis: The cost of compliance; the energy and nonair quality environmental impacts; any pollution control equipment in use at the source; the remaining useful life of the source; and the degree of improvement which may be reasonably anticipated to result from the use of such technology. The Regional Haze Rule defines BART as the best system of continuous emission control technology available and associated emission reductions achievable, as determined through an analysis of these five factors. The NPS is correct in that the BART Guidelines allows for the \$/deciview ratio as an additional cost effectiveness metric that can be employed along with \$/ton for use in a BART evaluation of the five statutory factors. 70 FR 39126 to 70 FR 39127. While the Regional Haze Rule may not prevent us from establishing a bright line for some of the factors such as cost-effectiveness and visibility, we are not required to do so, and have not done so for this action as the cost and visibility factors are both weighed in making control decisions. Also, while the BART Guidelines allows for the \$/deciview ratio as an additional cost effectiveness metric that can be employed along with \$/ton for use in a BART evaluation, we have not used this metric in our evaluation. As explained in our determinations for each source, the cost effectiveness of controls on a dollar per ton basis and the visibility benefit of those controls were the two factors that had the most influence over our decision.

*Comment:* MDEQ stated that in the North Dakota Regional Haze SIP/FIP, coal-fired utilities with much greater estimated visibility impact were required to install controls similar to those required at Colstrip 1 and 2.

*Response:* We disagree that certain BART determinations from the North Dakota Regional Haze SIP/FIP are appropriate comparisons to our BART determinations in this FIP. Our determination on the NO<sub>x</sub> BART determinations at Milton R. Young Station Units 1 and 2 and Leland Olds Station Unit 2<sup>10</sup> is explained in our final

action for regional haze for North Dakota. 77 FR 20893. Our BART determinations were made on a source-specific basis in consideration of the five statutory factors.

*Comment:* MDEQ stated that we “accept, discard or include new cost information without reason or justification.” MDEQ supported this claim by arguing that we used Integrated Planning Model (IPM) data in one instance, but used costs provided by sources and an outside consultant instead of IPM data for the North Dakota Regional Haze SIP/FIP.

*Response:* The BART Guidelines provide some flexibility in how to calculate and consider costs. 70 FR 39127. Generally, we followed a reasonable and supported approach. We have responded to specific comments regarding our cost analysis in other responses.

*Comment:* MDEQ stated that the averaging times and compliance demonstrations for Colstrip 1 & 2, Corette and Devon Energy are not practically enforceable, and therefore counter to the BART Guidelines. MDEQ stated that the 30-day rolling average particulate matter (PM) emission limits for Colstrip 1, Colstrip 2 and Corette, and the NO<sub>x</sub> limit for Devon are not enforceable with an annual stack test.

*Response:* We disagree with some aspects of this comment and have made changes in the final FIP to clarify requirements in response to other aspects of this comment. In the proposed FIP, we concluded that annual stack tests, along with emissions monitoring in accordance with the applicable Compliance Assurance Monitoring (CAM) plan are sufficient to determine compliance with BART PM limits. 77 FR 24099 (April 20, 2012). In its comments, MDEQ provides no evidence to the contrary aside from the general statements about practical enforceability described in the comment above. With regard to the Devon Energy Reasonable Progress determination, we have revised the monitoring, recordkeeping and reporting requirements in the final FIP. We have also clarified in a correction notice that the PM limits listed at 40 CFR 52.1396 are not based on a 30-day average. 77 FR 29270.

*Comment:* MDEQ noted that Cross-State Air Pollution Regulation (CSAPR) trading programs were recently determined by EPA to be an alternative to source-by-source BART determinations. 77 FR 33642 (April 20, 2012). MDEQ argued that, because CSAPR is a health-based standard, “EPA in the East is advocating the position that Montana has taken for our own

state: Realize the benefits (including visibility) from health-based standards and make compliance with those standards the demonstration for BART.”

*Response:* Emissions trading programs and other alternative programs can be used in place of source specific BART controls “as long as the alternative provides greater reasonable progress towards improving visibility than BART.” 77 FR 33644. Because Montana is not within the geographic areas covered by CSAPR, and because the State did not submit an emissions trading program or alternative program that was subject to, let alone satisfied, the “greater reasonable progress” test, EPA does not agree that compliance with other standards may replace a BART demonstration for sources subject to BART in Montana.

*Comment:* A commenter claimed that our elimination of best emission controls based on incremental benefit is not legally supportable and that EPA’s analyses do not satisfy the purpose or the regulatory requirements for BART determinations. The commenter stated that we applied additional filters with unstated thresholds or standards in our consideration of BART and that those filters eliminate or significantly diminish the weight and importance of the required five factors. The commenter stated that EPA used an incremental benefit test and reached a subjective conclusion.

*Response:* We disagree that our determinations are not legally supportable. Pursuant to 40 CFR 51.308(e)(1)(ii)(A) we considered the following five factors in our analysis: The cost of compliance; the energy and nonair quality environmental impacts; any pollution control equipment in use at the source; the remaining useful life of the source; and the degree of improvement which may be reasonably anticipated to result from the use of such technology. The Regional Haze Rule defines BART as the best system of continuous emission control technology available and associated emission reductions achievable, as determined through an evaluation of the five statutory factors. 70 FR 39126 to 70 FR 39127. While the Regional Haze Rule may allow us to establish a bright line for some of the factors such as cost-effectiveness and visibility, we are not required to do so, and have not done so for this action.

*Comment:* MDEQ commented that EPA makes a case for ordering the installation of control equipment for measurable emissions reductions absent a visibility improvement goal to achieve reasonable progress as measured in deciviews. MDEQ stated that one of the

<sup>10</sup> We presume these units are the “coal-fired utilities” to which MDEQ is referring.

factors to consider when determining BART is any existing pollution control technology in use at the source and that EPA may be interpreting this provision to mean BART requires the installation of any new pollution control technology that is useful for reducing emissions generally. MDEQ stated that the statute and the Regional Haze Rule are both clear that a BART determination focuses on existing pollution controls and that the suitability of additional controls for co-beneficial purposes that may be tangentially related to the National Goal is not part of the analysis. MDEQ stated that overall purpose of any SIP, including Montana's, is the control of emissions to comply with the NAAQS as set forth in 42 U.S. Code (USC) Section 7410 and that the purpose of the Regional Haze Rule is to control emissions that cause or contribute to visibility impairment in Class I Federal areas. MDEQ stated that, "Montana is adamant on this point because it forms the basis for its reluctant renunciation of authority over Montana's BART program." MDEQ stated that, "the consideration of a co-benefit strategy is not without merit, but the imposition of BART is set forth very clearly in statute and rule. MDEQ stated that the determination of BART has everything to do with visibility impairment and improvement, not the attainment or maintenance of the NAAQS." MDEQ suggested that, "EPA limit the BART criteria to that set forth in the rule at 40 CFR 51.308(e) and refuse to propose new controls that are not calculated to fulfill BART criteria."

*Response:* We disagree that we have misinterpreted the BART provision to consider any existing pollution control technology at the source. We point out that considering existing pollution control technology in use at the source does not preclude the consideration of new technology. As listed in the BART Guidelines, Step 1 of the "Five Basic Steps of a Case-by-Case BART Analysis" is "Identify All Available Retrofit Technologies." 70 FR 39164. A footnote to the word "All" in this step of the BART Guidelines reads as follows; "In identifying 'all' options, you must identify the most stringent option and a reasonable set of options for analysis that reflects a comprehensive list of available technologies. It is not necessary to list all permutations of available control levels that exist for a given technology—the list is complete if it includes the maximum level of control each technology is capable of achieving." 70 FR 39164. Our analysis for each Montana source subject to BART included each of the "Five Basic

Steps of a Case-by-Case BART Analysis," as well as a complete five-factor analysis which included consideration of "any existing pollution control technology in use at the source." Existing pollution control technology was considered when identifying available control options, when establishing a baseline for determining visibility impacts or for determining annual emission reductions for available control options. Existing pollution control technology also was considered in establishing emission limits. With regard to MDEQ's comment that we interpreted this provision to mean BART requires the installation of any new pollution control technology that is useful for reducing emissions generally, we point out that in many cases our BART determinations did not require additional pollution control technology to be installed for BART.

We also disagree that we have interpreted BART to require the installation of any new pollution control technology that is useful for reducing emissions generally, that we used criteria other than those listed at 40 CFR 51.308(e)(1)(ii)(A), or that we proposed new controls that are not calculated to fulfill BART criteria. As stated in other responses, pursuant to 40 CFR 51.308(e)(1)(ii)(A) we considered the five factors in our analysis. The Regional Haze Rule defines BART as the best system of continuous emission control technology available and associated emission reductions achievable, as determined through an evaluation of the five statutory factors. 70 FR 39126 to 70 FR 39127. As stated in another response, at no point in the proposed FIP did we discuss public health impacts as a consideration in our analyses, as they were not. As stated elsewhere, we agree that the Regional Haze Rule is not a health-based standard, and that we are not authorized to consider public health impacts in promulgating our FIP for purposes of this action.

*Comment:* The NPS commented that EPA determined that the incremental visibility improvement from a control option must exceed 0.5 deciview at a given Class I area if costs exceed \$5,000/ton in order to qualify as BART and stated that the NPS disagrees with this approach. The NPS stated that while the BART Guidelines do recommend estimation of incremental costs, it makes no mention of an incremental visibility improvement test. The NPS explained that if applied linearly, EPA's cost estimate of \$3,235/ton for SCR would correspond to a visibility improvement of 0.32 deciview, not 0.5 deciview to justify SCR. The NPS stated

that EPA concluded the benefit of SCR at Theodore Roosevelt NP is 0.4 deciview and that therefore, by EPA criteria SCR is BART for each Units 1 and 2.

*Response:* We disagree. We have not determined that the incremental visibility improvement from a control option must exceed 0.5 deciview at a given Class I area if costs exceed \$5,000/ton in order to qualify as BART. As stated in other responses, while the Regional Haze Rule may allow us to establish a bright line for some of the factors such as cost-effectiveness and visibility, we are not required to do so, and have not done so for this action.

### C. Comments on Cement Kilns

*Comment:* A commenter stated that we must not exempt cement kilns from BART for PM. The commenter described baseline visibility impacts from Ash Grove and Holcim and stated that the high degree of visibility impairment warrants analysis of whether PM emission limits should be lower to reflect BART.

*Response:* We disagree that we have exempted cement kilns from BART for PM. In our proposal, Table 35 shows that Ash Grove's greatest baseline visibility impact is 4.446 deciviews at Gates of the Mountains WA and Table 49 shows that Holcim's greatest baseline visibility impact is .980 deciview at Gates of the Mountains WA. 77 FR 24011 and 77 FR 24017. While we agree with the commenter that the baseline impacts are significant, the PM contribution to this overall baseline impact is small. In our proposal, Table 38 shows that for Ash Grove, coarse PM only contributes 0.84% and fine PM only contributes 4.77% to the overall baseline visibility impact of 4.446 deciviews. 77 FR 24013. Table 64 shows that for Holcim, coarse PM only contributes 5.79% and fine PM only contributes 12.61% to the overall baseline visibility impact of .980 deciview. 77 FR 24022. By contrast, our BART determination for Ash Grove for NO<sub>x</sub> is anticipated to achieve a visibility improvement of 1.248 deciviews and our BART determination for Holcim is anticipated to achieve a visibility improvement of 0.424 deciview. Any visibility improvement that could be achieved with improvements to the existing PM controls would be negligible. BART for PM was based on using the existing control equipment and the emission limit established in each facility's Title V permit. The PM BART limits for Ash Grove and Holcim were listed in our proposal at 77 FR 24098 and are

codified by our final action at 40 CFR 52.1396.

#### D. Comments on Ash Grove

*Comment:* Ash Grove stated that they did not object to EPA's conclusion that BART should be based on the installation of low NO<sub>x</sub> burner (LNB) and SNCR. However, the company stated that they objected to the assumptions made about what SNCR can achieve. Ash Grove stated that they explained in the prior correspondence that the company did not believe that it is appropriate to assume that the Montana City kiln can achieve 50% control effectiveness. Ash Grove stated that, as the data in Table 10 of the preamble clearly showed, only one of the three kilns at Ash Grove's Midlothian plant is able to achieve 50% control effectiveness while the other two kilns had an average control efficiency of 37.7% and 40.5%.

Ash Grove also believes that no other credible evidence is provided for our conclusion as to SNCR NO<sub>x</sub> control efficiency. Ash Grove stated that we referenced studies from other industry sectors and a marketing brochure from Cadence stating that "control efficiency of up to 50% can be achieved on long wet kilns" and that this quote states the upper end of what might be achievable. Ash Grove indicated that the brochure does not state that 50% control efficiency can be achieved on all long wet kilns, that Cadence's experience with SNCR on long wet kilns is what is shown in Table 10, Ash Grove indicated that Cadence was Ash Grove's partner in developing the Midlothian SNCR, which, according to Ash Grove, are the only long wet kilns in the United States with any track record of SNCR use. Ash Grove indicated that even after years of optimization on the Midlothian kilns, the data show that it has not been possible to bring all three kilns up to a 50% control efficiency and that the Midlothian NO<sub>x</sub> reduction data reflect not only the benefits of SNCR, but also the mid-kiln firing of tires, use of a mid-kiln fan and other technologies that are not available to the Montana City kiln, but that were implemented concurrent with the SNCR installation/optimization at Midlothian to reduce NO<sub>x</sub> emissions. Ash Grove explained that in considering the Midlothian data, one needs to account for the direct control efficiency these technologies provide, in addition to the synergistic effects of using more than one control device/technique at a time at Midlothian and that these benefits would not be available at Montana City and should not be assumed.

Ash Grove summarized that they continued to believe that a SNCR system at Montana City cannot be assumed to reach greater than 35% control efficiency and that EPA has produced no credible evidence in the record for supporting a different conclusion. Ash Grove stated that they recognized that their initial BART submittal listed 50% control as achievable for the combination of a low NO<sub>x</sub> burner and SNCR at the Montana City kiln but since then they have realized they cannot get to that level on all three kilns at Midlothian. Ash Grove stated that they are willing to not contest the 8.0 lb/ton clinker limit, and they anticipate that compliance could require additional control technologies/strategies; therefore, they need the maximum time allowable to find ways to consistently maintain NO<sub>x</sub> at or below that level.

*Response:* We disagree that SNCR cannot achieve a 50% control effectiveness at Ash Grove. The data from Ash Grove's Midlothian, Texas kilns in Table 10 of the proposed FIP, 77 FR 24003, show the SNCR control effectiveness achieved. The data were not intended to imply that this is the upper bound of what might be achieved. Ash Grove did not submit any information demonstrating that this was the maximum reduction that could have been achieved. It was not necessary to achieve greater reductions from the Midlothian Texas kilns to comply with the required emission limit. In Texas, SNCR was used at Midlothian to comply with the emission limit established at Texas Administrative Code (TAC) 117.3110(a)(1)(B) of 4.0 lb/ton clinker. TAC 117.3110(b) allowed an owner or operator of a long wet kiln to comply with the 4.0 lbs/ton clinker emission limit on the basis of a weighted average for multiple cement kilns. Thus, it was not necessary for each individual kiln to achieve the maximum percentage reduction possible; one or more kilns could emit more than 4.0 lbs/ton clinker as long as the weighted average complied with the emission limit.

Ash Grove has not submitted any data to demonstrate that SNCR was optimized in an attempt to achieve the greatest control efficiency possible. For the Midlothian kilns, from June–August 2009, the emission rate from kiln 1 was 3.7 lbs/ton clinker and the emission rate from kiln 2 was 4.8 lbs/ton clinker and from June through August 2010, the emission rate from kiln 1 was 2.6 lbs./ton clinker, the emission rate from kiln 2 was 4.8 lbs/ton clinker, and the emission rate from kiln 3 was 4.4 lbs/ton clinker. These emission rates are significantly higher than the emission rates from June to August 2008 (an

average of 1.8 lbs/ton clinker for kiln 1, 2.7 lbs/ton clinker for kiln 2, and 2.7 lbs/ton clinker for kiln 3). An increase in NO<sub>x</sub> emissions over time would not be expected if the SNCR were being optimized.

With regard to Ash Grove's claim that we need to account for the direct control efficiency of other technologies that are not available to the Montana City Kiln, the tire-derived fuel system was already being used at Midlothian in 2006 and is already accounted for in the 2006 baseline to which the 2008 post-SNCR emissions are compared.<sup>11</sup> Thus, no further adjustment is necessary. Ash Grove has not provided data to demonstrate that a synergistic effect has occurred between mid-kiln firing of tires and SNCR at Midlothian.

Ash Grove has not submitted data to support their claim that only 35% reduction can be achieved with SNCR at the Montana City kiln. All of the Midlothian kilns were able to achieve greater than 35% reduction with SNCR and there is no information to demonstrate that SNCR was optimized to its maximum potential. The BART Guidelines state, "In assessing the capability of the control alternative, latitude exists to consider special circumstances pertinent to the specific source under review, or regarding the prior application of the control alternative. However, you should explain the basis for choosing the alternate level (or range) of control in the BART analysis. Without a showing of differences between the source and other sources that have achieved more stringent emissions limits, you should conclude that the level being achieved by those other sources is representative of the achievable level for the source being analyzed." 70 FR 39166. Ash Grove has not demonstrated the differences between their Montana City kiln and the Midlothian kilns.

With regard to Ash Grove's statement that we have not produced credible evidence in the record for supporting a greater than 35% control effectiveness for SNCR, we provided a detailed explanation in our proposed FIP at 77 FR 24003. Ash Grove has used SNCR at its Midlothian kilns where it was shown to achieve the reductions ranging from 37.7% to 62.5% and these are within the range of control effectiveness demonstrated at other kilns. Considering that control effectiveness is greater when initial NO<sub>x</sub> concentrations are greater, and that the baseline NO<sub>x</sub> emissions of the Montana City kiln are

<sup>11</sup> Letter from Molly Cagle to Chance Goodwin, Initial Control Strategy Development for DFW Ozone Nonattainment Area, July 30, 2010, p. 1.

significantly greater than the Midlothian kilns, the Montana City kiln would be expected to achieve even greater control effectiveness when compared to the Midlothian kilns. 77 FR 24003 and 77 FR 24004.

Ash Grove's comment that they are willing to not contest the 8.0 lb/ton clinker limit is noted. With regard to Ash Grove's comment that they anticipate that compliance could require additional control technologies/strategies and that therefore they need the maximum time allowable to find ways to consistently maintain NO<sub>x</sub> at or below that level, we disagree that additional control technologies/strategies are necessary; however, the final FIP does not require specific control technologies/strategies to be used. The final FIP allows for the maximum time available to comply with the 8.0 lb/ton clinker limit.

*Comment:* Ash Grove stated that the company supported the conclusions as to what constitutes BART for SO<sub>2</sub>. Ash Grove noted that in the preamble we stated that there is so little improvement in visibility associated with implementing add-on SO<sub>2</sub> controls that there is no basis for requiring such controls under BART. Ash Grove stated that Clean Air Act Section 169A(g)(2) clearly states that "the degree of improvement in visibility which may reasonably be anticipated to result" must be used in evaluating potential BART controls. Ash Grove concluded that given the nominal improvement in visibility predicted from add-on controls, there is no basis under BART for requiring the addition of such controls. Ash Grove stated that the BART program has a very narrow statutory focus in that it exclusively addresses visibility improvement and that absent a material increase in visibility, the company believes that we would have been arbitrary and capricious if we had required add-on controls for SO<sub>2</sub> utilizing our BART authority. Ash Grove stated that the company supported our ultimate conclusion.

*Response:* The comment is noted. The final FIP makes no changes to the conclusions regarding SO<sub>2</sub> controls for Ash Grove.

*Comment:* Ash Grove stated that the company supported our conclusion that existing PM controls (an electrostatic precipitator (ESP)) constitute BART and that ESPs are well-accepted controls for wet kilns. Ash Grove stated that their compliance with the filterable particulate standard in the process weight rule applicable to the kiln is an appropriate limit for ensuring that the ESP is properly operating and that

annual compliance demonstrations will ensure ongoing compliance. Ash Grove stated that they believe that this approach is particularly appropriate where the contribution of PM emissions to visibility impairment is nominal.

*Response:* The comment is noted. The final FIP makes no changes to the conclusions regarding PM controls for Ash Grove.

*Comment:* Ash Grove requests clarification on whether they must comply with BART limits for SO<sub>2</sub> and PM within five years of the effective date of the rule, as specified in the proposed regulatory text at 40 CFR 52.1396(d), or within 180 days for SO<sub>2</sub> and 30 days for PM, as suggested by the preamble to the proposed rule. If the intent is to require compliance sooner than five years from the effective date, then Ash Grove requests that the rule be renounced, and that if EPA will not allow five years from the effective date, then Ash Grove requests that the BART compliance date for these pollutants be 30/180 days after the effective date, or the Portland cement National Emission Standards for Hazardous Air Pollutants (NESHAP) compliance date, whichever is later, in order to coordinate with the implementation of EPA's Portland cement NESHAP and New Source Performance Standard (NSPS) requirements, including installation and certification of continuous emission monitoring systems (CEMS). Ash Grove stated that the monitoring that EPA is imposing as part of the concurrent Portland cement Maximum Achievable Control Technology (MACT) rulemaking is very complicated and must be able to work in concert with what EPA imposes under this BART rulemaking. Ash Grove also stated that critical components of Ash Grove's envisioned monitoring scheme, such as installation of clinker weigh belts or the development of slurry conversion mechanisms, cannot be implemented within the 180 day period after the effective date.

*Response:* We agree with aspects of this comment, but disagree with others. We agree that there is an omission in the proposed 40 CFR 52.1396(d). We failed to specify, in the rule language itself, the compliance deadline for SO<sub>2</sub> of 180 days after the effective date of the FIP, and the compliance deadline for PM of 30 days after the effective date of the FIP. These deadlines were mentioned in the rule preamble. We have corrected the rule language at 40 CFR 52.1396(d) to specify these deadlines. For both SO<sub>2</sub> and NO<sub>x</sub>, we further clarify that the 180-day deadline is applicable only where installation of additional controls is not necessary to comply with the BART limit; otherwise the compliance

deadline is five years after the effective date of our rule.

We disagree that the compliance deadline should be 30/180 days after the FIP effective date, or the Portland cement NESHAP compliance date, whichever is later. With regard to "whichever is later," EPA does not have the option of specifying an open-ended compliance deadline for BART. In our FIP proposal at 77 FR 23993, we explained that "Once EPA has made its BART determination, the BART controls must be installed and in operation as expeditiously as practicable, but no later than five years after the date of the final FIP. CAA section 169(g)(4) and 40 CFR 51.308(e)(1)(iv)." Ash Grove's comment does not dispute this explanation.

Further, Ash Grove has not presented any specific reason for us to wait on the Portland cement MACT rulemaking before imposing PM and SO<sub>2</sub> monitoring requirements for purposes of BART. First in regard to SO<sub>2</sub> monitoring, the proposed amendments to the Portland cement MACT and NSPS rules do not include any changes to the SO<sub>2</sub> CEMS monitoring requirements. In the proposed amendments, EPA is proposing to correct the emission rate calculation formula for SO<sub>2</sub> in NSPS Subpart F, at 40 CFR 60.64(c), but since we are making the same correction in our final FIP rule (see our response below to the comment on NO<sub>x</sub> and SO<sub>2</sub> emission rate calculation), this is not a valid reason to wait until the Portland cement MACT and NSPS amendments are finalized before imposing SO<sub>2</sub> monitoring in the FIP.

Further, the proposed amended Portland cement MACT and NSPS rules require a SO<sub>2</sub> CEMS only if the kiln is subject to an SO<sub>2</sub> limit under NSPS. Ash Grove has not indicated that their kiln in Montana is subject to an SO<sub>2</sub> limit under NSPS, and even if it is, the proposed amended Portland cement MACT and NSPS rules will not impose any different requirements for an SO<sub>2</sub> CEMS than those in existing NSPS rules at 40 CFR 60.63(f), which are cross-referenced by our proposed regulatory text at 40 CFR 52.1396(e)(3). Ash Grove has also not presented any specific reason, such as vendor unavailability or site-specific complications, why it should take more than 180 days to replace and certify their SO<sub>2</sub> CEMS. We have already stated in our FIP proposal that 180 days would allow time for monitoring systems to be certified if necessary. We are clarifying that CEMS will have to be certified for BART purposes independent of NSPS requirements.

Second, in regard to PM monitoring, the proposed amendments to the

Portland cement MACT and NSPS rules require a PM continuous parametric monitoring system (CPMS), whereas the existing Portland cement MACT and NSPS rules require a PM CEMS. Since our FIP proposal does not require PM CPMS nor PM CEMS, the proposed amendments to the Portland cement MACT and NSPS rules do not affect the FIP and are not a valid reason to extend the 30-day compliance deadline for PM in the FIP.

With regard to Ash Grove's statement that critical components of the monitoring scheme, such as installation of clinker weigh belts or the development of slurry conversion mechanisms, cannot be implemented within the 180 day period after the effective date of the FIP, Ash Grove has not presented any specific reason why it should take longer than 180 days. With regard to Ash Grove's statement that the clinker monitoring must work in concert with the MACT rulemaking, our proposed regulatory text at 40 CFR 52.1396(e)(4)(ii) cross-references 40 CFR 60.63(b) for clinker production monitoring requirements. The proposed amendments to the Portland cement MACT and NSPS rules do not change the requirements in the existing section 60.63(b) for determining the amount of clinker produced. Only minor language clarifications are proposed, and there is no change to actual requirements.

We note that Ash Grove has no issue with the proposed PM BART emission limit. However, in preparing responses to Ash Grove's comments on other aspects of our proposed FIP, we identified a typographical error in our emission limit table for cement kilns. We made a correction to the emission limit table for cement kilns at 52.1396(c)(2), to clarify that the PM emission limit for Ash Grove is in lb/hr, not lb/ton clinker. Only the PM emission limit for Holcim is in lb/ton clinker. Similarly, we have clarified 40 CFR 52.1396(f)(2) to indicate that the emission rate of particulate matter shall be reported in lb/hr for Ash Grove, and in lb/ton clinker for Holcim. Ash Grove is not required to monitor clinker production for purposes of demonstrating compliance with the PM BART limit. We have also included in 40 CFR 52.1396(f)(2) the equation for calculating lb/ton clinker for PM at Holcim, rather than cross-reference 40 CFR 52.1396(e)(4)(ii), which pertains to SO<sub>2</sub> and NO<sub>x</sub>, not PM.

*Comment:* Ash Grove does not object to the requirement in our proposed regulatory text at 40 CFR 52.1396(e)(3) to maintain, calibrate and operate SO<sub>2</sub> and NO<sub>x</sub> CEMS on the cement kiln stack. Ash Grove requests, to be

consistent with other requirements to which they are subject, that the language be revised and proposed creating an exception during CEMS breakdown, repairs, calibration checks, and zero and span adjustments.

*Response:* We agree it is appropriate to address the language for consistency purposes. Rather than use the language proposed by Ash Grove, we are incorporating language from 40 CFR 60.63(g), which says,

You must operate the monitoring system and collect data at all required intervals at all times the affected source is operating, except for periods of monitoring systems malfunctions, repairs associated with monitoring system malfunctions, and required monitoring system quality assurance or quality control activities (including, as applicable, calibration checks and required zero and span adjustments).

We have revised the regulatory text at 40 CFR 52.1396(e)(3) accordingly. 40 CFR 60.63(g).

*Comment:* Ash Grove also believes it is critical that the facility have adequate time to install, shake down and calibrate the necessary CEMS equipment. The facility currently lacks a flow meter and does not have certified CEMS. As a result, Ash Grove anticipates that it must replace its CEMS system, including the data acquisition and handling system (DAHS) as part of Portland cement MACT implementation. Ash Grove stated that this effort cannot be completed until the Portland cement MACT requirements are finalized, as Ash Grove understands that the NESHAP monitoring provisions are in flux. Therefore, Ash Grove believes that the BART CEMS requirements must be implemented at the same time that the Portland cement MACT CEMS requirements are implemented and not before.

*Response:* We disagree. See our response on compliance deadlines above. EPA does not have the option of specifying an open-ended compliance deadline for BART. Further, Ash Grove has not presented any specific reason, such as vendor unavailability or site-specific complications, why it should take longer than 180 days to install a flow meter and replace the CEMS system with a certified system. This comment has not resulted in any change to our proposal.

*Comment:* Ash Grove supports the approach whereby the CEMS data are utilized to demonstrate compliance with the NO<sub>x</sub> and SO<sub>2</sub> BART limits. However, Ash Grove believes there is a material error in the formula used in the proposed regulatory text at 40 CFR 52.1396(e)(4)(ii). The formula expresses the concentrations of SO<sub>2</sub> and NO<sub>x</sub> in

grains per standard cubic foot (gr/scf). Ash Grove noted that a CEMS would not normally generate SO<sub>2</sub> or NO<sub>x</sub> concentrations in gr/scf, but in parts per million (ppm), consistent with the requirements of 40 CFR 60, Appendix B, Performance Specification 2. Ash Grove recognizes that this formula was likely intended to match Equation 3 in the 2010 revised Subpart F NSPS. While Ash Grove appreciates the effort to maintain consistency between the requirements, Ash Grove believes that Equation 3 in the Subpart F NSPS is in error and will be corrected in the upcoming public notice addressing Subpart F. Ash Grove provided a suggested formula to replace the formula stated in the proposed regulatory text.

*Response:* We agree for the reasons stated by Ash Grove that the formula for calculating the emissions should express SO<sub>2</sub> and NO<sub>x</sub> concentrations in ppm, not in gr/scf. We have corrected 40 CFR 52.1396(e)(4)(ii) accordingly; however, rather than use the language proposed by Ash Grove, we have used the formula and associated language found in the proposed amendments to the Portland cement NSPS. 77 FR 42397.

*Comment:* Ash Grove noted that the proposed regulatory text at 40 CFR 52.1396(f) would require that Ash Grove perform EPA Method 5, 5B, 5D or 17, 40 CFR Part 60, Appendix A, to demonstrate compliance with the PM limit and that the test consist of three runs with each run at least 120 minutes long and each run collecting a minimum sample of 60 dry standard cubic feet. Ash Grove supports the approach of identifying the specific source test methods in the rule. However, Ash Grove does not support specifying the duration of each test run and the minimum sample size. Ash Grove stated that this BART FIP is being implemented with the intent that it will control emissions for many years to come. Ash Grove stated that placing this type of detailed data into the rule, rather than letting the test duration and sample size be determined based on the test method as it exists at the time of the test, invites future confusion and trouble. Therefore, Ash Grove suggested that EPA specify the test methods but delete the other language relating to the test duration and sample size.

*Response:* We disagree. The test method does not determine the test duration and sample size, but cross-references other rules in this regard. EPA Method 5 states in subsection 8.2.4, "Select a total sampling time greater than or equal to the minimum total sampling time specified in the test

procedures for the specific industry, such that (1) the sampling time per point is not less than 2 minutes (or some greater time interval as specified by the Administrator), and (2) the sample volume taken (corrected to standard conditions) will exceed the required minimum total gas sample volume.” Methods 5B and 5D cross-reference Method 5 for sampling time and sampling volume. Method 17 does not cross-reference Method 5 for sampling time and sampling volume, but does not specify anything different. We consider three test runs, with each run at least 120 minutes long, and each run collecting a minimum sample of 60 dry standard cubic feet, to be appropriate and necessary for purposes of the Montana Regional Haze FIP. We note that this has been specified in PM stack testing requirements in other regional haze FIPs. (See, for example, Proposed Final FIP by EPA Region 9 for the Four Corners Power Plant, 76 FR 52387, August 22, 2011.) This comment has not resulted in any change to our proposal.

*Comment:* Ash Grove stated that the proposed regulatory text at 40 CFR 52.1396(h)(6) would require that they maintain, among other things, records required by Part 75. Ash Grove is not subject to part 75 as that applies only to electrical generating units. Ash Grove believes that this reference to Part 75 was just a “catch-all” and not intended to impose any obligations under Part 75 upon cement kilns otherwise not subject to Part 75. However, due to the potential for misunderstanding and the lack of relevance of the Acid Rain provisions to cement kilns, Ash Grove requested that the reference to Part 75 be deleted.

*Response:* We agree. Since the proposed monitoring requirements for cement kilns, at sections 52.1396(e)(3) and (4), and at section 52.1396(f)(2), do not cross-reference Part 75, there are no applicable Part 75 recordkeeping requirements under our FIP proposal. Therefore, the reference to Part 75 on recordkeeping, at 40 CFR 52.1396(h)(6), is not necessary and has been removed.

*Comment:* Ash Grove stated that the proposed regulatory text at 40 CFR 52.1396(i) would require that Ash Grove submit quarterly excess emission reports and CEMS performance reports. Ash Grove currently is subject to similar reporting requirements under the Title V and NESHAP programs. However, in both of those programs the reports are submitted semi-annually, not quarterly. Ash Grove sees no purpose gained by submitting the reports quarterly and the additional administrative burden is significant. Therefore, Ash Grove requested that EPA revise this reporting requirement to make it consistent with

the similar reports submitted under Title V and NESHAP programs, i.e., semiannual reports.

*Response:* We agree. We used provisions in NSPS Subparts A and F applicable to cement kilns as a model for the CEMS-related reporting requirements for cement kilns in our FIP proposal. The general provisions of NSPS Subpart A, at 40 CFR 60.7(c), require semiannual excess emission reports and monitoring systems performance reports, except when more frequent reporting is specifically required by an applicable subpart, or if the Administrator, on a case-by-case basis, determines that more frequent reporting is necessary to accurately assess the compliance status of the source. NSPS Subpart F for cement kilns does not specify more frequent reporting. Therefore, we have revised the required reporting frequency to semiannual in 40 CFR 52.1396(i)(1) and (i)(2) for cement kilns. The required reporting frequency for EGUs remains quarterly.

*Comment:* Ash Grove requested that EPA revise its proposed regulatory text at 40 CFR 52.1396(i)(2)(ii) requiring the company to submit Relative Accuracy Audits (RAAs) and Cylinder Gas Audits (CGAs). Ash Grove does not object to the idea of submitting Relative Accuracy Test Audits (RATAs) as those are documented in a highly formalized test report prepared by a third party testing contractor. However, the RAAs and CGAs are not documented in the same type of formal third party report. Ash Grove believes that it is adequate to certify that the audits have been performed as part of the semiannual reports.

*Response:* We disagree. Our proposed regulatory text at 40 CFR 52.1396(e)(3) states that the CEMS shall be used to determine compliance with the emission limitations in section 52.1396(c), for each unit, in combination with data on actual clinker production. For cement kilns, 40 CFR section 52.1396(i)(2)(ii) requires submittal of results of any CEMS performance tests required by 40 CFR part 60, appendix F, Procedure 1, which is titled “Quality Assurance Requirements for Gas Continuous Emission Monitoring Systems Used for Compliance Determination.” Under Section 7 of Procedure 1 (Reporting Requirements), it is not adequate to merely certify that the RAAs and CGAs have been performed. Section 7 requires submittal of a Data Assessment Report for each quarterly audit, which must include “Assessment of CEMS data accuracy and date of assessment, as determined by a RATA, RAA or CGA

described in Section 5, including \* \* \*, the A [accuracy] for the RAA or CGA, the RM [reference method] results, the CEMS responses, and the calculations results as defined in Section 6.” This information must be included in the semiannual reports referenced in our response to the previous comment above. We consider this information appropriate and necessary. This comment has not resulted in any change to our FIP proposal.

*Comment:* Ash Grove requested that EPA drop the requirement proposed in 40 CFR 52.1396(k)(2) to provide semiannual progress reports on construction of SO<sub>2</sub> and NO<sub>x</sub> control equipment. Ash Grove does not object to filing notification of commencement of construction as this obligation is consistent with what Ash Grove is used to under the NSPS and state new source review program. However, semiannual construction progress reports are not something that Ash Grove is typically set up to generate and there seems to be little gained from such reports. Therefore, Ash Grove requested that this requirement be dropped from the rule.

*Response:* We disagree. We consider construction progress reports necessary as part of ensuring that BART sources meet their five-year compliance deadlines. Since installation of substantial equipment may be involved, there could be unforeseen construction delays that we would want to be aware of well before the five-year deadline. We do not consider this reporting a burdensome requirement, as our FIP proposal does not specify any particular level of detail for these progress reports. This comment has not resulted in any change to our FIP proposal.

*Comment:* Ash Grove noted that the BART limits are identified as applying at all times, including startup, shutdown and malfunction. Although the preamble states that the proposed limits allow “for a sufficient margin of compliance,” Ash Grove argued that these limits do not take into account the impact of sudden and unforeseen effects attributable to malfunctions. As compliance with all three limits (i.e., SO<sub>2</sub>, PM and NO<sub>x</sub>) could be affected by a malfunction, Ash Grove believes that it is appropriate for EPA to provide the same affirmative defense in the event of a malfunction as is provided in the Portland cement MACT rules. Specifically, Ash Grove requested that EPA incorporate the same affirmative defense provided in 40 C.F.R. 63.1344 to address malfunctions.

*Response:* EPA disagrees with this comment. As stated in our proposal, to determine the BART NO<sub>x</sub> limit for Ash

Grove, we first applied the efficiency of the selected controls, LNB + SNCR at 58%, to the 99th percentile 30-day rolling average NO<sub>x</sub> emission rate at this facility for May 26, 2006 through September 8, 2008, resulting in a figure of 7.82 lb/ton clinker. 77 FR at 24007 n.45. We then set the BART limit above this, at 8.0 lb/ton clinker. Ash Grove provides no data to show that, at this facility, this limit cannot be achieved due to malfunctions, or that our use of the 99th percentile 30-day rolling-average NO<sub>x</sub> emission rate in combination with the additional margin (from 7.82 to 8.0 lb/ton clinker) provides an insufficient margin of compliance.

For SO<sub>2</sub>, we did not select any additional controls for BART. We based the BART SO<sub>2</sub> limit on the 99th percentile 30-day rolling average SO<sub>2</sub> emission rate at this facility for May 26, 2006 through September 8, 2008, 11.02 lb/ton clinker, and set the BART limit at 11.5 lb/ton clinker. 77 FR at 24013 n.73. Ash Grove provides no data to show that, at this facility, this limit cannot be achieved due to malfunctions, or that our use of the 99th percentile 30-day rolling average SO<sub>2</sub> emission rate at this facility in combination with the additional margin (from 11.02 to 11.5 lb/ton clinker) provides an insufficient margin of compliance.

We also did not select any additional controls for PM. Ash Grove currently has an electrostatic precipitator for PM control and is subject to a process weight-based PM<sub>10</sub> emission rate set out in Montana's approved SIP and Ash Grove's title V operation permit. We set the BART limit, based on use of the current control technology, at the existing emission rate. Ash Grove has not provided any data to show that it is not able to meet the existing limit due to malfunctions. As a result, we continue to maintain that the NO<sub>x</sub>, SO<sub>2</sub>, and PM BART limits for Ash Grove provide for a sufficient margin of compliance, including taking into account malfunctions.

With respect to the Portland cement MACT standard, we note that the MACT standard applies across the entire source category, while the BART limits imposed in this FIP reflect application of the five statutory BART factors to a particular facility, Ash Grove. Ash Grove does not explain why, in this circumstance, the existence of the affirmative defense in the MACT standard necessarily implies an affirmative defense is required for the BART limits, which as discussed above, for NO<sub>x</sub> and SO<sub>2</sub> are based in part on actual emissions from Ash Grove, and for PM are based on an existing limit for

Ash Grove. We therefore disagree that the affirmative defense provided for in 40 CFR section 63.1344 should be also provided for in this FIP.

*Comment:* The opening sentence of the proposed regulatory text at 40 CFR 52.1396(i) states "All reports under this section, with the exception of 40 CFR 53.1395(n) and (o) shall be submitted \* \* \*" Ash Grove believes that this cross-reference is in error, as Ash Grove is not aware of there being a 40 CFR 53.1395(n) or (o). Ash Grove believes this was intended to cite to 40 CFR 52.1396(n) and (o).

*Response:* We agree this was an error. We have corrected the language to cite to section 52.1396(n) and (o), instead of section 53.1395(n) and (o).

#### *E. Comments on Holcim*

*Comment:* Montanans Against Toxic Burning (MATB) applauded our proposed retrofit of the Holcim kiln to include LNB and SNCR.

*Response:* We acknowledge MATB's support.

*Comment:* MATB believes that we should reanalyze the fuel-switching option for the Holcim cement kiln. Specifically, they stated that petroleum coke inputs should be reduced, which they believe would lead to significant reductions in SO<sub>2</sub> emissions. They also stated that our analysis may be skewed by what MATB describes as Holcim's "low-ball" estimates of its sulfur emissions. MATB believes that a review of Holcim's past monitoring data could lead to a different conclusion.

*Response:* We disagree that it is necessary to reanalyze fuel switching options for Holcim. In our analysis, we used annual SO<sub>2</sub> emissions as reported to the National Emissions Inventory and we have no reason to believe that these were underestimated. The annual emissions (50.2 tpy) are so minimal that fuel switching options resulting in increased annual cost would not be considered cost-effective on a dollar per ton basis. In addition, the visibility improvement from fuel switching is very low at 0.015 deciview for fuel switching option 1 and 0.024 deciview for fuel switching option 2.

*Comment:* MATB commented that a "real-time hourly" standard for NO<sub>x</sub> and SO<sub>2</sub>, rather than the 30-day rolling averages based on clinker production proposed, is needed to assure compliance with protective limits. MATB explained that with the 30-day rolling averages, spikes due to malfunction or improper operation will "disappear" in the averaging process.

*Response:* We assume that by "real-time hourly" standard, the commenter means an emission limit in pounds per

hour. We disagree that we should establish an hourly standard rather than a 30-day rolling average limit based on clinker production. As we explained in our proposal (77 FR 24007), we chose an output-based standard because it avoids rewarding a source for becoming less efficient, i.e., requiring more feed to produce a unit of product. An output-based standard promotes the most efficient production process. With regard to 30-day versus hourly averaging time, EPA's BART guideline calls for BART emission limits to be expressed as 30-day rolling averages for electrical generating units. 70 FR 39172. We believe this is appropriate for other BART units as well. The proposed limit allows for a sufficient margin of compliance for a 30-day rolling average limit that would apply at all times, including startup, shutdown, and malfunction. 77 FR 24018.

*Comment:* MATB believes that more oversight, transparency, and accountability are needed when it comes to reporting and record keeping.

*Response:* We are confident that the information used to make our decision is accurate. With regard to reporting and recordkeeping requirements under the FIP, the commenter has not explained what oversight, transparency and accountability is lacking and what more is needed in this regard. That said, section 114 of the CAA allows EPA and the State to ask for monitoring data and reports as necessary. These documents are available to the public unless the information is claimed to be confidential business information.

*Comment:* MATB commented that the efficiency of Holcim's ESP is incorrect as stated in EPA's analysis, and does not operate during most malfunctions. These malfunctions can last 24 hours or more. Additionally, MATB stated that EPA's analysis fails to consider PM during periods of startup, shutdown and malfunction and considering the frequent upsets with the Trident kiln, that cause its ESP to be turned off, an additional control measure at Holcim is essential. MATB encouraged us to analyze the addition of a fabric filter.

*Response:* We disagree that it is necessary to evaluate the installation of a fabric filter at Holcim. In our proposal, we explained that PM emissions from Holcim did not significantly contribute to visibility impairment. We used actual emission rates to model the visibility impact from Holcim. Because the baseline visibility impact from PM was low, improvements to the existing PM control device would not be significant.

*Comment:* The commenter stated that an annual three-hour stack test is

inadequate to monitor PM emission limit compliance.

*Response:* We disagree. The proposed requirements for demonstrating compliance with PM emission limits include more than just an annual three-hour stack test. "In addition to annual stack tests, owner/operator shall monitor particulate emissions for compliance with the BART emission limits in accordance with the applicable Compliance Assurance Monitoring (CAM) plan developed and approved in accordance with 40 CFR part 64." 77 FR 24099. The requirements include the following:

- 40 CFR 64.3(a) requires that a monitoring parameter be selected by the owner/operator as an indicator of emission control performance for the control device.
- 40 CFR 64.3(b) requires that an indicator range for that parameter be selected "such that operation within the range provides a reasonable assurance of ongoing compliance with emission limitations or standards for the anticipated range of operating conditions."
- 40 CFR 64.7(d) requires the owner/operator, upon detecting an excursion or exceedance of the CAM indicator range, to restore operation of the emitting unit and emission control device to its normal or usual manner of operation as expeditiously as practicable, in accordance with good air pollution control practices for minimizing emissions.
- 40 CFR 64.8 says the Administrator or permitting authority may require the owner/operator, in the event of repeated excursions or exceedances of the CAM indicator range, to develop and implement a Quality Improvement Plan, to correct any control device performance problems.

Further, 40 CFR 52.11396(l) states, "At all times, owner/operator shall maintain each unit, including associated air pollution control equipment, in a manner consistent with good air pollution control practices for minimizing emissions" This applies to all sources in the FIP.

*Comment:* MATB explained that there are inconsistencies in EPA's proposed NO<sub>x</sub> and SO<sub>2</sub> emissions limits, and there appears to be a mistake on Table 53 dealing with fuel-switching options.

*Response:* These inconsistencies were corrected in the FR notice dated May 17, 2012. 77 FR 29270.

*Comment:* Holcim commented that that the output-based standards we proposed reward a source for operating inefficiently. Holcim indicated that our proposed FIP is unfairly stringent with respect to Holcim as compared to Ash

Grove. They stated that the kiln types and capacities of the two plants are substantially equal, but that Holcim's emissions profiles are notably different. Holcim stated that they use proper kiln design and best combustion practices to control NO<sub>x</sub> emissions at their plant, and that Ash Grove has NO<sub>x</sub> emissions that are 42% higher than NO<sub>x</sub> emissions from the Holcim plant. Holcim further stated that our proposed FIP rewards Ash Grove with a NO<sub>x</sub> BART emission limit that is 60% higher than Holcim's proposed NO<sub>x</sub> BART emission limit. Holcim pointed out that their kiln has substantially lower current NO<sub>x</sub> emission rates, lower current visibility impacts, and a lower subsequent visibility improvement, yet our FIP requires substantially tighter emission limits for NO<sub>x</sub> and SO<sub>2</sub>.

Holcim commented that, based on EPA's analysis, the proposed NO<sub>x</sub> limit would require Holcim to invest a total of \$5.6 million in SNCR and indirect firing, which would result in an improvement in visibility at Gates of the Mountains WA that is significantly less than the 1.0 deciview perceptibility threshold and that our proposed FIP would require only a \$1.19 million capital investment from Ash Grove, even though Ash Grove's impact on Gates of the Mountains WA is more than double the impact from Holcim. Holcim also stated that we estimated that Ash Grove's NO<sub>x</sub> emissions caused degradation in visibility of greater than 0.5 deciview at Gates of the Mountains WA on approximately 33% of the days in the baseline period while Holcim impacted Gates of the Mountains WA at greater than 0.5 deciview only on approximately 4% of the days during the baseline period. Holcim stated that EPA's approach would reward Ash Grove's higher emissions and inefficient operation by creating an economic disadvantage for Holcim in a highly competitive market.

*Response:* We disagree. Our explanation in the proposed FIP regarding the output-based standard was provided to explain the difference between a standard expressed in quantity of pollutant per amount of feed and quantity of pollutant per amount of product produced. As explained in our proposal, an output-based standard avoids rewarding a source for becoming less efficient, i.e., requiring more feed to produce a unit of product. 77 FR 24007. Our explanation did not imply that both sources should have exactly the same emission rate. The NO<sub>x</sub> standards for both Holcim and Ash Grove were determined by applying the control efficiency of the selected technologies to the current emission rates at each

facility. This is the most appropriate method to determine emission limits for these two sources. As explained in other responses, we are not requiring Holcim to convert to indirect firing in the final FIP, so the information comparing capital investment is no longer relevant. In the final FIP, we have determined the emission rate for Ash Grove by applying the control effectiveness of LNB + SNCR (58%) to the current emission rate and as explained in other responses we have revised the emission rate for Holcim by applying the control effectiveness of SNCR (50%) to the current emission rate. In both cases, we have determined the emission rate based on the control effectiveness of the control technology that was chosen based on the five statutory BART factors listed at CAA section 169A(g)(2) and 40 CFR 51.308(e)(1)(ii)(A). The five statutory factors include the costs of compliance and visibility improvement; therefore, these factors were evaluated and considered in the selection of controls. Applying the control effectiveness of the technology that was identified based on the five statutory factors to the current emission rates for each source is a logical method for determining emission rates. This same methodology was used for determining the emission rates for both sources.

We note that in the final FIP, Ash Grove will reduce an estimated 1,088 tons per year of NO<sub>x</sub> using LNB+SNCR at a total annual cost of \$2,238,893, but Holcim will only reduce an estimated 556 tons per year of NO<sub>x</sub> at a total annual cost of \$650,399. Ash Grove will be reducing 946 tons per year of NO<sub>x</sub> through the operation of SNCR, but Holcim will only be reducing 556 tons per year through the operation of SNCR.<sup>12</sup> We provide this information to demonstrate that overall, more emissions will be reduced by Ash Grove and to also illuminate the fact that annual cost will be greater for Ash Grove. The cost of reagent is proportional to the amount of pollutant removed; therefore, annual reagent cost will be significantly greater for Ash Grove.

We are not requiring additional controls for SO<sub>2</sub> for either Holcim or Ash Grove and the SO<sub>2</sub> limits for each facility were determined based on current emission rates. This determination was based on an evaluation of the five statutory factors and the SO<sub>2</sub> emission rates were determined in the same manner for both

<sup>12</sup> See Table 11, FR 77 24004, and Table 22, 77 FR 24007 for Ash Grove. Holcim's baseline NO<sub>x</sub> emissions are 1,112 tpy. Revised emissions reduction for SNCR only for Holcim is 556 tpy and cost is \$1,170/ton.

facilities. There is no necessity for additional SO<sub>2</sub> control at either facility; the current controls were considered to be BART.

As for Holcim's comment that the proposed FIP rewards Ash Grove's higher emissions and inefficient operation by creating an economic disadvantage for Holcim in a highly competitive market, the BART Guidelines do allow for the consideration of unusual circumstances that justify taking into consideration the conditions of the plant and the economic effects of requiring the use of a given control technology. The BART Guidelines state:

[t]hese effects would include effects on product prices, the market share, and profitability of the source. Where there are such unusual circumstances that are judged to affect plant operations, you may take into consideration the conditions of the plant and the economic effects of requiring the use of a control technology. Where these effects are judged to have a severe impact on plant operations you may consider them in the selection process, but you may wish to provide an economic analysis that demonstrates, in sufficient detail for public review, the specific economic effects, parameters, and reasoning.

70 FR 39171. Holcim did not provide information for us to consider in such an analysis.

The BART Guidelines also state, "[a]ny analysis may also consider whether other competing plants in the same industry have been required to install BART controls if this information is available." 70 FR 39171. In this case, Ash Grove is required to install BART controls. We have considered each plant individually, and based on the BART analyses both Holcim and Ash Grove plants are required to install BART controls.

*Comment:* Holcim argued that the Texas kilns cited by EPA in the FIP are not representative and two of the three kilns did not achieve 50% NO<sub>x</sub> reduction. Holcim cited several site-specific factors that impact SNCR performance that they state EPA did not adequately consider, including turbulent mixing, heat transfer, spray droplet size, spray drop evaporation, devolatilization and others. Holcim also argued that the carbon monoxide (CO) levels at the Trident kiln are much lower than the CO levels at the Texas kilns, which will adversely impact NO<sub>x</sub> reductions and ammonia slip at the Trident kiln relative to the Texas kilns. Holcim additionally argued that EPA did not adequately consider NO<sub>x</sub> emissions variability in setting the limit because of the limited time frame considered for the data from the Texas kilns.

*Response:* We disagree. EPA has assumed that 50% reduction is possible with SNCR; however, this does not rule out the possibility that Holcim may determine that other means, such as mid-kiln firing, may be better than SNCR alone in terms of cost or other factors for achieving 50% NO<sub>x</sub> reduction. In any event, 50% NO<sub>x</sub> reduction is achievable with SNCR and this is supported by the data cited in the proposed FIP. We address this in more detail in a response to Ash Grove.

Holcim also noted that SNCR performance depends upon a wide range of site-specific factors. They list rate-limiting processes, including turbulent mixing, heat transfer, spray droplet size, spray drop evaporation, devolatilization and others. As detailed in a contractor's report in the docket, we have considered these factors and none of them causes us to change our decision. In brief, spray droplet size is a factor the SNCR system designer can control and tailor to the needs of the system. Turbulent mixing may or may not be within the SNCR system designer's ability to control, but in any case our selection of SNCR does not depend on optimal turbulent mixing.

With respect to CO concentration, if the CO at the Trident kiln is much lower than at the Texas kilns referred to in the comments, as Holcim describes, this simply means that the SNCR reagent should be introduced at a point in the process where the gas temperature is higher than the injection point used at the Texas kilns where the CO levels are higher. This may in fact improve SNCR performance.

With regard to NO<sub>x</sub> emission variability raised by Holcim, first, the data used by EPA in Table 10 of the proposed FIP cover a three month period which should be adequate time to address normal operating changes that would impact NO<sub>x</sub>. Second, SNCR can be used to mitigate variability in NO<sub>x</sub> emissions. This is confirmed by the data on the Midlothian kilns that is in the proposed FIP and as described in response to comments from Ash Grove. For every kiln, the standard deviation in the monthly NO<sub>x</sub> emission rate was lower after the application of SNCR than before, indicating a lower variation in NO<sub>x</sub> emissions.

*Comment:* Holcim argued that a detached plume may result from operation of the SNCR in the winter months, which will make it necessary to not operate the SNCR system or to allow a condition where visibility is adversely impacted to continue. The detached plume could be the result of the formation of ammonium salt reactions with sulfate or chlorides.

*Response:* We disagree. As discussed by Miller,<sup>13</sup> there are several factors that could contribute to a visible detached plume, and these include moisture, temperature, and availability of the constituents that contribute to the plume—ammonia, sulfates and chlorides. Ammonia slip from the SNCR process can be well controlled in a cement kiln, and the SNCR system would not affect the amount of ammonia contributed by raw materials.

Sulfates and chlorides are largely the result of impurities in the raw materials, and ammonia can be contributed by raw materials. Holcim's SO<sub>2</sub> emissions are low indicating low levels of sulfates in the exhaust. Therefore, the risk of an ammonium sulfate plume, even with ammonia present, is small. The presence of chlorides will depend upon the raw materials and whether the chlorides become bound to alkaline material before being emitted up the stack.

Chlorides, if present, will typically preferentially be bound to alkaline material that is present rather than be emitted. Holcim did not provide any information on stack chloride emission levels at this site to support their concerns about detached plume from ammonium chloride.

Because of the importance of impurities in the raw materials in contributing to the chemical constituents that form a plume, the experience at one kiln cannot be directly applied to another without more information. Therefore, while there may be a risk of a visible plume at the Trident kiln, Holcim has not provided enough data to indicate that addition of an SNCR system would increase this risk significantly. Furthermore, a localized plume would not necessarily impact a Class I area and Holcim has not provided any information indicating such an impact.

*Comment:* Holcim indicated that EPA failed to consider the NO<sub>x</sub> control technology already installed at the Trident plant. Holcim explains that they changed the burner at Trident in May 2009 to a multichannel LNB design as part of the company's burner system modification for NO<sub>x</sub> control, as detailed in Holcim's 2007 BART analysis.

Holcim stated that EPA's BART analysis ignored the installation of the multichannel LNB at the Trident plant, in contravention of EPA's obligation to consider "any existing pollution control

<sup>13</sup> Miller, F. M., "Management of Detached Plumes in Cement Plants" 2001 IEEE-IAWPCA Cement Industry Technical Conference Vancouver, British Columbia, Canada April 2001.

technology in use at the source” as part of the five-factor BART analysis. 42 U.S.C. 7491(g)(2). Holcim’s BART analysis was prepared and submitted in 2007, before the multichannel LNB technology was installed.

Holcim explains that they originally installed a multichannel burner in April 2008 but it caused operational issues and was removed in July 2008. The multichannel burner was redesigned, installed in May 2009, and has operated continuously since that time. According to Holcim, the multichannel design allows the fuels to be separated into different channels and enables Holcim to more precisely control the amount of air passing through each of the channels. Consequently, Holcim says, they can better control the flame characteristics in the kiln, which results in higher thermal efficiency of the kiln and improved product quality.

Holcim stated that they also anticipated that the multichannel design would reduce NO<sub>x</sub> and SO<sub>2</sub> emissions. Holcim acknowledges that the effects of the technology are difficult to quantify. Based on a comparison of NO<sub>x</sub> emissions pre- and post-installation of the LNB technology where the fuel mix was generally the same, Holcim says the plant’s NO<sub>x</sub> emissions decreased by approximately 13% with the installation of the multichannel LNB. In addition to the multichannel LNB, Holcim stated that they installed an indirect firing system for the petroleum coke system.

Holcim notes that EPA used a baseline for the Trident plant of years 2008 through 2011, a period of time that already includes the effects of the LNB technology at the plant. Holcim stated that EPA assumed in its BART proposal for the Trident plant that the combination of LNB and indirect firing would achieve a NO<sub>x</sub> reduction of 15%. However, Holcim stated that a 13% reduction in NO<sub>x</sub> emissions has already been achieved through prior installation of the multichannel LNB. Holcim states there is no basis to assume that indirect firing would improve NO<sub>x</sub> emissions reductions at Trident and that additional NO<sub>x</sub> reductions can only be obtained through installation of SNCR. As a result, Holcim concludes that EPA’s analysis of the cost-effectiveness and visibility impact for the installation of indirect firing is, “clearly erroneous and should be disregarded”.

*Response:* We agree with aspects of this comment, but disagree with others. As described in more detail below, Holcim has not provided enough information to demonstrate that the installed multi-channel burner that Holcim installed is in fact a low NO<sub>x</sub> burner. In any case, the baseline used

for the BART analysis included emissions averaged over a four year period (2008–2011), which would have included the time that the multi-channel burner was installed. We have decided that the incremental cost of indirect firing and a low NO<sub>x</sub> burner is not justified and have revised the BART emission limit accordingly.

We agree that our BART proposal, did not consider installation of the new burners that Holcim describes as “multichannel LNB” in its March 20, 2008 letter to Vickie Walsh of the MDEQ. As the June 9, 2009 letter from Holcim to EPA notes, “a low NO<sub>x</sub> burner modification would require low primary air and, thus, a conversion of Trident’s firing system from a direct to an indirect system.” Based on the information we have, it appears that the Trident kiln has not installed an indirect firing system for coal and therefore the multichannel burner does not meet the definition of LNB in Holcim’s letter. The burner is not capable of operating at low primary air levels on pulverized coal and cannot achieve the NO<sub>x</sub> reductions that an indirect firing system would achieve.

However, we disagree that we must credit the newly installed burner with a 13% reduction in NO<sub>x</sub> emissions, because we are lacking validation data that such a reduction has been achieved. Holcim has only presented summary information to support the claim of 13% reduction and has not provided the underlying data to validate its claim. Our examination of NO<sub>x</sub> emissions data provided by Holcim on March 2, 2012, covering the period from 2008 through 2011 (referenced in our proposal at 77 FR 24018, footnote 93), does not reveal any evidence of sustained NO<sub>x</sub> emission reduction after May of 2009. We have used data from the time period 2009–2011, after the new burner was installed, in calculating baseline emissions. 77 FR 24014, Table 39, footnote 1. This baseline accurately reflects current conditions and is appropriate for comparison to available control scenarios.

Nevertheless, since a switch to indirect firing to accommodate installation of LNB, as described in our FIP proposal, would have an unreasonably high incremental cost-effectiveness of \$8,029/ton, with minimal visibility benefits (see our response below), we are not requiring a switch to indirect firing and LNB as BART in the final FIP. We also are clarifying that we intended this option to include switching to indirect firing and a LNB. We have recalculated the proposed BART limit for NO<sub>x</sub> to reflect a 50% reduction in NO<sub>x</sub> emissions from

that baseline by addition of SNCR alone, rather than the 58% reduction we previously used, which reflected switching to indirect firing and adding a LNB plus SNCR.

In recalculating our proposed BART emission limit for NO<sub>x</sub>, we continue to rely on the estimate of baseline NO<sub>x</sub> emissions in lb/ton clinker provided in Holcim’s 2012 submittal, cited in our proposal at 77 FR 24018, footnote 93. That submittal listed a 99th percentile 30-day rolling average NO<sub>x</sub> emission rate of 12.6 lb/ton clinker, for the period 2008–2011. Applying a 50% reduction to the 99th percentile figure yields 6.3 lb/ton clinker. To allow for a sufficient margin of compliance for a 30-day rolling average limit that would apply at all times, including startup, shutdown and malfunction (as explained in our proposal at 77 FR 24018), we are setting the BART limit at 6.5 lb/ton clinker in our final rule.

Since the estimated baseline NO<sub>x</sub> emissions have not changed from our proposal, and since our estimate of 50% NO<sub>x</sub> reduction for SNCR alone has not changed from our proposal, our estimate of 556 tons per year of expected NO<sub>x</sub> reduction for SNCR alone has also not changed from our proposal.

*Comment:* Holcim stated that EPA underestimated the costs of installing and maintaining a SNCR system. Holcim stated that the company calculated the direct annual costs of SNCR to be \$443,341 and the indirect annual costs for SNCR to be \$227,538, and that these calculations employed a 15-year amortization schedule, as requested by EPA in 2007.<sup>14</sup> Holcim noted that EPA’s estimated direct annual costs and indirect annual costs for SNCR are lower than Holcim’s estimates by approximately 67% and 46%, respectively and suggested that the difference may be at least in part due to EPA’s use of a 20-year period in the proposal.

Holcim stated that it is unclear how EPA derived its numbers and that EPA provided no explanation in the FIP proposal. Holcim requested clarification of EPA’s method for calculating these costs and urged EPA to instead use the cost calculation numbers provided by Holcim.

Also, Holcim stated that if EPA reviews selective catalytic reduction (SCR) for cement kilns in subsequent reasonable progress planning periods, and determines that Holcim must install SCR instead of SNCR at that time then

<sup>14</sup> August 2009 Submittal (EPA-R08-OAR-2011-0851-0038); Letter from Callie A. Videtich to Ned Pettit (Nov. 26, 2007) (EPA-R08-OAR-2011-0851-0038).

the 20-year amortization for SNCR costs would not accurately reflect the annual costs of installing SNCR. Holcim also stated that since the company conducted its original analysis, Holcim has installed SNCR at its plant in Hagerstown, Maryland in 2011, which also has a long kiln. Holcim stated that the total capital costs for the SNCR installation at Hagerstown were approximately \$1,920,000, including the cost of commissioning and spare parts and that, in addition, Hagerstown budgeted \$591,000 for 2012 operating costs (\$1.35 per metric ton of clinker or \$1.23 per metric ton of cement). Holcim stated that actual operating costs for 2012 through the end of April have been \$179,000 (\$1.40 per metric ton of clinker or \$1.28 per metric ton of cement). Holcim anticipates that similar capital and operating costs would apply to the installation of SNCR at Trident. Holcim requested that EPA use these updated figures in its analysis of the costs of SNCR at Trident.

*Response:* We agree with aspects of this comment, but disagree with others. We note that the letter to which Holcim refers requested that Holcim reanalyze annualized costs using a 15-year amortization period for a scrubber, not SNCR. We agree that EPA underestimated the cost of SNCR and that clarification on cost is needed, but we disagree with the statement that EPA provided no explanation in its proposal on how EPA derived its cost numbers. We also disagree with the statement that EPA provided no explanation for use of a 20-year amortization period. We also disagree with the statement that SNCR costs at the Trident kiln should be similar to Holcim's Hagerstown kiln.

We agree that we underestimated the cost of SNCR and that clarification is needed. The underestimate arose from our omission of cost of reagent. In Holcim's August 12, 2009 submittal, two versions of a SNCR cost spreadsheet were included. In one version, Holcim redacted the line item for reagent cost, on the basis of a Confidential Business Information (CBI) claim. This was the version we used for our proposal. However, in its cover letter for the August 12, 2009 submittal, Holcim stated that it later retracted its CBI claim. So the submittal included a second version of the same SNCR cost spreadsheet, in which the reagent line item now appears. The reagent cost is listed by Holcim in this second version at \$379,183.

We have recalculated the annual costs of SNCR to include the cost of reagent. Relying on the second version of the cost spreadsheet in Holcim's August 12, 2009 submittal, we now calculate the

annual costs other than capital recovery at \$526,471 and the total annual cost, including capital recovery, at \$650,399. Using an estimated emission reduction of 556 tons per year of NO<sub>x</sub>, as we did in our proposal (which is a 50% reduction from the NO<sub>x</sub> emissions baseline of 1,112 tons per year), we have recalculated the cost-effectiveness of SNCR at \$1,170/ton. At this cost-effectiveness, we still consider SNCR to be BART for NO<sub>x</sub>. Holcim has given us no reason to think otherwise.

We disagree with the statement that EPA provided no explanation in its proposal on how EPA derived its cost numbers. We explained that we relied on cost estimates supplied by Holcim for capital costs and annual costs of SNCR, with the exception of the Capital Recovery Factor (CRF) used. 77 FR 24015. We included a footnote to Table 44 to explain that we relied on Holcim's capital cost estimate for SNCR. We included a second footnote to that table to explain what CRF we used. We also included a footnote to Table 45 to explain that we relied on Holcim's estimate of direct annual operating costs. 77 FR 24016.

We disagree with the statement that EPA provided no explanation for use of a 20-year amortization period. As explained at 77 FR 24015, we relied on Holcim's estimates of SNCR capital cost and annual costs, with the exception of the capital recovery factor (CRF). We acknowledge that we wrote to Holcim in 2007 to recommend 15-year amortization, and that our decision since then to use 20-year amortization instead needs clarification. We now clarify that after reviewing EPA national guidance on CRFs in more detail since 2007, we determined that it would be more appropriate to use a CRF consistent with 20 years for the useful life of the kiln and associated SNCR controls. As explained below, our use of a 20-year period was not arbitrary.

The guidance we relied on was EPA's Air Pollution Control Cost Manual (CCM), which says, in regard to SNCR, that "In general, indirect annual costs (fixed costs) include the capital recovery cost, property taxes, insurance, administrative charges, and overhead. Capital recovery cost is based on the anticipated equipment lifetime and the annual interest rate employed. An economic lifetime of 20 years is assumed for the SNCR system." EPA Air Pollution Control Cost Manual, Sixth Edition, EPA/452/B-02-001, January 2002, Section 4.2, Chapter 1, page 1-37. We explained in our FIP proposal that without commitments for an early shutdown, EPA cannot consider a shorter amortization period. 77 FR

24014. For consistency in comparing control options for NO<sub>x</sub> and SO<sub>2</sub> for all Montana BART sources, our FIP proposal uses a 20-year equipment life in all the BART analyses (provided that the equipment life of each control option is 20 years or more). The CRF for a 20-year equipment life and 7% discount rate (the latter being recommended in Office of Management and Budget (OMB) Circular A-4, which we cited at 77 FR 24016) is 0.0944. As shown in Table 44 at 77 FR 24016, we multiplied Holcim's estimated capital cost of \$1,312,800 by this CRF to yield a capital recovery cost of \$123,928.

With regard to Holcim's comment that a 20-year amortization would misrepresent actual costs in the event that SCR rather than SNCR were to be required in the next planning period, we cannot anticipate every event that might happen in the future and we are not required to do so in establishing an amortization period.

We disagree with the statement that SNCR costs at the Trident kiln should be similar to Holcim's Hagerstown kiln. The Trident kiln is much smaller than the Hagerstown kiln. The Trident kiln is permitted at 425,000 tons per year of clinker production. Montana Air Quality Permit #0982-11, Condition II.B.6. The Hagerstown kiln is rated at 630,114 tons per year of clinker production capacity. Prevention of Significant Deterioration (PSD) Permit Application for Approval, Holcim Hagerstown, October 30, 2008. Also, the Hagerstown kiln—a dry kiln—likely has different emission rates than the Trident kiln. Without more information, it is not possible to determine how much of the claimed \$1,920,000 capital cost of the Hagerstown kiln SNCR system, as well as operating costs, would be costs that are permissible for inclusion in a BART cost estimate. For these reasons, without more information, the costs of the SNCR system at the Hagerstown kiln are not useful for estimating the costs at the Trident kiln. Therefore, we continue to rely on the SNCR capital cost estimate of \$1,312,800 and operating cost estimate of \$147,288 for Trident, already supplied to us by Holcim in the August 2009 submittal. We also note that, even with a capital cost of \$1,920,000, it appears SNCR would remain cost-effective; Holcim has provided no reason why our BART selection would change. This comment has not resulted in any changes to our regulatory text for NO<sub>x</sub> BART.

*Comment:* Holcim indicated that EPA underestimated the costs of installing indirect firing at Trident. Holcim stated that the company did not include indirect firing in its 2007 BART analysis

and did not consider indirect firing to be an appropriate technology to evaluate to achieve NO<sub>x</sub> reductions at Trident. Holcim stated that at EPA's request, the company submitted an estimate to EPA of the costs of installing indirect firing at Trident.<sup>15</sup> Holcim stated that in EPA's own analysis, the Agency "inexplicably and arbitrarily" eliminated a significant portion of the costs from Holcim's analysis. Nonetheless, even using EPA's underestimated costs for the installation of indirect firing and mistaken assumption that indirect firing could reduce NO<sub>x</sub> emissions at Trident by 15%, neither the average cost-effectiveness of indirect firing nor the incremental cost-effectiveness of indirect firing warrant a determination that indirect firing should be selected as BART.

Holcim pointed out that EPA is proposing to require that Holcim install both SNCR and indirect firing at Trident based on its analysis of the average cost-effectiveness of installing both technologies together. Holcim stated that the overwhelming majority of NO<sub>x</sub> emissions reductions and improvements in visibility would result from the installation of SNCR alone and that by ignoring the incremental costs of SNCR + indirect firing, and focusing solely on the average cost effectiveness, Holcim states that EPA tries to make the costs of SNCR + indirect firing appear reasonable. Holcim stated that the average cost-effectiveness for the installation of SNCR at Trident is well within the range of what EPA has considered for BART, but that EPA estimated the average cost effectiveness of indirect firing to be \$4,279/ton, which is far outside the range of what EPA has considered to be reasonable for BART. With such high costs for indirect firing, the incremental cost-effectiveness of SNCR + indirect firing as compared to SNCR alone is \$8,029/ton. Holcim stated that EPA should consider both the average and incremental cost effectiveness of its BART analysis for Trident. Holcim stated that, although EPA clearly identified the incremental cost effectiveness of SNCR + indirect firing, EPA "inexplicably ignored this unreasonable figure in concluding that the combination of technologies constitutes BART for Trident". Holcim stated that the incremental cost effectiveness of SNCR + indirect firing is unreasonable given the slight to nonexistent improvement in visibility that it would achieve and that EPA

should eliminate this combination of technologies as BART.

Holcim further stated that, based on modeling, the installation of indirect firing and SNCR at Trident, even if it could achieve EPA's claimed 58% reduction in NO<sub>x</sub> emissions, would result in an improvement of visibility of only 0.424 deciview in Gates of the Mountains WA and that this does not constitute a significant or perceptible improvement in visibility. Holcim stated that EPA's conclusion is even more unjustifiable considering the actual percentage reduction that Trident could be expected to achieve with the installation of SNCR of approximately 35% on an annual average basis.

Finally, Holcim stated that the average cost effectiveness estimates for indirect firing alone (\$4,279/ton) and for SNCR + indirect firing (\$1,528/ton) are well above what EPA used as a cost-effectiveness threshold for NO<sub>x</sub> in the Cross-State Air Pollution Rule (CSAPR), which EPA promulgated last year to address health-based standards. Holcim stated that the company does not understand why EPA believes it appropriate to use a higher cost threshold for an aesthetic standard than it has for a health-based standard.

*Response:* We agree with aspects of this comment, but disagree with others. We agree that an incremental cost effectiveness of \$8,029/ton, for LNB/indirect firing + SNCR, versus SNCR alone makes LNB/indirect firing + SNCR unreasonable for BART at the Trident kiln.

As explained in a previous response above, we have removed switching to indirect firing and a LNB from consideration as an option for further reducing NO<sub>x</sub> emissions and are treating any NO<sub>x</sub> emission reduction that may have been achieved from installation of a new burner as part of the emissions baseline. We have recalculated the proposed BART limit for NO<sub>x</sub> to reflect a 50% reduction in NO<sub>x</sub> emissions from that baseline by addition of SNCR alone, rather than the 58% reduction we previously used, which reflected a switch to indirect firing and a LNB plus SNCR. The recalculated NO<sub>x</sub> BART limit is 6.5 lb/ton clinker.

We disagree, however, with the statement that EPA analyzed for indirect firing as a separate control option. We did not. Throughout our proposal, we refer to the control option as LNB and are now clarifying that this option was intended to include switching to indirect firing and a LNB. We explained at 77 FR 24015 that the capital cost estimate of \$4,385,307 for LNB includes the cost of converting from a direct to

an indirect firing system to accommodate LNB, including installation of a baghouse, additional explosion prevention, pulverized coal storage, and dosing equipment. We cited Holcim's additional response of August 2009 as the source of this information.

We disagree with the statement that SNCR could be expected to achieve only a 35% reduction in NO<sub>x</sub> emissions. See our response to Holcim's comment above.

We also disagree with the statement that any controls required by our action must demonstrate a perceptible visibility improvement. In a situation where the installation of BART may not result in a perceptible improvement in visibility, the visibility benefit may still be significant. The July 6, 2005 BART Guidelines state:

even though the visibility improvement from an individual source may not be perceptible, it should still be considered in setting BART because the contribution to haze may be significant relative to other source contributions in the Class I area. Thus, we disagree that the degree of improvement should be contingent upon perceptibility. Failing to consider less-than-perceptible contributions to visibility impairment would ignore the CAA's intent to have BART requirements apply to sources that contribute to, as well as cause, such impairment.

70 FR 39129. Visibility impacts below the thresholds of perceptibility cannot be ignored because regional haze is produced by a multitude of sources and activities which are located across a broad geographic area.

With regard to Holcim's comment comparing the cost-effectiveness of controls required under the CSAPR, with cost-effectiveness of controls required under the Regional Haze Rule and the BART Guidelines, we reject the comparison. The two rules address different requirements of the CAA.

*Comment:* Holcim agreed with EPA's proposal that no additional controls constitute BART for SO<sub>2</sub> at Trident but objected to the imposition of a 30-day SO<sub>2</sub> limit. In Holcim's view, imposing a 30-day limit is neither reasonable nor necessary. Holcim's Trident plant relies on inherent scrubbing to achieve its extremely low SO<sub>2</sub> emissions. EPA's modeling confirms that SO<sub>2</sub> emissions from Trident have effectively zero visibility impact. Trident could more than double its current SO<sub>2</sub> emissions and still not have any reliably predictable impact on visibility (less than 0.1 deciview). Even if all SO<sub>2</sub> emissions from Trident were eliminated, visibility would improve in Gates of the Mountains WA by less than 0.05 deciview; less than one-twentieth of a perceptible change in visibility. See

<sup>15</sup> Letter from Greg Gannon to Laurel Dygowski, June 9, 2009. (See EPA-R08-OAR-2011-0851-0038).

77 FR at 24021. *Id.* at 24021, Table 63. Holcim stated that the kiln could not increase its emissions sufficiently to affect visibility without exceeding its currently enforceable limit.

Consequently, Holcim stated that there simply is no need to impose short term SO<sub>2</sub> limits to protect visibility.

Second, Holcim stated that because Trident relies on inherent scrubbing to control SO<sub>2</sub>, the plant has no real control over the short-term emissions variability that results from the natural variability in limestone from its quarry. The emissions variability would never rise to a level that could affect visibility, but it could cause Trident to exceed the proposed 30-day limit. Thus, the only effect of the 30-day limit would be to impose unnecessary regulatory burdens on the plant and expose it to potential penalties for short-term emissions variability, over which Holcim has no control and which would not impact visibility.

Holcim also commented that EPA is proposing to impose an SO<sub>2</sub> limit that is not based on the installation of retrofit control technology or a process change and that offers no improvement in visibility. Holcim stated that because the proposed limit is based on current emissions and will not improve visibility, it cannot be considered BART; the CAA and EPA's own BART Guidelines require that, in determining BART, the Administrator consider the degree of improvement in visibility which may reasonably be anticipated to result from the use of such technology. Holcim requested that EPA eliminate its proposed 30-day SO<sub>2</sub> limit as it does not represent BART and would impose unnecessary regulatory burdens and new compliance risks while serving no visibility purpose.

*Response:* We disagree. The July 6, 2005 BART Guidelines state that “\* \* \* you must establish an enforceable emission limit for each subject emission unit at the source and for each pollutant subject to review that is emitted from the source.” 70 FR 39172. Our FIP proposal states that “States, or EPA if implementing a FIP, must address all visibility-impairing pollutants emitted by a source in the BART determination process. The most significant visibility impairing pollutants are SO<sub>2</sub>, NO<sub>x</sub> and PM.” 77 FR 23993. Similarly, the BART Guidelines identify SO<sub>2</sub>, NO<sub>x</sub> and PM as visibility-impairing pollutants. 70 FR 39160. Since these pollutants are subject to review, emission limits must be established. This comment has not resulted in any changes to our proposal. We note that Holcim has not provided any specific data to demonstrate that

they may exceed the emission limit established for SO<sub>2</sub>.

*Comment:* Holcim disagreed with EPA's proposal to impose an emission limit for PM at Trident of 0.77 lb/ton clinker. Holcim stated that the proposed limit, which is based on Trident's current emissions, is unjustified because it would result in no visibility impact and that as the company had already explained, the selected BART must consider the degree of improvement in visibility. Holcim stated that adding a duplicative applicable requirement to Trident's Title V permit would serve no purpose other than to “create the potential for multiple penalties if the requirement were violated.”

*Response:* See the previous response.

#### F. Comments on CFAC

*Comments:* CFAC requested that EPA conduct a BART analysis for their facility now, rather than in the future, so that CFAC has more information for planning a restart. The NPS commented similarly. CFAC also commented that not knowing what the BART controls may or may not be for their facility makes it difficult to know whether those controls could be installed within the five-year timeframe. Another commenter stated that we must either set BART limits for CFAC in the FIP, or we must require plant shutdown as part of the FIP.

*Response:* We disagree that it is necessary to conduct the BART analysis at this time. The information necessary to complete such a BART analysis is not available until CFAC's future operational plans are known. The requirements for CFAC at 40 CFR 52.1396(n) are sufficient at this time. With regard to CFAC's comment that not knowing what the BART controls may or may not be for their facility makes it difficult to know whether those controls could be installed within the five-year timeframe, the BART Guidelines state that we must require compliance with emission limits no later than five years following the final FIP. 70 FR 39172. CFAC can provide the necessary information to EPA to conduct a BART analysis at any time.

#### G. Comments on Colstrip Units 1 and 2

*Comment:* A commenter stated that PPL's modeling files related to the June 2008 Addendum to PPL Montana's Colstrip BART Report should be placed in the docket.

*Response:* We requested the modeling files from PPL and PPL responded that they could not locate those files. We based our decisions on the more recent modeling described at 77 FR 24002.

*Comment:* Commenters stated that they object to our proposed BART determinations for NO<sub>x</sub> and SO<sub>2</sub> because it would impose emission limits based on SNCR and an additional scrubber vessel, respectively. Commenters stated that EPA's proposed BART analysis for Colstrip Units 1 and 2 is inconsistent with our statutory obligations and our own Guidelines. Commenters suggested that our BART determinations contain significant errors. Commenters stated that we did not properly or correctly consider the costs of the proposed controls, the incremental cost-effectiveness of the controls, and the lack of any reasonably expected visibility improvements resulting from the proposed controls. Instead of the BART proposed by EPA, commenters supported the installation of SOFA for NO<sub>x</sub> control with an emission limit of 0.20 lb/MMBtu, and lime injection for SO<sub>2</sub> control with an emission limit of 0.20 lb/MMBtu (both as a 30-day rolling average).

*Response:* In proposing our BART determinations, we met the statutory requirements under section 169A of the CAA and also followed the BART Guidelines. Based on our consideration of the five statutory BART factors, we continue to find that BART for NO<sub>x</sub> is SOFA+SNCR with an emission limit of 0.15 lb/MMBtu (30-day rolling average). Similarly, based on our consideration of the five statutory BART factors, we continue to find that BART for SO<sub>2</sub> is lime injection and an additional scrubber vessel with an emission limit of 0.08 lb/MMBtu (30-day rolling average). Each specific issue raised by the commenters is addressed in a separate response to comments.

*Comment:* Several commenters asserted that EPA's costs for SNCR on Colstrip Units 1 and 2 were inaccurate and that SNCR is not cost effective. Commenters asserted that this was due to a number of errors, including use of an incorrect baseline, overstating the emission benefits that can be achieved with SNCR, and using improper cost estimation techniques. The commenters submitted their own cost estimates challenging those reported by EPA.

*Response:* EPA estimated a cost effectiveness for SNCR+SOFA of about \$1,550/ton. This estimate has been confirmed after the proposal through information supplied by SNCR vendors.<sup>16</sup> For this control combination, Nalco Mobotec Inc. (Mobotec) estimated a cost effectiveness of roughly \$1,395/ton, while Fuel Tech Inc. (Fuel Tech) estimated a cost effectiveness of \$1,642/

<sup>16</sup> Memo from Jim Staudt, Andover Technology Partners, to Doug Grano, July 10, 2012.

ton. The average vendor cost effectiveness of \$1,518/ton is slightly lower than what was previously estimated by EPA. Likewise, EPA estimated a cost effectiveness for SNCR (after SOFA) of about \$3,300/ton. For SNCR (after SOFA) Nalco Mobotec estimated a cost effectiveness of roughly \$2,800/ton, while Fuel Tech estimated a cost effectiveness of \$3,500/ton.<sup>17</sup> The average vendor cost effectiveness of \$3,150/ton is slightly lower than what was previously estimated by EPA.

Further, the cost effectiveness of SNCR is of course highly dependent on the emission benefits that the control technology can achieve. The discrepancy between our cost effectiveness and that supplied by the commenters is largely driven by this factor. We address this issue, as well as other issues raised by commenters in regard to our SNCR cost estimates for Colstrip Units 1 and 2, separately below.

*Comment:* Two commenters claimed that EPA used an incorrect baseline of 2008–2010 for Colstrip pollutant emissions in our BART analyses. One commenter stated that the BART Guidelines require a baseline for BART analyses of 2000–2004, while another stated it requires a baseline of 2001–2003. Both of these baseline periods were prior to the installation of additional combustion controls at Colstrip Units 1 and 2. In addition, one commenter claimed that the 2008–2010 baseline emissions are not representative as they reflect a period of economic downturn.

*Response:* We disagree with these comments. The BART Guidelines require you to choose a representative baseline period, but do not specify that this period must be 2000–2004 or 2001–2003:

The baseline emissions rate should represent a realistic depiction of anticipated annual emissions for the source. In general, for the existing sources subject to BART, you will estimate the anticipated annual emissions based upon actual emissions from a baseline period.

70 FR 39167.

As we discussed in our proposed rule, in 2007 PPL installed additional combustion controls on Colstrip Units 1 and 2 in order to meet new Acid Rain Program emission limits. As these controls were not installed to meet BART requirements, we find that it is appropriate to reflect them in the baseline emissions.

Furthermore, annual heat input data contained in the CAMD emissions system shows the baseline period of 2008–2010 is representative of the

operation of the Colstrip Unit 1 and 2. For example, the 2000–2010 annual heat input for Colstrip Unit 1 ranged from a low of 24,003,758 MMBtu/yr in 2006 to a high of 30,770,151 MMBtu/yr in 2004. The 2008–2010 annual average heat input used by EPA in our BART analysis of 26,578,089 MMBtu/yr falls about in the middle of this range. Therefore, the baseline period chosen by EPA is a realistic depiction of the heat input (and thereby annual emissions) of the Colstrip Units 1 and 2.

Finally, the 2000–2004 annual average heat input (the period that one commenter asserted we should have used), was 26,966,516 MMBtu/yr, and only slightly higher than the heat input used by EPA of 26,578,089 MMBtu/yr. Therefore, even if we had used the 2000–2004 heat input, it would not have affected the BART analysis in a meaningful way.

*Comment:* Commenters asserted that EPA overstated the emissions benefit of SNCR and that it cannot achieve the level of control claimed. The commenters stated that SNCR cannot achieve a 25% emission reduction. They also stated that SNCR (in combination with combustion controls) cannot achieve an emission limit of 0.15 lb/MMBtu on a 30-day rolling average.

PPL based their assertions on analyses which they obtained from SNCR vendors, Nalco Mobotec, Inc. and Fuel Tech Inc. They stated that these analyses show that the lowest feasible emissions limit for these units on a 30-day rolling average would be in the range of 0.17 to 0.18 lbs/MMBtu. PPL estimates that only a 10% reduction in NO<sub>x</sub> emissions could be achieved since ammonia slip must be limited to 0.5 ppm.

NPS questioned whether SNCR can achieve 0.15 lb/MMBtu on a 30-day rolling average due to the sensitivity of SNCR to boiler operation, size, and configuration. NPS did not provide any data or information to support their concerns other than to state that a query of the CAMD emissions system revealed only two EGUs that are consistently meeting 0.15 lb/MMBtu on monthly basis.

*Response:* We disagree that we have overstated the emissions benefit of SNCR. Neither the vendor analyses nor the SNCR performance data contained in the CAMD emissions system support a conclusion that we overstated the emission benefits of SNCR.

The vendor analyses provided by PPL confirm the assumptions made by EPA regarding the emissions benefits that can be achieved with SNCR. Both vendors indicate that a control efficiency of 25%, as assumed by EPA,

can be achieved. For example, Fuel Tech indicates that a “10 ppm ammonia slip would result in ~25% NO<sub>x</sub> reduction.”<sup>18</sup> Similarly, Mobotec indicates that “[a]t 7 ppm of ammonia slip, NO<sub>x</sub> emissions could be reduced up to 25%, provided there would be no impact on the performance of the air preheater, or other plant systems.”<sup>19</sup> We realize that the control efficiency of SNCR is highly dependent on the level of ammonia slip. However, we find no reason that an ammonia slip level of 5 to 10 ppm is unacceptable for the Colstrip Unit 1 and 2. These levels of ammonia slip are typical for SNCR. In fact, Fuel Tech stated that “[i]n the coal-fired Utility market segment, the SNCR systems have been historically designed for a minimum of 5 ppm ammonia slip with some lower sulfur applications with NH<sub>3</sub> slip levels of 10 ppm.”<sup>20</sup> (We address the potential impacts from ammonia slip in a separate response to comments).

Further, we note that the control efficiencies provided by the vendors are for operation at full load, and that higher control efficiencies can be achieved at lower loads. For instance, Mobotec relates that “[h]igher NO<sub>x</sub> reductions can be achieved at mid to low load heat inputs, possibly up to 40%.”<sup>21</sup> Given that the Colstrip Unit 1 and 2 frequently operate at below full load, it is likely that on an annual basis SNCR can achieve better than the 25% emission reduction assumed by EPA.

PPL has erred in stating that the control efficiency of SNCR is no more than 10% since ammonia slip levels must be limited to 0.5 ppm. The commenter bases this claim on what they believe to be a precedent set in the Centralia Power Plant BART determination. However, the Centralia BART determination prepared by Washington stated that, “TransAlta’s cost analysis uses a urea-based SNCR system providing a nominal 25% reduction in NO<sub>x</sub> levels with a 5 ppm ammonia slip.”<sup>22</sup> And as established by the vendor analyses discussed above, much higher emission reductions than 10% can be achieved with SNCR at ammonia slip levels of 5 to 10 ppm.

<sup>18</sup> Letter from Dale T Pfaff, Fuel Tech, Inc. to Gordon Criswell, PPL Montana, May 29, 2012.

<sup>19</sup> Letter from Gary Tonnemacher, Mobotec, to Gordon Criswell, PPL Montana, May 25, 2012.

<sup>20</sup> Fuel Tech, May 29, 2012.

<sup>21</sup> Mobotec, May 25, 2012.

<sup>22</sup> BART Determination Support Document for Transalta Centralia Generation LLC Power Plant, Centralia, Washington, Prepared by Washington State Department of Ecology, Revised November 2011, p. 14; Region 10 clarified the typographical error in their **Federal Register** notice via email from Steve Body to Aaron Worstall dated July 26, 2012.

<sup>17</sup> Id.

Similarly, the performance data contained in CAMD emissions system only serves to reinforce the assumptions made by EPA regarding the emission benefits of SNCR. Based on our review of the CAMD emissions data, there are many EGUs equipped with SNCR (with combustion controls) that are achieving an emission rate of 0.15 lb/MMBtu or lower on a monthly basis. One unit in particular, Boswell Unit 4, is very comparable to the Colstrip Unit 1 and 2. Boswell Unit 4, like the Colstrip Unit 1 and 2, burns sub-bituminous coal and is tangentially fired. In addition, Boswell Unit 4 had a baseline annual emission rate (with LNB and CCOFA, but prior to the installation of SNCR and SOFA) similar to the Colstrip Unit 1 and 2 of approximately 0.35 lb/MMBtu. Since the installation of full combustion controls and SNCR, the Boswell Unit has achieved a monthly emission rate of below 0.15 lb/MMBtu. For example, between April 2011 and April 2012, the most recent full year of emissions data available in the CAMD emissions system, the monthly emission rates for Boswell Unit 4 were between 0.11 and 0.14 lb/MMBtu. This is a strong indicator of the performance rates that can be expected for Colstrip Units 1 and 2.

We acknowledge that a range of performance rates are currently being achieved with SNCR, and are in some cases not as low as at Boswell Unit 4. However, without a showing that there are circumstances unique to the Colstrip Unit 1 and 2 that would prevent SNCR from achieving the same reductions as at Boswell Unit 4, we find no reason that an emission limit higher than 0.15 lb/MMBtu on a 30-day rolling average is warranted. This is consistent with the BART Guidelines:

Without a showing of differences between the source and other sources that have achieved more stringent emissions limits, you should conclude that the level being achieved by those other sources is representative of the achievable level for the source being analyzed.

70 FR 39166.

Finally, due to the smaller size of Colstrip Unit 1 and 2 (333 MW each), we expect that SNCR would be more effective than at Boswell Unit 4 (525 MW). This is because the effectiveness of SNCR on large boilers is somewhat reduced as the relatively larger cross-section of the boiler makes distribution of the reagent difficult.

For the reasons stated here, we find no basis in claims that we overestimated the emission benefits for SNCR.

*Comment:* Commenters stated that EPA did not properly consider the incremental cost-effectiveness of SNCR

at Colstrip Units 1 and 2. Commenters stated that EPA improperly assessed the costs of SNCR when combined with SOFA, and not as an individual technology. Commenters stated that the incremental cost of adding SNCR to SOFA outweighs the benefits. One commenter cited portions of the BART Guidelines that address consideration of incremental costs between competing technologies.

*Response:* We disagree with these comments. We addressed why these control technologies were analyzed together in our proposed rule:

The post-combustion control technologies, SNCR and SCR, have been evaluated in combination with combustion controls. That is, the inlet concentration to the post-combustion controls is assumed to be 0.20 lb/MMBtu. This allows the equipment and operating and maintenance costs of the post-combustion controls to be minimized based on the lower inlet NO<sub>x</sub> concentration.

77 FR 22043.

If we had not combined the control technologies, then the cost effectiveness would have been more favorable to SNCR. This is because the inlet to the SNCR would reflect the current annual baseline emissions (e.g., 0.308 lb/MMBtu for Colstrip Unit 1, 2008–2010), as opposed to the anticipated post-combustion (i.e., with SOFA) rate of 0.20 lb/MMBtu assumed by EPA. This would lead to larger emission reductions being achieved by SNCR, and thereby, more favorable cost effectiveness.

Regardless, EPA did disclose the costs of SNCR alone (after SOFA) in our proposed rule. Consider for example our BART analysis for Colstrip Unit 1. See 77 FR 24025–24027 and spreadsheet entitled “EPA SNCR Cost Colstrip Unit 1 Final” located in the docket. The total annual cost of SNCR given in our proposed rule was \$2,188,569, while the emission reductions were 664 tpy. This results in a cost effectiveness of \$3,291/ton, essentially the incremental cost effectiveness between SNCR+SOFA and SOFA as given in Table 77 of the proposed rule. EPA selected SNCR as BART in consideration of these costs, all of which were presented to the public in our proposed rule.

*Comment:* Various commenters stated that EPA disregarded, or did not properly account for, issues associated with ammonia slip from SNCR systems. The commenters expressed concerns about both potential operational and environmental impacts. In regard to potential operational impacts, commenters expressed concerns about fouling of the air preheater. In regard to potential environmental impacts, commenters expressed concerns related

to a visible wet plume, greenhouse gases, and toxic emissions.

*Response:* We disagree with these comments. In our proposed rule, we explicitly considered issues associated with ammonia slip from SNCR systems. For example:

As Colstrip Unit 1 burns sub-bituminous PRB coal having a low sulfur content of 0.91 lb/MMBtu (equating to a SO<sub>2</sub> rate of 1.8 lb/MMBtu), [citation omitted] it was not necessary to make allowances in the cost calculations to account for equipment modifications or additional maintenance associated with fouling due to the formation of ammonium bisulfate. These are only concerns when the SO<sub>2</sub> rate is above 3 lb/MMBtu. [citation omitted] Moreover, ammonium bisulfate formation can be minimized by preventing excessive NH<sub>3</sub> slip. Optimization of the SNCR system can commonly limit NH<sub>3</sub> slip to levels less than the 5 parts per million (ppm) upstream of the pre-air heater.

77 FR 24025.

This observation has been verified by the vendor analyses submitted by PPL. For example, Fuel Tech stated that “[s]ince the Colstrip 1&2 coal has low sulfur, there is less concern of ammonium bisulfate formation and its associated air preheater pluggage issues.”<sup>23</sup>

We also find that concerns about the potential for adverse environmental impacts, such as a visible wet plume, toxic ammonia emissions, or greenhouse gas emissions, are unfounded or exaggerated. As previously discussed, optimization of the SNCR system would limit ammonia slip to acceptable levels (i.e., 5–10 ppm). Moreover, as noted in the BART determination for the Transalca Centralia Power Plant in Washington, ammonia in the gas stream is further removed when a wet scrubber is present.<sup>24</sup> Since the Colstrip Units 1 and 2 utilize wet scrubbers, no additional plume visibility or other local impacts would be anticipated.

While we did not quantify increases in greenhouse gases associated with SNCR in our proposed rule, we did quantify the additional amount of coal that is needed to account for the loss in thermal efficiency and found it to be insignificant. For example:

SNCR reduces the thermal efficiency of a boiler as the reduction reaction uses thermal energy from the boiler. [citation omitted] Therefore, additional coal must be burned to make up for the decreases in power generation. Using CCM calculations we

<sup>23</sup> Fuel Tech, May 29, 2012.

<sup>24</sup> BART Determination Support Document for Transalca Centralia Generation LLC Power Plant, Centralia, Washington, Washington State Department of Ecology, revised November 2011, p. 13.

determined the additional coal needed for Unit 1 equates to 77,600 MMBtu/yr.

77 FR 24026.

We note that 77,600 MMBtu/yr is only 0.3% of the 2008–2010 annual average heat input for Colstrip Unit 1. The increase in CO<sub>2</sub> emissions would be proportional (that is, 0.3%). The formation of other greenhouse gases, such as nitrous oxide, would be highly dependent upon the reagent used, the amount of reagent injected and the injection temperature. Regardless, we note that the potential for CO<sub>2</sub> increases also exists for SCR, the technology favored by some commenters. This is due to the energy penalty associated with the large pressure drop across the SCR reactor. Therefore, consideration of greenhouse gases would not have necessarily favored SNCR over SCR.

*Comment:* MDEQ stated that EPA failed to provide analysis or consideration of the impact SNCR installation may have on mercury controls at Colstrip 1 & 2. MDEQ stated that this failure ignores factor 3 of the five-factor analysis, “Any existing pollution control technology in use at the source.” MDEQ contended that the application of SNCR will require these units to displace the sorbent injection systems which limit mercury emissions, and that this displacement will compromise the Montana Mercury Rule.

*Response:* We disagree with this comment. SNCR should have no impact on mercury capture in the scrubber or with mercury capture from sorbent injection and will neither improve nor harm any efforts at Colstrip Units 1 and 2 to comply with Montana’s Mercury Rule. There is no reason why Colstrip Units 1 and 2 cannot utilize both SNCR and sorbent injection (if sorbent injection is what PPL chooses to use at Colstrip 1 and 2). Injection points for SNCR and for sorbent injection are at different locations—the furnace for SNCR and the downstream ductwork for sorbent injection. A review of EPA’s National Electric Energy Data System (NEEDS) reveals that are currently 17 utility boilers equipped with both SNCR and activated carbon injection systems.<sup>25</sup> The list of facilities includes units ranging from 65 MW to 405 MW and burning both bituminous and subbituminous coals. Therefore, there is no basis for the assertion that these two pollution control systems cannot be used together on the same facility.

*Comment:* MDEQ stated that EPA lacks consideration of Montana’s existing SIP requirements. For instance, sources required to add controls would

have to provide “de minimis” notifications under ARM 17.8.745, or potentially a resource-intensive demonstration that the additional control would not contribute to a violation of an air quality standard. Additionally, MDEQ stated that some of the proposed controls might require either a minor source permit or a major modification under the NSR program. MDEQ expressed particular concern over EPA’s lack of analysis of PPL’s estimated increase in ammonia slip.<sup>26</sup> MDEQ suggested that increases in ammonia slip could lead to increases in PM<sub>2.5</sub> emissions at Colstrip 1 & 2, potentially requiring the unit(s) to submit a “politically controversial, legally complex, and technically challenging” NSR major modification permit. MDEQ also stated that an NSR major modification would significantly alter the time and cost required to implement the proposed BART.

*Response:* We disagree with these comments. MDEQ has not provided any data or information to substantiate that our BART determinations would interfere with existing SIP requirements, including those for permitting. They have only speculated that these might be concerns. In addition, these concerns would not negate our obligation to prescribe BART controls. We have addressed concerns related to ammonia slip in a separate response to comments.

*Comment:* Commenters stated that EPA asserted, with no analysis, that the energy needs associated with installation SNCR or SCR on the Colstrip Unit 1 and 2 are minimal and neither the additional energy requirements nor the nonair quality environmental impacts associated with disposal of the ash waste or transportation of the chemical reagents or catalysts warranted eliminating either SCR or SNCR.

*Response:* We disagree with this comment. We provided analysis of the energy impacts associated with SNCR and SCR in our proposed rule. For example, for the application of SNCR to Colstrip Unit 1 we “determined the additional coal needed for Unit 1 equates to 77,600 MMBtu/yr.” 77 FR 24026. Similarly, we determined that SCR requires “additional electric power to meet fan requirements equivalent to approximately 0.3% of the plant’s electric output.” [citation omitted] 77 FR 24026. We also provided analysis of the non-air-quality impacts associated with SNCR and SCR in our proposed rule. See for example 77 FR 24026. We

did not find it necessary to quantify these impacts as they are negligible. Also, the nonair quality impacts would be no different than those at numerous other boilers where SNCR or SCR have been successfully applied. Regardless, the commenters did not present any data or information that establishes that the energy or nonair quality impacts of SNCR or SCR would make these control options unacceptable.

*Comment:* NPS stated that allowing five years from promulgation of the rule to install SNCR on Colstrip Units 1 and 2 is excessive since it can be installed in less than one year.

*Response:* We agree that SNCR in some cases can be installed in less than one year. However, the BART Guidelines require compliance with the BART emission limit as expeditiously as possible but in no event later than five years after promulgation of the FIP. 40 CFR 51.308(e)(1)(iv). Our FIP is consistent with that requirement.

*Comment:* The NPS agreed with EPA that an annual emission rate of 0.05 lb/MMBtu is achievable with SCR.

*Response:* Comment noted.

*Comment:* EarthJustice stated that EPA incorrectly rejected SCR as BART for NO<sub>x</sub> pollutant control for Colstrip Units 1 and 2. They asserted that EPA’s analysis was biased against the selection of SCR as BART. They also asserted that we manipulated data, made assumptions, and performed calculations where the results are specified but the calculation itself is absent from the public record.

*Response:* We disagree with these comments. Our selection of SNCR+SOFA, and not SCR+SOFA, as BART was based on our objective consideration of the five statutory factors. Moreover, all of our analyses and assumptions were supported by the docket which was available for public review.

*Comment:* EarthJustice stated EPA underestimated the NO<sub>x</sub> reductions that can be achieved with SCR technology. They stated that major SCR catalyst vendors routinely guarantee at least 90% removal efficiency for SCR systems.

*Response:* We disagree. EarthJustice has incorrectly assumed that a 90% control efficiency can be achieved in all applications regardless of the input NO<sub>x</sub> emission rate or other parameters. The baseline annual emission rate for Colstrip BART units is around 0.31 lb/MMBtu (annually). After the installation of SOFA, the emission rate is expected to be 0.20 lb/MMBtu (annually). Therefore, a 90% control efficiency for SCR would correspond to a controlled emission rate of 0.02 lb/MMBtu

<sup>25</sup> Memo from Jim Staudt, Andover Technology Partners, to Doug Grano, July 13, 2012, p. 9.

<sup>26</sup> September 23, 2011 PPL submittal titled “NO<sub>x</sub> Control Update to PPL Montana’s Colstrip Generating Station BART Report.”

(annually). We find that this is an unrealistic expectation of the level of control that can be achieved with SCR.

*Comment:* EarthJustice stated that EPA incorrectly used the Integrated Planning Model (IPM) for the direct capital costs of SCR for Colstrip Units 1 and 2 and that we failed to explain why we did so. They stated that the BART Guidelines require that the CCM be used for BART cost analyses, except for the site-specific cost of the equipment itself which will vary depending on site-specific conditions. EarthJustice also stated that our use of IPM led to the double counting of installation costs.

*Response:* We disagree with these comments. We explained our rationale for using IPM for direct costs for SCR in the proposed rule:

We relied on a number of resources to assess the cost of compliance for the control technologies under consideration. In accordance with the BART Guidelines (70 FR 39166 (July 6, 2005)), and in order to maintain and improve consistency, in all cases we sought to align our cost methodologies with the EPA's Control Cost Manual (CCM). [citation omitted] However, to ensure that our methods also reflect the most recent cost levels seen in the marketplace, we also relied on control costs developed for the Integrated Planning Model (IPM) version 4.10. [citation omitted] These IPM control costs are based on databases of actual control project costs and account for project specifics such as coal type, boiler type, and reduction efficiency. The IPM control costs reflect the recent increase in costs in the five years proceeding 2009 that is largely attributed to international competition. Finally, our costs were also informed by cost analyses submitted by the sources, including in some cases vendor data.

77 FR 24024.

As noted in the proposed rule, our use of IPM was intended to ensure that the direct capital costs reflect the most recent cost levels seen in the marketplace. Therefore, we disagree that this led to an overestimation of the costs of SCR. Also as noted in the proposal, while we did use IPM for direct capital costs, the remainder of our analysis for SCR conformed to the CCM.

EarthJustice is mistaken in asserting that our use of IPM led to the double counting of installation costs. EarthJustice is also mistaken in asserting that "in the Cost Control Manual, those installation costs [direct installation costs] are included as indirect capital costs." Direct installation costs are treated in the same way whether using the CCM or IPM. That is, both provide direct capital costs that are inclusive of the direct installation costs. For example, the CCM states:

Direct capital costs (DCC) include purchased equipment costs (PEC) such as

SCR system equipment, instrumentation, sales tax and freight. This includes costs associated with field measurements, numerical modeling and system design. *It also includes direct installation costs such as auxiliary equipment (e.g., ductwork, fans, compressor), foundations and supports, handling and erection, electrical, piping, insulation, painting, and asbestos removal.*<sup>27</sup> (emphasis added)

Similarly, the IPM documentation states the bare module costs include equipment, installation, buildings, foundations, electrical, and the retrofit factor.<sup>28</sup> Since we used the bare module capital costs to replace the direct capital costs in the CCM calculations, we did not double count direct installation costs. For example, for Colstrip Unit 1 we used the bare module capital cost of \$55,578,137 (2010 dollars) as input for the direct capital cost.

*Comment:* EarthJustice stated that EPA overestimated capital costs of SCR on Colstrip Units 1 and 2 by using an inflated capital recovery factor (CRF) that is not based on accurate, available, site-specific information and by underestimating the lifetime of SCR. EarthJustice asserted that EPA should have used a CRF based on a 5% interest rate and an equipment life of 30 years

*Response:* We disagree that the CRF used by EPA led to an overestimation of capital costs for SCR. In our cost analysis for Colstrip Units 1 and 2, we used an interest (discount) rate of 7% for all control options. This is consistent with guidance contained in the Office of Management and Budget, Circular A-4, for regulatory analysis.<sup>29</sup> In regard to the equipment life assumed by EPA for SCR, the BART Guidelines state:

For example, the methods for calculating annualized costs in EPA's OAQPS Control Cost Manual *require the use of a specified time period* for amortization that varies based upon the type of control. If the remaining useful life will clearly exceed this time period, the remaining useful life has essentially no effect on control costs and on the BART determination process. Where the remaining useful life is less than the time period for amortizing costs, you should use this shorter time period in your cost calculations.

70 FR 39169 (emphasis added).

And in regard to SCR, the CCM states: Capital recovery cost is based on the anticipated equipment lifetime and the annual interest rate employed. *An economic lifetime of 20 years is assumed for the SCR system.* The remaining life of the boiler may

<sup>27</sup> CCM, Section 4, Chapter 2, p. 2-41.

<sup>28</sup> IPM, Chapter 5, Appendix 5-2A, p. 2.

<sup>29</sup> Office of Management and Budget, Circular A-4, Regulatory Analysis, [http://www.whitehouse.gov/omb/circulars\\_a004\\_a-4/](http://www.whitehouse.gov/omb/circulars_a004_a-4/).

also be a determining factor for the system lifetime.<sup>30</sup> (emphasis added)

The equipment life assumed by EPA is consistent with that specified by the CCM for SCR (that is, 20 years). In addition, the consistent use of a 7% interest rate and 20 year equipment life ensures that the costs are comparable between all of the control options considered (provided that each option has an equipment life of at least 20 years). It also ensures that the costs are comparable to other BART analyses where similar assumptions have been made. However, we acknowledge that there may be circumstances where it is reasonable to assume a shorter or longer equipment life. In particular, it may be appropriate to consider a shorter equipment life where the owner plans to shut a unit down in less than 20 years.

Further, assuming a 30 year economic life would not change our conclusions regarding BART for Colstrip Units 1 and 2. For example, for Colstrip Unit 1 we have recalculated the cost-effectiveness amortizing over 30 years. The resulting cost effectiveness for SCR+SOFA is \$2,879/ton, as compared to the cost effectiveness of \$3,195/ton amortizing over 20 years which we cited in our proposed rule. We find that the cost of SOFA+SCR is reasonable regardless of the assumed equipment life. However, we find that the limited visibility benefits would continue to preclude our selection of SCR+SOFA as BART.

*Comment:* EarthJustice claimed that EPA skewed the cost effectiveness results away from SCR for Colstrip Units 1 and 2 by overestimating the operations and maintenance costs associated with SCR by approximately \$600,000. In particular, EarthJustice questioned our costs for maintenance, catalyst replacement, and reagent use.

*Response:* We disagree. While EarthJustice has suggested alternate assumptions that could be made when estimating each of the operation and maintenance costs (that is, direct annual costs) noted, they have not substantiated that their assumptions are superior to those used by EPA. Moreover, they have not substantiated that EPA erred in making any of the cost assumptions related to operations and maintenance. They have only pointed out instances in which they would make different assumptions. Therefore, we see no reason that our cost assumptions for O&M should be supplanted by those that EarthJustice would otherwise choose in order to arrive at lower cost effectiveness.

Regardless, if we were to incorporate each of the changes to the O&M costs

<sup>30</sup> CCM, Section 4, Chapter 2, p. 2-48.

suggested by EarthJustice, it would not change our BART determination. For example, for Colstrip Unit 1, reducing the O&M costs of SCR by \$600,000 would only moderately lower the cost effectiveness of SNR+SOFA from \$3,195/ton to \$3,019/ton. Though we find that both of these costs are reasonable, we continue to find that there is insufficient visibility benefit (0.404 deciview for Unit 1 and 0.423 deciview for Unit 2 at the most improved Class I area) to support the selection of SCR as BART.

*Comment:* EarthJustice stated that EPA made multiple errors in our SCR cost analysis for Colstrip Units 1 and 2. EarthJustice claims that EPA made errors in relation to the baseline NO<sub>x</sub> emissions, the control efficiency of SCR, the cost estimation method for direct capital costs (*CCM* vs. *IPM*), specific operation and maintenance costs, and the calculation of indirect annual costs (by way of the CRF). EarthJustice provided their own cost estimates for SCR, addressing the errors which they claimed EPA made. EarthJustice's cost effectiveness is 55–65% lower than the values calculated by EPA, making SCR+SOFA significantly more cost effective.

*Response:* We disagree that we made multiple errors in our SCR cost analysis for SCR for Colstrip Units 1 and 2 which led to inaccurate cost effectiveness. Each of the errors which EarthJustice claims EPA made has been addressed in separate responses. Therefore, we find that the cost effectiveness for SCR in the proposed rule was accurate and a correct basis for rejecting SCR as BART (in consideration of the remaining statutory BART factors).

*Comment:* The NPS commented that EPA has placed undue weight on the incremental cost effectiveness of SOFA+SCR at Colstrip Units 1 and 2.

*Response:* We disagree. In our proposed rule, we estimated the incremental cost effectiveness of SCR+SOFA (over SNCR+SOFA) to \$5,770/ton and \$5,887/ton, respectively. These costs far exceed the corresponding average cost effectiveness of \$3,195/ton and \$3,235/ton. Given these costs, we continue to find that SCR+SOFA is not justified by the visibility improvement that would be provided.

*Comment:* Some commenters stated that EPA properly concluded that SCR does not constitute BART for Colstrip Units 1 and 2, but that EPA incorrectly analyzed the capital costs and cost-effectiveness of SCR. Commenters stated that EPA failed to consider SCR costs estimates which PPL submitted in

February 2012.<sup>31</sup> Commenters also stated that EPA's reliance on outdated information is not consistent with its own guidance to use engineering estimates and that EPA should modify its rationale in the final rule to conclude that, when the actual costs of the technology are taken into consideration, SCR is not a cost-effective technology. In particular, commenters noted that EPA estimates the capital cost of the SCR at \$78 million and rejects PPL's cost estimate of \$190 million

*Response:* We disagree that we incorrectly analyzed the capital costs and cost-effectiveness of SCR. We did not accept the SCR cost estimates submitted by PPL in February 2012 that were based on cost estimates provided to PPL by a consultant. EPA rejected these cost estimates for a number of reasons.

First, the cost estimates provided to PPL by the consultant do not represent site-specific costs. The BART Guidelines state that "[t]he basis for equipment cost estimates also should be documented, either with data supplied by an equipment vendor (*i.e.*, budget estimates or bids) or by a referenced source (such as the OAQPS CCM Fifth Edition, February 1996, EPA 453/B-96-001)." 70 FR 39166. Since the costs submitted by PPL were simply adapted from another (undisclosed) utility boiler, and are not specific to Colstrip Units 1 and 2, they should not be considered a budgetary bid as described in the BART Guidelines. In fact, PPL's consultant represents the costs as a "feasibility capital cost estimate" and not as a budgetary bid.<sup>32</sup>

Second, the capital costs for SCR claimed in PPL's February 2012 submittal are far in excess of the range of capital costs documented by various studies for actual installations. Five industry studies conducted between 2002 and 2007 have reported the installed unit capital cost of SCRs, or the costs actually incurred by owners, to range from \$79/kW to \$316/kW (2010 dollars).<sup>33</sup> These studies show actual capital costs are much lower than estimated by PPL for Colstrip Units 1 and 2 (\$571/kW for each unit; 2011 dollars). Moreover, the capital costs surveyed by the studies represent a range of retrofit difficulties, including very difficult retrofits having

significantly impeded construction access, extensive relocations, and difficult ductwork transitions. Therefore, to the extent that similar retrofit difficulties may exist for Colstrip Units 1 and 2, the high end of the range documented in the reports is representative.

Third, we are concerned about the disparity among the various cost estimates submitted by PPL. Between August 2007 and February 2012, PPL submitted four separate SCR cost estimates for the Colstrip Unit 1 and 2. In the first SCR cost estimate, submitted in August 2007, PPL estimated capital costs of \$25,282,233 (\$76/kW), total annual costs of \$7,289,482 and a cost effectiveness of \$2,272/ton (each unit; 2007 dollars).<sup>34</sup> In the second SCR cost estimate, submitted in June 2008, PPL estimated capital costs of \$29,581,465 (\$88/kW), total annual costs of \$7,987,179 and a cost effectiveness of \$1,735/ton (each unit; 2008 dollars).<sup>35</sup> PPL's first and second cost estimates were generally performed in conformance with EPA's CCM. The lower cost effectiveness in the second submittal was driven primarily by a change in the assumed maximum control level (from 0.15 lb/MMBtu to 0.06 lb/MMBtu), and thereby greater annual emission reductions. In the third SCR cost estimate, submitted in September 2011, PPL estimated capital costs of \$152,508,328 (\$457/kW), total annual costs of \$16,733,719 and a cost effectiveness of \$7.405/ton (each unit; 2011 dollars).<sup>36</sup> The third cost estimates were largely based on control costs developed for the Integrated Planning Model.<sup>37</sup> PPL assumed a retrofit factor of 2 when using the IPM approach. We note that this retrofit factor, equating to 100% over the IPM base model capital costs, was unsupported and far in excess of the range described in the IPM documentation: "Retrofit difficulties associated with an SCR may result in capital cost increases of 30 to 50% over the base model."<sup>38</sup> In the fourth SCR cost estimate, submitted in February 2012, PPL estimated capital costs of \$190,000,000 (\$571/kW), total annual

<sup>34</sup> BART Assessment Colstrip Generating Station, prepared for PPL Montana, LLC, by TRC ("Colstrip Initial Response"), August 2007, Table A4-8(c).

<sup>35</sup> Addendum to PPL Montana's Colstrip BART Report Prepared for PPL Montana, LLC; Prepared by TRC, ("Colstrip Addendum"), June 2008, Table 5.3-3.

<sup>36</sup> NO<sub>x</sub> Control Update to PPL Montana's Colstrip Generating Station BART Report Prepared for PPL Montana, LLC, by TRC, September 2011, Table 2-3b.

<sup>37</sup> Documentation for EPA Base Case v.4.10 Using the Integrated Planning Model, August 2010, EPA #430R10010.

<sup>38</sup> IPM, Chapter 5, Appendix 5-2A, p. 1.

<sup>31</sup> Letter from David Bowen, Burns & McDonnell, to James Parker, PPL Montana, February 7, 2012.

<sup>32</sup> Bowen letter.

<sup>33</sup> Dr. Phyllis Fox, Revised BART Cost-Effectiveness Analysis for Tail End Selective Catalytic Reduction at Basin Electric Power Cooperative Leland Olds Station Unit 2. Report Prepared for U.S. EPA, RTI Project Number 0209897.004.095, March 2011.

costs \$19,956,767, and a cost effectiveness of \$8,884/ton (each unit; 2011 dollars).<sup>39</sup> The fourth cost estimate was also largely based on control costs taken from IPM, but was augmented by capital cost estimates provided to PPL by a consultant. In all, the capital costs varied by a factor of more than seven (\$76/kW to 571/kW), and the cost effectiveness varied by a factor of more than 5 (\$1,735/ton and \$8,884/ton). The large disparity between PPL's February 2012 cost estimates and those in their previous submittals led us to question their accuracy.

Finally, PPL's February 2012 cost estimates contained cost items that are either speculative in nature or not well documented. For example, they include capital costs for duct and boiler reinforcement even though the potential for boiler implosion was not evaluated by PPL's consultant.<sup>40</sup>

For the reasons stated above, EPA finds that no changes to the BART determinations or to the FIP are needed in response to this comment.

*Comment:* Various commenters objected to EPA's BART determinations for Colstrip 1 and 2. EarthJustice urged EPA to require selective SCR+SOFA as the best system of continuous emission control to meet a 0.05 lb/MMBtu NO<sub>x</sub> emission limit applicable on a 30-day rolling average basis. NPS also recommended that we require SCR+SOFA. PPL supported a BART emissions rate for NO<sub>x</sub> of 0.20 lb/MMBtu on a 30-day rolling average basis, reflecting the installation of SOFA.

*Response:* Based on our consideration of the five statutory BART factors, we continue to find that BART for NO<sub>x</sub> at each of the Colstrip Unit 1 and 2 is an emission limit of 0.15 lb/MMBtu (30-day rolling average) achievable with SNCR+SOFA.

*Comment:* PPL stated that EPA's proposed emission limit for PM of 0.10 lb/MMBtu on a 30-day rolling average for each of the Colstrip Unit 1 and 2 is flawed. PPL asserted that the current PM limit is 0.10 lbs/MMBtu as an annual average, based on a compliance assurance monitoring plan together with annual stack testing. In order to accommodate the shorter averaging period, the PPL suggested that the 30-day rolling average emission limit proposed in the FIP be increased to 0.12 lb/MMBtu.

*Response:* We disagree with some aspects of this comment, but agree with others. PPL has erred in stating that the

current PM limit is 0.10 lb/MMBtu as an annual average. The Final Title V Operating Permit (#OP0513-06) indicates that the emission limit is 0.10 lb/MMBtu, but does not provide an averaging period. The Title V permit requires that compliance with the emission limit be demonstrated by a Method 5 or Method 5B stack test once per year. As these stack test methods typically consist of three sampling runs of at least 120 minutes in duration, and are not long-term continuous measurements, it is not possible to average the emissions over 30-days or a year. For this reason, we corrected the proposed PM emission limits in a correction notice. 77 FR 29270. We clarified that that emission limits for NO<sub>x</sub> and SO<sub>2</sub>, but not PM, shall apply on a 30-day rolling average.

As we are not requiring that PM emission limits apply on a 30-day rolling average, PPL's suggestion that the emission limit be increased to 0.12 lb/MMBtu is no longer relevant. The PM emission limits will remain unchanged from those in the proposed rule which are identical to those in the Title V permit.

*Comment:* EarthJustice stated that EPA's exemption of Colstrip Units 1 and 2 from BART for PM is improper and unsupported. EarthJustice asserts that EPA has not complied with its statutory and regulatory obligations to determine BART for PM emissions from Colstrip Units 1 and 2 in that EPA simply made a declaration and skipped the statutory process. EarthJustice stated that the existing venturi scrubbers are not best technology and have not been considered such for a long time because particle scrubbers do not remove particulates sufficient to comply with basic CAA requirements. In addition, EarthJustice stated that EPA should have considered more effective technologies, such as baghouses.

*Response:* We disagree. As with existing SO<sub>2</sub> controls, we do not find that it is necessary to consider the replacement of existing PM controls with new controls. This is particularly true for PM as the existing controls for Colstrip Units 1 and 2 currently reduce emissions by more than 98%. Moreover, the contribution to the baseline visibility impact from PM is very small (e.g., for Colstrip Unit 1, less than 4% of 0.922 deciview, or 0.037 deciview). The most visibility improvement that could be expected, even if all PM were eliminated, is 0.037 deciview. The visibility improvement that could be expected with upgrades to the existing PM controls is only a fraction of 0.037 deciview. Therefore, it was reasonable

for us to conclude that the existing controls represent BART.

In addition, EarthJustice has conflated the most stringent controls with BART. BART is not necessarily the most stringent controls, but the best system of continuous emission reduction taking into consideration the five statutory factors.

*Comment:* NPS stated that they disagree with the PM emissions that we used in modeling the visibility impacts for Colstrip Units 1 and 2. They stated that the PM emissions data provided by PPL is more representative because it included both condensable and filterable PM emissions, while the PM data used by EPA did not measure condensable PM.

*Response:* The difference in the approach used to characterize PM emissions for visibility modeling purposes is negligible. Moreover, as the PM emissions were held constant for all of the control scenarios that EPA modeled, they had no impact on our BART determinations for NO<sub>x</sub> and SO<sub>2</sub>.

*Comment:* EarthJustice stated that EPA made the same error in calculating baseline emissions in its SO<sub>2</sub> BART determination for Colstrip Units 1 and 2 as it did in its NO<sub>x</sub> BART determination. EarthJustice asserted that EPA should have used a baseline of 2001–2003.

*Response:* We disagree with this comment. As discussed in a separate response to comments, we have established a baseline which provides a realistic depiction of anticipated annual emissions for the source. For example, the 2008–2010 baseline we used for Colstrip Unit 1 reflects annual average emissions of 5,548 tons/yr. By comparison the annual average emissions for 2000–2010, 5,504 tons/yr, were only slightly lower.

*Comment:* PPL stated that EPA's estimate of the performance that can be achieved with lime addition on Colstrip Units 1 and 2 was wrong. The commenter stated that EPA's assumed emission rate for SO<sub>2</sub> of 0.15 lbs/MMBtu was overly optimistic, and that a rate of 0.20 lbs/MMBtu on a 30-day rolling average basis is achievable.

*Response:* We disagree with this comment. The emission rate which EPA assumed for limestone lime addition (injection) on Colstrip Units 1 and 2 was 0.15 lb/MMBtu on an annual basis, not on a 30-day rolling average basis. This was based on PPL's amended BART submittal of August of June 2008.<sup>41</sup> We did not specify a 30-day rolling average

<sup>39</sup> Letter from Mark M. Hultman, P.E., TRC, February 9, 2012.

<sup>40</sup> Bowen letter, p. 2.

<sup>41</sup> Colstrip Addendum, p. 4–1.

emission limit for limestone injection since we did not select it as BART.

*Comment:* PPL commented that installation of an additional scrubber vessel is technically impracticable, if not infeasible, due to space constraints and the potential for equipment scaling.

*Response:* First, addition of a fourth scrubber vessel for each of Colstrip units 1 and 2 does not appear to be impracticable due to space constraints. PPL's argument that there is no space availability for an additional scrubber vessel is not supported by its own consultant. In addition, the site visit conducted by EPA<sup>42</sup> verified and the site plan provided by PPL shows ample space for locating additional equipment. A satellite image of units 1 and 2 located in the docket.<sup>43</sup> In fact, PPL's consultant, Burns & McDonnell was able to find space for a new vessel with associated ductwork: "[t]here is sufficient space behind the stacks for installation of the fourth scrubber module, ID fan, ductwork and accessories."<sup>44</sup> As URS pointed out, this might require an additional booster fan, which is included in the Burns & McDonnell estimate.<sup>45</sup>

Second, an additional scrubber vessel may not be necessary to avoid scaling. It is possible to inject lime and mitigate the risk of scaling through addition of a forced oxidation system or by use of chemical additives that mitigate scaling. The current system uses natural oxidation. Forced oxidation will enable higher lime injection rates while avoiding scaling. Forced oxidation systems will require blowers and piping, and agitators that could be retrofit on the existing scrubber vessels at what is likely to be a much lower cost than the cost of a new absorber vessel. An alternative to forced oxidation is use of chemical additives that address scaling. These additives are available from companies such as Nalco Chemical Company.

We find that it is acceptable for PPL to reduce emissions by means other than installing an additional scrubber vessel, provided that the emission limit of 0.08 lb/MMBtu on a 30-day rolling average is met.

*Comment:* PPL stated that EPA overstated the emissions benefit of an additional scrubber vessel.

*Response:* PPL argues that an additional vessel would not in fact reduce emissions because velocity

through the existing scrubber vessel tray will be reduced. As noted in responses to other comments, an additional scrubber vessel may not be necessary to achieve 95% SO<sub>2</sub> capture. Nevertheless, with regard to addition of another scrubber vessel and the impact on SO<sub>2</sub> reduction, PPL relies on a June 15, 2012, letter from Jonas Klingspor of URS Corporation that states the reduced gas velocity would reduce SO<sub>2</sub> reduction. The URS letter and PPL, however, overlook the fact that the openings in the tray for the existing vessels could be reduced to restore gas velocity to the original level.

URS provided estimates of emission rates possible under different conditions. The analyses performed by URS were limited either by increased scaling (the lowest rate of 0.13 lb/MMBtu with three vessels) or lower absorber gas velocity (0.16 lb/MMBtu with four vessels). Since URS did not evaluate addition of a forced oxidation system or any other means to address scaling, it is likely that a significantly lower emission rate than 0.13 lb/MMBtu is possible while using three vessels. And, addition of a fourth scrubber vessel, with tray openings in the three original vessels adjusted to maintain gas velocity, in combination with a forced oxidation system would certainly increase SO<sub>2</sub> capture performance even more.

Regardless, if PPL uses the additional scrubber vessel as a spare in a manner similar to that for Colstrip Units 3 and 4, then gas flow will remain unchanged. In this mode of operation, the spare scrubber vessel helps allow for maintenance that is needed due to the scaling caused by the additional lime. Without the spare vessel, the unit must be shut down to perform the maintenance. This is the mode of operation proposed by PPL in their August 2007 submittal.

*Comment:* Commenters stated that an additional scrubber vessel costs far more than EPA proposed and is therefore not cost-effective. Commenters stated that it was inappropriate for EPA to rely on outdated costs for an additional scrubber vessel in our proposed rule. PPL provided cost estimates obtained from Burns & McDonnell<sup>46</sup> showing higher costs than estimated by EPA.

*Response:* Foremost, we note that the costs that we cited for an additional scrubber vessel in our proposed rule were costs provided by PPL in their BART submittals of August 2007 and June 2008. PPL did not explain why the cost estimates submitted by PPL during the comment period are more than two

and a half times their original cost estimates.

The cost estimated by Burns & McDonnell of adding a single module to treat 25% of the flue gas is unreasonable, equating to around \$213/kW (\$71 million divided by 333,000 kW),— or the equivalent of \$853/kW when adjusting for the fact that only one fourth of the flue gas is being treated. To put this in perspective, this is more costly on a \$/kW basis than the typical cost of a complete limestone forced oxidation wet FGD system (around \$500/kW) that would provide over 95% removal for 100% of the flue gas.<sup>47</sup> Also, according to the 2010 EIA Form 860 Enviroequip data, the original scrubber structure with three modules for Colstrip Unit 1 cost \$34 million in 1975 (slightly over \$100/kW). Using the Chemical Engineering Plant Cost Index (CEPCI) to escalate to 2011 dollars, the cost in today's dollars would be about \$109 million (\$34 million times 585.7/182.4, or about \$327/kW). This would suggest the cost of an additional vessel to be on the order of \$27 million, or about 38% of what Burns & McDonnell estimated and consistent with what EPA has previously estimated. Moreover, the difference in cost between EPA's estimate and what Burns & McDonnell has estimated is far too large to be explained by the additional ductwork and fans associated with the retrofit, which PPL asserts are necessary. Additionally, Table 4–1 of the documentation from Burns & McDonnell has several costs that are questionable or high (\$900,000 for Owner's Project Management and \$400,000 for Owner's Legal Counsel and \$3.4 million in Escalation) and others that are very high and therefore require better explanation (\$8.1 million for furnish and erect packages plus the estimates for Mechanical, Electrical and Civil and Structural Construction that total over \$12 million). Engineering costs as well as many other costs are typically determined as a percentage of the other costs, therefore the effect of overestimation of one cost is compounded because it contributes to overestimation of other costs. Because the estimate by Burns & McDonnell is so much higher than what is reasonably expected and includes several unsubstantiated and questionable cost elements. In any event, an additional scrubber vessel may not be necessary if a forced oxidation system or other means to control scaling is used on the existing three scrubber vessels. PPL may determine that other means may be

<sup>42</sup> On September 27, 2011 Aaron Worstell and Vanessa Hinkle conducted a site visit at Colstrip.

<sup>43</sup> Staudt memo, p. 4.

<sup>44</sup> Report on the Fourth Scrubber Module Cost Estimate for PPL, Burns and McDonnell, p. 4–3.

<sup>45</sup> Letter from Jonas Klingspor, URS Corporation, to Gordon Criswell, PPL Montana, June 15, 2012.

<sup>46</sup> Burns and McDonnell, p. 1–1.

<sup>47</sup> IPM, Chapter 5, Table 5–4 shows a range of illustrative \$/kW costs.

better than adding an additional scrubber vessel in terms of cost or other factors for achieving the BART emission rate.

*Comment:* Commenters stated that EPA did not properly consider the incremental cost-effectiveness of additional scrubber vessels at Colstrip Units 1 and 2. Commenters stated that while the average cost-effectiveness of lime injection and an additional scrubber vessel is \$912/ton, the incremental cost-effectiveness of a scrubber vessel is \$2,379/ton, nearly three times higher.

Commenters also stated that it was improper for EPA to evaluate lime injection and an additional scrubber vessel together. Commenters stated that the incremental cost of adding an additional scrubber vessel to lime injection outweighs the benefits. In particular, they noted that use of lime injection alone would cost \$1,883,200, while the addition of a scrubber vessel adds \$2,217,000 to the total cost. By contrast, they noted that the SO<sub>2</sub> reductions achieved from the addition of the scrubber vessel are 929 tpy, while the use of lime injection alone results in emission reductions of 3,557 tpy.

*Response:* We agree with this comment in part. We miscalculated the incremental cost effectiveness of an additional scrubber vessel at Colstrip Unit 1 (which we stated to be \$1,975/ton), but not at Colstrip Unit 2 (\$2,410/ton). The correct incremental cost effectiveness for an additional scrubber vessel at Colstrip Unit 1 is \$2,380/ton, not \$1,975/ton as given in our proposed rule.

However, we disagree that it was improper to evaluate lime injection with an additional scrubber vessel together. We also disagree that cost of the additional scrubber vessel outweighs the benefits. For example, for Colstrip Unit 2, individually the total annual cost of an additional scrubber vessel is \$2,210,000, while the emission reduction is 917 tons per year. This results in a cost effectiveness of \$2,410, essentially the same as the incremental cost effectiveness between the two control options. The visibility improvement from lime injection alone is 0.225 deciview (at Theodore Roosevelt NP), while the improvement from lime injection with an additional scrubber vessel is 0.280 deciview (at Theodore Roosevelt NP). We continue to find that the cost is reasonable given the visibility benefits and that lime injection with an additional scrubber vessel represents BART.

*Comment:* PPL commented that in proposing SNCR, EPA appears to rely on its determination that relevant Class I

areas are currently above the Regional Haze Glide Path (RHGP). 77 FR 24,038. The RHGP is an important factor for the reasonable progress goals, but it is not one of the five statutory factors specified for EPA to consider in its BART analysis. Furthermore, as discussed above, there is no incremental benefit in visibility from installation of SNCR that would affect the area improvement in visibility relative to the glide path.

*Response:* We agree with some aspects of this comment and disagree with others. We agree that the Regional Haze glidepath is not one of the five statutory factors specified for EPA to consider in its BART analysis. We based our decision solely on the five statutory factors.

*Comment:* EarthJustice stated that EPA settled for minor adjustments for SO<sub>2</sub> pollutants from Colstrip Units 1 and 2 instead of proper BART controls. In particular, EarthJustice stated that EPA failed to examine a full suite of options for SO<sub>2</sub> BART, including replacement of the existing scrubbers with state-of-the-art scrubbers that could remove 98% of the SO<sub>2</sub> from Colstrip Units 1 and 2.

In addition, EarthJustice claimed that EPA failed to consider all feasible upgrades to the existing venturi scrubbers, including the use of magnesium enhanced lime. EarthJustice stated that significant emission reductions could be achieved via these upgrades, even without the installation of an additional scrubber vessel. EarthJustice held that an emission limit of 0.06 lb/MMBtu can be achieved with these upgrades.

*Response:* We disagree that we should have considered replacement of the existing controls. As noted in our proposed rule, for example:

The Colstrip Unit 1 venturi scrubber currently achieves greater than 50% removal of SO<sub>2</sub>. For units with preexisting post-combustion SO<sub>2</sub> controls achieving removal efficiencies of at least 50%, the BART Guidelines state that upgrades to the system designed to improve the system's overall removal efficiency should be considered.

77 FR 24028.

The BART Guidelines only recommend evaluating constructing a new FGD system “[f]or coal-fired EGUs with existing post-combustion SO<sub>2</sub> controls achieving less than 50 percent removal efficiencies.” 70 FR 39171. Therefore, it was appropriate for us to not consider new state-of-the-art scrubbers, or for that matter, any replacement technology.

As noted in a separate response, we agree that it may not be necessary to add an additional scrubber vessel in order to achieve an emission limit of 0.08 lb/

MMBtu on a 30-day rolling average. We acknowledge that it may be possible to achieve the emission limit with modifications to the existing scrubbers, such as a forced oxidation system or by use of chemical additives that mitigate scaling. However, these alternative approaches would likely be at a lower cost than an additional scrubber vessel. Given that equivalent emission reductions would be achieved at lower costs, the cost effectiveness would be even more reasonable. Accordingly, we are extending flexibility to PPL to meet the emission limit using the lowest cost approach.

Regardless of whether PPL chooses to meet the emission limit with an additional scrubber vessel or modifications to the existing scrubber vessels, we continue to find that an emission limit of 0.08 lb/MMBtu, and not 0.06 lb/MMBtu as suggested by the commenter, is appropriate. As noted in the proposed rule, this is based on the level of performance being achieved by Colstrip Units 3 and 4 which already employ scrubbing systems similar to that being contemplated for Colstrip Units 1 and 2.

The use of MEL is addressed in a separate response to a similar comment from EarthJustice in regard to Colstrip Units 3 and 4.

#### H. Comments on Corette

*Comment:* EarthJustice indicated that EPA's decision not to impose BART on Corette violates the statutory requirements for BART and is not supported by the facts. EarthJustice stated that EPA engaged in the same kind of non-BART result oriented process for Corette as it did for Colstrip. They asserted that EPA's approach is no more legitimate or compliant with the haze requirements in the case of Corette. Based on their own BART analyses, they determined that BART for Corette is installation of a dry scrubber and baghouse for the control of SO<sub>2</sub> and PM emissions, and SCR+SOFA for NO<sub>x</sub>.

*Response:* We disagree with this comment. Our selection of BART for Corette was based on our objective consideration of the five statutory factors. We continue to find no additional controls are necessary for Corette. Below, we address specific issues raised by EarthJustice in regard to our BART determination for Corette.

*Comment:* EarthJustice stated that, as with Colstrip Units 1 and 2, we used an improper baseline in our BART evaluation of 2008–2010. EarthJustice asserted that using these years artificially depresses the emissions baselines, which in turn makes visibility improvement appear less than they

actually are and thereby makes BART alternatives look less cost-effective than they actually are.

*Response:* See response to similar comments made by EarthJustice in regard to Colstrip Units 1 and 2. Here again, as required by the BART Guidelines, we used a baseline that is reflective of actual operations. We acknowledge that the 2008–2010 emissions for both SO<sub>2</sub> and NO<sub>x</sub> were in fact somewhat lower than the long-term trend. For example, the 2000–2010 SO<sub>2</sub> emissions were 3,129 tpy, while the 2008–2010 emissions were 2,723 tpy. Similarly, the 2000–2010 NO<sub>x</sub> emissions were 1,748 tpy, while the 2008–2010 emissions were 1,625 tpy. Nonetheless, the difference in the baseline emissions would not have impacted the cost-effectiveness calculations in an appreciable manner.

*Comment:* EarthJustice stated that EPA understated the cost effectiveness of SCR+SOFA.

*Response:* See response to similar comment made by EarthJustice in regard to Colstrip Units 1 and 2.

*Comment:* EarthJustice stated that EPA's cost-effectiveness calculations for SO<sub>2</sub> controls for Corette contain a number of incorrect assumptions. In particular, EarthJustice stated that much lower emission reductions can be achieved with LSD (90% with low sulfur coal) than assumed by EPA. Also, EarthJustice stated that EPA's approach of using IPM for capital costs resulted in a double counting of installation costs.

*Response:* We disagree. See response to similar comment made by EarthJustice in regard to Colstrip Units 1 and 2.

As we have noted previously, EarthJustice has erred in assuming that a given control efficiency can be achieved in all applications regardless of the input emission rate or other parameters. The level of performance assumed by EPA for LSD (0.065 lb/MMBtu annually) is generally reflective of what can be achieved with this technology.

Further, we used IPM based calculations for both capital costs and O&M costs for SO<sub>2</sub> controls at Corette. (This is unlike for NO<sub>x</sub> controls, where we used IPM based capital costs to reflect recent market trends). Therefore, we could not have double counted the installation costs for SO<sub>2</sub> controls (from IPM and the CCM).

*Comment:* EarthJustice stated that EPA wrongly exempted Corette from BART for PM.

*Response:* See response to a similar comment made by EarthJustice in regard to PM BART for Colstrip Units 1 and 2.

*Comment:* PPL stated that they support our conclusions with respect to BART for Corette that further controls are not justified.

*Response:* Comment noted. The final FIP does not require additional controls for Corette.

*Comment:* Commenters stated that they disagree with EPA's cost analysis for NO<sub>x</sub> and SO<sub>2</sub> control technologies at Corette and that EPA incorrectly concluded that a number of the control technologies are cost-effective. Commenters noted that PPL submitted a five factor BART analysis for Corette in August 2007, and later supplemented with the analysis with updated information in June 2008 and September 2011.<sup>48</sup> Commenters stated that in view of the information that PPL provided, EPA incorrectly concluded that SOFA, SOFA+SNCR, and SOFA+SCR are "all cost effective technologies" (77 FR 24043) and that the proposed FIP also incorrectly concluded that dry sorbent injection (DSI) for SO<sub>2</sub> is cost-effective at \$3,940/ton. 77 FR 24047.

Commenters stated that as documented in PPL's 2011 submissions, the company used the IPM control technology cost estimation techniques, which are more robust than those used in previous BART reports submitted by PPL.<sup>49</sup> Commenters stated that with respect to NO<sub>x</sub>, PPL determined the cost-effectiveness of SNCR to be approximately \$13,544/ton (as compared to EPA's \$2,596 for SOFA+SNCR) and the cost-effectiveness for SCR to be \$8,457/ton of additional NO<sub>x</sub> controlled (as compared to EPA's \$4,491 for SOFA + SCR).<sup>50</sup> The company stated that for SO<sub>2</sub> controls, the updated analysis determined that the cost-effectiveness of DSI is \$10,920/ton (as compared to EPA's \$3,940/ton).<sup>51</sup> Commenters stated that the proposed FIP failed to consider that the installation of DSI would most likely require upgrades to the existing particulate controls to achieve the SO<sub>2</sub> reductions that EPA evaluated and that EPA relied on the outdated and

inaccurate CCM to develop these estimates.

*Response:* We disagree. See our response to similar comments made by PPL in regard to cost analyses for Colstrip Units 1 and 2. PPL's cost estimates for Corette included many of the same incorrect methods and assumptions that the company used when developing cost estimates for Colstrip Units 1 and 2. In particular, PPL used unsupported retrofit factors that were well in excess of the range described in the IPM documentation.

Also, we disagree that installation of DSI would most likely require upgrades to the existing particulate controls to achieve the SO<sub>2</sub> reductions that EPA evaluated. In fact, DSI using trona would "typically either improve performance or have little impact, even at high injection rates."<sup>52</sup> It would not require the replacement of the existing ESP with a new baghouse as reflected in PPL's cost effectiveness estimate of \$10,920/ton.<sup>53</sup> Therefore, we find that EPA's cost estimate of \$3,490 is accurate.

*Comment:* Commenters stated that our proposed SO<sub>2</sub> and NO<sub>x</sub> emission limits for Corette were flawed. One commenter stated that EPA must increase the limits to no less than 0.81 lb/MMBtu for SO<sub>2</sub> and 0.46 lb/MMBtu for NO<sub>x</sub> in order to account for compliance over a 30-day rolling average. By contrast, another commenter stated that our proposed emission limits were too high and would actually result in increased emissions.

*Response:* Based on these comments, we have reassessed our SO<sub>2</sub> and NO<sub>x</sub> emission limits for Corette. As we have not prescribed any additional controls for Corette, the emission limits should reflect emission rates currently being achieved with existing controls. In order to establish appropriate emission limits, we have conducted a statistical analysis of the monthly emissions data contained in the CAMD emissions system. For the period 2000–2010, the 99th percentile monthly SO<sub>2</sub> emission rate was 0.548 lb/MMBtu. Similarly, the 99th percentile monthly NO<sub>x</sub> emission rate was 0.335 lb/MMBtu. In our final action, we are establishing emission limits slightly above these 99th percentile emission rates in order to allow a sufficient margin for compliance. This is because the emission limits must apply at all times,

<sup>48</sup> NO<sub>x</sub> Control Update to PPL Montana's J.E. Corette Generating Station BART Report, September 2011, Prepared for PPL Montana, LLC by TRC, at ES-1 ("NO<sub>x</sub> Control Update"); SO<sub>2</sub> Control Update to PPL Montana's J.E. Corette Generating Station BART Report, August 2011, Prepared for PPL Montana, LLC by TRC, at ES-1 ("SO<sub>2</sub> Control Update")

<sup>49</sup> See NO<sub>x</sub> Control Update to PPL Montana's J.E. Corette Generating Station BART Report, September 2011, Prepared for PPL Montana, LLC by TRC, at ES-1 ("NO<sub>x</sub> Control Update"); SO<sub>2</sub> Control Update to PPL Montana's J.E. Corette Generating Station BART Report, August 2011, Prepared for PPL Montana, LLC by TRC, at ES-1 ("SO<sub>2</sub> Control Update").

<sup>50</sup> NO<sub>x</sub> Control Update, at ES-3.

<sup>51</sup> SO<sub>2</sub> Control Update, at 14.

<sup>52</sup> United Conveyor Corporation Dry Sorbent Injection FAQ ([http://unitedconveyor.com/dsi\\_systems/](http://unitedconveyor.com/dsi_systems/)).

<sup>53</sup> Ref 2: SO<sub>2</sub> Control Update to PPL Montana's J.E. Corette Generating Station BART Report, Prepared for PPL Montana, LLC, by TRC, August 2011, p. ES-2.

including during startup, shutdown, and malfunction. The revised emission rates are 0.57 lb/MMBtu for SO<sub>2</sub> and 0.35 lb/MMBtu for NO<sub>x</sub>, both on a 30-day rolling average. We have revised the emission limits for Corette contained in section 52.1396(c)(1) accordingly. Our complete analysis of SO<sub>2</sub> and NO<sub>x</sub> emission limits for Corette can be found in the docket.0.5480.3350.57 We have addressed the emission limit for PM at Corette in a separate response to comments.

*Comment:* PPL stated that EPA's PM emission limit for Corette was flawed. PPL noted that over the past five years, stack test results have shown that PM emissions have ranged from 0.059 lb/MMBtu to 0.252 lb/MMBtu. PPL stated that an emission limit of 0.30 lb/MMBtu would be necessary to account for a 30-day rolling average.

*Response:* We agree, in part. In our proposed rule, we incorrectly specified a PM emission limit of 0.10 lb/MMBtu on a 30-day rolling average. In consideration of the stack test data provided by PPL, we have determined that a limit of 0.26 lb/MMBtu is more appropriate. In addition, and as discussed in response to a similar comment made by PPL in regard to Colstrip, we find that it is not feasible to require compliance with this emission limit on a 30-day rolling average. Again, this is because compliance is shown using stack methods such as Method 5 and 5B. These stack test methods typically consist of three sampling runs of at least 120 minutes in duration, and are not long-term continuous measurements. As such, it is not possible to average the emissions over 30 days or a year.

Accordingly, we are revising our FIP to reflect a PM emission limit for Corette of 0.26 lb/MMBtu. We are also removing the 30-day averaging period requirement for the PM emission limit at Corette. More specifically, we are revising section 52.1396(c)(1) to clarify that emission limits for NO<sub>x</sub> and SO<sub>2</sub>, but not PM, shall apply on a 30-day rolling average. Note that we are retaining the requirement that compliance with the PM emission limit shall be monitored in accordance with the CAM plan.

As we are not requiring that the PM emission limit applies on a 30-day rolling average, PPL's suggestion that the emission limit be increased to 0.30 lb/MMBtu is no longer relevant.

*Comment:* The USFWS commented that there are at least two other similarly-sized installations implementing lime spray drying (LSD) for SO<sub>2</sub> control that justify the positions taken by EPA in the proposed BART determination. USFWS stated that in

justifying emission limits of small units burning clean coal, Newmont Nevada is a 200 MW plant that attains a 30-day rolling average 0.065 lb/MMBtu SO<sub>2</sub> emission limit with an SO<sub>2</sub> control efficiency of 93.1% and that capital cost of LSD units is corroborated by Great River Energy's 188 MW Stanton #1 plant costing \$79,514,000.

*Response:* We acknowledge that the USFWS has provided information from two other similarly-sized installations which are implementing LSD for SO<sub>2</sub> corroborating our LSD cost estimates for Corette. However, as noted in our proposed rule, the cost of controls is not justified by the visibility improvement (0.253 deciview).

*Comment:* The USFWS stated that the capital costs proposed by EPA for dry sorbent injection (DSI) and LSD should be considered as maximums, because the costs should only decrease due to significant curtailment of construction of air pollution control devices during the economic downturn and cancellation or postponement of many coal burning electrical generation units. The USFWS stated that quantified estimates of the decreases could provide for firm reductions in the capital cost estimates, but it is agreed that they would be difficult to affirm with confidence at this time.

*Response:* We agree that any changes in cost associated with economic downturn would be difficult to affirm with confidence at this time.

*Comment:* The USFWS stated that the paragraph following Table 123 states that EPA considers \$4,659 per ton of SO<sub>2</sub> emissions reduction using DSI as reasonable, but that \$5,442 per ton for LSD is not cost effective. The USFWS stated that other proposed SO<sub>2</sub> BART determinations resulting in cost efficiency in the range of Corette include PacifiCorp's Dave Johnston, WY-\$4,743; Northshore Mining's Silver Bay Power, MN-\$7,309 and Xcel Energy's Taconite Harbor, MN-\$5,300 and as stated above, the capital cost of an LSD unit on Great River Energy's 188 MW Stanton #1 plant is \$79,514,000. USFWS stated that such a total capital cost incorporated as the cost of LSD at Corette would result in a cost per ton of SO<sub>2</sub> removed of \$4,891 and that the LSD alternative might then also be considered by EPA as being cost effective along with DSI.

*Response:* We disagree. We continue to find that the cost of LSD for Corette is not justified by the visibility improvement. Moreover, the capital cost that we estimated for LSD is specific to Corette, and we see no reason to supplant that cost with costs from

Taconite Harbor or other individual facilities.

*Comment:* The USFWS stated that regarding the cost-effectiveness of visibility improvement for SO<sub>2</sub> controls, the second paragraph after Table 123 in the draft proposed BART determination states, " \* \* \* the cost of controls is not justified by the visibility improvement" and that this proposed conclusion warrants further scrutiny. The USFWS stated that implementation of the DSI alternative results in a 0.176 deciview improvement at Washakie WA, the highest impacted Class I area, at a cost of \$3.4 million per deciview of improvement and that this is a very reasonable cost for visibility improvement. The USFWS stated that the cost of visibility improvement for SO<sub>2</sub> controls proposed in other BART determinations for a single most-impacted Class I area include: Colorado Springs Utilities, Martin Drake, CO-\$49.9 million/deciview; PacifiCorp, Wyodak, WY-\$44.7 million/deciview; PacifiCorp, Jim Bridger, WY-\$37.1 million/deciview; PG&E, Boardman, OR-\$35.2 million/deciview; and Dominion, Brayton Point, MA-\$33.9 million/deciview; Northshore Mining, Silver Bay Power, MN-\$26.2 million/deciview; Dominion, Salem Harbor, MA-\$25.1 million/deciview; Great River Energy, Stanton #1, ND-\$21.9 million/deciview; PacifiCorp, Naughton, WY-\$18.2 million/deciview; PacifiCorp, Dave Johnson, WY-\$16.7 million/deciview. The USFWS stated that the conclusion from the above is that since the cost per ton of SO<sub>2</sub> removal and the cost per deciview of visibility improvement are both reasonable, DSI should be considered as a feasible and cost-effective SO<sub>2</sub> control alternative and be accepted as BART for the PPL Montana, J.E. Corette Generating Station.

*Response:* We disagree. The total annual cost of DSI for Corette, as cited in our proposed rule was \$5,363,896, while the greatest visibility improvement was 0.176 deciview (Washakie WA). This results in cost of \$30 million per deciview, not \$3.4 million per deciview. We continue to find that the cost of LSD for Corette is not justified by the visibility improvement.

*Comment:* The USFWS commented that Table 110 states the visibility improvement associated with each of the three NO<sub>x</sub> control alternatives and by dividing respective Total Annual Costs by their visibility improvements, they result in cost per deciview of visibility improvement from \$16.7 million to \$17.8 million at the Washakie WA, the highest impacted Class I area.

The USFWS stated that when these values are compared to other single Class I area impacts for some other NO<sub>x</sub> BART proposals as summarized below, it would indicate that they each could be considered as reasonable. The USFWS stated that when total annual cost for each of the three NO<sub>x</sub> control alternatives is divided by the respective visibility improvement for all affected Class I areas (as discussed above for SO<sub>2</sub>) they result in cost per deciview of visibility improvement from \$4.7 million to \$5.0 million, which is a very reasonable visibility cost. USFWS stated that since the cost per ton of NO<sub>x</sub> removal and the cost per deciview of visibility improvement are both reasonable, at least the Separated Over-fire Air (SOFA)-only or, preferably SOFA plus Selective Non-Catalytic Reduction (SNCR) should definitely be considered as feasible and cost-effective NO<sub>x</sub> control alternatives and be accepted as BART for Corette.

*Response:* We disagree that SOFA or SOFA+SNCR should be accepted as BART for Corette. The BART Guidelines require that cost effectiveness be calculated in terms of annualized dollars per ton of pollutant removed, or \$/ton. 70 FR 739167. The BART Guidelines list the \$/deciview ratio as an additional cost effectiveness metric that can be employed along with \$/ton for use in a BART evaluation. However, we did not use this metric for the reasons that were explained in other responses. As we stated in the proposed FIP, we weighed costs against the anticipated visibility impacts and we explained that any of the control options would have a positive impact on visibility; however, the cost of controls was not justified by the visibility improvement. As we have explained elsewhere, in our proposal, we considered the visibility improvement at all Class I areas within 300 km of the subject BART unit.

In addition, we note that the USFWS seems to have miscalculated the dollars per deciview values for the NO<sub>x</sub> control options.

*Comment:* The USFS stated the BART determinations for Corette are not consistent with previous BART demonstrations that have been made for other facilities in Montana, as well as with decisions EPA has approved in other SIPs. And that EPA has identified control options for both NO<sub>x</sub> and SO<sub>2</sub> that are technically feasible and cost effective. USFS stated that it is their understanding that EPA has also determined that the visibility improvement does not justify the cost of the additional controls.

*Response:* We disagree. As the commenter has noted, we rejected additional controls for Corette since the visibility improvement does not justify the cost of controls. Moreover, the USFWS has not identified how this is inconsistent with other BART determinations in Montana or elsewhere.

*Comment:* WEG stated that EPA arbitrarily rejected requiring SCR as BART for NO<sub>x</sub> emissions from Corette and that we stated in the proposed FIP that the control technology would be cost-effective and achieve greater visibility benefits—in favor of no additional controls. WEG stated that the EPA's proposed BART determination is inconsistent with the CAA and the Agency's own record. WEG stated that that under the factors required to be considered by EPA in determining BART under the CAA, SCR would constitute BART. WEG stated that EPA found that SCR for Corette would not be cost-prohibitive and that the Agency also identified no energy and nonair quality impacts that would mitigate against the use of SCR, or any remaining useful life issues that would preclude the use of SCR. WEG stated that with regard to visibility improvement, the EPA further found that SCR, as opposed to doing nothing, would achieve greater visibility improvements and that given that SCR represents "the best system of continuous emission control technology available" (40 CFR 51.308(e)(1)(ii)), there appears to be no reason to dismiss SCR as BART for Corette. WEG stated that the EPA asserted that SCR for Corette "is not justified by the visibility improvement." Yet, the proposed FIP indicates that with the use of SCR, visibility improvements in the most impacted Class I area, the Washakie WA, would be 264%, an enormous improvement from current conditions. WEG stated that SCR would have a visibility improvement of 0.264 deciview and that SCR would reduce visibility impairment at seven different Class I areas, and that SCR would cumulatively improve visibility amongst the seven impacted Class I areas by 0.939 deciview. 77 FR 24042.

WEG stated that such cumulative visibility improvements do not appear to be unreasonable, but that in this case, the EPA appears to believe that the level of visibility improvement is not significant enough to justify the use of SCR. WEG stated that the proposed FIP provides no information or analysis to indicate that EPA's belief is not anything more than an arbitrary claim and that there is no explanation as to why the EPA believed the level of improvement with the use of SCR was

somehow discountable or insignificant. WEG stated that the EPA's logic is further belied by the fact that the FIP will fail to achieve meaningful reasonable progress in attaining natural visibility conditions in Class I areas in Montana and that given the prospect of such dismal progress in achieving natural visibility, it is reasonable to presume that any improvement in visibility, no matter how small, would be significant. WEG stated that the EPA failed to provide any information or analysis in the proposed FIP or the supporting record suggesting otherwise. WEG stated that although it is true that EPA is allowed to consider the degree in improvement in visibility in determining BART, there is no indication that this factor could be interpreted to allow the Agency to make arbitrary determinations that a 264% improvement in visibility under a plan that already contains unreasonable RPGs is insignificant or otherwise not worthy of regulatory action under the CAA's regional haze program.

*Response:* We disagree. We did not arbitrarily reject SCR. Our proposal clearly laid out the bases for our proposed BART determination for NO<sub>x</sub> for Corette. Our regulations define BART as an emission limitation based on the degree of reduction achievable through the application of the best system of continuous emission reduction for each pollutant which is emitted by an existing stationary facility. The emission limitation must be established, on a case-by-case basis, taking into consideration the technology available, the costs of compliance, the energy and nonair quality environmental impacts of compliance, any pollution control equipment in use or in existence at the source, the remaining useful life of the source, and the degree of improvement in visibility which may reasonably be anticipated to result from the use of such technology. The BART analysis identifies the best system of continuous emission reduction taking into account:

- (1) The available retrofit control options,
- (2) Any pollution control equipment in use at the source (which affects the availability of options and their impacts),
- (3) The costs of compliance with control options,
- (4) The remaining useful life of the facility,
- (5) The energy and nonair quality environmental impacts of control options
- (6) The visibility impacts analysis. 70 FR 39163.

As the final BART Guidelines explain, both the 2001 proposal and the 2004 reproposal requested comments on two options for evaluating the ranked options. The first option was similar to

the process that WEG implies should have been followed, where the most stringent control option must be chosen as long as it does not impose unreasonable costs of compliance or energy and nonair quality environmental impacts would justify selection of an alternative control option. 70 FR 39130. The second option was:

An alternative decision-making approach that would not begin with an evaluation of the most stringent control option. For example, States could choose to begin the BART determination process by evaluating the least stringent technically feasible control option or by evaluating an intermediate control option drawn from the range of technically feasible control alternatives. Under this approach, States would then consider the additional emissions reductions, costs, and other effects (if any) of successively more stringent control options. Under such an approach, States would still be required to (1) display all of the options and identify the average and incremental costs of each option; (2) consider the energy and nonair quality environmental impacts of each option; and (3) provide a justification for adopting the technology selected as the "best" level of control, including an explanation of its decision to reject the other control technologies identified in the BART determination.

In the final guidelines, EPA "decided that States should retain the discretion to evaluate control options in whatever order they choose, so long as the State explains its analysis of the CAA factors." 70 FR 39130. The BART Guidelines state that we "have discretion to determine the order in which you should evaluate control options for BART" and that we "should provide a justification for adopting the technology that you select as the "best" level of control, including an explanation of the CAA factors that led you to choose that option over other control levels." 70 FR 39170.

We explained our analysis of the five factors and explained that the CAA factors that led to our decision were cost-effectiveness and visibility improvement. The cost-effectiveness of SOFA + SCR was determined to be \$4,491/ton and the visibility improvement at the most impacted Class I area, Washakie WA, was 0.264 deciview. The impact at additional Class I areas was shown in Tables 123 and 124. 77 FR 24042. When we weighed the costs against the anticipated visibility improvement for Corette the cost of controls was not justified by the limited visibility improvement. 77 FR 24043.

With regard to WEG's claim that SCR would result in a visibility improvement of 264%, WEG used a fundamentally

flawed approach to calculate visibility improvements. Using WEG's approach, a 0.1 deciview change would produce a 1000% improvement in visibility compared to a 0.01 deciview change. In fact, the change would be 0.09 deciview or about 1% relative to natural visibility conditions. The approach that WEG used to calculate percent visibility improvement is mathematically incorrect. WEG compared a 0.264 deciview change to a zero deciview change and arbitrarily called this a 264% improvement in visibility. To get a more accurate estimate, you can use the rule of thumb that 0.5 deciview is approximately equivalent to a 5% change in perceived visibility. The 0.264 deciview change would be approximately a 2.6% improvement in visibility relative to natural visibility conditions. WEG makes the same mistake on page 3 in the comment on Colstrip where they state: "with the use of SCR, visibility improvements in the most impacted Class I areas would be around 50% greater than with the use of SNCR." Here they compared 0.784 deciview with SCR to 0.518 deciview with SNCR, and concluded that SCR provides a 50% visibility improvement over SNCR. Again, using the rule of thumb, this would be about a 2.6% difference in perceived visibility between SCR and SNCR relative to natural visibility conditions.

The BART Guidelines state that to make the net visibility improvement determination you should, "assess the visibility improvement based on the modeled change in visibility impacts for the pre-control and post-control emission scenarios. You have flexibility to assess visibility improvements due to BART controls by one or more methods. You may consider the frequency, magnitude, and duration components of impairment." 70 FR 39170. The BART Guidelines also state that, "Comparison thresholds can be used in a number of ways in evaluating visibility improvement (e.g. the number of days or hours that the threshold was exceeded, a single threshold for determining whether a change in impacts is significant, or a threshold representing an x percent change in improvement." 70 FR 39170. Our proposal shows the baseline visibility impact in deciviews, the visibility improvement in deciviews, the number of Class I areas impacted within 300 km, and fewer days impacted more than 0.5 deciview in Tables 123 and 124 and these are more appropriate metrics for evaluating visibility impact.

We disagree with WEG's statement that the FIP will fail to achieve meaningful reasonable progress in

attaining natural visibility conditions in Class I areas in Montana and that given the prospect of such dismal progress in achieving natural visibility, it is reasonable to presume that any improvement in visibility, no matter how small, would be significant. We have explained in other responses that 40 CFR 51.308(d)(1)(ii) states that, "if the State establishes a reasonable progress goal that provides for a slower rate of improvement in visibility that the rate that would be needed to attain natural conditions by 2064, the State must demonstrate, based on the factors in paragraph (d)(1)(i)(A) of this section, that the rate of progress for the implementation plan to attain natural conditions by 2064 is not reasonable; and that the progress goal adopted by the State is reasonable. The State must provide the public for review as part of its implementation plan an assessment of the number of years it would take to attain natural conditions if visibility improvement continues at the rate of progress selected by the State as reasonable." We explained in other responses how we have met those requirements.

#### *I. Comments on Reasonable Progress and Long Term Strategy*

*Comment:* A commenter stated that based on the WRAP emissions inventory and air quality modeling, EPA proposed reasonable progress goals for the 20% worst visibility days for the Montana Class I areas that are significantly less (16–51%) than the uniform rate of progress by 2018 and that no Montana Class I area is projected to achieve natural visibility conditions by 2064. The commenter stated that EPA projects that, at best, the national goal will not be met for 135 years at Cabinet Mountains WA and, at worst, for 437 years at the Medicine Lake WA.

The commenter stated that the WRAP inventory indicates that point sources contribute 71% of Montana's total SO<sub>2</sub> emissions, yet point source SO<sub>2</sub> emissions in Montana are projected to be reduced by less than 1% by 2018 (this includes SO<sub>2</sub> reductions for BART for Colstrip Units 1 and 2). This change in point source emissions inventory is considerably less than projected by other states in Region 8, yet EPA has determined that no additional SO<sub>2</sub> controls are reasonable. The commenter stated that the WRAP inventory projects that point source NO<sub>x</sub> emissions would be reduced by 3% (23,000 tons per year), primarily due to estimated NO<sub>x</sub> reductions at Colstrip and that EPA's RP analyses determined that \$282 per ton for NO<sub>x</sub> reduction at Devon Energy was cost effective, but NO<sub>x</sub> controls for all

other facilities were not cost effective. Several controls were below the cost of \$4,659 for SO<sub>2</sub> controls at Corette Generating Station that EPA determined were cost effective for BART. Given the lack of progress in improving visibility at the Class I areas, EPA needs to reconsider the cost effectiveness of point source SO<sub>2</sub> and NO<sub>x</sub> controls.

*Response:* We disagree that we should reconsider the cost effectiveness of point source controls given the lack of progress in improving visibility at the Class I areas. In determining the measures necessary to make reasonable progress and in selecting RPGs for mandatory Class I areas within Montana, we took into account the following four factors into consideration: costs of compliance; time necessary for compliance; energy and nonair quality environmental impacts of compliance; and remaining useful life of any potentially affected sources. CAA section 169A(g)(1) and 40 CFR 51.308(d)(1)(i)(A). In the FIP, we demonstrated how these four factors were considered. 40 CFR 51.308(d)(1)(ii) allows for a slower rate of improvement in visibility than the URP, as long as it is demonstrated that based on these four factors, it is not reasonable to achieve the URP and that the selected RPG is reasonable. CAA section 169A(g)(1) and 40 CFR 51.308(d)(1)(i)(A). We respond to specific critiques of our four-factor analyses elsewhere. To the extent that the commenter is stating that cost-effectiveness is a fixed value and must be the same whether a source is subject to BART or RP, we disagree. While the Regional Haze Rule may allow us to establish a bright line for some of the factors such as cost-effectiveness and visibility, we are not required to do so, and have not done so for this action.

*Comment:* A commenter stated that oil and gas development has increased markedly in Montana and neighboring states since the initial inventory projections provided by the WRAP in 2007 and that EPA should compare the most recent (Phase III) oil and gas emissions inventory to that used in the WRAP source apportionment modeling and discuss the implications of future oil and gas development for visibility at Montana Class I areas.

*Response:* We disagree that we should reevaluate the oil and gas inventory and discuss the implications of future oil and gas development for visibility at Montana Class I areas at this time. 40 CFR 51.308(d)(3)(iii) requires us to document the technical basis, including modeling, monitoring and emissions information on which we relied. It also requires that we identify the baseline emission inventory on which our

strategies are based. As stated in the proposal, an emissions inventory for each pollutant was developed by WRAP for Montana and these inventories were used as inputs to photochemical modeling that was used to determine the 2018 reasonable progress goal. 77 FR 24047 and 77 FR 24054. 40 CFR 51.308(d)(3)(iii) allows us to rely on the technical analysis developed by the WRAP, which we have done. We recognize that emission inventories are dynamic, but at this time it is not necessary to reevaluate the emission inventories. The Regional Haze Rule recognizes the need for periodic progress evaluation and requires progress reports to be submitted every five years. 40 CFR 51.308(g)(4) requires this report to include, “[A]n analysis tracking the change over the past five years in emissions of pollutants contributing to visibility impairment from all sources and activities within the state.” As we explained in our proposal, we will update the statewide emissions inventories periodically or as necessary and review emissions information from other states and future emissions projections.

*Comment:* MDEQ stated that EPA fails to consider the potential benefits of the Mercury Air Toxics Standard, the new NO<sub>x</sub> and SO<sub>2</sub> NAAQS, the forthcoming Boiler MACT, and other rules that will significantly impact PM<sub>2.5</sub>, SO<sub>2</sub> and NO<sub>2</sub> emissions in its LTS.

*Response:* We are sensitive to the challenges of coordinating compliance with a variety of rules. However, to the extent that MDEQ is implying that we should have considered the potential benefits of possible future regulations in our LTS, we disagree. As explained in our proposed FIP, in order to establish RPGs for the Class I areas in Montana and to determine the controls needed for the LTS, we followed the process established in the Regional Haze Rule. The anticipated visibility improvement in 2018 in all Montana Class I areas accounting for all existing enforceable federal and state regulations already in place was considered. 77 FR 24055. With regard to regulations that are not yet final, we cannot speculate on unknown reductions from anticipated future federal or state regulations prior to those actions completing the full regulatory process. None of the Montana sources have notified us that they will be reducing emissions as a result of future regulation and we have no basis for estimating what those emissions may be. Without an enforceable commitment, we cannot assume that additional reductions will be achieved and we cannot account for them in our LTS for the Regional Haze FIP. MDEQ

has not provided information to indicate that anything in the Regional Haze FIP will interfere with the requirements of other regulations. In fact, where additional controls are required, we would expect that the lower emission limit would make it easier to comply with future regulations that also require lower emission limits. We note that the Regional Haze FIP requires compliance with a specific emission limit and not necessarily the installation of a specific control technology and that sources have a full five years after the finalization of the FIP to comply with any emission limit that would require the installation of additional control technology.

*Comment:* MDEQ suggested that we include all smoke emissions from open burning and wildfires in the natural background estimates and recalculate URPs and RPGs in each of the State’s Class I areas with these adjusted background levels. MDEQ perceived fire to be the major contributing factor to the State’s visibility impairment, and claimed that EPA does not make a realistic allowance for smoke contributions to haze in Montana.

*Response:* We agree that industrial facilities are not the only causes of haze, but we disagree that we should make adjustments to the inventories, the URPs, or the RPGs. Our action considered the many contributors to haze including industrial facilities. It is not appropriate to consider open burning as natural background because open burning is anthropogenic. In our proposal, the emissions inventory appropriately included natural (non-anthropogenic) wildfire and anthropogenic sources such as open burning. 77 FR 24093. In developing a LTS, 40 CFR 51.308(d)(3)(iv) requires us to consider all anthropogenic sources. More specifically, 40 CFR 51.308(d)(3)(v)(E) requires the LTS to address smoke management techniques for agricultural and forestry management techniques. We note that our proposed action also proposed to approve the revisions to the paragraph titled “Smoke Management” of Title 17, Chapter 8, Subchapter 6, Open Burning as meeting the requirement in 40 CFR 308(d)(3)(v)(E) because the plan control emissions from these sources by requiring BACT and takes into consideration the visibility impacts on mandatory Class I areas.

Regardless of the contribution from smoke emissions, 40 CFR 51.308(d)(3)(iv) states, “The State must identify all anthropogenic sources of visibility impairment considered by the State in developing its long-term strategy. The State should consider major and minor stationary sources,

mobile sources, and area sources.” In this case, we acted in the place of Montana and were required to abide by the same requirement to consider point sources. 40 CFR 51.308(d)(1)(ii) states that, “if the State establishes a reasonable progress goal that provides for a slower rate of improvement in visibility that the rate that would be needed to attain natural conditions by 2064, the State must demonstrate, based on the factors in paragraph (d)(1)(i)(A) of this section, that the rate of progress for the implementation plan to attain natural conditions by 2064 is not reasonable; and that the progress goal adopted by the State is reasonable. The State must provide the public for review as part of its implementation plan an assessment of the number of years it would take to attain natural conditions if visibility improvement continues at the rate of progress selected by the State as reasonable.” In this case, we are acting in the place of Montana. In determining the measures necessary to make reasonable progress and in selecting RPGs for mandatory Class I areas within Montana, we evaluated major and minor point sources according to the four factors required by 40 CFR 51.308 (d)(1)(i)(A) (costs of compliance; time necessary for compliance; energy and nonair quality environmental impacts of compliance; and remaining useful life of any potentially affected sources CAA section 169A(g)(1) and 40 CFR 51.308(d)(1)(i)(A)). In addition, 40 CFR 51.308(e) requires states to make a BART determination for each BART-eligible source and in that determination, the state must consider the five statutory factors.

The requirements of 40 CFR 51.308(d)(3)(iv) and 40 CFR 51.308(e) are not dependent on the showing of a certain amount of impairment from point sources.

EPA recognized that variability in natural sources of visibility impairment causes variability in natural haze levels as described in its “Guidance for Estimating Natural Visibility Conditions Under the Regional Haze Rule.”<sup>54</sup> The

<sup>54</sup> Guidance for Estimating Natural Visibility Conditions Under the Regional Haze Rule, U.S. Environmental Protection Agency, September 2003. <http://www.epa.gov/ttncaaa1/t1/memoranda/rh-encurhr-gd.pdf>, page 1–1 (Guidance for Estimating Natural Visibility Conditions). The guidance states that, “Natural visibility conditions represent the long-term degree of visibility that is estimated to exist in a given mandatory Federal Class I area in the absence of human-caused impairment. It is recognized that natural visibility conditions are not constant, but rather they vary with changing natural processes (e.g., windblown dust, fire, volcanic activity, biogenic emissions). Specific natural events can lead to high short-term concentrations of particulate matter and its precursors. However, for

preamble to the BART Guidelines (70 FR 39124) describes an approach used to measure progress toward natural visibility in Mandatory Class I areas that includes a URP toward natural conditions for the 20% worst days and no degradation of visibility on the 20% best days. The use of the 20% worst natural conditions days in the calculation of the URP takes into consideration visibility impairment from wild fires, windblown dust and other natural sources of haze.<sup>55</sup> 70 FR 39124. The Guidance for Estimating Natural Visibility Conditions also discusses the use of the 20% best and worst estimates of natural visibility, provides for revisions to these estimates as better data becomes available, and discusses possible approaches for refining natural conditions estimates.<sup>56</sup>

For the evaluation of visibility impacts for BART sources, EPA recommended the use of the natural visibility baseline for the 20% best days for comparison to the “cause or contribute” applicability thresholds. This estimated baseline is reasonably conservative and consistent with the goal of attaining natural visibility conditions. While EPA recognizes that there are natural sources of haze, the use of the 20% worst natural visibility days is inappropriate for the “cause or contribute” applicability thresholds. For example, if BART source visibility impacts were evaluated in comparison to days with very poor natural visibility resulting from nearby wild fires or dust storms, the BART source impacts would be significantly reduced relative to these poor natural visibility conditions and would not be protective of natural visibility on the best 20% days.

*Comment:* MDEQ insisted that visibility issues in the Western U.S. are less stationary source driven than in the Eastern U.S., and that greater understanding of this difference has developed since Congress passed the Visibility Protection Act of 1977 and the visibility statute of the CAA Amendments of 1990.

*Response:* To the extent that MDEQ is implying that we are not required to analyze controls for stationary sources,

the purpose of this guidance and implementation of the regional haze program, natural visibility conditions represents a long-term average condition analogous to the 5-year average best- and worst-day conditions that are tracked under the regional haze program.”

<sup>55</sup> The preamble further stated that, “with each subsequent SIP revision, the estimates of natural conditions for each mandatory Federal Class I area may be reviewed and revised as appropriate as the technical basis for estimates of natural conditions improve.”

<sup>56</sup> Guidance for Estimating Natural Visibility Conditions, p.3–1 to 3–4.

we disagree. As explained in other responses, 40 CFR 51.308(d)(3)(iv) requires us to identify all anthropogenic sources of visibility impairment considered in developing our long term strategy. It specifically states that we should consider major and minor stationary sources, mobile sources, and area sources. Please see the language of 40 CFR 51.308(e) in the response to the previous comment. The requirements of 40 CFR 51.308(d)(3)(iv) and 40 CFR 51.308(e) are not dependant on the showing of a certain amount of impairment from point sources.

*Comment:* A commenter stated that BART sources such as Corette should also be considered under reasonable progress and that this would be consistent with actions EPA has approved in other SIPs. The commenter stated that EPA is using visibility improvement as measured by Q over D values as an indirect measure of the benefit of additional controls under reasonable progress and that it is their understanding that this is not supported under the Regional Haze Rule as reasonable progress decisions do not consider visibility improvement. The commenter requested that control options considered technologically feasible and cost effective under BART also be considered under reasonable progress.

*Response:* We disagree that BART sources need to be re-evaluated for the purposes of reasonable progress and that, under the Regional Haze Rule, reasonable progress determinations may not consider visibility improvement. Our RP Guidance states, “Since the BART analysis is based, in part, on an assessment of many of the same factors that must be addressed in establishing the RPG, it is reasonable to conclude that any control requirements imposed in the BART determination also satisfy the RPG-related requirements for source review in the first RPG planning period. Hence you may conclude that no additional emissions controls are necessary for these sources in the first planning period.”<sup>57</sup> The EPA has concluded that, based on the similarity of many of the same factors for both BART and reasonable progress, that no additional emissions controls are necessary for BART sources for this planning period. The commenter has given us no basis to change that conclusion: Regardless of whether any states have chosen to reevaluate BART sources for reasonable progress, the

<sup>57</sup> Guidance for Setting Reasonable Progress Goals Under the Regional Haze Program, U.S. Environmental Protection Agency, (“Reasonable Progress Guidance”) (June 1, 2007) p.4–2—4–3.

Regional Haze Rule does not require states to do so. With regard to the statement about using visibility improvement to evaluate additional controls under reasonable progress, EPA's reasonable progress guidance states: "In determining reasonable progress, CAA section 169A(g)(1) requires States to take into consideration a number of factors. However, you have flexibility in how to take into consideration these statutory factors and any other factors that you have determined to be relevant."<sup>58</sup> The potential reduction in quantity over distance (Q/D) is a factor that we consider to be relevant because the goal of the Regional Haze Rule is to improve visibility. The commenter has not cited any authority supporting the position that visibility improvements may not be considered in reasonable progress determinations and therefore has given us no basis to change our use of this factor.

*Comment:* A commenter stated that the proposal fails to achieve reasonable progress. The commenter explained that the proposal will leave visibility in the parks and WAs that are affected by Montana sources impaired for hundreds of years into the future, nonetheless, we propose no additional emission reductions from Montana's stationary sources.

*Response:* We disagree that the FIP fails to achieve reasonable progress. 40 CFR 51.308(d)(1)(ii) states:

If the State establishes a reasonable progress goal that provides for a slower rate of improvement in visibility than the rate that would be needed to attain natural conditions by 2064, the State must demonstrate, based on the factors in paragraph (d)(1)(i)(A) of this section, that the rate of progress for the implementation plan to attain natural conditions by 2064 is not reasonable; and that the progress goal adopted by the State is reasonable. The State must provide the public for review as part of its implementation plan an assessment of the number of years it would take to attain natural conditions if visibility improvement continues at the rate of progress selected by the State as reasonable.

In determining the measures necessary to make reasonable progress and in selecting RPGs for mandatory Class I areas within Montana, we took into account the following four factors into consideration: Costs of compliance; time necessary for compliance; energy and nonair quality environmental impacts of compliance; and remaining useful life of any potentially affected sources. CAA section 169A(g)(1) and 40 CFR 51.308(d)(1)(i)(A). In the FIP, we demonstrated how these four factors

were considered and we also provided, in Table 197, an assessment of the number of years it would take to attain natural conditions if visibility improvement continues at the rate of progress that we selected was reasonable. We respond to specific critiques of our four-factor analyses elsewhere.

*Comment:* A commenter stated that EPA failed to evaluate controls on all BART-subject sources to meet reasonable progress requirements and that EPA stated that the BART analyses for these facilities are similar to the requisite reasonable progress analysis. 77 FR at 24059. The commenter stated that EPA has ensured that Montana will not achieve reasonable progress toward natural visibility conditions at Class I areas affected by Colstrip and Corette and that EPA's approach is flawed legally and factually. The commenter stated that EPA's approach fails to distinguish between the purposes of BART and the long-term strategy under the Regional Haze Rule and that while both are mechanisms to help states achieve reasonable progress, BART is applied to a given source—for the purpose of eliminating or reducing visibility impairment caused or contributed to by that source. 42 U.S.C. section 7491(b)(2)(A). The commenter stated that rather than focusing on specific sources, the development of a long-term strategy requires EPA to look at existing visibility impairment—after emissions reductions due to BART and other strategies are accounted for—and attribute responsibility for eliminating that impairment among sources and categories. 40 CFR 51.308(d)(1). The commenter stated that in this way, the states and EPA maintain flexibility to determine the most effective and efficient way to eliminate haze pollution when technology mandates on specified sources have not done the job. The commenter stated that therefore, measures within a long-term strategy are required to achieve reasonable progress above and beyond BART and that by categorically eliminating all BART-subject sources from its reasonable progress analysis, EPA has failed to meet its obligation to determine whether emissions reductions from these sources beyond those required by BART are necessary to achieve the national goal of eliminating visibility impairment.

*Response:* We disagree that BART sources need to be re-evaluated for the purposes of reasonable progress. Our reasonable progress guidance states:

Since the BART analysis is based, in part, on an assessment of many of the same factors that must be addressed in establishing the RPG, it is reasonable to conclude that any

control requirements imposed in the BART determination also satisfy the RPG-related requirements for source review in the first RPG planning period. Hence you may conclude that no additional emissions controls are necessary for these sources in the first planning period.<sup>59</sup>

The commenter has given no reason for us to change this position.

*Comment:* A commenter stated that EPA's approach essentially duplicates all of the errors from its BART analysis in its reasonable progress analysis and that in particular, EPA's incremental visibility justification for dismissing the most stringent pollution control technologies is especially inappropriate in the reasonable progress framework. The commenter stated that incremental visibility improvement is not included among the four factors to be considered in establishing reasonable progress measures. 40 CFR 51.308(d)(1)(i)(A). The commenter stated that if this justification is applied to eliminate the most effective pollution-reduction measures at every source—especially the largest and oldest sources that are subject to BART—then Montana may never make reasonable progress toward achieving natural visibility conditions.

*Response:* We disagree that there are errors in our approach for BART and reasonable progress for the same reasons we have discussed previously. Pursuant to 40 CFR 51.308(e)(A) for our BART analyses, we considered the following five factors in our analysis: The appropriate level of BART control; the cost of compliance; the energy and nonair quality environmental impacts; any pollution control equipment in use at the source; the remaining useful life of the source; and the degree of improvement which may be reasonably anticipated to result from the use of such technology. We agree that visibility improvement is not one of the four factors required by CAA section 169A(g)(1) and 40 CFR 51.308(d)(1)(i)(A), however, it (along with other relevant factors) can be considered when determining controls that should be required for reasonable progress. Our reasonable progress guidance states: "In determining reasonable progress, CAA section 169A(g)(1) requires States to take into consideration a number of factors. However, you have flexibility in how to take into consideration these statutory factors and any other factors that you have determined to be relevant."<sup>60</sup> For certain potentially affected sources, we considered Q/D and potential reductions in Q/D, which are relevant to

<sup>58</sup> Reasonable Progress Guidance, p.5-1.

<sup>59</sup> Reasonable Progress Guidance, p. 4-2-4-3.

<sup>60</sup> Reasonable Progress Guidance, p. 5-1.

the goal of the Regional Haze Rule, improving visibility.

*Comments:* A commenter stated that EPA failed to require that Colstrip Units 1 and 2 and Corette make emissions reductions that were relied upon by the WRAP, EPA, and states neighboring Montana in establishing reasonable progress goals, and that if EPA fails to revise its BART determinations for Colstrip Units 1 and 2 and Corette, EPA must require additional reductions of visibility-impairing pollutants in its long-term strategy. Another commenter stated that EPA should have required SCR+SOFA as BART for Colstrip Units 1 and 2 and should have required SOFA+SCR and a dry scrubber/baghouse for Corette, but even if EPA were to justify its contrary BART finding in response to these comments, EPA should have required SCR+SOFA and a dry scrubber/baghouse at these units as part of its long term strategy. The commenter explained that where sources within a state contributes to visibility within another state's Class I area or areas, the state has an obligation to adopt controls necessary to ensure it achieves its share of the pollution reductions that are required to meet the reasonable progress goals set for the subject Class I area.

*Response:* We do not agree that we must revise our BART determinations for Colstrip Units 1 and 2 and Corette. We have stated in other actions addressing regional haze that a plan that provides for emission reductions consistent with the assumptions underlying the WRAP modeling will ensure that a State is not interfering with measures designed to protect visibility in other states. See e.g. 76 FR 491, 496–497 (Jan. 5, 2011). Similarly, a plan that is consistent with the assumptions underlying the modeling used to establish RPGs in a state likely will include the measures necessary to achieve those RPGs. However, there is no requirement that a SIP (or FIP) adopt the assumptions underlying the models as enforceable requirements. The air quality models used to support the regional haze SIPs are extremely complex, and due to the time consuming nature of performing the modeling, this work was performed early in the process. The emissions projections by the RPOs, relied upon in the air quality modeling, incorporated the best available information at the time from the states, and utilized the appropriate methods and models to provide a prediction of emissions from all source categories into the future. There was an inherent amount of uncertainty in the assumed emissions from all sources, including emissions

from BART-eligible sources, as the final control decisions by all of the states were not yet complete. The WRAP used their best estimates of what regional haze SIPs would achieve as inputs for the modeling. In the end, reductions resulting from BART determinations based on the statutory factors may differ from those estimates.

One relevant requirement cited by the commenter, at 40 CFR 51.308(d)(3)(ii), is that EPA must demonstrate that it has included all measures necessary to obtain its share of the emission reductions needed to meet the RPGs for Class I areas where it causes or contributes to impairment. Montana's neighboring Class I states originally set the reasonable progress goals in their SIP based on emission reductions expected to be achieved through application of presumptive BART and other emission reductions qualified for that purpose. These neighboring states had the opportunity to comment on the regional haze FIP, and did not ask for additional emission reductions. We also note that the RPGs are not enforceable goals. Neighboring states will have the responsibility to consider whether other reasonable control measures are appropriate to ensure reasonable progress during subsequent periodic progress reports and regional haze SIP revisions as required by 40 CFR 51.308(f)–(h), and may at that time consider asking EPA for additional emission reductions.

With respect to Colstrip Units 1 and 2, we note that our FIP achieves SO<sub>2</sub> emissions reductions well beyond those assumed in the WRAP PRP18b emissions inventory. Specifically, at Units 1 and 2, assuming operation at 85% of capacity, our FIP achieves reductions of 7,538 tpy of SO<sub>2</sub>, which is 1,504 tpy better than indicated by the PRP18b projections. By way of comparison, again assuming operation at 85% of capacity, our FIP achieves reductions of 6,652 tpy of NO<sub>x</sub> for Colstrip Units 1 and 2, which is 1,709 tpy below that indicated by the PRP18b projections. Because the additional SO<sub>2</sub> reductions are close to the shortfall in NO<sub>x</sub> reductions at Colstrip Units 1 and 2, and as SO<sub>2</sub> may have a greater impact than NO<sub>x</sub> on visibility in Montana, we find that the overall emissions reductions achieved at Colstrip Units 1 and 2 will result in similar visibility improvement to the emissions reductions assumed in the WRAP PRP18b projections.

With respect to Corette, the commenter has overstated the discrepancy between the emissions associated with our BART determination and the PRP18b

projections, because the commenter has compared WRAP projections based on annual emissions with emissions limits that are on a 30-day rolling average. In addition, we note that we have revised the NO<sub>x</sub> and SO<sub>2</sub> emission limits for Corette in our FIP to be somewhat more stringent than what we proposed (and more reflective of actual emissions with existing controls). Finally, the WRAP projections do not reflect application of SOFA+SCR or a dry scrubber/baghouse to Corette. Therefore, the projections do not support the commenter's position that these controls are required.

Moreover, there are NO<sub>x</sub> reductions at other BART sources that are greater than assumed by WRAP. At Ash Grove and Holcim, the total reductions from our FIP are significantly more relative to the PRP18b projections than the WRAP used. In conclusion, our FIP contains additional emission reductions at BART sources that largely offset any shortfall at Colstrip Units 1 and 2 and Corette.

*Comment:* A commenter stated that our reasonable progress goals are unreasonable, unsupported, and effectively contrary to the CAA's requirements that we assure reasonable progress in achieving natural visibility conditions in Class I areas. The commenter stated that the proposed RPGs, at a minimum, double the timeframe required to achieve natural visibility conditions for every Class I area in Montana and that this is not reasonable. The commenter also stated that the reasonable progress goals are unreasonable based on the statutory factors that must be considered by EPA under 42 U.S.C. 7491(g)(1), and that we provided two reasons for asserting that the reasonable progress goals are reasonable: That our four factor analyses resulted in limited opportunities for reasonable progress controls for point sources and that significant visibility impairment is caused by non-anthropogenic sources in and outside Montana. The commenter stated that with regard to the latter issue of non-anthropogenic sources in and outside of Montana, this is not a statutory factor that EPA is allowed to consider in establishing RPGs.

*Response:* We disagree. It is not necessarily unreasonable for the RPGs to reflect a longer period of time than the URP. The URP is simply calculated by dividing the difference between the present visibility conditions and natural visibility conditions by the number of years between the baseline and 2064. It assumes a steady rate of progress and does not take into account the four statutory factors for determining reasonable progress or any additional factors that warrant consideration. As a

result, the RPGs, which do reflect consideration of these factors, may well vary from the URP.

In determining reasonable progress controls, EPA did consider the statutory factors for determining reasonable progress set out in 42 U.S.C. 7491(g)(1). To the extent that the commenter argues with our evaluation of these factors, we respond to specific comments on our evaluation of these factors elsewhere.

The commenter is correct that consideration of non-anthropogenic sources in and outside of Montana is not one of the statutory four factors that must be considered under 42 U.S.C. 7491(g)(1). However, EPA's reasonable progress guidance states: "In determining reasonable progress, CAA section 169A(g)(1) requires States to take into consideration a number of factors. However, you have flexibility in how to take into consideration these statutory factors and any other factors that you have determined to be relevant."<sup>61</sup> The data demonstrating that significant visibility impairment is caused by non-anthropogenic sources in and outside Montana is relevant because it diminishes the potential improvement that might be realized through controlling an individual point source within Montana. Therefore, it was proper for EPA to consider this additional factor.

*Comment:* A commenter stated that based on the four factors set forth under the CAA, it appears that EPA grossly overstated its assertion that there are only limited opportunities for reasonable controls for point sources. The commenter stated that this is particularly the case with regard to NO<sub>x</sub> emissions from coal-fired EGUs in Montana. The commenter stated that our proposal disclosed that for every coal-fired EGU assessed under the four-factor analysis for determining RPGs, including Colstrip units 3 and 4, Colstrip Energy, and the Lewis and Clark Station, that cost-effective SCR control technology could achieve greater NO<sub>x</sub> emissions reductions and greater visibility improvements than under our FIP. The commenter stated that despite this, we rejected SCR as a control option and ultimately adopted no NO<sub>x</sub> emission controls for these four sources. The commenter stated that we also rejected SCR as BART for Colstrip Units 1 and 2 and the Corette coal-fired EGUs, even though we found SCR to be a cost-effective and reasonable technology, we rejected it in favor of weaker controls. The commenter concluded that we did not show that any of the four factors would mitigate against additional

control and stronger RPGs. The commenter stated that our assertion that there would be no degradation is not reasonable or legally justified and that we must establish our reasonable progress goals based on all coal-fired EGUs using SCR to reduce NO<sub>x</sub> emissions.

*Response:* We disagree that the four factor analyses for EGUs that are potentially affected reasonable progress sources mandate the addition of SCR and that visibility, although not one of the four statutory factors that are required to be considered, cannot be considered in determining appropriate controls under reasonable progress. EPA's reasonable progress guidance states: "In determining reasonable progress, CAA section 169A(g)(1) requires States to take into consideration a number of factors. However, you have flexibility in how to take into consideration these statutory factors and any other factors that you have determined to be relevant."<sup>62</sup> For example, the potential reduction in Q/D is a factor that we consider to be relevant because the goal of the Regional Haze Rule is to improve visibility at Class I areas. We note that the commenter, in citing potential visibility improvement at the facilities mentioned, undercuts their own argument that the four statutory RP factors by themselves, without consideration of other factors, demonstrate that EPA "grossly overstated" its conclusion that there are only limited opportunities for reasonable controls for point sources. Commenter misstated EPA's conclusions by stating that EPA "found SCR to be a cost-effective and reasonable technology" for the BART EGUs. While we did state that the cost on a dollars per ton basis was cost-effective, we also explained that the cost of SOFA + SCR was not justified by the visibility improvement. 77 FR 24027, 77 FR 24035, and 77 FR 24043. The commenter misstated the requirements of the Regional Haze Rule. In examining potentially affected sources for possible controls and setting RPGs, EPA is not required to "show that any of the four factors would mitigate against additional controls and stronger reasonable progress goals." Instead, EPA is required to consider the four statutory reasonable progress factors. In addition, EPA may consider additional, relevant factors such as visibility improvement from controls. To the extent that the comment argues with our determinations for particular potentially affected sources, we respond to specific

criticisms elsewhere. With regard to commenter's statement that our basis for determining there would be no degradation on the least impaired days was unreasonable and not legally justified, we note that the commenter did not identify any flaw in our data or methodology in deriving Table 198 in the proposal. We therefore disagree with the statement.

*Comment:* PPL commented that to try to address visibility impairment only within the universe of point sources subject to potential EPA regulation within the United States is not reasonable and will not lead to achievement of Reasonable Progress Goals (RPGs). PPL stated further that EPA, in conjunction with other federal and state agencies and the FLMs, should re-evaluate some of the conclusions as to the uncontrollable nature of several listed significant contributors of SO<sub>2</sub> and NO<sub>x</sub>. PPL stated that application of the BART analysis excludes consideration of a number of factors, including outside domain sources. PPL pointed out that the RPGs in the proposed FIP do not take into account the contribution of international emissions to the visibility, and do not address challenges faced by the state of Montana.

*Response:* To the extent that PPL commented that we are addressing visibility impairment only within the universe of point sources subject to potential EPA regulation within the United States, that we did not consider other sources of emissions, we disagree. As explained elsewhere, our action considered the many contributors to haze including all anthropogenic sources as required by 40 CFR 51.308(d)(3)(iv) and smoke management techniques for agricultural and forestry management techniques as required by 40 CFR 51.308(d)(3)(v)(E). In our proposal, the emissions inventory appropriately included natural (non-anthropogenic) wildfire and anthropogenic sources such as open burning and international emissions. We proposed approve the revisions to the smoke management section of Montana's Visibility SIP as meeting the requirement in 40 CFR 308(d)(3)(v)(E).

*Comment:* The NPS commented that EPA used inconsistent criteria in selecting reasonable progress controls.

*Response:* We disagree. As explained in other responses, in determining the measures necessary to make reasonable progress and in selecting RPGs for mandatory Class I areas within Montana, we took the following four factors into consideration: costs of compliance; time necessary for compliance; energy and nonair quality

<sup>61</sup> Reasonable Progress Guidance, p. 5-1.

<sup>62</sup> Reasonable Progress Guidance, p.5-1.

environmental impacts of compliance; and remaining useful life of any potentially affected sources. CAA section 169A(g)(1) and 40 CFR 51.308(d)(1)(i)(A). As also explained in other responses, we also considered potential visibility improvement in a general sense by considering the potential reduction in haze causing pollutants and also the distance from the source to the nearest Class I area. For Colstrip 3 and 4, we also considered visibility modeling results and have explained the reasoning for that decision in another response.

#### J. Comments on Colstrip Units 3 and 4

*Comment:* Some commenters agreed with EPA's conclusion not to require additional emissions controls at Colstrip Units 3 and 4. Commenters asserted that, given the aggressive pollution control technologies already in place, EPA properly concluded that additional controls for Reasonable Progress are not appropriate.

*Response:* We acknowledge the commenters' support for our decision not to require additional emission controls on Colstrip Units 3 and 4 in this planning period. Whether additional emission reductions from reasonable progress sources, including Colstrip Units 3 and 4, are necessary will be re-evaluated in subsequent planning periods.

*Comment:* Various commenters stated that we underestimated the costs of SNCR for Colstrip Units 3 and 4.

*Response:* We disagree that we underestimated the costs of SNCR for Colstrip Unit 3 and 4. For a further explanation, see our response to similar comments made in relation to SNCR costs for Colstrip Unit 1 and 2.

*Comment:* Commenters stated that they disagree with EPA's cost analysis for NO<sub>x</sub> control technologies for Colstrip Units 3 and 4. In particular, commenters stated that we underestimated the capital costs and cost-effectiveness of these controls. Commenters referenced cost estimates submitted by PPL in September 2011 and February 2012, which show much higher capital costs and cost-effectiveness than those estimated by EPA.

*Response:* We disagree. We have rejected PPL's cost estimates for NO<sub>x</sub> control options for Colstrip Units 3 and 4 for the same reasons that we rejected them for Colstrip Units 1 and 2. See previous responses to comments.

*Comment:* NPS stated that EPA modeled baseline visibility impacts at five Class I areas from Colstrip Units 3 & 4 using 2008–2010 emissions, while PPL modeled visibility impacts using

2001–2003 emissions. NPS agreed with the PPL modeling approach because it is consistent with EPA guidance to use the 2001–2003 pre-control emissions.

*Response:* See our response to a similar comment made in regard to the baseline emissions used for Colstrip Units 1 and 2.

*Comment:* NPS stated that after EPA concluded its statutory four-factor analysis of Colstrip 3 and 4, it created a new, "Optional Factor: Modeled Visibility Impacts" fifth factor, only for Colstrip 3 & 4. NPS further stated that this "optional" fifth factor is not required by statute or regulation, and that EPA only used it on one reasonable progress source (2 units) and did not explain what criteria it used to evaluate it.

*Response:* As we explained elsewhere, our RP Guidance allows for consideration of additional factors such as visibility impacts or benefits. Given the large annual emissions of NO<sub>x</sub> and SO<sub>2</sub> from Colstrip Units 3 and 4 compared to other reasonable progress sources, we found that it was reasonable to model the visibility benefits and consider them when evaluating controls.

*Comment:* NPS stated that EPA has not provided criteria used in making the determination of what "Costs of Compliance" are reasonable, and its determinations vary significantly across Montana facilities.

*Response:* As we have explained elsewhere, while the Regional Haze Rule and BART Guidelines allow states to establish thresholds for cost-effectiveness, we are not required to do so and have not done so for this action. Also, our Reasonable Progress determinations were made based not just on the cost of compliance, but with consideration of the four factors along with additional information that was pertinent.

*Comment:* EarthJustice stated that EPA must set NO<sub>x</sub> emission limits for Colstrip Units 3 and 4 based on SCR to help achieve reasonable progress. EarthJustice stated that EPA's analysis is skewed to underestimate the benefits of SCR, both in terms of control effectiveness and visibility improvement, and overestimates the costs. EarthJustice made claims regarding our cost analysis for Colstrip Units 3 and 4 that were very similar to the claims they made regarding Colstrip Units 1 and 2.

*Response:* We disagree. Below we address each of EarthJustice's arguments that support their assertion that SCR must be required for Colstrip Units 3 and 4.

*Comment:* EarthJustice stated that EPA underestimated the control effectiveness of SCR.

*Response:* See our response to similar comment made by EarthJustice in regard to Colstrip Units 1 and 2.

*Comment:* EarthJustice stated that EPA overestimated the cost of SCR.

*Response:* See our response to similar comment made by EarthJustice in regard to Colstrip Units 1 and 2.

*Comment:* EarthJustice claimed that the visibility benefit of SCR on Units 3 and 4 is substantial and therefore SCR should be required. EarthJustice noted that EPA modeled visibility benefits of SNCR and SCR and found a visibility benefit of 0.273 dv per unit from application of SCR. EarthJustice stated that application of SCR at both units would approximately halve the units' emissions of visibility impairing pollutants and would reduce the number of days of visibility impairment at Theodore Roosevelt NP to just 2 days and would eliminate visibility impairment caused by Units 3 and 4 at four other Class I areas. EarthJustice stated that, in light of this, we lacked a basis for our determination to not impose SCR at Colstrip Units 3 and 4. EarthJustice noted that, in North Dakota, we imposed LNB on two units at Antelope Valley Station based on a combined visibility benefit of 0.39 deciview, which we stated was significant even on a unit-by-unit basis of 0.2 deciview.

*Response:* We disagree that SCR should be required based solely on the modeled visibility benefits. As we explained in our proposal, we considered the four factors and the modeled visibility benefits of controls and determined that no additional controls should be required for this planning period. 77 FR 24066. Also, we stated that specifically, for SCR, the modeled visibility benefits (0.273 deciview and 0.260 deciview) were not sufficient for us to consider it reasonable to impose SCR in this planning period. 77 FR 24066. In making this determination, we noted that SCR was the more expensive option (\$4,574/ton at Unit 3 and \$4,607/ton at Unit 4). The cost of compliance is one of the four statutory factors, and EarthJustice has not provided a reason why it should be ignored. For the same reason, we reject the comparison with our North Dakota action. There, the cost-effectiveness of LNB at Antelope Valley Station was \$586/ton for Unit 1 and \$661/ton at Unit 2. 76 FR 58631. We explicitly considered these costs in making our determination to impose LNB. Here, the cost-effectiveness of SCR at Colstrip Units 3 and 4 is far above the

cost-effectiveness of LNB at Antelope Valley Units 1 and 2. Thus, the comparison gives us no basis to change our determination that SCR should not be required in this planning period.

*Comment:* EarthJustice stated that EPA should set more stringent SO<sub>2</sub> emission limits at Colstrip Units 3 and 4 to help achieve reasonable progress. EarthJustice stated that EPA incorrectly found that no additional upgrades are feasible and that 98% SO<sub>2</sub> removal to meet an SO<sub>2</sub> emission limit of 0.05 lb/MMBtu at Units 3 and 4, which is readily achievable at little expense using MEL.

*Response:* EarthJustice cites a 1984 paper presented at the American Power Conference to support their argument of a lower emission rate. Colstrip 3 had only started operation in 1984 and Colstrip 4 did not commence operation until 1986,<sup>63</sup> the data cited by EarthJustice cannot be more than short-term tests of Unit 3 that are not representative of longer term performance. Annual emissions from 1985 and 1990 emissions from CAMD can be found in the docket. At the time these scrubbers were built, wet MEL scrubbers and wet caustic scrubbers were the only scrubbers that could deliver high capture rates (over 90%) with reasonable reliability. Scrubber technology has improved and other, less expensive, reagents are now preferred. Although Colstrip Units 3 & 4 used MEL in the past, MEL is not readily available in the region near the Colstrip plant. MEL is produced from a blending of dolomitic lime with high calcium lime to achieve a lime with a magnesium content of 3–6% or so. The lime is produced by calcination of limestone. Dolomitic limestone is limestone with a significant amount of dolomite, or calcium magnesium carbonate. Because there are no dolomitic limestone deposits near the Colstrip plant, the dolomitic lime must be sourced from remote locations. This increases the cost of the lime (that is made from the dolomitic limestone). According to Carmeuse, a supplier of MEL, the closest source of dolomitic lime is 1,000 miles away from the Colstrip plant and transportation would cost \$0.12 per mile per short ton plus a 24% fuel surcharge to transport,<sup>64</sup> or close to \$150/short ton just for transportation of the reagent. Because the lime would be blended in closer to the plant with high calcium lime at perhaps an 8:1 ratio (reducing magnesium content from about 40% to about 4–5% this would

result in an increased reagent cost of \$15–\$20 per ton. Assuming a high-calcium lime cost of about \$95/ton,<sup>65</sup> this raises the cost of reagent by close to 20% assuming constant reduction. Reagent use might be improved somewhat for a given reduction level, but considering this is a unique scrubber design, it is difficult to assess what the impact may be. Regardless, reliance on a reagent source that is 1,000 miles away may cause operating risks during the winter months if delivery was interrupted.

We also note that EarthJustice did not provide site-specific cost information, for us to evaluate MEL. The cost of compliance is one of the factors required to be considered by CAA section 169A(g)(1) and 40 CFR 51.308(d)(1)(i)(A). Based on all four factors, we continue to find that the level of performance of the current SO<sub>2</sub> removal system for Colstrip Units 3 and 4 is satisfactory for this planning cycle. We will re-evaluate additional SO<sub>2</sub> controls for Colstrip Units 3 and 4 in the next planning cycle.

*Comment:* PPL stated that EPA properly concluded that RPGs do not require additional emissions controls on Colstrip Units 3 and 4 and that existing emissions controls at Units 3 and 4 already limit emissions to levels below the presumptive BART limit. PPL stated that EPA's RP conclusion should not be affected by EPA's ultimate determination with respect to BART requirements for Colstrip Units 1 and 2 and that no further controls are warranted based on conclusions regarding the extent of existing emissions controls and the cost-ineffectiveness of further controls.

*Response:* PPL did not provide specific information for us to consider in making a change to our FIP. In any case, we have not required additional controls for Colstrip Units 3 and 4 in our final FIP.

#### K. Comments on Devon Energy

*Comment:* MDEQ stated that we failed to provide information or analysis of any visibility benefit that would result from the application of NSCR for Devon Energy. MDEQ suggested that we must consider visibility benefits as part of the Devon Energy reasonable progress analysis, as the BART Guidelines include evaluation of visibility impacts “which would also appear to be required under the reasonable progress guidelines.”

<sup>65</sup> Sargent & Lundy, “IPM Model—Revisions to Cost and Performance for APC Technologies, SDA FGD Cost Development Methodology FINAL”, Prepared for US EPA, August 2010 see table 2.

*Response:* The four reasonable progress factors are the costs of compliance, the time necessary for compliance, the energy and nonair quality environmental impacts of compliance, and the remaining useful life of any potentially affected sources CAA section 169A(g)(1) and 40 CFR 51.308(d)(1)(i)(A). Our Reasonable Progress Guidance states: “In determining reasonable progress, CAA section 169A(g)(1) requires States to take into consideration a number of factors. However, you have flexibility in how to take into consideration these statutory factors and any other factors that you have determined to be relevant.”<sup>66</sup> As stated in our proposal at 77 FR 24069, for Devon, we considered Q/D and potential reductions in Q/D, which are relevant to the goal of the Regional Haze Rule, improving visibility.

*Comment:* MDEQ commented that EPA should review the NO<sub>x</sub> limit for Devon with respect to its averaging time and compliance determining method for practical enforceability.

*Response:* In the final FIP, we have made changes to the language in 40 CFR 52.1396 to clarify the requirements for Devon Energy.

#### L. Comments on Montana-Dakota Utilities

*Comment:* Montana-Dakota Utilities (MDU) commented that the company did not disagree with our Reasonable Progress determination. MDU stated that, for EPA's reference, paragraph 3 on page 1 of the Sargent & Lundy IPM model method document cautions as follows with respect to the application of the model to smaller units:

The costs for retrofitting a plant smaller than 100 MW increase rapidly due to the economy of size. The older units which comprise a large proportion of the plants in this range generally have more compact sites with very short flue gas ducts running from the boiler house to the chimney. Because of the limited space, the SCR reactor and new duct work can be expensive to design and install. Additionally, the plants might not have enough margins in the fans to overcome the pressure drop due to the duct work configuration and SCR reactor and therefore new fans may be required.

MDU stated that Lewis & Clark Station is a small, 52 MW net capacity unit. In addition, MDU believes that the fan margin is not present at Lewis & Clark Unit 1 to overcome the pressure drop as discussed in the Sargent & Lundy guidance.

*Response:* MDU has not provided the information that would be necessary for

<sup>66</sup> Reasonable Progress Guidance, p. 5–1.

<sup>63</sup> See EIA Form 860 data.

<sup>64</sup> Email from Bob Roden, Carmeuse, to Jim Staudt, Andover Technologies, July 31, 2012.

us to determine whether or not to agree with the implied point of this comment, which seems to be that EPA underestimated the cost of SCR. First, MDU has not indicated whether there are, in fact, space limitations at Lewis & Clark Station that would cause installation of an SCR reactor and associated ductwork to be more expensive than the cost estimate in our analysis. Second, MDU has not indicated whether the additional pressure drop from installation of SCR at Lewis & Clark Station would, in fact, require installation of new fans, and if so, whether or not our cost analysis failed to factor in the cost of new fans.

*Comment:* MDU indicated that EPA uses a Retrofit Factor value of 1 for Lewis & Clark Station Unit 1 in the IPM Model calculation (factor B in the EPA cost sheets) which indicates an average retrofit cost, however, a higher value would be expected for Lewis & Clark since it is a small facility (as discussed/cautioned above by Sargent & Lundy) and could be difficult to retrofit. A more appropriate value between 1.3 and 2.0 is therefore recommended.

*Response:* We disagree. MDU has not provided any data or information to substantiate that a retrofit factor other than 1 is warranted for Lewis & Clark Station. The IPM capital cost calculations for retrofits already account for unit size. We note that capital cost does not vary linearly with size in IPM. Instead, in the capital cost formula in IPM, the cost varies exponentially with unit size (a least squares fit). The IPM document states, "The least squares curve fit was based upon an average of the SCR retrofit projects." IPM Model—Revisions to Cost and Performance for APC Technologies, SCR Cost Development Methodology, Final, Sargent & Lundy, August 2010, Chapter 5, Appendix 5–2A, page 4–5.

We also disagree with the statement that a more appropriate retrofit factor should be 1.3 to 2.0. The aforementioned IPM document states that, "Retrofit difficulties associated with an SCR may result in capital cost increases of 30 to 50% over the base model." Therefore, the highest retrofit factor that might be considered would be 1.5.

This comment has not resulted in any change to our FIP proposal or to our cost calculations for SCR.

*Comment:* MDU stated that the model "Type of Coal" input indicates "PRB", but should be "Lig," since Lewis & Clark burns lignite coal. That stated, the "Coal Factor" value in the cell below "Type of Coal" indicates lignite coal was actually considered. As such, this recommendation is clerical in nature.

*Response:* As shown in the "Given/Assumptions" spreadsheet in our SCR cost analysis, we used a heating value of 6,714 Btu/lb, which we considered to be representative of lignite coal. PRB coal would have a much higher heating value.

*Comment:* MDU stated that EPA used a NO<sub>x</sub> input emission rate to the SCR of 0.26 lb/MMBtu, which is the low load emissions rate of low NO<sub>x</sub> burners (LNB) and Separated Overfire Air (SOFA) that MDU estimated in Table C.2–1 of Appendix C.2 of the Emissions Control Analysis for Lewis & Clark Station Unit 1. The 0.25 lb/MMBtu for LNB/SOFA at high load is a more appropriate rate to use as the inlet to an SCR. While this does not result in a significant change to the overall conclusions in the report, it is nonetheless important because the EPA-derived cost was based on full load operation, as opposed to lower load.

*Response:* We disagree with the statement that we obtained the emission rate of 0.26 lb/MMBtu from the low-load scenario presented in Table C.2–1 of Appendix C.2 of MDU's Emissions Control Analysis. Instead, as indicated in the "Given/Assumptions" spreadsheet of our SCR cost analysis, we obtained the rate of 0.26 lb/MMBtu from Table C.2–6 of MDU's analysis. Table C.2–6 is not identified by MDU as a low-load scenario.

*Comment:* MDU stated that, from the IPM model guidance, EPA did not include factors N through V in the model calculations for operating costs for Lewis & Clark Station's evaluations. Although factors N through R and T through V are utility costs that were not needed in EPA's evaluation, the catalyst cost (factor S) was applied based on an alternative source. EPA references "Cichanowicz (Jan 2010)" with a cost of \$170/ft<sup>3</sup> as compared to the IPM value of \$8,000/m<sup>3</sup> (\$226.53/ft<sup>3</sup> in 2009\$) and MDU's value of \$214.29/ft<sup>3</sup>. MDU recognized that a range of potential costs exist, and believes that either the IPM value or the value MDU provided would be more appropriate for EPA to use since they are based on industry and vendor data respectively and are expected to represent a more site specific value as opposed to a literature based value.

*Response:* We disagree. The Cichanowicz document we used provided actual catalyst costs observed over time. It demonstrates that catalyst costs continue to decline. In fact, based on the trend displayed in the graph on page 6–6 of the document, it is likely that catalyst costs in upcoming years will be even lower than the \$6,000/m<sup>3</sup> assumed in our FIP proposal. Current

Capital Cost and Cost-Effectiveness of Power Plant Emissions Control Technologies, J. Edward Cichanowicz, Prepared for Utility Air Regulatory Group, January 2010, page 6–6, Figure 6–6. This comment has not resulted in any change to our FIP proposal or to our cost calculations for SCR.

*Comment:* Similarly, to item e above, MDU noted that the cost EPA associated with aqueous ammonia (\$0.12/lb) is lower than the cost MDU estimated of \$0.70/lb. MDU recognized that a range of ammonia costs exists, that the price of ammonia fluctuates over time, and that the price is related to natural gas prices. As such, if SCR were to be considered in the future, MDU would ask that site specific, local, as delivered cost be evaluated at that time.

*Response:* We disagree. In its own SCR cost spreadsheet, MDU did not indicate the basis for its estimate of \$0.70/lb. We used \$0.12/lb based on data provided to us by control technology vendors on cost of aqueous ammonia. This comment has not resulted in any change to our FIP proposal or to our cost calculations for SCR.

*Comment:* MDU stated that, through the FR correction, EPA changed the language on 77 FR 24071 to state that an 85% control efficiency was used instead of the initially quoted 95% control efficiency for SDA and baghouse. MDU believes this correction was in error. Table 172 in the FR lists the control efficiency as 85% for SDA and baghouse and this value should be corrected to 95% control efficiency for SDA and baghouse as the textual representation in the FR was correct.

*Response:* We disagree. We made the correction from 95% to 85% because MDU's Emissions Control Analysis dated June 2011, at Table 1 on page 14, shows an expected SO<sub>2</sub> emission reduction of 850.3 tons per year, for SDA with baghouse. The baseline SO<sub>2</sub> emissions listed in the table are 1,002.1 tons per year. This amount of reduction represents 85% control efficiency. We presented these figures at 77 FR 24071, Table 172. MDU later wrote to us on February 10, 2012, to say that 70–90% control is the generally anticipated range of SO<sub>2</sub> control for this control option, and that 95% control was also assumed and represented a screening level assumption for a high degree of SO<sub>2</sub> control. In its February 10, 2012 submittal, MDU did *not* indicate that Table 1 of their June 2011 submittal should be revised, so we used the figures presented in MDU's Table 1.

*Comment:* In Table 172 of the proposed FIP (77 FR 24071), EPA provides a 10% control effectiveness for

both DSI with baghouse and existing scrubber mod; however, MDU stated that this value should be changed to 70% to reflect the overall reduction and not the incremental reduction as shown in Table 1 of MDU's Emissions Control Analysis for Lewis & Clark Station Unit 1.

*Response:* We disagree. We stated that we did use 70% overall SO<sub>2</sub> control effectiveness for DSI with baghouse, as well as for existing scrubber mod, in our analysis. 77 FR 24071. However, we also stated that existing SO<sub>2</sub> controls at Lewis & Clark Station, consisting of a flooded disc wet scrubber, have achieved up to 60% control under certain operating conditions. 77 FR 24070. We obtained this information from MDU's analyses. 77 FR 24070, footnote 265. MDU's Emissions Control Analysis dated June 2011, at Table 1 on page 14, lists an expected emissions reduction of 100.2 tons per year for DSI with baghouse, and the same amount of reduction for existing scrubber mod. This is a 10% reduction from the baseline emissions of 1,002.1 tons per year listed in that table. We relied on these figures from MDU in listing a control effectiveness of 10% for DSI with baghouse, as well as a control effectiveness of 10% for existing scrubber mod. For all control options analyzed in our FIP proposal, we present control effectiveness in terms of the reduction that might be achieved from baseline emissions. In this case, the baseline emissions already reflected a 60% level of SO<sub>2</sub> control.

*Comment:* EarthJustice argued that EPA should require Lewis and Clark to switch from lignite fuel to natural gas as a reasonable progress measure. The unit already uses natural gas for startup, there is a natural gas supply close by, and thus switching to natural gas is, in commenter's view, quite feasible and cost effective for Lewis and Clark station. Switching to natural gas should be required in the FIP to help achieve reasonable progress, as this measure would virtually eliminate the unit's SO<sub>2</sub> and PM emissions and would also reduce NO<sub>x</sub> emissions. Although EPA dismissed fuel switching as not cost effective, commenter argues that EPA vastly understated the cost effectiveness of this measure.

Commenter first stated that EPA has overstated the costs of switching to natural gas, in large part because it has underestimated, and in some cases ignored, the tremendous cost savings that would result from not operating the facility's scrubber, multi-cyclone dust collector, and coal preparation systems. EPA also relied on inflated estimates for natural gas and natural gas supply

pipelines provided by MDU, which owns Lewis and Clark.

Commenter also stated that EPA has improperly calculated the emissions reductions achievable from fuel switching. EPA failed to take into account the fact that the use of natural gas would replace the existing SO<sub>2</sub> and PM controls. Commenter stated that, in view of the 54 kilometer distance from Lewis and Clark to the closest Class I area, filterable PM must be considered. Thus, EPA should have accounted for the pollution reductions that would be achieved with natural gas from uncontrolled levels of SO<sub>2</sub> and PM. Properly calculated, fuel switching would eliminate 24,000 tons per year of SO<sub>2</sub>, NO<sub>x</sub> and filterable PM. As EPA noted, Lewis and Clark's remaining emissions would be "negligible."

Commenter concluded that, even using EPA's inflated cost estimate, when uncontrolled rates of SO<sub>2</sub> and PM are used as the baseline, the cost effectiveness of switching to natural gas at Lewis and Clark station is \$909/ton of SO<sub>2</sub>, NO<sub>x</sub> and PM removed. This measure is highly cost effective and should be required to help achieve reasonable progress.

*Response:* We disagree. Although we do not believe it was necessarily an error for us to rely on MDU's estimate of the price of natural gas, we acknowledge that price estimates for natural gas can vary, and that the \$3.07/Mscf price of natural gas cited on page 129 of the commenter's Technical Support Document, obtained from the Energy Information Administration (EIA), is substantially lower than MDU's estimate of \$7.91/Mscf. However, even if we rely on the price cited by the commenter, the cost of a fuel switch would still be excessive. Using \$3.07/Mscf, along with MDU's estimate of 3,282,876 Mscf of natural gas which would be needed to fuel Lewis and Clark station year-round solely on natural gas (not disputed by the commenter), we calculate the annual cost of natural gas at \$10,078,429. MDU estimated the annual cost of coal at \$5,754,732. The annual fuel cost differential would therefore be \$4,324,197. To this result we add the annualized cost of constructing a natural gas pipeline (\$1,699,200), as we did in our FIP proposal.<sup>67</sup> This yields a total annual cost of \$6,023,397. Dividing this result by an expected SO<sub>2</sub> emission

<sup>67</sup> Commenter's speculation that the existing pipeline could be upgraded does not provide sufficient basis for us to supplant MDU's estimated cost for a new pipeline with some other cost. We note that, even if the upgrade were feasible and had zero cost, the cost effectiveness of the SO<sub>2</sub> reductions would still be well over \$4,000/ton.

reduction of 1,002 tons per year yields cost effectiveness of \$6,011/ton. Based on this cost and other factors for Lewis and Clark station described in our FIP proposal at 77 FR 24072, we would still eliminate fuel switching as a control option for SO<sub>2</sub>.

We disagree with the statement that a fuel switch would yield "tremendous" cost savings from not operating the facility's scrubber, multi-cyclone dust collector, and coal preparation systems. Commenter has not quantified the cost savings. We have no reason to believe they would be "tremendous." We believe the cost savings would be minimal in comparison to other components of our cost calculations for a fuel switch. The cost savings would likely consist primarily of avoidance of electricity and maintenance costs for the equipment cited by the commenter.

Also, we disagree with the statement that we should have calculated reductions from uncontrolled levels of SO<sub>2</sub> and PM. In every cost analysis of control options for our FIP, we calculate reductions from an emissions baseline which is the current actual annual emissions, consistent with the approach laid out in the 2005 Regional Haze Rule, at 70 FR 39167, for calculating cost effectiveness of control options. Commenter's citation to a 2008 letter sent by EPA in the course of developing initial information for a FIP ignores the basis for the action we actually proposed.

We also disagree with the statement that a "proper cost analysis" would result in cost-effectiveness of \$909/ton. Commenter apparently calculated \$909/ton based on reduction from uncontrolled emissions, for the sum of three pollutants (PM, SO<sub>2</sub> and NO<sub>x</sub>). We have explained above why we do not use uncontrolled emissions as the baseline. We also explained in our proposal that, in our reasonable progress determinations, we were not evaluating controls for PM for potentially affected sources, based on our analysis of the emissions inventory and results from BART modeling. 77 FR 24055–56. Commenter has not disputed those bases; commenter merely notes the 54 kilometer distance to Theodore Roosevelt NP. Given these flaws, the commenter's cost analysis provides no basis for us to reconsider our decision.

*Comment:* Commenter noted that, although MDU proposed upgrades to its existing SO<sub>2</sub> and NO<sub>x</sub> pollution controls, EPA failed even to require these measures to help achieve reasonable progress. See 77 FR 24074. Commenter stated that MDU's proposal is vastly inferior to fuel switching at reducing haze pollution, but MDU's

proposed controls are the bare minimum that EPA should have required for reasonable progress.

Commenter noted that MDU proposed to improve SO<sub>2</sub> removal to 70% by optimizing the existing particulate scrubber and lime injection system with a proposed limit of 0.45 lb/MMBtu. EPA estimated the cost effectiveness of this modification at \$1,383/ton SO<sub>2</sub> removed. MDU also proposed SOFA and low NO<sub>x</sub> burners (upgraded) to achieve a NO<sub>x</sub> emission rate of 0.25 lb/MMBtu. EPA estimated the cost effectiveness of this option as \$1,213/ton of NO<sub>x</sub> removed. Commenter stated that, although the emissions reductions from these measures are modest, they are highly cost effective and are the minimum that EPA should have required from Lewis and Clark to achieve reasonable progress.

*Response:* We disagree. MDU's proposal to improve SO<sub>2</sub> and NO<sub>x</sub> emission control was contained in its June 2011 Emissions Control Analysis, which was submitted in response to a CAA section 114 information request from us. Under the Regional Haze Rule, we are not bound by controls that a source has proposed when we make our reasonable progress determination based on the four statutory factors.

With regard to the statement that cost-effectiveness of \$1,383/ton for SO<sub>2</sub> and \$1,213/ton for NO<sub>x</sub> is "highly cost-effective" and should result in a requirement for emissions reductions, commenter has not provided a basis for this conclusion. As explained in our FIP proposal at 77 FR 24072 (for SO<sub>2</sub>) and 24074 (for NO<sub>x</sub>), in making our reasonable progress determination for Lewis and Clark Station, we considered the following four reasonable progress factors: cost of compliance; the time necessary for compliance; the energy and nonair quality environmental impacts of compliance; and the remaining useful life of the source. We also took into account the following additional factors: size of the facility, the baseline Q/D of the facility, and the potential reduction in Q/D from the controls. Commenter has not disputed the appropriateness of using the four reasonable progress factors and other factors in our proposal.

*Comment:* WEG commented that the determination in the proposed rule that no additional SO<sub>2</sub> controls are required on Lewis & Clark Station is unreasonable. WEG notes that two highly effective control options are available (fuel switch to natural gas at 99% control effectiveness and SDA with baghouse at 85% control effectiveness) and should be further considered.

*Response:* We disagree. EPA did not evaluate control options for Regional Haze FIP development solely based on emission control effectiveness. As indicated in EPA's analysis, the cost of fuel switching is estimated at \$21,875 per ton of pollutant removed and the cost of SDA with baghouse is estimated at \$11,825 per ton of pollutant removed. 77 FR 24072, Table 173. EPA has already explained that this cost is excessive. WEG has not provided a reason to not consider the cost excessive. Besides the cost of compliance, EPA also explained that other factors were taken into consideration in determining whether additional SO<sub>2</sub> controls should be required at Lewis & Clark Station, those being the time necessary for compliance, the energy and nonair quality environmental impacts of compliance, the remaining useful life of the facility, the size of the facility, the baseline Q/D of the facility, and the potential reduction in Q/D from the controls. WEG did not provide a reason to re-evaluate these other factors.

*Comment:* WEG comments that EPA should re-examine its decision to eliminate all control options for NO<sub>x</sub> and move to require HDSCR + SOFA/LNB at Lewis & Clark Station. WEG notes that this control option has a high control effectiveness of 87.5% and considers the cost of \$4,853 per ton of pollutant removed to be reasonable. To rule it out alongside a fuel switch to natural gas, which has a much higher cost of \$41,934 per ton of pollutant removed, lacks reason. WEG stated that the cost and visibility benefits of HDSCR + SOFA/LNB should be considered individually, and the control option should be implemented because of the great emissions reduction it achieves, and because the FIP is far from attaining a Uniform Rate of Progress (URP) akin to the regulatory rate. WEG also stated that the final analysis of control options took into account only "the most cost effective option (SOFA/LNB)" when weighing cost against overall reductions in emissions.

*Response:* We disagree. EPA did consider control options individually. At Step 5 of its NO<sub>x</sub> analysis, EPA mentioned cost of HDSCR + SOFA/LNB in the same sentence as cost of a fuel switch only because those two options happened to be the most expensive. 77 FR 24074. Besides the cost of compliance, EPA also explained that other factors were taken into consideration in determining whether additional NO<sub>x</sub> controls should be required at Lewis & Clark Station, those being the time necessary for compliance, the energy and nonair

quality environmental impacts of compliance, the remaining useful life of the facility, the size of the facility, the baseline Q/D of the facility, and the potential reduction in Q/D from the controls. At Step 5, EPA explained how these factors were considered with respect to all control options, not just SOFA/LNB. In the case of HDSCR + SOFA/LNB, EPA explained that this control option was eliminated on the basis of not only cost, but also on the basis of the small size of the facility and the relatively small baseline Q/D of the facility. WEG has not provided a reason to re-evaluate these other factors. With regard to URP, that comment was addressed in a previous response.

#### *M. Comments on Montana Sulphur and Chemical Company*

*Comment:* MSCC commented that the company agrees with the conclusion in the proposed FIP that additional controls are not required at this time. MSCC also stated it does not believe we should have considered it to be a BART-eligible source. The company referenced several letters and discussions with MDEQ that were previously submitted and had as part of development of the regional haze plan for Montana.

*Response:* Because the commenter ultimately agrees with the final conclusion and controls are not required for MSCC, at this time, we find the comment to be non-substantive.

#### *N. Comments on Health, Ecosystem Benefits, Other Pollutants, and Coal Ash*

*Comment:* Several commenters stated that haze pollution significantly impacts human health and ecosystem health. Specifically, commenters asserted that haze pollution, including haze pollutants NO<sub>x</sub>, SO<sub>2</sub> and PM, contributes to heart attacks, asthma attacks, chronic bronchitis and respiratory illness, decreased lung function, increased hospital admissions, and even premature death. Another commenter stated that NO<sub>x</sub> and SO<sub>2</sub> can combine to create photochemical smog and ozone, which can exacerbate health problems.

Some commenters cited a 2010 Clean Air Task Force report in stating that the Colstrip coal-fired power plant put 31 people at risk of premature death, 48 people at risk of a heart attack, 47 people at risk of acute bronchitis, and 534 at risk of an asthma attack each year.<sup>68</sup> Several commenters encouraged EPA to finalize the regional haze proposal citing their own health

<sup>68</sup> Several commenters cited numbers that were similar to these, but did not match them exactly.

problems, or the health problems of family members.

Some commenters stated that the negative health impacts of this pollution disproportionately harm vulnerable populations, specifically the young and elderly, and that this disproportionate harm potentially makes this a case of environmental justice. A commenter claimed that Colstrip causes a dark shadow on snow and takes human lives. One commenter stated the rate of asthma in children in Rosebud County is the third highest of all counties in the State, while another stated the rate of birth abnormality in the area downwind of Colstrip is much higher (34%) than in most other counties in Montana (10%). One commenter stated that over 10% of Montana high school students were estimated to have asthma in 2009. A commenter surmised that a 50% reduction in pollution from Colstrip would help human health more than eliminating pollutants from all other Montana sources.

Some commenters expressed a willingness to pay more for power in support of pollution control technology, with others stating that we should all pay the full cost of energy and not pass it on as healthcare costs. Another commenter stated that the cost of pollution controls, especially at Colstrip, was small when compared to the health-related benefits. Other commenters stated that the sources should not be allowed to externalize the costs of their pollution onto the people, who must pay for them in the form of health-related costs.

Some commenters stated that haze pollution negatively impacts ecosystem health. Commenters expressed concern for the effects of haze pollution on plants and water bodies. Some commenters specifically expressed concern over acid deposition from SO<sub>2</sub> and NO<sub>x</sub> emissions, which they argued can leach into drinking water sources and harm crops. One commenter attributed high levels of mercury in some Montana back country lakes to coal-fired power plant emissions.

Other commenters supported EPA's position that consideration of health benefits is not relevant under the regional haze program.

One commenter stated that we should regulate coal ash at Colstrip. Another commenter expressed concern about acid rain, and one commenter stated that various pollutants such as dioxin and formaldehyde were byproducts of coal pollution.

*Response:* We acknowledge the commenters' concerns regarding the negative health impacts of haze-causing emissions. We agree that the same PM<sub>2.5</sub>

emissions that cause visibility impairment can cause respiratory problems, decreased lung function, aggravated asthma, bronchitis, and premature death. We also agree that the same NO<sub>x</sub> emissions that cause visibility impairment also contribute to the formation of ground-level ozone, which has been linked with respiratory problems, aggravated asthma, and even permanent lung damage. We agree that these pollutants may have negative impacts on vegetation, and reduce crop yields. However, for purposes of this action, we are not authorized to consider these impacts in promulgating our FIP, and we have not done so. However, to the extent that this FIP will lead to reductions in these pollutants, there will be co-benefits for public health.

We recognize the importance of considering environmental justice; for this action, we are finalizing emission limitations that will result in emissions reductions that will benefit potential environmental justice communities. Therefore, this action will have no high adverse and disproportionate impact on potential environmental justice communities.

Mercury is not a visibility impairing pollutant, and was therefore not included in our analysis. We also are not authorized to regulate coal ash in this action.

*Comment:* Some commenters noted that regional haze is not a health-based standard, and that there are other recently enacted rules that protect human health.

*Response:* We agree that the Regional Haze Rule was not intended to address health concerns. Regional Haze is not a health-based standard.

#### *O. General Comments Supporting Our Proposal or for Stricter Controls*

*Comment:* NPCA and MATB commended EPA's required controls for the Ash Grove and Holcim cement kilns. The Northern Cheyenne Tribe expressed support of our proposal as a whole.

*Response:* We acknowledge the support provided by these commenters.

*Comment:* Overall, we received more than 47,000 comment letters from members representing various organizations and concerned citizens requesting that EPA mandate more stringent and effective controls, most notably SCR, on eligible Montana sources. These comments were received at the public hearings in Billings and Helena, Montana, by Internet, and through the mail. Many of these commenters argued that SCR is required at over 200 facilities in the U.S., and that SCR should therefore also be

required at the coal-fired plants in Montana. A mass mailer from WEG claimed that SCR was shown to be cost-effective, but is not required. Several comments more generally stated that EPA should require the most modern, effective pollution controls on Montana sources, but did not specifically discuss the desired requirements. The Montana Conservation Voters pointed out that pollution from Colstrip will be three times higher than if SCR were required.

*Response:* Although we acknowledge the commenters' encouragement that we adopt even stricter standards, the standards discussed in our proposal are appropriate considering the costs and visibility improvement.

*Comment:* One commenter pointed out that Colstrip emits more pollutants than the nine next largest haze producers, combined.

*Response:* The commenter did not explain specifically what they were requesting.

*Comment:* A commenter pointed out that Colstrip 3 and 4 are as highly polluting as Colstrip 1 and 2, and thought that Colstrip 3 and 4 should also be required to install additional controls.

*Response:* As explained in our proposal, the modeled visibility benefits are not sufficient for us to consider it reasonable to impose additional controls for Colstrip units 3 and 4 for this planning period. 77 FR 24066 and 77 FR 24067.

*Comment:* One commenter stated that the upgrading of pollution controls on coal-burning facilities also helps mitigate the effects of climate change. A separate commenter requested that EPA's plan consider CO<sub>2</sub> because of its impacts on climate change, while another stated that coal should no longer be burned, as such action would slow global climate change.

*Response:* While we understand the commenters' concerns with respect to climate change, consideration of climate change is outside the scope of this action. CO<sub>2</sub> is a greenhouse gas (GHG) and is not considered a visibility impairing pollutant. However, EPA implements regulations that address GHGs in order to protect the public and the environment from the negative impacts of climate change.

#### *P. General Comments That the Proposal Is Too Stringent*

*Comment:* Various commenters generally stated they did not support the proposed rulemaking. Their reasons included: It will negatively affect the local economy; it will negatively affect the coal power plant industry; electricity costs will increase; health

concerns are exaggerated; direct and indirect jobs/businesses would be adversely affected; the costs outweigh the benefits; Colstrip is already significantly regulated; there are no air quality issues in Colstrip; and it will not result in noticeable visibility improvements. One commenter insisted our proposal is part of a broader anti-coal plan to shut down coal plants, while another stated that Congress should legislate national energy policy rather than involving federal agencies. One commenter stated that PPL is very committed to clean air and environmental stewardship and another stated that Colstrip is already heavily regulated and additional controls are unnecessary. One commenter stated that mismanagement of forests causes more haze and that Colstrip provides good jobs and has a good compliance record.

*Response:* We acknowledge these general comments that opposed our proposed action as being too stringent. We provide responses that address some of these issues elsewhere in this action. This action is based on the statutory and regulatory requirements for regional haze which we have followed.

#### *Q. General Comments on Visibility Improvement and Other Causes of Haze*

*Comment:* Some commenters stated that any controls required by our action must demonstrate a perceptible visibility improvement and some stated that the reductions in the proposal will not produce perceptible visibility improvement. Other commenters said that there were no haze issues in Montana and that the change in visibility is subjective. The Montana Chamber of Commerce commented that our FIP is not based on sound science, accurate measures, or proven measures that will solve the problem.

Some commenters stated that gravel roads and forest fire are the real causes of haze.<sup>69</sup> WETA commented that under the FIP, haze would not be effectively reduced and EPA's regional haze plan should consider all established sources of emissions and not just industrial facilities. Another commenter suggested that money to clean up pollution should be spent in urban areas where there are real problems, not in rural areas like Montana. An individual submitted information comparing Montana emissions from different sources.

One commenter noted that the proposed rule delays, by hundreds of years, in some cases, achievement of the 2064 natural visibility goal. Numerous commenters stated that EPA should not

forego cost-effective pollution controls when more progress is clearly needed to protect air quality. Some commenters stated that there is currently haze at Yellowstone that was not visible years ago.

With regard to Colstrip, a commenter said that shutting down Colstrip would not clear the haze and that areas outside Montana, including Oregon, Washington, and China influence the haze at Yellowstone. Another commenter stated that there is no haze in the town of Colstrip and that the wind does not blow in the directions of Yellowstone and Roosevelt.

*Response:* We disagree that any controls required by our action must demonstrate a perceptible visibility improvement. In a situation where the installation of BART may not result in a perceptible improvement in visibility, the visibility benefit may still be significant. The Regional Haze Rule states "even though the visibility improvement from an individual source may not be perceptible, it should still be considered in setting BART because the contribution to haze may be significant relative to other source contributions in the Class I area. Failing to consider less-than-perceptible contributions to visibility impairment would ignore the CAA's intent to have BART requirements apply to sources that contribute to, as well as cause, such impairment." 70 FR 39129. Visibility impacts below the thresholds of perceptibility cannot be ignored because regional haze is produced by a multitude of sources and activities which are located across a broad geographic area.

We agree that industrial facilities are not the only causes of haze. Our action considered the many contributors to haze including industrial facilities. In this action, we also proposed changes to Montana's Visibility SIP that would require BACT for open burning.

Even though some Class I areas will not attain natural visibility conditions by 2064, our action requires the controls that were determined to be effective according to our evaluation. For those sources subject to BART, we evaluated: (1) Cost of compliance, (2) the energy and nonair quality environmental impacts of compliance, (3) any existing pollution control technology in use at the source, (4) remaining useful life of source, and (5) degree of improvement in visibility which may reasonably be anticipated to result from the use of such technology and we determined which controls should be required according to that evaluation. In determining the measures necessary to make reasonable progress and in

selecting RPGs for mandatory Class I areas within Montana, we took into account the following four factors: (1) Costs of compliance, (2) time necessary for compliance, (3) Energy and nonair quality environmental impacts of compliance; and (4) remaining useful life of any potentially affected sources. CAA section 169A(g)(1) and 40 CFR 51.308(d)(1)(i)(A).

For Colstrip, we evaluated visibility improvement at all Class I areas within 300 km. As stated above we evaluated other sources of haze, including but not limited to, gravel roads and forest fires. The most impacted Class I areas were Theodore Roosevelt NP and UL Bend WA. While sources outside Montana do contribute to haze in the Class I areas within Montana, that does not preclude our obligation to evaluate Colstrip Units 1 and 2 according to the five BART factors and to evaluate Colstrip Units 3 and 4 according to the four reasonable progress factors and to require additional controls where necessary.

#### *R. Comments on Cost, Economic Impact, Jobs and Price to Consumers*

*Comment:* Some commenters stated that the proposed rule would have a negative economic impact and a negative impact on job creation and growth. Some commenters stated that PPL might shut down Colstrip Units 1 and 2 as a result of this action. One commenter explained that shutting down power plants removes jobs, and prevents other businesses from using the energy from the power plant, causing a domino effect. A commenter submitted documents describing Colstrip's positive economic and community impact. Another commenter said that specifically, Montana has a large percentage of low income and senior citizens who would be majorly burdened by an increase in utility cost and another commenter said that the cost would also be very burdensome for the small business community in the area. The Southeastern Montana Development Corporation stated that the economic impact of this action would be devastating to consumers. One commenter said that the costs were prohibitively expensive and another said that the costs could put the plants at risk for future investments due to lack of economic viability. A commenter suggested that the initial cost of investment at Colstrip 1 and 2, including the cost of debt and capital, would be in excess of \$82 million and that the capital cost, plus operating cost of \$377 million could result in a 19.6% increase in the cost of production. Another commenter suggested that the cost of electricity could increase by a

<sup>69</sup> One commenter also mentioned idling trucks, oil refineries and farms as causes of haze.

factor of 20 in 3–4 years. One commenter urged us to consider the indirect ways that controls on Colstrip 3 & 4 could affect electric rates. Numerous commenters stated that the reason EPA was not requiring SCR was to save polluters money.

Other commenters said that the health costs of pollution and economic benefit from tourism should be considered. One commenter said that the health related costs from Colstrip are estimated to be \$230 million annually. Another commenter stated that air pollution controls are cost effective based on an EPA report. One commenter said that pollution hinders the Billings economy because the city's economic vitality is linked to high quality life-styles, while another noted that haze diminishes tourists' scenic vistas.

Some commenters pointed out that the proposed rule would create jobs. One commenter stated that complying with the rule would create good, high-paying jobs for Montana's skilled work force, including boilermakers, laborers and pipefitters. Numerous commenters stated that nearly 1,000 full-time jobs could be created at Colstrip from installing pollution control equipment. One commenter said that the Colstrip plant will not shut down just because added technology is required.

Many commenters expressed a willingness to pay more for power in support of pollution control technology. Others similarly stated that we should all pay the full cost of energy and not pass it on to healthcare. Some commenters stated that they thought PPL could afford to pay for additional controls based on the company's profit. A report submitted by Power Consulting, Inc. found that the typical residential customer's bill would increase by 55 to 89 cents if SCR were required on Colstrip unit 4. The overall conclusion from that report was that the impact of a required SCR retrofit on customer's rates would be small enough that it would not disrupt household budgets nor cause a significant impact on the Montana economy.

*Response:* EPA's evaluation of capital and annual expenses associated with implementation of the FIP shows such expenses to be justified by the degree of improvement in visibility in relationship to the cost of implementation. BART requires that we evaluate: (1) Cost of compliance, (2) the energy and nonair quality environmental impacts of compliance, (3) any existing pollution control technology in use at the source, (4) remaining useful life of source, and (5) degree of improvement in visibility which may reasonably be anticipated to

result from the use of such technology. In determining the measures necessary to make reasonable progress and in selecting reasonable progress goals for mandatory Class I areas within Montana, we must take into account the following four factors: (1) Costs of compliance, (2) time necessary for compliance, (3) Energy and nonair quality environmental impacts of compliance; and (4) remaining useful life of any potentially affected sources. CAA section 169A(g)(1) and 40 CFR 51.308(d)(1)(i)(A). The cost of electricity to consumers and the overall impact on the economy is outside the scope of our evaluation for this action.

Although we did not consider the potential positive benefits to local economies in making our decision, we do expect that improved visibility would have a positive impact on tourism-dependent local economies. Also, the retrofits required are large construction projects that will take up to five years to complete. These projects will require well-paid, skilled labor which can potentially be drawn from the local area and support local growth.

*Comment:* A commenter stated that EPA should have included, as associated per-unit costs, consideration of the "wider market consequences" of a potential shutdown of generating capacity at Colstrip 1 and 2. The commenter says that, "[i]f the cost of production resulting from this rule \* \* \* exceeds the market value of power, PPL may make a decision to shutter the plant." The commenter also states that, "[b]ased on an analysis of production cost data, there is at least some chance that Colstrip Units 1 and 2 would become uneconomical as a result of mandated upgrades." Specifically, commenter estimated that the "all-in" cost of production of electricity post-controls is \$25.591 per megawatt-hour, a 19.6% increase over the current \$21.40 per megawatt-hour cost of production reported in Federal Regulatory Commission filings. Commenter stated that, compared to current market prices from a regional trade publication,<sup>70</sup> Colstrip 1 and 2 would often be uneconomical at that estimated cost.

The commenter also argued that a closure at Colstrip 1 and 2 would decrease available electrical generation in the northwestern U.S. The commenter stated that we wrongly failed to consider these factors of potential plant closure and the

subsequent constriction of power supply in our analyses.

*Response:* Analyzing the wider market consequences of a potential shutdown of generating capacity at Colstrip 1 and 2 involves many complicated factors and it is unclear from the information provided by the commenter that Colstrip Units 1 and 2 would, in fact, shut down. As noted previously, we have received conflicting information regarding potential rate increases. Specifically, a report submitted by Power Consulting, Inc. found that the typical residential customer's bill would increase by 55 to 89 cents if SCR were required on Colstrip unit 4. The BART Guidelines allow for the consideration of unusual circumstances that justify taking into consideration the conditions of the plant and the economic effects of requiring the use of a given control technology. The BART Guidelines state:

[t]hese effects would include effects on product prices, the market share, and profitability of the source. Where there are such unusual circumstances that are judged to affect plant operations, you may take into consideration the conditions of the plant and the economic effects of requiring the use of a control technology. Where these effects are judged to have a severe impact on plant operations you may consider them in the selection process, but you may wish to provide an economic analysis that demonstrates, in sufficient detail for public review, the specific economic effects, parameters, and reasoning.

70 FR 39171. The commenter has not provided any basis that unusual circumstances exist here. Nor has the commenter providing any information that indicates a shutdown will occur that we could have taken into account in our analysis. The owners of Colstrip Units 1 and 2 have made no indication that there are unusual circumstances present that warrant taking wider market consequences into consideration.

#### *S. Comments About Other Forms of Energy*

*Comment:* We received comments regarding alternative forms of energy. Some commenters believed that wind energy would create more jobs while others believed that it would not create as many jobs compared to coal fired power plants. Some commenters stated that wind energy was cheaper to produce while one commenter pointed out that the government subsidizes wind energy. One commenter believed that the wind farm in Judith Gap produces energy more cheaply compared to the Colstrip coal plant. One commenter stated that our energy

<sup>70</sup> Commenter cited the trade publication "Clearing Up," which commenter stated reports on prices at the Mid-Columbia trading club.

should be focused on renewable sources rather than coal and another commenter stated that the most important thing we can do to slow global warming is to stop burning coal.

*Response:* While we do generally acknowledge that many kinds of renewable energy do not produce haze-causing pollutants, and transitioning to those sources of energy could lead to visibility improvements. In this action we are required to review specific retrofit options for specific sources subject to BART or the sources analyzed under reasonable progress. Renewable energy technology is not a retrofit option for these sources and is outside the scope of our determinations and regulatory requirements in this action.

#### T. Other Miscellaneous Comments

*Comment:* One commenter asked whether EPA was concerned that requiring these facilities to install emissions control equipment to address fine particles and precursors might impact the effectiveness of equipment installed to address other pollutants.

*Response:* The control technologies that are required will not negatively impact the effectiveness of equipment installed to address other pollutants.

*Comment:* One commenter asked whether the agency was concerned that the technologies prescribed to address particles and precursors might also impact the efficiency and reliability of kilns, boilers, generators and other essential equipment.

*Response:* The control technologies required will not negatively impact the efficiency and reliability of kilns, boilers, generators and other essential equipment. As required under BART, we evaluated the energy impacts for each control option considered. 70 FR 39168 and 70 FR 39169. These impacts are discussed in the relevant sections of the proposed rule and in all cases are minor. In addition, as required under BART, we evaluated the technical feasibility for each control option considered. Where we have selected additional controls, the controls are shown to be technically feasible at similar facilities. Issues associated with the reliability of the emission units, if any, are resolvable.

*Comment:* MDEQ requested that EPA extend the comment period to sixty days from the date of the publication of corrections, or July 16, 2012.

*Response:* The comment period for our proposal closed on June 19, 2012. We carefully considered the request for an extension to the comment period. We took into consideration how an extension might affect our ability to consider comments received on the

proposed action and still comply with our consent decree deadlines. We do note that our May 1, 2012, public hearing in Helena, Montana and May 2, 2012, public hearing in Billings, Montana were well attended and provided an opportunity for people to comment on our proposal. We also note that the corrections published May 17, 2012, (77 FR 29270) primarily amended typographical errors.<sup>71</sup>

*Comment:* MDEQ suggested that EPA issue a request for additional comment to clarify the scope of the proposed FIP. MDEQ asserted that such a clarification is necessary to prevent confusion among the public regarding the Regional Haze Rule's prevention and correction of adverse health effects, about which EPA received multiple comments. MDEQ warned that "the level of this misperception threatens to pervert not only the National Goal, but, ostensibly, the public health goals of Section 110."

*Response:* We do not agree that the scope of the proposed FIP requires clarification. At no point in the proposed FIP did we discuss public health impacts as a consideration in our analyses, as they were not. As stated elsewhere, we agree that the Regional Haze Rule is not a health-based standard, and that we are not authorized to consider public health impacts in promulgating our FIP for purposes of this action. However, we have not been presented any information from the public to indicate that there is confusion that that reduction of visibility impairing pollutants also provides health benefits.

*Comment:* One commenter stated that the Cheyenne Reservation was given Class I air quality designation and that according to that designation there is not supposed to be any degradation of that air.

*Response:* The Regional Haze Rule requires analysis for the 156 mandatory Class I areas listed at 40 CFR Part 81. The Cheyenne Reservation is not one of these federally mandated Class I areas.

*Comment:* WEG stated that EPA overlooked, in two respects, the requirement of section 110(l) of the Act to prevent interference with attainment or maintenance of the NAAQS. First, WEG stated that EPA has not demonstrated that this FIP adequately safeguards the 2006 PM<sub>2.5</sub> NAAQS, the 2008 ozone NAAQS, the 2010 1-hour NO<sub>2</sub> NAAQS, and the 2010 1-hour SO<sub>2</sub> NAAQS. In particular, WEG noted that the FIP emissions limitations are generally expressed as 30-day rolling averages, which, in WEG's view, do not

adequately protect short-term NAAQS such as the 2010 1-hour SO<sub>2</sub> and NO<sub>2</sub>. Second, WEG argued that several BART emissions limitations are relaxations that may impact the NAAQS. As an example, WEG cited another portion of its comments in which WEG argued that the BART emissions limitations for Corette will allow actual emissions from Corette to increase. WEG concluded that EPA must conduct a 110(l) demonstration in order to protect public health and not interfere with maintenance and attainment of the NAAQS.

*Response:* EPA disagrees with WEG. In relevant part, section 110(l) provides that EPA shall not approve a revision of a plan if the revision would interfere with any applicable requirement concerning attainment and reasonable further progress or any other applicable requirement of the CAA. First, WEG does not explain how section 110(l) applies to EPA's initial promulgation of a FIP for certain regional haze requirements when there is no existing SIP to meet those requirements. Second, to the extent that section 110(l) applies, EPA's promulgation of this FIP satisfies its requirements. It is EPA's consistent interpretation of section 110(l) that a SIP revision does not interfere with attainment and maintenance of the NAAQS if the revision at least preserves the status quo air quality by not relaxing or removing any existing emissions limitation or other SIP requirement. EPA does not believe that a full attainment or maintenance demonstration for each NAAQS is required for every SIP revision under section 110(l).

In this case, the FIP imposes new emissions limitations on a number of existing sources, and it does not relax any existing emissions limitations or other SIP requirements. WEG's statement that actual emissions at Corette and other BART sources might rise to the BART limit misses the point: In the absence of the BART limit (or any other limit), those actual emissions could increase much more. In other words, imposing an emissions limitation where one did not exist before is necessarily a more stringent requirement, regardless of actual emissions. Nor does WEG explicitly identify any existing emissions limitation or other SIP requirement that is relaxed by the FIP. For that matter, nothing in the proposal, or in the preamble or regulatory text for this rule, purports to modify any existing SIP-approved emissions limitation or other SIP requirement. Thus, even if there were such a requirement—and WEG has identified none—it would not be

<sup>71</sup> We corrected some technical information in the Holcim SO<sub>2</sub> BART analysis. See 77 FR 29270.

relaxed by this FIP. EPA therefore concludes that, to the extent that section 110(l) is applicable to this FIP, its requirements are satisfied.

*Comment:* Commenter stated that the input of Montana residents should be given more weight than the input of special interest groups that receive support from outside the State. Commenter also requested that future hearings be held in areas of impact.

*Response:* Any commenter who submits a comment on the proposed FIP, either orally or written, during the public comment period is entitled to do so. EPA takes all comments into consideration in making its final decision on the FIP. If future hearings are required for any reason, we will do the best we can to ensure access is available to all those who wish to participate.

## V. Changes From Proposed Rule and Reasons for the Changes

### A. Emission Limits for Corette

We proposed a PM emission limit of 0.10 lb/MMBtu for Corette at 40 CFR 52.1396(c). We inadvertently stated that we were imposing an emission limit of 0.10 lb/MMBtu in the preamble to our proposed FIP (77 FR 24047) and also at 40 CFR 53.1396(c)(1). PPL commented that the emission limit in the proposed FIP was flawed and PPL provided additional information indicating that over the past five years, stack test results have shown that PM emissions have ranged from 0.059 lb/MMBtu to 0.252 lb/MMBtu. We have changed the emission limit in the final regulatory requirements at 40 CFR 1396(c)(1). In the final FIP, we are establishing a PM emission limit of 0.26 lb/MMBtu.

We proposed a SO<sub>2</sub> emission limit of 0.70 lb/MMBtu and a NO<sub>x</sub> emission limit of 0.40 lb/MMBtu for Corette at 40 CFR 52.1396(c). In the final FIP, we are establishing a SO<sub>2</sub> emission limit of 0.57 lb/MMBtu and a NO<sub>x</sub> emission limit of 0.35 lb/MMBtu. We have made this change as a result of the comments we received. One commenter stated that EPA must increase the limits to no less than 0.81 lb/MMBtu for SO<sub>2</sub> and 0.46 lb/MMBtu for NO<sub>x</sub> in order to account for compliance over a 30-day rolling average. By contrast, another commenter stated that our proposed emission limits were too high and would actually result in increased emissions.

Based on these comments, we have reassessed the SO<sub>2</sub> and NO<sub>x</sub> emission limits for Corette. In order to establish appropriate emission limits, we conducted a statistical analysis of the monthly emissions data contained in the CAMD emissions system. For the

period 2000–2010, the 99th percentile monthly SO<sub>2</sub> emission rate was 0.548 lb/MMBtu. Similarly, the 99th percentile monthly NO<sub>x</sub> emission rate was 0.335 lb/MMBtu. In our final action, we are establishing emission limits slightly above these 99th percentile emission rates in order to allow a sufficient margin for compliance. This is because the emission limits must apply at all times, including during startup, shutdown, and malfunction. The revised emission rates are 0.57 lb/MMBtu for SO<sub>2</sub> and 0.35 lb/MMBtu for NO<sub>x</sub>, both on a 30-day rolling average. We have revised the emission limits for Corette contained in section 52.1396(c)(1) accordingly.

### B. Changes to 40 CFR 52.1396(c)(2)—Emission Limitations for Cement Kilns

In response to a comment from Holcim that EPA failed to consider the NO<sub>x</sub> control technology already installed at the Trident cement plant, and that EPA failed to give proper weight to the excessively high average cost-effectiveness (\$4,279/ton) and incremental cost-effectiveness (\$8,029/ton) of a switch to indirect firing and a Low-NO<sub>x</sub> Burner (LNB), we have removed switching to indirect firing and a LNB from consideration as an option for further reducing NO<sub>x</sub> emissions and are treating any NO<sub>x</sub> emission reduction that may have been achieved from installation of a new burner as part of the emissions baseline. We have recalculated the BART limit for NO<sub>x</sub> to reflect a 50% reduction in NO<sub>x</sub> emissions from that baseline by addition of SNCR alone, rather than the 58% reduction we previously used, which reflected a switch to indirect firing and LNB plus SNCR. The recalculated NO<sub>x</sub> BART limit is 6.5 lb/ton clinker. We have replaced the NO<sub>x</sub> emission limit of 5.5 lb/ton clinker from our proposal with 6.5 lb/ton clinker, on a 30-day rolling average.

Also, during our evaluation of comments on PM BART from Ash Grove, we found that the table of emission limits for cement kilns, at section 52.1396(c)(2) of our proposal, needed to clarify that the PM emission limit for Ash Grove is in lb/hr, not lb/ton clinker. Only the PM emission limit for Holcim is in lb/ton clinker. The column header for PM emission limits for both cement kilns erroneously said “lb/ton clinker.” We have corrected this error by changing the header from “PM Emission Limit (lb/ton clinker)” to “PM Emission Limit.” We did not change the text of the PM emission limit for Ash Grove, as it is already clear in that text that the limit is in lb/hr. However, at the bottom of the column, we have clarified

the PM emission limit for Holcim to say “0.77 lb/ton clinker” rather than “0.77 lb/ton.”

### C. Change to 40 CFR 52.1396(d)—Compliance Date

In response to a comment from Ash Grove which identified the failure of our regulatory text at 40 CFR 52.1396(d) to specify the SO<sub>2</sub> and PM compliance dates described in the preamble to our proposed rule, we have revised 40 CFR 52.1396(d) to read as follows:

The owners and operators of the BART sources subject to this section shall comply with the emissions limitations and other requirements of this section as follows, unless otherwise indicated in specific paragraphs: Compliance with PM limits is required within 30 days of the effective date of this rule. Compliance with SO<sub>2</sub> and NO<sub>x</sub> limits is required within 180 days of the effective date of this rule, unless installation of additional emission controls is necessary to comply with emission limitations under this rule, in which case compliance is required within five years of the effective date of this rule.

### D. Change to 40 CFR 52.1396(e)(3)—CEMS for Cement Kilns

In response to a comment from Ash Grove Cement that this section should be revised to include an exception from CEMS data collection during CEMS breakdowns, repairs, calibration checks and zero and span adjustments, we have added the following language from 40 CFR part 60, subpart F, New Source Performance Standards for cement kilns, at 40 CFR 60.63(b):

You must operate the monitoring system and collect data at all required intervals at all times the affected source is operating, except for periods of monitoring systems malfunctions, repairs associated with monitoring system malfunctions, and required monitoring system quality assurance or quality control activities (including, as applicable, calibration checks and required zero and span adjustments).

Also, during our evaluation of comments from Ash Grove on CEMS requirements, we found that section 52.1396(e)(3) inadvertently failed to cross-reference the requirements for CEMS for cement kilns at 40 CFR 60.63(g). Section 52.1396(e)(3) only cross-referenced 60.63(f). There are important requirements for cement kiln CEMSs at 40 CFR 60.63(g), as well as important CEMS requirements at 60.63(h) which are cross-referenced only by 60.63(g) and not by 60.63(f). We have therefore added “and (g),” such that the first sentence of section 52.1396(e)(3) now reads as follows:

At all times after the compliance date specified in paragraph (d) of this section, the owner/operator of each unit shall maintain,

calibrate, and operate a CEMS, in full compliance with the requirements found at 40 CFR 60.63(f) and (g), to accurately measure concentration by volume of SO<sub>2</sub> and NO<sub>x</sub> emissions into the atmosphere from each unit.

*E. Change to 40 CFR 52.1396(e)(4)(ii)—Compliance Determination Methods for SO<sub>2</sub> and NO<sub>x</sub> at Cement Kilns*

In response to a comment from Ash Grove that the formula at section 52.1396(e)(4)(ii) of our proposal incorrectly expresses the concentrations of SO<sub>2</sub> and NO<sub>x</sub> in grains per dry standard cubic foot, rather than in parts per million, we have deleted the equation  $E = (CsQs)/(PK)$  from this section, as well as the definitions of terms in that equation, and replaced it with the following equation, which appears in the proposed amendments to 40 CFR part 60, subpart F, New Source Performance Standards for cement kilns, published in the **Federal Register** on July 18, 2012:

$$E_D = k \frac{1}{(n)} \sum_{i=1}^n C_i Q_i / P_i$$

Where:

$E_D$  = 30 kiln operating day average emission rate of NO<sub>x</sub> or SO<sub>2</sub>, lb/ton of clinker;

$C_i$  = Concentration of NO<sub>x</sub> or SO<sub>2</sub> for hour i, ppm;

$Q_i$  = volumetric flow rate of effluent gas for hour i, where

$C_i$  and  $Q_i$  are on the same basis (either wet or dry), scf/hr;

$P_i$  = total kiln clinker produced during production hour i, ton/hr;

$k$  = conversion factor,  $1.194 \times 10^{-7}$  for NO<sub>x</sub> and  $1.660 \times 10^{-7}$  for SO<sub>2</sub>

$n$  = number of kiln operating hours over 30 kiln operating days,  $n = 1$  to 720.

For each kiln operating hour for which you do not have at least one valid 15-minute CEMS data value, use the average emissions rate (lb/hr) from the most recent previous hour for which valid data are available.

*F. Change to 40 CFR 52.1396(f)(1) and (f)(2)—Compliance Determinations for PM BART Limits at EGUs and Cement Kilns*

In response to a verbal comment from Holcim, in a meeting with EPA in June of 2012 on the proposed FIP, that BART sources should be allowed to retain the PM stack testing schedule already established under State permits, we have added the following sentence, after the sentence in sections 52.1396(f)(1) and (f)(2) that requires the first annual PM performance stack test for PM within 60 days after the PM compliance deadline:

The results from a stack test meeting the requirements of this paragraph that was completed within 12 months prior to the

compliance deadline can be used in lieu of the first stack test required. If this option is chosen, then the next annual stack test shall be due no more than 12 months after the stack test that was used.

The meeting between Holcim and EPA is documented in the docket for this rulemaking.

*G. Change to 40 CFR 52.1396(f)(2)—Compliance Determinations for Cement Kiln PM BART Limits*

Consistent with our clarification of the table of PM emission limits for cement kilns at 40 CFR 52.1396(c)(2), we have clarified 40 CFR 52.1396(f)(2), to indicate that the emission rate of PM shall be reported in lb/hr for Ash Grove and in lb/ton clinker for Holcim. We have also clarified that the average of the results of three test runs for PM shall be used for demonstrating compliance. Specifically, we have added the following language after the third sentence of section 52.1396(f)(2):

The average of the results of three test runs shall be used for demonstrating compliance. For Ash Grove, the emission rate of particulate matter shall be computed for each run in pounds per hour (lb/hr). For Holcim, the emission rate (E) of particulate matter shall be computed for each run in lb/ton clinker, using the following equation: \* \* \*

We have also revised section 52.1396(f)(2) in response to a comment from Ash Grove that the equation at 40 CFR 52.1396(e)(4)(ii), cross-referenced by this section 52.1396(f)(2), for calculating emissions in lb/ton clinker, is not valid for calculating SO<sub>2</sub> and NO<sub>x</sub> emissions, but is only valid for calculating PM emissions. Therefore, we have moved this equation from section 52.1396(e)(4)(ii) to section 52.1396(f)(2). We have also changed the pollutant in the equation to PM. We have also clarified (as explained above) that the equation is to be used for calculating PM in lb/ton clinker only for Holcim, not for Ash Grove (which, as explained above, is subject to a PM emission limit in lb/hr, not in lb/ton clinker). Below is the equation we have now inserted into section 52.1396(f)(2), immediately after the revised text described above:

$$E = (CsQs)/(PK)$$

Where:

$E$  = emission rate of PM, lb/ton of clinker produced

$Cs$  = concentration of PM in grains per standard cubic foot (gr/scf)

$Qs$  = volumetric flow rate of effluent gas, where  $Cs$  and  $Qs$  are on the same basis (either wet or dry), scf/hr

$P$  = total kiln clinker production rate, tons/hr, and

$K$  = conversion factor, 7000 gr/lb

We have also deleted the cross-reference to section 52.1396(e)(4)(ii) for this equation.

*H. Change to 40 CFR 52.1396(h)(6)—Recordkeeping Requirements for Cement Kilns*

In response to a comment from Ash Grove that the reference to “40 CFR Part 75” should be deleted because Part 75 applies only to electrical generating units, not to cement kilns, we have deleted that reference. We note that since the monitoring requirements for cement kilns in the FIP, at 40 CFR 52.1396(e)(3) and (4), and at 40 CFR 52.1396(f)(2), do not cross-reference Part 75, there are no applicable Part 75 recordkeeping requirements in the FIP. Section 52.1396(h)(6) now reads as follows:

Any other records required by 40 CFR part 60, subpart F, or 40 CFR part 60, Appendix F, Procedure 1.

*I. Changes to 40 CFR 52.1396(i)—Reporting*

In response to a comment from Ash Grove that the first sentence of this section mistakenly references 40 CFR 53.1395(n) and (o), rather than 52.1396(n) and (o), we have made the correction.

*J. Change to 40 CFR 52.1396(i)(1) and (i)(2)—Reporting for CEMS for SO<sub>2</sub> and NO<sub>x</sub>*

In response to a comment from Ash Grove that the reporting frequency for CEMS excess emission reports and CEMS performance reports for cement kilns should be changed from quarterly to semiannual, because reporting requirements under other programs (Title V and NESHAP) only require semiannual reporting, we have changed the frequency to semiannual, but have kept the frequency at quarterly for EGUs.

We note that the general provisions of NSPS subpart A, at 40 CFR 60.7(c), which we used as a template for our FIP provisions for CEMS reporting, require semiannual excess emission reports and monitoring system performance reports, except when more frequent reporting is specifically required by an applicable subpart, or if the Administrator, on a case-by-case basis, determines that more frequent report is necessary to accurately assess the compliance status of the source. NSPS subpart F for cement kilns does not specify more frequent reporting.

Therefore, we have deleted “quarterly” from the first sentence of section 52.1396(i)(1) and from the first sentence of section 52.1396(i)(2). After the first sentence in each of those

sections, we have inserted the following sentence: "Reports shall be submitted quarterly for EGUs and semiannually for cement kilns."

*K. Changes to 40 CFR 52.1396 for Devon Energy, Blaine County #1 Compressor Station*

In the final FIP, we are clarifying testing requirements, monitoring, recordkeeping and reporting requirements, and emission limitations for Devon Energy, Blaine County #1 Compressor Station. We made these changes in response to a comment stating that the requirements for this source were not practically enforceable.

We have changed the text at 40 CFR 52.1396(c)(3) to read, "The owners/operators of LP, Blaine County #1 Compressor Station shall not emit or cause to be emitted from each 5,500 horsepower Ingersoll Rand 616 natural gas-fired compressor engine installed at the facility, total NO<sub>x</sub> in excess of 21.8 lbs/hr (average of three stack test runs)." We have made this change to clarify that the emission limit of 21.8 lbs/hr applies to each of the 5,500 horsepower Ingersoll Rand 616 natural gas-fired compressor engines installed at the facility and that the emission rate will be determined by averaging the results of three stack test runs.

We have changed the text at 40 CFR 52.1396(e)(5) to read, "The owner/operator of Blaine County #1 Compressor Station shall install a temperature-sensing device (i.e. thermocouple or resistance temperature detectors) before the catalyst in order to monitor the inlet temperatures of the catalyst for each engine. The owner/operator shall maintain the exhaust temperature at the inlet to the catalyst for each engine at a minimum of least 750 °F and no more than 1250 °F in accordance with the catalyst manufacturer's specifications. Also, the owner/operator shall install gauges before and after the catalyst for each engine in order to monitor pressure drop across the catalyst, and that the owner/operator maintain the pressure drop within ± 2" water at 100% load plus or minus 10% from the pressure drop across the catalyst measured during the initial performance test. The owner/operator shall follow the manufacturer's recommended maintenance schedule and procedures for each engine and its respective catalyst. The owner/operator shall only fire each engine with natural gas that is of pipeline-quality in all respects except that the CO<sub>2</sub> concentration in the gas shall not be required to be within pipeline-quality." We have made this change to clarify that it is the exhaust

temperature that must be maintained at a minimum of at least 750 °F and no more than 1250 °F in accordance with the catalyst manufacturer's specifications, and not the engine temperature that must be kept within this temperature range. We are also making this change to clarify that the temperature range must be kept in accordance with the catalyst manufacturer's specifications and not the engine manufacturer's specifications.

We have added a new section, 40 CFR 52.1396(j) which includes testing requirements for Blaine County #1 Compressor Station. This section was inadvertently omitted from the proposed FIP, but is necessary to ensure adequate testing is performed to ensure compliance with the NO<sub>x</sub> emission limit for Blaine County #1 Compressor Station.

We have changed 40 CFR 52.1396(k)(1) to read: "The owner/operator shall measure NO<sub>x</sub> emissions from each engine at least semi-annually or once every six-month period to demonstrate compliance with the emission limits. To meet this requirement, the owner/operator shall measure NO<sub>x</sub> emissions from each engine using a portable analyzer and a monitoring protocol approved by EPA." We have changed the first sentence from referring to engines to refer to each engine to clarify that NO<sub>x</sub> emissions must be measured from each engine.

We have added a new paragraph at 40 CFR 52.1396(k)(9) to read, "The owner/operator shall keep records of all deviations from the emission limit or operating requirements (e.g., catalyst inlet temperature, pressure drop across the catalyst) for each engine. The records shall include: The date and time of the deviation, the name and title of the observing employee and a brief description of the deviation and the measures taken to address the deviation and prevent future occurrences." We have made this change to ensure that adequate records are kept by the owner or operator of Blaine County #1 Compressor Station to demonstrate compliance with the required emission limit and appropriate operation of the NSCR system.

We have changed the text of 40 CFR 52.1396(k)(10) to correct a typographical error and to add to the requirements that the owner/operator of Blaine County #1 Compressor Station must maintain records of deviations from operating requirements for a period of at least five years and that these records must be made available upon request by EPA.

## VI. Statutory and Executive Order Reviews

### A. Executive Order 12866: Regulatory Planning and Review and Executive Order 13563: Improving Regulation and Regulatory Review 13563

This action will finalize a SIP approval for a revision to Montana's Smoke Management plan and a source-specific Regional Haze FIP for imposing federal controls to meet BART requirements for PM, NO<sub>x</sub> and SO<sub>2</sub> emissions on five specific units at four sources in Montana (Ash Grove, Holcim, Colstrip Units 1 and 2, and Corette) and imposing controls to meet RP requirements for NO<sub>x</sub> emissions at one additional source (Devon) in Montana. The net result of the FIP action is that EPA is proposing direct emission controls on selected units at five sources. The sources in question are two large electric generating plants (one plant includes two units), two cement plants, and one gas compressor station. This action also imposes notification requirements on CFAC and M2Green Redevelopment LLC. This type of action is exempt from review under Executive Orders 12866 (58 FR 51735, October 4, 1993) and 13563 (76 FR 3821, January 21, 2011).

### B. Paperwork Reduction Act

This action does not impose an information collection burden under the provisions of the Paperwork Reduction Act, 44 U.S.C. 3501 *et seq.* Under the Paperwork Reduction Act, a "collection of information" is defined as a requirement for "answers to \* \* \* identical reporting or recordkeeping requirements imposed on ten or more persons \* \* \*." 44 U.S.C. 3502(3)(A). Because the FIP applies to just seven sources, the Paperwork Reduction Act does not apply. See 5 CFR 1320(c).

Burden means the total time, effort, or financial resources expended by persons to generate, maintain, retain, or disclose or provide information to or for a federal agency. This includes the time needed to review instructions; develop, acquire, install, and utilize technology and systems for the purposes of collecting, validating, and verifying information, processing and maintaining information, and disclosing and providing information; adjust the existing ways to comply with any previously applicable instructions and requirements; train personnel to be able to respond to a collection of information; search data sources; complete and review the collection of information; and transmit or otherwise disclose the information.

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 Office of Management and Budget (OMB) control number. The OMB control numbers for our regulations in 40 CFR are listed in 40 CFR Part 9.

### C. Regulatory Flexibility Act

The Regulatory Flexibility Act (RFA) generally requires an agency to prepare a regulatory flexibility analysis of any rule subject to notice and comment rulemaking requirements under the Administrative Procedure Act or any other statute unless the agency certifies that the rule will not have a significant economic impact on a substantial number of small entities. Small entities include small businesses, small organizations, and small governmental jurisdictions.

For purposes of assessing the impacts of today's rule on small entities, small entity is defined as: (1) A small business as defined by the Small Business Administration's (SBA) regulations at 13 CFR 121.201; (2) a small governmental jurisdiction that is a government of a city, county, town, school district or special district with a population of less than 50,000; and (3) a small organization that is any not-for-profit enterprise which is independently owned and operated and is not dominant in its field.

After considering the economic impacts of this action on small entities, I certify that this action will not have a significant economic impact on a substantial number of small entities. The Regional Haze FIP that EPA is finalizing consists of imposing federal controls to meet BART and RP requirements for PM, NO<sub>x</sub> and SO<sub>2</sub> emissions on specific sources as described above in section A. None of these sources are owned by small entities, and therefore are not small entities.

### D. Unfunded Mandates Reform Act (UMRA)

This rule does not contain a Federal mandate that may result in expenditures of \$100 million or more for state, local, and tribal governments, in the aggregate, or the private sector in any one year. Table 1 notes that the cumulative total annual costs for this action are \$13.7 million. Thus, this rule is not subject to the requirements of sections 202 or 205 of UMRA.

This rule is also not subject to the requirements of section 203 of UMRA because it contains no regulatory requirements that might significantly or uniquely affect small governments.

### E. Executive Order 13132: Federalism

This action does not have federalism implications. It will not 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, as specified in Executive Order 13132, because it merely addresses the State of Montana not meeting its obligation to adopt a SIP that meets the regional haze requirements under the CAA. Thus, Executive Order 13132 does not apply to this action. In the spirit of Executive Order 13132, and consistent with EPA policy to promote communications between EPA and state and local governments, EPA specifically solicited comment on this rule from state and local officials. A summary of each comment and EPA's response to those comments is provided in section IV of this preamble.

### F. Executive Order 13175: Consultation and Coordination With Indian Tribal Governments

This action does not have tribal implications, as specified in Executive Order 13175 (65 FR 67249, November 9, 2000). This action applies to only seven sources in Montana. Thus, Executive Order 13175 does not apply to this rule. Although Executive Order 13175 does not apply to this action, EPA did send letters, dated October 7, 2011, to each of the Montana tribes explaining our regional haze FIP action and offering consultation. We did not receive any written or verbal requests from the Montana tribes for more information or for consultation. As a follow-up to our letter, we invited all of the tribes to a January 5, 2012 conference call. The call was attended by tribal Air Program Managers and one Environmental Director from tribes from four reservations. We also met with the Montana tribes prior to the start of the public hearings held in Helena and Billings, Montana. EPA specifically solicited additional comment on this rule from tribal officials and we received comments and responded to them in section IV of this preamble.

### G. Executive Order 13045: Protection of Children From Environmental Health Risks and Safety Risks

Executive Order 13045: *Protection of Children from Environmental Health Risks and Safety Risks* (62 FR 19885, April 23, 1997), applies to any rule that: (1) Is determined to be economically significant as defined under Executive Order 12866; and (2) concerns an

environmental health or safety risk that we have reason to believe may have a disproportionate effect on children. EPA interprets EO 13045 as applying only to those regulatory actions that concern health or safety risks, such that the analysis required under section 5-501 of the EO has the potential to influence the regulation. This action is not subject to EO 13045 because it implements specific standards established by Congress in statutes. However, to the extent this rule limits emissions of NO<sub>x</sub>, SO<sub>2</sub>, and PM, the rule will have a beneficial effect on children's health by reducing air pollution.

### H. Executive Order 13211: Actions Concerning Regulations That Significantly Affect Energy Supply, Distribution, or Use

This action is not subject to Executive Order 13211 (66 FR 28355 (May 22, 2001)), because it is not a significant regulatory action under Executive Order 12866.

### I. National Technology Transfer and Advancement Act

Section 12 of the National Technology Transfer and Advancement Act (NTTAA) of 1995 requires federal agencies to evaluate existing technical standards when developing a new regulation. To comply with NTTAA, EPA must consider and use "voluntary consensus standards" (VCS) if available and applicable when developing programs and policies unless doing so would be inconsistent with applicable law or otherwise impractical.

The EPA believes that VCS are inapplicable to this action. Today's action does not require the public to perform activities conducive to the use of VCS.

### J. Executive Order 12898: Federal Actions To Address Environmental Justice in Minority Populations and Low-Income Populations

Executive Order 12898 (59 FR 7629, February 16, 1994), establishes federal executive policy on environmental justice. Its main provision directs federal agencies, to the greatest extent practicable and permitted by law, to make environmental justice part of their mission by identifying and addressing, as appropriate, disproportionately high and adverse human health or environmental effects of their programs, policies, and activities on minority populations and low-income populations in the United States.

We have determined that this rule will not have disproportionately high and adverse human health or environmental effects on minority or

low-income populations because it increases the level of environmental protection for all affected populations without having any disproportionately high and adverse human health or environmental effects on any population, including any minority or low-income population. This rule limits emissions of NO<sub>x</sub>, SO<sub>2</sub>, and PM from five sources in Montana.

**K. Congressional Review Act**

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. Section 804 exempts from section 801 the following types of rules (1) rules of particular applicability; (2) rules relating to agency management or personnel; and (3) rules of agency organization, procedure, or practice that do not substantially affect the rights or obligations of non-agency parties. 5 U.S.C 804(3). EPA is not required to submit a rule report regarding today's action under section 801 because this action is a rule of particular applicability. This rule finalizes a FIP for seven sources.

**L. Judicial Review**

Under section 307(b)(1) of the CAA, petitions for judicial review of this action must be filed in the United States Court of Appeals for the appropriate circuit by November 19, 2012. Pursuant to CAA section 307(d)(1)(B), this action is subject to the requirements of CAA section 307(d) as it promulgates a FIP under CAA section 110(c). 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 CAA section 307(b)(2).

**List of Subjects in 40 CFR Part 52**

Environmental protection, Air pollution control, Intergovernmental relations, Incorporation by Reference, Nitrogen dioxides, Particulate matter, Reporting and recordkeeping requirements, Sulfur dioxide, Volatile organic compounds.

Dated: August 15, 2012.

**Lisa P. Jackson,**  
Administrator.

40 CFR part 52 is amended as follows:

**PART 52—[AMENDED]**

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

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

**Subpart BB—Montana**

■ 2. Section 52.1370 is amended by revising paragraph (c)(27)(i)(H) to read as follows:

**§ 52.1370 Identification of plan.**

- \* \* \* \* \*
- (c) \* \* \*
- (27) \* \* \*
- (i) \* \* \*

(H) Appendix G–2, Montana Smoke Management Plan, effective April 15, 1988, is removed and replaced by § 52.1395.

- \* \* \* \* \*

■ 3. Add section 52.1395 to read as follows:

**§ 52.1395 Smoke management plan.**

The Department considers smoke management techniques for agriculture and forestry management burning purposes as set forth in 40 CFR 51.308(d)(3)(v)(E). The Department considers the visibility impact of smoke when developing, issuing, or conditioning permits and when making dispersion forecast recommendations through the implementation of Title 17, Chapter 8, subchapter 6, ARM, Open Burning.

■ 4. Add section 52.1396 to read as follows:

**§ 52.1396 Federal implementation plan for regional haze.**

(a) *Applicability.* This section applies to each owner and operator of the following coal fired electric generating units (EGUs) in the State of Montana:

PPL Montana, LLC, Colstrip Power Plant, Units 1, 2; and PPL Montana, LLC, JE Corette Steam Electric Station. This section also applies to each owner and operator of cement kilns at the following cement production plants: Ash Grove Cement, Montana City Plant; and Holcim (US) Inc. Cement, Trident Plant. This section also applies to each owner or operator of Blaine County #1 Compressor Station. This section also applies to each owner and operator of CFAC and M2 Green Redevelopment LLC, Missoula site.

(b) *Definitions.* Terms not defined below shall have the meaning given them in the Clean Air Act or EPA's regulations implementing the Clean Air Act. For purposes of this section:

*Boiler operating day* means a 24-hour period between 12 midnight and the following midnight during which any fuel is combusted at any time in the EGU. It is not necessary for fuel to be combusted for the entire 24-hour period.

*Continuous emission monitoring system or CEMS* means the equipment required by this section to sample, analyze, measure, and provide, by means of readings recorded at least once every 15 minutes (using an automated data acquisition and handling system (DAHS)), a permanent record of SO<sub>2</sub> or NO<sub>x</sub> emissions, other pollutant emissions, diluent, or stack gas volumetric flow rate.

*Kiln operating day* means a 24-hour period between 12 midnight and the following midnight during which the kiln operates.

NO<sub>x</sub> means nitrogen oxides.

*Owner/operator* means any person who owns or who operates, controls, or supervises an EGU identified in paragraph (a) of this section.

PM means filterable total particulate matter.

SO<sub>2</sub> means sulfur dioxide.

*Unit* means any of the EGUs or cement kilns identified in paragraph (a) of this section.

(c) *Emissions limitations.* (1) The owners/operators of EGUs subject to this section shall not emit or cause to be emitted PM, SO<sub>2</sub> or NO<sub>x</sub> in excess of the following limitations, in pounds per million British thermal units (lb/MMBtu), averaged over a rolling 30-day period for SO<sub>2</sub> and NO<sub>x</sub>:

Source name	PM emission limit (lb/MMBtu)	SO <sub>2</sub> emission limit (lb/MMBtu)	NO <sub>x</sub> emission limit (lb/MMBtu)
Colstrip Unit 1 .....	0.10	0.08	0.15
Colstrip Unit 2 .....	0.10	0.08	0.15
JE Corette Unit 1 .....	0.26	0.57	0.35

(2) The owners/operators of cement kilns subject to this section shall not emit or cause to be emitted PM, SO<sub>2</sub> or NO<sub>x</sub> in excess of the following limitations, in pounds per ton of clinker produced, averaged over a rolling 30-day period for SO<sub>2</sub> and NO<sub>x</sub>:

Source name	PM emission limit	SO <sub>2</sub> emission limit (lb/ton clinker)	NO <sub>x</sub> emission limit (lb/ton clinker)
Ash Grove Cement .....	If the process weight rate of the kiln is less than or equal to 30 tons per hour, then the emission limit shall be calculated using $E = 4.10p^{0.67}$ where E = rate of emission in pounds per hour and p = process weight rate in tons per hour; however, if the process weight rate of the kiln is greater than 30 tons per hour, then the emission limit shall be calculated using $E = 55.0p^{0.11} - 40$ , where E = rate of emission in pounds per hour and P = process weight rate in tons per hour.	11.5	8.0
Holcim (US) Inc .....	0.77 lb/ton clinker .....	1.3	6.5

(3) The owners/operators of LP, Blaine County #1 Compressor Station shall not emit or cause to be emitted from each 5,500 horsepower Ingersoll Rand 616 natural gas-fired compressor engine installed at the facility total NO<sub>x</sub> in excess of 21.8 lbs/hr (average of three stack test runs).

(4) These emission limitations shall apply at all times, including startups, shutdowns, emergencies, and malfunctions.

(d) *Compliance date.* The owners and operators of Blaine County #1 Compressor Station shall comply with the emissions limitation and other requirements of this section as expeditiously as practicable, but no later than July 31, 2018. The owners and operators of the BART sources subject to this section shall comply with the emissions limitations and other requirements of this section as follows, unless otherwise indicated in specific paragraphs: Compliance with PM limits is required within 30 days of the effective date of this rule. Compliance with SO<sub>2</sub> and NO<sub>x</sub> limits is required within 180 days of the effective date of this rule, unless installation of additional emission controls is necessary to comply with emission limitations under this rule, in which case compliance is required within five years of the effective date of this rule.

(e) *Compliance determinations for SO<sub>2</sub> and NO<sub>x</sub>.* (1) *CEMS for EGUs.* At all times after the compliance date specified in paragraph (d) of this section, the owner/operator of each unit shall maintain, calibrate, and operate a CEMS, in full compliance with the requirements found at 40 CFR part 75, to accurately measure SO<sub>2</sub>, NO<sub>x</sub>, diluent, and stack gas volumetric flow rate from each unit. The CEMS shall be used by the owner/operator to determine compliance with the emission limitations in paragraph (c) of this section for each unit.

(2) *Method for EGUs.* (i) For any hour in which fuel is combusted in a unit, the owner/operator of each unit shall calculate the hourly average SO<sub>2</sub> and NO<sub>x</sub> concentration in lb/MMBtu at the CEMS in accordance with the requirements of 40 CFR part 75. At the end of each boiler operating day, the owner/operator shall calculate and record a new 30-day rolling average emission rate in lb/MMBtu from the arithmetic average of all valid hourly emission rates from the CEMS for the current boiler operating day and the previous 29 successive boiler operating days.

(ii) An hourly average SO<sub>2</sub> or NO<sub>x</sub> emission rate in lb/MMBtu is valid only if the minimum number of data points, as specified in 40 CFR part 75, is acquired by the owner/operator for both the pollutant concentration monitor (SO<sub>2</sub> or NO<sub>x</sub>) and the diluent monitor (O<sub>2</sub> or CO<sub>2</sub>).

(iii) Data reported by the owner/operator to meet the requirements of this section shall not include data substituted using the missing data substitution procedures of subpart D of 40 CFR part 75, nor shall the data have been bias adjusted according to the procedures of 40 CFR part 75.

(3) *CEMS for cement kilns.* At all times after the compliance date specified in paragraph (d) of this section, the owner/operator of each unit shall maintain, calibrate, and operate a CEMS, in full compliance with the requirements found at 40 CFR 60.63(f) and (g), to accurately measure concentration by volume of SO<sub>2</sub> and NO<sub>x</sub> emissions into the atmosphere from each unit. The CEMS shall be used by the owner/operator to determine compliance with the emission limitations in paragraph (c) of this section for each unit, in combination with data on actual clinker production. The owner/operator must operate the monitoring system and collect data at all required intervals at all times the

affected unit is operating, except for periods of monitoring system malfunctions, repairs associated with monitoring system malfunctions, and required monitoring system quality assurance or quality control activities (including, as applicable, calibration checks and required zero and span adjustments).

(4) *Method for cement kilns.* (i) The owner/operator of each unit shall record the daily clinker production rates.

(ii) The owner/operator of each unit shall calculate and record the 30-operating day rolling emission rates of SO<sub>2</sub> and NO<sub>x</sub>, in lb/ton of clinker produced, as the total of all hourly emissions data for the cement kiln in the preceding 30 days, divided by the total tons of clinker produced in that kiln during the same 30-day operating period, using the following equation:

$$E_D = k \frac{1}{(n)} \sum_{i=1}^n C_i Q_i / P_i$$

Where:

- E<sub>D</sub> = 30 kiln operating day average emission rate of NO<sub>x</sub> or SO<sub>2</sub>, lb/ton of clinker;
- C<sub>i</sub> = Concentration of NO<sub>x</sub> or SO<sub>2</sub> for hour i, ppm;
- Q<sub>i</sub> = volumetric flow rate of effluent gas for hour i, where
- C<sub>i</sub> and Q<sub>i</sub> are on the same basis (either wet or dry), scf/hr;
- P<sub>i</sub> = total kiln clinker produced during production hour i, ton/hr;
- k = conversion factor, 1.194 × 10<sup>-7</sup> for NO<sub>x</sub> and 1.660 × 10<sup>-7</sup> for SO<sub>2</sub>; and
- n = number of kiln operating hours over 30 kiln operating days, n = 1 to 720.

For each kiln operating hour for which the owner/operator does not have at least one valid 15-minute CEMS data value, the owner/operator must use the average emissions rate (lb/hr) from the most recent previous hour for which valid data are available. Hourly clinker production shall be determined by the owner/operator in accordance with the requirements found at 40 CFR 60.63(b).

(iii) At the end of each kiln operating day, the owner/operator of each unit shall calculate and record a new 30-day rolling average emission rate in lb/ton clinker from the arithmetic average of all valid hourly emission rates for the current kiln operating day and the previous 29 successive kiln operating days.

(5) *Method for compressor station.*

The owner/operator of Blaine County #1 Compressor Station shall install a temperature-sensing device (i.e. thermocouple or resistance temperature detectors) before the catalyst in order to monitor the inlet temperatures of the catalyst for each engine. The owner/operator shall maintain the exhaust temperature at the inlet to the catalyst for each engine at a minimum of least 750 °F and no more than 1250 °F in accordance with the catalyst manufacturer's specifications. Also, the owner/operator shall install gauges before and after the catalyst for each engine in order to monitor pressure drop across the catalyst. During the initial performance test the owner/operator maintain the pressure drop within  $\pm 2$ " water at 100 percent load plus or minus 10 percent from the pressure drop across the catalyst measured. The owner/operator shall follow the manufacturer's recommended maintenance schedule and procedures for each engine and its respective catalyst. The owner/operator shall only fire each engine with natural gas that is of pipeline-quality in all respects except that the CO<sub>2</sub> concentration in the gas shall not be required to be within pipeline-quality.

(f) *Compliance determinations for particulate matter.*

(1) *EGU particulate matter BART limits.* Compliance with the particulate matter BART emission limits for each EGU BART unit shall be determined by the owner/operator from annual performance stack tests. Within 60 days of the compliance deadline specified in paragraph (d) of this section, and on at least an annual basis thereafter, the owner/operator of each unit shall conduct a stack test on each unit to measure particulate emissions using EPA Method 5, 5B, 5D, or 17, as appropriate, in 40 CFR part 60, Appendix A. A test shall consist of three runs, with each run at least 120 minutes in duration and each run collecting a minimum sample of 60 dry standard cubic feet. Results shall be reported by the owner/operator in lb/MMBtu. The results from a stack test meeting the requirements of this paragraph that were completed within 120 days prior to the compliance date can be used by the owner/operator in lieu of the first stack

test required. In addition to annual stack tests, owner/operator shall monitor particulate emissions for compliance with the BART emission limits in accordance with the applicable Compliance Assurance Monitoring (CAM) plan developed and approved in accordance with 40 CFR part 64.

(2) *Cement kiln particulate matter BART limits.* Compliance with the particulate matter BART emission limits for each cement kiln shall be determined by the owner/operator from annual performance stack tests. Within 60 days of the compliance deadline specified in paragraph (d) of this section, and on at least an annual basis thereafter, the owner/operator of each unit shall conduct a stack test on each unit to measure particulate matter emissions using EPA Method 5, 5B, 5D, or 17, as appropriate, in 40 CFR part 60, Appendix A. A test shall consist of three runs, with each run at least 120 minutes in duration and each run collecting a minimum sample of 60 dry standard cubic feet. The average of the results of three test runs shall be used by the owner/operator for demonstrating compliance.

Clinker production shall be determined in accordance with the requirements found at 40 CFR 60.63(b). Results of each test shall be reported by the owner/operator as the average of three valid test runs. In addition to annual stack tests, owner/operator shall monitor particulate emissions for compliance with the BART emission limits in accordance with the applicable Compliance Assurance Monitoring (CAM) plan developed and approved in accordance with 40 CFR part 64.

(i) For Ash Grove Cement, the emission rate of particulate matter shall be computed by the owner/operator for each run in pounds per hour (lb/hr).

(ii) For Holcim, the emission rate (E) of particulate matter shall be computed by the owner/operator for each run in lb/ton clinker, using the following equation:

$$E = (C_s Q_s) / PK$$

Where:

E = emission rate of PM, lb/ton of clinker produced;

C<sub>s</sub> = concentration of PM in grains per standard cubic foot (gr/scf);

Q<sub>s</sub> = volumetric flow rate of effluent gas, where C<sub>s</sub> and Q<sub>s</sub> are on the same basis (either wet or dry), scf/hr;

P = total kiln clinker production, tons/hr; and  
K = conversion factor, 7000 gr/lb,

(g) *Recordkeeping for EGUs.* The owner/operator shall maintain the following records for at least five years:

(1) All CEMS data, including the date, place, and time of sampling or

measurement; parameters sampled or measured; and results.

(2) Records of quality assurance and quality control activities for emissions measuring systems including, but not limited to, any records required by 40 CFR Part 75.

(3) Records of all major maintenance activities conducted on emission units, air pollution control equipment, and CEMS.

(4) Any other records required by 40 CFR part 75.

(5) All particulate matter stack test results.

(h) *Recordkeeping for cement kilns.* The owner/operator shall maintain the following records for at least five years:

(1) All CEMS data, including the date, place, and time of sampling or measurement; parameters sampled or measured; and results.

(2) All particulate matter stack test results.

(3) All records of clinker production.

(4) Records of quality assurance and quality control activities for emissions measuring systems including, but not limited to, any records required by 40 CFR part 60, appendix F, Procedure 1.

(5) Records of all major maintenance activities conducted on emission units, air pollution control equipment, CEMS and clinker production measurement devices.

(6) Any other records required by 40 CFR part 60, Subpart F, or 40 CFR part 60, Appendix F, Procedure 1.

(i) *Reporting.* All reports under this section, with the exception of 40 CFR 52.1396(n) and (o), shall be submitted by the owner/operator to the Director, Office of Enforcement, Compliance and Environmental Justice, U.S. Environmental Protection Agency, Region 8, Mail Code 8ENF-AT, 1595 Wynkoop Street, Denver, Colorado 80202-1129.

(1) The owner/operator of each unit shall submit excess emissions reports for SO<sub>2</sub> and NO<sub>x</sub> BART limits. Reports shall be submitted quarterly by the owner/operator for EGUs and semiannually for cement kilns, no later than the 30th day following the end of each calendar quarter or semiannual period, respectively. Excess emissions means emissions that exceed the emissions limits specified in paragraph (c) of this section. The reports shall include the magnitude, date(s), and duration of each period of excess emissions, specific identification of each period of excess emissions that occurs during startups, shutdowns, and malfunctions of the unit, the nature and cause of any malfunction (if known), and the corrective action taken or preventative measures adopted.

(2) The owner/operator of each unit shall submit CEMS performance reports, to include dates and duration of each period during which the CEMS was inoperative (except for zero and span adjustments and calibration checks), reason(s) why the CEMS was inoperative and steps taken to prevent recurrence, and any CEMS repairs or adjustments. The owner/operator shall submit reports quarterly for EGUs and semiannually for cement kilns.

(i) *For EGUs:* The owner/operator of each unit shall also submit results of any CEMS performance tests required by 40 CFR part 75 (Relative Accuracy Test Audits, Relative Accuracy Audits, and Cylinder Gas Audits).

(ii) *For cement kilns:* Owner/operator of each unit shall also submit results of any CEMS performance tests required by 40 CFR part 60, appendix F, Procedure 1 (Relative Accuracy Test Audits, Relative Accuracy Audits, and Cylinder Gas Audits).

(3) When no excess emissions have occurred or the CEMS has not been inoperative, repaired, or adjusted during the reporting period, the owner/operator shall state such information in the quarterly reports required by sections (h)(1) and (2) of this section.

(4) The owner/operator of each unit shall submit results of any particulate matter stack tests conducted for demonstrating compliance with the particulate matter BART limits in paragraph (c) of this section within 60 days after the completion of the test.

(5) The owner/operator of each unit shall submit semi-annual reports of any excursions under the approved CAM plan in accordance with the schedule specified in the source's title V permit.

(j) Testing requirements for Blaine County #1 Compressor Station:

(1) An initial performance test shall be conducted by the owner/operator for each engine for measuring NO<sub>x</sub> emissions from the engines to demonstrate initial compliance with the emission limits. The initial performance test shall be conducted by the owner/operator as expeditiously as practicable, but no later than October 31, 2018.

(2) Upon change out of the catalyst for each engine a performance test shall be conducted by the owner/operator for measuring NO<sub>x</sub> from the engines to demonstrate compliance with the emission limits and re-establish temperature and pressure correlations. The performance test shall be conducted by the owner/operator within 90 calendar days of the date of the catalyst change out.

(3) The performance tests for NO<sub>x</sub> shall be conducted by the owner/operator in accordance with the test

methods specified in 40 CFR Part 60, Appendix A. EPA Reference Method 7E shall be used to measure NO<sub>x</sub> emissions.

(4) All tests conducted by the owner/operator for NO<sub>x</sub> emissions must meet the following requirements:

(i) All tests shall be performed at a maximum operating rate (90 to 110 percent of engine capacity at site elevation).

(ii) During each test run, data shall be collected on all parameters necessary to document how NO<sub>x</sub> emissions in pounds per hour were measured or calculated (such as test run length, minimum sample volume, volumetric flow rate, moisture and oxygen corrections, etc.). The temperature at the inlet to the catalyst and the pressure drop across the catalyst shall also be measured and recorded during each test run for each engine.

(iii) Each source test shall consist of at least three 1-hour or longer valid test runs. Emission results shall be reported as the arithmetic average of all valid test runs and shall be in terms of the emission limits (pounds per hour).

(iv) A source test plan for NO<sub>x</sub> emissions shall be submitted to EPA at least 45 calendar days prior to the scheduled performance test.

(v) The source test plan shall include and address the following elements:

(A) Purpose of the test;

(B) Engines and catalysts to be tested;

(C) Expected engine operating rate(s) during test;

(D) Schedule/date(s) for test;

(E) Sampling and analysis procedures (sampling locations, test methods, laboratory identification);

(F) Quality assurance plan (calibration procedures and frequency, sample recovery and field documentation, chain of custody procedures); and

(G) Data processing and reporting (description of data handling and quality control procedures).

(k) Monitoring, recordkeeping, and reporting requirements for Blaine County #1 Compressor Station:

(1) The owner/operator shall measure NO<sub>x</sub> emissions from each engine at least semi-annually or once every six month period to demonstrate compliance with the emission limits. To meet this requirement, the owner/operator shall measure NO<sub>x</sub> emissions from each engine using a portable analyzer and a monitoring protocol approved by EPA.

(2) The owner/operator shall submit the analyzer specifications and monitoring protocol to EPA for approval within 45 calendar days prior to installation of the NSCR unit.

(3) Monitoring for NO<sub>x</sub> emissions shall commence during the first

complete calendar quarter following the owner/operator's submittal of the initial performance test results for NO<sub>x</sub> to EPA.

(4) The owner/operator shall measure the engine exhaust temperature at the inlet to the oxidation catalyst at least once per week and shall measure the pressure drop across the oxidation catalyst monthly.

(5) The owner/operator shall ensure that each temperature-sensing device is accurate to within plus or minus 0.75% of span and that the pressure sensing devices be accurate to within plus or minus 0.1 inches of water.

(6) The owner/operator shall keep records of all temperature and pressure measurements; vendor specifications for the thermocouples and pressure gauges; vendor specifications for the NSCR catalyst and the air-to-fuel ratio controller on each engine.

(7) The owner/operator shall keep records sufficient to demonstrate that the fuel for the engines is pipeline-quality natural gas in all respects, with the exception of the CO<sub>2</sub> concentration in the natural gas.

(8) The owner/operator shall keep records of all required testing and monitoring that include: The date, place, and time of sampling or measurements; the date(s) analyses were performed; the company or entity that performed the analyses; the analytical techniques or methods used; the results of such analyses or measurements; and the operating conditions as existing at the time of sampling or measurement.

(9) The owner/operator shall keep records of all deviations from the emission limit or operating requirements (e.g., catalyst inlet temperature, pressure drop across the catalyst) for each engine. The records shall include: The date and time of the deviation, the name and title of the observing employee and a brief description of the deviation and the measures taken to address the deviation and prevent future occurrences.

(10) The owner/operator shall maintain records of all required monitoring data, support information (e.g., all calibration and maintenance records, all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required) and deviations from operating requirements for a period of at least five years from the date of the monitoring sample, measurement, or report and that these records be made available upon request by EPA.

(11) The owner/operator shall submit a written report of the results of the required performance tests to EPA within 90 calendar days of the date of testing completion.

(l) *Notifications.* (1) The owner/operator shall submit notification of commencement of construction of any equipment which is being constructed to comply with the SO<sub>2</sub> or NO<sub>x</sub> emission limits in paragraph (c) of this section.

(2) The owner/operator shall submit semi-annual progress reports on construction of any such equipment.

(3) The owner/operator shall submit notification of initial startup of any such equipment.

(m) *Equipment operation.* At all times, the owner/operator shall maintain each unit, including associated air pollution control equipment, in a manner consistent with good air pollution control practices for minimizing emissions.

(n) *Credible evidence.* Nothing in this section shall preclude the use, including the exclusive use, of any credible evidence or information, relevant to

whether a source would have been in compliance with requirements of this section if the appropriate performance or compliance test procedures or method had been performed.

(o) *CFAC notification.* CFAC shall notify EPA 60 days in advance of resuming operation. CFAC shall submit such notice to the Director, Air Program, U.S. Environmental Protection Agency, Region 8, Mail Code 8P-AR, 1595 Wynkoop Street, Denver, Colorado 80202-1129. Once CFAC notifies EPA that it intends to resume operation, EPA will initiate and complete a BART determination after notification and revise the FIP as necessary in accordance with regional haze requirements, including the BART provisions in 40 CFR 51.308(e). CFAC will be required to install any controls that are required as soon as practicable, but in no case later than five years following the effective date of this rule.

(p) *M2Green Redevelopment LLC notification.* M2Green Redevelopment LLC shall notify EPA 60 days in advance of resuming operation. M2Green Redevelopment LLC shall submit such notice to the Director, Air Program, U.S. Environmental Protection Agency, Region 8, Mail Code 8P-AR, 1595 Wynkoop Street, Denver, Colorado 80202-1129. Once M2 Green Redevelopment LLC notifies EPA that it intends to resume operation, EPA will initiate and complete a four factor analysis after notification and revise the FIP as necessary in accordance with regional haze requirements including the "reasonable progress" provisions in 40 CFR 51.308(d)(1). M2 Green Redevelopment LLC will be required to install any controls that are required as soon as practicable, but in no case later than July 31, 2018.

[FR Doc. 2012-20918 Filed 9-17-12; 8:45 am]

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# FEDERAL REGISTER

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Part IV

## Department of the Interior

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Fish and Wildlife Service

50 CFR Part 17

Endangered and Threatened Wildlife and Plants; 12-Month Finding on a Petition To List 14 Aquatic Mollusks as Endangered or Threatened; Proposed Rule

## DEPARTMENT OF THE INTERIOR

## Fish and Wildlife Service

## 50 CFR Part 17

[Docket No. FWS-R8-ES-2011-0076:  
4500030113]

**Endangered and Threatened Wildlife and Plants; 12-Month Finding on a Petition To List 14 Aquatic Mollusks as Endangered or Threatened**

**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 basalt juga (*Juga* new species (n. sp. 2), canary duskysnail (*Colligyrus convexus*), cinnamon juga (*Juga* n. sp. 3), Columbia duskysnail (*Colligyrus* n. sp. 1), Fredenburg pebblesnail (*Fluminicola* n. sp. 11), Goose Valley pebblesnail (*Fluminicola anserinus*), Hat Creek pebblesnail (*Fluminicola umbilicatus*), Klamath Rim pebblesnail (*Fluminicola* n. sp. 3), knobby rams-horn (*Vorticifex* n. sp. 1), masked duskysnail (*Colligyrus* n. sp. 2), nugget pebblesnail (*Fluminicola seminalis*), Potem Creek pebblesnail (*Fluminicola potemicus*), Shasta pebblesnail (*Fluminicola multifarius*), and tall pebblesnail (*Fluminicola* n. sp. 2) as endangered or threatened, and to designate critical habitat, under the Endangered Species Act of 1973, as amended (Act). The Fredenburg pebblesnail and the Klamath Rim pebblesnail were referred to in the petition and in our 90-day finding (76 FR 61826) as the nerite pebblesnail and the diminutive pebblesnail, respectively (see *Clarification Regarding Common Names for Two Petitioned Aquatic Mollusks*, below). After review of the best available scientific and commercial information, we find that listing the basalt juga, cinnamon juga, Columbia duskysnail, Fredenburg pebblesnail, Klamath Rim pebblesnail, knobby rams-horn, masked duskysnail, and tall pebblesnail is not warranted at this time because these snails do not constitute listable entities under the Act (see Listable Entity Evaluation, below). We ask the public to submit to us new information that becomes available concerning the taxonomic status of these mollusks. We find that listing the canary duskysnail, Goose Valley pebblesnail, Hat Creek pebblesnail, nugget pebblesnail, Potem Creek pebblesnail, and Shasta pebblesnail is not warranted at this time. We ask the

public to submit to us new information that becomes available concerning threats to these mollusks.

**DATES:** The finding announced in this document was made on September 18, 2012.

**ADDRESSES:** This finding is available on the Internet at <http://www.regulations.gov> at Docket Number FWS-R8-ES-2011-0076. 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, Sacramento Fish and Wildlife Office, 2800 Cottage Way, Room W-2605, Sacramento, California 95825. Please submit any new information, materials, comments, or questions concerning this finding to the above address.

**FOR FURTHER INFORMATION CONTACT:** Listing Coordinator, U.S. Fish and Wildlife Service, Sacramento Fish and Wildlife Office (see **ADDRESSES**); by telephone at 916-414-6600; or by facsimile at 916-414-6712 *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:**

**List of Acronyms**

To assist the reader, the following is a partial list of acronyms that are used in this document.

ACS = Aquatic Conservation Strategy  
ANSTF = Aquatic Nuisance Species Task Force  
BNSF = Burlington Northern and Santa Fe  
CAL FIRE = California Department of Forestry and Fire Protection  
CBD = Center for Biological Diversity  
CDFG = California Department of Fish and Game  
CDPR = California Department of Parks and Recreation  
CNDDDB = California Natural Diversity Database  
DPS = distinct population segment  
FERC = Federal Energy Regulatory Commission  
FPA = Forest Practice Act  
FRRCD = Fall River Resource Conservation District  
IPCC = Intergovernmental Panel on Climate Change  
NBII = National Biological Information Infrastructure  
NWP = Northwest Forest Plan  
OHV = off-highway vehicle  
ORNHC = Oregon Natural Heritage and Information Center  
PDA = Public Domain Allotment  
PGE = Pacific Gas and Electric Company  
RCAs = Riparian Conservation Areas  
SHU = Shasta-Trinity Unit  
SMP = Survey and Manage Program  
SNFPA = Sierra Nevada Forest Plan Amendment

SPR = significant portion of the range  
SWRCB = State Water Resources Control Board  
THP = Timber Harvest Plan

**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 Threatened and Endangered Wildlife and Plants that contains substantial scientific or commercial information that listing a 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*

On March 17, 2008, we received a petition dated March 13, 2008, from five conservation organizations: The Center for Biological Diversity (CBD), Conservation Northwest, the Environmental Protection Information Center, the Klamath-Siskiyou Wildlands Center, and Oregon Wild. The petition asked us to list 32 species and subspecies of snails and slugs (mollusks) in the Pacific Northwest as threatened or endangered under the Act. Additionally, the petition requested that we designate critical habitat concurrent with listing. The petition clearly identified itself as a petition and included identification information regarding the petitioners, as required by title 50 of the Code of Federal Regulations (CFR) in 424.14(a). The petition included the 14 aquatic mollusk species addressed in this finding, and provided supporting information regarding the species' taxonomy and ecology, range, present status, and actual and potential causes of decline.

In a June 27, 2008, letter to the petitioners, we responded that we had reviewed the information presented in the petition and determined that issuing an emergency regulation temporarily

listing the species as per section 4(b)(7) of the Act was not warranted. We also stated that we could not address their petition at that time due to court orders and judicially approved settlement agreements for other listing and critical habitat determinations under the Act that required nearly all of our listing and critical habitat funding for fiscal years 2008 and 2009. We indicated that we anticipated making an initial finding on their petition in fiscal year 2010.

On April 13, 2009, we received a signed email from CBD providing updated taxonomic information regarding some of the 32 petitioned mollusk species (Curry 2009, pp. 1–2). The email indicated that two of the species had been formally described, two others had been combined into a single species that had been formally described, and three additional petitioned species had been combined into a single species that had been formally described. The email provided a citation to the article making the taxonomic changes, and asked us to consider the revised species for listing as endangered or threatened under the Act. We treated this email message as an amendment to the original petition. Therefore, the amended petition asked us to list 29 species and subspecies of mollusks, including the 14 aquatic species addressed here.

We addressed the petition as funding permitted beginning in late 2009, and published a 90-day finding on October 5, 2011 (76 FR 61826). We found that substantial scientific and commercial information had been presented in the petition and existed in our files to indicate listing may be warranted for 26 of the 29 petitioned mollusks. Fourteen of those 26 mollusks are aquatic and 12 are terrestrial. We have initiated a status review of the 14 aquatic mollusks, and present the results here. We intend to review the status of the remaining 12 terrestrial mollusks in fiscal year 2013. This notice constitutes our 12-month finding on the June 27, 2008, petition (as amended on April 13, 2009) to list 14 aquatic mollusks as endangered or threatened.

#### *Clarification Regarding Common Names for Two Petitioned Aquatic Mollusks*

The mollusks petitioned for listing included the “diminutive pebblesnail (*Fluminicola* n. sp. 3)” (CBD *et al.* 2008, pp. 9, 44) and the “nerite pebblesnail (*Fluminicola* n. sp. 11)” (CBD *et al.* 2008, pp. 9, 46). In our 90-day finding, which was limited in scope to information provided by the petition and available in our files, we noted that these mollusks were sometimes referred to by cited sources other than the

petition as the Klamath Rim pebblesnail and the Fredenburg pebblesnail, respectively (76 FR 61836, 61843). Information that we reviewed for this status review indicates that the only accepted common names for these mollusks are the Klamath Rim pebblesnail and the Fredenburg pebblesnail. The only sources that refer to these two mollusks by the common names used in the petition are the Oregon Natural Heritage and Information Center (ORNHC) (2004d, p. 1) for the diminutive pebblesnail, and ORNHC (2004j, p. 1) for the nerite pebblesnail. However, these must be incorrect rather than simply alternate common names because Frest and Johannes (the original discoverers of these snails) refer to all four named mollusks as separate species (Frest and Johannes 1993, pp. 46, 47, 49; Frest and Johannes 2000, pp. 181, 264, 267, 273).

They note that the Klamath Rim and Fredenburg pebblesnails are protected under the Survey and Manage Program (SMP) of the Northwest Forest Plan (NWFP) (see *Generally Applicable Federal Regulatory Mechanisms*, below), whereas the diminutive and nerite pebblesnails “should be” included in that program (Frest and Johannes 2000, pp. 264, 265, 268, 274). The petition only included mollusks that had been protected under the SMP (CBD *et al.* 2008, p. 12). An Environmental Impact Statement (EIS) on which we relied in our 90-day finding for information regarding occupied locations of various mollusks, identifies all the petitioned mollusks by their scientific names alone, without providing common names (for example, U.S. Department of Agriculture (USDA) and U.S. Department of the Interior (USDI) 2007, pp. 92, 251).

In the case of these two mollusks, the “scientific names” were provisional and subject to change in different documents (Frest and Johannes 1993, pp. 46, 49; Frest and Johannes 2000, pp. 264, 273) (see Listable Entity Evaluation, below). However, we have subsequently obtained the survey protocol for aquatic mollusk species under the SMP, and that document identifies *Fluminicola* n. sp. 3 and n. sp. 11 as the Klamath Rim and Fredenburg pebblesnails, respectively (Furnish *et al.* 1997, p. 29). It does not mention the diminutive or nerite pebblesnails, presumably because they were not protected by the SMP. Accordingly, in this document we will refer to the petitioned mollusk *Fluminicola* n. sp. 3 as the Klamath Rim pebblesnail and to the petitioned mollusk *Fluminicola* n. sp. 11 as the Fredenburg pebblesnail, rather than as

the diminutive and nerite pebblesnails, respectively.

#### **Listable Entity Evaluation**

Section 3(16) of the Act defines the term “species” to include “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.” Taxonomic groups or entities that meet the Act’s definition of a “species” can be considered for listing under the Act and are, therefore, referred to as “listable entities.” Listable entities can then be listed if they are determined to meet the definition of either an endangered or threatened species.

Of the 14 aquatic mollusks considered in this review, 8 have not been formally described as species or subspecies in a peer-reviewed journal, or in any other source commonly accepted by the scientific community. This is why they have provisional scientific names, including “new species” (or “n. sp.”) and a number, rather than accepted species names. Formal peer-reviewed description, with its opportunities for further review and comment, is the process by which proposed new species and subspecies become generally recognized or rejected by the taxonomic community. We must therefore evaluate whether the best available scientific and commercial information indicates that these eight mollusks constitute valid species, despite their lack of formal descriptions, for the purpose of determining whether the mollusks in question constitute listable entities (16 U.S.C. 1533(b)(3)(A) and (B)). It is rare for us to list entities that have not been formally described, but we have occasionally done so in the past. Examples include two fish: The Hutton tui chub (*Gila bicolor* ssp.) and Foskett speckled dace (*Rhinichthys osculus* ssp.) (50 FR 12302; March 28, 1985). In those instances, there was general agreement among biologists familiar with these fish that they constituted listable subspecies, and formal descriptions of the subspecies were in preparation. Additionally, if our determination of the status of these fish as valid subspecies had been incorrect, the fish would still likely have constituted distinct vertebrate population segments, and thus qualified as listable entities under section 3(16) of the Act. Mollusk populations are not listable entities, unless they also constitute valid species or subspecies, because the provision in section 3(16) allowing DPSs to be listed only applies to vertebrates (16 U.S.C. 1532(16)).

The eight aquatic mollusks reviewed here that have not been formally described are: Basalt juga, cinnamon juga, Columbia duskysnail, Fredenburg

pebblesnail, Klamath Rim pebblesnail, knobby rams-horn, masked duskysnail, and tall pebblesnail. Table 1 below summarizes basic taxonomic and

biological information for these purported species.

TABLE 1—BASIC BIOLOGY OF MOLLUSKS LACKING FORMAL DESCRIPTIONS

Common name	Description	Habitat	Known sites
Basalt juga.	Shell about 22 by 10 mm*; color bands of yellow, brown, pink, white, or tan (Frest and Johannes 1999, p. 85).	Small, gravelly springs with unpolluted water (Frest and Johannes 1995a, p. 179).	31 sites in Hood River, Sherman, and Wasco Counties, OR; and Klickitat and Skamania Counties, WA (BLM 2011, entire).
Cinnamon juga.	Shell about 15 by 8 mm; cinnamon red but can appear black in the field (Frest and Johannes 1999, p. 89).	Large cold springs and spring runs, with sand-cobble substrate or exposed basalt bedrock (Frest and Johannes 1999, p. 90).	8 sites in the Shasta Springs complex, upper Sacramento River, Siskiyou County, CA (Frest and Johannes 1999, p. 90).
Columbia duskysnail.	Shell about 1.7 by 1.4 mm; translucent, off-white, often with rust to black coating (Frest and Johannes 1999, p. 69).	Cold, shallow, well-oxygenated, slow-flowing springs and outflows with soft substrates. (Duncan 2005b, p. 10).	64 sites in Clackamas, Wasco, Hood River, and Multnomah Counties, OR; and Skamania County, WA (USDA and USDI 2007, p. 93).
Fredenburg pebblesnail.	Shell about 3 by 2.5 mm; white with greenish-yellow outer layer; white, sickle-shaped penis. (Frest and Johannes 1999, p. 29).	Small, shallow, cold spring runs with cobbled substrate (Frest and Johannes 1999, p. 30).	19 sites in Jackson County, OR. (Frest and Johannes 1999, p. 30; USDA and USDI 2007, p. 92).
Klamath Rim pebblesnail.	Shell about 2 by 2 mm; white with greenish-yellow outer layer; sickle-shaped penis (Frest and Johannes 1999, p. 25).	Shady areas in small, cold, shallow spring runs with gravel-cobble substrates and no large water plants (Frest and Johannes 1999, p. 26).	6 sites in southern OR and possibly northern CA (USDA and USDI 2007, pp. 92, 251).
Knobby rams-horn.	Shell about 6 by 6 mm; reddish-brown outer layer, keeled with ribs and protuberances (Frest and Johannes 1995b, p. 57; Frest and Johannes 1999, p. 98).	Rocky substrates in cold, clear water with high dissolved oxygen levels (Frest and Johannes 1999, p. 99).	2 sites in Shasta County, CA (USDA and USDI 2007, pp. 94, 268).
Masked duskysnail.	Shell described as up to 2 mm long (Frest and Johannes 1995a, p. 185) or as 3 to 5 mm long (Frest and Johannes 1999, p. 73); mask of black pigment on neck and around eyes (Frest and Johannes 1999, p. 73).	Cool-water kettle lakes with oxygenated mud substrates and aquatic plant growth (Duncan 2005e, p. 3).	3 to 4 sites at two lakes: Curlew Lake, Ferry County, WA, and Fish Lake, Chelan County, WA (Duncan 2005e, p. 3; USDA and USDI 2007, p. 94). Some indications of possible additional sites in ID and OR (ORNHIC 2004u, p. 1).
Tall pebblesnail.	Shell about 4.5 by 3 mm; conical, white with green outer layer; black body except for white, flanged penis (Frest and Johannes 1999, p. 21).	Very cold water and cobbled substrate (Duncan 2005b, p. 9).	1 site at Harriman Spring, Klamath County, OR (Duncan 2005b, p. 9; USDA and USDI 2007, p. 92).

\* mm = millimeter.

None of these eight aquatic mollusks are included in databases of recognized mollusk species, such as the Integrated Taxonomic Information System (ITIS) (2010), or Turgeon *et al.* (1998). All eight mollusks were first proposed as new species in an unpublished consultation report produced in 1993 (Frest and Johannes 1993, pp. 46, 49, 50, 59, 62, 67). These eight mollusks have been addressed in several subsequent documents (Frest and Johannes 1999, pp. 21–26, 29–30, 69–76, 85–90, 98–101; Furnish and Monthey 1999, Sections 2, 4, 5, entire; Frest and Johannes 2000, pp. 181, 264, 273, 274; ORNHIC 2004a, entire; ORNHIC 2004d, entire; ORNHIC 2004j, entire; ORNHIC 2004r, entire; ORNHIC 2004s, entire; ORNHIC 2004t, entire; ORNHIC 2004u, entire; ORNHIC 2004v, entire; Duncan 2005b, entire; Duncan 2005e, entire; USDA and USDI 2007, pp. 92–94, 250–252, 257–259, 268–269), but none of those documents provide peer-reviewed

evidentiary support of the mollusks' taxonomic distinctness. Although the eight mollusks have been treated by the U.S. Forest Service (USFS) and Bureau of Land Management (BLM) as distinct entities under the SMP of the Northwest Forest Plan (see Factor D, below), that program is not specifically restricted to species or subspecies, as is the Act when applied to invertebrates (16 U.S.C. 1532 (16)).

The unpublished descriptions of these eight mollusks are all primarily based on shell characteristics, with occasional mention of certain characters of the animals themselves (such as color). Snail shell characteristics in general can vary due to environmental influences including elevation, calcium content of the surrounding water, and population density (Minton and Lydeard 2003, p. 76; Chak 2007, p. 3). The informal descriptions lack genetic data, data regarding microscopic anatomical features such as the radula (tongue), and

photographs or drawings of anatomical features other than the shell. Such data are often highly distinctive, and are of key importance in formal descriptions (for example, Hershler *et al.* 2003, pp. 278–282; Hershler *et al.* 2007, pp. 407–419).

At the time the petition to list these aquatic mollusks was first submitted, only one of the petitioned mollusks (the nugget pebblesnail) had been formally described (CBD *et al.* 2008, p. 9). Since then, an additional five mollusks have been formally described and thereby established in the scientific community as valid species. These are the canary duskysnail, Goose Valley pebblesnail, Hat Creek pebblesnail, Potem Creek pebblesnail, and Shasta pebblesnail (Hershler *et al.* 2003, p. 278; Hershler *et al.* 2007, pp. 407, 409, 412, 415). For three of these recently described species (the canary duskysnail, Goose Valley pebblesnail, and Potem Creek pebblesnail), the formal descriptions

simply confirm the informal species designations under which they had been petitioned. However, the formal description of the Hat Creek pebblesnail combined into one species two of the petitioned mollusks that had previously been informally described as separate species (the umbilicate pebblesnail (*Fluminicola* n. sp. 19) and the Lost Creek pebblesnail (*Fluminicola* n. sp. 20)). Similarly, the formal description of the Shasta pebblesnail combined four mollusks that had previously been informally described as separate species (Hershler *et al.* 2007, p. 419)). Three of those had been petitioned for listing (CBD *et al.* 2008, p. 9): the flat-top, Shasta Springs, and disjunct pebblesnails (identified as *Fluminicola* n. sp. 3, 4, and 5 in Frest and Johannes 1995b, pp. 43, 44; but as *Fluminicola* n. sp. 15, 16, and 17 in Frest and Johannes 1999, pp. 39, 43, 47 and in CBD *et al.* 2008, p. 9). The fourth, the Sacramento pebblesnail (*Fluminicola* n. sp. 1) (Frest and Johannes 1995b, p. 42) had not been petitioned for listing and was not protected by the SMP (USDA and USDI 2007, pp. 92–94). In describing the Shasta pebblesnail, the authors noted the “[m]arked shell variation” of the species (Hershler *et al.* 2007, p. 419).

The primary reason for combining multiple informally described mollusks in the formal descriptions of the Hat Creek and Shasta pebblesnails was that new genetic comparisons had shown those informally described mollusks were not genetically divergent or phylogenetically independent (Hershler *et al.* 2007, p. 383). Such genetic comparisons have not yet been published for the remaining undescribed mollusks. This suggests the remaining but undescribed mollusks may also be determined by future taxonomic analyses to represent populations of larger-ranging species or subspecies. New taxonomic analyses are currently being conducted for a large number of provisionally identified species in the *Fluminicola* genus (Johannes 2011, p. 1). Additionally, the establishment of the Shasta pebblesnail as a single species, despite the marked differences in shell morphology among its various populations, indicates that shell morphology is a relatively poor indicator of species status for at least some of these mollusks.

Accordingly, we conclude that the eight mollusks that have not been formally described (as listed in Table 1, above) cannot be considered to be listable entities under the Act at this time, and, therefore, we will not further evaluate the status of these entities. These include the Basalt juga, cinnamon juga, Columbia dusksnail, Fredenburg

pebblesnail, Klamath Rim pebblesnail, knobby rams-horn, masked dusksnail, and tall pebblesnail. We, therefore, restrict the remainder of our listing status review to the six mollusks constituting listable entities under the Act. These are the canary dusksnail, the Goose Valley pebblesnail, the Hat Creek pebblesnail, the nugget pebblesnail, the Potem Creek pebblesnail, and the Shasta pebblesnail.

#### Generally Applicable Federal Regulatory Mechanisms

##### The Northwest Forest Plan

The Northwest Forest Plan (NWFP) is a set of amendments to the resource management plans for USFS and BLM lands within the range of the northern spotted owl (*Strix occidentalis caurina*) in western Washington, Oregon, and northwestern California (referred to below as NWFP lands) (USDA and USDI 1994a, pp. 11, 12). The NWFP was established to protect species commonly occurring in late-successional and old-growth forests, while also allowing for sustainable timber production (USDA and USDI 1994a, p. 3). The NWFP established several categories of land allocations and, with minor exceptions, restricted timber production to those areas designated as Matrix Lands (16 percent of the total) and to certain Adaptive Management Areas (6 percent of the total) (USDA and USDI 1994a, pp. 6, 7). The NWFP includes two subprograms designed to provide additional protections to specific resources on NWFP lands. The first subprogram is the Aquatic Conservation Strategy (ACS), which protects aquatic and riparian habitat. The second subprogram is the SMP, which protects numerous rare species associated with late-successional or old-growth forests that are not adequately protected by other provisions of the NWFP (USDA and USDI 1994a, pp. 9, 10; Olson *et al.* 2007, pp. 1, 2). The ACS and SMP are particularly applicable, in varying degrees, to the six listable aquatic mollusks considered here, and are discussed in more detail below.

##### The Aquatic Conservation Strategy

The ACS was established to protect and restore aquatic ecosystems on NWFP lands (USDA and USDI 1994b, p. B–11; Reeves *et al.* 2006, p. 320). The ACS includes four components: Riparian reserves, key watersheds, watershed analysis, and watershed restoration (USDA and USDI 1994a, pp. 9, 10). Of these, riparian reserves are the most significant conservation tool for the aquatic mollusks considered here. Riparian reserves include all aquatic

habitat (perennial and seasonal streams, lakes, ponds, and wetlands) on NWFP lands. Riparian reserves are managed to maintain and restore water quality, aquatic ecosystem physical integrity, instream flows, habitat connectivity, and other natural features of the protected riparian and aquatic habitat (USDA and USDI 1994b, pp. B–11, B–13). Activities with the potential to negatively affect natural features, such as logging, road construction and maintenance, grazing, recreation, mineral management, and fire management are closely regulated within the reserves (USDA and USDI 1994a, p. 9; USDA and USDI 1994b, pp. C–31—C–38).

Riparian reserves incorporate buffers of 100 to 300 feet (ft) (30.5 to 91.4 meters (m)) around these aquatic features (except for wetlands of less than 1 acre (ac) (0.4 hectares (ha)), which have buffers that extend to the limit of the associated riparian vegetation). The six listable aquatic mollusks considered in this review all occupy springs (including those forming lakes or ponds) and perennial streams, sometimes fish-bearing and sometimes not (a stream is considered fish bearing if it supports any species of fish for any duration of time) (USDA and USDI 1994b, p. B–14). When any of these six mollusks are on NWFP lands in lakes, ponds, or fish-bearing streams, they are protected by buffers extending outward 300 ft (91.4 m) from the streambanks, to the limit of riparian vegetation or to a distance equal to the height of two site-potential trees, whichever is greater (USDA and USDI 1994a, p. 9). “Site-potential tree height” refers to the expected height attainable by a mature conifer growing in the area (Kier Associates 2011a, p. 2). Average site-potential tree height for much of the Pacific Northwest is about 170 ft (51.8 m). When present in non-fish-bearing streams on NWFP lands, the six mollusks are protected by buffers of 150 ft (45.7 m) or equal to the height of one site-potential tree, whichever is greater. These boundaries may be modified based on subsequent watershed analysis (USDA and USDI 1994a, p. 10; USDA and USDI 1994b, p. B–13)).

The second component of the ACS, key watersheds, establishes specific watersheds to be given the highest priority in watershed restoration efforts (USDA and USDI 1994b, p. B–19). None of the key watersheds identified under the ACS are in the known current range of, or upstream from, any of the six aquatic mollusks that qualify as listable entities (REO 2006, p. 5). Accordingly, the key watersheds provision of the ACS does not affect the conservation of those

six mollusks, except if new locations of those species are identified within key watersheds in the future.

The third component of the ACS, watershed analysis, is a systematic procedure to collect information on and characterize watersheds on NWFP lands (USDA and USDI 1994b, pp. B-20—B-31). Watershed analysis must be conducted in key watersheds and roadless areas prior to management activities, in riparian reserves prior to changing reserve widths, and in any watershed prior to restoration efforts. Watershed analysis is recommended for all watersheds, and has been conducted on an ongoing basis since its inclusion in the NWFP (USDA 2009, p. 1). Analyses have been conducted for portions of the upper Sacramento River and lower McCloud River watersheds, which support occupied sites of the Shasta pebblesnail and nugget pebblesnail, respectively.

The final component of the ACS, watershed restoration, focuses primarily on restoring watershed aquatic habitat through the prevention of road-related runoff, restoration of riparian vegetation, and restoration of instream habitat complexity (USDA and USDI 1994b, p. B-31). The Shasta-Trinity and Lassen National Forests are currently planning or implementing several such watershed restoration projects (USDA 2012a, pp. 4, 5; USDA 2012b, pp. 3, 5), although none of the currently active projects involve locations near sites occupied by the mollusks addressed in this status review at the present time.

#### The Survey and Manage Program

The SMP, like the ACS, was established under the NWFP and is particularly applicable, in varying degrees, to the six listable aquatic mollusks considered here. The six mollusks were protected under the SMP (when on Federal lands subject to the NWFP), but the SMP program was discontinued in 2007 (USDA and USDI 2007, pp. xii, xiii; CBD *et al.* 2008, p. 5). The SMP was subsequently reinstated in accordance with a court-approved settlement agreement in 2011 (*Conservation Northwest v. Sherman 2011*, C08-1067-JCC, p. 2), and is being implemented in accordance with the 2001 Record of Decision. All of the aquatic mollusks petitioned in 2008 (both formally described and otherwise) are protected where they occur on NWFP lands (*Conservation Northwest v. Sherman 2011*, C08-1067-JCC, Document 81-2, pp. 6, 7). Refinements to the SMP in 2001 established six species categories with differing mitigation requirements based on the species' conservation status and on the

practicality of conducting predisturbance surveys (surveys conducted prior to habitat-disturbing projects) (Molina *et al.* 2006, p. 311, 312). Rare species for which predisturbance surveys are practical are in Category A. Thirteen of the 14 petitioned aquatic mollusks fall into this category, including all six of the listable mollusks (USDA and USDI 2007, pp. 92-94). The one exception among the petitioned aquatic mollusks is the knobby rams-horn (see Table 1, above), which is in Category E (rare, practicality of predisturbance surveys undetermined) (Molina *et al.* 2006, p. 312; USDA and USDI 2007, p. 94).

For Category A species, the SMP requires predisturbance, strategic surveys (conducted in areas not currently under consideration for habitat-disturbing projects), management of all known sites to support species persistence, and annual species reviews (Molina *et al.* 2006, p. 312; Olson *et al.* 2007, abstract). Numerous such surveys and several annual reviews have been completed (Molina *et al.* 2006, pp. 312-315; USDA and USDI 2001, entire; USDA and USDI 2002, entire; USDA and USDI 2003, entire). The process of continually collecting information through surveys, and of summarizing and updating the information in annual reviews, produces an adaptive management approach to guide conservation and mitigation measures for rare species associated with late-successional or old-growth forests (Olson *et al.* 2007, p. 2).

#### Summary of Procedures for Determining the Listing Status of Species

##### Review of Status Based on Five Factors

Section 4 of the Act (16 U.S.C. 1533) and implementing regulations (50 CFR part 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 these findings, we discuss information below pertaining to each

species in relation to the five factors provided in section 4(a)(1) of the Act. In considering what factors might constitute threats to a species, we must look beyond the simple exposure of the species to a particular factor. Instead we must 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, during the status review, 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 warrants listing as endangered or threatened as those terms are defined by the Act. However, the identification of factors that could impact a species negatively may not be sufficient to compel a finding that the species warrants listing. The information must include evidence sufficient to suggest that the potential threat has the capacity (is of sufficient magnitude and extent) to affect the species' status such that it meets the definition of endangered or threatened under the Act.

##### Distinct Population Segments

After considering the five factors, we assess whether each species is endangered or threatened throughout all of its range. Generally, we next consider in our findings whether a DPS or any significant portion of the species' range meets the definition of endangered or is likely to become endangered in the foreseeable future (threatened). The inclusion of DPSs in the definition of species under paragraph 3(16) of the Act only applies to vertebrate fish or wildlife. Therefore, our Policy Regarding the Recognition of Distinct Vertebrate Population Segments Under the Endangered Species Act (DPS Policy) (61 FR 4722; February 7, 1996) is not applicable to mollusks and no population segments under review could qualify as a DPS under the Act. Although our DPS Policy is not applicable to mollusks, we do determine in our findings whether a mollusk species is endangered or threatened in a significant portion of its range.

##### 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 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 a 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.

#### **Evaluation of the Status of Each of the Six Mollusk Species That Are Listable Entities**

For each of the six listable aquatic mollusk species considered, we provide a description of the species and its life history and habitat, an evaluation of listing factors, and our finding as to whether the petitioned action is warranted throughout its range. We then address whether the species may be considered endangered or threatened in any significant portion of its range.

#### **Canary Dusksnail (*Colligyrus convexus*)**

##### *Species Information for the Canary Dusksnail*

##### Taxonomy and Species Description

The canary dusksnail was formally named and described in 2003 (Hershler *et al.* 2003, p. 278). Prior to that it was referred to as “*Lyogyrus n. sp. 3*” (Frest and Johannes 1999, pp. 77–78; Hershler *et al.* 2003, p. 278; USDA and USDI 2007, pp. 93, 169), and also as “*Lyogyrus n. sp. 1*” (Frest and Johannes 1995b, p. 50). Although the canary dusksnail was considered to be in the Hydrobiidae family by earlier authors (Frest and Johannes 1995b, p. 50; Frest and Johannes 1999, p. 13), and was referred to as such in the listing petition (CBD *et al.* 2008, p. 9), it was placed in the family Amnicolidae when it was formally described (Hershler *et al.* 2003, p. 278). It is a small (1.4 to 1.9 millimeters (mm) 0.06 to 0.07 inches (in)), aquatic snail with a yellowish shell, sometimes with weakly striped markings on the whorls. It is distinguishable from the other two species in its genus by its smaller size, the highly convex whorls on the main part of its shell, and the waviness of the shell near the opening (Hershler *et al.* 2003, p. 278).

##### Distribution

The canary dusksnail is known from a total of 21 sites in Shasta County, California, including 9 along the lower Pit River (California Natural Diversity Database (CNDDB) 2012, pp. 1–5; Johannes 2012a, pp. 2–7; Pacific Gas and Electric Company (PGE) 2011, pp. 26, 37; Johannes 2012b, p. 11; PGE 2012, p. 27). Of those 21 sites, 7 are on Federal land covered by the NWFP, 1 is on an Indian Public Domain Allotment (PDA), 3 are in State parks, and 10 are on privately owned lands. Repeat site monitoring at eight of those sites (see Factor A, below) shows large shifts in population density and in presence or absence of canary dusksnails at any given site. Site locations fall into three broad areas: The lower Pit River and nearby Burney Creek (11 sites), Hat Creek (2 sites), and the upper Fall and Tule River area (8 sites).

##### Habitat and Biology

The canary dusksnail typically occurs in shallow water on the undersides of boulders and cobbles in pond springs and wetted areas near streambeds (the hyporheic zone) (Hershler *et al.* 2003, pp. 280, 284). It is most likely a grazer on perolithon, the community of small organisms such as

algae, protozoa, and bacteria growing underwater on stones (Frest and Johannes 1995b, p. 81; Furnish and Monthey 1999, Sect. 4, p. 9). It is most commonly found in areas lacking cover from aquatic plants, often in association with the Shasta crayfish (*Pacifastacus fortis*). It is found in, and is likely dependent on, water that is cold, clear, well-oxygenated, and unpolluted (Frest and Johannes 1995b, p. 3). It is often found in spring flows or in spring-influenced streams (Service 1998, p. 20; Frest and Johannes 1999, p. 78). The canary dusksnail is a short-lived species (1 to occasionally 2 years) that only reproduces once before dying (Frest and Johannes 1995b, p. 4; Furnish and Monthey 1999, Sect. 4, p. 7). Eggs are likely laid in the spring and hatch in 2 to 4 weeks (Furnish and Monthey 1999, Sect. 4, p. 7).

#### *Five-Factor Evaluation of Threats for the Canary Dusksnail*

##### Factor A. The Present or Threatened Destruction, Modification, or Curtailment of Its Habitat or Range Impoundments

Nine of the 21 occupied sites are in or along the lower Pit River below Lake Britton (PGE 2011, pp. 26, 37; Johannes 2012b, p. 11; PGE 2012 p. 27). PGE maintains three dams in this area: Pit 3, 4, and 5 (PGE 2010, p. 5). Each dam sends water from its associated reservoir through tunnels to power-generating stations located just above the reservoirs of the next dam downstream. Flows in the natural river channel below each dam (referred to as the Pit 3, 4, and 5 reaches) have in the past consisted primarily of water from springs and minor tributaries emptying below each dam. In 2007, however, the Pit 3, 4, and 5 dams were issued a new operating license that required increased releases of surface water from the reservoirs into their associated reaches (PGE 2010, p. 2). These releases have the potential to negatively impact the canary dusksnail because reservoir surface water tends to be warmer than spring or creek water (Ellis 2012, p. 1). Because the dams initially lacked the infrastructure to release the required amounts of instream water, the required amounts were not achieved until 2011 (PGE 2012, p. 1). In accordance with a facilities modification plan, interim flow releases of approximately half the required amounts were authorized for 2008 through 2010 while the flow release structures of the dams were improved (PGE 2010, pp. 1, 2).

PGE was also required by the relicensing requirements to conduct mollusk surveys in 2009, in 2011–2015,

in 2018, and every 4 years thereafter until the expiration of the license in 2043 (PGE 2012, p. 1). Following monitoring in 2009, PGE decided to monitor for mollusks in 2010 as well (PGE 2010, p. 54; PGE 2011, p. 1). Accordingly, we now have 3 years of survey data (2009–2011) for a total of 12 sites in the Pit River (four sites downstream of each dam) (PGE 2011, pp. 26, 37; PGE 2012, p. 27). The surveys found canary dusksnails at 8 of those 12 sites (as well as nugget pebblesnails at all 12 sites, as discussed below). A ninth site in the Pit River with canary dusksnails (as mentioned above) was not in a monitored location (Hershler *et al.* 2003, p. 280; CNDDDB 2012, p. 2; Johannes 2012a, p. 2).

Four of the eight monitored occupied sites are in the Pit 3 reach, which is the farthest upstream (PGE 2011, pp. 26, 37; PGE 2012, p. 27). During 2009, that reach also showed the lowest average water discharge rates, lowest average water temperatures, and produced the highest average densities of canary dusksnails, thus tending to support the idea that canary dusksnails benefit from lower discharge rates from the dams (PGE 2010, p. 35; PGE 2011, pp. 26, 37; PGE 2012, p. 27). However, as average water discharge rates increased in the Pit 3 reach from 150 cubic ft per second (cfs) in 2009 to 350 cfs in 2011, and as average water temperatures increased as well from approximately 60 to about 63 degrees Fahrenheit (°F) (15.4 to 17.2 degrees Celsius (°C)), canary dusksnail densities rose from 20 to 53 snails per square meter (16.7 to 44.3 snails per square yard) at one location (their highest density in the study), and dropped from 50 to 0 snails per square meter (41.8 to 0 snails per square yard) at another location. The populations thus showed strong fluctuations, with widely differing responses to increasing flows. Similarly, in the Pit 5 reach, 37 snails per square meter (30.9 snails per square yard) were found in 2011 (the year of highest flows) at a location that had supported no snails in the 2 previous years. All other occupied locations had comparatively low population densities, and only one of those showed a clear drop in population density over the 3-year monitoring period (from 4 to 0 snails per square meter (3.3 to 0 snails per square yard)). Therefore, we conclude there are no clear trends in observed survey data attributable to changes in flow releases from dams.

The only other occupied site potentially affected by an impoundment is at Baum Lake (CNDDDB 2012, p. 4; Johannes 2012a, pp. 4, 5), a PGE-owned reservoir on Hat Creek, just north of the

town of Cassel (Service 1998, pp. 20, 43). Abundant canary dusksnails were found at the site in 2001, under cobbles near the outflow of Crystal Lake, a spring-fed water body that abuts and empties into Baum Lake (CNDDDB 2012, p. 4; Johannes 2012a, pp. 4, 5). Although the best available information does not indicate the fate of that population, its presence in 2001 and the abundant number of individual snails found at that time suggest the impoundment of Baum Lake does not constitute a threat. Three other occupied sites (identified in the source material as locations 102, 412, and 514) are located on the margins of spring-fed natural lakes in water bodies draining into the Fall River (Johannes 2012a pp. 3, 6), so the species is capable of surviving in slow-moving lake waters fed by nearby springs.

#### Water Quality

The Pit River is considered a water-quality limited segment for 198 kilometers (km) (123 miles (mi)) upstream of Shasta Lake; including the locations of all nine canary dusksnail sites known from the Pit River (State Water Resources Control Board (SWRCB) 2010a, p. 164). Nutrients from cattle defecation and fertilizers applied in the course of agriculture enter the Pit River, where they promote algal growth that decreases oxygen levels and increases water temperature. However, as discussed above with respect to impoundments, the only population trend data available for the canary dusksnail does not show clearly decreasing populations, despite any temperature increases or oxygen decreases that may be attributable to water quality.

PGE will continue to monitor mollusk populations annually as discussed above (PGE 2012, p. 1), so if impacts from Pit water quality or from the releases themselves do develop, they should be detected. The operating license for the dams includes an adaptive management plan for responding to negative impacts detected by the monitoring program (PGE 2008, pp. 3–6). The Service serves on the Technical Review Group which recommends specific adaptive management responses (PGE 2008, p. 2), and so will remain informed of the effectiveness of those responses. Seven of the nine occupied locations on the Pit River are on Federal land (either Shasta-Trinity National Forest or Lassen National Forest) within the area covered by the NWFP. Activities on those lands with the potential to affect water quality (or to affect the populations directly) would have to meet the requirements of the SMP and the ACS, as discussed

above. For instance, logging or road construction in the vicinity of the Pit River or its tributaries (on Federal lands within the NWFP area) would be subject to buffers for riparian reserves established under the ACS as well as predisturbance surveys and mitigation as required by the SMP.

There are no locations occupied by canary dusksnails on the Pit River upstream of the Pit 3 dam at Lake Britton. However, there are two locations each on Burney Creek and Hat Creek, which both flow into Lake Britton. The remaining eight canary dusksnail locations are in the Fall River drainage, generally at the headwater springs (Service 2012a, p. 1). Neither Burney Creek nor Hat Creek is considered water-quality limited (SWRCB 2010a, entire; SWRCB 2010b, entire; SWRCB 2010c, entire). However, the Fall River is affected by sedimentation extending far enough upstream to reach the southernmost of the eight sites in the drainage occupied by canary dusksnails (SWRCB 2010a, p. 148; SWRCB 2011, p. 2). The sedimentation was caused by historical land management activities, and is not likely to constitute a threat to the other sites (Fall River Resource Conservation District (FRRCD) 2005, pp. 1–3; SWRCB 2010a, p. 148).

A final area with impaired water quality is Eastman Lake, at the headwaters of the Little Tule River, a tributary of the Fall River (SWRCB 2010a, p. 148; SWRCB 2011, p. 1). One canary dusksnail site (514) is located at the lake, while two others (102, 263) are just upstream of the inlet (Johannes 2012a, pp. 3, 4, 6). At an average pH of 8.64, the lake water is slightly more alkaline than the established water quality objective range of 6.5 to 8.5 (SWRCB 2010d, pp. 6, 7). The reason for the increased alkalinity is unknown, as is the optimal pH range for the canary dusksnail. However, acidic waters (pH 5 and below) can interfere with shell production, so freshwater snails are generally found in waters that are at least somewhat alkaline (Wyoming Game and Fish Department (WGFD) 2005, p. 548).

#### Other Habitat-Related Impacts

Grazing, spring diversions, road construction, and railroad construction have all been mentioned as possible threats to the canary dusksnail (Furnish and Monthey 1999, Sect. 4, p. 14; Service 2011, p. 61831). However, since the time of Furnish and Monthey's conclusions in 1999, the number of known locations has increased from 2 to 21, 10 of which are on protected State or Federal lands (Furnish and Monthey

1999, Sect. 4, pp. 10, 11; Johannes 2012a, pp. 2–7; Johannes 2012b, p. 11; PGE 2011, pp. 26, 37; PGE 2012 p. 27). The SMP (discussed above) has also been reinstated on Federal lands subject to the NWFP. Various habitat improvement measures have been carried out in the upper Fall River drainage, where the majority of occupied sites on private land are located (FRRCD 2005, pp. 1–3). Habitat improvements include exclusion fencing to keep cattle from streambanks, bank stabilization projects, and the replacement and upgrade of a railroad crossing that had collapsed twice in the past (producing extensive siltation on those occasions) (FRRCD 2005, p. 2; Ellis and Haley 2012, p. 1). Landowners also took steps to reduce the potential for serious wildfires and to prevent erosion of sediment from a nearby meadow (FRRCD 2005, p. 3). In Hat Creek, grazing has been eliminated in the general vicinity of the PGE dams since 2001 (Stewardship Council 2007, Vol. 2, p. PM–31). Grazing has also been eliminated from lands surrounding the two privately owned sites occupied by canary dusksnails in the lower Pit River. Forestry has been eliminated in areas near those sites conducted in accordance with a conservation plan developed and implemented by a nonprofit land-management corporation (see *Grazing and Logging* under Nugget Pebblesnail, below) (Stewardship Council, Vol. 2, pp. PM 38, 40, 41, 48, 50).

The Shasta crayfish is a federally endangered species that shares essentially the same native range and habitat requirements as the canary dusksnail (Service 2009, pp. 4–6). The two species often co-occur at the same locations (Hershler *et al.* 2003, p. 280). When we listed the Shasta crayfish in 1988, we identified grazing, pollution, and water use for residential development as threats to the species (Service 1988, p. 38463). In our 2009 review of the species' status, however, we determined those practices no longer constitute significant impacts to the species (Service 2009, p. 9).

#### Summary of Factor A

In summary, no clear population trends in response to habitat modifications are evident at any of the sites occupied by canary dusksnails, including the eight sites monitored by PGE. The release of additional Pit River waters from the dams under PGE's new licensing agreements does not appear to have resulted in adverse effects on downstream canary dusksnail populations. We also know of no occupied sites that have been

permanently lost due to habitat modifications, although population fluctuations at some of the monitored sites included densities of zero during some years. No cause of the fluctuations at the monitored sites was evident. We therefore conclude, based on the best available scientific and commercial data, that the present or threatened destruction, modification or curtailment of its habitat or range does not constitute a significant threat to the species now or in the future.

#### Factor B. Overutilization for Commercial, Recreational, 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 occur in the future. We therefore conclude such overutilization does not constitute a threat to the canary dusksnail.

#### Factor C. Disease or Predation Disease

We reviewed the best available scientific and commercial information regarding this species and other similar species, and found no evidence to indicate that disease is impacting canary dusksnail populations.

#### Predation

There is the potential for increased predation on canary dusksnails due to the introduction of the signal crayfish (*Pacifastacus leniusculus*) into the mid-Pit River drainage in the late 1970s, and its subsequent expansion throughout the area during the 1990s and early 2000s (Ellis 1999, pp. 12, 57, 58; Service 2009, p. 10). The signal crayfish, which is native to Oregon, Washington, and more coastal portions of northwest California, is a faster growing, faster reproducing relative of the Shasta crayfish, with a greater tolerance for warmer water (Ellis 1999, pp. 2, 9, 12, 13; Service 2009, p. 9; PGE 2011c, p. 25). The signal crayfish now occurs in all the general locations occupied by the canary dusksnail (Service 2009, pp. 5, 10; PGE 2011b, pp. 4, 10, 23) and is a generalist feeder with a diet that very likely includes aquatic snails (Lorman and Magnuson 1978, p. 9; Ellis 1999, pp. 55, 56).

Experiments conducted with another species of crayfish in Wisconsin indicate that dense crayfish populations can significantly impact prey populations, including aquatic snails (Lorman and Magnuson 1978, p. 9). However, the best available scientific and commercial information does not

indicate how dense crayfish populations must generally be in order to impact populations of aquatic snails. The best available scientific and commercial information does not provide data on population density trends for crayfish and aquatic snails at the same locations. Although PGE conducted both crayfish and mollusk surveys at various locations in the Pit 4 reach, the surveyed sites did not overlap (PGE 2010, p. 7, PGE 2011b, p. 4). Crayfish were surveyed at foothill yellow-legged frog breeding sites, and one such site (Canyon Creek 45.8) appears to overlap a surveyed mollusk site referred to as Malinda Ridge by mollusk surveyors. However, Canyon Creek 45.8 was one of the frog breeding sites at which conditions did not allow crayfish surveys (due to risk of injuring frog eggs) (PGE 2011b, pp. 10, 21–23).

We do know that average densities of signal crayfish remained at 3 per square meter in the Pit 4 reach from 2008 through 2011 (PGE 2011b, p. 10, PGE 2012b, p. 9), despite increasingly large releases of warmer surface water from reservoirs during those years (PGE 2010, p. 35; PGE 2011, p. 24; PGE 2011b, p. iii; PGE 2012, p. 24) that might be expected to have benefitted signal crayfish (Service 2009, p. 9). Although average densities remained steady during the monitoring period, maximum densities of signal crayfish decreased from 14 to 7 per square meter (PGE 2011b, p. 10; PGE 2012b, p. 9). The sampled averages of 3 per square meter are very close to the average densities of 2.85 crayfish per square meter estimated for the native Shasta crayfish at Lava Creek (upper Fall River drainage) in 1990 (Ellis 1999, p. 58), and therefore suggest that they are close to the native crayfish densities with which the canary dusksnail evolved. The crayfish density surveys at Pit 4 reach also provide some evidence to suggest that signal crayfish densities are remaining stable in that area, despite warmer water temperatures from increased flows of reservoir surface water.

The evidence also does not support the possibility that, in areas occupied by canary dusksnails, populations of signal and Shasta crayfish might overlap to produce unusually high combined crayfish densities. The known range of the Shasta crayfish does not extend into Burney Creek or the lower Pit River (below Lake Britton) (Service 2009, pp. 3–5), so the 11 canary dusksnail sites in those areas are only subject to potential impacts from signal crayfish. Two general areas that support canary dusksnails are known to support both species of crayfish: The upper Fall River drainage and the area around Baum

Lake on Hat Creek (Service 2009, p. 9; Johannes 2012a, pp. 2–7). Monitoring has shown that the occupied locations within these general areas may support relatively high numbers of Shasta crayfish, or of signal crayfish, but not of both (Service 2009, p. 9). As signal crayfish numbers increase at a given location, the numbers of Shasta crayfish drop dramatically (Ellis 1999, pp. 57, 58).

Hence, the available evidence does not support the contention that signal crayfish are present in the range of the canary dusksnail in sufficiently high densities to pose a predation risk to the canary dusksnail, either by themselves or in combination with the native Shasta crayfish. Furthermore, the information does not indicate any trend in the densities of the two crayfish that would lead us to a conclusion that the predation risk would increase in the future.

We therefore conclude, based on the best available scientific and commercial information, that neither disease nor predation constitutes a significant threat to the species now or in 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 \* \* \*”. We interpret this language to require the Service to consider relevant Federal, State, and Tribal laws and regulations when developing our threat analyses. Regulatory mechanisms, if they exist, may preclude the need for listing if we determine that such mechanisms adequately address the threats to the species such that listing is not warranted. The analysis of threats to the canary dusksnail under the other factors included consideration of the ameliorative effects of regulatory mechanisms where applicable, such as those discussed under Factor A and under *Generally Applicable Federal Regulatory Mechanisms*, above.

Having evaluated the significance of the threat as mitigated by any such conservation efforts, we analyze under Factor D the extent to which existing regulatory mechanisms are inadequate to address the specific threats to the species. We found no significant threats to the canary dusksnail under the other factors, therefore, the analysis of any existing regulatory mechanisms’

adequacy to address threats is not applicable. Consequently, after reviewing the best available commercial and scientific information, we conclude that the inadequacy of existing regulatory mechanisms is not a threat to the canary dusksnail now or in the future.

#### Factor E. Other Natural or Manmade Factors Affecting Its Continued Existence

##### Competition With Invasive Species

New Zealand mudsnails (*Potamopyrgus antipodarum*) are 4 to 6 mm (0.12 to 0.24 in) aquatic snails that are extremely prolific and can reach densities of hundreds of thousands per square meter in waters outside their native New Zealand (National Biological Information Infrastructure (NBII) 2011, pp. 1, 2). They are carried to new areas on boots, fishing equipment, boats, or in the digestive systems of birds and fish, and are capable of colonizing locations with a wide variety of substrates, temperatures, and currents (NBII 2011, pp. 1–3). In the western United States, New Zealand mudsnail populations typically consist almost entirely of parthenogenic (asexually reproducing) females born with embryos already developing in their reproductive systems (NBII 2011, p. 4; Crosier and Molloy, undated, p. 1).

New Zealand mudsnails typically eat detritus (decaying organic matter), diatoms (a type of plankton), and periphyton (essentially the same as perolithon except on underwater surfaces of vascular plants rather than rock surfaces) (Frest and Johannes 1995b, p. 81; NBII 2011, p. 4). Although they reach their highest numbers in areas with numerous vascular water plants, they can also dominate areas that lack such plants (Hall *et al.* 2006, pp. 1122, 1126), indicating they eat perolithon as necessary. As discussed above, perolithon is likely the primary food source of the canary dusksnail (Furnish and Monthey 1999, Sect. 4, p. 9). One study found that New Zealand mudsnails reached higher numbers in areas with stable hydrological flows and relatively warm water temperatures (averaging 18 °C (64.4 °F) as compared to an average 6 °C (42.8 °F) in their native New Zealand) (Hall *et al.* 2006, p. 1128). As discussed below under *Changes in Precipitation and Water Availability Due to Climate Change*, the springs with which canary dusksnails are associated tend to be highly stable in flow (Service 1998, p. 46). Average summer water temperatures for 2009 through 2011 measured in the lower Pit River near sites occupied by canary

duskysnails ranged from 17.1 to 19.9 °C (62.8 to 67.8 °F) (PGE 2012, p. 24). Sites supporting canary duskysnails are thus not ideal for New Zealand mudsnails due to the lack of vascular plants, but they do provide favorable flow and temperature characteristics that could facilitate the growth and competitive ability of any New Zealand mudsnail populations that became established at those sites.

Because of their high reproductive rate, wide habitat tolerance, and few effective parasites or predators outside of their native waters, New Zealand mudsnails are capable of outcompeting most native aquatic snails for food and space (NBII 2011, pp. 1, 2). They are extremely difficult to eradicate once established (NBII 2011, p. 3, 4).

In 2007, New Zealand mudsnails became established at the Bridge Bay Marina on Shasta Lake near Interstate 5 (United States Geological Survey (USGS) 2009a, pp. 1, 2; USGS 2009b, p. 1; McAlexander 2012a, p. 1). The aerial distance between that location and the nearest known site occupied by the canary duskysnail is about 48 km (30 mi). If the New Zealand mudsnail were to colonize multiple areas occupied by the canary duskysnail, it could become a serious threat to the species. However, the likelihood that such a scenario will occur is very uncertain. In 2011, six additional New Zealand mudsnail locations were found in the north-central California area, but population levels were low and all sites were on the Sacramento River (USGS 2009b, p. 1; USGS 2011, p. 40; McAlexander 2012a, p. 1). Five of those sites are downstream of the Bridge Bay Marina, while one is upstream at Castle Lake (USGS 2009b, p. 1; McAlexander 2012b, p. 1). No populations have so far been found in any tributary rivers or streams, such as the Pit River. The California Department of Fish and Game (CDFG) is following a national management and control plan (Aquatic Nuisance Species Task Force (ANSTF) 2007, entire) and has posted information and brochures about the New Zealand mudsnail on its Web site, including printable posters and wallet cards (CDFG undated, p. 1).

Although there is no recognized method for assessing the risk of New Zealand mudsnail establishment in a given area at a given time (ANSTF 2007, p. 17), we consider Lake Britton to be the location within the range of the canary duskysnail currently at greatest danger of infestation. Lake Britton supports a marina, boat launch, and fishery, borders a state park, and is easily accessed from State Highway 89 (Stewardship Council, Vol. 2, pp. PM-37-39). In contrast, vehicle access to the

Pit 4 reservoir is more difficult, and boating is not currently allowed (Stewardship Council, Vol. 2, pp. PM-48, PM-49). Thus, if a boat inadvertently carrying New Zealand mudsnails were to be towed from the Bridge Bay Marina to some body of water in the range of the canary duskysnail, the most likely such location would be Lake Britton. However, virtually the entire extent of the canary duskysnail's range supports fisheries (Stewardship Council, Vol. 2, pp. PM-21, PM-31, PM-49), so it would be possible for New Zealand mudsnails to be carried on fishing waders from an infested fishing spot (presumably farther downstream on the Sacramento River, rather than at the Bridge Bay Marina itself) to almost anywhere in the range (NBII 2011, p. 3; Emery 2012, p. 1).

Once established at one location within the range of the canary duskysnail, the likelihood of infestation at other such locations would increase. However, to compete directly with canary duskysnails, the New Zealand mudsnail would have to establish itself at the canary duskysnail's occupied locations. The New Zealand mudsnail tends to have a spotty distribution, apparently governed to a large extent by where colonizing individuals are deposited by various vectors (USGS 2009b, p. 1; Emery 2012, p. 1). For the New Zealand mudsnail to be a threat to the canary duskysnail, first it would have to colonize somewhere within the range (probably Lake Britton), then it would have to establish so many additional colonies that a large percentage of canary duskysnail sites were overlapped. Then, it would have to outcompete the canary duskysnails at those sites and the canary duskysnails would have to be unable to establish themselves at different sites. All these stages are likely to require several years, if they happen at all. Currently the available information indicates there is no infestation at Lake Britton or at any locations occupied by the canary duskysnail. Accordingly, we do not consider competition from New Zealand mudsnails to be a threat to the canary duskysnail at this time.

#### Fire

A large high-severity fire could potentially impact canary duskysnails by removing ground cover (Robichaud undated, pp. 2, 4), thereby allowing silt to wash into occupied springs and streams. Silt can degrade water quality, cover the perolithon on which canary duskysnails feed, and could also smother canary duskysnail eggs (Furnish and Monthey 1999, Sect. 4, pp. 9, 14; Robichaud undated, p. 3). For the

nine occupied sites in the Pit River below Lake Britton, siltation would be expected to collect in the Pit 3, 4, and 5 reservoirs, and to wash out of the river portions below each dam fairly quickly due to required flow releases established by the dam operating requirements (see Impoundments, above). The remaining 12 sites are spread out over 3 major areas, with 8 sites in the upper Fall River watershed, and 2 each in Burney Creek (in McArthur-Burney Falls State Park), and Hat Creek (near Cassel, CA). The closest distances between these locations range from 12 km (7.5 mi) (Burney Creek to Hat Creek) to 20 km (12.4 mi) (upper Fall River to Hat Creek). A fire would have to be extremely large and precisely positioned to encompass two such areas. Additionally, the occupied sites along the lower Pit River and in upper Fall River watershed are likely to benefit from fire prevention and fuel reduction activities conducted by the Shasta-Trinity National Forest (USDA 2012a, pp. 1-15, 17-19), the Lassen National Forest (USDA 2012b, pp. 1, 3-7, 9-12), and by landowners in the upper Fall River watershed (FRRCD 2005, p. 3).

#### Changes in Precipitation and Water Availability Due to Climate Change

Our analyses under the Endangered Species 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 (for example, habitat fragmentation) (IPCC 2007, pp. 8-14, 18-19). In our analyses, we use our expert judgment to weigh relevant information, including uncertainty, in our consideration of various aspects of climate change.

Climate change is not expected to significantly change total precipitation in northern California, but may affect seasonal water availability in some areas due to changes in snowpack melting times and the proportion of precipitation falling as rain rather than snow (Dettinger *et al.* 2004, pp. 43, 44). However, the water supplying springs occupied by the canary dusksnail in the middle Pit River drainage (including the upper Fall River area) and in Hat Creek are collected from wide areas in the Medicine Lake highlands and Lassen volcanic highlands, respectively (Service 1998, p. 18). Rain and snowmelt in those areas percolate through porous volcanic rocks to collect in large aquifers, thereby holding extra water from seasons when rain is plentiful and delivering it through springs during seasons when rain is not plentiful. Resulting spring flows are highly stable in volume, temperature, and clarity (Service 1998, p. 46). Accordingly, we do not expect changes in precipitation or water availability due to climate change to significantly affect the species.

#### Summary of Factor E

In summary, the canary dusksnail is protected from expected changes in precipitation or water availability due to climate change by the particular characteristics of its habitat. Although potential competition from the New Zealand mudsnail is cause for concern, no site currently occupied by canary dusksnail has been colonized and there is nothing to indicate the New Zealand mudsnail will colonize any of the multiple locations occupied by the canary dusksnail. There is also no direct evidence to show that any such occupied locations would be extirpated by such a colonization were it to occur. The two species are not known to have interacted in the past. We therefore conclude that, based on the best available scientific and commercial information, that other natural or manmade factors such as competition from the New Zealand mudsnail, changes in precipitation or water availability due to climate change, or fire do not constitute significant threats to the canary dusksnail now or in the future.

#### Finding for the Canary Dusksnail

We have carefully assessed the best scientific and commercial information available regarding the past, present, and future threats faced by the canary dusksnail. We reviewed the petition, available published and unpublished scientific and commercial information, and information submitted to us during

our status review. This finding reflects and incorporates that information. We also consulted with recognized authorities on this species, and we consulted with Federal and State resource agencies. Although only 21 occupied sites are known for the canary dusksnail, the best available scientific and commercial information does not clearly indicate that populations at any site are in decline, or that any sites are likely to be lost due to impoundments, water quality, other habitat-related impacts, overutilization, disease or predation, the inadequacy of existing regulatory mechanisms, competition with invasive species, or fire, now or in the foreseeable future. The best available scientific and commercial information at this time does not indicate that there is likely to be a change in any of these stressors in the future. Three years of data from an ongoing monitoring study found extreme fluctuations in population density numbers at certain sites, but did not indicate the fluctuations were in response to threats, or likely to lead to permanent local extirpation. New Zealand mudsnails could be a threat to canary dusksnails if they become established in their range, but we have no information to indicate whether that will happen in the foreseeable future or the extent of New Zealand mudsnail impact if they do become established in the range of the canary dusksnail.

Based on our review of the best available scientific and commercial information pertaining to the five factors, we find that the threats as described above, either alone or in combination are not of sufficient imminence, intensity, or magnitude to indicate that the canary dusksnail is in danger of extinction (endangered) or likely to become endangered within the foreseeable future (threatened), throughout all of its range.

#### Significant Portion of the Range

Having determined that the canary dusksnail is not endangered or threatened throughout all of its range, we must next consider whether there are any significant portions of the range where the canary dusksnail is in danger of extinction or is likely to become endangered in the foreseeable future. See *Significant Portion of the Range* under Summary of Procedures for Determining the Listing Status of Species.

We evaluated the current range of the canary dusksnail to determine if there is any apparent geographic concentration of potential threats for the species. The canary dusksnail is highly restricted in its range and the threats

occur throughout its range. We considered the potential threats due to impoundments, water quality, other habitat-related impacts, overutilization, disease or predation, the inadequacy of existing regulatory mechanisms, competition with invasive species, and fire. We found no concentration of threats that suggests that the canary dusksnail may be in danger of extinction in a portion of its range. We found no portions of its range where potential threats are significantly concentrated or substantially greater than in other portions of its range. Therefore, we find that factors affecting the species are essentially uniform throughout its range, indicating no portion of the range of the species warrants further consideration of possible endangered or threatened status under the Act.

We find that the canary dusksnail is not in danger of extinction now, nor is likely to become endangered within the foreseeable future, throughout all or a significant portion of its range. Therefore, listing the canary dusksnail as endangered or threatened under the Act is not warranted at this time.

#### Goose Valley Pebblesnail (*Fluminicola anserinus*)

##### *Species Information for the Goose Valley Pebblesnail*

##### Taxonomy and Species Description

The Goose Valley pebblesnail was formally named and described in 2007 (Hershler *et al.* 2007, p. 409). Prior to 2007, it was referred to as the globular pebblesnail, "*Fluminicola* n. sp. 18" (Frest and Johannes 1993, p. 52; Frest and Johannes 1999, pp. 51–52; Furnish and Monthey 1999, Sect. 2, p. 6; CBD *et al.* 2008, p. 49). It was assigned a different provisional scientific name ("*Fluminicola* n. sp. 6") by Frest and Johannes (1995b, p. 44), although it remained the "globular pebblesnail" as referred to in that source. Although pebblesnails in general (*Fluminicola* genus) had previously been considered part of the Hydrobiidae family (Hershler *et al.* 2003, p. 275), they have since been reassigned to the Lithoglyphidae family (Hershler *et al.* 2007, p. 371).

The Goose Valley pebblesnail is a small aquatic snail, roughly 2 to 3.5 mm (0.08 to 0.14 in) tall, with about 3.25 to 3.75 major whorls (Hershler *et al.* 2007, pp. 372, 410–412). Its head is dark brown, while the periostracum (outer layer) is tan or light green. It is similar in appearance to the Potem Creek pebblesnail (described below), but has a larger shell aperture with a more reinforced periphery (among other

differences) (Furnish *et al.* 1997, p. 48; Hershler *et al.* 2007, pp. 409, 410).

#### Distribution

The Goose Valley pebblesnail is known from a total of 13 locations, 2 in the upper Sacramento River drainage in Siskiyou County, California (Frest and Johannes 1995b, pp. T12, A6, B24), and 11 (after accounting for overlap from different sources) in the lower Pit River drainage, Shasta County, California (Frest and Johannes 1995b, pp. T13, A7; Hershler *et al.* 2007, pp. 376, 409, 410; Haley 2012a, p. 3). Further review has indicated that the Siskiyou County sites must be considered unconfirmed (Johannes 2012c, pp. 1–4).

The type locality for the Goose Valley pebblesnail is a spring on the west side of Goose Valley, about 10 km (6.3 mi) east of the crossing of Highways 89 and 299, and about 6.5 km (4 mi) from the Pit River (Hershler *et al.* 2007, p. 409). All other occupied sites in the drainage are in the valley formed by the Pit River itself. Nine sites are in springs along the Pit 4 reach (below Pit 4 dam) on Shasta-Trinity National Forest land in the NWFP area (Hershler *et al.* 2007, pp. 376, 409, 410; Haley 2012a, p. 3). The 11th site is upstream, in a spring on private land near Lake Britton (Hershler *et al.* 2007, pp. 376, 409, 410). The unconfirmed sites in the upper Sacramento River drainage are located in springs somewhat east of the river and north of Mossbrae Falls (Frest and Johannes 1995b, pp. T12, A6, B24). Those sites also support Shasta pebblesnails (discussed below).

#### Habitat and Biology

The Goose Valley pebblesnail occurs in springs and spring-fed habitats, generally on the sides and undersides of stones in shaded areas with few water plants (Frest and Johannes 1999, p. 52; Spring Rivers 2001, p. 22). It is likely to be a perolithon grazer (Furnish *et al.* 1997, p. 31; Frest and Johannes 1999, p. 52). We have no specific information regarding the reproduction of this species, but members of the *Fluminicola* genus typically live a single year and breed only once (Furnish and Monthey 1999, Sect. 2, p. 5; ORNHIC 2004, p. 2). They generally lay eggs in the spring, which hatch in 2 to 4 weeks. They are not known to disperse widely, and are highly sensitive to water pollution, decreases in dissolved oxygen, elevated temperatures, and sedimentation (Furnish and Monthey 1999, Sect. 2, pp. 5, 7; Hershler *et al.* 2007, p. 372).

#### Five-Factor Evaluation of Threats to the Goose Valley Pebblesnail

##### Factor A. The Present or Threatened Destruction, Modification, or Curtailment of Its Habitat or Range

###### Impoundments

Although 9 of the 11 known occupied sites are downstream of the Pit 4 dam, the sites consist of springs or spring-fed creeks near the Pit River and thus physically removed from any warmer high-water flows released by the dams (Hershler *et al.* 2007, pp. 376, 409, 410; Haley 2012a, p. 3). A tenth occupied site is near Lake Britton, at 878 m (2,880 ft) elevation (Hershler *et al.* 2007, p. 409). The lake surface is lower than 841 m (2,759 ft) when full, and we are not aware of any plans to raise the level of the lake. The final occupied location, at Goose Valley, is not influenced by dams. Therefore, we conclude the habitat of the Goose Valley pebblesnail is not currently at risk of modification due to impoundments nor do we expect it to be so in the future.

###### Agriculture

The type locality is a spring on the edge of Goose Valley, the floor of which is completely converted to agriculture. The site is within 50 m (164 ft) of converted land, but it is separated by Goose Valley Road, and is on sloped and forested terrain. The limits of the converted land have not changed since at least 2001, and the occupied site is on land zoned as unclassified, whereas the valley floor is zoned as exclusive agriculture and agricultural preserve (Shasta County 2003, p. 1; Shasta County 2012, p. 1). The best available scientific and commercial information does not indicate that the quality of the site has been damaged by its proximity to converted agricultural lands over the past decade, nor is there any indication that the location of the spring itself is likely to be converted to agriculture. None of the other occupied locations are near agricultural lands.

###### Diversions and Grazing

In our 90-day finding, we indicated that diversions of spring water for agricultural and other uses, and grazing in and around occupied locations, were potential threats. However, these conclusions were largely based on generalized information for the mid and lower Pit River area (Hershler *et al.* 2003, p. 277) and the upper Sacramento River (ORNHIC 2004e, p. 2), where we now know no occupied locations exist (see Distribution, above). Nine of the 11 known sites in the Pit River drainage are within the NWFP area on the Shasta-Trinity National Forest and, as such, are

protected by the SMP and ACS (see *Generally Applicable Federal Regulatory Mechanisms*, above). Proposed diversions or grazing practices at those locations would have to take into account the buffer requirements established by the ACS riparian reserves, as well as the survey and mitigation requirements of the SMP. We are not aware of evidence suggesting any such practices are occurring on Shasta-Trinity National Forest land.

In summary, although the type locality is close to agricultural land, most occupied locations are near flows influenced by dams, and diversions and grazing occur within the larger geographic area occupied by the species, a review of the best available scientific and commercial information does not indicate that any of these factors are negatively impacting any populations of Goose Valley pebblesnails. We therefore conclude that the present or threatened destruction, modification or curtailment of its habitat or range does not constitute a significant threat to the species now or in the future.

##### Factor B. Overutilization for Commercial, Recreational, 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 occur in the future. We therefore conclude such overutilization does not constitute a threat to the Goose Valley pebblesnail.

##### Factor C. Disease or Predation

###### Disease

We reviewed the best available scientific and commercial information regarding this species and other similar species, and found no evidence to indicate that disease is impacting Goose Valley pebblesnail populations.

###### Predation

There is a potential for increased predation on Goose Valley pebblesnails due to the establishment of the signal crayfish in the mid and lower Pit River drainage (Ellis 1999, pp. 12, 57, 58; Service 2009, p. 10). As discussed above with regard to the canary dusksnail, signal crayfish predation can significantly impact mollusk populations when the crayfish are at high densities (Lorman and Magnuson 1978, p. 9). The known Goose Valley pebblesnail sites do not overlap the current range of the Shasta crayfish, so only the signal crayfish poses a potential predation impact. The only

information we have regarding crayfish densities applies to the Pit 4 reach and does not indicate that crayfish densities at that location are either particularly high (as compared to populations of native crayfish at other locations) or increasing (Ellis 1999, p. 58; PGE 2011b, pp. iii, 10; PGE 2012b, p. 9). Hence, the available evidence does not support the contention that signal crayfish are present in the range of the Goose Valley pebblesnail in sufficiently high densities to pose a predation risk to the Goose Valley pebblesnail. Furthermore, the information does not indicate any trend in the densities of the signal crayfish that would lead us to a conclusion that the predation risk would increase in the future.

We therefore conclude, based on the best available scientific and commercial information, that neither disease nor predation constitutes a significant threat to the species now or in 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 \* \* \*". We interpret this language to require the Service to consider relevant Federal, State, and Tribal laws and regulations when developing our threat analyses. Regulatory mechanisms, if they exist, may preclude the need for listing if we determine that such mechanisms adequately address the threats to the species such that listing is not warranted. The analysis of threats to the Goose Valley pebblesnail under the other factors included consideration of the ameliorative effects of regulatory mechanisms where applicable, such as those discussed under Factor A and under *Generally Applicable Federal Regulatory Mechanisms*, above.

Having evaluated the significance of the threat as mitigated by any such conservation efforts, we analyze under Factor D the extent to which existing regulatory mechanisms are inadequate to address the specific threats to the species. We found no significant threats to the Goose Valley pebblesnail under the other factors, therefore, the analysis of any existing regulatory mechanisms' adequacy to address threats is not applicable. Consequently, after reviewing the best available commercial and scientific information, we conclude that the inadequacy of existing

regulatory mechanisms is not a threat to the Goose Valley pebblesnail now or in the future.

#### Factor E. Other Natural or Manmade Factors Affecting Its Continued Existence

##### Competition With Invasive Species

An invasion by the New Zealand mudsnail into the lower Pit River drainage could constitute a serious threat to the Goose Valley pebblesnail due to competition for food and space (see canary dusksnail, above). However, we found no information to indicate New Zealand mudsnails are currently in the lower Pit River, nor did we find specific information to indicate the likelihood of an invasion by New Zealand mudsnails in the near future. Additionally, the occupied spring at Goose Valley would be less likely to be colonized by the New Zealand mudsnail because it drains into Goose Valley, where it is used for agriculture, rather than into the Pit River, which is visited by boaters and fishermen who may inadvertently transport the mudsnail from previously visited sites.

##### Changes in Precipitation and Water Availability Due to Climate Change

See our discussion of climate change in general in the *Changes in Precipitation and Water Availability Due to Climate Change* section under "Factor A" in *Five-Factor Evaluation of Threats for the Canary Dusksnail*. Climate change is not expected to significantly change total precipitation in northern California, but may affect seasonal water availability in some areas due to changes in snowpack melting times and the proportion of precipitation falling as rain rather than snow (Dettinger *et al.* 2004, pp. 43, 44). However, the water supplying springs occupied by the Goose Valley pebblesnail in the middle Pit River drainage is collected from wide areas in the Medicine Lake highlands (Service 1998, p. 18). Rain and snowmelt in those areas percolate through porous volcanic rocks to collect in large aquifers, thereby holding extra water from seasons when rain is plentiful and delivering it through springs during seasons when it is not. Resulting spring flows are highly stable in volume, temperature, and clarity (Service 1998, p. 46). Similarly, the size of the aquifer that supplies the water for the Goose Valley spring is estimated at approximately 18 square km (7 square mi) (CDWR 2003, p. 1). All occupied locations of the Goose Valley pebblesnail are in springs or small spring-fed streams, rather than in the

main current of the Pit River, and so are likely to be protected from temperature and flow variations by the springs' stable flows. Accordingly, we do not expect changes in precipitation or water availability due to climate change to significantly affect the species.

##### Fire

Fire could potentially affect Goose Valley pebblesnails by increased siltation due to the accumulation of ash or subsequent erosional deposition of soil in their springs or streams. However, most siltation should clear relatively quickly from the four occupied locations in the lower Pit River drainage, because the flow rates for those locations are high (Haley 2012b, p. 1). Biologists working on mollusk surveys in the lower Pit River both before and after the Shasta-Trinity Unit (SHU) Lightning Complex Fire of early August 2009 (PGE 2010, p. 13) did not consider the impacts to nearby springs and streams to be serious or lasting (Ellis and Haley 2012, p. 1). A search of fire data archived by the California Department of Forestry and Fire Protection (CAL FIRE) and extending back to 2003, indicates that the SHU Lightning Complex Fire, at 17,623 ac (7,132 ha) (CAL FIRE 2009, p. 1) was the largest in Shasta County on record (Service 2012, p. 1). Future Shasta County fires are therefore likely to be smaller than the SHU Lightning Complex Fire, and to have smaller impacts (such as less siltation from the accumulation of ash). Since the SHU Lightning Complex fire did not produce serious impacts to Goose Valley pebblesnail habitats, smaller fires would not be expected to either.

##### Summary of Factor E

In summary, the Goose Valley pebblesnail is protected from likely impacts of climate change and fire by the particular characteristics of its habitat. Although potential competition from the New Zealand mudsnail is cause for concern, no site currently occupied by Goose Valley pebblesnail has been colonized, and there is nothing to indicate the New Zealand mudsnail will colonize multiple locations occupied by the Goose Valley pebblesnail. There is also no direct evidence to show that any such occupied locations would be extirpated by such a colonization, were it to occur. The two species are not known to have interacted in the past. We therefore conclude, based on the best available scientific and commercial information, that other natural or manmade factors such as competition from the New Zealand mudsnail, changes in

precipitation or water availability due to climate change, or fire do not constitute significant threats to the Goose Valley pebblesnail now or in the future.

#### *Finding for the Goose Valley Pebblesnail*

We have carefully assessed the best scientific and commercial information available regarding the past, present, and future threats faced by the Goose Valley pebblesnail. We reviewed the petition, available published and unpublished scientific and commercial information, and information submitted to us during our status review. This finding reflects and incorporates that information. We also consulted with recognized authorities on this species and Federal and State resource agencies. Although only 11 occupied sites are known for the Goose Valley pebblesnail, a review of the best available information does not indicate that populations at any site are in decline, or that any sites are likely to be lost due to impoundments, agriculture, diversions and grazing, overutilization, disease or predation, the inadequacy of existing regulatory mechanisms, competition with invasive species, changes in precipitation and water availability due to climate change, or fire, now or in the foreseeable future. The best available scientific and commercial information at this time does not indicate that there is likely to be a change in any of these stressors in the future.

Based on our review of the best available scientific and commercial information pertaining to the five factors, we find that the threats as described above, either alone or in combination, are not of sufficient imminence, intensity, or magnitude to indicate that the Goose Valley pebblesnail is in danger of extinction (endangered) or likely to become endangered within the foreseeable future (threatened), throughout all of its range.

#### Significant Portion of the Range

Having determined that the Goose Valley pebblesnail is not endangered or threatened throughout all of its range, we must next consider whether there are any significant portions of the range where the Goose Valley pebblesnail is in danger of extinction or is likely to become endangered in the foreseeable future. See *Significant Portion of the Range* under Summary of Procedures for Determining the Listing Status of Species.

We evaluated the current range of the Goose Valley pebblesnail to determine if there is any apparent geographic concentration of potential threats for the

species. The Goose Valley pebblesnail is highly restricted in its range and the threats occur throughout its range. We considered the potential threats due to impoundments, agriculture, diversions and grazing, overutilization, disease or predation, the inadequacy of existing regulatory mechanisms, competition with invasive species, changes in precipitation and water availability due to climate change, and fire. We found no concentration of threats that suggests that the Goose Valley pebblesnail may be in danger of extinction in a portion of its range. We found no portions of its range where potential threats are significantly concentrated or substantially greater than in other portions of its range. Therefore, we find that factors affecting the species are essentially uniform throughout its range, indicating no portion of the range of the species warrants further consideration of possible endangered or threatened status under the Act.

We find that the Goose Valley pebblesnail is not in danger of extinction now, nor is likely to become endangered within the foreseeable future, throughout all or a significant portion of its range. Therefore, listing the Goose Valley pebblesnail as endangered or threatened under the Act is not warranted at this time.

#### **Hat Creek Pebblesnail (*Fluminicola umbilicatus*)**

##### *Species Information for the Hat Creek Pebblesnail*

##### Taxonomy and Species Description

The Hat Creek pebblesnail is an aquatic snail that was formally named and described in 2007 (Hershler *et al.* 2007, p. 407). This species combines two taxa previously considered likely species but never formally described, the umbilicate pebblesnail (*Fluminicola* n. sp. 19) (Frest and Johannes 1999, p. 55) and the Lost Creek pebblesnail (*Fluminicola* n. sp. 20) (Frest and Johannes 1999, pp. 55, 59). The shell of the Hat Creek pebblesnail is subglobose (rounded top) to ovate conic (egg shaped top), and ranges from 2.1 to 5.4 mm (0.08 to 0.2 in) tall, with 3.25 to 4.5 major whorls (Hershler *et al.* 2007, p. 409). The periostracum can be tan, brown, or light green. The head is dark brown to almost black. Adult Hat Creek pebblesnails are somewhat unusual among *Fluminicola* species in having a visible open space near the opening of the shell, called an umbilicus, around which the whorls wrap (Frest and Johannes 1999, pp. 55, 58).

##### Distribution

The Hat Creek pebblesnail is known from five locations in the upper Hat Creek watershed, Shasta County, close to the intersection of State Highways 44 and 89. The locations fall into two groups, one of which centers on Hat Creek itself and the other on nearby Lost Creek. Lost Creek disappears into a lava tube, and is presumed to connect to Hat Creek (ORNHC 2004f, p. 1). The groups are roughly 13 km (8 mi) apart, and the furthest distance of occupied locations within each group is roughly 1 km (0.6 mi). One occupied location in each group is on Lassen National Forest land, while the others are on private inholdings within the general boundaries of the National Forest.

##### Habitat and Biology

The Hat Creek pebblesnail appears limited to cold water springs and spring runs (Frest and Johannes 1999, pp. 56, 60). It occurs on sand-gravel substrates, and on water plants such as watercress (genus *Nasturtium*, formerly *Rorippa*) and brooklime (*Veronica* sp.). It grazes on perolithon and periphyton. We have no specific information regarding the reproduction of this species, but members of the *Fluminicola* genus typically live a single year and breed only once (Furnish and Monthey 1999, Sect. 4, p. 7 and Sect. 6, p. 4; ORNHIC 2004f, p. 2). They generally lay eggs in the spring, which hatch in 2 to 4 weeks. They are not known to disperse widely, and are highly sensitive to water pollution, decreases in dissolved oxygen, elevated temperatures, and sedimentation (Furnish and Monthey 1999, Sect. 4, pp. 7, 8).

##### *Five-Factor Evaluation of Threats to the Hat Creek Pebblesnail*

Factor A. The Present or Threatened Destruction, Modification, or Curtailment of Its Habitat or Range

##### Timber Production

Lassen National Forest plans to reduce fuel loads by removing small conifers upstream of the two southernmost sites occupied by Hat Creek pebblesnails (Burton 2012, p. 1). Such operations, if not carefully conducted, could potentially remove shading foliage and collapse riverbanks, thereby causing siltation and increased water temperatures that could impact Hat Creek pebblesnails downstream. However, the operations will take place in Riparian Conservation Areas (RCAs, discussed below), and are subject to protective regulations likely to prevent serious habitat impacts. In keeping with these regulations, the fuel reduction projects will proceed with a minimum

of disturbance, and conifers will be cut by hand to avoid unnecessary use of heavy machinery near the stream (Burton 2012, p. 1).

#### Timber Production—Protective Regulatory Mechanisms

The Sierra Nevada Forest Plan Amendment (SNFPA)—The SNFPA is a set of amendments to the resource management plans of national forests in the Sierra Nevada and Modoc Plateau areas of California (USDA 2004, p. 15). The SNFPA applies to those portions of the Lassen National Forest not covered by the NWFP, including the two areas within the National Forest occupied by Hat Creek pebblesnails. The SNFPA includes a sub-program called the Aquatic Management Strategy (AMS), which establishes RCAs around perennial streams and other hydrological or topographic depressions, such as ponds and springs (USDA 2004, pp. 32, 42). Activities within the RCAs require site-specific analyses to ensure the activity conforms to several riparian conservation objectives (USDA 2004, p. 33). Those objectives include maintaining or restoring geomorphic and biological characteristics of special aquatic features and ensuring that activities enhance or maintain physical and biological characteristics associated with aquatic and riparian-dependent species. Although they also include provisions for improving habitat, such improvements are subject to funding and may take time to address situations in which habitat has already been impacted, such as recreational vehicle impacts upstream of the occupied sites on Hat Creek.

#### Grazing

The two occupied sites on Hat Creek are not near grazed areas, but two of the three occupied sites on Lost Creek are on private land in a location that is subject to grazing (Burton 2012, p. 1). The third Lost Creek site is on ungrazed land in the Lassen National Forest, about 0.64 km (0.4 mi) downstream from the grazed area. Cattle grazing in and around streams can trample banks and riparian vegetation, resulting in wider, shallower, muddier, and less shaded waters (Meehan and Platts 1978, pp. 275–276; Stephenson and Street 1978, p. 152; Kauffman and Krueger 1984, p. 432). If such impacts were to occur in the vicinity of the sites occupied by Hat Creek pebblesnails, they could threaten the snail populations, which (as discussed under Habitat and Biology, above) are highly sensitive to water pollution, decreases in dissolved oxygen, elevated

temperatures, and sedimentation. However, the stream in the area of the occupied sites is protected from cattle by a combination of fencing, brush, and rocks (Suarez 2012, p. 1). Cattle are typically driven across the stream twice per year, but the substrate at the crossing site is primarily rock, so the stream bed suffers little trampling damage.

#### Impoundments

The two occupied sites on Hat Creek are not near impoundments, but the three occupied sites on Lost Creek are downstream of one small impoundment and upstream from another, with approximately 2.5 km (1.5 mi) of perennial stream between the two reservoirs (Burton 2012, p. 1). There is some potential for increases in water temperatures in the Lost Creek occupied sites due to releases from the upper reservoir. However, the small upstream reservoir exposes relatively little still surface water to the sun as compared to the much larger Pit 3, 4, and 5 reservoirs, and so is less likely to produce significantly higher downstream temperatures (see Impoundments, under Canary Dusksnail, above). Both the upstream reservoir and the water below it in Lost Creek support coldwater fish such as rainbow trout (Burton 2012, p. 1).

The downstream reservoir is over 200 m (650 ft) from the nearest occupied location. The downstream dam includes an overflow outlet, so the reservoir is unlikely to back up during high flows and inundate sites occupied by Hat Creek pebblesnails.

#### Recreation

An area about 4.8 km (3 mi) long along Hat Creek, upstream of the occupied sites, has been heavily impacted by off-highway vehicle (OHV) use in and around the creek (Burton 2012, p. 1). Impacts at the OHV site include crushed riparian vegetation and collapsed stream banks, resulting in increased siltation and potentially higher temperatures. However, the nearest site occupied by the Hat Creek pebblesnail is a spring off the side of Hat Creek (Hershler *et al.* 2007, p. 407), while the other occupied site in the area is farther downstream in Hat Creek, approximately 2 km (1.2 mi) from the edge of the recreational area and 2.6 km (1.6 mi) from the area of primary impact. Because of distance to the second site, and spring flows from the first, sediment and increased temperatures produced by upstream recreational use would be unlikely to significantly affect either occupied site.

There is no evidence of OHV impacts at the spring.

Accordingly, although timber management, grazing, impoundments, and OHV use all occur in the general vicinity of occupied sites, the best available evidence indicates they are not impacting occupied habitat. We therefore conclude, based on the best available scientific and commercial information, that the present or threatened destruction, modification or curtailment of its habitat or range does not constitute a significant threat to the species now or in the future.

#### Factor B. Overutilization for Commercial, Recreational, 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 occur in the future. We therefore conclude such overutilization does not constitute a threat to the Hat Creek pebblesnail.

#### Factor C. Disease or Predation Disease

We reviewed the best available scientific and commercial information regarding this species and other similar species, and found no evidence to indicate that disease is impacting Hat Creek pebblesnail populations.

#### Predation

Predation by the introduced signal crayfish could threaten Hat Creek pebblesnail populations if the signal crayfish were present in sufficiently high densities (see canary dusksnail, above). However, we have no direct evidence that either signal or Shasta crayfish are present in the upper portions of Hat Creek or Lost Creek. The closest area for which we have signal crayfish density information is the middle Pit River, where densities were roughly equal to native crayfish densities as measured in the upper Fall River (Ellis 1999, p. 58; PGE 2011b, pp. iii, 10; PGE 2012b, p. 9). Hence, the available evidence does not support the contention that signal crayfish are present in Hat or Lost Creeks in sufficiently high densities to pose a predation risk to the Hat Creek pebblesnail. Furthermore, the information does not indicate any trend in the densities of either crayfish that would lead us to a conclusion that the predation risk would increase in the future.

We therefore conclude, based on the best available scientific and commercial

information, that neither disease nor predation constitutes a significant threat to the species now or in 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...”. We interpret this language to require the Service to consider relevant Federal, State, and Tribal laws and regulations when developing our threat analyses. Regulatory mechanisms, if they exist, may preclude the need for listing if we determine that such mechanisms adequately address the threats to the species such that listing is not warranted. The analysis of threats to the Hat Creek pebblesnail under the other factors included consideration of the ameliorative effects of regulatory mechanisms where applicable, such as those discussed under Factor A and under *Generally Applicable Federal Regulatory Mechanisms*, above.

Having evaluated the significance of the threat as mitigated by any such conservation efforts, we analyze under Factor D the extent to which existing regulatory mechanisms are inadequate to address the specific threats to the species. We found no significant threats to the Hat Creek pebblesnail under the other factors, therefore, the analysis of any existing regulatory mechanisms’ adequacy to address threats is not applicable. Consequently, after reviewing the best available commercial and scientific information, we conclude that the inadequacy of existing regulatory mechanisms is not a threat to the Hat Creek pebblesnail now or in the future.

#### Factor E. Other Natural or Manmade Factors Affecting Its Continued Existence

##### Competition With Invasive Species

New Zealand mudsnails are not currently known to occur within the range of the Hat Creek pebblesnail (Lost Creek and upper Hat Creek). If New Zealand mudsnails were to become established in those areas, they would likely compete with Hat Creek pebblesnails for food and space (see canary dusksnail, above). Typically, New Zealand mudsnails establish themselves in new areas after being transported on boating or angling

equipment (ANTSF 2005, p. 1). Upper Hat Creek and Lost Creek are popular fishing destinations, but lack boating facilities, so the likelihood of New Zealand mudsnail infestation in these areas may be somewhat lower than for areas in the canary dusksnail’s range that support both fishing and boating, such as Lake Britton.

##### Changes in Precipitation and Water Availability Due to Climate Change

See our discussion of climate change in general in the *Changes in Precipitation and Water Availability Due to Climate Change* section under “Factor A” in *Five-Factor Evaluation of Threats for the Canary Dusksnail*. Climate change is not expected to significantly change total precipitation in northern California, but may affect seasonal water availability in some areas due to changes in snowpack melting times and the proportion of precipitation falling as rain rather than snow (Dettinger *et al.* 2004, pp. 43, 44). However, the water supplying springs emptying into Lost Creek and upper Hat Creek are collected from wide areas in the Lassen volcanic highlands (Service 1998, p. 18). Rain and snowmelt in those areas percolate through porous volcanic rocks to collect in large aquifers, thereby holding extra water from seasons when rain is plentiful and delivering it through springs during seasons when it is not. Resulting spring flows are highly stable in volume, temperature and clarity (Service 1998, p. 46). Accordingly, we do not expect changes in precipitation or water availability due to climate change to significantly affect the species.

##### Catastrophic Events—Highway Spill

Spills from tank trucks carrying chemicals, such as pesticides or gasoline, on State Highway 44 near the two occupied sites on Hat Creek could potentially impact the Hat Creek pebblesnails at those sites. Chemical spills can eliminate pebblesnail populations (see discussion of Chemical Spills under Nugget Pebblesnail (*Fluminicola seminalis*), below). However, the more upstream of the two occupied sites is in a spring near the creek (Hershler *et al.* 2007, p. 407), and the highway pulls away from the creek upstream of that location, so a tanker spill would have to occur directly above that site in order to significantly impact the pebblesnail population there. The highway runs close to the creek from that point to the second occupied site, a distance of about 1.2 km (0.75 mi), so a spill somewhere along that stretch might impact the second site. We are not aware of any previous spills within

that region, however, and we consider the likelihood of a major chemical spill within that relatively small area to be low.

##### Summary of Factor E

We find that neither highway spills, competition with the New Zealand mudsnail, nor changes in precipitation or water availability due to climate change are a threat to the Hat Creek pebblesnail. Although a chemical spill off the highway could potentially impact up to two locations, the likelihood of such an event is extremely low. No site occupied by the Hat Creek pebblesnail has been colonized by the New Zealand mudsnail and the lack of boating opportunities makes invasion by the mudsnail less likely. The springs supplying Hat and Lost Creeks are resistant to the fluctuations in temperature and water availability associated with predicted climate changes. We therefore conclude that, based on the best available scientific and commercial information, that other natural or manmade factors as described above, do not constitute significant threats to the Hat Creek pebblesnail now or in the future.

##### Finding for the Hat Creek Pebblesnail

We have carefully assessed the best scientific and commercial information available regarding the past, present, and future threats faced by the Hat Creek pebblesnail. We reviewed the petition, available published and unpublished scientific and commercial information, and information submitted to us during our status review. This finding reflects and incorporates that information. We also consulted with recognized authorities on this species and Federal and State resource agencies. Although only five occupied sites are known for the Hat Creek pebblesnail, a review of the best available data does not indicate that populations at any site are in decline, or that any sites are likely to be lost due to timber production and management, grazing, impoundments, recreation, overutilization, disease or predation, the inadequacy of existing regulatory mechanisms, competition with invasive species, changes in precipitation and water availability due to climate change, or catastrophic events such as highways spills, now or in the foreseeable future. The best available scientific and commercial information at this time does not indicate that there is likely to be a change in any of these stressors in the future.

Based on our review of the best available scientific and commercial information pertaining to the five factors, we find that the threats as

described above, either alone or in combination are not of sufficient imminence, intensity, or magnitude to indicate that the Hat Creek pebblesnail is in danger of extinction (endangered) or likely to become endangered within the foreseeable future (threatened), throughout all of its range.

#### Significant Portion of the Range

Having determined that the Hat Creek pebblesnail is not endangered or threatened throughout all of its range, we must next consider whether there are any significant portions of the range where the Hat Creek pebblesnail is in danger of extinction or is likely to become endangered in the foreseeable future. See *Significant Portion of the Range* under Summary of Procedures for Determining the Listing Status of Species.

We evaluated the current range of the Hat Creek pebblesnail to determine if there is any apparent geographic concentration of potential threats for the species. The Hat Creek pebblesnail is highly restricted in its range and the threats occur throughout its range. We considered the potential threats due to timber production and management, grazing, impoundments, recreation, overutilization, disease or predation, the inadequacy of existing regulatory mechanisms, competition with invasive species, changes in precipitation and water availability due to climate change, and catastrophic events such as highways spills. We found no concentration of threats that suggests that the Hat Creek pebblesnail may be in danger of extinction in a portion of its range. We found no portions of its range where potential threats are significantly concentrated or substantially greater than in other portions of its range. Therefore, we find that factors affecting the species are essentially uniform throughout its range, indicating no portion of the range of the species warrants further consideration of possible endangered or threatened status under the Act.

We find that the Hat Creek pebblesnail is not in danger of extinction now, nor is likely to become endangered within the foreseeable future, throughout all or a significant portion of its range. Therefore, listing the Hat Creek pebblesnail as endangered or threatened under the Act is not warranted at this time.

#### Nugget Pebblesnail (*Fluminicola seminalis*)

##### *Species Information for the Nugget Pebblesnail*

##### Taxonomy and Species Description

The nugget pebblesnail was first described as *Palludina seminalis* in 1842 (Hershler and Frest 1996, p. 15). After undergoing several name changes, it was redescribed as *Fluminicola seminalis* in 1996 (Hershler and Frest 1996, p. 15). It has a globose to broadly conical shell with 4 to 4.5 whorls (Frest and Johannes 1995b, p. 49; Hershler and Frest 1996, p. 16). The shell can be tan, brown, or light green, and has a large opening. Its distinguishing features, as compared to other pebblesnails, include (among other features) its relatively large size (about 6 to 8 mm (0.24 to 0.31 in), thick periostracum, and thin parietal lip (on the side of the opening toward the inside of the whorls) (Hershler *et al.* 2007, p. 405). The snail itself is black with a pale gray head (Hershler and Frest 1996, p. 16). Although pebblesnails in general (*Fluminicola* genus) had previously been considered part of the Hydrobiidae family (Hershler *et al.* 2003, p. 275), they have since been reassigned to the Lithoglyphidae family (Hershler *et al.* 2007, p. 371).

##### Distribution

The nugget pebblesnail is known from approximately 44 occupied sites in Shasta, Lassen, and Tehama Counties. The sites can be grouped into five general areas: The mid and lower Pit River and nearby tributaries including Hat Creek; the upper Fall River drainage; Ash Creek (a tributary of the upper Pit River in Lassen County); the McCloud River near Lake Shasta; and Battle Creek, along the Shasta-Tehama County boundary. The majority of known sites (37 of 44) are in the mid and lower Pit River and upper Fall River areas. The local abundance of this snail at occupied sites can be high (Frest and Johannes 1995b, p. 50).

The nugget pebblesnail was formerly widespread in the upper Sacramento River above Lake Shasta, but was apparently extirpated from the entire region in 1991 due to the Cantara Spill, in which a railcar containing the herbicide metam sodium derailed and spilled its contents into the river (Frest and Johannes 1995b, pp. 13, 50; Hershler and Frest 1996, p. 16; ORNHIC 2004k, p. 1).

##### Habitat and Biology

The nugget pebblesnail prefers gravel-boulder substrate and clear, cold,

flowing water, but has been found on soft substrate in a few very large spring pools (Frest and Johannes 1995b, p. 50). It is a riparian associate, apparently grazes on perolithon and periphyton, and possibly on fine particles of detritus as well (Frest and Johannes 1993, p. 54; Furnish *et al.* 1997, p. 31). We have no specific information regarding the reproduction of this species, but members of the *Fluminicola* genus typically live a single year and breed only once (Furnish and Monthey 1999, Sect. 3, p. 4; ORNHIC 2004f, p. 2). They generally lay eggs in the spring, which hatch in 2 to 4 weeks. They are not known to disperse widely, and are sensitive to water pollution, decreases in dissolved oxygen, elevated temperatures, and sedimentation (Furnish and Monthey 1999, Sect. 3, pp. 5, 8).

##### *Five-Factor Evaluation of Threats to the Nugget Pebblesnail*

##### Factor A. The Present or Threatened Destruction, Modification, or Curtailment of Its Habitat or Range Impoundments

Thirteen of the 44 occupied sites are in or along the lower Pit River below Lake Britton (Hershler *et al.* 2007, p. 405; Haley 2012a, p. 3; PGE 2011, pp. 26, 37; PGE 2012 p. 27). Twelve of those 13 sites were monitored by PGE from 2009 through 2011, in accordance with the 2007 relicensing requirements for the Pit 3, 4, and 5 dams (see canary dusksnail, above). Flow releases from the dams for 2009 and 2010 were at interim levels (higher than in previous years but lower than the final levels required by the relicensing agreements (PGE 2010, pp. 1, 2). Flow releases had reached their final required levels in 2011 and are expected to remain at those levels thereafter.

Increased flows from dams may negatively impact nugget pebblesnails by raising water temperatures (see canary dusksnail, above) (Ellis 2012, p. 1). As average flows increased from 2009 to 2011, average temperatures did in fact go up, and average density of nugget pebblesnails decreased at the four locations monitored in the Pit 3 reach (PGE 2010, p. 35; PGE 2011, pp. 24, 26, 37; PGE 2012, pp. 24, 27). Average densities of nugget pebblesnails likewise decreased each year over the 3-year period at each of four sites in the Pit 5 reach. However, average water temperatures in the Pit 5 reach were highest in 2009 at one of those locations, highest in 2010 at another location, and remained essentially unchanged at a third location. This may be due to variations in air temperature

across the 3 years (PGE 2010, p. 35; PGE 2011, p. 24; PGE 2012, p. 24). In the Pit 4 reach, there was a varied response, with July surveys showing an overall average increase in nugget pebblesnail density from 2009 to 2011, and August surveys showing a (smaller) overall decrease. Thus, increased water temperatures and increased flows were closely correlated with decreased population densities in the Pit 3 reach, but not in the Pit 4 or 5 reaches.

Despite any decreases, nugget pebblesnails remained common throughout the three survey years, and no sites were extirpated (PGE 2011, pp. 26–37; PGE 2012, p. 27). Average densities in 2009 ranged from 240 to 4,970 snails per square meter, while in 2011 they ranged from 10 to 5,058 snails per square meter. The nugget pebblesnail was also the most common aquatic snail in each of the three areas surveyed in 2009 (PGE 2010, p. 41), whereas, in the following 2 years it was the most common in the Pit 3 and Pit 4 reaches, but the second-most common in the Pit 5 reach (PGE 2011, p. 29; PGE 2012, p. 28). Accordingly, while the current data from PGE surveys indicate that increased flow releases may have impacted the nugget pebblesnail in at least some of their lower Pit River sites, high densities of nugget pebblesnails persist in all three reaches despite these impacts. We therefore do not consider the existing data to indicate that increased flows are likely to threaten the continued existence of the nugget pebblesnail in the area. PGE will continue to monitor mollusk populations, so any significant declines in nugget pebblesnail populations should be detected promptly (PGE 2012, p. 1).

Four sites in the lower Hat Creek watershed also are potentially affected by dams. Two of these are in Baum Lake near the outflow of Crystal Lake, and close to the Baum Lake location of canary dusksnails (discussed above) (Hershler *et al.* 2007, p. 405). Another occupied site is at Crystal Lake, a spring-fed lake that flows into Baum Lake at its eastern end (PGE 2006, fig 1, p. 46; Hershler *et al.* 2007, p. 405). A fourth site is upstream of Baum Lake, just below the PGE dam (Hat Creek 1) that forms Cassel Pond. Licensing requirements, established by the Federal Energy Regulatory Commission (FERC) when the two dams were relicensed in 2002 establish minimum flows of 8 cfs in Hat Creek below the Hat Creek 1 dam (White 2008, pp. 1, 2) and also require PGE to maintain the surface of Baum Lake at a constant height (FERC 2011, p. 1). Accordingly, the occupied sites in Baum Lake are likely to be kept at a

constant depth, and the occupied site below the Hat Creek 1 dam is unlikely to be left without water. The nugget pebblesnails at those locations are therefore unlikely to lose the cold, well-oxygenated flows they require.

Two occupied sites are in the McCloud River near Lake Shasta (Hershler *et al.* 2007, p. 405; Haley 2012a, p. 3). One could potentially be inundated by the lake if a proposal to raise the height of Shasta dam up to 18.5 ft (5.6 m) is carried out (U.S. Bureau of Reclamation (USBR) 2007, p. ES 6; USBR 2011, pp. 1–6). Inundation resulting from the higher reservoir level made possible by raising the dam height would likely remove necessary flows and would extirpate the site. The best available scientific and commercial information does not indicate the likelihood of the proposal being implemented (USBR 2011, pp. 182–184), nor the likelihood of relocating the nugget pebblesnails or otherwise mitigating the project's impact.

#### Water Quality

The Pit River is considered a water-quality limited segment for 198 km (123 mi) upstream of Shasta Lake, due to added nutrients from agriculture and grazing that encourage algal growth (see canary dusksnail above) (SWRCB 2010a, p. 164). Sixteen sites occupied by the nugget pebblesnail are within that area, including the 12 sites considered above with regard to impoundments, and an additional 4 sites upstream of the Pit 3, 4 and 5 reaches. Although we lack information regarding the impacts (if any) of the impaired water quality on the snails, snail populations at 12 of the 16 occupied sites are subject to annual monitoring (see *Impoundments*). At this point, after only 3 years of monitoring and 1 year at the full flow releases established by the operating license, the data do not indicate that water quality is a threat to nugget pebblesnail populations in the lower Pit River.

Sediment levels in the upper Fall River and high pH in Eastman Lake (see canary dusksnail, above) may affect nugget pebblesnails at three occupied sites in those locations. Three additional occupied sites in upper Ash Creek (Lassen County) may also be subject to alkalinity levels slightly above the established water quality limit of 8.5 pH (SWRCB 2010a, p. 137; SWRCB 2010b, p. 1). Three water quality samples from the area showed pH levels of 8.62, 8.53, and 8.58 (SWRCB 2010b, p. 8).

The three occupied sites in upper Ash Creek discussed above may also be subject to levels of *Escherichia coli* (*E. coli*) bacteria (an indicator of sewage contamination) exceeding water quality

standards (SWRCB 2010 (Ash Cr), pp. 5, 6). A single sample taken from upper Ash Creek in 2005 showed an *E. coli* density greater than three times the water quality standard for non-contact recreation, and greater than 5.5 times the standard for water contact recreation (SWRCB 2010 (Ash Cr), pp. 6, 7). The source of contamination was not established (SWRCB 2010 (Ash Cr), p. 5), although feces from grazing cattle is a possibility (see below). Although nugget pebblesnails are considered sensitive to water pollution (Furnish and Monthey 1999, Sect. 3, pp. 5, 8), their response to *E. coli* contamination is not known. No population trend data are available for nugget pebblesnails in Ash Creek, therefore, it is difficult to infer any direct response to *E. coli* levels at this location.

#### Grazing and Logging

In the middle and lower Pit River area (including lower Hat Creek), 7 occupied sites are on National Forest lands in the NWFP area, 14 are on PGE lands, and 1 is in MacArthur-Burney State Park (Stewardship Council 2007, Vol. 2, pp. PM–20, PM–30, PM–38, PM–58). The sites on NWFP lands benefit from the SMP and ACS, (see *Generally Applicable Federal Regulatory Mechanisms*, above) and so are unlikely to be threatened by grazing or logging taking place on those lands. Such activities would be subject under the SMP to predisturbance surveys and management of known sites to support species persistence (Molina *et al.* 2006, p. 312; Olson *et al.* 2007, abstract). Under the ACS they would also be subject to close regulation within riparian reserve buffer areas so as to maintain water quality and aquatic ecosystem integrity (USDA and USDI 1994a, p. 9; USDA and USDI 1994b, pp. C–31–C–38). The site at the State Park is also unlikely to be threatened by grazing or logging, as the Park is committed to maintaining its scenic features in a natural condition (California Department of Parks and Recreation (CDPR) 1997, p. 46), and to take measures to monitor and maintain natural water quality, channel flow, and sediment transport rates (CDPR 1997, p. 47). Although the State is considering closing several State Parks in order to save money, neither MacArthur-Burney State Park, nor Ahjumawi Lava Springs State Park (discussed below) are among those being considered for closure (CDPR 2012, p. 2).

Lands owned by PGE are also subject to conservation management. Due to bankruptcy proceedings in 2004 (Stewardship Council 2007, Vol. 1, pp. ES–1, ES–2), PGE accepted a settlement

agreement with the California Public Utilities Commission (PUC) that requires PGE to protect the lands associated with its dams, either by establishing conservation easements or by donating the land to qualified conservation managers. A nonprofit corporation was established that published a land conservation plan in 2007 (Stewardship Council 2007, Vol. 1, p. ES-1). As the plan indicates, grazing has been eliminated to protect water quality in the areas of the Pit 3, 4, and 5 dams and associated reaches since the late 1980s (Stewardship Council, Vol. 2, p. PM-47). Grazing was eliminated in the general vicinity of the PGE dams on Hat Creek in 2001 (Stewardship Council 2007, Vol. 2, p. PM-31). Current timber management activities on the PGE Hat Creek and Fall River lands are restricted to mitigating for watershed and forest health issues (Stewardship Council 2007, Vol. 2, pp. PM-3, PM-31). A single timber management unit of 2,499 ac (1,011 ha) exists in the vicinity of Lake Britton and the Pit 3 reach and is managed for multiple uses (Stewardship Council, Vol. 2, p. PM-40). In the Pit 4 reach, six timber management units totaling 2,123 ac (859 ha) are currently managed for sustainable production, with the most recent harvest in 2005 and 2006 (Stewardship Council, Vol. 2, p. PM-50).

Timber harvest on private lands is governed by the state Nejedly-Z'berg Forest Practice Act (FPA). The FPA requires timber harvesters to submit a publicly reviewable Timber Harvest Plan (THP) to the California Department of Forest and Fire Protection (CAL FIRE) (Kier Associates 2011b, p. 2) and to maintain buffers around fish-bearing streams of at least 75 ft (23 m) within which at least 50 percent of overstory and understory vegetation and 75 percent of total original vegetation must remain uncut (CAL FIRE 2012, pp. 68-72).

In the upper Fall River drainage, eight occupied sites are on private land, one is on an Indian PDA, and three are in the Ahjumawi Lava Springs State Park. Various habitat improvement measures have been carried out by private landowners in the area, including the erection of exclusion fencing, bank stabilization projects, and the replacement and upgrade of a railroad crossing that had collapsed twice in the past (see canary dusksnail, above) (FRRCD 2005, pp. 1-3; Ellis and Haley 2012, p. 1). Landowners also took steps to reduce the potential for serious wildfires and to prevent erosion of sediment from a nearby meadow (FRRCD 2005, p. 3).

A general plan is not yet completed for Ahjumawi Lava Springs State Park, but the California State Park System maintains a resource management program with the general goal of protecting, restoring, and maintaining the natural resources within the Parks (CDPR 2012, p. 2).

There are three occupied sites in upper Ash Creek in Lassen County; two occupied sites are in the Modoc National Forest and the other is on private land. The sites in the National Forest are in the Ash Creek management unit of the Round Valley grazing allotment, where grazing is not currently permitted (Raymond 2012, p. 1). Grazing does occur on private lands farther upstream from the National Forest, however (Raymond 2012, p. 1), so it may occur in the vicinity of the occupied site on private land. Grazing in and around streams on private land is not closely regulated, and can lead to trampled vegetation, fecal matter in the water, and a muddier and warmer stream (Meehan and Platts 1978, p. 276; Stephenson and Street 1978, p. 152; Kauffman and Krueger 1984, p. 432), all of which would negatively impact the nugget pebblesnail. We do not have information regarding the extent of grazing on private lands in the area, nor of the extent to which protective management actions may have been taken.

The Modoc National Forest also expects to offer a timber sale this year in the vicinity of Ash Creek, possibly leading to timber removal in the spring of 2013 (Raymond and Bryan 2012, p. 1). Timber removal would be subject to restrictions established by the SNFPA (see Hat Creek pebblesnail, above).

#### Summary of Factor A

In summary, flow rates from the Pit 3, 4, and 5 dams, as well as impaired water quality, may be affecting occupied locations in the lower Pit River, but the nugget pebblesnail remains extremely common in the area, and ongoing monitoring will alert us if species persistence in the area becomes threatened. Potential water quality issues may also apply to three sites in the upper Fall River drainage and to three sites at Ash Creek, but the available data do not show that resident nugget pebblesnail populations are, or are likely to be, impacted by these issues. Available data also do not suggest that any occupied sites are threatened by grazing or logging, and most occupied locations along the Pit River also receive high levels of regulatory protection from grazing and logging. Seven of those sites are protected by the SMP and ACS, fourteen

are protected by conservation provisions established for PGE lands under a settlement agreement, and one is protected by State Park regulations. In the upper Fall River drainage several habitat improvement projects have been completed by landowners, while in the Ash Creek drainage two occupied sites are on un-grazed Federal land protected by the SNFPA, and one is on grazed private land. We conclude, based on the best available scientific and commercial information, that the present or threatened destruction, modification or curtailment of its habitat or range does not constitute a significant threat to the species now or in the future.

#### Factor B. Overutilization for Commercial, Recreational, 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 occur in the future. We therefore conclude such overutilization does not constitute a threat to the nugget pebblesnail.

#### Factor C. Disease or Predation

##### Disease

We reviewed the best available scientific and commercial information regarding this species and other similar species, and found no evidence to indicate that disease is impacting nugget pebblesnail populations.

##### Predation

The nugget pebblesnail occurs in the same general areas as the canary dusksnail, and may also be subject to predation by the introduced signal crayfish. Predation by dense crayfish populations can significantly impact aquatic snails (Lorman and Magnuson 1978, p. 9). However, our only data regarding signal crayfish densities indicate those densities appear to be holding stable at levels equivalent to those of the native Shasta crayfish, alongside which the nugget pebblesnail has evolved (see Canary Dusksnail, above) (Ellis 1999, p. 58; PGE 2011b, pp. iii, 10; PGE 2012b, p. 9). We do not expect occupied areas within the current range of both crayfish species to be subject to high combined crayfish densities, because past monitoring has shown a strong tendency for one or the other crayfish species to be common in an area, but not both (Ellis 1999, pp. 57, 58; Service 2009, p. 9) (see Canary Dusksnail, above). Hence, the available evidence does not support the contention that signal crayfish are

present in the range of the nugget pebblesnail in sufficiently high densities to pose a predation risk to the nugget pebblesnail. Furthermore, the information does not indicate any trend in the densities of the signal crayfish that would lead us to a conclusion that the predation risk would increase in the future.

We therefore conclude, based on the best available scientific and commercial information, that neither disease nor predation constitutes a significant threat to the species now or in 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 \* \* \*”. We interpret this language to require the Service to consider relevant Federal, State, and Tribal laws and regulations when developing our threat analyses. Regulatory mechanisms, if they exist, may preclude the need for listing if we determine that such mechanisms adequately address the threats to the species such that listing is not warranted. The analysis of threats to the nugget pebblesnail under the other Factors included consideration of the ameliorative effects of regulatory mechanisms where applicable, such as those discussed under Factor A and under *Generally Applicable Federal Regulatory Mechanisms*, above.

Having evaluated the significance of the threat as mitigated by any such conservation efforts, we analyze under Factor D the extent to which existing regulatory mechanisms are inadequate to address the specific threats to the species. We found no significant threats to the nugget pebblesnail under the other factors, therefore, the analysis of any existing regulatory mechanisms’ adequacy to address threats is not applicable. Consequently, after reviewing the best available commercial and scientific information, we conclude that the inadequacy of existing regulatory mechanisms is not a threat to the nugget pebblesnail now or in the future.

#### Factor E. Other Natural or Manmade Factors Affecting Its Continued Existence

##### Competition With Invasive Species

The New Zealand mudsnail has the potential to outcompete and thereby threaten the nugget pebblesnail if it can establish itself at a significant number of locations that the nugget pebblesnail currently occupies (see canary dusksnail, above). However, the level of threat is somewhat reduced by the nugget pebblesnail’s greater range as compared to the canary dusksnail. We consider Lake Britton to be at greatest danger of infestation within that range, due to its ease of access, marina, boat launch, fishery, and nearby state park (Stewardship Council, Vol. 2, pp. PM–37–39). As discussed above in relation to the canary dusksnail, once the first infestation point is established, new infestation points could be expected to establish themselves from that base. At that point, if it occurs, we could ascertain whether the New Zealand mudsnail was spreading in a manner likely to threaten the nugget pebblesnail in a significant portion of its range. At the current time, no infestations of New Zealand mudsnail are known within the nugget pebblesnail’s range. Accordingly, we do not consider competition from New Zealand mudsnails to be a threat to the canary dusksnail at this time.

##### Changes in Precipitation and Water Availability Due to Climate Change

See our discussion of climate change in general in the *Changes in Precipitation and Water Availability Due to Climate Change* section under “Factor A” in *Five-Factor Evaluation of Threats for the Canary Dusksnail*. Climate change is not expected to significantly change total precipitation in northern California, but may affect seasonal water availability in some areas due to changes in snowpack melting times and in the proportion of precipitation falling as rain rather than snow (Dettinger *et al.* 2004, pp. 43, 44). However, the springs that support sites occupied by the nugget pebblesnail in the middle and lower Pit River and upper Fall River drainages are supplied by large aquifers of porous lava that collect and store water from wide areas, thereby holding extra water from seasons when rain is plentiful and delivering it through springs during seasons when it is not (see canary dusksnail, above). Resulting spring flows are highly stable in volume, temperature, and clarity (Service 1998, p. 46) We lack information regarding aquifer sizes and collection ranges for the six occupied sites that are not in the

middle and lower Pit River or upper Fall River drainages, but given the general volcanic geology of the entire area (U.S. National Park Service (USNPS) 2005, p. 1), we consider it most likely that these sites also will maintain relatively constant flow rates and water temperatures despite climate change.

##### Catastrophic Events—Chemical Spills

The nugget pebblesnail was apparently extirpated from the upper Sacramento River due to a catastrophic spill of herbicide (the Cantara Spill) from a derailed rail car in 1991 (see Distribution, above) (Frest and Johannes 1995b, pp. 13, 50; Hershler and Frest 1996, p. 16; ORNHIC 2004k, p. 1). A rail line owned by the McCloud River Railroad crosses the Pit River just upstream of Lake Britton, but freight service on the line was discontinued in 2006 (Trainweb undated, p. 1). A rail line owned by the Burlington Northern and Santa Fe (BNSF) railroad crosses the Pit River much farther upstream in Lassen County, south of the town of Nubieber, and runs close to the Pit River for almost 4 km (2.5 mi) after the crossing. However, the point where the rail line leaves the vicinity of the Pit River is approximately 50 km (31 mi) upstream of the closest known occupied site on the Pit River. Although the Cantara spill’s effects may have reached such a distance (Frest and Johannes 1995b, p. 73), in this case a spill from the BNSF line would have to travel 50 km (31 mi) to affect one occupied nugget pebblesnail site, then approximately 6.7 km (4.2 mi) to affect two more, then approximately 23 km (14 mi) farther (including approximately 11 km (6.8 mi) through Lake Britton) to the next occupied site. If a very large spill were to occur, the most sites it could affect would be the three Pit River sites upstream of Lake Britton. That would still leave 41 known occupied sites, and so would not pose a threat to the species.

##### Summary of Factor E

In summary, the nugget pebblesnail is protected from likely impacts of changes in precipitation or water availability due to climate change by the particular characteristics of its habitat. Although potential competition from the New Zealand mudsnail is cause for concern, no site currently occupied by nugget pebblesnail has been colonized and the best available information does not indicate it will colonize areas occupied by the nugget pebblesnail, or that it will threaten the nugget pebblesnail with extinction if it does so. We conclude that, based on the best available

scientific and commercial information, that other natural or manmade factors such as competition from the New Zealand mudsnail, changes in precipitation or water availability due to climate change, and chemical spills are not a threat to the nugget pebblesnail now or in the future.

#### *Finding for the Nugget Pebblesnail*

We have carefully assessed the best scientific and commercial information available regarding the past, present, and future threats faced by the nugget pebblesnail. We reviewed the petition, available published and unpublished scientific and commercial information, and information submitted to us during the public comment period following our 90-day petition finding. This finding reflects and incorporates information we received during the public comment period. We also consulted with recognized authorities on this species and Federal and State resource agencies. The nugget pebblesnail occupies 44 sites, and a review of the best available information does not indicate that populations at any site are likely to be extirpated due to impoundments, water quality, grazing and logging, overutilization, disease or predation, the inadequacy of existing regulatory mechanisms, competition with invasive species, changes in precipitation and water availability due to climate change, or catastrophic events such as chemical spills, now or in the foreseeable future. The best available scientific and commercial information at this time does not indicate that there is likely to be a change in any of these stressors in the future.

Based on our review of the best available scientific and commercial information pertaining to the five factors, we find that the threats as described above either alone or in combination, are not of sufficient imminence, intensity, or magnitude to indicate that the nugget pebblesnail is in danger of extinction (endangered) or likely to become endangered within the foreseeable future (threatened), throughout all of its range.

#### Significant Portion of the Range

Having determined that the nugget pebblesnail is not endangered or threatened throughout all of its range, we must next consider whether there are any significant portions of the range where the nugget pebblesnail is in danger of extinction or is likely to become endangered in the foreseeable future. See *Significant Portion of the Range* under Summary of Procedures for Determining the Listing Status of Species.

We evaluated the current range of the nugget pebblesnail to determine if there is any apparent geographic concentration of potential threats for the species. The nugget pebblesnail is highly restricted in its range and the threats occur throughout its range. We considered the potential threats due to impoundments, water quality, grazing and logging, overutilization, disease or predation, the inadequacy of existing regulatory mechanisms, competition with invasive species, changes in precipitation and water availability due to climate change, and catastrophic events such as chemical spills. We found no concentration of threats that suggests that the nugget pebblesnail may be in danger of extinction in a portion of its range. We found no portions of its range where potential threats are significantly concentrated or substantially greater than in other portions of its range. Therefore, we find that factors affecting the species are essentially uniform throughout its range, indicating no portion of the range of the species warrants further consideration of possible endangered or threatened status under the Act.

We find that the nugget pebblesnail is not in danger of extinction now, nor is likely to become endangered within the foreseeable future, throughout all or a significant portion of its range. Therefore, listing the nugget pebblesnail as endangered or threatened under the Act is not warranted at this time.

#### **Potem Creek Pebblesnail (*Fluminicola Potemicus*)**

##### *Species Information for the Potem Creek Pebblesnail*

##### Taxonomy and Species Description

The Potem Creek pebblesnail was formally named and described in 2007 (Hershler *et al.* 2007, pp. 412–415). Prior to 2007, it was referred to as the “Potem pebblesnail (*Fluminicola* n. sp. 14)” (Frest and Johannes 1999, pp. 35–38). It was also referred to as the “Potem pebblesnail (*Fluminicola* n. sp. 2)” by Frest and Johannes (1995b, pp. 42, 43) (Hershler *et al.* 2007, p. 414). Although pebblesnails in general (*Fluminicola* genus) had previously been considered part of the Hydrobiidae family (Hershler *et al.* 2003, p. 275), they have since been reassigned to the Lithoglyphidae family (Hershler *et al.* 2007, p. 371).

The shell of the Potem Creek pebblesnail is about 2.5 to 3.3 mm (0.1 to 0.13 in) tall, with 3 to 3.75 whorls. Its periostracum is tan or light green, and the head of the snail itself is pale brown or gray (Hershler *et al.* 2007, p. 412).

##### Distribution

Only one occupied site (the type location) for the Potem Creek pebblesnail is mentioned in the formal description of the species (Hershler *et al.* 2007, p. 412). However, that description indicates the species was previously referred to as *Fluminicola* n. sp. 2 (Hershler *et al.* 2007, p. 412). *Fluminicola* n. sp. 2 (common name Potem pebblesnail) has been identified at 11 locations (Frest and Johannes 1995b, pp. T10–T13, T17, T22, T23), including the 1 site mentioned by Hershler *et al.* (2007, p. 412) and 7 sites in the upper Sacramento River drainage. Subsequent communications indicate that the snails from the upper Sacramento River sites were likely Shasta pebblesnails (*Fluminicola multifarius*) rather than Potem pebblesnails (Hershler 2012, pp. 2–5; Johannes 2012c, pp. 2, 3). However, this has not been confirmed by reexamination of all the specimens involved (Hershler 2012, p. 2; Johannes 2012c, p. 1). As discussed below, Shasta pebblesnails are unusually variable in form (Hershler *et al.* 2007, p. 419). Prior to genetic tests establishing the species identity of the Shasta and Potem Creek pebblesnails (Hershler *et al.* 2007, pp. 380–382), the particular morphological characteristics separating one from the other may not have been clear. The seven Potem pebblesnail sites in the upper Sacramento River, and the three Potem pebblesnail sites in the Pit River drainage (other than the Potem Creek pebblesnail type location) identified by Frest and Johannes in 1995 (Frest and Johannes 1995b, pp. T13, T17), are, therefore, considered unconfirmed.

We have also received information regarding three additional sites in the lower Pit River drainage with snails tentatively identified (based on shell alone) as Potem Creek pebblesnails (Haley 2012, pp. 1, 3). Therefore, we are aware of 1 confirmed site (the type location) and 13 unconfirmed sites. Seven of the unconfirmed sites are in the upper Sacramento River drainage, while all of the other sites are in the lower Pit River drainage. One of the unconfirmed sites in the Pit River drainage is on Shasta-Trinity National Forest land within the NWFP area. All other sites are on private land. The type location is on a small private inholding within the perimeter of the Shasta-Trinity National Forest.

##### Habitat and Biology

The Potem Creek pebblesnail occurs on muddy or silty substrates in small, cold springs and spring runs (Frest and Johannes 1995b, p. A7 (site 36); Frest

and Johannes 1999, p. 36). It appears to graze on partly decayed deciduous leaves (Frest and Johannes 1999, p. 36). We have no specific information regarding reproduction for this species, but members of the *Fluminicola* genus typically live a single year and breed only once (Furnish and Monthey 1999, Sect. 2, p. 5; ORNHIC 2004, p. 2). They generally lay eggs in the spring, which hatch in 2 to 4 weeks. They are not known to disperse widely, and are highly sensitive to water pollution, decreases in dissolved oxygen, elevated temperatures, and sedimentation (Furnish and Monthey 1999, Sect. 2, pp. 5, 7; Hershler *et al.* 2007, p. 372).

#### Factor A. The Present or Threatened Destruction, Modification, or Curtailment of Its Habitat or Range Impoundments

All of the Potem Creek pebblesnail occupied sites (confirmed and unconfirmed) are in small spring ponds or creeks (Frest and Johannes 1995b, pp. 42, A3, A4, A6–A8, A14, A22, T10–T13, T17, T22, T23; Hershler *et al.* 2007, p. 412; Haley 2012, p. 3) and are thus relatively unlikely to be affected by flow releases from major dams. The three unconfirmed locations found by Haley (2012, p. 3) are very close to the edges of the Pit 6 and Pit 7 reservoirs, but we are not aware of any plans to raise the surface levels of those lakes (which could impede flows and raise temperatures). The surface level of Shasta Lake may be raised up to 18.5 ft (5.6 m) if a proposal by USBR to enlarge Shasta Dam is implemented (see nugget pebblesnail, above), but the closest occupied location of the Potem Creek pebblesnail (the type location) is over 350 ft (107 m) above the current elevation of the lake surface, and would therefore remain unaffected. We conclude that, based on the best available scientific and commercial information, that the present or threatened destruction, modification or curtailment of its habitat or range does not constitute a significant threat to the species.

#### Factor B. Overutilization for Commercial, Recreational, 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 occur in the future. We therefore conclude such overutilization does not constitute a threat to the Potem Creek pebblesnail.

#### Factor C. Disease or Predation Disease

We reviewed the best available scientific and commercial information regarding this species and other similar species, and found no evidence to indicate that disease is impacting Potem Creek pebblesnail populations.

#### Predation

The Potem Creek pebblesnail occurs in the same general areas as the canary dusksnail, and may also be subject to predation by the introduced signal crayfish. Predation by dense crayfish populations can significantly impact aquatic snails (Lorman and Magnuson 1978, p. 9). However, our only data regarding signal crayfish density indicates those densities appear to be holding stable at levels equivalent to those of the native Shasta crayfish, alongside which the Potem Creek pebblesnail has evolved (see canary dusksnail, above) (Ellis 1999, p. 58; PGE 2011b, pp. iii, 10; PGE 2012b, p. 9). None of the confirmed or unconfirmed Potem Creek pebblesnail sites overlap the current range of the Shasta crayfish, so only the signal crayfish poses a potential predation impact. Hence, the available evidence does not support the contention that signal crayfish are present in the range of the Potem Creek pebblesnail in sufficiently high densities to pose a predation risk to the Potem Creek pebblesnail. Furthermore, the information does not indicate any trend in the densities of the signal crayfish that would lead us to a conclusion that the predation risk would increase in the future.

We therefore conclude, based on the best available scientific and commercial information, that neither disease nor predation constitutes a significant threat to the species now or in 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 \* \* \*”. We interpret this language to require the Service to consider relevant Federal, State, and Tribal laws and regulations when developing our threat analyses. Regulatory mechanisms, if they exist, may preclude the need for listing if we determine that such mechanisms adequately address the threats to the

species such that listing is not warranted.

Having evaluated the significance of the threat as mitigated by any such conservation efforts, we analyze under Factor D the extent to which existing regulatory mechanisms are inadequate to address the specific threats to the species. We found no significant threats to the Potem Creek pebblesnail under the other factors, therefore, the analysis of any existing regulatory mechanisms’ adequacy to address threats is not applicable. Consequently, after reviewing the best available commercial and scientific information, we conclude that the inadequacy of existing regulatory mechanisms is not a threat to the Potem Creek pebblesnail now or in the future.

#### Factor E. Other Natural or Manmade Factors Affecting Its Continued Existence

##### Competition with Invasive Species

The New Zealand mudsnail is a potential threat to the Potem Creek pebblesnail (see canary dusksnail, above). The level of threat is significantly reduced in the three occupied locations (including the type location) that are far from the Pit River. Because New Zealand mudsnails are transported on boats and fishing equipment (NBII 2011, pp. 1–3), they are less likely to become established in smaller creeks where boating is not possible and fishing by non-locals is less common. The seven unconfirmed sites in the upper Sacramento River are at greater potential risk because New Zealand mudsnails have been reported at Castle Lake, which is about 5.6 km (3.5 mi) from Siskiyou Lake (McAlexander 2012a, p. 1; McAlexander 2012b, p. 1). If the New Zealand mudsnail established itself in Siskiyou Lake, it might then easily wash down the Sacramento River, potentially establishing anywhere along the route, which might include any of the seven unconfirmed occupied sites. Since the Sacramento River occupied sites are unconfirmed, however, and since the available data does not indicate New Zealand mudsnails will establish themselves at Lake Siskiyou or points downstream, we do not consider the New Zealand mudsnail a threat to the continued existence of the Potem Creek pebblesnail.

##### Changes in Precipitation and Water Availability Due to Climate Change

See our discussion of climate change in general in the *Changes in Precipitation and Water Availability Due to Climate Change* section under

“Factor A” in *Five-Factor Evaluation of Threats for the Canary Dusksnail*. Climate change is not expected to significantly change total precipitation in northern California, but may affect seasonal water availability in some areas due to changes in snowpack melting times and in the proportion of precipitation falling as rain rather than snow (Dettinger *et al.* 2004, pp. 43, 44). However, the springs supporting sites occupied by the Potem Creek pebblesnail in the middle and lower Pit River are supplied by large aquifers of porous lava that collect and store water from wide areas (see canary dusksnail, above). The aquifers are therefore able to provide water to the springs at highly constant flow rates and temperatures, despite fluctuations in precipitation. We lack information regarding aquifer sizes and collection ranges for the seven unconfirmed sites in the upper Sacramento River drainage, but based on the best available scientific and commercial information and given the general volcanic geology of the entire area (USNPS 2005, p. 1), we consider it most likely that these sites also will maintain relatively constant flow rates and water temperatures despite climate change.

#### Catastrophic Events—Fire

Siltation caused by fires would be likely to be cleared relatively quickly by springs in the lower Pit River area (see Goose Valley pebblesnail, above). We do not know the flow rate of the spring at the type location of the Potem Creek pebblesnail, however, so fire remains a concern at that site. However, for a fire at the location to threaten the species, it would have to be serious enough to produce extensive siltation; the flow of the spring would have to be insufficient to flush that siltation; the seven unconfirmed occupied sites in the upper Sacramento River drainage would have to be unoccupied; and the six unconfirmed occupied locations in the Pit River drainage, (located at distances of 6 to 20 km (3.7 to 12.4 mi) from the type location) would have to be unoccupied or similarly affected by the fire. We consider such a combination of circumstances unlikely. Additionally, the Potem Creek pebblesnail occurs on muddy or silty substrates (see Habitat and Biology, above), and so is likely to be less strongly affected by siltation than other pebblesnail species.

#### Summary of Factor E

In summary, the Potem Creek pebblesnail is protected from expected changes in precipitation or water availability due to climate change by the particular characteristics of its habitat.

Although potential competition from the New Zealand mudsnail is cause for concern, no site currently occupied by the Potem Creek pebblesnail has been colonized and there is nothing to indicate the New Zealand mudsnail will colonize any of the locations occupied by the Potem Creek pebblesnail. There is also no direct evidence to show that any such occupied locations would be extirpated by such a colonization were it to occur. The two species are not known to have interacted in the past. We consider catastrophic events such as fire to be unlikely, and the Potem Creek pebblesnail is likely to be less strongly affected by siltation than other pebblesnail species. We therefore conclude that, based on the best available scientific and commercial information, that other natural or manmade factors such as competition from the New Zealand mudsnail, changes in precipitation or water availability due to climate change, or fire do not constitute significant threats to the Potem Creek pebblesnail now or in the future.

#### *Finding for the Potem Creek Pebblesnail*

We have carefully assessed the best scientific and commercial information available regarding the past, present, and future threats faced by the Potem Creek pebblesnail. We reviewed the petition, available published and unpublished scientific and commercial information, and information submitted to us during our status review. This finding reflects and incorporates that information. We also consulted with recognized authorities on this species, and we consulted with Federal and State resource agencies. Although only 1 confirmed and 13 unconfirmed occupied sites are known for the Potem Creek pebblesnail, review of the best available information did not indicate that populations at any site are likely to be extirpated due to impoundments, overutilization, disease or predation, the inadequacy of existing regulatory mechanisms, competition with invasive species, changes in precipitation and water availability due to climate change, or catastrophic events such as fire, now or in the foreseeable future. The best available scientific and commercial information at this time does not indicate that there is likely to be a change in any of these stressors in the future.

Based on our review of the best available scientific and commercial information pertaining to the five factors, we find that the threats as described above either alone or in combination are not of sufficient imminence, intensity, or magnitude to

indicate that the Potem Creek pebblesnail is in danger of extinction (endangered) or likely to become endangered within the foreseeable future (threatened), throughout all of its range.

#### Significant Portion of the Range

Having determined that the Potem Creek pebblesnail is not endangered or threatened throughout all of its range, we must next consider whether there are any significant portions of the range where the Potem Creek pebblesnail is in danger of extinction or is likely to become endangered in the foreseeable future. See *Significant Portion of the Range* under Summary of Procedures for Determining the Listing Status of Species.

We evaluated the current range of the Potem Creek pebblesnail to determine if there is any apparent geographic concentration of potential threats for the species. The Potem Creek pebblesnail is highly restricted in its range and the threats occur throughout its range. We considered the potential threats due to impoundments, overutilization, disease or predation, the inadequacy of existing regulatory mechanisms, competition with invasive species, changes in precipitation and water availability due to climate change, and catastrophic events such as fire. We found no concentration of threats that suggests that the Potem Creek pebblesnail may be in danger of extinction in a portion of its range. We found no portions of its range where potential threats are significantly concentrated or substantially greater than in other portions of its range. Therefore, we find that factors affecting the species are essentially uniform throughout its range, indicating no portion of the range of the species warrants further consideration of possible endangered or threatened status under the Act.

We find that the Potem Creek pebblesnail is not in danger of extinction now, nor is likely to become endangered within the foreseeable future, throughout all or a significant portion of its range. Therefore, listing the Potem Creek pebblesnail as endangered or threatened under the Act is not warranted at this time.

#### **Shasta Pebblesnail (*Fluminicola multifarius*)**

##### *Species Information for the Shasta Pebblesnail*

##### Taxonomy and Species Description

The Shasta pebblesnail is an aquatic snail that was formally named and described in 2007 (Hershler *et al.* 2007, pp. 415–419). This species combines

four taxa previously considered likely species, but never formally described: The Sacramento pebblesnail (*Fluminicola* n. sp. 1) (Frest and Johannes 1995b, pp. 42, D14) and three species discussed in Frest and Johannes 1999 (pp. 39–50), the flat top pebblesnail (*Fluminicola* n. sp. 15), the Shasta Springs pebblesnail (*Fluminicola* n. sp. 16), and the disjunct pebblesnail (*Fluminicola* n. sp. 17). The latter three were included under the SMP (USDA and USDI 2007, pp. 169, 252). Although pebblesnails in general (*Fluminicola* genus) had previously been considered part of the Hydrobiidae family (Hershler *et al.* 2003, p. 275), they have since been reassigned to the Lithoglyphidae family (Hershler *et al.* 2007, p. 371).

The shell of the Shasta pebblesnail is 2.3 to 4.6 mm (0.09 to 0.18 in) tall, with a tan, brown, or light green periostracum and 3.25 to 4.5 whorls (Hershler *et al.* 2007, pp. 417–419). The Shasta pebblesnail has a high range of shell variation, with shapes ranging from subglobose to narrowly conic, and lower whorls that are sometimes loosened from the coiling axis and sometimes not (Hershler *et al.* 2007, p. 419). This range of morphological characteristics is the source of the Shasta pebblesnail's specific name *multifarius*, meaning "in various manners."

#### Distribution

Twenty occupied locations of the Shasta pebblesnail are known, 19 of which are in Siskiyou County, California, and the other along the Sacramento River in Shasta County, California (Hershler *et al.* 2007, pp. 415–417). All but two sites are in springs or spring runs, the exceptions being two sites in the Sacramento River itself, which may be associated with nearby springs. Five sites are at Mount Shasta City Park, 11 are along the Sacramento River between Lake Siskiyou and the southern end of Dunsmuir, and 3 are east of the town of McCloud in waters that drain into the McCloud River. There is one occupied site on Shasta-Trinity National Forest land, within the NWFP area, and two others in the Cantara/Ney Springs State Wildlife Area. The rest (except for the five mentioned above at Mount Shasta City Park) are on private property.

#### Habitat and Biology

The Shasta pebblesnail occurs in cold perennially flowing waters on substrates ranging from sand to cobbles (Frest and Johannes 1995b, p. 42; Frest and Johannes 1999, pp. 40, 44, 48). It is often associated with watercress, and it feeds on perolithon and may eat periphyton as

well (Frest and Johannes 1995b, pp. 42, 43; Frest and Johannes 1999, p. 40; Furnish and Monthey 1999, Sect. 2, p. 2). We have no specific information regarding reproduction for this species, but members of the *Fluminicola* genus typically live a single year and breed only once (Furnish and Monthey 1999, Sect. 2, p. 5; ORNHIC 2004, p. 2). They generally lay eggs in the spring, which hatch in 2 to 4 weeks. They are not known to disperse widely, and are highly sensitive to water pollution, decreases in dissolved oxygen, elevated temperatures, and sedimentation (Furnish and Monthey 1999, Sect. 2, pp. 5, 7; Hershler *et al.* 2007, p. 372).

#### Five-Factor Evaluation of Threats for the Shasta Pebblesnail

##### Factor A. The Present or Threatened Destruction, Modification, or Curtailment of Its Habitat or Range Impoundments

One occupied site (identified as USNM 1020758) is located in the main stem of the Sacramento River, about 3 km (1.9 mi) downstream of Box Canyon Dam, which impounds Lake Siskiyou (Hershler *et al.* 2007, p. 415). Due to low generating capacity, the dam was exempted in 1982 from licensing requirements under the Federal Power Act (Siskiyou County and CDFG 1983a, p. 2). However, the exemption requires Siskiyou County to comply with requirements established by CDFG for flow releases from the lake. Those requirements include minimum flow volumes (40 cfs), minimum dissolved oxygen concentrations (7.0 milligrams per liter (mg/l)), and procedures to minimize water temperatures during summer months (by releasing water from the lowest possible depth in the lake) (Siskiyou County and CDFG 1983a, pp. 2, 3). All of these requirements benefit Shasta pebblesnails in downstream locations, because the upebblesnails require cold, well-oxygenated flowing water (see Habitat and Biology, above). We have obtained monitoring information from 2003, 2004, and 2006 indicating these requirements were consistently met in those years (Webb 2005, pp. 2–13, 18–29; FERC 2006, p. 2). The maximum recorded temperature during 2003 and 2004 was 59.2 °F (15.1 °C) (in October 2003), which is colder than all but one of the average water temperatures measured in 2009 through 2011 in the Pit 3, 4, and 5 reaches (see Canary dusksnail, above) (PGE 2010, p. 35; PGE 2011, p. 24; PGE 2012, p. 24). Minimum flow requirements were not met for a few brief periods of 15 minutes or less in 2002, 2005, and 2009 (Webb

2005, p. 14; FERC 2006, pp. 3, 4; FERC 2009, p. 1), but we do not expect these to have significantly impacted the Shasta pebblesnails in the main stem location. Additional water is also supplied to that location by Ney Creek, which joins the Sacramento River about 0.8 km (0.5 mi) upstream of the occupied site. Two additional occupied sites are within a mile downstream (Hershler *et al.* 2007, p. 417), but these are in springs and so less likely to be impacted by flow releases from the dam.

##### Grazing and Logging

Of the 20 occupied sites, 5 are in a small city park unlikely to be used for grazing or logging, 2 are on property used as a spiritual retreat by the St. Germain Foundation, 2 are in the Cantara/Ney Springs Wildlife Area, and 1 is in the Shasta-Trinity National Forest within the NWFP boundary and outside of any grazing allotments (Hershler *et al.* 2007, p. 417). An eleventh occupied site (in Shasta County) is in a spring on a thin strip of land between the Union Pacific railroad tracks and Interstate 5, and thus unlikely to be grazed or logged. This leaves nine sites for which we lack data regarding potential grazing impacts. Comparisons of mapped Shasta pebblesnail sites (Hershler *et al.* 2007, pp. 404, 405; Service 2012, p. 1) with locations of planned timber harvests (THP Tracking Center 2012, p. 1) show no THPs have been filed since 2009 for lands covering any of the 20 occupied sites.

To summarize: (1) Only a few locations occur near impoundments, and those impoundments are managed to minimize potential impacts; (2) the locations of 11 of 20 sites makes them unlikely to be grazed or logged; (3) the remaining 9 sites are not scheduled to be logged in the near future, but we lack information regarding grazing at those sites. We conclude that, based on the best available scientific and commercial information, that the present or threatened destruction, modification or curtailment of its habitat or range does not constitute a significant threat to the species.

##### Factor B. Overutilization for Commercial, Recreational, 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 occur in the future. We therefore conclude such overutilization

does not constitute a threat to the Shasta pebblesnail.

#### Factor C. Disease or Predation Disease

We reviewed the best available scientific and commercial information regarding this species and other similar species, and found no evidence to indicate that disease is impacting Shasta pebblesnail populations.

#### Predation

It is likely the introduced signal crayfish has established itself in the upper Sacramento River, as well as the Pit River. Predation by dense crayfish populations can significantly impact aquatic snails (Lorman and Magnuson 1978, p. 9). However, our only data regarding signal crayfish densities indicates those densities appear to be holding stable at levels equivalent to those of the native Shasta crayfish, alongside which the Shasta pebblesnail has evolved (see canary dusksnail, above) (Ellis 1999, p. 58; PGE 2011b, pp. iii, 10; PGE 2012b, p. 9). The known Shasta pebblesnail sites do not overlap the current range of the Shasta crayfish, so only the signal crayfish poses a potential predation impact. Hence, the available evidence does not support the contention that signal crayfish are present in the range of the Shasta pebblesnail in sufficiently high densities to pose a predation risk to the Shasta pebblesnail. Furthermore, the information does not indicate any trend in the densities of the two crayfish that would lead us to a conclusion that the predation risk would increase in the future.

We therefore conclude, based on the best available scientific and commercial information, that neither disease nor predation constitutes a significant threat to the species now or in 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 \* \* \*”. We interpret this language to require the Service to consider relevant Federal, State, and Tribal laws and regulations when developing our threat analyses. Regulatory mechanisms, if they exist, may preclude the need for listing if we determine that such mechanisms adequately address the threats to the

species such that listing is not warranted.

Having evaluated the significance of the threat as mitigated by any such conservation efforts, we analyze under Factor D the extent to which existing regulatory mechanisms are inadequate to address the specific threats to the species. We found no significant threats to the Shasta pebblesnail under the other factors; therefore, the analysis of any existing regulatory mechanisms’ adequacy to address threats is not applicable. Consequently, after reviewing the best available commercial and scientific information, we conclude that the inadequacy of existing regulatory mechanisms is not a threat to the Shasta pebblesnail now or in the future.

#### Factor E. Other Natural or Manmade Factors Affecting Its Continued Existence

##### Competition With Invasive Species

The New Zealand mudsnail (see canary dusksnail, above) has been reported at Castle Lake, which is about 5.6 km (3.5 mi) from Siskiyou Lake (see Potem Creek pebblesnail, above) (McAlexander 2012a, p. 1; McAlexander 2012b, p. 1). If the New Zealand mudsnail were to establish itself in Siskiyou Lake, it could potentially wash down the Sacramento River, establishing anywhere along the route and thereby potentially competing directly with the Shasta pebblesnail at 11 of its 20 known occupied sites, including 2 sites in the river itself and 9 sites in springs that are close to the river and hydrologically connected to it (Hershler *et al.* 2007, pp. 415, 417). If that were to happen, it could pose a threat to the species. However, the available information does not indicate that such a scenario is likely. We consider the risk of infestation to be much lower in springs adjoining the river since the New Zealand mudsnails could not simply be washed to such locations by the current. Nine of the eleven Shasta pebblesnail sites in the upper Sacramento River area are in adjoining springs. Additionally, CDFG is following a national control plan (ANSTF 2007, entire) and has posted information and downloadable posters and wallet cards to its Web site (see canary dusksnail, above) (CDFG undated, p. 1). Accordingly, we do not consider competition from the New Zealand mudsnail a threat to the species.

#### Changes in Precipitation and Water Availability Due to Climate Change

See our discussion of climate change in general in the *Changes in Precipitation and Water Availability Due to Climate Change* section under “Factor A” in *Five-Factor Evaluation of Threats for the Canary Dusksnail*. Climate change is not expected to significantly change total precipitation in northern California, but may affect seasonal water availability in some areas due to changes in snowpack melting times and in the proportion of precipitation falling as rain rather than snow (Dettinger *et al.* 2004, pp. 43, 44). However, the water supplying many springs in Shasta and Siskiyou Counties is collected from wide areas and percolates through porous volcanic rocks to collect in large aquifers, thereby holding extra water from seasons when rain is plentiful and delivering it through springs during seasons when it is not (Service 1998, p. 18). Resulting spring flows are generally highly stable in volume, temperature and clarity (Service 1998, p. 46). We lack information regarding aquifer sizes and collection ranges for the specific springs supporting sites occupied by the Shasta pebblesnail, but given the general volcanic geology of the entire area (USNPS 2005, p. 1), we consider it most likely that these sites will maintain relatively constant flow rates and water temperatures despite climate change. Accordingly, we do not expect changes in precipitation or water availability due to climate change to significantly affect the species.

#### Catastrophic Events—Chemical Spills

In 1991, a Southern Pacific railroad car carrying the herbicide metam sodium spilled its contents into the upper Sacramento River near Dunsuir (Frest and Johannes 1995b, p. 13). The spill eliminated numerous mollusks from the main stem, but did not eliminate Shasta pebblesnails from their remaining known occupied sites along the river, presumably because most of those sites are in springs to the side of the main stem (Frest and Johannes 1995b, p. 73; Hershler *et al.* 2007, pp. 415–417). The flow from those springs would have prevented the chemical from traveling from the river into the springs themselves. The one occupied site in the main stem of the river near Dunsuir is about 500 m (1,640 ft) upstream of the spill site (Frest and Johannes 1995b, p. F4). Since the time of the spill, the railroad company involved (Southern Pacific) has been acquired by the Union Pacific, which has taken several steps to prevent a

recurrence of the accident. These steps include regrading the section of track, replacing the wooden ties with concrete ties, lowering the maximum length of trains operating in the area, reducing the maximum speed, upgrading locomotives, and requiring locomotives to be spread more evenly throughout each train (Darling 2011, p. 4). If such a spill were to recur, most Shasta pebblesnail populations would again be protected by their location in springs and spring runs outside the main stem flow.

#### Summary of Factor E

In summary, the Shasta pebblesnail is protected from expected changes in precipitation or water availability due to climate change by the particular characteristics of its habitat. Although potential competition from the New Zealand mudsnail is cause for concern, no site currently occupied by the Shasta pebblesnail has been colonized and there is nothing to indicate the New Zealand mudsnail will colonize any of the locations occupied by the Shasta pebblesnail. There is also no direct evidence to show that any such occupied locations would be extirpated by such a colonization were it to occur. The two species are not known to have interacted in the past. If a chemical spill were to occur, most Shasta pebblesnail populations would be protected by their location in springs and spring runs outside the main stem flow. We therefore conclude that, based on the best available scientific and commercial information, that other natural or manmade factors such as competition from the New Zealand mudsnail, changes in precipitation or water availability due to climate change, or chemical spills do not constitute significant threats to the Shasta pebblesnail now or in the future.

#### *Finding for the Shasta Pebblesnail*

We have carefully assessed the best scientific and commercial information available regarding the past, present, and future threats faced by the Shasta pebblesnail. We reviewed the petition, available published and unpublished scientific and commercial information,

and information submitted to us during our status review. This finding reflects and incorporates that information. We also consulted with recognized authorities on this species and Federal and State resource agencies. Although only 20 occupied sites are known for the Shasta pebblesnail, a review of the best available information does not indicate that populations at any site are likely to be extirpated due to impoundments, grazing and logging, overutilization, disease or predation, the inadequacy of existing regulatory mechanisms, competition with invasive species, changes in precipitation and water availability due to climate change, or catastrophic events such as chemical spills, now or in the foreseeable future. The best available scientific and commercial information at this time does not indicate that there is likely to be a change in any of these stressors in the future.

Based on our review of the best available scientific and commercial information pertaining to the five factors, we find that the threats as described above either alone or in combination are not of sufficient imminence, intensity, or magnitude to indicate that the Shasta pebblesnail is in danger of extinction (endangered) or likely to become endangered within the foreseeable future (threatened), throughout all of its range.

#### Significant Portion of the Range

Having determined that the Shasta pebblesnail is not endangered or threatened throughout all of its range, we must next consider whether there are any significant portions of the range where the Shasta pebblesnail is in danger of extinction or is likely to become endangered in the foreseeable future. See *Significant Portion of the Range* under Summary of Procedures for Determining the Listing Status of Species.

We evaluated the current range of the Shasta pebblesnail to determine if there is any apparent geographic concentration of potential threats for the species. The Shasta pebblesnail is highly restricted in its range and the threats occur throughout its range. We

considered the potential threats due to impoundments, grazing and logging, overutilization, disease or predation, the inadequacy of existing regulatory mechanisms, competition with invasive species, changes in precipitation and water availability due to climate change, and catastrophic events such as chemical spills. We found no concentration of threats that suggests that the Shasta pebblesnail may be in danger of extinction in a portion of its range. We found no portions of its range where potential threats are significantly concentrated or substantially greater than in other portions of its range. Therefore, we find that factors affecting the species are essentially uniform throughout its range, indicating no portion of the range of the species warrants further consideration of possible endangered or threatened status under the Act.

We find that the Shasta pebblesnail is not in danger of extinction now, nor is likely to become endangered within the foreseeable future, throughout all or a significant portion of its range. Therefore, listing the Shasta pebblesnail as endangered or threatened under the Act is not warranted at this time.

#### References Cited

A complete list of references cited is available on the Internet at <http://www.regulations.gov> and upon a request to the Sacramento Fish and Wildlife Office (see **ADDRESSES** section).

#### Authors

The primary authors of this notice are the staff members of the Sacramento Fish and Wildlife Office.

#### Authority

The authority for this action is section 4 of the Endangered Species Act of 1973, as amended (16 U.S.C. 1531 *et seq.*).

Dated: September 5, 2012.

#### Rowan W. Gould,

*Acting Director, Fish and Wildlife Service.*

[FR Doc. 2012-22723 Filed 9-17-12; 8:45 am]

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# FEDERAL REGISTER

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Part V

Department of Defense

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General Services Administration

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National Aeronautics and Space Administration

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48 CFR Parts 1, 2, 3, *et al.*

Federal Acquisition Regulation; Positive Law Codification of Title 41;  
Proposed Rule

**DEPARTMENT OF DEFENSE**

**GENERAL SERVICES  
ADMINISTRATION**

**NATIONAL AERONAUTICS AND  
SPACE ADMINISTRATION**

**48 CFR Parts 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 19, 22, 23, 24, 25, 26, 27, 28, 30, 31, 32, 33, 36, 37, 38, 39, 41, 42, 43, 44, 46, 47, 48, 50, 51, 52, and 53**

[FAR Case 2011–018; Docket 2011–0018; Sequence 1]

RIN 9000–AM30

**Federal Acquisition Regulation;  
Positive Law Codification of Title 41**

**AGENCIES:** Department of Defense (DoD), General Services Administration (GSA), and National Aeronautics and Space Administration (NASA).

**ACTION:** Proposed rule.

**SUMMARY:** DoD, GSA, and NASA are proposing to amend the Federal Acquisition Regulation (FAR) to conform references throughout the FAR to the new Positive Law Codification of Title 41, United States Code, “Public Contracts.”

**DATES:** Interested parties should submit written comments to the Regulatory Secretariat at one of the addressees shown below on or before November 19,

2012 to be considered in the formation of the final rule.

**ADDRESSES:** Submit comments in response to FAR Case 2011–018 by any of the following methods:

- *Regulations.gov:* <http://www.regulations.gov>. Submit comments via the Federal eRulemaking portal by searching for “FAR Case 2011–018”. Select the link “Submit a Comment” that corresponds with “FAR Case 2011–018.” Follow the instructions provided at the “Submit a Comment” screen. Please include your name, company name (if any), and “FAR Case 2011–018” on your attached document.
- *Fax:* 202–501–4067.
- *Mail:* General Services Administration, Regulatory Secretariat (MVCB), ATTN: Hada Flowers, 1275 First Street NE., 7th Floor, Washington, DC 20417.

*Instructions:* Please submit comments only and cite FAR Case 2011–018, in all correspondence related to this case. All comments received will be posted without change to <http://www.regulations.gov>, including any personal and/or business confidential information provided.

**FOR FURTHER INFORMATION CONTACT:** Mr. Edward N. Chambers, Procurement Analyst, at 202–501–3221, for clarification of content. For information pertaining to status or publication schedules, contact the Regulatory Secretariat at 202–501–4755. Please cite FAR Case 2011–018.

**SUPPLEMENTARY INFORMATION:**

**I. Background**

On January 4, 2011, Public Law 111–350 enacted a new codified version of Title 41 United States Code (U.S.C.), entitled “Public Contracts.” The purpose of this proposed rule is to update all references to Title 41 in the FAR to conform to the positive law codification.

Furthermore, this rule proposes further updates to complete the implementation of the recodification of title 40 in the FAR (see final rule under FAR Case 2005–010, Title 40 of United States Code Reference Corrections, published in the **Federal Register** at 70 FR 57453 on September 30, 2005).

**II. Discussion and Analysis**

There are three types of changes throughout the FAR, including some standard forms:

A. Change to the citation (e.g., “41 U.S.C. 10a-10d” now reads “41 U.S.C. chapter 83”).

B. Change to the popular names of the Acts (e.g., the “Service Contract Act of 1965” is now the “Service Contract Labor Standards statute”). A table providing the popular names of the Acts, the present statutory citation, and the new titles of the statutes is proposed at FAR 1.110. This table covers Acts under both titles 40 and 41.

C. Changes to terminology which did not involve substantive changes to the meaning of the statutes. The changes are summarized in the following table:

	Statutory cite in 41 U.S.C.	Change from	To	FAR cites
1.	104 .....	Definition of COTS item: “section 3 of the Shipping Act of 1984 (46 U.S.C. App. 1702)”.	“46 U.S.C. 40102(4)” .....	2.101, 22.1801, 52.209–6, 52.222–54, 52.225–1, 52.225–3, 52.225–9, 52.225–11.
2.	2105(c)(1) .....	“has engaged in conduct constituting a violation of”/“constitutes a violation of”.	“has violated”/“violates.” .....	3.703, 52.203–8.
3.	1705 and 4106(g)(2) .....	“competition advocate” .....	“advocate for competition” .....	6.000, 6.304(a), subpart 6.5 (multiple), 7.104(c), 8.405–3(e)(3), 8.405–6(d), 9.202(b), 13.501(a)(2)(ii), 16.505(b)(2)(ii)(C).
4.	3901 .....	“in its discretion,” .....	Delete phrase .....	52.203–5.
5.	6308 .....	“let” .....	“award” .....	3.303(c)(5), 19.800(a), 52.219–8.
6.	6701 .....	“Outer Continental Shelf lands”	“outer Continental Shelf” .....	22.305, 22.1001, 52.213–4(b).
7.	7103 .....	“duly” .....	Delete word .....	33.201, 33.207(e), 52.233–1.
8.	8501 and 29 CFR 525 .....	“handicapped” .....	“disabled” or “workers with disabilities”.	5.202(a)(4), 9.102(b)(3), 15.404–4(d)(1)(iii), 22.102–1(h), 22.1019, 52.222–20, -38, 41.
9.	Chapter 85 (see 48 U.S.C. note prec. 1681).	Trust Territory of the Pacific .....	Delete .....	52.212–3, Alt I, 52.219–1, Alt I.
10.	8701 and 8702 .....	“directly or indirectly” .....	Delete .....	3.502–1(a), 52.203–7(a).
11.	8703 .....	“Department of Justice” .....	“Attorney General” .....	3.502–2(g), 52.203–7(c)(2).

Additionally, this case makes numerous minor corrections to the FAR apart from the changes directly due to the recodification:

- References to title 10 of the United States Code are corrected at FAR 6.302–5(c)(1), 7.102(a)(2), 7.103(a), 7.202(a), 15.303(b)(4) and (6), 15.404–1(f)(2), 32.006–1(a), and 32.006–5.

- Codification citations are added for Authorization Acts, for Appropriations Acts and other public laws at FAR 8.602(a), 9.402(d), 12.000, 12.102(g)(1), 12.504(a)(13), 16.505(a)(9), 19.201(d), 23.704(b)(1)(ii), 25.405, 25.700(b), 26.400, 28.106–4(b), 28.106–6(d), 31.205–1(f)(8), 32.112–1(a), 32.112–2(a), 52.212–5(a)(3) and (c)(7), (e)(1)(xiii), and in (e)(1)(ii)(M) of Alternate II; 52.213–4(a)(1)(vii), (b)(1)(x), 52.226–6(b), and 52.228–12.

- FAR 12.201 deletes the reference to Public Law 103–355, which is already covered at 12.000.

- The title of the clause at FAR 52.244–6 is corrected at FAR 12.502(b) and 44.402(b).

- FAR 1.501 is corrected to conform to 41 U.S.C. 1707 and FAR 1.301.

- FAR 22.1502—the relationship of three statutes is conformed to language used in Executive Order 13126.

- Obsolete references are deleted at FAR 43.102(c) and 50.103–3(c).

- The Executive order citation is added for FAR 52.222–54, Employment Eligibility Verification, at 52.212–5(e)(1)(xii) and Alternate II at (e)(1)(ii)(L).

### III. Executive Order 12866 and 13563

Executive Orders (E.O.s) 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). E.O. 13563 emphasizes the importance of quantifying both costs and benefits, of reducing costs, of harmonizing rules, and of promoting flexibility. This is not a significant regulatory action and, therefore, was not subject to review under section 6(b) of E.O. 12866, Regulatory Planning and Review, dated September 30, 1993. This rule is not a major rule under 5 U.S.C. 804.

### IV. Regulatory Flexibility Act

The Department of Defense (DoD), the General Services Administration (GSA), and the National Aeronautics and Space Administration (NASA) do not expect this proposed rule to have a significant economic impact on a substantial

number of small entities within the meaning of the Regulatory Flexibility Act, 5 U.S.C. 601, *et seq.*, because the rule does not change or add any policies or procedures. The rule merely updates references and terminology. Therefore, an Initial Regulatory Flexibility Analysis has not been performed. DoD, GSA, and NASA invite comments from small business concerns and other interested parties on the expected impact of this rule on small entities.

DoD, GSA, and NASA will also consider comments from small entities concerning the existing regulations in subparts affected by the rule in accordance with 5 U.S.C. 610. Interested parties must submit such comments separately and should cite 5 U.S.C. 610 (FAR Case 2011–018) in all correspondence.

### V. Paperwork Reduction Act

The Paperwork Reduction Act (44 U.S.C. chapter 35) does apply; however, these changes to the FAR do not imposed additional information collection requirements to the paperwork burden previously approved under the Office of Management and Budget Control Number 1215–0017, titled: Records to be Kept by Employers-FLSA; 1215–0119, titled: Requirements of a Bono Fide Thrift or Savings Plan; 1215–0140, titled: Affected Public: Business or other for-profit; Federal Government; State, Local or Tribal Government; 1215–0149, titled: Optional Use Payroll Form under the Davis-Bacon Act; 1215–0150, titled: Nondisplacement of Qualified Workers Under Service Contracts; 9000–0014, titled: Statement and Acknowledgement; 9000–0024, titled: Buy American Act Certificate; 9000–0025, titled: Trade Agreement Certificate; 9000–0035, titled: Claims and Appeals; 9000–0045, titled: Bid Guarantees, Performance and Payment Bonds, and Alternative Payment Protections; 9000–0070, titled: Payments; 9000–0089, titled: Request for Authorization of Additional Classification and Rate, Standard Form 1444; 9000–0090, titled: Rights in Data and Copyrights; 9000–0091, titled: Anti-Kickback Procedures; 9000–0094, titled: Debarment and Suspension; 9000–0102, titled: Prompt Payment; 9000–0113, titled: Acquisition of Helium; 9000–0130, titled: Buy American Act-Free Trade Agreements-Israeli Trade Act Certificate; 9000–135, titled: Prospective Subcontractor Requests for Bonds; 9000–0136, titled: Commercial Item Acquisitions; 9000–0138, titled: Contract Financing; 9000–0141, titled: Buy American Act—Construction;

9000–0154, titled: Davis Bacon Act—Price Adjustments (Actual Method).

**List of Subjects in 48 CFR Parts 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 19, 22, 23, 24, 25, 26, 27, 28, 30, 31, 32, 33, 36, 37, 38, 39, 41, 42, 43, 44, 46, 47, 48, 50, 51, 52, and 53.**

Government procurement.

Dated: August 30, 2012.

**Laura Auletta,**

*Director, Office of Governmentwide Acquisition Policy, Office of Acquisition Policy, Office of Governmentwide Policy.*

Therefore, DoD, GSA, and NASA propose amending 48 CFR parts 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 19, 22, 23, 24, 25, 26, 27, 28, 30, 31, 32, 33, 36, 37, 38, 39, 41, 42, 43, 44, 46, 47, 48, 50, 51, 52, and 53 as set forth below:

1. The authority citation for 48 CFR parts 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 19, 22, 23, 24, 25, 26, 27, 28, 30, 31, 32, 33, 36, 37, 38, 39, 41, 42, 43, 44, 46, 47, 48, 50, 51, 52, and 53 is revised to read as follows:

**Authority:** 40 U.S.C. 121(c); 10 U.S.C. chapter 137; and 51 U.S.C. 20113.

### PART 1—FEDERAL ACQUISITION REGULATIONS SYSTEM

2. Amend section 1.103 by revising paragraph (a) to read as follows:

#### 1.103 Authority.

(a) The development of the FAR System is in accordance with the requirements of (41 U.S.C. chapter 13, Acquisition Councils).

\* \* \* \* \*

#### 1.106 [Amended]

3. Amend section 1.106 by removing from the introductory paragraph “(Pub. L. 96–511)” and adding “(44 U.S.C. chapter 35)” in its place.

4. Amend section 1.107 by revising the introductory paragraph to read as follows:

#### 1.107 Certifications.

In accordance with 41 U.S.C. 1304, a new requirement for a certification by a contractor or offeror may not be included in this chapter unless—

\* \* \* \* \*

5. Amend section 1.109 by removing from paragraph (a) “41 U.S.C. 431a” and adding “41 U.S.C. 1908” in its place; and revising paragraph (c) to read as follows:

#### 1.109 Statutory acquisition-related dollar thresholds—adjustment for inflation.

\* \* \* \* \*

(c) The statute does not permit escalation of acquisition-related dollar

thresholds established by 40 U.S.C. chapter 31, subchapter IV, Wage Rate Requirements (Construction 41 U.S.C. chapter 67, Service Contract Labor Standards; or the United States Trade Representative pursuant to the authority of the Trade Agreements Act of 1979 (19 U.S.C. 2511 *et seq.*).

\* \* \* \* \*

6. Add section 1.110 to read as follows:

**1.110 Positive Law codification.**

(a) Public Law 107–217 revised, codified, and enacted as title 40, United States Code, Public Buildings, Property, and Works, certain general and permanent laws of the United States.

(b) Public Law 111–350 revised, codified, and enacted as title 41, United States Code, Public Contracts, certain general and permanent laws of the United States.

(c) The following table provides cross references between the historical titles of the acts, and the current reference in title 40 or title 41.

Historical title of Act	Division/chapter/subchapter	Title
Anti-Kickback Act .....	41 U.S.C. chapter 87 .....	Kickbacks.
Brooks Architect-Engineer Act .....	40 U.S.C. chapter 11 .....	Selection of Architects and Engineers.
Buy American Act .....	41 U.S.C. chapter 83 .....	Buy American.
Contract Disputes Act of 1978 .....	41 U.S.C. chapter 71 .....	Contract Disputes.
Contract Work Hours and Safety Standards Act	40 U.S.C. chapter 37 .....	Contract Work Hours and Safety Standards.
Davis-Bacon Act .....	40 U.S.C. chapter 31, Subchapter IV .....	Wage Rate Requirements (Construction).
Drug-Free Workplace Act .....	41 U.S.C. chapter 81 .....	Drug-Free Workplace.
Federal Property and Administrative Services Act of 1949, Title III.	41 U.S.C. Div. C of subtitle I* .....	Procurement.
Javits-Wagner-O'Day Act .....	41 U.S.C. chapter 85 .....	Committee for Purchase from People Who Are Blind or Severely Disabled.
Miller Act .....	40 U.S.C. chapter 31, subchapter III .....	Bonds.
Office of Federal Procurement Policy Act .....	41 U.S.C. Div. B of subtitle I** .....	Office of Federal Procurement Policy.
Procurement Integrity Act .....	41 U.S.C. chapter 21 .....	Restrictions on Obtaining and Disclosing Certain Information.
Service Contract Act of 1965 .....	41 U.S.C. chapter 67 .....	Service Contract Labor Standards.
Truth in Negotiations Act .....	41 U.S.C. chapter 35 .....	Truthful Cost or Pricing Data.
Walsh-Healey Public Contracts Act .....	41 U.S.C. chapter 65 .....	Contracts for Materials, Supplies, Articles, and Equipment Exceeding \$15,000.

\* Except sections 3302, 3501(b), 3509, 3906, 4710, and 4711.  
 \*\* Except sections 1704 and 2303.

7. Amend section 1.301 by revising the first sentence of paragraph (b) to read as follows:

**1.301 Policy.**

\* \* \* \* \*

(b) Agency heads shall establish procedures to ensure that agency acquisition regulations are published for comment in the **Federal Register** in conformance with the procedures in subpart 1.5 and as required by 41 U.S.C. 1707, and other applicable statutes, when they have a significant effect beyond the internal operating procedures of the agency or have a significant cost or administrative impact on contractors or offerors. \* \* \*

\* \* \* \* \*

**1.501–1 [Amended]**

8. Amend section 1.501–1 by removing from the first sentence “having a significant” and adding “and which have a significant” in its place.

**1.602–3 [Amended]**

9. Amend section 1.602–3 by removing from paragraph (b)(5) “under the Contract Disputes Act of 1978” and adding “under 41 U.S.C. chapter 71, Contract Disputes,” in its place.

**1.603–1 [Amended]**

10. Amend section 1.603–1 by removing “Subsection 414(4) of Title 41,

United States Code,” and adding “41 U.S.C. 1702(b)(3)(F)” in its place.

**PART 2—DEFINITIONS OF WORDS AND TERMS**

11. Amend section 2.101 in paragraph (b) by—

a. Removing from the definition “Certified cost or pricing data” the citation “41 U.S.C.254b)” and adding “41 U.S.C. chapter 35)” in its place;

b. Removing from the definition “Chief Acquisition Officer” the words “to the Services Acquisition Reform Act of 2003, Section 1421 of Public Law 108–136” and adding “41 U.S.C. 1702” in its place;

c. Removing from the definition “Claim” the words “the Contract Disputes Act of 1978” and “by the Act” and adding “41 U.S.C. chapter 71, Contract Disputes,” and “by the statute” in its place, respectively;

d. Removing from the definition “Commercially available off-the-shelf (COTS) item”, in paragraph (2), “section 3 of the Shipping Act of 1984 (46 U.S.C. App. 1702)” and adding “46 U.S.C. 40102(4),” in its place;

e. Removing from the first sentence of the definition “Cost or pricing data” the words “41 U.S.C. 254b)” and adding “41 U.S.C. chapter 35) in its place;

f. Removing from the definition “Humanitarian or peacekeeping

operation” the citation “41 U.S.C. 259(d)” and adding “41 U.S.C. 153(2)” in its place;

g. Revising the definition “Ineligible”;

h. Removing from the definition “Major system”, in paragraph (3), “41 U.S.C. 403” and adding “41 U.S.C. 109” in its place;

i. Revising the definition “Micro-purchase threshold”;

j. Revising the definition “Senior procurement executive”;

k. Removing from the definition “Simplified acquisition threshold” in the introductory paragraph, “(41 U.S.C. 428a)” and adding “(41 U.S.C. 1903)” in its place;

l. Removing from the definition “Technical data” the words “(See 41 U.S.C. 403(8))” and adding “(See 41 U.S.C. 116)” in its place; and

m. Revising the definition “Value engineering” to read as follows:

**2.101 Definitions.**

\* \* \* \* \*

(b) \* \* \*  
 (2) \* \* \*

*Ineligible* means excluded from Government contracting (and subcontracting, if appropriate) pursuant to statutory, Executive order, or regulatory authority other than this regulation (48 CFR Chapter 1) and its implementing and supplementing regulations; for example, pursuant to—

(1) 40 U.S.C. chapter 31, subchapter IV, Wage Rate Requirements (Construction), and its related statutes and implementing regulations;

(2) 41 U.S.C. chapter 67, Service Contract Labor Standards;

(3) The Equal Employment Opportunity Acts and Executive orders;

(4) 41 U.S.C. chapter 65, Contracts for Material, Supplies, Articles, and Equipment Exceeding \$15,000;

(5) 41 U.S.C. chapter 83, Buy American; or

(6) The Environmental Protection Acts and Executive orders.

\* \* \* \* \*

*Micro-purchase threshold* means \$3,000, except it means—

(1) For acquisitions of construction subject to 40 U.S.C. chapter 31, subchapter IV, Wage Rate Requirements (Construction), \$2,000;

(2) For acquisitions of services subject to 41 U.S.C. chapter 67, Service Contract Labor Standards, \$2,500; and

(3) For acquisitions of supplies or services that, as determined by the head of the agency, are to be used to support a contingency operation or to facilitate defense against or recovery from nuclear, biological, chemical or radiological attack as described in 13.201(g)(1), except for construction subject to 40 U.S.C. chapter 31, subchapter IV, Wage Rate Requirements (Construction) [41 U.S.C. 1903]—

(i) \$15,000 in the case of any contract to be awarded and performed, or purchase to be made, inside the United States; and

(ii) \$30,000 in the case of any contract to be awarded and performed, or purchase to be made, outside the United States.

\* \* \* \* \*

*Senior procurement executive* means the individual appointed pursuant to 41 U.S.C. 1702(c) who is responsible for management direction of the acquisition system of the executive agency, including implementation of the unique acquisition policies, regulations, and standards of the executive agency.

\* \* \* \* \*

*Value engineering* means an analysis of the functions of a program, project, system, product, item of equipment, building, facility, service, or supply of an executive agency, performed by qualified agency or contractor personnel, directed at improving performance, reliability, quality, safety, and life-cycle costs 41 U.S.C. 1711). For use in the clause at 52.248–2, see the definition at 52.248–2(b).

\* \* \* \* \*

### PART 3—IMPROPER BUSINESS PRACTICES AND PERSONAL CONFLICTS OF INTEREST

12. Amend section 3.104–1 in the definition “Contractor bid or proposal information” by revising paragraph (1); and removing from the definition “Federal agency procurement” the words “of the Act” and adding “of 41 U.S.C. chapter 21” in its place.

The revised text reads as follows:

#### 3.104–1 Definitions.

\* \* \* \* \*

*Contractor bid or proposal information* \* \* \*

(1) Cost or pricing data (as defined by 10 U.S.C. 2306a(h)) with respect to procurements subject to that section, and 41 U.S.C. 3501(a)(2), with respect to procurements subject to that section.

\* \* \* \* \*

13. Amend section 3.104–2 by revising paragraph (a) to read as follows:

#### 3.104–2 General.

(a) This section implements 41 U.S.C. chapter 21, Restrictions on Obtaining and Disclosing Certain Information. Agency supplementation of 3.104, including specific definitions to identify individuals who occupy positions specified in 3.104–3(d)(1)(ii), and any clauses required by 3.104 must be approved by the senior procurement executive of the agency, unless a law establishes a higher level of approval for that agency.

\* \* \* \* \*

#### 3.104–3 [Amended]

14. Amend section 3.104–3 by—

a. Removing from the introductory text of paragraph (a) “(subsection 27(a) of the Act)” and adding “(41 U.S.C. 2102)” in its place;

b. Removing from paragraph (b) “(subsection 27(b) of the Act)” and adding “(41 U.S.C. 2102)” in its place;

c. Removing from the introductory text of paragraph (c) “(subsection 27(c) of the Act)” and adding “(41 U.S.C. 2103)” in its place;

d. Removing from paragraph (c)(4) “(subsection 27(c) of the Act)” and adding “(41 U.S.C. 2103)” in its place; and

e. Removing from the introductory text of paragraph (d) “subsection 27(d) of the Act” and adding “(41 U.S.C. 2103)” in its place.

#### 3.104–4 [Amended]

15. Amend section 3.104–4 by removing from paragraph (f)(1) “section 27 of the Act” and adding “41 U.S.C. chapter 21” in its place.

#### 3.104–6 [Amended]

16. Amend section 3.104–6 by removing from paragraphs (a), (c), and (d)(3) “subsection 27(d) of the Act” and adding “41 U.S.C. 2104” in its place.

#### 3.104–7 [Amended]

17. Amend section 3.104–7 by—  
a. Removing from the introductory text of paragraph (a) “subsection 27(a), (b), (c), or (d) of the Act” and adding “41 U.S.C. 2102, 2103 or 2104” in its place;

b. Removing from paragraph (b)(5) “subsection 27(e) of the Act” and adding “41 U.S.C. 2105” in its place;

c. Removing from paragraph (c) “the Act” and adding “41 U.S.C. chapter 21” in its place; and

d. Removing from the introductory text of paragraph (d) “section 27 of the Act” and adding “41 U.S.C. chapter 21” in its place;

e. Removing from paragraph (d)(2)(ii)(A) “subsections 27(a) or (b) of the Act” and adding “41 U.S.C. 2102” in its place; and

f. Removing from paragraph (d)(2)(ii)(B) “subsection 27(c)(1) of the Act” and adding “41 U.S.C. 2105(a)” in its place.

18. Amend section 3.104–8 by removing from the introductory paragraph “the Act” and adding 41 U.S.C. chapter 21” in its place; and removing from paragraphs (a) and (b) “subsection 27(e) of the Act” and adding “41 U.S.C. 2105” in its place.

#### 3.303 [Amended]

19. Amend section 3.303 by removing from paragraph (a) “41 U.S.C. 253b(i)” and adding “41 U.S.C. 3707” in its place; and removing from paragraph (c)(5) “let by” and adding “awarded by” in its place.

#### 3.400 [Amended]

20. Amend section 3.400 by removing “41 U.S.C. 254(a)” and adding “41 U.S.C. 3901” in its place.

#### 3.402 [Amended]

21. Amend section 3.402 by removing from the introductory paragraph “41 U.S.C. 254(a)” and adding “41 U.S.C. 3901” in its place.

#### 3.502–1 [Amended]

22. Amend section 3.502–1 by removing from the definition “Kickback” “, directly or indirectly,”.

23. Amend section 3.502–2 by—  
a. Revising the introductory text, and paragraphs (d)(3) and (g);

b. Removing from the introductory text of paragraph (h), and paragraphs (i)(1), and (i)(2) “the Act” and adding “Kickbacks statute” in its place; and

c. Revising (j) to read as follows:

**3.502-2 Subcontractor Kickbacks.**

The Anti-Kickback Act of 1986 (now codified at 41 U.S.C. chapter 87, Kickbacks,) was passed to deter subcontractors from making payments and contractors from accepting payments for the purpose of improperly obtaining or rewarding favorable treatment in connection with a prime contractor a subcontract relating to a prime contract. The Kickbacks statute—

\* \* \* \* \*

(d) Provides that—

(3) An offset under subparagraph (d)(1) or a direction under subparagraph (d)(2) of this subsection is a claim by the Government for the purposes of 41 U.S.C. chapter 71, Contract Disputes.

\* \* \* \* \*

(g) Requires a prime contractor or subcontractor to report in writing to the inspector general of the contracting agency, the head of the contracting agency if the agency does not have an inspector general, or the Attorney General any possible violation of the Kickbacks statute when the prime contractor or subcontractor has reasonable grounds to believe such violation may have occurred.

\* \* \* \* \*

(j) Notwithstanding paragraph (i) of this subsection, a prime contractor shall cooperate fully with any Federal Government agency investigating a violation of 41 U.S.C. 8702 (See also 41 U.S.C. 8703(b)).

**3.503-1 [Amended]**

24. Amend section 3.503-1 by removing “41 U.S.C. 253g” and adding “41 U.S.C. 4704” in its place.

25. Amend section 3.703 by revising the introductory text of paragraph (b) and (b)(1) to read as follows:

**3.703 Authority.**

\* \* \* \* \*

(b) 41 U.S.C. 2105(c) requires a Federal agency, upon receiving information that a contractor or a person has violated 41 U.S.C. 2102, to consider rescission of a contract with respect to which—

(1) The contractor or someone acting for the contractor has been convicted for an offense punishable under 41 U.S.C. 2105(a); or

\* \* \* \* \*

**3.704 [Amended]**

26. Amend section 3.704 by removing from the introductory text of paragraph (c) “subsection 27(e) of the OFPP Act” and adding “41 U.S.C. 2105” in its place.

27. Amend section 3.705 by revising paragraph (e) to read as follows:

**3.705 Procedures.**

\* \* \* \* \*

(e) *Final agency decision.* The final agency decision shall be based on the information available to the agency head or designee, including any pertinent information submitted or, if a hearing was held, presented at the hearing. If the agency decision declares void and rescinds the contract, the final decision shall specify the amounts due and property to be returned to the agency, and reflect consideration of the fair value of any tangible benefits received and retained by the agency. Notice of the decision shall be sent promptly by certified mail, return receipt requested. Rescission of contracts under the authority of the Act and demand for recovery of the amounts expended and property transferred therefore, is not a claim within the meaning of 41 U.S.C. chapter 71, Contract Disputes, or part 33. Therefore, the procedures required by the statute and the FAR for the issuance of a final contracting officer decision are not applicable to final agency decisions under this subpart, and shall not be followed.

28. Amend section 3.900 by revising paragraph (a) to read as follows:

**3.900 Scope of subpart.**

(a) Sections 3.901 through 3.906 of this subpart implements 10 U.S.C. 2409 and 41 U.S.C. 4705.

\* \* \* \* \*

**PART 4—ADMINISTRATIVE MATTERS**

29. Revise section 4.500 to read as follows:

**4.500 Scope of subpart.**

This subpart provides policy and procedures for the establishment and use of electronic commerce in Federal acquisition as required by 41 U.S.C. 2301.

**4.502 [Amended]**

30. Amend section 4.502 by removing from the introductory text of paragraph (b) “Section 30 of the OFPP Act (41 U.S.C. 426)” and adding “41 U.S.C. 2301” in its place.

31. Amend section 4.602 by revising paragraph (a)(2) to read as follows:

**4.602 General.**

(a) \* \* \*

\* \* \* \* \*

(2) A means of measuring and assessing the effect of Federal contracting on the Nation’s economy and the extent to which small, veteran-owned small, service-disabled veteran-

owned small, HUBZone small, small disadvantaged, women-owned small business concerns, and AbilityOne nonprofit agencies operating under 41 U.S.C. chapter 85, Committee for Purchase from People Who Are Blind or Severely Disabled, are sharing in Federal contracts;

\* \* \* \* \*

**4.805 [Amended]**

32. Amend section 4.805 by removing from paragraph (b)(1) “Act” and adding “statute” in its place.

**4.1202 [Amended]**

33. Amend section 4.1202 by—  
(a) Removing from paragraphs (p) and (q) “Act” and adding “Labor Standards” in its place;

(b) Removing from paragraph (u) “Buy American Act” and adding “Buy American Certificate.” in their places; and

(c) Removing from paragraph (v) “Buy American Act” and adding “Buy American-Free” in its place.

**PART 5—PUBLICIZING CONTRACT ACTIONS**

34. Amend section 5.101 by revising the introductory text of paragraph (a) to read as follows:

**5.101 Methods of disseminating information.**

(a) As required by the Small Business Act (15 U.S.C. 637(e)) and 41 U.S.C. 1708, contracting officers must disseminate information on proposed contract actions as follows:

\* \* \* \* \*

35. Amend section 5.201 by revising paragraph (a) to read as follows:

**5.201 General.**

(a) As required by the Small Business Act (15 U.S.C. 637(e)) and 41 U.S.C. 1708, agencies must make notices of proposed contract actions available as specified in paragraph (b) of this section.

\* \* \* \* \*

36. Amend section 5.202 by revising paragraph (a)(4) to read as follows:

**5.202 Exceptions.**

\* \* \* \* \*

(a) \* \* \*  
(4) The proposed contract action is expressly authorized or required by a statute to be made through another Government agency, including acquisitions from the Small Business Administration (SBA) using the authority of section 8(a) of the Small Business Act (but see 5.205(f)), or from a specific source such as a workshop for the blind under the rules of the

Committee for the Purchase from People Who Are Blind or Severely Disabled;

\* \* \* \* \*

37. Amend section 5.207 by removing from paragraph (c)(14)(i) “Act”; and revising paragraph (c)(14)(iii) to read as follows:

**5.207 Preparation and transmittal of synopses.**

\* \* \* \* \*

(c) \* \* \*

(14) \* \* \*

(iii) If the solicitation will include the FAR clause at 52.225–11, Buy American-Construction Materials under Trade Agreements, 52.225–23, Required Use of American Iron, Steel, and Manufactured Goods—Buy American Statute—Construction Materials under Trade Agreements, or an equivalent agency clause, insert the following notice in the synopsis: “One or more of the items under this acquisition is subject to the World Trade Organization Government Procurement Agreement and Free Trade Agreements.”

\* \* \* \* \*

**PART 6—COMPETITION REQUIREMENTS**

**6.000 [Amended]**

38. Amend Section 6.000 by removing “and competition advocates” and adding “and advocates for competition” in its place.

**6.101 [Amended]**

39. Amend section 6.101 by removing from paragraphs (a) and (b) “41 U.S.C. 253” and adding “41 U.S.C. 3301” in their places.

**6.102 [Amended]**

40. Amend section 6.102 by removing from paragraph (d)(3) “41 U.S.C. 259(b)(3)(A)” and adding “41 U.S.C. 152(3)(A)” in its place.

**6.301 [Amended]**

41. Amend section 6.301 by removing from paragraph (a) “41 U.S.C. 253(c)” and adding “41 U.S.C. 3304” in its place (twice).

**6.302–1 [Amended]**

42. Amend section 6.302–1 by—

(a) Removing from paragraph (a)(1) “41 U.S.C. 253(c)(1)” and adding “41 U.S.C. 3304(a)(1)”;

(b) Removing from paragraph (a)(2)(i)(C) “41 U.S.C. 253(d)(1)(A)” and adding “41 U.S.C. 3304(b)(1)”;

(c) Removing from paragraph (a)(2)(ii)(B) “41 U.S.C. 253(d)(1)(B)” and adding “41 U.S.C. 3304(b)(2)” in its place.

**6.302–2 [Amended]**

43. Amend section 6.302–2 by removing from paragraph (a)(1) “41 U.S.C. 253(c)(2)” and adding “41 U.S.C. 3304(a)(2)” in its place.

**6.302–3 [Amended]**

44. Amend section 6.302–3 by removing from paragraph (a)(1) “41 U.S.C. 253(c)(3)” and adding “41 U.S.C. 3304(a)(3)” in its place.

**6.302–4 [Amended]**

45. Amend section 6.302–4 by removing from paragraph (a)(1) “41 U.S.C. 253(c)(4)” and adding “41 U.S.C. 3304(a)(4)” in its place.

46. Amend section 6.302–5 by revising paragraphs (a)(1), (b)(2), (c)(1)(ii), and (c)(1)(iii) to read as follows:

**6.302–5 Authorized or required by statute.**

(a) *Authority.* (1) Citations: 10 U.S.C. 2304(c)(5) or 41 U.S.C. 3304(a)(5).

\* \* \* \* \*

(b) \* \* \*

(2) Qualified nonprofit agencies for the blind or other severely disabled—41 U.S.C. chapter 85, Committee for Purchase From People Who Are Blind or Severely Disabled (see subpart 8.7).

\* \* \* \* \*

(c) *Limitations.*

(1) \* \* \*

(ii) Refers to 10 U.S.C. 2304(k) for armed services acquisitions or 41 U.S.C. 3105 for civilian agency acquisitions; and

(iii) States that award to that entity shall be made in contravention of the merit-based selection procedures in 10 U.S.C. 2304(k) or 41 U.S.C. 3105, as appropriate. However, this limitation does not apply—

\* \* \* \* \*

**6.302–6 [Amended]**

47. Amend section 6.302–6 by removing from paragraph (a)(1) “41 U.S.C. 253(c)(6)” and adding “41 U.S.C. 3304(a)(6)” in its place.

**6.302–7 [Amended]**

48. Amend section 6.302–7 by removing from paragraph (a)(1) “41 U.S.C. 253(c)(7)” and adding “41 U.S.C. 3304(a)(7)” in its place.

**6.304 [Amended]**

49. Amend section 6.304 by removing from paragraph (a)(2) “by the competition advocate” and adding “by the advocate for competition”; and by removing from paragraph (a)(4) “the OFPP Act (41 U.S.C. 414(3))” and adding “41 U.S.C. 1702(c)” in its place.

**6.305 [Amended]**

50. Amend section 6.305 by removing from paragraph (a) “41 U.S.C. 253(j).” and adding “41 U.S.C. 3304(f).” in its place.

51. Amend subpart 6.5 by revising the heading as set forth below:

**SUBPART 6.5—ADVOCATES FOR COMPETITION**

52. Amend section 6.501 by revising the introductory paragraph to read as follows:

**6.501 Requirement.**

As required by 41 U.S.C. 1705, the head of each executive agency shall designate an advocate for competition for the agency and for each procuring activity of the agency. The advocates for competition shall—

\* \* \* \* \*

**6.502 [Amended]**

53. Amend section 6.502 by removing from paragraphs (a) and (b) “competition advocates” and adding “advocates for competition” in their places.

**PART 7—ACQUISITION PLANNING**

**7.102 [Amended]**

54. Amend section 7.102 by removing from paragraph (a)(1) “41 U.S.C. 251, *et seq.*” and adding “41 U.S.C. 3307” in its place; and removing from paragraph (a)(2) “10 U.S.C. 2301(a)(5) and 41 U.S.C. 253a(a)(1)” and adding “10 U.S.C. 2305(a)(1)(A) and 41 U.S.C. 3306(a)(1)” in its place.

**7.103 [Amended]**

55. Amend section 7.103 by—  
a. Removing from paragraph (a) “41 U.S.C. 253a(a)(1)” and adding “10 U.S.C. 2305(a)(1)(A) and 41 U.S.C. 3306(a)(1)” in its place;

b. Removing from paragraph (b) “41 U.S.C. 251, *et seq.*” and adding “41 U.S.C. 3307” in its place; and

c. Removing from paragraph (c) “41 U.S.C. 253a(a)(1)” and adding “41 U.S.C. 3306(a)(1)” in its place.

**7.104 [Amended]**

56. Amend section 7.104 by removing from paragraph (c) “competition advocate” and adding “advocate for competition” in its place.

**7.108 [Amended]**

57. Amend section 7.108 by removing from the introductory paragraph “section 1428 of Public Law 108–136” and adding “41 U.S.C. 3306(f)” in its place.

**7.202 [Amended]**

58. Amend section 7.202 by removing from paragraph (a) “10 U.S.C. 2384(a) and 41 U.S.C. 253f” and adding “10 U.S.C. 2384a and 41 U.S.C. 3310” in its place.

**PART 8—REQUIRED SOURCES OF SUPPLIES AND SERVICES**

**8.401 [Amended]**

59. Amend section 8.401 in the definition “Multiple Award Schedule (MAS)” by removing “Title III of the Federal Property and Administrative Services Act of 1949 (41 U.S.C. 251, *et seq.*) and Title” and adding “41 U.S.C. 152(3), Competitive Procedures, and” in its place.

**8.403 [Amended]**

60. Amend section 8.403 by removing from the introductory text of paragraph (c) “Public Law 108–136” and adding “Public Law 108–136 (40 U.S.C. 1103 note)” in its place.

**8.405–3 [Amended]**

61. Amend section 8.405–3 by removing from paragraph (e)(3) “competition advocate” and adding “advocate for competition” in its place.

**8.405–6 [Amended]**

62. Amend section 8.405–6 by removing from paragraph (d)(2) “competition advocate” and adding “advocate for competition” in its place.

**8.602 [Amended]**

63. Amend section 8.602 by removing from the introductory text of paragraph (a) “(Pub. L. 108–447)” and adding “(Pub. L. 108–447) (18 U.S.C. 4124 note)” in its place.

64. Amend section 8.603 by revising the introductory text of paragraph (a); and removing from paragraph (a)(1) “(41 U.S.C. 48)” and adding “(41 U.S.C. 8504)” in its place.

The revised text reads as follows:

**8.603 Purchase priorities.**

FPI and nonprofit agencies participating in the AbilityOne Program under 41 U.S.C. chapter 85, Committee for Purchase from People Who Are Blind or Severely Disabled (see Subpart 8.7), may produce identical supplies or services. When this occurs, ordering offices shall purchase supplies and services in the following priorities:  
\* \* \* \* \*

65. Revise section 8.700 to read as follows:

**8.700 Scope of subpart.**

This subpart prescribes the policies and procedures for implementing—

(a) 41 U.S.C. chapter 85, Committee for Purchase from People Who Are Blind or Severely Disabled; and

(b) The rules of the Committee Purchase from People Who Are Blind or Severely Disabled (41 CFR Chapter 51), which implements the AbilityOne program.

**8.701 [Amended]**

66. Amend section 8.701 by—  
a. Removing from the definition “Procurement List” “the Javits-Wagner-O’Day Act” and adding “41 U.S.C. chapter 85” in its place; and  
b. Removing from the definition “Nonprofit agency serving people who are blind,” the words “the Act” and adding “41 U.S.C. chapter 85” in its place.

**8.702 [Amended]**

67. Amend section 8.702 by removing from paragraph (c) “the Javits-Wagner-O’Day Act” and adding “41 U.S.C. chapter 85” in its place.

**8.704 [Amended]**

68. Amend section 8.704 by removing from the introductory text of paragraph (a) “The Javits-Wagner-O’Day Act” and adding “41. U.S.C. chapter 85” in its place; and removing from paragraph (a)(1)(i) “(41 U.S.C. 48)” and adding “(41 U.S.C. 8504)” in its place.

**8.1104 [Amended]**

69. Amend section 8.1104 by removing from paragraph (e)(3) “Walsh-Healey Public Contracts Act” and adding “Contracts for Materials, Supplies, Articles, and Equipment Exceeding \$15,000” in its place.

**PART 9—CONTRACTOR QUALIFICATIONS**

**9.102 [Amended]**

70. Amend section 9.102 by removing from paragraph (b)(3) “the blind or other severely handicapped” and adding “people who are blind or severely disabled” in its place.

71. Amend section 9.107 by revising the section heading; and removing from paragraph (a) “41. U.S.C. 46–48c” and adding “41 U.S.C. chapter 85” in its place. The revised text reads as follows:

**9.107 Surveys of nonprofit agencies participating in the AbilityOne Program.**

\* \* \* \* \*

**9.200 [Amended]**

72. Amend section 9.200 by removing “41 U.S.C. 253(e)” and adding “41 U.S.C. 3311” in its place.

**9.202 [Amended]**

73. Amend section 9.202 by removing from paragraph (b) “competition

advocate” and adding “advocate for competition” in its place (twice).

**9.402 [Amended]**

74. Amend section 9.402 by removing from paragraph (d) “(Pub. L. 110–417)” and adding “(Pub. L. 110–417) (31 U.S.C. 6101 note)” in its place.

75. Amend section 9.406–2 by revising the introductory text of paragraph (b)(1)(ii) to read as follows:

**9.406–2 Causes for debarment.**

\* \* \* \* \*

(b) \* \* \*

(ii) Violations of 41 U.S.C. chapter 81, Drug-Free Workplace, as indicated by—  
\* \* \* \* \*

**9.406–4 [Amended]**

76. Amend section 9.406–4 by removing from paragraph (a)(1)(i) “the Drug-Free Workplace Act of 1988” and adding “41 U.S.C. chapter 81, Drug Free Workplace” in its place.

77. Amend section 9.407–2 by revising the introductory text of paragraph (a)(4) to read as follows:

**9.407–2 Causes for suspension.**

(a) \* \* \*

(4) Violations of 41 U.S.C. chapter 81, Drug-Free Workplace, as indicated by—  
\* \* \* \* \*

**PART 10—MARKET RESEARCH**

**10.000 [Amended]**

78. Amend section 10.000 by removing “41 U.S.C. 253a(a)(1), 41 U.S.C. 264b” and adding “41 U.S.C. 3306(a)(1), 41 U.S.C. 3307” in its place.

**PART 11—DESCRIBING AGENCY NEEDS**

**11.002 [Amended]**

79. Amend section 11.002 by removing from the introductory text of paragraph (a) “41 U.S.C. 253a(a), and 41 U.S.C. 264b” and adding “41 U.S.C. 3306(a), and 41 U.S.C. 3307” in its place.

**11.103 [Amended]**

80. Amend section 11.103 by removing from the introductory text of paragraph (a) “Section 8002(c) of Pub. L. 103–355” and adding “41 U.S.C. 3307(e)” in its place.

**11.500 [Amended]**

81. Amend section 11.500 by removing “Act” and adding “statute” in its place.

**PART 12—ACQUISITION OF COMMERCIAL ITEMS****12.000 [Amended]**

82. Amend section 12.000 by removing “Title VIII of the Federal Acquisition Streamlining Act of 1994 (Public Law 103–355)” and adding “41 U.S.C. 1906, 1907, and 3307 and 10 U.S.C. 2375–2377” in its place.

**12.102 [Amended]**

83. Amend section 12.102 by removing from the introductory text of paragraph (g)(1) “section 1431 of the National Defense Authorization Act for Fiscal Year 2004 (Public law 108–136) (41 U.S.C. 437)” and adding “41 U.S.C. 2310” in its place.

84. Revise section 12.103 to read as follows:

**12.103 Commercially available off-the-shelf (COTS) items.**

Commercially available off-the-shelf (COTS) items are defined in 2.101. Unless indicated otherwise, all of the policies that apply to commercial items also apply to COTS items. Section 12.505 lists the laws that are not applicable to COTS items (in addition to 12.503 and 12.504); the components test of the Buy American statute, and the two recovered materials certifications in Subpart 23.4, do not apply to COTS items.

85. Revise section 12.201 to read as follows:

**12.201 General.**

This subpart identifies special requirements for the acquisition of commercial items intended to more closely resemble those customarily used in the commercial marketplace, as well as other considerations necessary for proper planning, solicitation, evaluation, and award of contracts for commercial items.

**12.301 [Amended]**

86. Amend section 12.301 by removing from the introductory text of paragraph (a) “Section 8002 of Public Law 103–355 (41 U.S.C. 264, note)” and adding “41 U.S.C. 3307” in its place.

**12.404 [Amended]**

87. Amend section 12.404 by removing from the introductory text of paragraph (b) “The Federal Acquisition Streamlining Act of 1994 (41 U.S.C. 264 note)” and adding “41 U.S.C. 3307(e)(5)(B)” in its place.

**12.500 [Amended]**

88. Amend section 12.500 by removing from the introductory text of paragraph (a) “sections 34 and 35 of the Office of Federal Procurement Policy

Act (41 U.S.C. 430 and 431)” and adding “41 U.S.C. 1906 and 1907” in its place.

**12.502 [Amended]**

89. Amend section 12.502 by removing from paragraph (b) “and Commercial Components”.

90. Amend section 12.503 by—

a. Revising paragraphs (a)(1) through (a)(4), (a)(7), (a)(8), (b)(1), and (b)(2);

b. Removing from paragraph (c)(1) “41 U.S.C. 253g” and adding “41 U.S.C. 4704” in its place;

c. Revising paragraph (c)(2); and

d. Removing from paragraph (c)(3) “41 U.S.C. 422” and adding “41 U.S.C. chapter 15” in its place.

The revised text reads as follows:

**12.503 Applicability of certain laws to executive agency contracts for the acquisition of commercial items.**

(a) \* \* \*

(1) 41 U.S.C. chapter 65, Contracts for Materials, Supplies, Articles, and Equipment Exceeding \$15,000 (see subpart 22.6).

(2) 41 U.S.C. 3901(b) and 10 U.S.C. 2306(b), Contingent Fees (see 3.404).

(3) 41 U.S.C. 1708(e)(3), Minimum Response Time for Offers (see 5.203).

(4) 41 U.S.C. chapter 81, Drug-Free Workplace (see 23.501).

(7) Section 806(a)(3) of Pub. L. 102–190, as amended by Sections 2091 and 8105 of Pub. L. 103–355 (10 U.S.C. 2302 note), Payment Protections for Subcontractors and Suppliers (see 28.106–6).

(8) 41 U.S.C. 4706(d)(1) and 10 U.S.C. 2313(c)(1), GAO Access to Contractor Employees, Section 871 of Pub. L. 110–417 (see 52.214–26 and 52.215–2).

\* \* \* \* \*

(b) \* \* \*

(1) 40 U.S.C. chapter 37, Requirement for a certificate and clause under the Contract Work Hours and Safety Standards statute (see 22.305).

(2) 41 U.S.C. 8703 and 8704, Requirement for a clause and certain other requirements related to kickbacks (see 3.502).

\* \* \* \* \*

(c) \* \* \*

(2) 41 U.S.C. chapter 35, Truthful Cost or Pricing Data, and 10 U.S.C. 2306a, Truth in Negotiations (see 15.403).

\* \* \* \* \*

91. Amend section 12.504 by—

a. Revising paragraph (a)(4) through (a)(6);

b. Removing from paragraph (a)(7) “41 U.S.C. 254d(c)” and adding “41 U.S.C. 1708(e)(3)” in its place;

c. Revising paragraphs (a)(8) through (a)(10);

d. Removing from paragraph (a)(13) “Pub. L. 103–355” and adding “Pub. L. 103–355 (10 U.S.C. 2302 note)” in its place;

e. Removing from paragraph (b) “Act, 40 U.S.C. 3701, *et seq.*” and adding “statute, 40 U.S.C. chapter 37” in its place; and

f. Revising paragraphs (c)(1) through (c)(3).

The revised text reads as follows:

**12.504 Applicability of certain laws to subcontracts for the acquisition of commercial items.**

(a) \* \* \*

(4) 41 U.S.C. 6505, Contracts for Materials, Supplies, Articles, and Equipment Exceeding \$15,000 (see Subpart 22.6).

(5) 41 U.S.C. 4703, Validation of Property Data restrictions (see subpart 27.4).

(6) 41 U.S.C. 3901(b) and 10 U.S.C. 2306(b), Contingent Fees (see subpart 3.4).

\* \* \* \* \*

(8) 41 U.S.C. 1708(e)(3), Minimum Response Time for Offers (see subpart 5.2).

(9) 41 U.S.C. 2302, Rights in Technical Data (see subpart 27.4)

(10) 41 U.S.C. chapter 81, Drug-Free Workplace (see subpart 23.5).

\* \* \* \* \*

(c) \* \* \*

(1) 41 U.S.C. 4704 and 10 U.S.C. 2402, Prohibition on Limiting Subcontractor Direct Sales to the United States (see subpart 3.5).

(2) 41 U.S.C. chapter 35, Truthful Cost or Pricing Data, and 10 U.S.C. 2306a, Truth in Negotiations (see subpart 15.4)

(3) 41 U.S.C. chapter 15, Cost Accounting Standards (48 CFR chapter 99) (see 12.214).

92. Amend section 12.505 by revising paragraphs (a)(1) and (a)(2) to read as follows:

**12.505 Applicability of certain laws to contract for the acquisition of COTS items.**

\* \* \* \* \*

(a)(1) The portion of 41 U.S.C. 8302(a)(1) that reads “substantially all from articles, materials, or supplies mined, produced, or manufactured in the United States,” Buy American—Supplies, component test (see 52.225–1 and 52.225–3).

(2) The portion of 41 U.S.C. 8303(a)(2) that reads “substantially all from articles, materials, or supplies mined, produced, or manufactured in the United States,” Buy American—Construction Materials, component test (see 52.225–9 and 52.225–11).

\* \* \* \* \*

**PART 13—SIMPLIFIED ACQUISITION PROCEDURES****13.005 [Amended]**

93. Amend section 13.005 by—

- Revising the section heading;
- Removing from the introductory text of paragraph (a) “threshold” and adding “threshold pursuant to 41 U.S.C. 1905” in its place;
- Removing from paragraph (a)(1) “41 U.S.C. 57(a) and (b) (Anti Kickback Act of 1986)” and adding “41 U.S.C. 8703 (Kickbacks statute)” in its place;
- Removing from paragraph (a)(2) “40 U.S.C. 3131 (Miller Act). (Although the Miller Act does)” and adding “40 U.S.C. 3131 (Bonds Statute). (Although the Bonds Statute does)” in its place;
- Revising paragraphs (a)(3), (a)(4), and (a)(6) through (a)(8); and
- Removing from paragraph (c)(2) “Public Law 103–355” and adding “Public Law 103–355 41 U.S.C. 1905” in its place.

The revised text reads as follows:

**13.005 List of laws inapplicable to contracts and subcontracts at or below the simplified acquisition threshold.**

(a) \* \* \*

(3) 40 U.S.C. chapter 37 (Contract Work Hours and Safety Standards—Overtime Compensation).

(4) 41 U.S.C. 8102(a)(1) (Drug-Free Workplace), except for individuals.

\* \* \* \* \*

(6) 10 U.S.C. 2306(b) and 41 U.S.C. 3901(b) (Contract Clause Regarding Contingent Fees).

(7) 10 U.S.C. 2313 and 41 U.S.C. 4706 (Authority to Examine Books and Records of Contractors).

(8) 10 U.S.C. 2402 and 41 U.S.C. 4704 (Prohibition on Limiting Subcontractors Direct Sales to the United States).

\* \* \* \* \*

**13.006 [Amended]**

94. Amend section 13.006 by removing from paragraph (e) the word “Act”.

**13.302–5 [Amended]**

95. Amend section 13.302–5 by removing from the introductory text of paragraph (d)(3)(i) “Buy American Act” and adding “Buy American” in its place (two times).

**13.500 [Amended]**

96. Amend section 13.500 by removing from the introductory text of paragraph (a) “41 U.S.C. 253(g) and 253a and 253b” and adding “41 U.S.C. 3305, 3306, and chapter 37, Awarding of Contracts” in its place; and removing from paragraph (e) “41 U.S.C. 428a” and adding “41 U.S.C. 1903” in its place.

**13.501 [Amended]**

97. Amend section 13.501 by—

- Removing from paragraph (a)(1)(ii) “(section 4202 of the Clinger-Cohen Act of 1996 or the authority of the Services Acquisition Reform Act of 2003 41 U.S.C. 428a)” and adding “at 41 U.S.C. 1901 or the authority of 41 U.S.C. 1903” in its place; and
- Removing from paragraph (a)(2)(ii) “competition advocate” and adding “advocate for competition” in its place.

**PART 14—SEALED BIDDING****14.201–8 [Amended]**

98. Amend section 14.201–8 by removing from paragraph (e) “American Act” and adding “American statute” in its place.

**14.404–2 [Amended]**

99. Amend section 14.202–2 by removing from paragraph (l) “41 U.S.C. 15” and adding “41 U.S.C. 6305” in its place.

**PART 15—CONTRACTING BY NEGOTIATION****15.207 [Amended]**

100. Amend section 15.207 by removing from paragraph (b) “41 U.S.C. 423” and adding “41 U.S.C. chapter 21, Restrictions on Obtaining and Disclosing Certain Information” in its place.

**15.209 [Amended]**

101. Amend section 15.209 by removing from the introductory text of paragraph (b)(1) “41 U.S.C. 254d” and adding “41 U.S.C. 4706” in its place.

**15.303 [Amended]**

102. Amend section 15.303 by—

- Removing from paragraph (b)(4) “10 U.S.C. 2305(b)(1) and 41 U.S.C. 253b(d)(3)” and adding “10 U.S.C. 2305(b)(4)(C) and 41 U.S.C. 3703(c)” in its place; and
- Removing from paragraph (b)(6) “10 U.S.C. 2305(b)(4)(B) and 41 U.S.C. 253b(d)(3)” and adding “10 U.S.C. 2305(b)(4)(C) and 41 U.S.C. 3703(c)” in its place.

**15.304 [Amended]**

103. Amend section 15.304 by—

- Removing from paragraph (c)(1) “41 U.S.C. 253a(c)(1)(B)” and adding 41 U.S.C. 3306(c)(1)(B)” in its place; and removing from the end of sentence “;” and adding a period in its place;
- Removing from paragraph (c)(2) “41 U.S.C. 253a(c)(1)(A); and” and adding “3306(c)(1)(A).” in its place;
- Removing from paragraph (d) “41 U.S.C. 253a(b)(1)(A)” and adding “41 U.S.C. 3306(b)(1)(A)” in its place; and

d. Removing from paragraph (e)(3) “41 U.S.C. 253a(c)(1)(C)” and adding “41 U.S.C. 3306(c)(1)(C)” in its place.

**15.306 [Amended]**

104. Amend section 15.306 by—

- Removing from paragraph (a)(3) “41 U.S.C. 253b(d)(1)(B)” and adding “41 U.S.C. 3703(a)(2)” in its place;
- Removing from paragraph (c)(2) “41 U.S.C. 253b(d)” and adding “41 U.S.C. 3703” in its place; and
- Removing from paragraphs (e)(3) and (e)(5) “41 U.S.C. 423(h)(1)(2)” and adding “41 U.S.C. 2102 and 2107” in its place (two times).

**15.401 [Amended]**

105. Amend section 15.401 by removing from the definition “Subcontract” the citation “41 U.S.C. 254b” and adding “41 U.S.C. chapter 35” in its place.

106. Amend section 15.403–1 by—

- Revising the section heading;
- Removing from paragraph (c)(3)(ii) “section 868 of Pub. L. 110–417” and adding “41 U.S.C. 3501” in its place;
- Removing from paragraph (c)(3)(ii)(A) “41 U.S.C. 254b” and adding “41 U.S.C. chapter 35 in its place”; and
- Removing from paragraph (c)(3)(iv) “41 U.S.C. 428a” and adding “41 U.S.C. 1903” in its place.

The revised text reads as follows:

The revised text reads as follows:

**15.403–1 Prohibition on obtaining certifies cost or pricing data (10 U.S.C. 2306a and 41 U.S.C. chapter 35).**

\* \* \* \* \*

**15.403–3 [Amended]**

107. Amend section 15.403–3 by—

- Removing from paragraph (a)(1)(ii) “41 U.S.C. 254b(d)(1)” and adding “41 U.S.C. 3505(a)” in its place; and
- Removing from paragraph (c)(2) 41 U.S.C. 254b(d)(2)” and adding “41 U.S.C. 3505(b)” in its place.

108. Amend section 15.403–4 by revising the section heading to read as follows:

**15.403–4 Requiring certified cost or pricing data (10 U.S.C. 2306a and 41 U.S.C. chapter 35).**

\* \* \* \* \*

**15.404–1 [Amended]**

109. Amend section 15.404–1 by removing from paragraph (f)(2) “10 U.S.C. 2304 and 41 U.S.C. 254(d)(5)(A)(i)” and adding “10 U.S.C. 2306a(b)(1)(A)(i) and 41 U.S.C. 3503(a)(1)(A)” in its place.

**15.404–2 [Amended]**

110. Amend section 15.404–2 by removing from paragraph (c)(2) “41

U.S.C. 254d” and adding “41 U.S.C. 4706” in its place.

#### 15.404–4 [Amended]

111. Amend section 15.404–4 by removing from paragraph (c)(4)(i) “41 U.S.C. 254(b)” and adding “41 U.S.C. 3905” in its place; and removing from paragraph (d)(1)(iii) “handicapped sheltered workshops” and adding “sheltered workshops for workers with disabilities” in its place.

#### 15.407–1 [Amended]

112. Amend section 15.407–1 by removing from paragraph (d)(1) “Disputes Act” and adding “Disputes statute” in its place.

#### 15.503 [Amended]

113. Amend section 15.503 by removing from the introductory text of paragraph (b)(1) “41 U.S.C. 253b(c)” and adding “41 U.S.C. 2704” in its place.

#### 15.505 [Amended]

114. Amend section 15.505 by removing from the introductory text “41 U.S.C. 253b(f)–(h)” and adding “41 U.S.C. 3705” in its place.

### PART 16—TYPES OF CONTRACTS

#### 16.102 [Amended]

115. Amend section 16.102 by—  
a. Removing from paragraph (b) “41 U.S.C. 254(a)” and adding “41 U.S.C. 3901” in its place; and  
b. Removing from paragraph (c) “41 U.S.C. 254(b)” and adding “41 U.S.C. 3905(a)” in its place.

#### 16.501–2 [Amended]

116. Amend section 16.501–2 by removing from paragraph (a) “Pursuant to 10 U.S.C. 2304d and section 303K of the Federal Property and Administrative Service Act of 1949” and adding “Pursuant to 10 U.S.C. and 41 U.S.C. 4101” in its place.

#### 16.505 [Amended]

117. Amend section 16.505 by—  
a. Removing from paragraph (a)(9) “Public Law 108–136” and adding “Public Law 108–136, 40 U.S.C. 1103 note” in its place; and  
b. Removing from paragraphs (b)(2)(ii)(c)(2) and (b)(6) “competition advocate” and adding “advocate for competition” in its place.

### PART 17—SPECIAL CONTRACTING METHODS

118. Revise section 17.101 to read as follows:

#### 17.101 Authority.

This subpart implements 41 U.S.C. 3903 and 10 U.S.C. 2306b and provides

policy and procedures for the use of multi-year contracting.

119. Amend section 17.109 by revising paragraph (b)(1) to read as follows:

#### 17.109 Contract clauses.

\* \* \* \* \*

(b) \* \* \*

(1) Shall add the clause at 52.222–43, Fair Labor Standards Act and Service Contract Labor Standards—Price Adjustment (Multiple Year and Option Contracts), when the contract includes the clause at 52.222–41, Service Contract Labor Standards;

\* \* \* \* \*

#### 17.204 [Amended]

120. Amend section 17.204 by removing from paragraph (e) “Contract Act” and adding “Contract Labor Standards Statute” in its place.

121. Amend section 17.501 by revising paragraph (d) to read as follows:

#### 17.501 General.

\* \* \* \* \*

(d) An agency shall not use an interagency acquisition to make acquisitions conflicting with any other agency’s authority or responsibility (for example, that of the Administrator of General Services under title 40, United States Code, “Public Buildings, Property and Works” and 41 U.S.C. division C of subtitle I, Procurement.

#### 17.602 [Amended]

122. Amend section 17.602 by removing from paragraph (a) “the Competition in Contracting Act of 1984” and adding “41 U.S.C. chapter 33” in its place.

### PART 19—SMALL BUSINESS PROGRAMS

123. Amend section 19.000 by revising the introductory text of paragraph (a); by redesignating paragraphs (a)(1) through (a)(12) as paragraphs (a)(2) through (a)(13), respectively; and adding a new paragraph (a)(1) to read as follows:

#### 19.000 Scope of part.

(a) This part implements—

(1) The acquisition-related sections of the Small Business Act (15 U.S.C. 631, *et seq.*); applicable sections of 10 U.S.C. 2302, *et seq.*; 41 U.S.C. 3104; 10 U.S.C. 2323; and Executive Order 12138, May 18, 1979. It covers—

\* \* \* \* \*

124. Amend section 19.201 by revising paragraph (d) to read as follows:

#### 19.201 General policy.

\* \* \* \* \*

(d) The Small Business Act requires each agency with contracting authority to establish an Office of Small and Disadvantaged Business Utilization (see section (k) of the Small Business Act). For the Department of Defense, in accordance with section 904 of the National Defense Authorization Act for Fiscal Year 2006 (Pub. L. 109–163) (10 U.S.C. 144 note), the Office of Small and Disadvantaged Business Utilization has been redesignated as the Office of Small Business Programs. Management of the office shall be the responsibility of an officer or employee of the agency who shall, in carrying out the purposes of the Act—

\* \* \* \* \*

#### 19.800 [Amended]

125. Amend section 19.800 by removing from paragraph (a) “agencies and let” and adding “agencies and award” in its place.

#### 19.811–1 [Amended]

126. Amend section 19.811–1 by removing from paragraph (b)(1) “41 U.S.C. 253(c)(5)” and adding “41 U.S.C. 3304(a)(5)” in its place.

#### 19.1304 [Amended]

127. Amend section 19.1304 by removing from paragraph (a)(2) “Javits-Wagner-O’Day Act participating” and adding “Ability one participating” in its place.

#### 19.1404 [Amended]

128. Amend section 19.1404 by removing from paragraph (a)(2) “Javits-Wagner-O’Day Act participating” and adding “Ability one participating” in its place.

#### 19.1504 [Amended]

129. Amend section 19.1504 by removing from paragraph (a)(2) “Javits-Wagner-O’Day Act participating” and adding “Ability one participating” in its place.

### PART 22—APPLICATION OF LABOR LAWS TO GOVERNMENT ACQUISITIONS

130. Amend section 22.001 by—  
a. Removing from the definition “e98” the words “Contract Act” and adding “Contract Labor Standards statute” in its place; and  
b. Revising the definition “Wage Determination Online (WDOL)” to read as follows:

#### 22.001 Definitions.

\* \* \* \* \*

*Wage Determinations OnLine (WDOL)* means the Government Internet Web

site for both Construction Wage Rate Requirements statute and Service Contract Labor Standards statute wage determinations available at <http://www.wdol.gov>.

\* \* \* \* \*

#### 22.102-1 [Amended]

131. Amend section 22.102-1 by removing from paragraph (h) “the handicapped” and adding “workers with disabilities” in its place.

132. Amend section 22.102-2 by revising paragraph (c) to read as follows:

#### 22.102-2 Administration.

\* \* \* \* \*

(c)(1) The U.S. Department of Labor is responsible for the administration and enforcement of the Occupational Safety and Health Act. The Department of Labor’s Wage and Hour Division is responsible for administration and enforcement of numerous wage and hour statutes including—

(i) 40 U.S.C. chapter 31, subchapter IV, Wage Rate Requirements (Construction);

(ii) 40 U.S.C. chapter 37, Contract Work Hours and Safety Standards;

(iii) The Copeland Act (18 U.S.C. 874 and 40 U.S.C. 3145);

(iv) 41 U.S.C. chapter 65, Contracts for Materials, Supplies, Articles, and Equipment Exceeding \$15,000;

(v) 41 U.S.C. chapter 67, Service Contract Labor Standards.

(2) Contracting officers should contact the Wage and Hour Division’s regional offices when required by the subparts relating to these statutes unless otherwise specified. Addresses for these offices may be found at 29 CFR 1, Appendix B.

133. Amend section 22.202 by revising paragraph (a) to read as follows:

#### 22.202 Contract clause.

\* \* \* \* \*

(a) The contract will be subject to 41 U.S.C. chapter 65, Contracts for Materials, Supplies, Articles, and Equipment Exceeding \$15,000 (see Subpart 22.6), which contains a separate prohibition against the employment of convict labor;

\* \* \* \* \*

134. Revise section 22.300 to read as follows:

#### 22.300 Scope of Subpart.

This subpart prescribes policies and procedures for applying the requirements of 40 U.S.C. chapter 37, Contract Work Hours and Safety Standards (the statute) to contracts that may require or involve laborers or mechanics. In this subpart, the term “laborers or mechanics” includes

apprentices, trainees, helpers, watchmen, guards, firefighters, fireguards, and workmen who perform services in connection with dredging or rock excavation in rivers or harbors, but does not include any employee employed as a seaman.

#### 22.301 [Amended]

135. Amend section 22.301 by removing “Act requires” and adding “statue requires” in its place.

#### 22.302 [Amended]

136. Amend section 22.302 by removing from paragraphs (a), (b), and (c) “the Act” and adding “the statue” in its place.

#### 22.303 [Amended]

137. Amend section 22.303 by removing “the Act” and adding “the statue” in its place.

#### 22.304 [Amended]

138. Amend section 22.304 by removing from paragraph (a) “the Act” and adding “the statue” in its place.

139. Amend section 22.305 by revising the introductory paragraph, paragraph (d) and paragraph (e) to read as follows:

#### 22.305 Contract clause.

Insert the clause at 52.222-4, Contract Work Hours and Safety Standards— Overtime Compensation, in solicitations and contracts (including, for this purpose, basic ordering agreements) when the contract may require or involve the employment of laborers or mechanics. However, do not include the clause in solicitations and contracts—

\* \* \* \* \*

(d) To be performed outside the United States, Puerto Rico, American Samoa, Guam, the U.S. Virgin Islands, Johnston Island, Wake Island, and the outer Continental Shelf as defined in the Outer Continental Shelf Lands Act (43 U.S.C. 1331) (29 CFR 5.15);

(e) For work to be done solely in accordance with 41 U.S.C. chapter 65, Contracts for Materials, Supplies, Articles, and Equipment Exceeding \$15,000, (see Subpart 22.6);

\* \* \* \* \*

#### 22.401 [Amended]

140. Amend section 22.401 by removing from the definition “Laborers or mechanics”, paragraph (1)(ii), “Standards Act” and adding “Standards statute” in its place; and removing from the definition “Wages” the words “Davis-Bacon Act” and adding “Construction Wage Rate Requirements statute” in its place.

#### 22.402 [Amended]

141. Amend section 22.402 by removing from paragraph (b)(1)(ii) “Davis-Bacon Act” and adding “Construction Wage Rate Requirements statute” in its place.

142. Revise section 22.403-1 to read as follows:

#### 22.403-1 Construction Wage Rate Requirements statute.

40 U.S.C. chapter 31, subchapter IV, Wage Rate Requirements (Construction), formerly known as the Davis-Bacon Act, provides that contracts in excess of \$2,000 to which the United States or the District of Columbia is a party for construction, alteration, or repair (including painting and decorating) of public buildings or public works within the United States, shall contain a clause (see 52.222-6) that no laborer or mechanic employed directly upon the site of the work shall receive less than the prevailing wage rates as determined by the Secretary of Labor.

143. Revise section 22.403-3 to read as follows:

#### 22.403-3 Contract Work Hours and Safety Standards.

40 U.S.C. chapter 37, Contract Work Hours and Safety Standards, requires that certain contracts (see 22.305) contain a clause (see 52.222-4) specifying that no laborer or mechanic doing any part of the work contemplated by the contract shall be required or permitted to work more than 40 hours in any workweek unless paid for all additional hours at not less than 1 ½ times the basic rate of pay (see 22.301).

144. Amend section 22.403-4 by revising paragraph (b) to read as follows:

#### 22.403-4 Department of Labor regulations.

\* \* \* \* \*

(b) The Department of Labor regulations include—

(1) Part 1, relating to Construction Wage Rate Requirements statute minimum wage rates;

(2) Part 3, relating to the Copeland (Anti-Kickback) Act and requirements for submission of weekly statements of compliance and the preservation and inspection of weekly payroll records;

(3) Part 5, relating to enforcement of the (i) Construction Wage Rate Requirements statute, (ii) Contract Work Hours and Safety Standards statute and (iii) Copeland (Anti-Kickback) Act;

(4) Part 6, relating to rules of practice for appealing the findings of the Administrator, Wage and Hour Division, in enforcement cases under the various labor statutes, and by which Administrative Law Judge hearings are held; and

(5) Part 7, relating to rules of practice by which contractors and other interested parties may appeal to the Department of Labor Administrative Review Board, decisions issued by the Administrator, Wage and Hour Division, or administrative law judges under the various labor statutes.

\* \* \* \* \*

#### 22.404 [Amended]

145. Amend section 22.404 by removing from the section heading “Davis-Bacon Act” and adding “Construction Wage Rate Requirements statute” in its place.

#### 22.404-1 [Amended]

146. Amend section 22.404-1 by removing from paragraph (a)(2) “Davis-Bacon Act” and adding “Construction Wage Rate Requirements statute” in its place.

#### 22.404-11 [Amended]

147. Amend section 22.404-11 by removing “Davis-Bacon Act” and adding “Construction Wage Rate Requirements statute” in its place.

#### 22.404-12 [Amended]

148. Amend section 22.404-12 by removing from paragraph (c)(3) “Davis-Bacon Act” and adding “Construction Wage Rate Requirements statute” in its place; and removing from paragraph (c)(4) “Service Contract Act” and adding “Service Contract Labor Standards statute” in its place.

#### 22.406-2 [Amended]

149. Amend section 22.406-2 by removing from the introductory text of paragraph (b)(1) “Davis-Bacon Act” and adding “Construction Wage Rate Requirements” in its place.

#### 22.406-3 [Amended]

150. Amend section 22.406-3 by removing from paragraph (a) “Davis-Bacon Act” and adding “Construction Wage Rate Requirements” in its place.

#### 22.406-8 [Amended]

Amend section 22.406-8 by—

- Removing from paragraph (d)(2)(i)(B) “Davis-Bacon Act” and adding “Construction Wage Rate Requirements statute” in its place;
- Removing from paragraph (d)(2)(ii)(D) “Standards Act” and adding “Standards statute” in its place;
- Removing from paragraph (e)(2) “Davis-Bacon Act” and adding “Construction Wage Rate Requirements statute” in its place; and
- Removing from paragraph (e)(3) “Standards Act” and adding “Standards statute” in its place.

151. Amend section 22.406-9 by—

- Removing from paragraph (a) “Standards Act” and adding “Standards statute” in its place;

- Removing from paragraph (a)(1) “Davis-Bacon Act” and “Standards Act” and adding “Construction Wage Rate Requirements statute” and “Standards statute” in its place, respectively;

- Removing from paragraph (b) “Davis-Bacon Act” and adding “Construction Wage Rate Requirements statute” in its place; and
- Revising paragraph (c)(1) to read as follows:

22.406-9 Withholding from or suspension of contract payments.

\* \* \* \* \*

(c) *Disposition of contract payments withheld or suspended—*

(1) *Forwarding wage underpayments to the Comptroller General.* Upon final administrative determination, if contractor of subcontractor has not made restitution, the contracting officer must forward to the appropriate disbursing office Standard Form (SF) 1093, Schedule of Withholdings Under the Construction Wage Rate Requirements statute (40 U.S.C. chapter 31, subchapter IV) and/or Contract Work Hours and Safety Standards statute (40 U.S.C. chapter 37). Attach to the SF 1093 a list of the name, social security number, and last known address of each affected employee; the amount due each employee; employee claims if feasible; and a brief rationale for restitution. Also, the contracting officer must indicate if restitution was not made because the employee could not be located. The Government may assist underpaid employees in preparation of their claims. The disbursing office must submit the SF 1093 with attached additional data and the funds withheld (by check) to the Comptroller General (Claims Section).

\* \* \* \* \*

152. Amend section 22.406-10 by revising paragraph (f) to read follows:

#### 22.406-10 Disposition of disputes concerning construction contract labor standards enforcement.

\* \* \* \* \*

(f) The Administrator, Wage and Hour Division, may institute debarment proceedings against the contractor or subcontractor if the Administrator finds reasonable cause to believe that the contractor or subcontractor has committed willful or aggravated violations of the Contract Work Hours and Safety Standards statute or the Copeland (Anti-Kickback) Act, or any of the applicable statutes listed in 29 CFR 5.1 other than the Construction Wage Rate Requirements statute, or has committed violations of the

Construction Wage Rate Requirements statute that constitute a disregard of its obligations to employees or subcontractors under Section 3(a) of that statute.

153. Amend section 22.406-12 by revising paragraph (b) to read as follows:

#### 22.406-12 Cooperation with the Department of Labor.

\* \* \* \* \*

(b) If a Department of Labor representative undertakes an investigation at a construction project, the contracting officer shall inquire into the scope of the investigation, and request to be notified immediately of any violations discovered under the Construction Wage Rate Requirements statute, the Contract Work Hours and Safety Standards statute, or the Copeland (Anti-Kickback) Act.

154. Revise section 22.406-13 to read as follows:

#### 22.406-13 Semiannual enforcement reports.

A semiannual report on compliance with and enforcement of the construction labor standards requirements of the Construction Wage Rate Requirements statute and Contract Work Hours and Safety Standards statute is required from each contracting agency. The reporting periods are October 1 through March 31 and April 1 through September 30. The reports shall only contain information as to the enforcement actions of the contracting agency and shall be prepared as prescribed in Department of Labor memoranda and submitted to the Department of Labor within 30 days after the end of the reporting period. This report has been assigned interagency report control number 1482-DOL-SA.

155. Amend section 22.407 by—

- Removing from paragraphs (a)(1) and (a)(8) “Davis-Bacon Act” and adding “Construction Wage Rate Requirements” in its place;

- Removing from paragraph (e) “Davis-Bacon Act” and adding “Construction Wage Rate Requirements” in its place;

- Removing from paragraph (e)(1) and (e)(2) Davis-Bacon Act” and adding “Construction Wage Rate Requirements statute” in its place;

- Revising paragraphs (f) and (g); and

- Removing from paragraph (h) “Davis-Bacon Act” and adding “Construction Wage Rate Requirements” in its place.

The revised text reads as follows:

#### 22.407 Solicitation provision and contract clauses.

\* \* \* \* \*

(f) Insert the clause at 52.222–31, Construction Wage Rate Requirements—Price Adjustment (Percentage Method), in solicitations and contracts if the contract is expected to be a fixed-price contract subject to the Construction Wage Rate Requirements statute that will contain option provisions by which the contracting officer may extend the term of the contract, and the contracting officer determines the most appropriate contract price adjustment method is the method at 22.404–12(c)(3).

(g) Insert the clause at 52.222–32, Construction Wage Rate Requirements—Price Adjustment (Actual Method), in solicitations and contracts if the contract is expected to be a fixed-price contract subject to the Construction Wage Rate Requirements statute that will contain option provisions by which the contracting officer may extend the term of the contract, and the contracting officer determines the most appropriate method to establish contract price is the method at 22.404–12(c)(4).

\* \* \* \* \*

156. Revise the heading of Subpart 22.6 to read as follows:

**Subpart 22.6—Contracts For Materials, Supplies, Articles, and Equipment Exceeding \$15,000**

157. Revise section 22.602 to read as follows:

**22.602 Statutory requirements.**

Except for the exemptions at 22.604, all contracts subject to 41 U.S.C. chapter 65, Contracts for Materials, Supplies, Articles, and Equipment Exceeding \$15,000 (the statute), and entered into by any executive department, independent establishment, or other agency or instrumentality of the United States, or by the District of Columbia, or by any corporation (all the stock of which is beneficially owned by the United States) for the manufacture or furnishing of materials, supplies, articles, and equipment (referred to in this subpart as supplies) in any amount exceeding \$15,000, shall include or incorporate by reference the stipulations required by the statute pertaining to such matters as minimum wages, maximum hours, child labor, convict labor, and safe and sanitary working conditions.

**22.604–1 [Amended]**

158. Amend section 22.604–1 by removing from the introductory text “the Act” and adding “the statute” in its place.

**22.604–2 [Amended]**

159. Amend section 22.604–2 by removing from paragraphs (a) and (a)(3)

“the Act” and adding “the statute” in their places.

**22.605 [Amended]**

160. Amend section 22.605 by removing from paragraphs (a), (a)(1), (a)(2), (a)(3), (a)(4), and (a)(5) “the Act” and adding “the statute” in their places.

**22.608 [Amended]**

161. Amend section 22.608 by removing from paragraphs (a) and (b) “the Act” and adding “the statute” in their places.

162 Revise section 22.610 to read as follows:

**22.610 Contract clause.**

The contracting officer shall insert the clause at 52.222–20, Contracts for Materials, Supplies, Articles, and Equipment Exceeding \$15,000, in solicitations and contracts covered by the statute (see 22.603, 22.604, and 22.605).

163. Revise the heading of Subpart 22.10 to read as follows:

**Subpart 22.10—Service Contract Labor Standards**

164. Revise section 22.1000 to read as follows:

**22.1000 Scope of subpart.**

This subpart prescribes policies and procedures implementing the provisions of 41 U.S.C. chapter 67, Service Contract Labor Standards, the applicable provisions of the Fair Labor Standards Act of 1938, as amended (29 U.S.C. 201, et seq.), and related Secretary of Labor regulations and instructions (29 CFR Parts 4, 6, 8, and 1925).

165. Amend section 22.1001 by—  
 a. Removing the definition “Act”;  
 b. Removing from the definition “Contractor” the words “the Act” and adding “the statute” in its place; and  
 c. Revising the definitions “Service contract”, “United States”, “Wage and Hour Division” and “Wage determination” to read as follows:

**22.1001 Definitions.**

\* \* \* \* \*

*Service contract* means any Government contract, the principal purpose of which is to furnish services in the United States through the use of service employees, except as exempted under 41 U.S.C. 6702, see 22.1003–3 and 22.1003–4, or any subcontract at any tier thereunder. See 22.1003–5 and 29 CFR 4.130 for a partial list of services covered by the Service Contract Labor Standards statute.

\* \* \* \* \*

*United States* means the 50 States, the District of Columbia, Puerto Rico, the

Northern Mariana Islands, American Samoa, Guam, the U.S. Virgin Islands, Johnston Island, Wake Island, and the outer Continental Shelf as defined in the Outer Continental Shelf Lands Act (43 U.S.C. 1331, et seq.), but does not include any other place subject to U.S. jurisdiction or any U.S. base or possession within a foreign country (29 CFR 4.112).

*Wage and Hour Division* means the unit in the Employment Standards Administration of the Department of Labor to which is assigned functions of the Secretary of Labor under the Service Contract Labor Standards statute.

*Wage determination* means a determination of minimum wages or fringe benefits made under 41 U.S.C. 6703 or 6707(c) applicable to the employment in a given locality of one or more classes of service employees.

**22.1002–1 [Amended]**

166. Amend section 22.1002–1 by removing “41 U.S.C. 353(d)” and adding “41 U.S.C. 6707(d)” in its place.

167. Revise section 22.1003–2 to read as follows:

**22.1003–2 Geographical coverage of the Service Contract Labor Standards statute.**

The Service Contract Labor Standards statute applies to service contracts performed in the United States (see 22.1001). The Service Contract Labor Standards statute does not apply to contracts performed outside the United States.

168. Amend section 22.1003–3 by revising the introductory text and paragraph (b) to read as follows:

**22.1003–3 Statutory exemptions.**

The Service Contract Labor Standards statute does not apply to—

\* \* \* \* \*

(b) Any work required to be done in accordance with the provisions of 41 U.S.C. chapter 65, Contracts for Materials, Supplies, Articles, and Equipment Exceeding \$15,000;

\* \* \* \* \*

169. Amend section 22.1003–4 by—  
 a. Revising paragraph (a);

b. Removing from the introductory text of paragraph (b) “the Act” and adding “the Service Contract Labor Standards statute” in its place;

c. Removing from the introductory text of paragraph (c)(1) “the Act” and adding “the Service Contract Labor Standards statute” in its place;

d. Removing from paragraph (c)(3)(i) “Contract Act” and adding “Contract Labor Standards statute” in its place;

e. Removing from paragraphs (c)(3)(ii) and (c)(3)(iii) “Contract Act” and adding “Contract Labor Standards” in its place;

f. Removing from paragraph (c)(4)(i) “Contract Act” and adding “Contract Labor Standards statute” in its place;

g. Removing from paragraphs (c)(4)(ii), and (d)(1) “the Act” and adding “the Service Contract Labor Standards statute” in their places;

h. Removing from paragraph (d)(1)(iv) “Davis-Bacon Act” and adding “Construction Wage Rate Requirements statute” in its place;

i. Removing from paragraphs (d)(3)(i), (d)(3)(ii) introductory text, and (d)(3)(iii) “Contract Act” and adding “Contract Labor Standards” in their places;

j. Removing from paragraphs (d)(4)(i) and (d)(4)(ii) “Contract Act” and “the Act” and adding “Contract Labor Standards statute” and “Service Contract Labor Standards statute” in their places; respectively; and

k. Revising paragraphs (d)(5)(i) and (d)(5)(iii).

The revised text reads as follows:

**22.1003-4 Administrative limitations, variations, tolerances, and exemptions.**

(a) The Secretary of Labor may provide reasonable limitations and may make rules and regulations allowing reasonable variations, tolerances, and exemptions to and from any or all provisions of the Service Contract Labor Standards statute other than 41 U.S.C. 6707(f). These will be made only in special circumstances where it has been determined that the limitation, variation, tolerance, or exemption is necessary and proper in the public interest or to avoid the serious impairment of Government business, and is in accord with the remedial purpose of the Service Contract Labor Standards statute to protect prevailing labor standards (41 U.S.C. 6707(b)). See 29 CFR 4.123 for a listing of administrative exemptions, tolerances, and variations. Requests for limitations, variances, tolerances, and exemptions from the Service Contract Labor Standards statute shall be submitted in writing through contracting channels and the agency labor advisor to the Wage and Hour Administrator.

\* \* \* \* \*

(d) \* \* \*

(5) \* \* \*

(i) Awarded under 41 U.S.C. chapter 85, Committee for Purchase from People Who Are Blind or Severely Disabled (see Subpart 8.7).

\* \* \* \* \*

(iii) Subject to 41 U.S.C. 6707(c) (see 22.1002-3).

**22.1003-5 [Amended]**

170. Amend section 22.1003-5 by removing from introductory text “the

Act” and adding “the Service Contract Labor Standards statute” in its place.

171. Amend section 22.1003-6 by revising paragraph (a); and by removing from paragraph (b) “Contract Act” and adding “Contract Labor Standards statute” in its place.

The revised text reads as follows:

**22.1003-6 Repair distinguished from remanufacturing of equipment.**

(a) Contracts principally for remanufacturing of equipment which is so extensive as to be equivalent to manufacturing are subject to 41 U.S.C. chapter 65, Contracts for Materials, Supplies, Articles, and Equipment Exceeding \$15,000, rather than to the Service Contract Labor Standards statute. Remanufacturing shall be deemed to be manufacturing when the criteria in either subparagraphs (a)(1) or (a)(2) of this subsection are met.

\* \* \* \* \*

**22.1003-7 [Amended]**

172. Amend section 22.1003-7 by removing “the Act” and adding “the Service Contract Labor Standards statute” in its place.

**22.1004 [Amended]**

173. Amend section 22.1004 by removing from the introductory paragraph and paragraph (c) “the Act” and adding “the Service Contract Labor Standards statute” in its place (three times).

**22.1006 [Amended]**

174. Amend section 22.1006 by—  
a. Removing from the introductory text of paragraph (a)(1) the words “Act of 1965” and “the Act” and adding “Labor Standards” and “the Service Contract Labor Standards statute” in its place, respectively;

b. Removing from paragraph (a)(2) “Contract Act” and adding “Contract Labor Standards statute” in its place;

c. Removing from paragraphs (a)(2)(i)(A) and (a)(2)(i)(B) the words “Contract Act” and adding “Contract Labor Standards” in their places;

d. Revising paragraph (a)(2)(ii) to read as follows;

e. Removing from paragraph (b) “the Act” and adding “the Service Contract Labor Standards statute” in its place.

**22.1008-1 [Amended]**

175. Amend section 22.1008-1 by removing from paragraph (e)(3) “whether Section 4(c) of the Act applies” and adding “whether 41 U.S.C. 6707(c) applies” in its place.

176. Amend section 22.1008-2 by—

a. Revising the section heading and paragraph (a);

b. Removing from paragraphs (b) introductory text, (c) introductory text, (c)(1), and (c)(2) introductory text “section 4(c) of the Act” and adding “41 U.S.C. 6707(c)” in its place;

c. Removing from paragraph (d)(1) “section 4(c) of the Act” and adding “41 U.S.C. 6707(c)” and removing “Service Contract Act of 1965” and adding “Service Contract Labor Standards,” in its place;

d. Removing from paragraph (d)(3) “applicability of the Act” and adding “applicability of the Service Contract Labor Standards statute” in its place; and

e. Removing from paragraph (e)(1) “Section 4(c) of the Act” and adding “41 U.S.C. 6707(c)” in its place.

The revised text reads as follows:

**22.1008-2 Successorship with incumbent contractor collective bargaining agreement.**

(a) Early in the acquisition cycle, the contracting officer shall determine whether 41 U.S.C. 6707(c) affects the new acquisition. The contracting officer shall determine whether there is a predecessor contract covered by the Service Contract Labor Standards statute and, if so, whether the incumbent prime contractor or its subcontractors and any of their employees have a collective bargaining agreement.

\* \* \* \* \*

**22.1009-4 [Amended]**

177. Amend section 22.1009-4 by removing from paragraph (b) “Service Contract Act Place” and adding “Service Contract Labor Standards-Place” in its place.

**22.1012-2 [Amended]**

178. Amend section 22.1012-2 by removing from paragraphs (a) and (b) “section 4(c) of the Act” and adding “41 U.S.C. 6707 (c)” in their places.

**22.1015 [Amended]**

179. Amend section 22.1015 by removing “Service Contract Act” and “section 10 of the Act (41 U.S.C. 358)” and adding “Service Contract Labor Standards statute” and “41 U.S.C. 6707 (f),” in its place, respectively.

**22.1018 [Amended]**

180. Amend section 22.1018 by—  
a. Removing from paragraphs (a) “the Act” and adding “the Service Contract Labor Standards statute” in its place; and

b. Removing from paragraph (b) “the Act” and “Service Contract Act of 1965” and adding “the Service Contract Labor Standards statute” and “Service Contract Labor Standards.” in its place, respectively.

**22.1019 [Amended]**

181. Amend section 22.1019 by—  
 a. Removing from paragraphs (a) “Service Contract Act of 1965” and adding “Service Contract Labor Standards.” in its place; and  
 b. Removing from paragraph (c) “handicapped workers” and “Service Contract Act of 1965” and adding “disabled workers” and “Service Contract Labor Standards.” in its place, respectively.

**22.1020 [Amended]**

182. Amend section 22.1020 by removing “Service Contract Act of 1965” and adding “Service Contract Labor Standards.” in its place.

**22.1022 [Amended]**

183. Amend section 22.1022 by removing “Service Contract Act of 1965” and “Service Contract Act” and adding “Service Contract Labor Standards,” and “Service Contract Labor Standards statute” in its place, respectively.

184. Revise section 22.1023 to read as follows:

**22.1023 Termination for default.**

As provided by the Service Contract Labor Standards statute, any contractor failure to comply with the requirements of the contract clauses related to the Service Contract Labor Standards statute may be grounds for termination for default (see paragraph (k) of the clause at 52.222–41, Service Contract Labor Standards).

**22.1025 [Amended]**

185. Amend section 22.1025 by removing “the Act” and adding “the Service Contract Labor Standards statute” in its place twice.

**22.1026 [Amended]**

186. Amend section 22.1026 by removing “Act of 1965” and adding “Labor Standards” in its place.

187. Revise section 22.1101 to read as follows:

**22.1101 Applicability.**

The Service Contract Act of 1965, now codified at 41 U.S.C. chapter 67,

Service Contract Labor Standards, was enacted to ensure that Government contractors compensate their blue-collar service workers and some white-collar service workers fairly, but it does not cover bona fide executive, administrative, or professional employees.

188. Revise section 22.1502 to read as follows:

**22.1502 Policy.**

Agencies must take appropriate action to enforce the laws prohibiting the manufacture or importation of products that have been mined, produced, or manufactured wholly or in part by forced or indentured child labor, consistent with 19 U.S.C. 1307, 29 U.S.C. 201, *et seq.*, and 41 U.S.C. chapter 65. Agencies should make every effort to avoid acquiring such products.

189. Amend section 22.1801 in the definition “Commercially available off-the-sheet (COTS) item” by revising the first sentence of paragraph (2) to read as follows:

**22.1801 Definitions.**

\* \* \* \* \*

Commercially available off-the-sheet (COTS) item \* \* \*

(2) Does not include bulk cargo, as defined 46 U.S.C. 40102(4), such as agricultural products and petroleum products. \* \* \*

\* \* \* \* \*

**PART 23—ENVIRONMENT, ENERGY AND WATER EFFICIENCY, RENEWABLE ENERGY TECHNOLOGIES, OCCUPATIONAL SAFETY, AND DRUG-FREE WORKPLACE**

190. Revise section 23.500 to read as follows:

**23.500 Scope of subpart.**

This subpart implements 41 U.S.C. chapter 81, Drug-Free Workplace.

191. Revise section 23.502 to read as follows:

**23.502 Authority.**

41 U.S.C. chapter 81, Drug Free Workplace.

192. Amend section 23.704 by revising paragraph (b)(1)(ii) to read as follows:

**23.704 Electronic products environmental assessment tool.**

\* \* \* \* \*

(b) \* \* \*

(1) \* \* \*

(ii) Is a voluntary consensus standard consistent with Section 12(d) of Pub. L. 104–113 (15 U.S.C. 272 note), the “National Technology Transfer and Advancement Act of 1995”, (see 11.102(c);

\* \* \* \* \*

**PART 24—PROTECTION OF PRIVACY AND FREEDOM OF INFORMATION**

**24.202 [Amended]**

193. Amend section 24.202 by—

a. Removing from paragraph (a) “41 U.S.C. 253b” and adding “41 U.S.C. 4702” in its place; and

b. Removing from paragraph (b) “41 U.S.C. 254b (d)(2)(c)” and adding “41 U.S.C. 3505(b)(3)” in its place.

**PART 25—FOREIGN ACQUISITION**

194. Amend section 25.000 by revising paragraph (b) to read as follows:

**25.000 Scope of part.**

\* \* \* \* \*

(b) It implements 41 U.S.C. chapter 83, Buy American; trade agreements; and other laws and regulations.

195. Amend section 25.001 by revising paragraph (a); and removing from paragraphs (b), (c), and (c)(1) “Buy American Act” and adding “Buy American statute” in their places. The revised text reads as follows: *25.001 General.*

(a) 41 U.S.C. chapter 83, Buy American—

\* \* \* \* \*

196. Amend section 25.002 by revising the table to read as follows:

**25.002 Applicability of subparts.**

\* \* \* \* \*

Subpart	Supplies for use		Construction		Services performed	
	Inside U.S.	Outside U.S.	Inside U.S.	Outside U.S.	Inside U.S.	Outside U.S.
25.1 Buy American—Supplies .....	X	.....	.....	.....	.....	.....
25.2 Buy American—Construction Materials .....	.....	.....	X	.....	.....	.....
25.3 Contracts Performed Outside the United States .....	.....	X	.....	X	.....	X
25.4 Trade Agreements .....	X	X	X	X	X	X
25.5 Evaluating Foreign Offers—Supply Contracts .....	X	X	.....	.....	.....	.....
25.6 American Recovery and Reinvestment Act—Buy American statute—Construction Materials .....	.....	.....	.....	.....	X	.....

**25.004 [Amended]**

197. Amend section 25.004 by removing from paragraph (a) “41 U.S.C. 10a” and adding “41 U.S.C. 8302(b)” in its place.

198. Amend subpart 25.1 by revising the section heading to read as follows:

**Subpart 25.1—Buy American—Supplies**

199. Amend section 25.100 by revising paragraphs (a)(1) and (a)(3) to read as follows

**25.100 Scope of subpart.**

(a) \* \* \*  
(1) 41 U.S.C. chapter 83, Buy American;

\* \* \* \* \*

(3) Waiver of the component test of the Buy American statute for acquisition of commercially available off-the-shelf (COTS) items in accordance with 41 U.S.C. 1907.

\* \* \* \* \*

**25.101 [Amended]**

200. Amend section 25.101 by—  
a. Removing from paragraph (a) “Buy American Act” and adding “Buy American statute” in its place (two times);

b. Removing from paragraph (a)(2) “41 U.S.C. 431” and “Buy American Act” and adding “41 U.S.C. 1907” and “Buy American statute” in its place, respectively; and

c. Removing from paragraph (b) “Buy American Act” and adding “Buy American statute” in its place.

**25.103 [Amended]**

201. Amend section 25.103 by removing from the introductory text, paragraphs (a), (b) introductory text, and (b)(1)(iii)(A) “Buy American Act” and adding “Buy American statute” in their places.

**25.105 [Amended]**

202. Amend section 25.105 by removing from the introductory text of paragraph (b) “Buy American Act” and adding “Buy American statute” in its place.

203. Amend Subpart 25.2 by revising the subpart heading to read as follows:

**Subpart 25.2—Buy American—Construction Materials**

204. Amend section 25.200 by revising paragraphs (a)(1) and (a)(3) to read as follows:

**25.200 Scope of subpart.**

(a) \* \* \*  
(1) 41 U.S.C. chapter 83, Buy American;

\* \* \* \* \*

(3) Waiver of the component test if the buy American statute for acquisitions of commercially available off-the-shelf (COTS) items in accordance with 41 U.S.C. 1907.

\* \* \* \* \*

**25.202 [Amended]**

205. Amend section 25.202 by removing from paragraphs (a) and (a)(1) “Buy American Act” and adding “Buy American statute” in their places (three times).

**25.203 [Amended]**

206. Amend section 25.203 by removing from paragraph (a) “Buy American Act” and adding “Buy American statute” in its place.

**25.204 [Amended]**

207. Amend section 25.204 by removing from paragraph (b) “Buy American Act” and adding “Buy American statute” in its place.

**25.205 [Amended]**

208. Amend section 25.205 by removing from paragraphs (a), (b), and (c) “Buy American Act” and adding “Buy American statute” in their places.

**25.206 [Amended]**

209. Amend section 25.206 by removing from paragraphs (a), (c)(1), and (c)(3) “Buy American Act” and adding “Buy American statute” in their places (four times).

**25.400 [Amended]**

210. Amend section 25.400 by removing from paragraph (a)(2)(ii) “(Public Law 108–77)” and adding “(Public Law 108–77) (19 U.S.C. 3805 note)” in its place; and removing from paragraph (a)(6) “Buy American Act” and adding “Buy American statute” in its place.

**25.402 [Amended]**

211. Amend section 25.402 by removing from the introductory text of paragraph (a)(1) “Buy American Act” and adding “Buy American statute” in their places (two times).

**25.405 [Amended]**

212. Amend section 25.405 by removing “(Pub. L. 109–53)” and adding “(Pub. L. 109–53) (19 U.S.C. 4031)” in its place.

**25.406 [Amended]**

213. Amend section 25.406 by removing “Buy American Act” and adding “Buy American statute” in its place.

**25.407 [Amended]**

214. Amend section 25.407 by removing “Buy American Act” and

adding “Buy American statute” in its place.

**25.501 [Amended]**

215. Amend section 25.501 by removing from paragraph (d) “Buy American Act” and adding “Buy American statute” in its place.

**25.502 [Amended]**

216. Amend section 25.502 by removing from paragraphs (c), (c)(3), (d)(2), and (d)(3) “Buy American Act” and adding “Buy American statute” in their places.

217. Amend section 25.504–1 by revising the section heading; and removing from paragraphs (a)(2) and (b)(2) “Buy American Act” and adding “Buy American statute” in their places. The revised text reads as follows:

**25.504–1 Buy American statute.**

\* \* \* \* \*

**25.504–4 [Amended]**

218. Amend section 25.504–4 by removing from paragraph (b) under the heading “Problem” the words “Buy American Act” and adding “Buy American statute” in its place.

219. Amend Subpart 25.6 by revising the subpart heading to read as follows:

**Subpart 25.6—American Recovery And Reinvestment Act—Buy American Statute—Construction Materials****25.600 [Amended]**

220. Amend section 25.600 by removing “the Buy American Act” and adding “41 U.S.C. chapter 83, Buy American (referred to in this subpart as the Buy American Statute)” in its place.

**25.601 [Amended]**

221. Amend section 25.601 by removing from paragraph (1) of the definition “Domestic construction material” the words “Buy American Act” and adding “Buy American statute” in its place.

222. Amend section 25.602–2 by revising the section heading; and removing “Buy American Act” and adding “Buy American statute” in its place. The revised text reads as follows:

**25.602–2 Buy American statute.**

\* \* \* \* \*

**25.603 [Amended]**

223. Amend section 25.603 by removing from paragraphs (a)(1), (a)(1)(iii), and (a)(2) “Buy American Act” and adding “Buy American statute” in its place.

224. Amend section 25.604 by revising the section heading; and removing from paragraph (a) “Buy

American Act” and adding “Buy American statute” in its place. The revised text reads as follows:

**25.604 Preaward determination concerning the inapplicability of section 1605 of the Recovery Act or the Buy American statute.**

\* \* \* \* \*

**25.606 [Amended]**

225. Amend section 25.606 by removing from paragraphs (a), (b), and (c) “Buy American Act” and adding “Buy American statute” in its place.

**25.607 [Amended]**

226. Amend section 25.607 by removing from paragraphs (a), (c)(1), and (c)(3) “Buy American Act” and adding “Buy American statute” in its places (four times).

**25.700 [Amended]**

227. Amend section 25.700 by removing from paragraph (b) “110–174)” and adding “110–174) (50 U.S.C. 1701 note)” in its place.

**25.1001 [Amended]**

228. Amend section 25.1001 by removing from paragraph (a) “41 U.S.C. 254d” and adding “41 U.S.C. 4706” in its place.

**25.1101 [Amended]**

229. Amend section 25.1101 by—  
 a. Removing from the introductory text of paragraph (a)(1) “Act”;  
 b. Removing from paragraph (a)(1)(ii) “Buy American Act” and adding “Buy American statute” in its place;  
 c. Removing from paragraphs (a)(1), (a)(2), (b)(1)(i), and (b)(2)(i) “Act”; and  
 d. Removing from paragraphs (a)(1)(ii), (c)(1), and (d) “Buy American Act” and adding “Buy American statute” in its place.

**25.1102 [Amended]**

230. Amend section 25.1102 by—  
 a. Removing from paragraph (a) “Act”;  
 b. Removing from paragraph (a)(1) “Buy American Act” and adding “Buy American statute” in its place;  
 c. Removing from paragraph (b)(1) “Act”;  
 d. Removing from paragraph (b)(2) “Buy American Act” and adding “Buy American statute” in its place;  
 e. Removing from paragraph (c) “Act”;  
 f. Removing from paragraphs (c)(1) and (c)(3) “Buy American Act” and adding “Buy American statute” in its place;  
 g. Removing from paragraph (d)(1) “Act”; and  
 h. Removing from paragraphs (d)(2), (e)(3)(i), and (e)(3)(ii) “Buy American

Act” and adding “Buy American statute” in its place.

**PART 26—OTHER SOCIOECONOMIC PROGRAMS**

**26.400 [Amended]**

231. Amend section 26.400 by removing “(Pub. L. 110–247)” and adding “(42 U.S.C 1792)” in its place.

232. Amend section 26.403 by revising the introductory text of paragraph (a) to read as follows:

**26.403 Procedures.**

(a) In accordance with the Federal Food Donation Act of 2008 an executive agency shall comply with the following:

\* \* \* \* \*

**PART 27—PATENTS, DATA, AND COPYRIGHTS**

**27.304 [Amended]**

233. Amend sections 27.304 by removing from paragraph (c) “Disputes Act” and adding “Disputes statute” in its place (two times).

**PART 28—BONDS AND INSURANCE**

234. Amend section 28.102–1 by revising the introductory test of paragraph (a) and paragraph (a)(2) to read as follows.

**28.102–1 General.**

(a) The 40 U.S.C. chapter 31, subchapter III, Bonds, requires performance and payment bonds for any construction contract exceeding \$150,000, except that this requirement may be waived—

\* \* \* \* \*

(2) As otherwise authorized by the Bonds statute or other law.

\* \* \* \* \*

**28.102–2 [Amended]**

235. Amend section 28.102–2 by removing from paragraph (b) “\$150,000 Miller Act” and adding “\$150,000” in its place.

**28.106–1 [Amended]**

236. Amend section 28.106–1 by removing from paragraphs (h) and (i) “Miller Act”.

**28.106–4 [Amended]**

237. Amend section 28.106–4 by removing from paragraph (b) “Pub. L. 103–355” and adding “Pub. L. 103–355 (10 U.S.C. 2302 note)” in its place; and removing the words “the Miller Act” and adding “40 U.S.C. chapter 31, subchapter III, Bonds” in its place.

**28.106–6 [Amended]**

238. Amend section 28.106–6 by removing from paragraph (d) “Pub. L.

103–355” and adding “Pub. L. 103–355 (10 U.S.C. 2302 note)” in its place; and removing “Miller Act” and adding “bonds statute” in its place.

239. Amend section 28.202 by revising paragraph (a)(4) to read as follows.

**28.202 Acceptability of corporate sureties.**

(a) \* \* \*

(4) When specified in the solicitation, the contracting officer may accept a bond from the direct writing company in satisfaction of the total bond requirement of the contract. This is permissible until necessary reinsurance agreements are executed, even though the total bond requirement may exceed the insurer’s underwriting limitation. The contractor shall execute and submit necessary reinsurance agreements to the contracting officer within the time specified on the bid form, which may not exceed 45 calendar days after the execution of the bond. The contractor shall use Standard Form 273, Reinsurance Agreement for a Performance Bond, and Standard Form 274, Reinsurance Agreement for a Payment Bond, when reinsurance is furnished with the required performance or payment bonds. Standard Form 275, Reinsurance Agreement in Favor of the United States, is used when reinsurance is furnished with bonds for other purposes.

\* \* \* \* \*

**28.203–5 [Amended]**

240. Amend section 28.203–5 by removing from paragraphs (a)(1) and (a)(3) “Miller Act” and adding “Bonds Statute” in its place.

**28.204–3 [Amended]**

241. Amend section 28.204–3 by removing from paragraphs (f)(2)(i) and (f)(2)(ii), “Miller Act” and adding “Bonds Statute” in its place.

**PART 30—COST ACCOUNTING STANDARDS ADMINISTRATION**

**30.101 [Amended]**

242. Amend section 30.101 by—  
 a. Removing from paragraph (a) “Public Law 100–679 (41 U.S.C. 422)” and adding “41 U.S.C. chapter 15, Cost Accounting Standards,” in its place; and  
 b. Removing from paragraph (b) “Public Law 100–679” and adding “41 U.S.C. chapter 15” in its place.

**PART 31—CONTRACT COST PRINCIPLES AND PROCEDURES**

**31.205–1 [Amended]**

243. Amend section 31.205–1 by removing from paragraph (f)(8) “Pub L.

110–247) (see FAR Subpart 26.4)” and adding “42 U.S.C. 1792, see subpart 26.4)” in its place.

244. Amend section 31.205–6 by revising paragraph (g)(6) and (p)(1) to read as follows:

**31.205–6 Compensation for personal services.**

\* \* \* \* \*

(g) \* \* \*

(6) Under 10 U.S.C. 2324(e)(1)(M) and 41 U.S.C. 4304(a)(13), the costs of severance payments to foreign nationals employed under a service contract performed outside the United States are unallowable to the extent that such payments exceed amounts typically paid to employees providing similar services in the same industry in the United States. Further, under 10 U.S.C. 2324(e)(1)(N) and 41 U.S.C. 4304(a)(14), all such costs of severance payments that are otherwise allowable are unallowable if the termination of employment of foreign national is the result of the closing of, or the curtailment of activities at, a United States facility in that country at the request of the government of that country; this does not apply if the closing of a facility or curtailment of activities is made pursuant to a status-of-forces or other country-to-country agreement entered into with the government of that country before November 29, 1989. 10 U.S.C. 2324(e)(3) and 41 U.S.C. 4304(b) permit the head of the agency to waive these cost allowability limitations under certain circumstances (see 37.113 and the solicitation provision at 52.237–8).

\* \* \* \* \*

(p) \* \* \*

(1) Costs incurred after January 1, 1998, for compensation of a senior executive in excess of the benchmark compensation amount determined applicable for the contractor fiscal year by the Administrator, Office of Federal Procurement Policy (OFPP), under 41 U.S.C. 1127 are unallowable (10 U.S.C. 2324(e)(1)(P) and 41 U.S.C. 4304(a)(16)).

\* \* \* \* \*

**31.205–47 [Amended]**

245. Amend section 31.205–47 by removing from paragraph (a)(3) “the Anti-Kickback Act, 41 U.S.C., sections 51 and 54” and adding “41 U.S.C. chapter 87, Kickbacks” in its place.

**31.603 [Amended]**

246. Amend section 31.603 by—  
a. Removing from the introductory text of paragraph (b) “41 U.S.C. 256(e)” and adding “41 U.S.C. 4304 (a)” in its place; and

b. Removing from paragraph (b)(15) “41 U.S.C. 256(k)” and adding “41 U.S.C. 4310” in its place.

**31.703 [Amended]**

247. Removing from paragraph (b) “41 U.S.C. 256(e)” and adding “41 U.S.C. 4304” in its place.

**PART 32—CONTRACT FINANCING**

248. Amend section 32.006–1 by revising paragraph (a) and the first sentence of paragraph (b) to read as follows:

**32.006–1 General.**

(a) Under 10 U.S.C. 2307(i)(8), the statutory authority implemented by this section is available to the Department of Defense and the National Aeronautics and Space Administration; this statutory authority is not available to the United States Coast Guard. Under 41 U.S.C. Division B of subtitle I (Procurement) and 4506, this statutory authority is available to all agencies subject to that statute.

(b) 10 U.S.C. 2307(i)(2) and 41 U.S.C. 4506 provide for a reduction or suspension of further payments to a contractor when the agency head determines there is substantial evidence that the contractor’s request for advance, partial, or progress payments is based on fraud. \* \* \*

\* \* \* \* \*

**32.006–2 [Amended]**

249. Amend section 32.006–2 by removing from the definition “Remedy coordination official” the word “41 U.S.C. 255(g)(9)” and adding “41 U.S.C. 4506(a)” in its place.

**32.006–5 [Amended]**

250. Amend section 32.006–5 by removing from paragraph (a) “41 U.S.C. 255” and “10 U.S.C. 2307” and adding “41 U.S.C. 4506(h)” and “10 U.S.C. 2307(i)(7)” in their places; respectively; and removing from paragraph (b) “41 U.S.C. 255” and “10 U.S.C. 2307” adding “41 U.S.C. 4506(h)” and “10 U.S.C. 2307(i)(7)” in their places; respectively.

251. Revise section 32.101 read as follows:

**32.101 Authority.**

The basic authority for the contract financing described in this part is contained in (41 U.S.C. chapter 45, Contracting Financing), 10 U.S.C. 2307, and Title III of the Defense Production Act of 1950 (50 U.S.C. App. 2091).

**32.102 [Amended]**

252. Amend section 32.102 by removing from paragraph (d) “41 U.S.C.

255” and adding “41 U.S.C. chapter 45” in its place.

**32.112–1 [Amended]**

253. Amend section 32.112–1 by removing from paragraph (a) “Pub. L. 103–355” and adding “Pub. L. 103–355 (10 U.S.C. 2302)” in its place.

**32.112–2 [Amended]**

254. Amend section 32.112–2 by removing from the introductory text of paragraph (a) “Pub. L. 103–355” and adding “Pub. L. 103–355 (10 U.S.C. 2302)” in its place.

**32.201 [Amended]**

255. Amend section 32.201 by removing “41 U.S.C. 255(f)” and adding “41 U.S.C. 4505” in its place.

**32.202–4 [Amended]**

256. Amend section 32.202–4 by removing from the introductory text of paragraph (a)(1) “41 U.S.C. 255(f)” and adding “41 U.S.C. 4505” in its place.

257. Amend section 32.401 by revising paragraphs (a) and (b) to read as follows:

**32.401 Statutory Authority.**

\* \* \* \* \*

(a) 41 U.S.C. chapter 45;

(b) 10 U.S.C. 2307; or

\* \* \* \* \*

258. Amend section 32.410 by revising paragraph (c), under the heading “Authorization”, to read as follows.

**32.410 Findings, determination, and authorization.**

\* \* \* \* \*

(c) The advance payments, of which (the amount at any time outstanding) (the aggregate amount, less the aggregate amounts repaid, or withdrawn by the Government), shall not exceed \$ \_\_\_\_\_, are hereby authorized under (41 U.S.C. chapter 45, Contract Financing.) (10 U.S.C. 2307) (the Extraordinary Contracting Authority of Government Agencies in Connection with National Defense Functions (50 U.S.C. 1431–1435) and Executive Order No. 10789 of November 14, 1958 (3 CFR 1958 Supp. pp. 72–74)) or, if other, cite appropriate authority on (terms substantially as contained in the proposed advance payment clause, a copy (an outline) of which is annexed to this authorization) (the following terms:) Insert the appropriate terms. (All prior authorizations for advance payments under Contract No. \_\_\_\_\_ are superseded.)

\* \* \* \* \*

**32.501–1 [Amended]**

259. Amend section 32.501–1 by removing from paragraph (d) “41 U.S.C. 255” and adding “41 U.S.C. 4504(b)” in its place.

**32.604 [Amended]**

260. Amend section 32.604 by removing from paragraph (b)(4)(ii) “Section 611 of the Contract Disputes Act of 1978 (Public Law 95–563)” and adding “(41 U.S.C. 7109)” in its place.

**32.606 [Amended]**

261. Amend section 32.606, by removing from paragraph (a) “41 U.S.C. 15” and adding “41 U.S.C. 6305” in its place.

**32.703–3 [Amended]**

262. Amend section 32.703–3, by removing from paragraph (a), “41 U.S.C. 11a” and adding “41 U.S.C. 6302” in its place; and removing from paragraph (b) “41 U.S.C. 2531” and adding “41 U.S.C. 3902” in its place.

**32.800 [Amended]**

263. Amend section 32.800 by removing “31 U.S.C. 3727, 41 U.S.C. 15” and adding “31 U.S.C. 3727, and 41 U.S.C. 6305” in its place.

**32.805 [Amended]**

264. Amend section 32.805, by removing from paragraph (c), under the heading “Notice of Assignment” in the second paragraph, “31 U.S.C. 3727, 41 U.S.C. 15” and adding “31 U.S.C. 3727, and 41 U.S.C. 6305” in its place.

**PART 33—PROTESTS, DISPUTES, AND APPEALS****33.102 [Amended]**

265. Amend section 33.102 by removing from paragraph (f) “41 U.S.C. 423(g)” and adding “41 U.S.C. 2106” in its place.

**33.201 [Amended]**

266. Amend section 33.201 by removing from the definition “Defective certification” the words “a person duly” and adding “a person” in its place.

267. Revise section 33.202 to read as follows.

**33.202 Disputes.**

41 U.S.C. Chapter 71, Disputes, establishes procedures and requirements for asserting and resolving claims subject to the Disputes statute. In addition, the Disputes statute provides for:

- 268. Amend section 33.203 by—
  - a. Revising paragraph (b)(1);
  - b. Removing from paragraphs (b)(2) “Act” and adding “Disputes statute” in its place; and

C. Revising paragraph (c).

The revised text read as follows:

**33.203 Applicability.**

\* \* \* \* \*

(b) \* \* \*

(1) A foreign government or agency of that government; or

\* \* \* \* \*

(c) This part applies to all disputes with respect to contracting officer decisions on matters “arising under” or “relating to” a contract. Agency Boards of Contract Appeals (BCA’s) authorized under the Disputes statute continue to have all of the authority they possessed before the Disputes statute with respect to disputes arising under a contract, as well as authority to decide disputes relating to a contract. The clause at 52.233–1, Disputes, recognizes the “all disputes” authority established by the Disputes statute and states certain requirements and limitations of the Disputes statute for the guidance of contractors and contracting agencies. The clause is not intended to affect the rights and obligations of the parties as provided by the Disputes statute or to constrain the authority of the statutory agency BCA’s in the handling and deciding of contractor appeals under the Disputes statute.

**33.205 [Amended]**

269. Amend section 33.205 by—

a. Removing from the section heading “Act” and adding “Disputes statute” in its place;

b. Removing from paragraph (a) “contract Disputes Act of 1978” and adding “Disputes statute” in its place;

c. Removing from paragraph (b) “under the Act” and adding “under the Dispute statute” in its place; and

d. Removing from paragraph (c) “Disputes Act of 1978” and adding “Disputes statute” in its place.

**33.207 [Amended]**

270. Amend section 33.207 by removing from paragraph (e) “duly”.

**33.208 [Amended]**

271. Amend section 33.208 by removing from paragraph (b) “the Act” and adding “the Disputes statute” in its place.

**33.211 [Amended]**

272. Amend section 33.210 by removing from paragraph (a)(4)(v)(2) “the Contract Dispute Act of 1978, 41 U.S.C. 603” and adding “41 U.S.C. 7102(d),” in its place.

273. Revise the first and second sentences of paragraph (a) to read as follows:

**33.213 Obligation to continue performance.**

(a) In general, before passage of the Disputes statute, the obligation to continue performance applied only to claims arising under a contract. However, the Disputes statute at 41 U.S.C. 605(b) 7103(g), authorizes agencies to require a contractor to continue contract performance in accordance with the contracting officer’s decision pending a final resolution of any claim arising under, or relating to, the contract. \* \* \*

\* \* \* \* \*

**PART 36—CONSTRUCTION AND ARCHITECT—ENGINEER****36.104 [Amended]**

274. Amend section 36.104 by removing from paragraph (a) “the Brooks Architect-Engineers Act (40 U.S.C. 1101, *et seq.*)” and “41 U.S.C. 253m” and adding “40 U.S.C. chapter 11, Selection of Architects and Engineers,” and “41 U.S.C. 3309” in their places; respectively.

**36.300 [Amended]**

275. Amend section 36.300 by removing “41 U.S.C. 253m” and adding “41 U.S.C. 3309” in its place.

**PART 37—SERVICE CONTRACTING**

276. Amend section 37.000 by revising the last sentence to read as follows:

**37.000 Scope of part.**

\* \* \* This part includes, but is not limited to, contracts for services to which 41 U.S.C. chapter 67, Service Contract Labor Standards, applies (see subpart 22.10).

**37.106 [Amended]**

277. Amend section 37.106 by removing from paragraph (b) “41 U.S.C. 2531” and adding “41 U.S.C. 3902” in its place.

278. Revise section 37.107 to read as follows.

**37.107 Service Contract Labor Standards.**

41 U.S.C. chapter 67, Service Contract Labor Standards, provides for minimum wages and fringe benefits as well as other conditions of work under certain types of service contracts. Whether or not the Service Contract Labor Standards statute applies to a specific service contract will be determined by the definitions and exceptions given in the Service Contract Labor Standards statute, or implementing regulations.

**37.202 [Amended]**

279. Amend section 37.202 by removing from paragraph (b) “the

Brooks Architect-Engineers Act (40 U.S.C. 1102)” and adding “40 U.S.C. 1102” in its place.

280. Amend section 37.203 by revising paragraph (d)(2) to read as follows.

**37.203 Policy.**

\* \* \* \* \*

(d) \* \* \*

(2) The contractor is a Federally-Funded Research and Development Center (FFRDC) as authorized in 41 U.S.C. 1709(c) and the work placed under the FFRDC’s contract meets the criteria of 35.017–3; or

\* \* \* \* \*

281. Revise section 37.301 to read as follows:

**37.301 Labor standards.**

Contracts for dismantling, demolition, or removal of improvements are subject to either 41 U.S.C. chapter 67, Service Contract Labor Standards or 40 U.S.C. chapter 31, subchapter IV, Wage Rate Requirements (Construction). If the contract is solely for dismantling, demolition, or removal of improvements, the Service Contract Labor Standards statute applies unless further work which will result in the construction, alteration, or repair of a public building or public work at that location is contemplated. If such further construction work is intended, even though by separate contract, then the Construction Wage Rate Requirements statute applies to the contract for dismantling, demolition, or removal.

**37.302 [Amended]**

282. Amend section 37.302 by removing from the introductory text “the Miller Act (40 U.S.C. 3131 *et seq.*)” and adding “41 U.S.C. chapter 31, subchapter III, Bonds,” in its place.

**37.401 [Amended]**

283. Amend section 37.401 by removing from the introductory paragraph “41 U.S.C. 253” and adding “41 U.S.C. chapter 33, Planning and Solicitation” in its place.

**PART 38—FEDERAL SUPPLY SCHEDULE CONTRACTING**

**38.101 [Amended]**

284. Amend section 38.101 by removing from paragraph (a) “41 U.S.C. 259(b)(3)(A)” and adding “41 U.S.C. 152(3)” in its place.

**PART 39—ACQUISITION OF INFORMATION TECHNOLOGY**

**39.103 [Amended]**

285. Amend section 39.103 by removing from paragraph (a) “Section

5202, Incremental Acquisition of Information Technology, of the Clinger-Cohen Act of 1996 (Public Law 104–106)” and adding “41 U.S.C. 2308” in its place.

**PART 41—ACQUISITION OF UTILITY SERVICES**

**41.101 [Amended]**

286. Amend section 41.101 by removing from the definition “Utility service” the words “Service Contract Act of 1965” and adding “41 U.S.C. chapter 67, Service Contract Labor Standards” in its place.

**PART 42—CONTRACT ADMINISTRATION AND AUDIT SERVICES**

**42.703–1 [Amended]**

287. Amend section 42.703–1 by—  
a. Removing from paragraph (a) “41 U.S.C. 254(d)” and adding “41 U.S.C. 4706(e)” in its place; and

b. Removing from the introductory text of paragraph (c) “41 U.S.C. 256(a)” and adding “41 U.S.C. 4303(a)” in its place.

**42.703–2 [Amended]**

288. Amend section 42.703–2 by—  
a. Removing from paragraph (a) “41 U.S.C. 256(h)” and adding “41 U.S.C. 4307” in its place; and

b. Removing from paragraph (e) “41 U.S.C. 256(a) through (d)” and adding “41 U.S.C. 4303” in its place.

**42.705–1 [Amended]**

289. Amend section 42.705–1 by removing from paragraph (b)(4) “41 U.S.C. 256(f)” and adding “41 U.S.C. 4305” in its place.

**42.705–3 [Amended]**

290. Amend section 42.705–3 by removing from paragraph (b)(1) “41 U.S.C. 254(a)” and adding “41 U.S.C. 4708” in its place.

**42.709 [Amended]**

291. Amend section 42.709 by removing from the introductory text of paragraph (a) “41 U.S.C. 256(a) through (d)” and adding “41 U.S.C. 4303” in its place.

292. Amend section 42.1203 by revising paragraph (a) to read as follows:

**42.1203 Processing agreements.**

(a) If a contractor wishes the Government to recognize a successor in interest to its contracts or a name change, the contractor must submit a written request to the responsible contracting officer (see 42.1202). If the contractor received its contract under Subpart 8.7 under 41 U.S.C. chapter 85,

Committee for Purchase from People Who Are Blind or Severely Disabled, use the procedures at 8.716 instead.

\* \* \* \* \*

**42.1204 [Amended]**

293. Amend section 42.1204 by removing from the introductory text of paragraph (a) “41 U.S.C. 15” and adding “41 U.S.C. 6305” in its place.

**42.1601 [Amended]**

294. Amend section 42.1601 by removing “the Contract Disputes Act of 1978 (41 U.S.C. 601–613)” and adding “41 U.S.C. chapter 71, Contract Disputes” in its place.

**PART 43—CONTRACT MODIFICATIONS**

**43.102 [Amended]**

295. Amend section 43.102 by removing paragraph (c).

**PART 44—SUBCONTRACTING POLICIES AND PROCEDURES**

**44.201–2 [Amended]**

296. Amend section 44.201–2 by removing from paragraph (b) “41 U.S.C. 254(b)” and adding “41 U.S.C. 3905” in its place.

**44.202–2 [Amended]**

297. Amend section 44.202–2 by removing from paragraph (a)(4)(ii) “Javits-Wagner-O’Day Act (41 U.S.C. 48)” and adding “41 U.S.C. 8504” in its place.

**44.400 [Amended]**

298. Amend section 44.400 by removing “with section 8002(b)(2) of Public Law 103–355” and adding “with 41 U.S.C. 3307” in its place.

**44.402 [Amended]**

299. Amend section 44.402 by removing from paragraph (b) “and Commercial Components”.

**PART 46—QUALITY ASSURANCE**

**46.102 [Amended]**

300. Amend section 46.102 by removing from paragraph (f) “Section 8002 of Public Law 103–355” and adding “with 41 U.S.C. 3307” in its place.

**PART 47—TRANSPORTATION**

301. Amend section 47.202 by revising paragraph (a) to read as follows:

**47.202 Presolicitation planning.**

\* \* \* \* \*

(a) The Service Contract Labor Standards statute requirement to obtain a wage determination by accessing the

Wage Determination OnLine Web site (<http://www.wdol.gov>) using the WDOL process or by submitting a request directly to the Department of Labor on this Web site using the e98 process before the issuance of an invitation for bid, request for proposal, or commencement of negotiations for any contract exceeding \$2,500 that may be subject to the Service Contract Labor Standards statute (see subpart 22.10);

**PART 48—VALUE ENGINEERING**

**48.102 [Amended]**

302. Amend section 48.102 by—  
a. Removing from paragraph (a) “Section 36 of the Office of Federal Procurement Policy Act (41 U.S.C. 401, *et seq.*)” and adding “41 U.S.C. 1711” in its place; and  
b. Removing from paragraph (e) “41 U.S.C. 254(b)” and adding “41 U.S.C. 3905” in its place.

**PART 50—EXTRAORDINARY CONTRACTUAL ACTIONS AND THE SAFETY ACT**

**50.101–2 [Amended]**

303. Amend section 50.101–2 by removing from paragraph (c) “the Contract Disputes Act of 1978” and adding “with 41 U.S.C. chapter 71, Contract Disputes” in its place.

**50.102–3 [Amended]**

304. Amend section 50.102–3 by removing from paragraph (c) “10 U.S.C. 2304(a)(15) or 41 U.S.C. 252(c)(14), or”.  
305. Amend section 50.103–7 by revising paragraph (b) to read as follows:

**50.103–7 Contract requirements.**

(b) The authority in 50.101–1(a) shall not be used to omit from contracts, when otherwise required, the clauses at 52.203–5, Covenant Against Contingent Fees; 52.215–2, Audit and Records—Negotiation; 52.222–4, Contract Work Hours and Safety Standards—Overtime Compensation; 52.222–6, Construction Wage Rate Requirements; 52.222–10, Compliance With Copeland Act Requirements; 52.222–20, Contracts for Materials, Supplies, Articles, and Equipment Exceeding \$15,000; 52.222–26, Equal Opportunity; and 52.232–23, Assignment of Claims.

**PART 51—USE OF GOVERNMENT SOURCES BY CONTRACTORS**

306. Amend section 51.101 by—  
a. Revising the introductory text of paragraph (a)(3); and  
b. Removing from paragraph (a)(3)(i) “Government,” and adding “Government;” in its place.

The revised text reads as follows:

**51.101 Policy.**

(a) \* \* \*  
(3) A contract under 41 U.S.C. chapter 85, Committee for Purchase from People Who Are Blind or Severely Disabled, if—

**PART 52—SOLICITATION PROVISIONS AND CONTRACT CLAUSES**

**52.203–5 [Amended]**

307. Amend section 52.203–5 by removing from the clause heading “(Apr 1984)” and adding “(Date)” in its place; and removing from paragraph (a) “, in its discretion,”.

308. Amend section 52.203–7 by—  
a. Revising the date of the clause; and  
b. Removing from paragraph (a), in the definition “Kickback” the words “, directly or indirectly,”.  
c. Revising the introductory text of paragraph (b); and  
d. Removing from paragraph (c)(2) “Department of Justice” and adding “Attorney General” in its place.

The revised text reads as follows:

**52.203–7 Anti-Kickback Procedures.**

**Anti-Kickback Procedures (Date)**

(b) 41 U.S.C. chapter 87, Kickbacks, prohibits any person from—

309. Amend section 52.203–8 by—  
a. Revising the date of the clause; and  
b. Revising the introductory text of paragraph (a) and paragraphs (a)(2)(i) and (a)(2)(ii) to read as follows:

**52.203–8 Cancellation, Rescission, and Recovery of Funds for Illegal or Improper Activity.**

**Cancellation, Rescission, and Recovery of Funds for Illegal or Improper Activity (Date)**

(a) If the Government receives information that a contractor or a person has violated 41 U.S.C. 2102–2104, Restrictions on Obtaining and Disclosing Certain Information the Government may—

(2) \* \* \*  
(i) The Contractor or someone acting for the Contractor has been convicted for an offense where the conduct violates 41 U.S.C. 2102 for the purpose of either—

(ii) The head of the contracting activity has determined, based upon a preponderance of the evidence, that the Contractor or someone acting for the Contractor has engaged in conduct punishable under 41 U.S.C. 2105(a).

310. Amend section 52.203–10 by—

a. Revising the date of the clause;  
b. Revising paragraph (a); and  
c. Removing from paragraph (c) “Act” and adding “statute” in its place.  
The revised text reads as follows:

**52.203–10 Price or Fee Adjustment for Illegal or Improper Activity.**

**Price or Fee Adjustment for Illegal or Improper Activity (Date)**

(a) The Government, at its election, may reduce the price of a fixed-price type contract and the total cost and fee under a cost-type contract by the amount of profit or fee determined as set forth in paragraph (b) of this clause if the head of the contracting activity or designee determines that there was a violation of 41 U.S.C. 2102 or 2103, as implemented in section 3.104 of the Federal Acquisition Regulation.

311. Amend section 52.204–8 by—  
a. Revising the date of the provision; and  
b. Removing from paragraphs (c)(1)(xvi) and (c)(1)(xvii) “American Act” and adding “American”; and  
c. Removing from paragraphs (c)(2)(iii) and (c)(2)(iv) “Act” and adding “Labor Standards” in its place.  
The revised text reads as follows:

**52.204–8 Annual Representations and Certifications.**

**Annual Representations And Certifications (Date)**

**52.208–9 [Amended]**

312. Amend section 52.208–9 by removing from the clause heading “(Oct 2008)” and adding “(Date)” its place; and removing from paragraph (a) “the Javits-Wagner-O’Day Act (41 U.S.C. 48)” and adding “41 U.S.C. 8504” in its place.

**52.209–6 [Amended]**

313. Amend section 52.209–6 by removing from the clause heading “(Dec 2010)” and adding “(Date)” its place; and removing from paragraph (a)(2) “section 3 of the Shipping Act of 1984 (46 U.S.C. App. 1702)” and adding “46 U.S.C. 40102(4)” in its place.

**52.212–3 [Amended]**

314. Amend section 52.212–3 by—  
a. Removing from the provision heading “(Apr 2012)” and adding “(Date)” in its place;  
b. Removing from paragraph (f) introductory text the word “Act” (two times);  
c. Removing from paragraph (f)(1) “Act—”;  
d. Removing from paragraph (g)(1) introductory text “American Act” and adding “American” in its place;

e. Removing from paragraph (g)(1)(i), (g)(1)(ii), (g)(1)(iii), (g)(2) introductory text, (g)(2)(g)(1)(ii), (g)(3) introductory text, and (g)(3)(g)(1)(ii) “Act—”;

f. Removing from paragraph (g)(4)(iii) “Act” and adding “statute” in its place;

g. Removing from paragraph (k) introductory text and (k)(3)(i) “Act” and adding “Labor Standards” in its place; and

h. Removing from the introductory paragraph of Alternate I “(Apr 2011)” and adding “(Date)” in its place; and removing from paragraph (12), fourth subparagraph “U.S. Trust Territory of the Pacific Islands (Republic of Palau)” and adding “Republic of Palau” in its place.

315. Amend section 52.212–4 by—

a. Removing from the clause heading “(Feb 2012)” and adding “(Date)” in its place;

b. Removing from paragraph (d) “the Contract Disputes Act of 1978, as amended (41 U.S.C. 601–613)” and adding “41 U.S.C. chapter 71, Contract Disputes” in its place;

c. Removing from paragraph (i)(6)(i) “Section 611 of the Contract Disputes Act of 1978 (Public Law 95–563)” and adding “41 U.S.C. 7109” in its place;

d. Revising paragraph (r); and

e. Amending Alternate I by—

1. Removing from the introductory paragraph “(Oct 2008)” and adding “(Date)” in its place; and

2. Removing from paragraph (i)(6)(i) “(Section 611 of the Contract Disputes Act of 1978 (Public Law 95–563)” and adding “41 U.S.C. 7109” in its place.

The revised text reads as follows:

**52.212–4 Contract Terms and Conditions—Commercial Items**

\* \* \* \* \*

(r) *Compliance with laws unique to Government contracts.* The Contractor agrees to comply with 31 U.S.C. 1352 relating to limitations on the use of appropriated funds to influence certain Federal contracts; 18 U.S.C. 431 relating to officials not to benefit; 40 U.S.C. chapter 37, Contract Work Hours and Safety Standards; 41 U.S.C. chapter 87, Kickbacks; 41 U.S.C. 4705 and 10 U.S.C. 2409 relating to whistleblower protections; 49 U.S.C. 40118, Fly American; and 41 U.S.C. chapter 21 relating to procurement integrity.

\* \* \* \* \*

316. Amend section 52.212–5 by—

a. Revising the clause heading;

b. Removing from paragraph (a)(3) “(Pub. L. 108–77, 108–78).” and adding “(Public Laws 108–77 and 108–78 (19 U.S.C. 3805 note)).” in its place;

c. Removing from paragraph (b)(1) “(41 U.S.C. 253g)” and adding “(41 U.S.C. 4704)” in its place;

d. Removing from paragraph (b)(2) “(Pub. L. 110–252, Title VI, Chapter 1 (41 U.S.C. 251 note)).” and adding “(41 U.S.C. 3509).” in its place;

e. Removing from paragraph (b)(6) “(Dec 2010)” and adding “(Date)” in its place;

f. Removing from paragraph (b)(14) “(Jan 2011)” and adding “(Date)” in its place;

g. Removing from paragraph (b)(34) “(Jan 2009)” and adding “(Date)” in its place;

h. Removing from paragraph (b)(39) “(Feb 2009)” and adding “(Date)” in its place; and removing “(41 U.S.C. 10a-10d)” and adding “41 U.S.C. chapter 83” in its place;

i. Revising paragraph (b)(40);

j. Removing from paragraphs (b)(45) and (b)(46) “(41 U.S.C. 255(f)” and adding “(41 U.S.C. 4505)” in their places;

k. Removing from paragraph (b)(49) “(Feb 2010)” and adding “(Date)” in its place;

l. Revising paragraphs (c)(1) through (c)(7);

m. Removing from paragraph (e)(1)(i) “(Pub. L. 110–252, Title VI, Chapter 1 (41 U.S.C.251 note))” and adding “(41 U.S.C. 3509)” in its place;

n. Removing from paragraph (e)(1)(ii) “(Dec 2010)” and adding “(Date)” in its place;

o. Removing from paragraph (e)(1)(viii) “Act of 1965 (Nov 2007) (41 U.S.C. 351, *et seq.*)” and adding “Labor Standards (Date) (41 U.S.C. chapter 67)” in its place;

p. Revising paragraphs (e)(1)(x) and (e)(1)(xi);

q. Removing from paragraph (e)(1)(xii) “(Jan 2009)” and adding “(Date) (Executive Order 12989)” in its place;

r. Removing from paragraph (e)(1)(xiii) “(Mar 2009) (Pub. L. 110–247)” and adding “(Date) (42 U.S.C. 1792)” in its place; and

s. Amending Alternate II by—

1. Revising the date;

2. Removing from paragraph (e)(1)(ii)(A) “(Pub. L. 110–252, Title VI, Chapter 1 (41 U.S.C. 251 note))” and adding “(41 U.S.C. 3509)” in its place;

3. Removing from paragraph (e)(1)(ii)(C) “(Dec 2010)” and adding “(Date)” in its place;

4. Revising paragraph (e)(1)(ii)(H); and

5. Revising paragraphs (e)(1)(ii)(J) through (e)(1)(ii)(M).

The revised text reads as follows:

**52.212–5 Contract Terms and Conditions Required To Implement Statutes or Executive Orders—Commercial Items.**

\* \* \* \* \*

**Contract Terms and Conditions Required To Implement Statutes or Executive Orders—Commercial Items (Date)**

\* \* \* \* \*

(b) \* \* \*

\* \* \* \* \*

\_\_\_\_ (40)(i) 52.225–3, Buy American Free Trade Agreements—Israeli Trade Act (Date) (41 U.S.C. chapter 83, 19 U.S.C. 3301 note, 19 U.S.C. 2112 note, 19 U.S.C. 3805 note, Pub. L. 108–77, 108–78, 108–286, 108–302, 109–53, 109–169, 109–283, and 110–138.

\* \* \* \* \*

(c) \* \* \*

\_\_\_\_ (1) 52.222–41, Service Contract Labor Standards (Date) (41 U.S.C. chapter 67).

\_\_\_\_ (2) 52.222–42, Statement of Equivalent Rates for Federal Hires (Date) (29 U.S.C. 206 and 41 U.S.C. chapter 67).

\_\_\_\_ (3) 52.222–43, Fair labor Standards Act and Service Contract Labor Standards—Price Adjustment (Multiple Year and Option Contracts) (Date) (29 U.S.C. 206 and 41 U.S.C. chapter 67).

\_\_\_\_ (4) 52.222–44, Fair Labor Standards Act and Service Contract Labor Standards—Price Adjustment (Date) (29 U.S.C. 206 and 41 U.S.C. chapter 67).

\_\_\_\_ (5) 52.222–51, Exemption from Application of the Service Contract Labor Standards to Contracts for maintenance, Calibration, or Repair of Certain Equipment—Requirements (Date) (41 U.S.C. chapter 67).

\_\_\_\_ (6) 52.222–53, Exemption from Application of the Service Contract Labor Standards to Contracts for Certain Services—Requirements (Date) (41 U.S.C. chapter 67).

\_\_\_\_ (7) 52.226–6, Promoting Excess Food Donation to Nonprofit Organizations (Date) (42 U.S.C. 1792).

\* \* \* \* \*

(e)(1) \* \* \*

(i) \* \* \*

\* \* \* \* \*

(x) 52.222–51, Exemption from Application of the Service Contract Labor Standards to Contracts for Maintenance, Calibration, or Repair of Certain Equipment—Requirements (Date) (41 U.S.C. chapter 67).

(xi) 52.222–53, Exemption from Application of the Service Contract Labor Standards to Contracts for Certain Services—Requirements (Date) (41 U.S.C. chapter 67).

\* \* \* \* \*

Alternate II (Date) \* \* \*

\* \* \* \* \*

(e)(1) \* \* \*

(ii) \* \* \*

(H) 52.222–41, Service Contract Labor Standards (Date) (41 U.S.C. chapter 67).

\* \* \* \* \*

(J) 52.222–51, Exemption from Application of the Service Contract Labor Standards to Contracts for Maintenance, Calibration, or Repair of Certain Equipment—Requirements (Date) (41 U.S.C. chapter 67).

(K) 52.222–53, Exemption from Application of the Service Contract Labor Standards to Contracts for Certain Services—Requirements (Date) (41 U.S.C. chapter 67).

(L) 52.222–54, Employment Eligibility Verification (Date) (Executive Order 12989).

(M) 52.226–6, Promoting Excess Food Donation to Nonprofit Organizations. (Date) (42 U.S.C. 1792). Flow down required in accordance with paragraph (e) of FAR clause 52.226–6.

\* \* \* \* \*

\* \* \* \* \*

317. Amend section 52.213–4 by—

a. Removing from the clause heading “(Mar 2012)” and adding “(Date)” in its place;

b. Removing from paragraph (a)(1)(vii) “(Pub. L. 108–77, 108–78)” and adding “(Public Laws 108–77 and 108–78 (19 U.S.C. 3805 note))” in its place;

c. Removing from paragraph (a)(2)(vi) “(Jul 2002)” and adding “(Date)” in its place;

d. Removing from paragraph (a)(2)(vii) “(Jan 2011)” and adding “(Date)” in its place;

e. Removing from paragraph (b)(1)(ii) “Walsh-Healey Public Contracts Act (Oct 2010) (41 U.S.C. 35–45)” and adding “Contracts for Materials, Supplies, Articles, and Equipment Exceeding \$15,000 (Date) (41 U.S.C. chapter 65)” in its place;

f. Revising paragraph (b)(1)(vi);

g. Removing from paragraph (b)(1)(ix) “Act—Supplies (Feb 2009) (41 U.S.C. 10a-10d)” and adding “Supplies (Date) (41 U.S.C. chapter 83)” in its place;

h. Redesignating paragraphs (b)(1)(x) through (b)(1)(xii) as paragraph (b)(1)(xi) through (b)(1)(xiii) respectively;

i. Adding a new paragraph (b)(1)(x);

j. Removing from paragraph (b)(2)(i) “(Dec 2010)” and adding “(Date)” in its place;

k. Removing paragraph (b)(2)(iii); and

l. Redesignating paragraphs (b)(2)(iv) and (b)(2)(v) as paragraphs (b)(2)(iii) and (b)(2)(iv), respectively.

The revised text reads as follows:

**52.213–4 Terms and Conditions—Simplified Acquisitions (Other Than Commercial Items).**

\* \* \* \* \*

(b) \* \* \*

(1) \* \* \*

(vi) 52.222–41, Service Contract Labor Standards (Date) (41 U.S.C. chapter 67) (Applies to service contracts over \$2,500 that are subject to the Service Contract Labor Standards statute and will be performed in the United States, District of Columbia, Puerto Rico, the Northern Mariana Islands, American Samoa, Guam, the U.S. Virgin Islands, Johnston Island, Wake Island, or the outer Continental Shelf.)

\* \* \* \* \*

(x) 52.226–6, Promoting Excess Food Donation to Nonprofit Organizations (DATE) (42 U.S.C. 1792) (Applies to contracts greater than \$25,000 that provide for the provision, the service, or the sale of food in the United States.)

318. Amend section 52.219–1 by revising the introductory paragraph of Alternate I and paragraph (b)(9) of the checklist “Asian-Pacific American” to read as follows:

**52.219–1 Small Business Program Representations.**

\* \* \* \* \*

Alternate I (DATE). As prescribed in 19.308(a)(2), add the following paragraph (b)(9) to the basic provision:

(9) \* \* \*

\* \* \* \* \*  
Asian-Pacific American (persons with origins from Burma, Thailand, Malaysia, Indonesia, Singapore, Brunei, Japan, China, Taiwan, Laos, Cambodia (Kampuchea), Vietnam, Korea, The Philippines, Republic of Palau, Republic of the Marshall Islands, Federated States of Micronesia, the Commonwealth of the Northern Mariana Islands, Guam, Samoa, Macao, Hong Kong, Fiji, Tonga, Kiribati, Tuvalu, or Nauru).

\* \* \* \* \*

319. Amend section 52.219–8 by revising the date of the clause; and removing from paragraph (a) “contracts let” and adding “contracts awarded” in its place.

The revised text reads as follows:

**52.219–8 Utilization of Small Business Concerns.**

\* \* \* \* \*

**Utilization of Small Business Concerns (Date)**

\* \* \* \* \*

320. Amend section 52.222–4 by—

a. Revising the section heading;

b. Revising the clause heading;

c. Removing from paragraph (b) “Standards Act” and adding “Standards statute (found at 40 U.S.C. chapter 37)” in its place;

d. Removing from paragraph (c) “Act”; and

e. Removing from paragraph (d)(1) “Davis-Beacon Act” and adding “Construction Wage Rate Requirements statute” in its place.

The revised text reads as follows:

**52.222–4 Contract Work Hours and Safety Standards—Overtime Compensation.**

\* \* \* \* \*

**Contract Work Hours and Safety Standards—Overtime Compensation (Date)**

\* \* \* \* \*

321. Amend section 52.222–5 by—

a. Revising the section heading;

b. Revising the provision heading; and

c. Removing from paragraph (a)(1) “Davis-Beacon Act” and adding “Construction Wage Rate Requirements” in its place.

The revised text reads as follows:

**52.222–5 Construction Wage Rate Requirements—Secondary Site of the Work.**

\* \* \* \* \*

**Construction Wage Rate Requirements—Secondary Site of Work (Date)**

\* \* \* \* \*

322. Amend section 52.222–6 by—

a. Revising the section heading;

b. Revising the clause heading;

c. Removing from paragraph (b)(2) “Davis-Beacon Act” and adding

“Construction Wage Rate Requirements statute” in its place;

d. Removing from paragraph (b)(4) “Davis-Beacon” and adding “Construction Ware Requirements” in its place; and

e. Removing from paragraph (e) “Davis-Beacon Act” and adding “Construction Wage Rate Requirements statute” in its place.

The revised text reads as follows:

**52.222–6 Construction Wage Rate Requirements.**

\* \* \* \* \*

**Construction Wage Rate Requirements (Date)**

\* \* \* \* \*

323. Amend section 52.222–7 by revising the date of the clause; and removing from the clause “Davis-Beacon”. The revised text reads as follows:

**52.222–7 Withholding of Funds.**

\* \* \* \* \*

**Withholding of Funds (Date)**

\* \* \* \* \*

324. Amend section 52.222–8 by revising the date of the clause and paragraph (a) to read as follows:

**52.222–8 Payrolls and Basic Records.**

\* \* \* \* \*

**Payrolls and Basic Records (Date)**

(a) Payrolls and basic records relating thereto shall be maintained by the Contractor during the course of the work and preserved for a period of 3 years thereafter for all laborers and mechanics working at the site of the work. Such records shall contain the name, address, and social security number of each such worker, his or her correct classification, hourly rates of wages paid (including rates of contributions or costs anticipated for bona fide fringe benefits or cash equivalents thereof of the types described in 40 U.S.C. 3141 (2)(B) (Construction Wage Rate Requirement statute)), daily and weekly number of hours worked, deductions made, and actual wages paid. Whenever the Secretary of Labor has found, under paragraph (d) of the clause entitled Construction Wage Rate Requirements, that the wages of any laborer or mechanic include the amount of any costs reasonably anticipated in providing benefits under a plan or program described in 40 U.S.C. 3141(2)(B), the Contractor shall maintain records which show that the commitment to provide such benefits is enforceable, that the plan or program is financially responsible, and that the plan or program has been communicated in writing to the laborers or mechanics affected, and records which show the costs anticipated or the actual cost incurred in providing such benefits. Contractors employing apprentices or trainees under approved programs shall maintain written evidence of the registration of apprenticeship programs and certification of trainee programs, the registration of the

apprentices and trainees, and the ratios and wage rates prescribed in the applicable programs.

\* \* \* \* \*

325. Amend section 52.222–11 by—  
 a. Revising the date of the clause;  
 b. Removing from paragraphs (a)(4) and (a)(5) “Davis-Bacon Act” and adding “Construction Wage Rate Requirements” in its place; and  
 c. Revising paragraphs (b)(1) and (b)(10) to read as follows:

**52.222–11 Subcontracts (Labor Standards).**

\* \* \* \* \*

**Subcontracts (Labor Standards) (Date)**

\* \* \* \* \*

(b) \* \* \*

(1) Construction Wage Rate Requirements;

\* \* \* \* \*

(10) Compliance with Construction Wage Rate Requirements and Related Regulations; and

\* \* \* \* \*

326. Amend section 52.222–12 by revising the section and clause headings, and the clause to read as follows:

**52.222–12 Contract Termination—Debarment.**

\* \* \* \* \*

**Contract Termination—Debarment (Date)**

A breach of the contract clauses entitled Construction Wage Rate Requirements, Contract Work Hours and Safety Standards—Overtime Compensation, Apprentices and Trainees, Payrolls and Basic Records, Compliance with Copeland Act Requirements, Subcontracts (Labor Standards), Compliance with Construction Wage Rate Requirements and Related Regulations, or Certification of Eligibility may be grounds for termination of the contract, and for debarment as a Contractor and subcontractor as provided in 29 CFR 5.12.

(End of Clause)

327. Amend section 52.222–13 by—  
 a. Revising the heading of the clause; and

b. Removing from the introductory paragraph “Davis Bacon and Related Acts” and adding “Construction Wage Rate Requirements and related statutes” in its place.

The revised text reads as follows:

**52.222–13 Compliance with Construction Wage Rate Requirements and Related Act Regulations.**

\* \* \* \* \*

**Compliance With Construction Wage Rate Requirements and Related Act Regulations (Date)**

\* \* \* \* \*

328. Amend section 52.222–15 by revising the section and clause

headings, and paragraphs (a) and (b) to read as follows:

**52.222–15 Certification of Eligibility.**

\* \* \* \* \*

**Certification of Eligibility (Date)**

(a) By entering into this contract, the Contractor certifies that neither it nor any person or firm who has an interest in the Contractor’s firm is a person or firm ineligible to be awarded Government contracts by virtue of 40 U.S.C. 3144(b)(2) or 29 CFR 5.12(a)(1).

(b) No part of this contract shall be subcontracted to any person or firm ineligible for award of a Government contract by virtue of 40 U.S.C. 3144(b)(2) or 29 CFR 5.12(a)(1).

\* \* \* \* \*

**52.222–16 [Amended]**

329. Amend section 52.222–16 by—  
 a. Removing from the clause heading “(Feb 1988)” and adding “(Date)” in its place; and

b. Removing from the introductory paragraph “Davis-Bacon Act” and adding “Construction Wage Rate Requirements” in its place.

330. Revise section 52.222–20 to read as follows:

**52.222–20 Contracts for Materials, Supplies, Articles, and Equipment Exceeding \$15,000.**

As prescribed in 22.610, insert the following clause in solicitations and contracts:

**Contracts for Materials, Supplies, Articles, and Equipment Exceeding \$15,000 (Date)**

If this contract is for the manufacture or furnishing of materials, supplies, articles or equipment in an amount that exceeds or may exceed \$15,000, and is subject to 41 U.S.C. chapter 65, the following terms and conditions apply:

(a) All stipulations required by 41 U.S.C. chapter 65 and regulations issued by the Secretary of Labor (41 CFR Chapter 50) are incorporated by reference. These stipulations are subject to all applicable rulings and interpretations of the Secretary of Labor that are now, or may hereafter, be in effect.

(b) All employees whose work relates to this contract shall be paid not less than the minimum wage prescribed by regulations issued by the Secretary of Labor (41 CFR 50–202.2). Learners, student learners, apprentices, and workers with disabilities may be employed at less than the prescribed minimum wage (see 41 CFR 50–202.3) to the same extent that such employment is permitted under Section 14 of the Fair Labor Standards Act (41 U.S.C. 6508).

331. Amend section 52.222–30 by—  
 a. Revising the section and clause headings; and

b. Removing from paragraphs (a) and (b)(3) the words “Davis-Bacon Act” and adding “Construction Wage Rate Requirements statute” in its place.

The revised text reads as follows:

**52.222–30 Construction Wage Rate Requirements—Price Adjustment.**

\* \* \* \* \*

**Construction Wage Rate Requirements—Price Adjustment (None Or Separately Specified Method) (Date)**

\* \* \* \* \*

332. Amend section 52.222–31 by—  
 a. Revising the section and clause headings; and

b. Removing from paragraphs (a), (b) introductory text, (b)(1), (b)(2), and (c)(3) the words “Davis-Bacon Act” and adding “Construction Wage Rate Requirements statute” in their places.

The revised text reads as follows:

**52.222–31 Construction Wage Rate Requirements—Price Adjustment.**

\* \* \* \* \*

**Construction Wage Rate Requirements—Price Adjustment (Percentage Method) (Date)**

\* \* \* \* \*

333. Amend section 52.222–32 by—  
 a. Revising the section and clause headings; and

b. Removing from paragraphs (c)(1) and (c)(2) the words “Davis-Bacon Act” and adding “Construction Wage Rate Requirements” in its place.

The revised text reads as follows:

**52.222–32 Construction Wage Rate Requirements—Price Adjustment (Actual Method).**

\* \* \* \* \*

**Construction Wage Rate Requirements—Price Adjustment (Actual Method) (Date)**

\* \* \* \* \*

334. Amend section 52.222–41 by—  
 a. Revising the section and clause headings;

b. Removing the definition “Act”;  
 c. Removing from paragraph (b) “the Act” and “41 U.S.C. 356” and adding “41 U.S.C. chapter 67, Service Contract Labor Standards” and “41 U.S.C. 6702” in its place, respectively;

d. Removing from paragraphs (c)(2)(v) and (f) the words “the Act” and adding “the Service Contract Labor Standards statute” in their places;

e. Removing from paragraph (g) the words “section 2(a)(4) of the Act” and adding “41 U.S.C. 6703” in its place;

f. Removing from paragraphs (i)(1) introductory text and (i)(1)(i) “the Act” and adding “the Service Contract Labor Standards statute” in its place;

g. Removing from paragraph (j) “the Act” and “this Act” and adding “Service Contract Labor Standards statute” and “this statute” in its place, respectively;

h. Removing from paragraphs (k), (l), and (o) “the Act” and adding “the Service Contract Labor Standards statute” in their places;

i. Revising paragraph (p)(1);  
 j. Removing from paragraph (p)(2) “section 5 of the Act” and adding “41 U.S.C. 6706” in its place;  
 k. Removing from paragraph (q) “Act” and adding “41 U.S.C. 6707” in its place;  
 l. Revising paragraphs (q)(1) and (q)(2);  
 m. Removing from the introductory text of paragraph (s) “section 2(a)(1) or section 2(b)(1) of the Act” and adding “41 U.S.C. 6703(1)” in its place;  
 n. Removing from paragraph (s)(3) “Contract Act” and adding “Contract Labor Standards” in its place; and  
 o. Removing from paragraph (s)(4) “section 4(c) of the Act” and adding “41 U.S.C. 6707(c)” in its place.  
 The revised text reads as follows:

**52.222-41 Service Contract Labor Standards.**

\* \* \* \* \*

**Service Contract Labor Standards (Date)**

\* \* \* \* \*

(p) \* \* \*

(1) By entering into this contract, the Contractor (and officials thereof) certifies that neither it nor any person or firm who has a substantial interest in the Contractor’s firm is a person or firm ineligible to be awarded Government contracts by virtue of the sanctions imposed under 41 U.S.C. 6706.

\* \* \* \* \*

(q) \* \* \*

(1) Apprentices, student-learners, and workers whose earning capacity is impaired by age, physical or mental deficiency, or injury may be employed at wages lower than the minimum wages otherwise required by 41 U.S.C. 6703(1) without diminishing any fringe benefits or cash payments in lieu thereof required under 41 U.S.C. 6703(2), in accordance with the conditions and procedures prescribed for the employment of apprentices, student-learners, persons with disabilities, and disabled clients of work centers under section 14 of the Fair Labor Standards Act of 1938, in the regulations issued by the Administrator (29 CFR parts 520, 521, 524, and 525).

(2) The Administrator will issue certificates under the statute for the employment of apprentices, student-learners, persons with disabilities, or disabled clients of work centers not subject to the Fair Labor Standards Act of 1938, or subject to different minimum rates of pay under the two acts, authorizing appropriate rates of minimum wages (but without changing requirements concerning fringe benefits or supplementary cash payments in lieu thereof), applying procedures prescribed by the applicable regulations issued under the Fair Labor Standards Act of 1938 (29 CFR parts 520, 521, 524, and 525).

\* \* \* \* \*

335. Amend section 52.222-42 by revising the date of the clause and the introductory paragraph of the clause to read as follows:

**52.222-42 Statement of Equivalent Rates for Federal Hires.**

\* \* \* \* \*

**Statement of Equivalent Rates for Federal Hires (Date)**

In compliance with the Service Contract Labor Standards statute and the regulations of the Secretary of Labor (29 CFR Part 4), this clause identifies the classes of service employees expected to be employed under the contract and states the wages and fringe benefits payable to each if they were employed by the contracting agency subject to the provisions of 5 U.S.C. 5341 or 5332.

\* \* \* \* \*

336. Amend section 52.222-43 by—  
 a. Revising the section and clause headings; and

b. Removing from paragraph (c) “Act of 1965, as amended” 41 U.S.C. 351, *et seq.*” and adding “Labor Standards statute (41 U.S.C. chapter 67)” in its place.

The revised text reads as follows:

**52.222-43 Fair Labor Standards Act and Service Contract Labor Standards—Price Adjustment (Multiple Year and Option Contracts).**

\* \* \* \* \*

**Fair Labor Standards Act and Service Contract Labor Standards—Price Adjustment (Multiple Year and Option Contracts) (Date)**

\* \* \* \* \*

337. Amend section 52.222-44 by revising the section heading and clause headings to read as follows:

**52.222-44 Fair Labor Standards Act and Service Contract Labor Standards—Price Adjustment.**

\* \* \* \* \*

**Fair Labor Standards Act and Service Contract Labor Standards—Price Adjustment (Date)**

\* \* \* \* \*

338. Amend section 52.222-48 by—  
 a. Revising the section and clause headings;

b. Removing from the introductory text of paragraph (b) “Contract Act” and adding “Contract Labor Standards statute” in its place;

c. Removing from paragraph (b)(1) the words “Act of 1965” and adding “Labor Standards” in its place; and

d. Removing from paragraphs (b)(2), (c)(1), and (c)(2) the words “Contract Act” and adding “Contract Labor Standards” in its place.

The revised text reads as follows:

**52.222-48 Exemption from Application of the Service Contract Labor Standards to Contracts for Maintenance, Calibration, or Repair of Certain Equipment Certification.**

\* \* \* \* \*

**Exemption From Application of the Service Contract Labor Standards to Contracts for Maintenance, Calibration, or Repair of Certain Equipment Certification (Date)**

\* \* \* \* \*

339. Amend section 52.222-49 by—  
 a. Revising the section and clause heading; and

b. Removing from paragraph (a) the words “Contract Act” and adding “Contract Labor Standards statute” in its place.

The revised text reads as follows:

**52.222-49 Service Contract Labor Standards—Place of Performance Unknown.**

\* \* \* \* \*

**Service Contract Labor Standards—Place of Performance Unknown (Date)**

\* \* \* \* \*

340. Amend section 52.222-51 by—  
 a. Revising the section and clause headings;

b. Removing from paragraph (e) the words “Contract Act” and adding “Contract Labor Standards statute” in its place.

The revised text reads as follows:

**52.222-51 Exemption from Application of the Service Contract Labor Standards to Contracts for Maintenance, Calibration, or Repair of Certain Equipment—Requirements.**

\* \* \* \* \*

**Exemption From Application of the Service Contract Labor Standards to Contracts for Maintenance, Calibration, or Repair of Certain Equipment—Requirements (Date)**

\* \* \* \* \*

341. Amend section 52.222-52 by—  
 a. Revising the section and clause headings;

b. Removing from the introductory text of paragraph (b) “Act” and adding “Labor Standards statute” in its place;

c. Removing from paragraph (b)(1) “Act of 1965” and adding “Labor Standards” in its place;

d. Removing from paragraph (b)(2) “Act” and adding “Labor Standards” in its place; and

e. Removing from paragraphs (c)(1) and (c)(2) “Act” and adding “Labor Standards” in its place.

The revised text reads as follows:

**52.222-52 Exemption from Application of the Service Contract Labor Standards to Contracts for Certain Services—Certification.**

\* \* \* \* \*

**Exemption From Application of the Service Contract Labor Standards to Contracts for Certain Services—Certification**

(Date)

\* \* \* \* \*

342. Amend section 52.222-53 by—

- a. Revising the section and clause headings;
- b. Removing from paragraphs (f) and (g) “Act” and adding “Labor Standards statute” in their places.

The revised text reads as follows:

**52.222–53 Exemption from Application of the Service Contract Labor Standards to Contracts for Certain Services—Requirements.**

\* \* \* \* \*

**Exemption From Application of the Service Contract Labor Standards to Contracts for Certain Services—Requirements (Date)**

\* \* \* \* \*

**52.222–54 [Amended]**

343. Amend section 52.222–54 by—
- a. Removing from the clause heading “(Jan 2009)” and adding “(Date)” in its place; and

b. Removing from paragraph (a)(2) “section 3 of the Shipping Act of 1984 (46 U.S.C. App. 1702)” and adding “46 U.S.C. 40102(4)” in its place.

344. Amend section 52.225–1 by—

- a. Revising the section and clause headings;
- b. Removing from paragraph (a) in the definition “Commercially available of the shelf (COTS) item”, paragraph (2) “section 3 of the Shipping Act of 1984 (46 U.S.C. App. 1702)” and adding “46 U.S.C. 40102(4)” in its place;
- c. Revising paragraph (b); and
- d. Removing from paragraph (d) the word “Act”.

The revised text read as follows:

**52.225–1 Buy American Supplies.**

\* \* \* \* \*

**Buy American Supplies (Date)**

\* \* \* \* \*

(b) 41 U.S.C. chapter 83, Buy American, provides a preference for domestic end products for supplies acquired for use in the United States. In accordance with 41 U.S.C. 1907, the component test of the Buy American statute is waived for an end product that is a COTS item (See 12.505(a)(1))

\* \* \* \* \*

345. Amend section 52.225–2 by—
- a. Revising the section and clause headings; and

b. Removing from paragraph (a) “Act”.

The revised text reads as follows:

**52.225–2 Buy American Certificate.**

\* \* \* \* \*

**Buy American Certificate (Date)**

\* \* \* \* \*

346. Amend section 52.225–3 by—
- a. Revising the section and clause headings;

b. Removing from paragraph (a) in the definition “Commercially available off-

the-shelf (COTS) item” the words “section 3 of the Shipping Act of 1984 (46 U.S.C. App. 1702)” and adding “46 U.S.C. 40102(4)” in its place;

c. Revising paragraph (c); and

d. Amend Alternate I by—

1. Removing from the introductory paragraph “(Mar 2012)” and adding “(Date)” in its place;

2. Removing from paragraph (c) “Act—”

e. Amend Alternate II by—

1. Removing from the introductory paragraph “(Mar 2012)” and adding “(Date)” in its place; and

2. Removing from paragraph (c) “Act—”.

The revised text read as follows:

**52.225–3 Buy American—Free Trade Agreements—Israeli Trade Act.**

\* \* \* \* \*

**Buy American—Free Trade Agreements—Israeli Trade Act (Date)**

\* \* \* \* \*

(c) *Delivery of end products.* 41 U.S.C. chapter 83, Buy American, provides a preference for domestic end products for supplies acquired for use in the United States. In accordance with 41 U.S.C. 1907, the component test of the Buy American statute is waived for an end product that is a COTS item (See 12.505(a)(1)). In addition the Contracting Officer has determined that FTAs (except the Bahrain, Morocco, Oman, and Peru FTAs) and the Israeli Trade Act apply to this acquisition. Unless otherwise specified, these trade agreements apply to all items in the Schedule. The Contractor shall deliver under this contract only domestic end products except to the extent that, in its offer, it specified delivery of foreign end products in the provision entitled “Buy American—Free Trade Agreements—Israeli Trade Act Certificate.” If the Contractor specified in its offer that the Contractor would supply a Free Trade Agreement country end product (other than a Bahrainian, Moroccan, Omani, or Peruvian end product) or an Israeli end product, then the Contractor shall supply a Free Trade Agreement country end product (other than a Bahrainian, Moroccan, Omani, or Peruvian end product), an Israeli end product or, at the Contractor’s option, a domestic end product.

\* \* \* \* \*

347. Amend section 52.225–4 by—

a. Revising the section and clause headings;

b. Removing from paragraphs (a), (b) and (c) “American Act—” and adding “American” in their places; and

c. Amend Alternate I by—

1. Removing from the introductory paragraph “(Jan 2004)” and adding “(Date)” in its place;

2. Removing from paragraph (b) “American Act—” and adding “American” in its place;

d. Amending Alternate II by—

1. Removing from the introductory paragraph “(Jan 2004)” and adding “(Date)” in its place; and

2. Removing from paragraph (b) “American Act—” and adding “American” in its place.

The revised text reads as follows:

**52.225–4 Buy American Free Trade Agreements—Israeli Trade Act Certificate.**

\* \* \* \* \*

**Buy American Free Trade Agreements—Israeli Trade Act Certificate (Date)**

\* \* \* \* \*

**52.225–6 [Amended]**

348. Amend section 52.225–6 by—

a. Removing from the provision heading “(Jan 2005)” and adding “(Date)” in its place; and

b. Removing from paragraph (c) “Act” and adding “statute” in its place.

349. Amend section 52.225–7 by—

a. Revising the section and provision headings; and

b. Removing from paragraph (b) “Act” and adding “statute” in its place.

The revised text reads as follows:

**52.225–7 Waiver of Buy American Statute for Civil Aircraft and Related Articles.**

\* \* \* \* \*

**Waiver of Buy American Statute for Civil Aircraft and Related Articles (Date)**

\* \* \* \* \*

350. Amend section 52.225–9 by—

a. Revising the section and clause headings;

b. Removing from paragraph (a) in the definition “Commercially available off-the-shelf (COTS) item”, in paragraph (2) “section 3 of the Shipping Act of 1984 (46 U.S.C. App. 1702)” and adding “46 U.S.C. 40102(4)” in its place;

c. Revising the introductory text of paragraph (b)(1);

d. Removing from paragraphs (b)(3)(i), (b)(3)(ii), (c), (c)(2), and (c)(3) “Act” and adding “statute” in their places;

The revised text read as follows:

**52.225–9 Buy American—Construction Materials.**

\* \* \* \* \*

**Buy American—Construction Materials (Date)**

\* \* \* \* \*

(b) \* \* \*

(1) This clause implements 41 U.S.C. chapter 83, Buy American, by providing a preference for domestic construction material. In accordance with 41 U.S.C. 1907, the component test of the Buy American statute is waived for construction material that is a COTS item. (See FAR 12.505(a)(2)). The Contractor shall use only domestic construction material in performing this contract, except as provided in paragraphs (b)(2) and (b)(3) of this clause.

\* \* \* \* \*

351. Amend section 52.225-10 by—  
a. Revising the section and provision headings;

b. Removing from paragraph (a) “Act—”;

c. Removing from paragraph (b) “Act” and adding “statute” in its place (two times);

d. Removing from the introductory text of paragraph (c) and paragraph (c)(1) “Act” and adding “statute” in their places;

e. Amend Alternate I by—

1. Removing from the introductory paragraph “(May 2002)” and adding “(Date)” in its place; and

2. Removing from paragraph (b) “Act” and adding “statute” in its place;

The revised text reads as follows:

**52.225-10 Notice of Buy American Requirement—Construction Materials.**

\* \* \* \* \*

**Notice of Buy American Requirement—Construction Materials (Date)**

\* \* \* \* \*

352. Amend section 52.225-11 by—  
a. Revising the section and clause headings;

b. Removing from paragraph (a) in the definition “Commercially available off-the-shelf (COTS) item”, in paragraph (2) “section 3 of the Shipping Act of 1984 (46 U.S.C. App. 1702)” and adding “46 U.S.C. 40102(4)” in its place;

c. Revising paragraph (b)(1);

d. Removing from paragraphs (b)(4)(i) and (b)(4)(ii) “Act” and adding “statute” in its place;

e. Removing from paragraph (c) “Act” and adding “statute” in its place;

f. Removing from paragraph (c)(2) “Act” and adding “statute” in its place;

g. Removing from paragraph (c)(3) “Act” and adding “statute” in its place (two times);

h. Amend Alternate I by—

1. Removing from the introductory paragraph “(Jun 2009)” and adding “(Date)” in its place; and

2. Revising paragraph (b)(1).

The revised text read as follows:

**52.225-11 Buy American—Construction Materials Under Trade Agreements.**

\* \* \* \* \*

**Buy American—Construction Materials Under Trade Agreements (Date)**

\* \* \* \* \*

(b) \* \* \*

(1) This clause implements 41 U.S.C. chapter 83, Buy American by providing a preference for domestic construction material. In accordance with 41 U.S.C. 1907, the component test of the Buy American statute is waived for construction material that is a COTS item. (See FAR 12.505(a)(2)). In addition, the Contracting Officer has determined that the WTO GPA and Free

Trade Agreements (FTAs) apply to this acquisition. Therefore, the Buy American restrictions are waived for designated country construction materials.

\* \* \* \* \*

*Alternate I* \* \* \*

\* \* \* \* \*

(b) \* \* \*

(1) This clause implements 41 U.S.C. chapter 83, Buy American, by providing a preference for domestic construction material. In accordance with 41 U.S.C. 1907, the component test of the Buy American statute is waived for construction material that is a COTS item. (See FAR 12.505(a)(2)). In addition, the Contracting Officer has determined that the WTO GPA and all the Free Trade Agreements except the Bahrain FTA, NAFTA, and the Oman FTA apply to this acquisition. Therefore, the Buy American restrictions are waived for designated country construction materials other than Bahrainian, Mexican, or Omani construction materials.

\* \* \* \* \*

353. Amend section 52.225-12 by—  
a. Revising the section and clause headings;

b. Removing from paragraph (a) “Act”;

c. Removing from paragraph (b) “Buy American Act” and adding “Buy American statute” in its place (two times);

d. Removing from paragraphs (c)(1) the words “Buy American Act” and adding “Buy American statute” in its place; and

e. Amend Alternate I by—

1. Revising the date of Alternate I; and  
2. Removing from paragraph (b) “Buy American Act” and adding “Buy American statute” in its place.

The revised text reads as follows:

**52.225-12 Notice of Buy American Requirement—Construction Materials Under Trade Agreements.**

\* \* \* \* \*

**Notice of Buy American Requirement—Construction Materials Under Trade Agreements (Date)**

\* \* \* \* \*

*Alternate I (Date)* \* \* \*

\* \* \* \* \*

354. Amend section 52.225-21 by—  
a. Revising the section and clause headings;

b. Removing from paragraph (a) in the definition “Domestic construction material” in paragraph (a)(1) “Act” and adding “statute” in its place;

c. Removing from paragraph (b)(1)(ii) “The Buy American Act (41 U.S.C. 10a-10(d))” and adding “41 U.S.C. chapter 83, Buy American,” in its place;

d. Removing from paragraph (b)(4)(iii) “Act” and adding “statute” in its place;

e. Removing from paragraphs (c) and (c)(2) “Act” and adding “statute” in its place; and

f. Removing from paragraph (c)(3) “Act” and adding “statute” in its place (two times).

The revised text reads as follows:

**52.225-21 Required Use of American Iron, Steel, and Manufactured Goods—Buy American Statute—Construction Materials.**

\* \* \* \* \*

**Required Use of American Iron, Steel, and Manufactured Goods—Buy American Statute—Construction Materials (Date)**

\* \* \* \* \*

355. Amend section 52.225-22 by—  
a. Revising the section and clause headings;

b. Removing from paragraph (a) “Buy American Act” and adding “Buy American Statute” in its place;

c. Removing from paragraph (b) “American Act” and adding “American Statute” in its place (two times), and removing “inapplicability of 1605” and adding inapplicability of section 1605” in its place;

d. Removing from paragraph (c)(1) “Buy American Act” and adding “Buy American statute” in its place;

e. Amend Alternate I by—

1. Removing from the introductory text “(Mar 2009)” and adding “(Date)” in its place; and

f. Removing from paragraph (b) “Buy American Act” and adding “Buy American statute” in its place.

The revised text reads as follows:

**52.225-22 Notice Required Use of American Iron, Steel, and Manufactured Goods—Buy American Statute—Construction Materials.**

\* \* \* \* \*

**Notice of Required Use of American Iron, Steel, and Manufactured Goods—Buy American Statute—Construction Materials (Date)**

\* \* \* \* \*

356. Amend section 52.225-23 by—  
a. Revising the section and clause headings;

b. Removing from paragraph (a) in paragraph (1) of the definition “Domestic construction material”, the words “Buy American Act” and adding “Buy American statute” in its place;

c. Removing from paragraphs (b)(1), (b)(1)(ii), (b)(4)(iii), (c) introductory text, (c)(2), and (c)(3) “Buy American Act” and adding “Buy American statute” in their places;

d. Amend Alternate I by—

1. Removing from the introductory text “(Oct 2010)” and adding “(Date)” in its place; and

e. Removing from paragraphs (b)(1) and (b)(1)(ii) the words “Buy American Act” and adding “Buy American statute” in its place.

The revised text reads as follows:

**52.225–23 Required Use of American Iron, Steel, and Manufactured Goods—Buy American Statute—Construction Materials under Trade Agreements.**

\* \* \* \* \*

**Required Use of American Iron, Steel, and Manufactured Goods—Buy American Statute—Construction Materials Under Trade Agreements (Date)**

\* \* \* \* \*

357. Amend section 52.225–24 by—  
a. Revising the section and provision headings;

b. Removing from paragraphs (a) “American Act” and adding “American statute” in its place;

c. Removing from paragraphs (b) “American Act” and adding “American statute” in its place (two times);

d. Removing from paragraphs (c)(1) “American Act” and adding “American statute” in its place;

e. Amend Alternate I by—

1. Removing from the introductory text “(MAR 2009)” and adding “(DATE)” in its place; and

2. Removing from paragraph (b) “American Act” and adding “American statute” in its place.

The revised text reads as follows:

**52.225–24 Notice of Required Use of American Iron, Steel, and Manufactured Goods—Buy American Statute—Construction Materials Under Trade Agreements.**

\* \* \* \* \*

**Notice of Required Use of American Iron, Steel, and Manufactured Goods—Buy American Statute Construction Materials Under Trade Agreements (Date)**

\* \* \* \* \*

358. Amend section 52.226–6 by—  
a. Revising the date of the clause; and  
b. Removing from paragraph (b) “(Pub. L. 110–247)” and adding “(42 U.S.C. 1792)” in its place.

The revised text reads as follows:

**52.226–6 Promoting Excess Food Donation to Nonprofit Organizations.**

\* \* \* \* \*

**Promoting Excess Food Donation to Nonprofit Organizations (Date)**

\* \* \* \* \*

359. Amend section 52.227–11 by—  
a. Revising the date of the clause; and  
b. Removing from paragraph (k)(4) “Contract Disputes Act” and adding “Contract Disputes statute” in its place.

The revised text reads as follows:

**52.227–11 Patent Rights—Ownership by the Contractor.**

\* \* \* \* \*

**Patent Rights—Ownership by the Contractor (Date)**

\* \* \* \* \*

360. Amend section 52.227–14 by—  
a. Revising the date of the clause;  
b. Removing from paragraph (a) in the definition “Technical data” the words “databases (See 41 U.S.C. 403(8))” and adding “databases. (See 41 U.S.C. 116)” in its place; and

c. Removing from the introductory text of paragraph (e)(1) “41 U.S.C. 253d” and adding “41 U.S.C. 4703” in its place.

The revised text reads as follows:

**52.227–14 Rights in Data—General.**

\* \* \* \* \*

**Rights in Data—General (Date)**

\* \* \* \* \*

361. Amend section 52.227–20 by revising the date of the clause; and removing from paragraph (a), in the definition “Technical data” the words “41 U.S.C. 403(8)” and adding “41 U.S.C. 116” in its place. The revised text is as follows:

**52.227–20 Rights in Data—SBIR Program.**

\* \* \* \* \*

**Rights in Data—SBIR Program (Date)**

\* \* \* \* \*

362. Amend section 52.227–21 by revising the date of the clause; and by removing from paragraph (a) “41 U.S.C. 418a(d)(7)” and adding “41 U.S.C. 2302(e)(7)” in its place. The revised text reads as follows:

**52.227–21 Technical Data Declaration, Revision, and Withholding of Payment—Major Systems.**

\* \* \* \* \*

**Technical Data Declaration, Revision, and Withholding of Payment—Major System (Date)**

\* \* \* \* \*

363. Amend section 52.228–12 by revising the date of the clause and the clause to read as follows:

**52.228–12 Prospective Subcontractor Requests for Bonds.**

\* \* \* \* \*

**Prospective Subcontractor Requests for Bonds (Date)**

In accordance with Section 806(a)(3) of Pub. L. 102–190, as amended by Sections 2091 and 8105 of Pub. L. 103–355 (10 U.S.C. 2302 note), upon the request of a prospective subcontractor or supplier offering to furnish labor or material for the performance of this contract for which a payment bond has been furnished to the Government pursuant to 40 U.S.C. chapter 31, subchapter III, Bonds, the Contractor shall promptly provide a copy of such payment bond to the requester.

(End of clause)

364. Amend section 52.228–14 by revising the date of the clause; and removing from paragraphs (c)(2)(i) and

(c)(2)(ii) “the Miller Act” and adding “40 U.S.C. chapter 31, subchapter III, Bonds” in its place. The revised text reads as follows:

**52.228–14 Irrevocable Letter of Credit.**

\* \* \* \* \*

**Irrevocable Letter of Credit (Date)**

\* \* \* \* \*

365. Amend section 52.230–2 by revising the date of the clause; and removing from paragraph (b) “the Contract Disputes Act (41 U.S.C. 601)” and adding “41 U.S.C. chapter 71, Contract Disputes” in its place. The revised text reads as follows:

**52.230–2 Cost Accounting Practices.**

\* \* \* \* \*

**Cost Accounting Practices (Date)**

\* \* \* \* \*

366. Amend section 52.230–3 by revising the date of the clause; and removing from paragraph (b) “the Contract Disputes Act (41 U.S.C. 601)” and adding “41 U.S.C. chapter 71, Contract Disputes” in its place. The revised text reads as follows:

**52.230–3 Disclosure and Consistency of Cost Accounting Practices.**

\* \* \* \* \*

**Disclosure and Consistency of Cost Accounting Practices (Date)**

\* \* \* \* \*

367. Amend section 52.230–4 by revising the date of the clause; and removing from paragraph (b) “the Contract Disputes Act (41 U.S.C. 601)” and adding “41 U.S.C. chapter 71, Contract Disputes” in its place. The revised text reads as follows:

**52.230–4 Disclosure and Consistency of Cost Accounting Practices—Foreign Concerns.**

\* \* \* \* \*

**Disclosure and Consistency of Cost Accounting Practices—Foreign Concerns (Date)**

\* \* \* \* \*

368. Amend section 52.230–5 by revising the date of the clause; and removing from paragraph (b) “the Contract Disputes Act (41 U.S.C. 601)” and adding “41 U.S.C. chapter 71, Contract Disputes” in its place. The revised text reads as follows:

**52.230–5 Cost Accounting Standards—Educational Institutions.**

\* \* \* \* \*

**Cost Accounting Standards—Educational Institutions (Date)**

\* \* \* \* \*

369. Amend section 52.232–5 by revising the date of the clause; and

removing from paragraph (h)(3) "41 U.S.C. 15" and adding "41 U.S.C. 6305" in its place. The revised text reads as follows:

**52.232-5 Payments Under Fixed-Price Construction Contracts.**

\* \* \* \* \*

**Payments Under Fixed-Price Construction Contracts (Date)**

\* \* \* \* \*

370. Amend section 52.232-17 by revising the date of the clause; and removing from paragraph (a) "Section 611 of the Contract Disputes Act of 1978 (Public L. 95-563)" and adding "41 U.S.C. 7109" in its place. The revised text reads as follows: *52.232-17 Interest.*

\* \* \* \* \*

**Interest (Date)**

\* \* \* \* \*

371. Amend section 52.232-23 by revising the date of the clause; and removing from paragraph (a) "41 U.S.C. 15" and adding "41 U.S.C. 6305" in its place. The revised text reads as follows:

**§ 52.232-23 Assignment of Claims.**

\* \* \* \* \*

**Assignment of Claims (Date)**

\* \* \* \* \*

372. Amend section 52.232-24 by revising the date of the clause and the clause to read as follows:

**§ 52.232-24 Prohibition of Assignment of Claims.**

\* \* \* \* \*

**Prohibition of Assignment of Claims (Date)**

The assignment of claims under the Assignment of Claims Act of 1940 (31 U.S.C. 3727, 41 U.S.C. 6305) is prohibited for this contract.

(End of clause)

373. Amend section 52.232-27 by—  
a. Revising the date of the clause;  
b. Removing from paragraphs (c)(2)(ii) and (e)(4)(ii) "section 12 of the Contract Disputes Act of 1978 (41 U.S.C. 611)" and adding "41 U.S.C. 7109" in its place;

c. Removing from paragraph (f)(1) "the Miller Act (40 U.S.C. 3133)" and adding "40 U.S.C. 3133" in its place; and  
d. Removing from paragraph (f)(2)(ii) "section 12 of the Contract Disputes Act of 1978 (41 U.S.C. 611)" and adding "41 U.S.C. 7109" in its place.

The revised text reads as follows:

**§ 52.232-27 Prompt Payment for Construction Contracts.**

\* \* \* \* \*

**Prompt Payment for Construction Contracts (Date)**

\* \* \* \* \*

374. Amend section 52.232-31 by revising the date of the clause; and removing from paragraph (c) "41 U.S.C. 255(f)" and adding "41 U.S.C. 4505" in its place. The revised text reads as follows:

**§ 52.232-31 Invitation to Propose Financing Terms.**

\* \* \* \* \*

**Invitation To Propose Financing Terms (Date)**

\* \* \* \* \*

375. Amend section 52.232-36 by revising the date of the clause; and removing from paragraph (e) "as amended, 31 U.S.C. 3727, 41 U.S.C. 15" and adding "(31 U.S.C. 3727, 41 U.S.C. 6305)" in its place. The revised text reads as follows:

**52.232-36 Payment by Third Party.**

\* \* \* \* \*

**Payment by Third Party (Date)**

\* \* \* \* \*

376. Amend section 52.233-1 by—  
a. Revising the date of the clause and paragraph (a);

b. Removing from paragraph (b) "the Act" and adding "chapter 71" in its place;

c. Removing from paragraph (c) "the Act" and adding "chapter 71" in its place (three times);

d. Removing from paragraphs (d)(2)(iii) and (d)(3) "duly"; and

e. Removing from paragraph (f) "the Act" and adding "chapter 71" in its place.

The revised text reads as follows:

**52.233-1 Disputes.**

\* \* \* \* \*

**Disputes (Date)**

(a) This contract is subject to 41 U.S.C. chapter 71, Contract Disputes.

\* \* \* \* \*

377. Amend section 52.234-4 by revising the date of the clause; and removing from paragraph (f) "a duly" and adding "an" in its place. The revised text reads as follows:

**52.234-4 Earned Value Management System.**

\* \* \* \* \*

**Earned Value Management System (Date)**

\* \* \* \* \*

378. Amend section 52.237-9 by revising the date of the clause; and removing from paragraph (a) "41 U.S.C. 256(c)(2)(A)" and adding "41 U.S.C. 4304(b)(1)" in its place. The revised text reads as follows:

**52.247-9 Waiver of Limitation on Severance Payment to Foreign Nationals.**

\* \* \* \* \*

**Waiver of Limitation on Severance Payments to Foreign Nationals (Date)**

\* \* \* \* \*

379. Amend section 52.242-3 by—  
a. Revising the date of the clause;

b. Removing from paragraph (b) "41 U.S.C. 256" and adding "41 U.S.C. chapter 43" in its place; and

c. Removing from paragraph (f) "the Contract Disputes Act of 1978 (41 U.S.C. 601, *et seq.*)" and adding "chapter 71, Contract Disputes" in its place.

The revised text reads as follows:

**52.242-3 Penalties for Unallowable Costs.**

\* \* \* \* \*

**Penalties for Unallowable Costs (Date)**

\* \* \* \* \*

380. Amend section 52.244-6 by—  
a. Revising the date of the clause;

b. Removing from paragraph (c)(1)(i) "(Pub. L. 110-252, Title VI, Chapter 1 (41 U.S.C. 251 note))" and adding "(41 U.S.C. 3509)" in its place; and

c. Removing from paragraph (c)(1)(iii) "(DEC 2010)" and adding "(DATE)" in its place.

The revised text reads as follows:

**52.244-6 Subcontracts for Commercial Items.**

\* \* \* \* \*

**Subcontracts for Commercial Items (Date)**

\* \* \* \* \*

**PART 53—FORMS**

**53.214 [Amended]**

375. Amend section 53.214 by removing from paragraph (a) "(Rev. 5/2011)" and adding "(Rev. 3/2012)" in its place.

376. Amend section 53.222 by—  
a. Revising paragraph (c);  
b. Removing from paragraph (d) "Act" and adding "Statute" in its place; and revising paragraphs (e), (f), and (h) to read as follows:

**53.222 Application of labor laws to Government acquisitions (SF's 308, 1093, 1413, 1444, 1445, 1446, WH-347).**

\* \* \* \* \*

(c) *SF 308 (DOL) (Rev. 1/2012), Request for Wage Determination and Response to Request.* (See 22.404-3(a) and (b).)

(d) *SF 1093 (Rev. 5/2012), Schedule of Withholdings Under the Construction Wage Rate Requirements Statute (40 U.S.C. Chapter 31, Subchapter IV, § 3144) and/or the Contract Work Hours and Safety Standards Statute (40 U.S.C. Chapter 37, § 3703).*

(e) *SF 1413 (Rev. 2/2012), Statement and Acknowledgment.* SF 1413 is prescribed for use in obtaining contractor acknowledgment of inclusion of required clauses in subcontracts, as specified in 22.406-5.

(f) *Form SF 1444 (Rev. 2/2012), Request for Authorization of Additional Classification and Rate.* (See 22.406–3(a) and 22.1019.)

\* \* \* \* \*

(h) *SF 1446 (Rev. 4/2012), Labor Standards Investigation Summary Sheet.* (See 22.406–8(d).)

\* \* \* \* \*

**53.228 [Amended]**

377. Amend section 53.228 by—  
a. Removing from paragraph (b) “(Rev. 5/96)” and adding “(Rev. 2/2012)” in its place;

b. Removing from paragraph (c) “(Rev. 10/98)” and adding “(Rev. 2/2012)” in its place; and

c. Removing from paragraphs (h) and (i) “(Rev. 10/98)” and “Miller Act” and adding “Bond Statute” and “(Rev. 2/2012)” in its place, respectively.

**53.236–2 [Amended]**

378. Amend section 53.236–2 by removing from paragraph (b) “(6/04)” and adding “(Rev. 2/2012)” in its place.

378. Revise section 53.301–25 to read as follows:

**53.301–25 Performance Bond.**

*[Insert SF 25 here.]*

379. Revise section 53.301–25A to read as follows:

**53.301–25A Payment Bond.**

*[Insert SF 25A here.]*

380. Revise section 53.301–26 to read as follows:

**53.301–26 Award/Contract.**

*[Insert SF 26 here.]*

381. Revise section 53.301–273 to read as follows:

**53.301–273 Reinsurance Agreement for a Bonds Statute Performance Bond.**

*[Insert SF 273 here.]*

382. Revise section 53.301–274 to read as follows:

**53.301–274 Reinsurance Agreement for a Bonds Statute Payment Bond.**

*[Insert SF 274 here.]*

383. Revise section 53.301–308 to read as follows:

**53.301–308 Request for Wage Determination and Response To Request.**

*[Insert SF 308 here.]*

384. Revise section 53.301–330 to read as follows:

**53.301–330 Architect-Engineer Qualifications.**

*[Insert SF 330 here.]*

385. Revise section 53.301–1093 to read as follows:

**53.301–1093 Schedule of Withholdings Under the Construction Wage Rate Requirements Statute (40 U.S.C. Chapter 31, Subchapter IV, § 3144) and/or the Contract Work Hours and Safety Standards Statute (40 U.S.C. Chapter 37, § 3703).**

*[Insert SF 1093 here.]*

386. Revise section 53.301–1413 to read as follows:

**53.301–1413 Statement and Acknowledgement.**

*[Insert SF 1413 here.]*

387. Revise section 53.301–1444 to read as follows:

**53.301–1444 Request for Authorization of Additional Classification and Rate.**

*[Insert SF 1444 here.]*

388. Revise section 53.301–1446 to read as follows:

**53.301–1446 Labor Standards Investigation Summary Sheet.**

*[Insert SF 1446 here.]*

[FR Doc. 2012–21874 Filed 9–17–12; 8:45 am]

BILLING CODE 6820–14–P



# FEDERAL REGISTER

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Vol. 77

Tuesday,

No. 181

September 18, 2012

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Part VI

The President

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Proclamation 8862—Constitution Day and Citizenship Day, Constitution Week, 2012



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# Presidential Documents

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Title 3—

Proclamation 8862 of September 13, 2012

The President

**Constitution Day and Citizenship Day, Constitution Week, 2012****By the President of the United States of America****A Proclamation**

Today, we celebrate our heritage as a country bound together by fidelity to a set of ideas and a system of governance first laid out in America's Constitution. The product of fierce debate and enduring compromise, our Nation's Constitution has guided our progress from 13 to 50 United States that stretch from sea to shining sea. It has watched over our growth from a fragile experiment in democracy to a beacon of freedom that lights the world. It has vested in each of us the power to appeal to principles that could broaden democracy's reach.

As we mark this 225th anniversary of the signing of our Constitution, we also recognize the candidates for citizenship who will commemorate this day by joining our American family. For more than two centuries, our country has drawn enterprising men and women from around the world—individuals who have sought to build a life as good as their talents and their hard work would allow. Generations have crossed land and ocean because of the belief that, in America, all things are possible. As a new group of citizens takes an oath to support and defend our country's oldest principles, we affirm another truth: that our American journey and our success would never have been possible without the hope, the drive, and the irrepressible optimism that every generation of immigrants has brought to our shores. Across our country, Americans are working side-by-side with our Nation's newest citizens to build strong, welcoming communities that embrace the talents and contributions of all their members.

This week, we reflect on the basic rights and responsibilities of citizenship, the founding documents from which they were drawn, and the extraordinary legacy of progress they have enabled. Let us forever uphold the ideals the Framers enshrined in our Constitution, and let us never cease in our pursuit of the more perfect Union they imagined so many years ago.

In remembrance of the signing of the Constitution and in recognition of the Americans who strive to uphold the duties and responsibilities of citizenship, the Congress, by joint resolution of February 29, 1952 (36 U.S.C. 106), designated September 17 as "Constitution Day and Citizenship Day," and by joint resolution of August 2, 1956 (36 U.S.C. 108), requested that the President proclaim the week beginning September 17 and ending September 23 of each year as "Constitution Week."

NOW, THEREFORE, I, BARACK OBAMA, President of the United States of America, do hereby proclaim September 17, 2012, as Constitution Day and Citizenship Day, and September 17 through September 23, 2012, as Constitution Week. I encourage Federal, State, and local officials, as well as leaders of civic, social, and educational organizations, to conduct ceremonies and programs that bring together community members to reflect on the importance of active citizenship, recognize the enduring strength of our Constitution, and reaffirm our commitment to the rights and obligations of citizenship in this great Nation.

IN WITNESS WHEREOF, I have hereunto set my hand this thirteenth day of September, in the year of our Lord two thousand twelve, and of the Independence of the United States of America the two hundred and thirty-seventh.

A handwritten signature in black ink, appearing to be Barack Obama's signature, consisting of a large 'B' followed by a circle and a vertical line through it, and a horizontal line extending to the right.

[FR Doc. 2012-23187  
Filed 9-17-12; 11:15 am]  
Billing code 3295-F2-P

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(phone, 202-512-1808). The text will also be made available on the Internet from GPO's Federal Digital System (FDsys) at <http://www.gpo.gov/fdsys>. Some laws may not yet be available.

**H.R. 1402/P.L. 112-170**

To authorize the Architect of the Capitol to establish battery recharging stations for privately owned vehicles in parking areas under the jurisdiction of the House of Representatives at no net cost to the Federal Government. (Aug. 16, 2012; 126 Stat. 1303)

**H.R. 3670/P.L. 112-171**

To require the Transportation Security Administration to comply with the Uniformed

Services Employment and Reemployment Rights Act. (Aug. 16, 2012; 126 Stat. 1306)

**H.R. 4240/P.L. 112-172**

Ambassador James R. Lilley and Congressman Stephen J. Solarz North Korea Human Rights Reauthorization Act of 2012 (Aug. 16, 2012; 126 Stat. 1307)

**S. 3510/P.L. 112-173**

To prevent harm to the national security or endangering the military officers and civilian employees to whom internet publication of certain information applies, and for other purposes. (Aug. 16, 2012; 126 Stat. 1310)

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