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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.

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DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2014-0449; Directorate Identifier 2013-NM-259-AD; Amendment 39-18021; AD 2014-23-05]

RIN 2120-AA64

Airworthiness Directives; Airbus Airplanes

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

ACTION: Final rule.

SUMMARY: We are adopting a new airworthiness directive (AD) for all Airbus Model A318 series airplanes, Model A319 series airplanes, Model A320-211, -212, -214, -231, -232, and -233 airplanes, and Model A321 series airplanes. This AD was prompted by a report of a circumferential crack at the gland retaining-ring groove of certain retraction actuators on the main landing gear (MLG). This AD requires an inspection to identify the part numbers of MLG retraction actuators and replacement of certain MLG retraction actuators. We are issuing this AD to prevent MLG retraction actuator failure that could prevent the full extension and/or down-locking of the MLG, possibly resulting in MLG collapse during landing or rollout, and consequent damage to the airplane and injury to the occupants.

DATES: This AD becomes effective December 26, 2014.

The Director of the Federal Register approved the incorporation by reference of a certain publication listed in this AD as of December 26, 2014.

ADDRESSES: You may examine the AD docket on the Internet at <http://www.regulations.gov/> [#!docketDetail;D=FAA-2014-0449](#) or in

person at the Docket Management Facility, U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE., Washington, DC.

For service information identified in this AD, contact Airbus, Airworthiness Office—ELAS, 1 Rond Point Maurice Bellonte, 31707 Blagnac Cedex, France; telephone +33 5 61 93 36 96; fax +33 5 61 93 44 51; email account.airworthiness@airbus.com; Internet <http://www.airbus.com>. You may view this 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.

FOR FURTHER INFORMATION CONTACT:

Sanjay Ralhan, Aerospace Engineer, International Branch, ANM-116, Transport Airplane Directorate, FAA, 1601 Lind Avenue SW., Renton, WA 98057-3356; telephone 425-227-1405; fax 425-227-1149.

SUPPLEMENTARY INFORMATION:

Discussion

We issued a notice of proposed rulemaking (NPRM) to amend 14 CFR part 39 by adding an AD that would apply to all Airbus Model A318 series airplanes, Model A319 series airplanes, Model A320-211, -212, -214, -231, -232, and -233 airplanes, and Model A321 series airplanes. The NPRM published in the **Federal Register** on July 17, 2014 (79 FR 41658).

The European Aviation Safety Agency (EASA), which is the Technical Agent for the Member States of the European Community, has issued EASA Airworthiness Directive 2013-0283R1, dated December 9, 2013 [Corrected December 11, 2013] (referred to after this as the Mandatory Continuing Airworthiness Information, or “the MCAI”), to correct an unsafe condition for the specified products. The MCAI states:

During routine pre-flight inspection of an Airbus A319, a hydraulic fluid leak was detected, coming from the retraction actuator of the main landing gear (MLG). The results of subsequent investigations revealed that a galvanic difference between materials induced an internal corrosion which was the crack initiator of the component. Actuators from 201590 series were identified as potentially affected, unless inspected and corrected during MLG overhaul.

This condition, if not detected and corrected, could lead to retraction actuator failure, preventing the full extension and/or down-locking of the MLG, possibly resulting in MLG collapse during landing or rollout and consequent damage to the aeroplane and injury to occupants.

To address this potential unsafe condition, Airbus published Service Bulletin (SB) A320-32-1408, providing instructions to identify and replace the affected actuators that have already exceeded 20,000 flight cycles (FC) or 10 years of operation since new, or since last overhaul.

For the reason described above, EASA AD 2013-0283 was issued to require a one-time identification and replacement of each affected MLG retraction actuator.

* * * * *

You may examine the MCAI in the AD docket on the Internet at <http://www.regulations.gov/> [#!documentDetail;D=FAA-2014-0449-0002](#).

Comments

We gave the public the opportunity to participate in developing this AD. We received no comments on the NPRM (79 FR 41658, July 17, 2014) or on the determination of the cost to the public.

Clarification of Costs of Compliance

We have revised the Costs of Compliance section of this AD to clarify the costs of the follow-on actions.

Conclusion

We reviewed the relevant data and determined that air safety and the public interest require adopting this 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 (79 FR 41658, July 17, 2014) for correcting the unsafe condition; and
- Do not add any additional burden upon the public than was already proposed in the NPRM (79 FR 41658, July 17, 2014).

Costs of Compliance

We estimate that this AD affects 851 airplanes of U.S. registry.

We also estimate that it will take about 3 work-hours per product to comply with the 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 on U.S. operators to be \$217,005, or \$255 per product.

In addition, we estimate that any necessary follow-on actions will take about 8 work-hours and require parts costing \$36,135 per MLG actuator, for a cost of \$36,845 per MLG actuator. We have no way of determining the number of aircraft that might 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 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.

Examining the AD Docket

You may examine the AD docket on the Internet at <http://www.regulations.gov/#!docketDetail;D=FAA-2014-0449>; or in person at the Docket Management Facility between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this AD, the regulatory evaluation, any comments received, and other

information. The street address for the Docket Operations office (telephone 800-647-5527) is in the ADDRESSES section.

List of Subjects in 14 CFR Part 39

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

Adoption of the Amendment

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

PART 39—AIRWORTHINESS DIRECTIVES

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

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

§ 39.13 [Amended]

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

2014-23-05 Airbus: Amendment 39-18021. Docket No. FAA-2014-0449; Directorate Identifier 2013-NM-259-AD.

(a) Effective Date

This AD becomes effective December 26, 2014.

(b) Affected ADs

None.

(c) Applicability

This AD applies to the Airbus airplanes specified in paragraphs (c)(1) through (c)(4) of this AD, certificated in any category, all manufacturer serial numbers.

- (1) Airbus Model A318-111, -112, -121, and -122 airplanes.
- (2) Airbus Model A319-111, -112, -113, -114, -115, -131, -132, and -133 airplanes.
- (3) Airbus Model A320-211, -212, -214, -231, -232, and -233 airplanes.
- (4) Airbus Model A321-111, -112, -131, -211, -212, -213, -231, and -232 airplanes.

(d) Subject

Air Transport Association (ATA) of America Code 32, Landing Gear.

(e) Reason

This AD was prompted by a report of a circumferential crack at the gland retaining groove of certain retraction actuators on the main landing gear (MLG). We are issuing this AD to prevent MLG retraction actuator failure that could prevent the full extension and/or down-locking of the MLG, possibly resulting in MLG collapse during landing or rollout, and consequent damage to the airplane and injury to the occupants.

(f) Compliance

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

(g) Inspection To Determine Part Number (P/N) and Time-in-Service

Within 18 months after the effective date of this AD: Do an inspection of each MLG retraction actuator to determine whether the actuator has P/N 201590001, 201590002, 201590002-010, 201590002-020, or 201590003; and to determine the time-in-service accumulated on actuators having those part numbers. The actuator flight cycles and calendar time are those accumulated since first installation on an airplane, or since last actuator overhaul, or since the most recent accomplishment of the actions described in Task 321147-01-1 of the Airbus A318/A319/A320/A321 Maintenance Review Board Report (MRBR), whichever occurs latest. A review of airplane delivery or maintenance records is acceptable, provided that the actuator part number and time-in-service can be conclusively identified from that review.

(h) MLG Actuator Replacement

At the applicable time specified in paragraphs (h)(1) and (h)(2) of this AD: Replace each MLG actuator having a part number identified in paragraph (g) of this AD with a new or serviceable actuator, in accordance with the Accomplishment Instructions of Airbus Service Bulletin A320-32-1408, dated July 22, 2013. The actuator flight cycles and calendar time specified in paragraphs (h)(1) and (h)(2) of this AD are those accumulated since first installation on an airplane, or since last actuator overhaul, or since doing the actions described in Task 321147-01-1 of the Airbus A318/A319/A320/A321 MRBR; whichever occurs later.

(1) For actuators with accumulated time-in-service equal to or more than 20,000 flight cycles or 10 years as of the effective date of this AD: Within 18 months after the effective date of this AD.

(2) For actuators with accumulated time-in-service less than 20,000 flight cycles and 10 years as of the effective date of this AD: Before the accumulation of 10 years since first installation on an airplane.

(i) MLG Actuator Replacement With Unknown Time-in-Service

Within 18 months after the effective date of this AD: Replace each MLG retraction actuator having a part number specified in paragraph (g) of this AD, and for which the in-service history is unknown, with a new or serviceable actuator, in accordance with the Accomplishment Instructions of Airbus Service Bulletin A320-32-1408, dated July 22, 2013.

(j) Exception to Paragraphs (g), (h), and (i) of This AD

An airplane that does not have Airbus Modification 26644 or Modification 150820 (for all airplane models), or Modification 27151 (for Model A321 series airplanes), applied in production, as applicable, is not affected by the requirements of paragraphs (g), (h), and (i) of this AD, provided that it can be conclusively determined that no MLG retraction actuator having a part number identified in paragraph (g) of this AD has been installed on that airplane since first flight.

(k) Parts Installation Limitation

As of the effective date of this AD, installation of an MLG retraction actuator having a part number identified in paragraph (g) of this AD is allowed, provided that the MLG retraction actuator has not accumulated or exceeded 20,000 flight cycles or 10 years since new; or 20,000 flight cycles or 10 years since last actuator overhaul.

(l) Other FAA AD Provisions

The following provisions also apply to this AD:

(1) **Alternative Methods of Compliance (AMOCs):** The Manager, International Branch, ANM-116, Transport Airplane Directorate, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. In accordance with 14 CFR 39.19, send your request to your principal inspector or local Flight Standards District Office, as appropriate. If sending information directly to the International Branch, send it to ATTN: Sanjay Ralhan, Aerospace Engineer, International Branch, ANM-116, Transport Airplane Directorate, FAA, 1601 Lind Avenue SW., Renton, WA 98057-3356; telephone 425-227-1405; 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) **Contacting the Manufacturer:** For any requirement in this AD to obtain corrective actions from a manufacturer, the action must be accomplished using a method approved by the Manager, International Branch, ANM-116, Transport Airplane Directorate, FAA; or the European Aviation Safety Agency (EASA); or Airbus's EASA Design Organization Approval (DOA). If approved by the DOA, the approval must include the DOA-authorized signature.

(m) Special Flight Permits

Special flight permits may be issued in accordance with sections 21.197 and 21.199 of the Federal Aviation Regulations (14 CFR 21.197 and 21.199) to operate the airplane to a location where the airplane can be modified (if the operator elects to do so), provided the MLG remains extended.

(n) Related Information

Refer to Mandatory Continuing Airworthiness Information (MCAI) 2013-0283R1, dated December 9, 2013 [Corrected December 11, 2013], for related information. This MCAI may be found in the AD docket on the Internet at <http://www.regulations.gov/>#!/documentDetail;D=FAA-2014-0449-0002.

(o) Material Incorporated by Reference

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

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

(i) Airbus Service Bulletin A320-32-1408, dated July 22, 2013.

(ii) Reserved.

(3) For service information identified in this AD, contact Airbus, Airworthiness Office—EIAS, 1 Rond Point Maurice Bellonte, 31707 Blagnac Cedex, France; telephone +33 5 61 93 36 96; fax +33 5 61 93 44 51; email account.airworth-eas@airbus.com; Internet <http://www.airbus.com>.

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

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

Issued in Renton, Washington, on November 5, 2014.

Jeffrey E. Duven,

Manager, Transport Airplane Directorate, Aircraft Certification Service.

[FR Doc. 2014-26984 Filed 11-19-14; 8:45 am]

BILLING CODE 4910-13-P

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

[Docket No. FAA-2014-0256; Directorate Identifier 2013-NM-214-AD; Amendment 39-18020; AD 2014-23-04]

RIN 2120-AA64

Airworthiness Directives; the Boeing Company Airplanes

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Final rule.

SUMMARY: We are adopting a new airworthiness directive (AD) for certain The Boeing Company Model 777-200LR, -300, -300ER, and 777F series airplanes. This AD was prompted by reports of dual pitch rate sensor (PRS) failures causing the primary flight computers to transition from primary mode to secondary mode, resulting in autopilot disconnects. This AD requires an inspection to determine the PRS part number, and replacement if necessary. We are issuing this AD to prevent a dual PRS failure that could cause an automatic disengagement of the autopilot and autoland, which may prevent continued safe flight and landing if disengagement occurs at low altitude and the flight crew is unable to safely assume control and execute a go-around or manual landing.

DATES: This AD is effective December 26, 2014.

The Director of the Federal Register approved the incorporation by reference of a certain publication listed in this AD as of December 26, 2014.

ADDRESSES: For service information identified in this AD, contact Boeing Commercial Airplanes, Attention: Data & Services Management, P.O. Box 3707, MC 2H-65, Seattle, WA 98124-2207; telephone 206-544-5000, extension 1; fax 206-766-5680; Internet <https://www.myboeingfleet.com>. You may view this 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> by searching for and locating Docket No. FAA-2014-0256; or in person at the Docket Management Facility between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this AD, the regulatory evaluation, any comments received, and other information. The address for the Docket Office (phone: 800-647-5527) is Document Management Facility, U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE., Washington, DC 20590.

FOR FURTHER INFORMATION CONTACT: Douglas Tsuji, Aerospace Engineer, Systems and Equipment Branch, ANM-130S, FAA, Seattle Aircraft Certification Office, 1601 Lind Avenue SW., Renton, WA 98057-3356; phone: 425-917-6546; fax: 425-917-6590; email: douglas.tsuji@faa.gov.

SUPPLEMENTARY INFORMATION:**Discussion**

We issued a notice of proposed rulemaking (NPRM) to amend 14 CFR part 39 by adding an AD that would apply to certain the Boeing Company Model 777 airplanes. The NPRM published in the **Federal Register** on April 25, 2014 (79 FR 22908). The NPRM was prompted by reports of dual PRS failures, resulting in autopilot disconnects. The NPRM proposed to require an inspection to determine the PRS part number, and replacement if necessary. We are issuing this AD to prevent a dual PRS failure that could cause an automatic disengagement of the autopilot and autoland, which may prevent continued safe flight and

landing if disengagement occurs at low altitude and the flight crew is unable to safely assume control and execute a go-around or manual landing.

Comments

We gave the public the opportunity to participate in developing this AD. The following presents the comments received on the NPRM (79 FR 22908, April 25, 2014), and the FAA’s response to each comment.

Support for the NPRM (79 FR 22908, April 25, 2014)

Boeing stated that it concurs with the contents of the NPRM (79 FR 22908, April 25, 2014).

Request To Revise Alternative Method of Compliance (AMOC) Approval Authority

American Airlines requested that we revise paragraph (j) of the NPRM (79 FR

22908, April 25, 2014) to add information regarding Boeing’s authority to approve an AMOC. American Airlines stated that paragraph (j) of the NPRM does not provide operators information as to whether Boeing has the ability to grant AMOC approvals.

We do not agree with the commenter’s request. At this time, the FAA has delegated AMOC approvals to Boeing Authorized Representatives for structural modifications only. This AD requires an inspection or maintenance records check to determine the part numbers of the four PRSs, and replacement if necessary. This AD does not require, and Boeing Special Attention Service Bulletin 777–27–0115, dated May 22, 2013, does not include, any structural modifications. We have not changed this AD in this regard.

Conclusion

We reviewed the relevant data, considered the comments received, and determined that air safety and the public interest require adopting this 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 (79 FR 22908, April 25, 2014) for correcting the unsafe condition; and
- Do not add any additional burden upon the public than was already proposed in the NPRM (79 FR 22908, April 25, 2014).

Costs of Compliance

We estimate that this AD affects 47 airplanes of U.S. registry.

We estimate the following costs to comply with this AD:

ESTIMATED COSTS

Action	Labor cost	Parts cost	Cost per product	Cost on U.S. operators
Inspection	2 work-hours × \$85 per hour = \$170	\$0	\$170	\$7,990

We estimate the following costs to do any necessary replacements that would be required based on the results of the

inspection. We have received no definitive data that would enable us to provide the cost of parts specified in

this AD. We have no way of determining the number of airplanes that might need these replacements:

ON-CONDITION COSTS

Action	Labor cost	Parts cost	Cost per product
Replacement (Up to 4 PRSs per airplane)	Up to 4 work-hours × \$85 per hour = \$340	\$0	Up to \$340.

Authority for This Rulemaking

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

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

Regulatory Findings

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

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

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

List of Subjects in 14 CFR Part 39

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

Adoption of the Amendment

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

PART 39—AIRWORTHINESS DIRECTIVES

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

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

§ 39.13 [Amended]

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

2014–23–04 The Boeing Company: Amendment 39–18020; Docket No.

FAA-2014-0256; Directorate Identifier 2013-NM-214-AD.

(a) Effective Date

This AD is effective December 26, 2014.

(b) Affected ADs

None.

(c) Applicability

This AD applies to The Boeing Company Model 777-200LR, -300, -300ER, and 777F series airplanes, certificated in any category, as identified in Boeing Special Attention Service Bulletin 777-27-0115, dated May 22, 2013.

(d) Subject

Air Transport Association (ATA) of America Code 27, Flight Controls.

(e) Unsafe Condition

This AD was prompted by reports of dual pitch rate sensor (PRS) failures causing the primary flight computers to transition from primary mode to secondary mode, resulting in autopilot disconnects. We are issuing this AD to prevent a dual PRS failure that could cause an automatic disengagement of the autopilot and autoland, which may prevent continued safe flight and landing if disengagement occurs at low altitude and the flight crew is unable to safely assume control and execute a go-around or manual landing.

(f) Compliance

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

(g) Inspection

Within 60 months after the effective date of this AD, inspect to determine the part numbers of all four PRSs, in accordance with the Accomplishment Instructions of Boeing Special Attention Service Bulletin 777-27-0115, dated May 22, 2013. For airplanes in group 1, as identified in Boeing Special Attention Service Bulletin 777-27-0115, dated May 22, 2013: A review of airplane maintenance records is acceptable in lieu of this inspection if the part number of the PRS can be conclusively determined from that review.

(h) Replacement

If any PRS having P/N 402875-05-01 is found during the inspection required by paragraph (g) of this AD: Before further flight, replace with a PRS having P/N 402875-03-01, in accordance with the Accomplishment Instructions of Boeing Special Attention Service Bulletin 777-27-0115, dated May 22, 2013.

(i) Parts Installation Prohibition

As of the effective date of this AD, no person may install a PRS having P/N 402875-05-01 on any airplane.

(j) Alternative Methods of Compliance (AMOCs)

(1) The Manager, Seattle Aircraft Certification Office (ACO), FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. In accordance with 14 CFR 39.19,

send your request to your principal inspector or local Flight Standards District Office, as appropriate. If sending information directly to the manager of the ACO, send it to the attention of the person identified in paragraph (k) of this AD. Information may be emailed to: 9-ANM-Seattle-ACO-AMOC-Requests@faa.gov.

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

(k) Related Information

For more information about this AD, contact Douglas Tsuji, Aerospace Engineer, Systems and Equipment Branch, ANM-130S, FAA, Seattle Aircraft Certification Office, 1601 Lind Avenue SW., Renton, WA 98057-3356; phone: 425-917-6546; fax: 425-917-6590; email: douglas.tsuji@faa.gov.

(l) Material Incorporated by Reference

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

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

(i) Boeing Special Attention Service Bulletin 777-27-0115, dated May 22, 2013.

(ii) Reserved.

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

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

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

Issued in Renton, Washington, on November 5, 2014.

Jeffrey E. Duven,

Manager, Transport Airplane Directorate, Aircraft Certification Service.

[FR Doc. 2014-26831 Filed 11-19-14; 8:45 am]

BILLING CODE 4910-13-P

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2014-0489; Directorate Identifier 2014-NM-048-AD; Amendment 39-18022; AD 2014-23-06]

RIN 2120-AA64

Airworthiness Directives; Bombardier, Inc. Airplanes

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

ACTION: Final rule.

SUMMARY: We are adopting a new airworthiness directive (AD) for certain Bombardier, Inc. Model CL-600-2B19 (Regional Jet Series 100 & 440) airplanes. This AD was prompted by a report indicating that inboard and outboard hydraulic lines of the brakes were found connected to the incorrect ports on the swivel assembly of the main landing gear (MLG). This AD requires modifying the MLG by installing a new bracket on the left and right lower aft-wing planks. We are issuing this AD to prevent incorrect installation of the brake hydraulic lines, which could cause the brakes and the anti-skid system to operate incorrectly, and consequent catastrophic failure of the airplane during a high-speed rejected takeoff.

DATES: This AD becomes effective December 26, 2014.

The Director of the Federal Register approved the incorporation by reference of a certain publication listed in this AD as of December 26, 2014.

ADDRESSES: You may examine the AD docket on the Internet at <http://www.regulations.gov/>#!/docketDetail;D=FAA-2014-0489 or in person at the Docket Management Facility, U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE., Washington, DC.

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

FOR FURTHER INFORMATION CONTACT:

Fabio Buttitta, Aerospace Engineer, Airframe and Mechanical Systems Branch, ANE-171, FAA, New York Aircraft Certification Office, 1600 Stewart Avenue, Suite 410, Westbury, NY 11590; telephone 516-228-7303; fax 516-794-5531.

SUPPLEMENTARY INFORMATION:**Discussion**

We issued a notice of proposed rulemaking (NPRM) to amend 14 CFR part 39 by adding an AD that would apply to certain Bombardier, Inc. Model CL-600-2B19 (Regional Jet Series 100 & 440) airplanes. The NPRM published in the **Federal Register** on August 4, 2014 (79 FR 45135).

Transport Canada Civil Aviation (TCCA), which is the aviation authority for Canada, has issued Canadian Airworthiness Directive CF-2014-10, dated February 12, 2014 (referred to after this as the Mandatory Continuing Airworthiness Information, or “the MCAI”), to correct an unsafe condition for certain Bombardier, Inc. Model CL-600-2B19 (Regional Jet Series 100 & 440) airplanes. The MCAI states:

Cases of inboard and outboard hydraulic brake lines connected to the incorrect port of the swivel assembly on the main landing gear were found in service, including a runway overrun event. Cross-connected brake hydraulic lines can cause the brakes and/or the anti-skid system to operate incorrectly. During a high speed rejected take-off, inability for the brakes to operate correctly could be catastrophic.

This [Canadian] AD mandates the modification to prevent inadvertent cross-connection of the inboard and outboard hydraulic brake lines.

The required action in this AD includes installing a new bracket on the left and right lower aft-wing planks of the MLG. You may examine the MCAI in the AD docket on the Internet at <http://www.regulations.gov/#!documentDetail;D=FAA-2014-0489-0002>.

Comments

We gave the public the opportunity to participate in developing this AD. We received no comments on the NPRM (79 FR 45135, August 4, 2014) or on the determination of the cost to the public.

Conclusion

We reviewed the relevant data and determined that air safety and the public interest require adopting this 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 (79 FR

45135, August 4, 2014) for correcting the unsafe condition; and

- Do not add any additional burden upon the public than was already proposed in the NPRM (79 FR 45135, August 4, 2014).

Costs of Compliance

We estimate that this AD affects 526 airplanes of U.S. registry.

We also estimate that it will take about 6 work-hours per product to comply with the basic requirements of this AD. The average labor rate is \$85 per work-hour. Required parts will cost about \$375 per product. Based on these figures, we estimate the cost of this AD on U.S. operators to be \$465,510, or \$885 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.

Examining the AD Docket

You may examine the AD docket on the Internet at <http://www.regulations.gov/#!docketDetail;D=FAA-2014-0489>; or in person at the Docket Management Facility between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this AD, the regulatory evaluation, any comments received, and other information. The street address for the Docket Operations office (telephone 800-647-5527) is in the **ADDRESSES** section.

List of Subjects in 14 CFR Part 39

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

Adoption of the Amendment

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

PART 39—AIRWORTHINESS DIRECTIVES

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

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

§ 39.13 [Amended]

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

2014-23-06 Bombardier, Inc.: Amendment 39-18022. Docket No. FAA-2014-0489; Directorate Identifier 2014-NM-048-AD.

(a) Effective Date

This AD becomes effective December 26, 2014.

(b) Affected ADs

None.

(c) Applicability

This AD applies to Bombardier, Inc. Model CL-600-2B19 (Regional Jet Series 100 & 440) airplanes, certificated in any category, serial numbers 7003 and subsequent.

(d) Subject

Air Transport Association (ATA) of America Code 32, Landing Gear.

(e) Reason

This AD was prompted by a report indicating that inboard and outboard hydraulic lines of the brakes were found connected to the incorrect ports on the swivel assembly of the main landing gear (MLG). We are issuing this AD to prevent incorrect installation of the brake hydraulic lines, which could cause the brakes and the anti-skid system to operate incorrectly, and consequent catastrophic failure of the airplane during a high-speed rejected take-off.

(f) Compliance

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

(g) Modification

Within 6,600 flight hours after the effective date of this AD, but no later than 36 months after the effective date of this AD: Modify the MLG by installing a new bracket on the left and right lower aft-wing planks, in accordance with the Accomplishment Instructions of Bombardier Service Bulletin 601R-32-110, dated December 19, 2013.

(h) Other FAA AD Provisions

The following provisions also apply to this AD:

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

(2) *Contacting the Manufacturer*: For any requirement in this AD to obtain corrective actions from a manufacturer, the action must be accomplished using a method approved by the Manager, New York ACO, ANE-170, Engine and Propeller Directorate, FAA; or Transport Canada Civil Aviation (TCCA); or Bombardier, Inc.'s TCCA Design Approval Organization (DAO). If approved by the DAO, the approval must include the DAO-authorized signature.

(i) Related Information

(1) Refer to Mandatory Continuing Airworthiness Information (MCAI) Canadian Airworthiness Directive CF-2014-10, dated February 12, 2014, for related information. This MCAI may be found in the AD docket on the Internet at <http://www.regulations.gov/> #!documentDetail;D=FAA-2014-0489-0002.

(j) Material Incorporated by Reference

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

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

(i) Bombardier Service Bulletin 601R-32-110, dated December 19, 2013.

(ii) Reserved.

(3) For service information identified in this AD, contact Bombardier, Inc., 400 Côte-Vertu Road West, Dorval, Québec H4S 1Y9,

Canada; telephone 514-855-5000; fax 514-855-7401; email thd.crj@aero.bombardier.com; Internet <http://www.bombardier.com>.

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

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

Issued in Renton, Washington, on November 5, 2014.

Jeffrey E. Duven,

Manager, Transport Airplane Directorate, Aircraft Certification Service.

[FR Doc. 2014-26985 Filed 11-19-14; 8:45 am]

BILLING CODE 4910-13-P

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

[Docket No. FAA-2014-0472; Directorate Identifier 2013-SW-040-AD; Amendment 39-18018; AD 2014-23-02]

RIN 2120-AA64

Airworthiness Directives; Agusta S.p.A. Helicopters (Type Certificate Currently Held by AgustaWestland S.p.A.) (Agusta)

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Final rule.

SUMMARY: We are adopting a new airworthiness directive (AD) for certain Agusta Model A109E, A109K2, A119, and AW119 MKII helicopters. This AD requires repetitively performing a magnetic particle inspection of the Gleason crown for a crack. This AD was prompted by a report of a crack that was found on a Gleason crown, which if not detected, could cause damage to or loss of the main rotor drive and subsequent loss of control of the helicopter.

DATES: This AD is effective December 26, 2014.

The Director of the Federal Register approved the incorporation by reference of certain documents listed in this AD as of December 26, 2014.

ADDRESSES: For service information identified in this AD, contact AgustaWestland, Product Support Engineering, Via del Gregge, 100, 21015 Lonate Pozzolo (VA) Italy, ATTN: Maurizio D'Angelo; telephone 39-0331-664757; fax 39-0331-664680; or at

<http://www.agustawestland.com/technical-bulletins>. You may review the referenced service information at the FAA, Office of the Regional Counsel, Southwest Region, 2601 Meacham Blvd., Room 663, Fort Worth, Texas 76137.

Examining the AD Docket

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

FOR FURTHER INFORMATION CONTACT: Rao Edupuganti, Aviation Safety Engineer, Regulations and Policy Group, Rotorcraft Directorate, FAA, 2601 Meacham Blvd., Fort Worth, Texas 76137; telephone (817) 222-5110; email rao.edupuganti@faa.gov.

SUPPLEMENTARY INFORMATION:**Discussion**

On July 16, 2014, at 79 FR 41462, the **Federal Register** published our notice of proposed rulemaking (NPRM), which proposed to amend 14 CFR part 39 by adding an AD that would apply to Agusta Model A109E, A109K2, A119, and AW119 MKII helicopters with a main transmission, part number (P/N) 109-0400-03-103, 109-0400-05-103, and 109-0400-03-109, with a Gleason crown, P/N 109-0403-07-103, installed. The NPRM proposed to require, for main transmissions with 2,400 or more hours time-in-service (TIS), performing repetitive magnetic particle inspections of the Gleason crown for a crack. If there is a crack, the NPRM proposed replacing the Gleason crown assembly before further flight. The NPRM also proposed to prohibit installing a Gleason crown, P/N 109-0403-07-103, or a Gleason crown assembly, P/N 109-0401-27-101 or P/N 109-0401-27-109, on any helicopter. The proposed requirements were intended to detect a crack, which could cause damage to or loss of the main rotor drive and subsequent loss of control of the helicopter.

The NPRM was prompted by AD No. 2013-0118, dated June 3, 2013, issued by EASA, which is the Technical Agent

for the Member States of the European Union, to correct an unsafe condition for Agusta Model A109K2, A109E, A119, and AW119MKII helicopters. EASA advises that during an overhaul of an A119 main transmission, P/N 109-0400-05-103, a crack on the Gleason crown, P/N 109-0403-07-103, was found. EASA further states that the crack originated from the bottom of one of the 40 threaded holes in the Gleason crown, and that this part-numbered Gleason crown is also installed on Model A109 helicopters. EASA states that this condition, if not corrected, could cause damage to or loss of the main rotor drive and loss of control of the helicopter. To correct this unsafe condition, EASA AD No. 2013-0118 requires repetitive magnetic particle inspections of the Gleason crown and, if there is a crack, replacing the Gleason crown with a different part-numbered Gleason crown. EASA AD No. 2013-0118 also prohibits installing a Gleason crown, P/N 109-0403-07-103, or a Gleason crown assembly, P/N 109-0401-27-101 or P/N 109-0401-27-109, on any helicopter, as Gleason crown, P/N 109-0403-07-103, is a component of these assemblies.

Comments

We gave the public the opportunity to participate in developing this AD, but we did not receive any comments on the NPRM (79 FR 41462, July 16, 2014).

FAA's Determination

These helicopters have been approved by the aviation authority of Italy and are approved for operation in the United States. Pursuant to our bilateral agreement with Italy, EASA, its technical representative, has notified us of the unsafe condition described in the EASA AD. We are issuing this AD because we evaluated all information provided by EASA and determined the unsafe condition exists and is likely to exist or develop on other helicopters of these same type designs and that air safety and the public interest require adopting the AD requirements as proposed, except for minor editorial changes. These changes are consistent with the intent of the proposals in the NPRM (79 FR 41462, July 16, 2014) and will not increase the economic burden on any operator nor increase the scope of the AD.

Differences Between This AD and the EASA AD

This AD requires compliance within 200 hours TIS for main transmissions with 2,400 or more hours. The EASA AD requires different compliance times,

depending on the number of flight hours the transmission has accumulated.

Related Service Information

We reviewed Agusta Bollettino Tecnico (BT) No. 109EP-128 for Model A109E helicopters, Agusta BT No. 109K-57 for Model A109K2 helicopters, and Agusta BT No. 119-058 for Model A119 and AW119MKII helicopters, each Revision A and dated May 28, 2013. Each BT describes procedures for performing a magnetic particle inspection on the Gleason crown, P/N 109-0403-07-103, for a crack. If there is a crack, each BT specifies replacing the Gleason crown assembly with a Gleason crown assembly, P/N 109-0401-27-107.

We also reviewed Agusta BT No. 109EP-126 for Model A109E helicopters, Agusta BT No. 109K-56 for Model A109K2 helicopters, and Agusta BT No. 119-053 for Model A119 and AW119MKII helicopters, each dated December 20, 2012. These BTs contain procedures for upgrading the transmission system by replacing the Gleason crown assembly with a Gleason crown assembly, P/N 109-0401-27-107.

Costs of Compliance

We estimate that this AD affects 218 helicopters of U.S. registry. We estimate the following costs to comply with this AD. At an average labor rate of \$85 per hour, magnetic particle inspecting the Gleason crown requires about 24 work-hours, for an estimated cost per helicopter of \$2,040, and a total cost of \$444,720 for the U.S. fleet, per inspection cycle.

If required, replacing the Gleason crown assembly requires about 24 work-hours, and required parts will cost \$29,000, for a cost per helicopter of \$31,040.

According to the manufacturer, some of the costs of this AD may be covered under warranty, thereby reducing the cost impact on affected individuals. We do not control warranty coverage for affected individuals. As a result, we have included all costs in our cost estimate.

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 helicopters identified in this rulemaking action.

Regulatory Findings

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

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

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

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

List of Subjects in 14 CFR Part 39

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

Adoption of the Amendment

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

PART 39—AIRWORTHINESS DIRECTIVES

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

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

§ 39.13 [Amended]

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

2014-23-02 Agusta S.p.A. Helicopters (Type Certificate Currently Held By AgustaWestland S.p.A.) (Agusta): Amendment 39-18018; Docket No. FAA-2014-0472; Directorate Identifier 2013-SW-040-AD.

(a) Applicability

This AD applies to Agusta Model A109E, A109K2, A119, and AW119 MKII helicopters with a main transmission, part number (P/N) 109-0400-03-103, 109-0400-05-103, or 109-0400-03-109, with a Gleason crown, P/N 109-0403-07-103, installed, certificated in any category.

(b) Unsafe Condition

This AD defines the unsafe condition as a crack in a Gleason crown. This condition could cause damage to or loss of the main rotor drive and subsequent loss of control of the helicopter.

(c) Effective Date

This AD becomes effective December 26, 2014.

(d) Compliance

You are responsible for performing each action required by this AD within the specified compliance time unless it has already been accomplished prior to that time.

(e) Required Actions

(1) For main transmissions with 2,400 or more hours time-in-service (TIS), within 200 hours TIS and thereafter at intervals not exceeding 1,600 hours TIS, magnetic particle inspect the Gleason crown, P/N 109-0403-07-103, for a crack by following the procedures in:

(i) Annex 1 of Agusta Bollettino Tecnico (BT) No. 109EP-128, Revision A, dated May 28, 2013, for Model A109E helicopters;

(ii) Annex 1 of Agusta BT No. 109K-57, Revision A, dated May 28, 2013, for Model A109K2 helicopters; or

(iii) Annex 1 of Agusta BT No. 119-058, Revision A, dated May 28, 2013, for Model A119 and AW119MKII helicopters.

(2) If there is a crack, before further flight, replace the Gleason crown assembly with a Gleason Crown assembly, P/N 109-0401-27-107. Replacing the Gleason crown assembly with P/N 109-0401-27-107 is terminating action for the inspection requirements of this AD.

(3) After the effective date of this AD, do not install a Gleason crown, P/N 109-0403-07-103, or a Gleason crown assembly, P/N 109-0401-27-101 or P/N 109-0401-27-109, on any helicopter.

(f) Alternative Methods of Compliance (AMOCs)

(1) The Manager, Safety Management Group, FAA, may approve AMOCs for this AD. Send your proposal to: Rao Edupuganti, Aviation Safety Engineer, Regulations and Policy Group, Rotorcraft Directorate, FAA, 2601 Meacham Blvd., Fort Worth, Texas 76137; telephone (817) 222-5110; email rao.edupuganti@faa.gov.

(2) For operations conducted under a 14 CFR part 119 operating certificate or under 14 CFR part 91, subpart K, we suggest that you notify your principal inspector, or lacking a principal inspector, the manager of the local flight standards district office or certificate holding district office, before operating any aircraft complying with this AD through an AMOC.

(g) Additional Information

The subject of this AD is addressed in European Aviation Safety Agency (EASA) AD No. 2013-0118, dated June 3, 2013. You may view the EASA AD on the Internet at <http://www.regulations.gov> in Docket No. FAA-2014-0472.

(h) Subject

Joint Aircraft Service Component (JASC) Code: 6320: Main Rotor Gearbox.

(i) Material Incorporated by Reference

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

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

(i) AgustaWestland Bollettino Tecnico No. 109EP-128, Revision A, dated May 28, 2013.

(ii) AgustaWestland Bollettino Tecnico No. 109K-57, Revision A, dated May 28, 2013.

(iii) AgustaWestland Bollettino Tecnico No. 119-058, Revision A, dated May 28, 2013.

(3) For AgustaWestland service information identified in this AD, contact AgustaWestland, Product Support Engineering, Via del Gregge, 100, 21015 Lonate Pozzolo (VA) Italy, ATTN: Maurizio D'Angelo; telephone 39-0331-664757; fax 39-0331-664680; or at <http://www.agustawestland.com/technical-bullettins>.

(4) You may view this service information at FAA, Office of the Regional Counsel, Southwest Region, 2601 Meacham Blvd., Room 663, Fort Worth, Texas 76137. For information on the availability of this material at the FAA, call (817) 222-5110.

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

Issued in Fort Worth, Texas, on October 30, 2014.

Lance T. Gant,

Acting Directorate Manager, Rotorcraft Directorate, Aircraft Certification Service.

[FR Doc. 2014-26825 Filed 11-19-14; 8:45 am]

BILLING CODE 4910-13-P

DEPARTMENT OF COMMERCE**Bureau of Economic Analysis****15 CFR Part 801**

[Docket No. 1206013202-4700-01]

RIN 0691-AA83

Direct Investment Surveys: BE-10, Benchmark Survey of U.S. Direct Investment Abroad

AGENCY: Bureau of Economic Analysis, Commerce.

ACTION: Final rule.

SUMMARY: This final rule amends regulations of the Department of Commerce's Bureau of Economic Analysis (BEA) to reinstate reporting requirements for the 2014 BE-10, Benchmark Survey of U.S. Direct Investment Abroad. Benchmark surveys are conducted every five years; the prior survey covered 2009. The benchmark survey covers the universe of U.S. direct investment abroad, and is BEA's most comprehensive survey of such investment in terms of subject matter. For the 2014 benchmark survey, BEA will make changes in the data items collected. No changes will be made to the reporting requirements for the survey. This mandatory survey will be conducted under the authority of the International Investment and Trade in Services Survey Act (the Act). Unlike many other BEA surveys conducted pursuant to the Act, a response will be required from persons subject to the reporting requirements of the BE-10, Benchmark Survey of U.S. Direct Investment Abroad, whether or not they are contacted by BEA, in order to ensure that respondents subject to the requirements for U.S. direct investment abroad are identified.

DATES: This final rule is effective December 22, 2014.

FOR FURTHER INFORMATION CONTACT:

Patricia Abaroa, Chief, Direct Investment Division (BE-50), Bureau of Economic Analysis, U.S. Department of Commerce, Washington, DC 20230; phone (202) 606-9591.

SUPPLEMENTARY INFORMATION: On August 14, 2014, BEA published a notice of proposed rulemaking that set forth revised reporting criteria for the BE-10, Benchmark Survey of U.S. Direct Investment Abroad (79 FR 47599-47603). On September 9, 2014, BEA published a correction to the notice of proposed rulemaking to correct the Regulation Identifier Number (RIN) that was listed in the first notice (79 FR 53355). BEA received two comments on the proposed rule.

One comment was written on behalf of hedge fund managers that are subject to BE-10 reporting requirements. The letter suggested that the BE-10 survey is not well suited to hedge funds and that for these respondents the burden of reporting is significant. The commenter made several recommendations, including (1) that entities that are not contacted by BEA should have no reporting responsibilities (similar to other BEA surveys), (2) that BEA should not require reporting by U.S. investment managers on their management of non-U.S. investment funds, and (3) that BEA should provide survey instructions specific to hedge fund filers. BEA is very concerned about respondent burden and has employed several strategies to reduce the burden where possible. BEA cannot implement the first two recommendations because of the legal requirements and the statistical needs that govern how the data are collected and tabulated. To address the third recommendation, BEA will consider what additional guidance it can offer to hedge fund filers, possibly in the form of Frequently Asked Questions (FAQs).

The other commenter was a data user that urged BEA to reorient the BE-10 survey to address current issues related to global value chains and trade in value added. The commenter recommended that BEA systematically capture data on firm sales of goods and services by business function and international surveys industry (ISI) code, imports and exports by country, and distribution of sales and purchases by type of customer. The commenter also suggested that BEA reorganize the BE-10 survey to collect data in matrix format. BEA does not collect sales by business function and would need to explore the feasibility of collecting this information by conducting outreach to respondent companies to determine what information classified by business function might be available in their records. BEA will consider this addition for future surveys. BEA does collect sales data by ISI code and by type of customer as well as data on trade in services by country and on affiliated goods trade by country. To offer additional information that will be useful in analysis of trade in value added, BEA will add questions to the BE-10 survey to collect a regional breakdown of unaffiliated goods trade by U.S. parent companies. The BE-10 does not cover purchased inputs and BEA believes that this information would be more accurately reported on establishment level surveys. Regarding survey design, BEA has tended to

minimize use of matrix formatting on the BE-10 survey because of feedback from experts in survey response indicating that matrix formatting leads to unit and item nonresponse on surveys.

The additional questions related to unaffiliated trade in goods (described in the Description of Changes section below) will be reflected in the final versions of the forms. This final rule adds 15 CFR 801.8 to set forth the reporting requirements for the BE-10, Benchmark Survey of U.S. Direct Investment Abroad. BEA conducts the BE-10 survey under the authority of the International Investment and Trade in Services Survey Act (22 U.S.C. 3101–3108).

By rule issued in 2012 (77 FR 24373), BEA established guidelines for collecting data on international trade in services and direct investment through notices, rather than through rulemaking. This final rule amends the regulations to require a response from persons subject to the reporting requirements of the BE-10, whether or not they are contacted by BEA, in order to ensure complete coverage of U.S. direct investment abroad.

The benchmark survey covers the U.S. direct investment abroad universe and is BEA's most comprehensive survey of such investment in terms of subject matter. U.S. direct investment abroad is defined as the ownership or control, directly or indirectly, by one U.S. person of 10 percent or more of the voting securities of an incorporated foreign business enterprise or an equivalent interest in an unincorporated foreign business enterprise, including a branch.

The purpose of the benchmark survey is to obtain universe data on the financial and operating characteristics of, and on positions and transactions between, U.S. parent companies and their foreign affiliates. The data are needed to measure the size and economic significance of U.S. direct investment abroad, measure changes in such investment, and assess its impact on the U.S. and foreign economies. These data are used to derive current universe estimates of direct investment from sample data collected in other BEA surveys in non-benchmark years. In particular, they would serve as benchmarks for the quarterly direct investment estimates included in the U.S. international transactions, international investment position, and national income and product accounts, and for annual estimates of the operations of U.S. parent companies and their foreign affiliates.

Description of Changes

The changes amend the regulations and the survey forms for the BE-10 benchmark survey. These amendments include changes in the data items collected and questionnaire design.

Under the revised regulations, unlike many other BEA surveys conducted pursuant to the Act, persons subject to the reporting requirements of the BE-10, Survey of U.S. Direct Investment Abroad, are required to respond whether or not they are contacted by BEA.

BEA will add and delete some items on the benchmark survey forms. Most of the additions are made in response to suggestions from data users. The following items will be added to the benchmark survey:

(1) For U.S. parent companies, questions will be added to collect data on the U.S. imports of goods by the intended use of the goods and by whether the shipper of the goods is a foreign affiliate or an unaffiliated foreign entity.

(2) For U.S. parent companies, questions will be added to collect data on U.S. exports to and imports from unaffiliated foreigners in the following regions: Canada, Europe, Latin America and other Western Hemisphere, Africa, Middle East, and Asia and Pacific.

(3) For larger U.S. parent companies (those with assets, sales, or net income greater than \$300 million), questions will be added to collect information on assets, liabilities, and interest receipts and payments that are related to banking activities. These questions are collected on the Annual Survey of U.S. Direct Investment Abroad (BE-11).

(4) A question will be added to collect the city in which each foreign affiliate is located.

(5) For majority-owned foreign affiliates with assets, sales, or net income greater than \$80 million, a question will be added to the balance sheet to collect data on cash and cash equivalents.

(6) For larger majority-owned foreign affiliates (those with assets, sales, or net income greater than \$300 million), questions will be added to the section on sales to collect the top five countries (besides the U.S. and the country of the affiliate) to which the affiliates made sales. For each country, sales will be categorized by customer: "other foreign affiliates of the U.S. Reporter(s)" and "unaffiliated customers." An "all other" item will also be added after the top five countries. Questions on sales by region of destination will be retained.

(7) For majority-owned foreign affiliates with assets, sales, or net

income greater than \$80 million, questions will be added to the section on royalties and license fees to collect receipts from U.S. parents, receipts from other U.S. persons, payments to U.S. parents, and payments to other U.S. persons. On the previous benchmark survey, this section only included receipts from and payments to foreign persons.

(8) For foreign affiliates with assets, sales, or net income greater than \$25 million, several check-box questions will be added to ensure that certain types of finance companies do not report intercompany debt to BEA that is already reported on Treasury International Capital surveys. Similar questions are included in the Quarterly Survey of U.S. Direct Investment Abroad (BE-577).

(9) For foreign affiliates with assets, sales, or net income between \$25 million and \$80 million, a question will be added to collect expenditures for research and development performed by the foreign affiliate.

Several questions will be modified:

(1) Questions on contract manufacturing will be updated to incorporate improved wording.

(2) The cash item on the balance sheet for U.S. parent companies will be modified to include cash equivalents.

BEA will eliminate several items from the benchmark survey because they are no longer used:

(1) Official foreign identification numbers issued by host-country governments to foreign affiliates on BE-10B.

(2) Withholding taxes on interest received from and paid to U.S. parent companies by foreign affiliates on BE-10B.

In addition, BEA will redesign the survey questionnaires. The new design will incorporate improvements made to other BEA surveys. Survey instructions and data item descriptions will be changed to improve clarity and make the benchmark survey forms more consistent with those of other BEA surveys.

Executive Order 12866

This final rule has been determined to be not significant for purposes of E.O. 12866.

Executive Order 13132

This final rule does not contain policies with Federalism implications sufficient to warrant preparation of a Federalism assessment under E.O. 13132.

Paperwork Reduction Act

The collection of information in this final rule has been submitted to the

Office of Management and Budget (OMB) under the Paperwork Reduction Act (PRA). OMB has pre-approved the information collection under OMB control number 0608-0049.

Notwithstanding any other provisions of the law, no person is required to respond to, nor shall any person be subject to a penalty for failure to comply with, a collection of information subject to the requirements of the PRA unless that collection displays a currently valid OMB control number.

The BE-10 survey is expected to result in the filing of reports from approximately 3,900 respondents. The respondent burden for this collection of information will vary from one company to another, but is estimated to average 144 hours per response, including time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Thus the total respondent burden for this survey is estimated at 561,100 hours, compared to 459,400 hours for the previous (2009) benchmark survey. The increase in burden hours is due to an increase in the size of the respondent universe.

Written comments regarding the burden-hour estimates or other aspects of the collection-of-information requirements contained in the final rule should be sent to both BEA via email at Patricia.Abaroa@bea.gov, and to OMB, O.I.R.A., Paperwork Reduction Project 0608-0049, Attention PRA Desk Officer for BEA, via email at pbugg@omb.eop.gov or by FAX at (202) 395-7245.

Regulatory Flexibility Act

The Chief Counsel for Regulation, Department of Commerce, certified at the proposed rule stage to the Chief Counsel for Advocacy, Small Business Administration, under the provisions of the Regulatory Flexibility Act (RFA), 5 U.S.C. 605(b), that this final rule will not have a significant economic impact on a substantial number of small entities. The factual basis for the certification was published in the proposed rule and is not repeated here. No comments were received regarding the certification or the economic impact of the rule more generally. No final regulatory flexibility analysis was prepared.

List of Subjects in 15 CFR Part 801

Economic statistics, International transactions, Multinational companies, Penalties, Reporting and record keeping

requirements, U.S. direct investment abroad.

Brian C. Moyer,

Director, Bureau of Economic Analysis.

For reasons set forth in the preamble, BEA amends 15 CFR part 801 as follows:

PART 801—SURVEY OF INTERNATIONAL TRADE IN SERVICES BETWEEN U.S. AND FOREIGN PERSONS AND SURVEYS OF DIRECT INVESTMENT

■ 1. The authority citation for part 801 continues to read as follows:

Authority: 5 U.S.C. 301; 15 U.S.C. 4908; 22 U.S.C. 3101–3108; E.O. 11961 (3 CFR, 1977 Comp., p. 86), as amended by E.O. 12318 (3 CFR, 1981 Comp. p. 173); and E.O. 12518 (3 CFR, 1985 Comp. p. 348).

■ 2. Revise § 801.3 to read as follows:

§ 801.3 Reporting requirements.

Except for surveys subject to rulemaking in §§ 801.7 and 801.8, reporting requirements for all other surveys conducted by the Bureau of Economic Analysis shall be as follows:

(a) Notice of specific reporting requirements, including who is required to report, the information to be reported, the manner of reporting, and the time and place of filing reports, will be published by the Director of the Bureau of Economic Analysis in the **Federal Register** prior to the implementation of a survey;

(b) In accordance with section 3104(b)(2) of title 22 of the United States Code, persons notified of these surveys and subject to the jurisdiction of the United States shall furnish, under oath, any report containing information which is determined to be necessary to carry out the surveys and studies provided for by the Act; and

(c) Persons not notified in writing of their filing obligation by the Bureau of Economic Analysis are not required to complete the survey.

■ 3. Add § 801.8 to read as follows:

§ 801.8 Requirements for the BE-10, Benchmark Survey of U.S. Direct Investment Abroad—2014.

A BE-10, Benchmark Survey of U.S. Direct Investment Abroad will be conducted covering 2014. All legal authorities, provisions, definitions, and requirements contained in §§ 801.1 and 801.2 and §§ 801.4 through 801.6 are applicable to this survey. Specific additional requirements for the BE-10 survey are given in paragraphs (a) through (d) of this section. More detailed instructions are given on the report forms and instructions.

(a) *Response required.* A response is required from persons subject to the reporting requirements of the BE-10, Benchmark Survey of U.S. Direct Investment Abroad—2014, contained herein, whether or not they are contacted by BEA. Also, a person, or their agent, that is contacted by BEA about reporting in this survey, either by sending them a report form or by written inquiry, must respond in writing pursuant this section. This may be accomplished by:

(1) Certifying in writing, by the due date of the survey, to the fact that the person had no direct investment within the purview of the reporting requirements of the BE-10 survey;

(2) Completing and returning the “BE-10 Claim for Not Filing” by the due date of the survey; or

(3) Filing the properly completed BE-10 report (comprising Form BE-10A and Form(s) BE-10B, BE-10C, and/or BE-10D) by May 29, 2015, or June 30, 2015, as required.

(b) *Who must report.* (1) A BE-10 report is required of any U.S. person that had a foreign affiliate—that is, that had direct or indirect ownership or control of at least 10 percent of the voting stock of an incorporated foreign business enterprise, or an equivalent interest in an unincorporated foreign business enterprise, including a branch—at any time during the U.S. person’s 2014 fiscal year.

(2) If the U.S. person had no foreign affiliates during its 2014 fiscal year, a “BE-10 Claim for Not Filing” must be filed by the due date of the survey; no other forms in the survey are required. If the U.S. person had any foreign affiliates during its 2014 fiscal year, a BE-10 report is required and the U.S. person is a U.S. Reporter in this survey.

(3) Reports are required even if the foreign business enterprise was established, acquired, seized, liquidated, sold, expropriated, or inactivated during the U.S. person’s 2014 fiscal year.

(4) The amount and type of data required to be reported vary according to the size of the U.S. Reporters or foreign affiliates, and, for foreign affiliates, whether they are majority-owned or minority-owned by U.S. direct investors. For purposes of the BE-10 survey, a “majority-owned” foreign affiliate is one in which the combined direct and indirect ownership interest of all U.S. parents of the foreign affiliate exceeds 50 percent; all other affiliates are referred to as “minority-owned” affiliates.

(c) *Forms to be filed.* (1) Form BE-10A must be completed by a U.S. Reporter. If the U.S. Reporter is a corporation,

Form BE-10A is required to cover the fully consolidated U.S. domestic business enterprise. It must also file Form(s) BE-10B, C, and/or D for its foreign affiliates, whether held directly or indirectly.

(2) Form BE-10B must be filed for each majority-owned foreign affiliate for which any of the following three items—total assets, sales or gross operating revenues excluding sales taxes, or net income after provision for foreign income taxes—was greater than \$80 million (positive or negative) at any time during the affiliate’s 2014 fiscal year.

(3) Form BE-10C must be filed:

(i) For each majority-owned foreign affiliate for which any one of the three items listed in paragraph (c)(2) of this section was greater than \$25 million but for which none of these items was greater than \$80 million (positive or negative), at any time during the affiliate’s 2014 fiscal year, and

(ii) For each minority-owned foreign affiliate for which any one of the three items listed in (c)(2) of this section was greater than \$25 million (positive or negative), at any time during the affiliate’s 2014 fiscal year.

(4) Form BE-10D must be filed for majority- or minority-owned foreign affiliates for which none of the three items listed in paragraph (c)(2) of this section was greater than \$25 million (positive or negative) at any time during the affiliate’s 2014 fiscal year. Form BE-10D is a schedule; a U.S. Reporter would submit one or more pages of the form depending on the number of affiliates that are required to be filed on this form.

(d) *Due date.* A fully completed and certified BE-10 report comprising Form BE-10A and Form(s) BE-10B, C, and/or D (as required) is due to be filed with BEA not later than May 29, 2015, for those U.S. Reporters filing fewer than 50, and June 30, 2015, for those U.S. Reporters filing 50 or more, foreign affiliate Forms BE-10B, C, and/or D. If the U.S. person had no foreign affiliates during its 2014 fiscal year, it must file a BE-10 Claim for Not Filing by May 29, 2015.

[FR Doc. 2014-27421 Filed 11-19-14; 8:45 am]

BILLING CODE 3510-06-P

CONSUMER PRODUCT SAFETY COMMISSION

16 CFR Part 1700

[CPSC Docket No. CPSC-2012-0005]

Requirements for Child-Resistant Packaging: Products Containing Specified Imidazolines Equivalent to 0.08 Milligrams or More; Extension of Stay of Enforcement

AGENCY: Consumer Product Safety Commission.

ACTION: Extension of stay of enforcement.

SUMMARY: This document announces the Commission’s decision to extend the conditional stay of enforcement of special packaging requirements for over-the-counter and prescription products containing the equivalent of 0.08 milligrams or more of a specified imidazoline (tetrahydrozoline, naphazoline, oxymetazoline, or xylometazoline) in a single package. Firms that meet the conditions of the stay have until June 10, 2015 to comply with the special packaging requirements.

DATES: The stay of enforcement of special packaging requirements for specified imidazoline products expires on June 10, 2015.

FOR FURTHER INFORMATION CONTACT: Carol Afflerbach, Senior Compliance Officer, Division of Regulatory Enforcement, Office of Compliance and Field Operations, Consumer Product Safety Commission, 4330 East West Highway, Bethesda, MD 20814; telephone (301) 504-7529; email: cafflerbach@cpsc.gov.

SUPPLEMENTARY INFORMATION:

I. Background

On December 10, 2012 (77 FR 73294), the Commission issued a rule requiring special packaging (also called child-resistant or CR packaging) for any over-the-counter or prescription products containing the equivalent of 0.08 milligrams or more of a specified imidazoline (tetrahydrozoline, naphazoline, oxymetazoline, or xylometazoline) in a single package. 16 CFR 1700.14(a)(3). The rule included an effective date of 1 year after publication of the rule in the **Federal Register** (making the effective date December 10, 2013); however, in consideration of concerns raised in comments on the proposed rule, the Commission allowed manufacturers of imidazoline products subject to the rule to avail themselves of a 1-year conditional stay of enforcement (77 FR 73300). Firms meeting the

conditions for the stay of enforcement would have until December 10, 2014 to comply with the rule. The final rule preamble set forth the conditions that a firm would need to satisfy to obtain the 1-year conditional stay of enforcement:

- Provide notice to the Commission of intent to receive the benefit of the conditional stay of enforcement, which includes a detailed timeline setting forth the steps necessary for the firm to produce CR packaging for its products and a range of time anticipated for completion of each step; and
- Submit quarterly status reports during the 1-year stay of enforcement for each affected product, providing the following information:
 - Proposed packaging specifications;
 - estimated initial production date;
 - progress made and/or steps completed during the quarterly reporting period; and
 - reports of any incidents or exposures involving the firm's imidazoline-containing products subject to the rule.

Id.

Eleven manufacturers of imidazoline products covered by the rule and one contract packager timely notified the Commission of their intent to avail themselves of the 1-year conditional stay of enforcement; to date, these manufacturers and the packager have met the reporting requirements of the conditional stay. The 1-year conditional stay is due to expire on December 10, 2014.

II. Requests for Extension of the Conditional Stay of Enforcement

Twelve companies provided timely notice and met the conditions for the 1-year conditional stay of enforcement. Eight of these 12 firms have notified the Commission that they likely will not be able to comply with the requirements of the rule by December 10, 2014 for certain of their imidazoline products; for that reason these firms are seeking an extension of the conditional stay. Four of the 12 firms expect to have their products in compliant packaging before the expiration of the conditional stay.

Five additional manufacturers of imidazoline products covered by the rule that did not provide timely notice of their intent to avail themselves of the conditional stay have contacted the Commission regarding the stay of enforcement. These firms are not covered by the 1-year conditional stay of enforcement, and therefore not eligible for the 6-month extension of the conditional stay.

The 17 firms that have contacted the Commission regarding the conditional

stay of enforcement account for a substantial share of the imidazoline products on the market subject to the rule.

A. Manufacturers of Ophthalmic-Use Products Covered by the Stay of Enforcement

Five firms that manufacture imidazoline-containing products intended for ophthalmic use timely notified the Office of Compliance and Field Operations (Compliance) of their intent to avail themselves of the 1-year conditional stay of enforcement. These five firms produce 35 different eye drop products. One of these firms expects to meet the CR packaging requirements for its products before the expiration of the 1-year conditional stay. The other four firms have notified the Commission that they require additional time to meet the CR packaging requirements for their products.

The four firms that manufacture imidazoline products for ophthalmic use have provided detailed explanations of the difficulties encountered in developing or obtaining CR packaging for their products, such as:

- Multiple prototype packages failing the child-resistant and senior-friendly test requirements when produced for testing purposes;
- prototype packages passing the child-resistant and senior-friendly test requirements, but then failing the test requirements when mass-produced;
- mass production problems encountered by a third party contract packager;
- inability to obtain sufficient quantities of special packaging to permit timely mass production of imidazoline products in CR packaging; and
- intent to conduct final protocol testing of packaging supplied by third party package suppliers before beginning distribution of ophthalmic imidazoline products.

B. Manufacturers of Nasal Products Covered by the Stay of Enforcement

Imidazoline-containing products that are intended to relieve nasal congestion use either a squeeze-to-spray or metered-pump-to-spray delivery system. Seven manufacturers of nasal products provided timely notice to the Commission of their intent to avail themselves of the conditional stay of enforcement and have satisfied the other conditions of the stay. These seven firms include one contract packager that supplies products for 28 different distributors/private labelers, who, in turn, supply products to retailers who sell store brand nasal products. These seven firms manufacture 156 different

nasal decongestant products—118 products are packaged in a squeeze-spray bottle, and 38 are packaged in pump-spray bottles. Four of these seven firms do not expect to be able to produce compliant products by December 10, 2014.

The firms that manufacture imidazoline products for nasal use have provided detailed explanations of the difficulties encountered in developing or obtaining CR packaging for their products, such as:

- Mass production problems encountered by a third party contract packager;
- possible incompatibility of manufacturing lines with the mass production of new package designs;
- intent to conduct final protocol testing of packaging supplied by third party package suppliers before beginning distribution of nasal imidazoline products;
- inability to obtain sufficient quantities of special packaging to permit timely mass production of imidazoline products in CR packaging.

III. Incident and Injury Data

As discussed more extensively in the **Federal Register** notice for the final rule, CPSC staff reviewed several sources for information on adverse health effects from ingestion of imidazolines. One source reviewed by CPSC staff is the National Electronic Injury Surveillance System (NEISS).¹ Another incident data source reviewed in connection with the final rule is the Children and Poisoning (CAP) system maintained by the CPSC's Directorate for Health Sciences. The CAP is a subset of NEISS records containing additional information obtained through NEISS involving children under 5 years old.²

The final rule noted that an analysis of the CAP database revealed a total of 198 emergency-room treated injuries associated with household products containing imidazolines involving children under 5 years old from January 1, 1997 to December 31, 2011—an average of 13 cases per year.

CPSC staff searched the CAP database for incidents involving household products that typically contain imidazolines and children under 5 years old for the period from December 2012

¹ NEISS is a statistically valid injury surveillance and follow-back database that the Commission maintains of consumer product-related injuries occurring in the United States. Injury data are gathered from the emergency departments (ED) of 96 hospitals selected as a probability sample of all 5,000+ U.S. hospitals with emergency departments.

² CAP includes data on each pediatric poisoning, chemical burn, or ingestion case reported from a NEISS hospital, as well as data on some ingestions that could lead to poisoning.

(when the final rule for imidazolines was published) through September 8, 2014, to update the injury and incident data discussed in the final rule. This search revealed 79 cases involving decongestants/nose drops, nose sprays, nose drops, and naphazoline eye drops. These cases were reviewed for incidents involving imidazolines used in nose drops, nose sprays and eye drops, and 17 cases were identified—13 involving eye drops, and four involving nasal drops or spray. One of these cases involved a 3-year old female who ingested eye drops and was hospitalized. The remaining patients were treated and released, except for one child who left the emergency room without being seen by medical personnel. Fifteen of the 17 cases occurred during the 12-month period from December 2012 to December 2013, the one year period prior to the effective date of the rule. Two cases occurred during the most recent 9-month period during which the stay of enforcement was in effect. Neither of the two most recent cases resulted in the hospitalization of the child. Moreover, the narratives describing these two cases did not provide sufficient information to determine whether the incident products were in CR packaging, or whether the circumstances of the incident suggest that CR packaging would likely have prevented the ingestion.

CPSC staff also searched the Consumer Product Safety Risk Management System (CPSRMS) for reports of incidents received by the Commission involving household products containing imidazolines. The search was conducted on September 9, 2014, and included all incidents for which reports had been received from December 2012 to September 9, 2014. One report involving eye drops that was received arose from an investigation of one of the 17 NEISS cases mentioned above. No other reports involving eye drops, nasal sprays, or nasal drops were received during this time period.

IV. Extension of Stay of Enforcement

Twelve firms that manufacture and/or package imidazoline-containing products covered by the final rule provided timely notice to the Commission of their intent to avail themselves of the conditional stay of enforcement authorized in the final rule. These firms have also met the other conditions of the stay, *i.e.*, providing quarterly status reports during the 1-year stay of enforcement that include the information specified in the final rule. As discussed above, eight of these firms have advised CPSC staff that they

likely will be unable to package some of their imidazoline products in CR packaging by the date that the current conditional stay of enforcement is set to expire. Four of the five firms that manufacture ophthalmic products and that have met the requirements to participate in the stay have advised staff that the firms need additional time to produce their products in CR packaging. Four of seven firms that manufacture nasal products and that have met the requirements to participate in the stay have advised staff that the firms need additional time to produce either squeeze spray or metered pump spray bottles for their imidazoline products.

A review of injury data reveals a significant reduction in NEISS cases since the effective date of the final rule. Although there was an average of approximately 13 NEISS cases of imidazoline ingestions by children under 5 years of age, per year, from January 1997 to December 2013, two cases were found for the most recent 9-month period. Furthermore, there have been no CPSRMS reports of incidents involving household products containing imidazolines since publication of the final rule.

The Commission finds that the circumstances described above warrant an extension of the conditional stay of enforcement. All but one of the eight firms covered by the conditional stay of enforcement that have requested additional time to comply with the rule have advised Compliance staff that their products will comply with the rule by May 2015 at the latest. Therefore, we have determined that the duration of the extension of the conditional stay of enforcement will be 6 months from the date of the expiration of the conditional stay, or June 10, 2015. The stay will apply only to firms that are subject to the current conditional stay of enforcement and that continue to meet the reporting conditions set forth in the final rule preamble as explained above.

One firm covered by the stay of enforcement has told Compliance staff that the firm's products will not comply with the final rule by May 2015. The Office of Compliance will consider requests for an additional temporary extension of the stay of enforcement on a case-by-case basis, if a firm covered by the extended stay of enforcement anticipates difficulties meeting the June 10, 2015 date. A request for time beyond June 10, 2015 must be submitted to the Office of Compliance before the expiration of the extended conditional stay of enforcement. The request must specify the period of time needed to produce CR packaging, explain the reasons why additional time is needed,

and provide a timeline or schedule outlining the steps the firm will take to comply with the final rule.

Dated: November 14, 2014.

Todd A. Stevenson,
Secretary, Consumer Product Safety Commission.

[FR Doc. 2014-27378 Filed 11-19-14; 8:45 am]

BILLING CODE 6355-01-P

DEPARTMENT OF COMMERCE

International Trade Administration

19 CFR Part 351

[Docket No.: 141104924-4924-01]

RIN 0625-AB01

Enforcement and Compliance; Change of Electronic Filing System Name

AGENCY: International Trade Administration, Department of Commerce.

ACTION: Final rule.

SUMMARY: The International Trade Administration's Enforcement and Compliance Unit publishes this rule to announce a change in the name of Enforcement and Compliance's electronic filing system from "IA ACCESS" to "ACCESS." Consistent with this action, this rule makes appropriate conforming changes in part 351 of title 19 of the Code of Federal Regulations. This action is being taken to ensure that the regulations reflect the change in nomenclature from Import Administration to Enforcement and Compliance.

DATES: This rule is effective November 24, 2014.

FOR FURTHER INFORMATION CONTACT: Laura Merchant, IT Manager, Enforcement and Compliance, Telephone (202) 482-0367; Shana Hofstetter, Attorney, Office of Chief Counsel for Trade Enforcement and Compliance, Telephone: (202) 482-3414.

SUPPLEMENTARY INFORMATION: On October 1, 2013, as part of an internal consolidation within the International Trade Administration, the name of the Import Administration was changed to Enforcement and Compliance to reflect the unit's new operational mandate.¹ This rule updates the regulations to reflect the new name of Enforcement and Compliance's electronic filing system from "IA ACCESS" to "ACCESS". This rule changes all

¹ See *Import Administration; Change of Agency Name*, 78 FR 62417 (Oct. 22, 2013).

references to IA ACCESS (Import Administration Antidumping and Countervailing Duty Centralized Electronic Service System) to ACCESS (Antidumping and Countervailing Duty Centralized Electronic Service System) in 19 CFR 351.303. Upon the effective date of this rule, the Web site is changed from <https://iaaccess.trade.gov> to <https://access.trade.gov> and the Help Desk email is changed from ia_access@trade.gov to access@trade.gov.

Savings Provision

This rule shall constitute notice that all references to IA ACCESS (Import Administration Antidumping and Countervailing Duty Centralized Electronic Service System) in any documents, statements, or other communications, in any form or media, and whether made before, on, or after the effective date of this rule, shall be deemed to be references to ACCESS (Antidumping and Countervailing Duty Centralized Electronic Service System).

Rulemaking Requirements

1. This final rule has been determined to be not significant for purposes of review under Executive Order 12866.

2. This rule does not impose information collection and recordkeeping requirements. Consequently, it need not be reviewed by the Office of Management and Budget under the provisions of the Paperwork Reduction Act of 1995.

3. This rule does not contain policies with Federalism implications as that term is defined in Executive Order 13132.

4. Pursuant to 5 U.S.C. 553(b)(B), good cause exists to waive the provisions of the Administrative Procedure Act (5 U.S.C. 553) otherwise requiring notice of proposed rulemaking and the opportunity for public participation. This rule involves a nonsubstantive change to the regulations to update the name of Enforcement and Compliance's electronic filing system. This rule does not impact any substantive rights or obligations. The change implemented by this rule needs to be implemented without further delay to avoid the confusion caused by the reference to the previous organization name that is no longer contained in the name of the system, the Web site, and the Help Desk email address. No other law requires that a notice of proposed rulemaking and an opportunity for public comment be given for this final rule. Accordingly, this rule is issued in final form.

For the reasons listed above, the provision of the Administrative Procedure Act requiring a 30-day delay in effectiveness is also waived for good

cause pursuant to 5 U.S.C. 553(d)(3) as this rule involves a nonsubstantive change to the regulations to update the name of Enforcement and Compliance's electronic filing system. This rule does not contain any provisions that require regulated entities to come into compliance and failure to implement it immediately might cause confusion.

5. Because a notice of proposed rulemaking and an opportunity for public comment are not required to be given for this rule under 5 U.S.C. or by any other law, the analytical requirements of the Regulatory Flexibility Act (5 U.S.C. 601, et seq.) are not applicable. Accordingly, no regulatory flexibility analysis is required and none has been prepared.

List of Subjects in 19 CFR Part 351

Administrative practice and procedure, Antidumping, Business and industry, Cheese, Confidential business information, Countervailing duties, Freedom of information, Investigations, Reporting and recordkeeping requirements.

For the reasons set out in the preamble, 19 CFR part 351 is amended as follows:

PART 351—ANTIDUMPING AND COUNTERVAILING DUTIES

■ 1. The authority citation for part 351 continues to read as follows:

Authority: 5 U.S.C. 301; 19 U.S.C. 1202 note; 19 U.S.C. 1303 note; 19 U.S.C. 1671 et seq.; and 19 U.S.C. 3538.

§ 351.303 [AMENDED]

■ 2. Amend § 351.303 to remove “IA ACCESS” wherever it appears and add in its place “ACCESS”.

Dated: November 17, 2014.

Paul Piquado,

Assistant Secretary for Enforcement and Compliance.

[FR Doc. 2014-27530 Filed 11-19-14; 8:45 am]

BILLING CODE P

DEPARTMENT OF JUSTICE

Federal Bureau of Investigation

28 CFR Part 25

[Docket No. FBI 152; AG Order No. 3477–2014]

RIN 1110-AA27

National Instant Criminal Background Check System Regulation

AGENCY: Federal Bureau of Investigation, Department of Justice.

ACTION: Final rule.

SUMMARY: The United States Department of Justice (“the Department”) is publishing this final rule to amend the regulations implementing the National Instant Criminal Background Check System (“NICS”) pursuant to the Brady Handgun Violence Prevention Act (“Brady Act”). This final rule authorizes tribal criminal justice agencies to access the NICS Index for purposes of issuing firearm-related permits and licenses, authorizes criminal justice agencies to access the NICS Index for purposes of disposing of firearms in their possession, and updates the storage location of NICS Audit Log records relating to denied transactions.

DATES: This rule is effective on January 20, 2015.

FOR FURTHER INFORMATION CONTACT:

Sean Ragan, Federal Bureau of Investigation, National Instant Criminal Background Check System Section, Module A–3, 1000 Custer Hollow Road, Clarksburg, West Virginia 26306–0147, (304) 625–3500.

SUPPLEMENTARY INFORMATION: This rule finalizes the proposal in the **Federal Register** on January 28, 2013 (78 FR 5757). The Federal Bureau of Investigation (“FBI”) accepted comments on the proposed rule from interested parties until March 29, 2013, and received 38 comments. With the exception of deleting the requirement for a form as explained below, the proposed rule is adopted as final.

Significant Comments or Changes:

On January 28, 2013, the Department published a notice of proposed rulemaking (“NPRM”) that proposed three changes to the FBI's NICS regulations. The proposed changes were to authorize tribal criminal justice agencies to access the NICS Index for purposes of issuing firearm-related permits and licenses; authorize criminal justice agencies to access the NICS Index for purposes of disposing of firearms in their possession; and to update the storage location of NICS Audit Log records relating to denied transactions. The proposed changes balance the Brady Act's mandate that the Department protect legitimate privacy interests of law-abiding firearm transferees (Pub. L. 103–159, section 103 (h)) and the Department's obligation to enforce the Brady Act (Id., section 103 (b)) and prevent prohibited persons from receiving firearms. Comments received for each of the three proposals are addressed below.

Proposal #1: Authorizing Tribal Criminal Justice Agencies To Access NICS Index Records (28 CFR 25.6(j)(1))

The Department proposed to extend to tribal criminal justice agencies authority to access the NICS Index. Some commenters were concerned that the proposal would undermine tribal sovereignty.

That is a misunderstanding of the rule. This rule does not, in any way, preempt tribal law. Rather, it extends to federally recognized tribes authorization to access the NICS Index and provides a tool to help tribes exercise their law enforcement responsibilities, including the regulation of firearms, within the territories they oversee. NICS access is wholly discretionary on the part of the tribes. This rule does not in any way mandate tribal government action. Because NICS access is wholly voluntary on the part of tribal governments, the rule does not impose compliance costs on those governments. This rule merely provides authorization for a tribal government to use the NICS in connection with the issuance of firearm-related permits should the tribal government choose to do so.

Tribal governments are responsible for law enforcement and the maintenance of good order within their Indian country. Some tribes have for years issued firearm permits authorizing persons in their territories to possess and to carry concealed firearms. If a tribe chooses to access NICS pursuant to this rule, it will improve that tribe's ability to prevent and reduce illegal gun possession in its jurisdiction.

One commenter expressed concern that storing tribal information in a national database would "take[] away" that tribe's sovereignty. The Department does not believe that to be the case. This rule does not address the ability of a tribe to submit information to the NICS. What the rule does address is the ability of the tribes to access the information stored in the NICS for issuing firearm permits and other authorized purposes. Tribal use of this authorized access is completely voluntary. The Federal Government in no way mandates tribal use of the NICS.

Proposal #2: Authorizing Law Enforcement Agencies To Conduct NICS Checks Before Transferring Firearms (28 CFR 25.6(j)(3))

The Department proposed to permit law enforcement agencies to conduct NICS checks before transferring to another person or persons a firearm. Comments regarding this proposal were generally favorable. Therefore, the

Department is finalizing the proposal unchanged.

Proposal #3: Storage Location of NICS Audit Log Records Relating to Denied Transactions (28 CFR 25.9(b)(1)(i))

The Department proposed a change to the storage location and storage agency for its Audit Log records relating to denied transactions retained for more than 10 years. Specifically, the Department proposed to retain those records on-site after the National Archives and Records Administration ("NARA") informed the FBI that it could not accept the records for storage. Retaining denied transaction records indefinitely is specifically authorized by the Brady Act, Pub. L. 103–159, section 103(i)(2) (codified at 18 U.S.C. 922(t) note)). The Department intends to retain Audit Log records of denied transactions on-site with the NICS Section given the unavailability of space to accommodate those records elsewhere. This change modifies the prior regulation only with regard to the storage location for *denied* transaction records older than 10 years. The change will not affect the extent to which denied transaction records may be disseminated or accessed.

The original determination of where to store denied transactions older than 10 years was made by the Department in conjunction with NARA. When NICS reached its 10th anniversary, NARA determined that it lacked the capacity to house the NICS denied transaction records. However, the FBI was directed by NARA to retain its NICS denied records for a period up to 110 years. This period is consistent with the retention period prescribed by NARA for the other records in the FBI's Criminal Justice Information Service ("CJIS") Division. Because the NICS business model obliges it to maintain all of its records in electronic format, it is a simple matter for the FBI to retain the NICS denied transaction records older than 10 years in an electronic format on-site for the period prescribed by NARA.

One commenter questioned the benefit of retaining its denied transaction records for more than 10 years on-site. On-site retention beyond 10 years will enhance NICS operations for those rare occasions when a person appeals a very old denied transaction. There is no statute of limitations for appealing denied transactions. Denied transaction record information is not provided to any firearms dealer or private third party. It is used to defend lawsuits, respond to appeals, respond to law enforcement queries, support criminal prosecutions, provide precautionary alerts to law enforcement,

and provide information for NICS audits. On those occasions when the FBI must resort to archived denied transaction records, there will be no need for the FBI to make a separate request for the record, wait while warehouse personnel search for it, and, if it is located, wait for its receipt. By storing the records on-site, the FBI will maintain control over the record location, establish its own retrieval priorities, and improve the efficiency of the search and retrieval process.

One commenter suggested that the Department should impose on itself a requirement to report annually to Congress the number of firearm transactions denied by the NICS Section, the reason(s) for the denials, and the number of transactions denied then later found to be in error in the year immediately preceding the report. The commenter further suggested that the report should be indexed by Federal judicial district and that it include the number of Federal prosecutions for any applicable violations of law as a result of the attempted purchase(s) of a firearm.

The Department already reports much of this information in other locations. For example, Federal prosecution information can be found on the Department's Web site for the Executive Office for United States Attorneys. Statistics regarding denied transactions are annually published by the NICS on the CJIS Division's Web site. Therefore, there is no need to duplicate this information in a new reporting requirement.

Finally, some commenters expressed concern that storing the denied records on-site by the FBI versus storage by NARA presented a risk of improper use by the FBI due to its law enforcement and national security missions. Specifically, one commenter feared that storage by the FBI could lead to an erosion of the data's protection and adherence to "the rules" (not further identified) to the same degree as NARA. Other commenters feared this change could cause creation of arbitrary blacklists of innocent persons, otherwise erode the privacy of citizens, or result in an illegal registry.

These fears are unfounded as the only records retained will be those authorized to be retained by law and belonging to persons who were denied firearms transactions based on statutory criteria specified under 18 U.S.C. 922(g) or (n). Moreover, the security provided by the FBI for NICS data is comprehensive and robust. Those records are not publicly accessible and will be appropriately safeguarded and protected from unauthorized access or

use. NICS system information is stored electronically in an FBI computer environment in a locked room within a secure facility. Access to the facility is restricted to authorized personnel who have identified themselves and their need for access to a system security officer. Additionally, access to NICS data by other duly authorized agencies is similarly restricted.

The only change in this proposal to store denial records by the FBI is one of agency location for the storage. It should be emphasized that the records concerned are those of denied transactions. The Brady Act, Public Law 103–159, section 103(i)(2), permits the Attorney General to create registries of “persons [] prohibited by section 922(g) or (n) of title 18, United States Code or State law [] from receiving a firearm”; i.e., persons who have been denied a firearm. Even if NARA retained Audit Log records of NICS denied transaction records older than 10 years as originally envisioned, those records are of denied transactions. The FBI would retain ownership of those records and the right to access them. See 28 CFR part 25. Moreover, the history of the FBI operation of the NICS has demonstrated its commitment to the privacy and security of the information housed in the NICS. See, for example, 28 CFR 25.8 and 25.9(b)(3).

Cost/Benefit Analysis

Several commenters requested that the Department perform a more detailed cost/benefit analysis. As explained in its NPRM, the Department lacks sufficient information to conduct a detailed verifiable cost/benefit analysis. For example, the Department knows neither how many of the more than 18,000 state, tribal, and local law enforcement agencies (LEAs) will take advantage of the new provisions nor the specific implementation cost for each agency. The Department estimates that the time required for an LEA to submit its NICS query should not exceed two to three minutes. That span includes the time needed to gather the minimum identifying information (name, sex, date of birth, race, and state of residence), to enter it on the computer screen, and to press the submit key.

Even given the foregoing information, the Department cannot estimate the costs that will be imposed on Federal, state, tribal, and local LEAs by their use of the new access authority. This inability is caused by the uncertainty of how many LEAs will avail themselves of this new use of the NICS and the unknown number of the potential eligible firearms in the hands of LEAs. However, a range of expense potentially

incurred by a LEA using this access authority can be estimated if one begins the analysis by using the mean hourly wages for either a clerical/administrative assistant or a law enforcement officer (Police and Sheriff's Patrol Officer) conducting the checks. The following figures are derived from the Bureau of Labor Statistics as of 2010 for administrative employees and 2012 for law enforcement officers. As noted, the FBI estimates that the entire process of conducting the NICS check should take no more than two to three minutes. The 2010 administrative mean hourly wage is \$16.66. The 2012 mean hourly wage for a law enforcement officer is \$27.78. The cost for a clerical NICS check should be between 56 and 83 cents. If a law enforcement officer conducts the check, then the cost should be between 93 cents and \$1.39. The FBI was unable to estimate how often any one of the thousands of LEAs might choose to employ the access and which staff member will make the check is similarly unknown.

Beyond the personnel costs, the Department has determined that the LEAs should not incur any start-up or new capital expenses in order to use their new authority. The LEAs already have the computer and communications equipment necessary for them to access and query the National Crime Information Center (“NCIC”) and the Interstate Identification Index (III) for their day-to-day law enforcement activities. These two FBI criminal history databases are part of the same information system used to conduct a NICS check. Moreover, the LEAs can conduct a NICS check from the same terminals that they use to query the NCIC and III.

General NICS Concerns

A few commenters expressed concerns about the NICS statutory and regulatory scheme as a whole. One commenter expressed concern generally regarding the intent of this rule and specifically that it would apply to hunting license applicants. That is not the case. Neither the current NICS regulations nor the changes to the NICS regulations made by this final rule permit NICS records to be used to process hunting licenses. Because this rulemaking makes three specific changes to the NICS regulations, comments generally expressing favorable or unfavorable opinions about the NICS legal framework are outside the scope of this regulatory action and the Department does not address them herein.

Regulatory Certifications

Executive Order 12866 and 13563—Regulatory Review

This regulation has been drafted and reviewed in accordance with Executive Order 12866, “Regulatory Planning and Review,” section 1(b), The Principles of Regulation, and in accordance with Executive Order 13563, “Improving Regulation and Regulatory Review,” section 1(b), General Principles of Regulation.

The Department of Justice has determined that this rule is a “significant regulatory action” under Executive Order 12866, section 3(f), and accordingly, this rule has been reviewed by the Office of Management and Budget (OMB).

Further, both Executive Orders 12866 and 13563 direct agencies to assess all costs and benefits of available regulatory alternatives and, if regulation is necessary, to select regulatory approaches that maximize net benefits (including potential economic, environmental, public health and safety effects, distributive impacts, and equity). Executive Order 13563 emphasizes the importance of quantifying both costs and benefits, of reducing costs, of harmonizing rules, and of promoting flexibility.

The Department of Justice believes that this rule has substantial operational benefits. One benefit of this rule is enhanced access to the NICS for tribal criminal justice agencies that issue firearm-related licenses or permits. This access, while discretionary, will assist the tribes in evaluating any legal prohibitions or public safety risks associated with issuing a particular firearm permit or license. Another benefit of this rule is that state, tribal, and local criminal justice agencies in the possession of firearms will be able to ensure that persons to whom they transfer recovered, seized, or confiscated firearms are legally permitted to receive and possess those firearms. In both cases, such actions by criminal justice agencies will help to improve public safety by reducing the risk that firearms will be obtained and used by persons who are prohibited by law from doing so. Finally, the retention of denied transaction information at CJIS will enhance the efficiency and operational capability of the NICS Section.

The costs of this rule stem from staffing and funding required by state, tribal, and local agencies and the NICS Section to conduct additional background checks for the disposition of firearms in the possession of law enforcement or criminal justice

agencies, or in connection with the issuance of firearm-related licenses or permits by tribal criminal justice agencies. The full impact of the increase in background checks resulting from these changes cannot be reliably projected due to uncertainty about the number of firearms that currently are in, or regularly come into, the possession of law enforcement, and the number of such firearms that ultimately are appropriate for transfer to an unlicensed recipient. Similarly, the FBI cannot predict how often tribal criminal justice agencies are likely to access the NICS in connection with firearms license or permit decisions. Because these uses of the NICS are discretionary with state, tribal, and local criminal justice agencies, the FBI is unable to estimate the extent to which the states will use these capabilities and, therefore, cannot provide reliable monetized estimates of the cost of this rule.

Executive Order 13132—Federalism

This regulation 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. While it provides that LEAs that are authorized users of the NICS with access to the NCIC will be authorized to conduct Disposition of Firearm background checks of the NICS Index, such background checks are not mandatory.

In drafting this rule, the FBI consulted the FBI's CJIS Division Advisory Policy Board (APB). The APB is an advisory committee established pursuant to the Federal Advisory Committee Act, 5 U.S.C. App. 2. It consists of representatives from numerous Federal, state, tribal, and local criminal justice agencies across the United States. It provides general policy recommendations to the FBI Director regarding the philosophy, concept, and operational principles of the FBI's Integrated Automated Fingerprint Identification System, Law Enforcement Online, the NCIC, the NICS, Uniform Crime Reporting, and other systems and programs administered by the FBI's CJIS Division. In accordance with Executive Order 13132, this rule does not have sufficient federalism implications to warrant the preparation of a Federalism Assessment.

Regulatory Flexibility Analysis

The Department, in accordance with the Regulatory Flexibility Act, 5 U.S.C. 605(b), has reviewed this regulation and, by approving it, certifies that this regulation will not have a significant

economic impact on a substantial number of small entities. This rule imposes no costs on businesses, organizations, or governmental jurisdictions (whether large or small).

Unfunded Mandates Reform Act of 1995

This rule will not result in the expenditure by state, tribal, and local governments, in the aggregate, or by the private sector, of \$100 million or more in any one year, and it will not significantly or uniquely affect small governments. Therefore, no action was deemed necessary under the provisions of the Unfunded Mandates Reform Act of 1995.

Small Business Regulatory Enforcement Fairness Act of 1996

This rule is not a major rule as defined by section 251 of the Small Business Regulatory Enforcement Fairness Act of 1996 (5 U.S.C. 804). This rule will not result in an annual effect on the economy of \$100 million or more, a major increase in costs or prices, or have significant adverse effects on competition, employment, investment, productivity, innovation, or on the ability of United States-based enterprises to compete with foreign-based enterprises in domestic and export markets.

Paperwork Reduction Act of 1995

Information collection associated with this regulation has been approved by the OMB for review under the provisions of the Paperwork Reduction Act of 1995 (44 U.S.C. 3507(d)). The OMB control number for this collection is 1110-0055.

In the NPRM, the Department solicited comments regarding the Paperwork Reduction Act. Specifically, it requested assistance to help it—

- 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.

78 FR 5760 (Jan. 28, 2013).

Commenters offered several suggestions on modifying the proposed information collection by the

Disposition of Firearms Form. Some commenters suggested eliminating the hard copy version of the form in favor of one electronically submitted. One commenter suggested keeping the hard copy and expanding its function by increasing the amount of information required to be entered on it including details also found on the ATF Form 4473 and the circumstances of how the firearm was acquired by the LEA.

The modifications suggested for the proposed creation and use of a form are not necessary. The FBI decided not to create the form proposed because it would serve no function that could not be otherwise accomplished more efficiently. The form was intended to fulfill two functions. First, the form was intended to establish an audit trail the NICS Section could periodically review to ensure the system was not being misused. After some research, the FBI determined that there were alternate methods it could use to detect misuse and that the form was not necessary to accomplish compliance reviews. Second, the form was intended to ensure that law enforcement officers gathered and entered the minimum amount of data necessary to successfully initiate a firearm disposition check with the NICS. The FBI has determined this purpose can also be accomplished without publishing a form. The alternative is to post instructions on the FBI NICS Web site, complete with a list of the minimum data required to successfully initiate a NICS check.

Finally, there is no regulatory or statutory mandate for the form. In an effort to minimize the fiscal impact of this change on state, tribal, and local law enforcement, the Department has determined a new form is not necessary and will abandon the publication of the form originally proposed.

List of Subjects in 28 CFR Part 25

Administrative practice and procedure, Computer technology, Courts, Firearms, Law enforcement officers, Penalties, Privacy, Reporting and recordkeeping requirements, Security measures, Telecommunications.

Authority and Issuance

Accordingly, part 25 of title 28 of the Code of Federal Regulations is amended as follows:

PART 25—DEPARTMENT OF JUSTICE INFORMATION SYSTEMS

- 1. The authority citation for part 25 continues to read as follows:

Authority: Pub. L. 103–159, 107 Stat. 1536.

- 2. In § 25.2, revise the definition of “ATF” to read as follows:

§ 25.2 Definitions.

* * * * *

ATF means the Bureau of Alcohol, Tobacco, Firearms and Explosives.

* * * * *

- 3. In § 25.6, revise paragraph (j) to read as follows:

§ 25.6 Accessing records in the system.

* * * * *

(j) *Access to the NICS Index for purposes unrelated to NICS background checks required by the Brady Act.* Access to the NICS Index for purposes unrelated to NICS background checks pursuant to 18 U.S.C. 922(t) shall be limited to uses for the purposes of:

(1) Providing information to Federal, state, tribal, or local criminal justice agencies in connection with the issuance of a firearm-related or explosives-related permit or license, including permits or licenses to possess, acquire, or transfer a firearm, or to carry a concealed firearm, or to import, manufacture, deal in, or purchase explosives;

(2) Responding to an inquiry from the Bureau of Alcohol, Tobacco, Firearms, and Explosives in connection with a civil or criminal law enforcement activity relating to the Gun Control Act (18 U.S.C. Chapter 44) or the National Firearms Act (26 U.S.C. Chapter 53); or,

(3) Disposing of firearms in the possession of a Federal, state, tribal, or local criminal justice agency.

* * * * *

- 4. In § 25.9, revise paragraph (b)(1)(i) to read as follows:

§ 25.9 Retention and destruction of records in the system.

* * * * *

(b) * * *

(1) * * *

(i) NICS denied transaction records obtained or created in the course of the operation of the system will be retained in the Audit Log for 10 years, after which time they will be transferred to an appropriate FBI-maintained electronic database.

* * * * *

Dated: November 13, 2014.

Eric H. Holder, Jr.,
Attorney General.

[FR Doc. 2014-27386 Filed 11-19-14; 8:45 am]

BILLING CODE P

ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 52

[EPA-R04-OAR-2013-0772; FRL-9919-10-Region 4]

Approval and Promulgation of Implementation Plans; North Carolina; Inspection and Maintenance Program Updates

AGENCY: Environmental Protection Agency.

ACTION: Direct final rule.

SUMMARY: The Environmental Protection Agency (EPA) is taking direct final action to approve State Implementation Plan (SIP) revisions submitted by the State of North Carolina, through the North Carolina Department of Environment and Natural Resources (NC DENR) on January 31, 2008, May 24, 2010, October 11, 2013, and February 11, 2014, pertaining to rules for changes to the North Carolina Inspection and Maintenance (I/M) program. Specifically, these SIP revisions update the North Carolina I/M program as well as repeal one rule that is included in the federally-approved SIP.

DATES: This direct final rule is effective on January 20, 2015 without further notice, unless EPA receives relevant adverse comment by December 22, 2014. If EPA receives such comment, EPA will publish a timely withdrawal in the **Federal Register** informing the public that this rule will not take effect.

ADDRESSES: Submit your comments, identified by Docket ID No. EPA-R04-OAR-2013-0772, by one of the following methods:

1. *www.regulations.gov*: Follow the on-line instructions for submitting comments.

2. *Email*: R4-RDS@epa.gov.

3. *Fax*: 404-562-9019.

4. *Mail*: “EPA-R04-OAR-2013-0772,” Regulatory Development Section, Air Planning Branch, Air, Pesticides and Toxics Management Division, U.S. Environmental Protection Agency, Region 4, 61 Forsyth Street SW., Atlanta, Georgia 30303-8960.

5. *Hand Delivery or Courier*: Lynora Benjamin, Chief, Regulatory Development Section, Air Planning Branch, Air, Pesticides and Toxics Management Division, U.S. Environmental Protection Agency, Region 4, 61 Forsyth Street SW., Atlanta, Georgia 30303-8960. Such deliveries are only accepted during the Regional Office’s normal hours of operation. The Regional Office’s official hours of business are Monday through

Friday, 8:30 a.m. to 4:30 p.m., excluding Federal holidays.

Instructions: Direct your comments to Docket ID No. “EPA-R04-OAR-2013-0772”. 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 through *www.regulations.gov* or email, information that you consider to be CBI or otherwise protected. The *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*, 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*.

Docket: All documents in the electronic docket are listed in the *www.regulations.gov* index. Although listed in the index, some information is not publicly available, i.e., 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 in *www.regulations.gov* or in hard copy at the Regulatory Development Section, Air Planning Branch, Air, Pesticides and Toxics Management Division, U.S. Environmental Protection Agency, Region 4, 61 Forsyth Street SW., Atlanta, Georgia 30303-8960. EPA requests that if at all possible, you contact the person listed in the **FOR FURTHER INFORMATION CONTACT** section to

schedule your inspection. The Regional Office's official hours of business are Monday through Friday, 8:30 a.m. to 4:30 p.m., excluding Federal holidays.

FOR FURTHER INFORMATION CONTACT: Nacosta Ward, Regulatory Development Section, Air Planning Branch, Air, Pesticides and Toxics Management Division, U.S. Environmental Protection Agency, Region 4, 61 Forsyth Street, SW., Atlanta, Georgia 30303–8960. The telephone number is (404) 562–9140. Ms. Ward can be reached via electronic mail at ward.nacosta@epa.gov. For information regarding the I/M program, contact Ms. Amanetta Somerville, Air Quality Modeling and Transportation Section, at the same address above. Telephone number: (404) 562–9025; email address: somerville.amanetta@epa.gov.

SUPPLEMENTARY INFORMATION:

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- I. Today's Action
- II. Background
- III. EPA's Analysis of North Carolina's SIP Revisions
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I. Today's Action

EPA is approving four SIP revisions submitted by NC DENR on January 31, 2008, May 24, 2010, October 11, 2013, and February 11, 2014. Specifically, these SIP revisions relate to changes for North Carolina's I/M rules as well as the repeal of one rule (section 15A NCAC 2D .1004 within the Motor Vehicle Emission Control Standards).

The January 31, 2008, SIP revision submitted by NC DENR involves multiple regulatory changes to the North Carolina SIP. This action, however, pertains only to the portion of North Carolina's January 31, 2008, SIP revision which revises section 15A NCAC 02D .1000, Motor Vehicle Emission Control Standard, to account for the repeal of regulation 15A NCAC 02D .1004, Tailpipe Emission Standards for Carbon Monoxide (CO) and Hydrocarbon (HC). Regulation 15A NCAC 2D .1004, was repealed because it is obsolete, and today, EPA is removing this provision from the SIP. The requirement for tailpipe emission testing for passenger motor vehicles has been replaced by on-board diagnostics (OBD) testing in 15A NCAC 02D .1005. This change to North Carolina's I/M rules became State effective on July 1, 2007.¹

The May 24, 2010, SIP revision submitted by NC DENR involves

additional changes to the North Carolina I/M program, however, on October 11, 2013, NC DENR submitted a subsequent SIP revision to supplement and replace the May 24, 2010, revision. Specifically, the May 24, 2010, submission included changes regarding the I/M portion of the North Carolina SIP narrative to reflect changes to the areas impacted by the North Carolina I/M program and the internal procedures for the management of the I/M program. These changes were revised by the October 11, 2013, SIP revision, which also amended the SIP to reflect changes to the internal procedures for the management of the I/M program.

The October 11, 2013, SIP revision submitted by NC DENR also provided a technical demonstration of non-interference to address whether pending changes to the State's I/M program would interfere with air quality in North Carolina areas subject to the I/M program. The pending rule changes were triggered by North Carolina General Assembly Session Law 2012–199, which incorporated an exemption from emission inspection for the three newest model year vehicles with less than 70,000 miles on their odometers in all areas in the State where I/M is required. In addition, these rule changes were also necessitated by the North Carolina General Assembly Session Law 2011–95, which exempted plug-in vehicles from emission inspection requirements.

On February 11, 2014, as a supplement to North Carolina's October 11, 2013, SIP revision, NC DENR submitted a SIP revision incorporating the necessary rule changes related to the North Carolina General Assembly Session Laws 2011–95 and 2012–199 statutory exemption from emission inspection for plug-in vehicles and for the three newest model year vehicles with less than 70,000 miles on their odometers in all areas in the State where I/M is required under SIP section 15A NCAC 02D .1000, Motor Vehicle Emission Control Standard. Specifically rules 15A NCAC 02D .1002, .1003, .1005, and .1006 were amended, and 15A NCAC 02D .1009 was repealed.²

More information on EPA's analysis of North Carolina's SIP revisions related to changes in the State's I/M program is provided Section III of this rulemaking.

² While North Carolina's submission provides changes to regulation 15A NCAC 02D .1006 and a repeal of 15A NCAC 02D .1009, these regulations were never incorporated into the federally-approved SIP and thus no action on EPA's part is needed related to the changes for regulation 15A NCAC 02D .1006, and the repeal of 15A NCAC 02D .1009.

II. Background

The North Carolina I/M program began in 1982 in Mecklenburg County. From 1986 through 1991 the program expanded to include eight additional counties (Wake, Forsyth, Guilford, Durham, Gaston, Cabarrus, Orange and Union County) based on a "tail-pipe" emissions test. In 1999, the North Carolina General Assembly passed legislation to expand the coverage area for the I/M program in the State in order to gain additional emission reductions to achieve the 1997 8-hour ozone national ambient air quality standards in the State. The vehicle testing requirements in these expanded counties were OBD requirements rather than tail-pipe testing requirements. Starting in October 2002, the original nine counties converted from tail-pipe testing to the new OBD emission testing for all model year (MY) 1996 and newer light duty gasoline vehicles and continued tail-pipe testing of MY 1995 and older vehicles. The program began to expand from nine counties starting in July 2003 to a total of 48 counties (the nine original counties plus Alamance, Brunswick, Buncombe, Burke, Caldwell, Carteret, Catawba, Chatham, Cleveland, Craven, Cumberland, Davidson, Edgecombe, Franklin, Granville, Harnett, Haywood, Henderson, Johnston, Lee, Lenoir, Moore, Nash, New Hanover, Onslow, Orange, Pitt, Randolph, Robeson, Rockingham, Rutherford, Stanly, Stokes, Surry, Wake, Wayne, Wilkes, and Wilson) on July 1, 2006. At the time of full implementation of the OBD program, inspection stations were performing the OBD emissions test on MY 1996 and newer vehicles, and tailpipe testing on MY 1995 and older vehicles were discontinued.

EPA most recently approved changes to North Carolina's I/M program in the SIP on October 30, 2002. *See* 67 FR 66056. Since that time, North Carolina has submitted additional changes to its program, which EPA is now acting upon. Specifically, North Carolina submitted SIP revisions related to the State's I/M program on January 31, 2008, May 24, 2010, October 11, 2013, and February 11, 2014. EPA's analysis of the aforementioned North Carolina SIP revisions related to changes in the State's I/M program is provided Section III of this rulemaking.

III. EPA's Analysis of North Carolina's SIP Revisions

Through SIP revisions provided on January 31, 2008, May 24, 2010, October 11, 2013, and February 11, 2014, NC DENR requested that EPA take action to update the State's implementation plan

¹ EPA notes that OBD is more accurate than tailpipe testing and provides for earlier detection of vehicles that do not meet the performance standards.

to include changes for the I/M program in North Carolina. For any changes to provisions that are already included in the federally-approved SIP, EPA must consider section 110(l) of the Clean Air Act (CAA or Act). Section 110(l) of the CAA requires that a revision to the SIP not interfere with any applicable requirement concerning attainment and reasonable further progress (as defined in section 171), or any other applicable requirement of the Act. The section 110(l) non-interference demonstration is a case-by-case determination based upon the circumstances of each SIP revision. EPA interprets 110(l) as applying to all NAAQS that are in effect, including those that have been promulgated, but for which the EPA has not yet made designations. The specific elements of the 110(l) analysis contained in the SIP revision depend on the circumstances and emissions analyses associated with that revision. EPA's analysis of North Carolina's SIP revisions related to changes for the I/M program, including review of section 110(l) requirements, is provided below.

On October 11, 2013, NC DENR submitted a SIP revision to provide the non-interference technical demonstration related to the changes for North Carolina's I/M program that resulted from the passage of North Carolina General Assembly Session Laws 2011–95 and 2012–199 as well as

the other revisions described herein to the State's I/M program, such as the discontinuation of tailpipe testing MY 1995 and older vehicles. This non-interference demonstration also accounts for the previous repeal of regulation 15A NCAC 02D .1004, where applicable. Specifically, this demonstration considers the changes to the State's I/M program in three geographical areas that cover the entire 48 counties where the I/M program is required. The three geographical areas are as follows: The Charlotte Area; the Greensboro Area; and the remainder of the 48 counties not covered in the Charlotte and Greensboro Area analyses. More information on the non-interference demonstration and EPA's analysis for each Area is described below.

a. Analysis of the Non-Interference Demonstration for the Charlotte Area

As indicated above, on October 11, 2013, NC DENR provided a technical demonstration with modeling to account for changes to the North Carolina I/M program in the seven county Charlotte Area.³ Specifically, the technical demonstration modifies the existing 175A(a) maintenance plan for the Charlotte Area to account for changes to the I/M program including the exemption of the three newest model year vehicles under 70,000 miles and plug in vehicles for this area, and

the change in I/M compliance rate from 95 percent to 96 percent. North Carolina's October 11, 2013, SIP revision includes an evaluation of the impact that the increase in model year exemptions would have on the attainment and or maintenance of the 1997 and 2008 ozone standards and on other applicable NAAQS.

Specifically, North Carolina's October 11, 2013, SIP revision includes a technical demonstration which revised mobile source emissions modeling using EPA's approved models—Motor Vehicle Emissions Simulator (MOVES) 2010b—to demonstrate non-interference for the SIP revisions to expand the I/M exemptions and to account for the increase in the I/M compliance rate from 95 percent to 96 percent. In that technical demonstration, NC DENR provided information regarding the emissions projections from the I/M program changes for carbon monoxide and for the precursor of ozone (*i.e.*, nitrogen oxides (NO_x) and volatile organic compounds (VOCs)). To determine these emissions, NC DENR's demonstration compared the current 95 percent I/M compliance rate and the 1 model year exemption emissions inventory to the 96 percent I/M compliance rate and the 3 model year exemption for the Charlotte Area. This comparison for the Charlotte Area is shown below in Table 1.

TABLE 1—CHANGES IN EMISSIONS FOR CHARLOTTE AREA

Emissions (kg/day)	Current I/M program (95% compliance rate, 1 year exemption)	Target I/M program (96% compliance rate, 3 year exemption)	Difference between 95% and 96% compliance rate
NO _x	98,157	98,122	– 35
VOC	48,545	48,523	– 22
CO	1,047,712	1,047,737	24

Table 1 above indicates an emissions benefit for the changes to North Carolina's I/M program with regard to the ozone precursor emissions (*i.e.*, NO_x and VOC), and a slight emissions increase with regards to emissions for CO. There is no difference in emissions anticipated as a result of North Carolina I/M program changes for particulate matter (PM), lead, sulfur dioxide (SO₂) or nitrogen dioxide (NO₂). Accordingly, in this action, EPA is making the determination that the applicable NAAQS⁴ of interest for the non-interference demonstration required by

section 110(l) of the CAA are the ozone and CO standards.

In addition to the information provided in North Carolina's technical demonstration, EPA reviewed the most recent preliminary ozone air quality data for the Charlotte Area, and it appears that the Area is currently monitoring attaining levels for all ozone NAAQS (including the 2008 8-hour ozone NAAQS for which the area is currently designated nonattainment). While the Charlotte Area is currently a nonattainment area for ozone, the changes to North Carolina's I/M

program are not anticipated to increase emissions in ozone precursors (*i.e.*, VOC and NO_x—see Table 1 above), so EPA does not expect these changes to interfere with the Area's ability to attain the 2008 8-hour ozone NAAQS. EPA also notes that the Charlotte Area has not been designated for the SO₂ NAAQS, and is currently designated unclassifiable/attainment for the 1997 PM_{2.5} NAAQS, the 2006 PM_{2.5} NAAQS, the 2008 Lead NAAQS and the 2010 NO₂ NAAQS.

The Charlotte Area is also in attainment of the CO NAAQS and has

³ The Charlotte Area is comprised of Mecklenburg, Cabarrus, Gaston, Lincoln, Rowan, Union and Iredell Counties.

⁴ The six NAAQS for which EPA establishes health and welfare based standards are CO, Lead, NO₂, Ozone, PM, and Sulfur Dioxide.

current monitoring levels of CO well below the standard. Even though there is a slight emissions increase from this rule change for CO emissions, given the Charlotte Area's CO monitoring levels that are well below the CO NAAQS, EPA does not believe that the slight increase in CO emissions will cause the Area to come out of compliance with the CO NAAQS.⁵ Consequently, EPA has concluded that the new modeling

associated with these changes demonstrates that the changes for North Carolina's I/M program in the seven counties in the Charlotte Area will not interfere with the Area's ability to attain and maintain the NAAQS.

b. Analysis of the Non-Interference Demonstration for the Greensboro Area

In its October 11, 2013, SIP revision, NC DENR provided a technical

demonstration with modeling to account for changes to the North Carolina I/M program in the three-county Greensboro Area⁶ similar to the demonstration that was conducted for the Charlotte Area to account for the same changes to North Carolina's I/M program. Table 2 provides the changes in emissions that will result from the changes to North Carolina's I/M program in the Greensboro Area.

TABLE 2—CHANGES IN EMISSIONS FOR GREENSBORO AREA

Emissions (kg/day)	Current I/M program (95% compliance rate, 1 year exemption)	Target I/M program (96% compliance rate, 3 year exemption)	Difference between 95% and 96% compliance rate
NO _x	36,157	36,143	– 15
VOC	19,965	19,954	– 11
CO	492,801	492,720	– 82

Table 2 above indicates an emissions benefit for the changes to North Carolina's I/M program with regard to the ozone precursor emissions (*i.e.*, NO_x and VOC), and for CO. There is no difference in emissions anticipated as a result of North Carolina I/M program changes for PM, Lead, SO₂ or NO₂. In this action, EPA is making the determination that the applicable NAAQS of interest for the non-interference demonstration required by section 110(l) of the CAA are the ozone and CO standards.

In addition to the information provided in North Carolina's technical demonstration, EPA reviewed the most recent preliminary ozone air quality

data for the Greensboro Area, and it appears that the area is monitoring attaining levels for all ozone NAAQS. The Greensboro Area has not been designated for the SO₂ NAAQS, and is currently designated unclassifiable/attainment for the 1997 PM_{2.5} NAAQS, the 2006 PM_{2.5} NAAQS, the 2008 Lead NAAQS, the 2008 8-hour Ozone NAAQS and the 2010 NO₂ NAAQS. Consequently, EPA has concluded that the new modeling associated with these changes demonstrates that the changes for North Carolina's I/M program in the three counties of the Greensboro Area will not interfere with the Area's ability to attain and maintain the NAAQS.

c. Analysis of the Non-Interference Demonstration of the Remaining Counties Area

NC DENR provided a technical demonstration with modeling to account for changes to the North Carolina I/M program in the 38 counties outside of the seven Charlotte Area counties and the three Greensboro Area counties (hereafter referred to as the "Remaining Counties Area")⁷ in its October 11, 2013, SIP revision. Table 3 provides the changes in emissions that will result from the change to North Carolina's I/M program in the Remaining Counties.

TABLE 3—CHANGES IN EMISSIONS FOR REMAINING COUNTIES AREA

Emissions (kg/day)	Current I/M program (95% compliance rate, 1 year exemption)	Target I/M program (96% compliance rate, 3 year exemption)	Difference between 95% and 96% compliance rate
NO _x	226,196	226,113	– 83
VOC	115,443	115,384	– 59
CO	2,560,587	2,560,367	– 220

Table 3 above indicates an emissions benefit for the changes to North Carolina's I/M program with regard to the ozone precursor emissions (*i.e.*, NO_x and VOC), and for CO. There is no difference in emissions anticipated as a result of North Carolina I/M program changes for PM, Lead, SO₂ or NO₂. In

this action, EPA is making the determination that the applicable NAAQS of interest for the non-interference demonstration required by section 110(l) of the CAA are the ozone and CO standards.

In addition to the information provided in North Carolina's technical

demonstration, EPA reviewed the most recent preliminary ozone air quality data for this Area, and it appears that the Remaining Counties Area is monitoring attaining levels for all ozone NAAQS. The Remaining Counties Area has not been designated for the SO₂ NAAQS, and is currently designated

⁵ Based upon the projected CO emissions increase of 24 kg/day, the difference in CO emissions per day of the target I/M Program represents an increase of only 0.002291% over CO emissions under the Current I/M Program.

⁶ The Greensboro Area is comprised of Guilford, Forsyth, and Davidson Counties.

⁷ The remaining counties include: Alamance, Brunswick, Buncombe, Burke, Caldwell, Carteret, Catawba, Chatham, Cleveland, Craven, Cumberland, Durham, Edgecombe, Franklin, Granville, Harnett,

Haywood, Henderson, Johnston, Lee, Lenoir, Moore, Nash, New Hanover, Onslow, Orange, Pitt, Randolph, Robeson, Rockingham, Rutherford, Stanly, Stokes, Surry, Wake, Wayne, Wilkes, and Wilson Counties.

unclassifiable/attainment for the 1997 PM_{2.5} NAAQS, the 2006 PM_{2.5} NAAQS, the 2008 Lead NAAQS, the 2008 8-hour Ozone NAAQS and the 2010 NO₂ NAAQS. Consequently, EPA has concluded that the new modeling associated with these changes demonstrates that the changes for North Carolina's I/M program in the Remaining Counties Area will not

interfere with the Area's ability to attain and maintain the NAAQS.

d. Conclusion

Based upon the above analysis, EPA's overall conclusion with regards to North Carolina's changes to the State's I/M program is that these changes are consistent with the CAA and will not interfere with any of the affected Areas' ability to attain and maintain the NAAQS. While the individual area

analyses appear to demonstrate that these changes provide an overall emissions benefit for each Area, the benefit is even more pronounced when the total emission reductions from the entire area covered by the North Carolina I/M program are considered. Table 4 below provides the changes in emissions that will result from the change to North Carolina's I/M program in all of the affected counties.

TABLE 4—CHANGES IN EMISSIONS FOR ALL AFFECTED COUNTIES

Emissions (kg/day)	Current I/M program (95% compliance rate, 1 year exemption)	Target I/M program (96% compliance rate, 3 year exemption)	Difference between 95% and 96% compliance rate
NO _x	360,510	360,377	– 133
VOC	183,953	183,860	– 92
CO	4,101,100	4,100,823	– 277

Table 4 above indicates an emissions benefit for the changes to North Carolina's I/M program with regard to the ozone precursor emissions (*i.e.*, NO_x and VOC), and for CO.⁸ This provides further support for EPA's overall determination that the changes to North Carolina's I/M program will not interfere with attainment or maintenance of the NAAQS, or any other applicable requirement of the CAA.

IV. Final Action

EPA is approving changes to North Carolina's I/M program as provided in SIP revisions dated January 31, 2008, May 24, 2010, October 11, 2013, and February 11, 2014. First, EPA is approving the repeal of regulation 15A NCAC 02D .1004 as provided in North Carolina's January 31, 2008. EPA has made the determination that the repeal of this regulation is acceptable because it is obsolete and replaced by OBD. This change to the program was accounted for in North Carolina's modeling included with the October 11, 2013, non-interference demonstrations. EPA is also approving North Carolina's rule changes as provided in North Carolina's May 24, 2010, and February 11, 2014, SIP revisions, which are also supported by the State's technical non-interference demonstration provided through the October 11, 2013 SIP revision. EPA has made the determination that North Carolina's technical non-interference demonstration supports a conclusion that these rule changes will not interfere

with air quality goals in areas in North Carolina. EPA has also made the determination that these SIP revisions with regard to the aforementioned provisions are approvable because they are consistent with section 110 of the CAA.

EPA is publishing this rule without prior proposal because the Agency views these actions as non-controversial revisions and anticipates no adverse comments. However, in the proposed rules section of this **Federal Register** publication, EPA is publishing a separate document that will serve as the proposal to approve the SIP revision should relevant adverse comment be filed. This rule will be effective on *January 20, 2015* without further notice unless the Agency receives relevant adverse comment by *December 22, 2014*. If EPA receives such comments, EPA will publish a document withdrawing the final rule and informing the public that the rule will not take effect. EPA will address all relevant adverse comments received during the comment period in a subsequent final rule based on the proposed rule. EPA will not institute a second comment period on this action. Any parties interested in commenting must do so by December 22, 2014. If no such comments are received, this rule will be effective on *January 20, 2015* and no further action will be taken on the proposed rule.

V. Statutory and Executive Order Reviews

Under the CAA, the Administrator is required to approve a SIP submission that complies with the provisions of the Act and applicable federal regulations.

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

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

⁸ As noted above, there are no difference in emissions anticipated as a result of North Carolina's I/M program changes for PM, Lead, SO₂ or NO₂.

application of those requirements would be inconsistent with the CAA; and

- does not provide EPA with the discretionary authority to address, as appropriate, disproportionate human health or environmental effects, using practicable and legally permissible methods, under Executive Order 12898 (59 FR 7629, February 16, 1994).

The SIP is not approved to apply on any Indian reservation land or in any other area where EPA or an Indian tribe has demonstrated that a tribe has jurisdiction. In those areas of Indian country, the rule does not have tribal implications as specified by Executive Order 13175 (65 FR 67249, November 9, 2000), nor will it impose substantial direct costs on tribal governments or preempt tribal law.

The Congressional Review Act, 5 U.S.C. 801 *et seq.*, as added by the Small Business Regulatory Enforcement Fairness Act of 1996, generally provides that before a rule may take effect, the agency promulgating the rule must submit a rule report, which includes a copy of the rule, to each House of the Congress and to the Comptroller General of the United States. EPA will submit a report containing this action and other required information to the U.S. Senate, the U.S. House of Representatives, and

the Comptroller General of the United States prior to publication of the rule in the **Federal Register**. A major rule cannot take effect until 60 days after it is published in the **Federal Register**. This action is not a “major rule” as defined by 5 U.S.C. 804(2).

Under section 307(b)(1) of the CAA, petitions for judicial review of this action must be filed in the United States Court of Appeals for the appropriate circuit by January 20, 2015. Filing a petition for reconsideration by the Administrator of this final rule does not affect the finality of this action for the purposes of judicial review nor does it extend the time within which a petition for judicial review may be filed, and shall not postpone the effectiveness of such rule or action. This action may not be challenged later in proceedings to enforce its requirements. *See* section 307(b)(2).

List of Subjects in 40 CFR Part 52

Environmental protection, Air pollution control, Carbon monoxide, Incorporation by reference, Intergovernmental relations, Nitrogen dioxide, Ozone, Particulate matter, Reporting and recordkeeping requirements, Sulfur oxides, Volatile organic compounds.

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

Dated: October 23, 2014.

V. Anne Heard,

Acting Regional Administrator, Region 4.

40 CFR part 52 is amended as follows:

PART 52—APPROVAL AND PROMULGATION OF IMPLEMENTATION PLANS

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

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

Subpart II—North Carolina

■ 2. In § 52.1770:

■ a. Table 1 in paragraph (c) is amended by revising the entries for “Sect .1002,” “Sect .1003,” and “Sect .1005;” and removing the entry for “Sect .1004.”

■ b. In paragraph (e), the table is amended by adding a new entry “Non-Interference Demonstration for the North Carolina Inspection and Maintenance Program” at the end of the table.

The revisions and addition read as follows:

§ 52.1770 Identification of plan

* * * * *

(c) * * *

TABLE 1—EPA APPROVED NORTH CAROLINA REGULATIONS

State citation	Title/subject	State effective date	EPA approval date	Explanation
Subchapter 2D Air Pollution Control Requirements				
* * *	* * *	* * *	* * *	* * *
Section .1000 Motor Vehicle Emissions Control Standard				
Sect .1002	Applicability	1/1/2014	11/20/2014 [Insert Federal Register citation].	*
Sect .1003	Definitions	2/1/2014	11/20/2014 [Insert Federal Register citation].	*
Sect .1005	On-Board Diagnostic Standards	1/1/2014	11/20/2014 [Insert Federal Register citation].	*
* * *	* * *	* * *	* * *	* * *

* * * * *

(e) * * *

EPA APPROVED NORTH CAROLINA NON-REGULATORY PROVISIONS

Provision	State effective date	EPA approval date	Federal Register citation	Explanation
Non-Interference Demonstration for the North Carolina Inspection and Maintenance Program.	10/11/2013	11/20/2014	[Insert Federal Register citation].	*

[FR Doc. 2014-27030 Filed 11-19-14; 8:45 am]

BILLING CODE 6560-50-P

FEDERAL COMMUNICATIONS COMMISSION

47 CFR Part 54

[WC Docket No. 13-184; FCC 14-99]

Modernization of the Schools and Libraries “E-Rate” Program

AGENCY: Federal Communications Commission.

ACTION: Final rule; announcement of effective date.

SUMMARY: On July 23, 2014, the Federal Communications Commission (Commission) released a *document* which contained information collection requirements for the schools and libraries universal service mechanism (E-rate) which required approval from the Office of Management and Budget (OMB). The Office of Management and Budget (OMB) granted approval on October 27, 2014, under emergency processing for certain of the information collection requirements contained in the *Report and Order* as required by the Paperwork Reduction Act (PRA) of 1995 (44 U.S.C. 3501-3520).

DATES: The amendments to §§ 54.502(b)(3) and (5), 54.504(a), and 54.516(a) through (c), in WC Docket No. 13-184, FCC 14-99, that appeared in the *Federal Register* at 79 FR 49160 on August 19, 2014, and revised the information collection OMB 3060-0806 as approved by OMB are effective November 20, 2014.

FOR FURTHER INFORMATION CONTACT: Lisa Hone, Wireline Competition Bureau at (202) 418-7400 or TTY (202) 418-0484.

SUPPLEMENTARY INFORMATION: The Federal Communications Commission has received OMB approval for the changes to E-rate rules contained in information collection OMB Control No: 3060-0806; Description of Services Requested and Certification; Description of Services Requested and Certification Instructions; Services Ordered and Certification; Services Ordered and Certification Instructions (FCC Form 470 and Instructions; FCC Form 471 and Instructions). The information collection was revised in the *Report and Order* and Further Notice of Proposed Rulemaking in WC Docket 13-184 which appears at 79 FR 49160, August 19, 2014. The rules adopted in the *Report and Order* that contain new or modified information collection requirements were not to become effective until approved by the Office of

Management and Budget. Through this document, the Commission announces that it has received this approval (OMB Control No: 3060-0806, Expiration Date April 30, 2015) and that §§ 54.502(b)(3) and (5), 54.504(a), and 54.516(a) through (c) are effective November 20, 2014.

Pursuant to the Paperwork Reduction Act of 1995, 44 U.S.C. 3501-3520, an agency may not conduct or sponsor a collection of information unless it displays a currently valid control number. Notwithstanding any other provisions of law, no person shall be subject to any penalty for failing to comply with the collection of information subject to the Paperwork Reduction Act that does not display a valid control number. Questions concerning the OMB control numbers and expiration dates should be directed to Leslie F. Smith, Federal Communications Commission, (202) 418-0217 or via the Internet at Leslie.Smith@fcc.gov.

Federal Communications Commission.

Marlene H. Dortch,

Secretary.

[FR Doc. 2014-27462 Filed 11-19-14; 8:45 am]

BILLING CODE 6712-01-P

FEDERAL COMMUNICATIONS COMMISSION

47 CFR Part 73

[DA 13-2003; MB Docket No. 11-167; RM-11645]

Radio Broadcasting Services; Altamont, Oregon

AGENCY: Federal Communications Commission.

ACTION: Final rule.

SUMMARY: The Audio Division, at the request of Threshold Communications, substitutes FM Channel 235C1 for Channel 249C1 at Altamont, Oregon. Channel 235C1 can be allotted at Altamont in compliance with the Commission's minimum distance separation requirements with a site restriction of 20 km (12.6 miles) northeast of Altamont, at 42-08-37 North Latitude and 121-30-19 West Longitude.

DATES: Effective November 20, 2014, and applicable November 11, 2013.

FOR FURTHER INFORMATION CONTACT: Deborah A. Dupont, Media Bureau, (202) 418-2700.

SUPPLEMENTARY INFORMATION: This is a synopsis of the Commission's *Report and Order*, MB Docket No. 11-167, adopted September 26, 2013, and released September 27, 2013. The full

text of this Commission decision is available for inspection and copying during normal business hours in the FCC Information Center, Portals II, 445 12th Street SW., Room CY-A257, Washington, DC 20554. The complete text of this decision also may be purchased from the Commission's duplicating contractor, Best Copy and Printing, Inc., 445 12th Street SW., Room CY-B402, Washington, DC, 20554, (800) 378-3160, or via the company's Web site, www.bcpweb.com. This document does not contain proposed information collection requirements subject to the Paperwork Reduction Act of 1995, Public Law 104-13. In addition, therefore, it does not contain any proposed information collection burden “for small business concerns with fewer than 25 employees,” pursuant to the Small Business Paperwork Relief Act of 2002, Public Law 107-198, *see* 44 U.S.C. 3506(c)(4). The Commission will send a copy of this *Report and Order* in a report to be sent to Congress and the Government Accountability Office pursuant to the Congressional Review Act, *see* U.S.C. 801(a)(1)(A).

List of Subjects in 47 CFR Part 73

Radio, Radio broadcasting.

Federal Communications Commission.

Nazifa Sawez

Assistant Chief, Audio Division, Media Bureau.

For the reasons discussed in the preamble, the Federal Communications Commission amends 47 CFR part 73 as follows:

PART 73—RADIO BROADCAST SERVICES

■ 1. The authority citation for part 73 continues to read as follows:

Authority: 47 U.S.C. 154, 303, 334, 336.

§ 73.202 [Amended]

■ 2. Section 73.202(b), the Table of FM Allotments under Oregon is amended by removing Channel 249C1 at Altamont; and by adding Channel 235C1 at Altamont.

[FR Doc. 2014-27529 Filed 11-19-14; 8:45 am]

BILLING CODE 6712-01-P

FEDERAL COMMUNICATIONS COMMISSION**47 CFR Part 73**

[DA 13–1603; MB Docket No. 13–23; RM–11690]

Radio Broadcasting Services; Pearsall, Texas**AGENCY:** Federal Communications Commission.**ACTION:** Final rule.

SUMMARY: The Audio Division, at the request of Bryan King (“petitioner”), deletes FM Channel 227A and allots FM Channel 277A at Pearsall, Texas. Channel 277A can be allotted at Pearsall, consistent with the minimum distance separation requirements of the Commission’s rules, at coordinates 28–56–40 NL and 99–11–44 WL, with a site restriction of 11.4 km (7.1 miles) northwest of the community. The Government of Mexico has concurred with the allotment of Channel 277A at Pearsall, which is located within 320 kilometers (199 miles) of the U.S.-Mexican border. *See* Supplementary Information *infra*.

DATES: Effective November 20, 2014, and applicable September 2, 2013.**FOR FURTHER INFORMATION CONTACT:** Deborah Dupont, Media Bureau, (202) 418–2180.

SUPPLEMENTARY INFORMATION: This is a synopsis of the Commission’s *Report and Order*, MB Docket No. 13–23, adopted July 18, 2013, and released July 19, 2013. The full text of this Commission decision is available for inspection and copying during normal business hours in the FCC Information Center, Portals II, 445 12th Street, SW., Room CY–A257, Washington, DC 20554. The complete text of this decision also may be purchased from the Commission’s duplicating contractor, Best Copy and Printing, Inc., 445 12th Street SW., Room CY–B402, Washington, DC, 20554, (800) 378–3160, or via the company’s Web site, www.bcpweb.com. This document does not contain information collection requirements subject to the Paperwork Reduction Act of 1995, Public Law 104–13. In addition, therefore, it does not contain any 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). The Commission will send a copy of this *Report and Order* in a report to be sent to Congress and the Government Accountability Office pursuant to the

Congressional Review Act, *see* U.S.C. 801(a)(1)(A).**List of Subjects in 47 CFR Part 73**

Radio, Radio broadcasting.
Federal Communications Commission.
Nazifa Sawez,
Assistant Chief, Audio Division, Media Bureau.

For the reasons discussed in the preamble, the Federal Communications Commission amends 47 CFR Part 73 as follows:

PART 73—RADIO BROADCAST SERVICES

■ 1. The authority citation for part 73 continues to read as follows:

Authority: 47 U.S.C. 154, 303, 334, 336 and 339.

§ 73.202 [Amended]

■ 2. Section 73.202(b), the Table of FM Allotments under Texas, is amended by removing Channel 227A at Pearsall; and by adding Channel 277A at Pearsall.

[FR Doc. 2014–27536 Filed 11–19–14; 8:45 am]

BILLING CODE 6712–01–P**DEPARTMENT OF COMMERCE****National Oceanic and Atmospheric Administration****50 CFR Part 622**

[Docket No. 140722613–4908–02]

RIN 0648–BE31**Fisheries of the Caribbean, Gulf of Mexico, and South Atlantic; Coastal Migratory Pelagic Resources in the Gulf of Mexico and Atlantic Region; Framework Amendment 1**

AGENCY: National Marine Fisheries Service (NMFS), National Oceanic and Atmospheric Administration (NOAA), Commerce.

ACTION: Final rule.

SUMMARY: NMFS issues this final rule to implement management measures described in a framework amendment to the Fishery Management Plan for the Coastal Migratory Pelagic (CMP) Resources in the Gulf of Mexico and Atlantic Region (FMP) (Framework Amendment 1), as prepared and submitted by the South Atlantic and Gulf of Mexico Fishery Management Councils (Councils). This rule modifies the annual catch limits (ACLs) for Atlantic and Gulf of Mexico (Gulf) migratory groups of Spanish mackerel and modifies the recreational annual

catch target (ACT) for Atlantic migratory group Spanish mackerel, based on the results of the most recent stock assessments for these stocks. Framework Amendment 1 also specifies the optimum yield and acceptable biological catch (ABC) estimates for Atlantic and Gulf migratory groups of Spanish mackerel. The purpose of this rule is to update ACLs based on the best scientific information available and to ensure overfishing does not occur for the Spanish mackerel resources in the Atlantic and Gulf.

DATES: This rule is effective December 22, 2014.

ADDRESSES: Electronic copies of the Framework Amendment, which includes an environmental assessment, a regulatory flexibility act analysis and a regulatory impact review, may be obtained from the Southeast Regional Office Web site at <http://sero.nmfs.noaa.gov>.

FOR FURTHER INFORMATION CONTACT:

Karla Gore, telephone: 727–824–5305, or email: karla.gore@noaa.gov.

SUPPLEMENTARY INFORMATION: The CMP fishery of the South Atlantic and the Gulf is managed under the FMP. The FMP was prepared by the Councils and implemented through regulations at 50 CFR part 622 under the authority of the Magnuson-Stevens Fishery Conservation and Management Act (Magnuson-Stevens Act).

On July 31, 2014, NMFS published a proposed rule for Framework Amendment 1 and requested public comment (79 FR 44369). The proposed rule and Framework Amendment 1 outline the rationale for the actions contained in this final rule. A summary of the actions implemented by this final rule is provided below.

Management Measures Contained in This Final Rule

This final rule revises the stock ACLs for Atlantic and Gulf migratory groups of Spanish mackerel, based on the results of the most recent assessments and the ABC recommendations by the Councils’ Scientific and Statistical Committees (SSCs). Additionally, this final rule revises the commercial and recreational ACLs (based on previously determined sector allocations), the recreational ACT, and the adjusted commercial quota for Atlantic migratory group Spanish mackerel, based on the revised commercial ACL (commercial quota).

Revise Commercial and Recreational ACLs, and Recreational ACT for Atlantic Migratory Group Spanish Mackerel

This final rule revises the stock ACL for Atlantic Migratory group Spanish mackerel to 6.063 million lb (2.750 million kg) and allocates the revised ACL based on the previously determined allocation distribution of 55 percent to the commercial sector and 45 percent to the recreational sector. Therefore, this final rule increases the commercial ACL (equal to the commercial quota) for Atlantic migratory group Spanish mackerel to 3.33 million lb (1.51 million kg) and the recreational ACL to 2.727 million lb (1.236 million kg). The recreational ACT increases to 2.364 million lb (1.072 million kg).

Revise Adjusted Quota for Atlantic Migratory Group Spanish Mackerel

This final rule revises the adjusted commercial quota for Atlantic migratory group Spanish mackerel from 2.88 million (1.31 million kg) to 3.08 million lb (1.40 million kg), based on the increase of the commercial ACL (commercial quota) for Atlantic migratory group Spanish mackerel. The adjusted quota is the quota for Atlantic migratory group Spanish mackerel reduced by an amount calculated to allow continued harvests of Atlantic migratory group Spanish mackerel at the rate of 500 lb (227 kg) per vessel per day for the remainder of the fishing year after the adjusted quota is reached. Total commercial harvest is still subject to the ACL and an in-season closure when landings are projected to reach the ACL.

Revise Stock ACL for Gulf Migratory Group Spanish Mackerel

This final rule increases the stock ACL for Gulf migratory group Spanish mackerel to 12.7 million lb (5.76 million kg) for the 2014–2015 fishing year, 11.8 million lb (5.35 million kg) for the 2015–2016 fishing year, and 11.3 million lb (5.13 million kg) for the 2016–2017 fishing year and subsequent fishing years.

Additions to Codified Text

This final rule also includes additions to the introductory paragraphs for the CMP Quotas and ACLs/AMs/ACTs sections (50 CFR 622.384 and 50 CFR 622.388) to include language that all weights are in round and eviscerated weight combined, unless specified otherwise. This language is added to clarify that the quotas, ACLs, and ACTs are established using landings that are documented in both round weight

(whole weight) and eviscerated weight (gutted weight).

Comments and Responses

NMFS received a total of eight comment letters on the proposed rule, which include comments from a Federal agency, private citizens, recreational fishermen, and commercial fishermen. The Federal agency stated it had no comments. Two comments were received in support of the proposed rule. Specific comments on the proposed rule and NMFS' respective responses are summarized below.

Comment 1: There is no need to increase the harvest of Spanish mackerel. A precautionary approach should be used and catch should be maintained at current levels.

Response: NMFS disagrees that catch should be maintained at current levels. The increased catch levels are expected to enhance social and economic benefits to fishermen and fishing communities that utilize the Atlantic and Gulf Spanish mackerel migratory groups, while having no negative impacts on the stocks. Based on the most recent Southeast Data, Assessment, and Review (SEDAR) stock assessments for Gulf and Atlantic Spanish mackerel the Councils' SSCs determined that the catch levels for Atlantic and Gulf Spanish mackerel could be increased without negatively impacting the stocks. The stock assessment results indicated that the stocks are healthy and the SSCs established a buffer between the ABCs and the overfishing levels to account for scientific uncertainty. The Southeast Fisheries Science Center concluded that the increased ABCs and ACLs for Atlantic and Gulf migratory groups of Spanish mackerel are based upon the best scientific information available.

Comment 2: Increasing the harvest of Spanish mackerel could result in an increase in bycatch of ladyfish, bluefish, and other species in the northern Gulf.

Response: NMFS disagrees that increasing catch levels for the Atlantic and Gulf migratory groups of Spanish mackerel will result in increased bycatch. A bycatch practicability analysis was included in Framework Amendment 1 and indicates that the Spanish mackerel portion of the CMP fishery has relatively low levels of bycatch. The analysis concludes that these low levels of bycatch are not expected to change as a result of implementation of the amendment.

Comment 3: The recreational sector allocation for Atlantic migratory group Spanish mackerel should be set equal to the commercial sector allocation.

Response: Framework Amendment 1 and this final rule do not address the

sector allocations for Atlantic migratory group Spanish mackerel that were established in 1999 (64 FR 45457) and this comment is therefore beyond the scope of this rule.

Comment 4: One comment states that the recreational bag limit for Atlantic migratory group Spanish mackerel should not be increased from 10 fish per person per day to 15 fish per person per day. Another comment indicates the bag limit for Atlantic migratory group Spanish mackerel should be reduced from 15 fish per person per day to 10 fish per person per day.

Response: Framework Amendment 1 and this final rule do not address the recreational bag limit for Spanish mackerel and this comment is therefore beyond the scope of this rule.

Comment 5: With the increase in the ACL, the minimum size limit for Gulf migratory group Spanish mackerel should be increased from 12 inches (30.5 cm) fork length (FL) to 15 inches (38.1 cm) FL. Most of the fish caught are larger than 15 inches (38.1 cm) total length.

Response: Framework Amendment 1 and this final rule do not address the minimum size limit for Gulf migratory group Spanish mackerel and this comment is therefore beyond the scope of this rule.

Classification

The Regional Administrator, Southeast Region, NMFS, has determined that this final rule is necessary for the conservation and management of Atlantic and Gulf migratory groups of Spanish mackerel and is consistent with Framework Amendment 1, the FMP, the Magnuson-Stevens Act and other applicable law.

This final rule has been determined to be not significant for purposes of Executive Order 12866.

The Chief Counsel for Regulation of the Department of Commerce certified to the Chief Counsel for Advocacy of the Small Business Administration during the proposed rule stage that this action would not have a significant economic impact on a substantial number of small entities. The factual basis for this certification was published in the proposed rule and is not repeated here. No comments were received regarding the certification and NMFS has not received any new information that would affect its determination. No changes to the final rule were made in response to public comments. As a result, a regulatory flexibility analysis was not required and none was prepared.

List of Subjects in 50 CFR Part 622

Annual catch limit, Annual catch target, Fisheries, Fishing, Gulf, Quotas, South Atlantic, Spanish mackerel.

Dated: November 4, 2014.

Samuel D. Rauch III,

Deputy Assistant Administrator for Regulatory Programs, National Marine Fisheries Service.

For the reasons set out in the preamble, 50 CFR part 622 is amended as follows:

PART 622—FISHERIES OF THE CARIBBEAN, GULF OF MEXICO, AND SOUTH ATLANTIC

■ 1. The authority citation for part 622 continues to read as follows:

Authority: 16 U.S.C. 1801 *et seq.*

■ 2. In § 622.384, a sentence is added at the end of the introductory text and paragraph (c)(2) is revised to read as follows:

§ 622.384 Quotas.

* * * All weights are in round and eviscerated weight combined, unless specified otherwise.

* * * * *

(c) * * *

(2) *Atlantic migratory group.* The commercial quota for the Atlantic migratory group of Spanish mackerel is 3.33 million lb (1.51 million kg).

* * * * *

■ 3. In § 622.385, the first sentence in paragraph (b)(2) is revised to read as follows:

§ 622.385 Commercial trip limits.

* * * * *

(b) * * *

(2) For the purpose of paragraph (b)(1)(ii) of this section, the adjusted quota is 3.08 million lb (1.40 million kg).

* * * * *

■ 4. In § 622.388, introductory text is added and paragraphs (c)(3), (d)(3), and the last two sentences of paragraph (d)(2)(i) are revised to read as follows:

§ 622.388 Annual catch limits (ACLs), annual catch targets (ACTs), and accountability measures (AMs).

All weights are in round and eviscerated weight combined, unless specified otherwise.

* * * * *

(c) * * *

(3) The stock ACL for Gulf migratory group Spanish mackerel is 12.7 million lb (5.76 million kg) for the 2014–2015 fishing year, 11.8 million lb (5.35 million kg) for the 2015–2016 fishing year, and 11.3 million lb (5.13 million

kg) for the 2016–2017 fishing year and subsequent fishing years.

(d) * * *

(2) * * *

(i) * * * The recreational ACT for the

Atlantic migratory group is 2.364 million lb (1.072 million kg). The recreational ACL for the Atlantic migratory group is 2.727 million lb (1.236 million kg).

* * * * *

(3) The stock ACL for Atlantic migratory group Spanish mackerel is 6.063 million lb (2.76 million kg).

* * * * *

[FR Doc. 2014–27374 Filed 11–19–14; 8:45 am]

BILLING CODE 3510–22–P

DEPARTMENT OF COMMERCE

National Oceanic and Atmospheric Administration

50 CFR Part 660

[Docket No. 120814338–2711–02]

RIN 0648–BE64

Magnuson-Stevens Act Provisions; Fisheries off West Coast States; Biennial Specifications and Management Measures; Inseason Adjustments

AGENCY: National Marine Fisheries Service (NMFS), National Oceanic and Atmospheric Administration (NOAA), Commerce.

ACTION: Final rule; inseason adjustments to biennial groundfish management measures.

SUMMARY: This final rule announces inseason changes to management measures in the Pacific Coast groundfish fisheries. This action, which is authorized by the Pacific Coast Groundfish Fishery Management Plan (PCGFMP), is intended to allow fisheries to access more abundant groundfish stocks while protecting overfished and depleted stocks.

DATES: Effective 0001 hours (local time) November 20, 2014.

FOR FURTHER INFORMATION CONTACT: Gretchen Hanshew (West Coast Region, NMFS), phone: 206–526–6147, fax: 206–526–6736, gretchen.hanshew@noaa.gov.

SUPPLEMENTARY INFORMATION:

Electronic Access

This final rule is accessible via the Internet at the Office of the Federal Register's Web site at <http://www.gpo.gov/fdsys/search/home.action>, or <http://federalregister.gov>. Background information and documents are available at the Pacific Fishery

Management Council's Web site at <http://www.pcouncil.org/>. Copies of the final environmental impact statement (FEIS) for the 2013–2014 Groundfish Specifications and Management Measures are available from Donald McIsaac, Executive Director, Pacific Fishery Management Council (Council), 7700 NE Ambassador Place, Portland, OR 97220, phone: 503–820–2280.

Background

The PCGFMP and its implementing regulations at title 50 in the Code of Federal Regulations (CFR), part 660, subparts C through G, regulate fishing for over 90 species of groundfish off the coasts of Washington, Oregon, and California. Groundfish specifications and management measures are developed by the Pacific Fishery Management Council (Council), and are implemented by NMFS.

On November 14, 2012, NMFS published a proposed rule to implement the 2013–2014 harvest specifications and management measures for most species of the Pacific Coast groundfish fishery (77 FR 67974). The final rule to implement the 2013–2014 harvest specifications and management measures for most species of the Pacific Coast Groundfish Fishery was published on January 3, 2013 (78 FR 580).

The Council, in coordination with Pacific Coast Treaty Indian Tribes and the States of Washington, Oregon, and California, recommended changes to current groundfish management measures at its October 17, 2014 meeting. Specifically, the Council recommended changing the amount of darkblotched rockfish initially deducted from the annual catch limit (ACL) to account for mortality in the incidental open access sector from 18.4 metric tons (mt) to 15.4 mt. The Council also recommended that the corresponding 3 mt of darkblotched rockfish previously deducted from the ACL be made available to the catcher/processor (C/P) sector of the at-sea Pacific whiting fishery. On November 12, 2014, NMFS published an inseason action to implement the Council's recommended changes (79 FR 67095). That rule correctly described the action and the intent, but contained erroneous calculations in the footnotes to Table 2b to subpart C. As a result of those errors, only the 3 mt reduction of the amount of darkblotched rockfish deducted from the ACL to account for mortality in the incidental open access sector was made. The increase to the C/P allocation of darkblotched rockfish was calculated incorrectly. For the same reasons stated in the November 12, 2014 rule and summarized below, this rule

implements the Council's recommended changes to the darkblotched rockfish allocation to the C/P sector by superseding Table 2b to subpart C that published on November 12, 2014.

Transferring Darkblotched Rockfish to the Catcher/Processor Sector via Inseason Action

At the start of 2014, the C/P and Mothership (MS) sectors of the Pacific whiting fishery were allocated 9.0 mt and 6.3 mt of darkblotched rockfish, respectively, per allocation regulations at § 660.55(c)(1)(i)(A). On October 17, 2014 NMFS reapportioned 3.0 mt of darkblotched rockfish from the C/P sector to the MS sector as an automatic action pursuant to §§ 660.60(d) and 660.160(c)(5), reducing the C/P darkblotched rockfish allocation from 9.0 mt to 6.0 mt and increasing the MS allocation from 6.3 mt to 9.3 mt. This action allowed the MS sector to reopen in a timely manner. At their October 17, 2014 meeting, the Council recommended redistributing 3 mt of darkblotched rockfish from the "off-the-top" deductions that were made at the start of the 2013–2014 biennium, and giving that 3 mt to the C/P sector to accommodate potential bycatch of darkblotched rockfish as the C/P sector prosecutes the remainder of its 2014 Pacific whiting fishery. NMFS took an inseason action to transfer darkblotched rockfish to the C/P sector allocation in the November 12, 2014 rule, however, a footnote to Table 2b, Subpart C, incorrectly described the calculations made during the transfer of darkblotched rockfish from the "off-the-top" deductions to the C/P sector. This rule implements the Council-recommended change to the C/P sector allocation by publishing the corrected Table 2b, including footnotes, and superseding the inaccurate regulations and bringing consistency between Tables 2a and 2b.

The action to transfer darkblotched rockfish from the "off-the-top" deductions to the C/P sector was implemented, in part, on November 12, 2014. This rule completes the implementation of the transfer of darkblotched rockfish to the C/P sector, for the same reasons described in detail in the preamble to the November 12, 2014 rule (79 FR 67095).

Classification

This final rule makes routine inseason adjustments to groundfish fishery

management measures, based on the best available information, consistent with the PCGFMP and its implementing regulations.

This action is taken under the authority of 50 CFR 660.60(c) and is exempt from review under Executive Order 12866.

The aggregate data upon which these actions are based are available for public inspection at the Office of the Administrator, West Coast Region, NMFS, during business hours.

NMFS finds good cause to waive prior public notice and comment on the revisions to groundfish management measures under 5 U.S.C. 553(b) because notice and comment would be impracticable and contrary to the public interest. Also, for the same reasons, NMFS finds good cause to waive the 30-day delay in effectiveness pursuant to 5 U.S.C. 553(d)(3), so that this final rule may become effective November 20, 2014.

At the October emergency Council meeting, the Council recommended that reapportionment of darkblotched rockfish to the C/P sector be implemented as quickly as possible. There was not sufficient time after that meeting to undergo proposed and final rulemaking before this action needs to be in effect. For the actions implemented in this final rule, affording the time necessary for prior notice and opportunity for public comment would prevent transfer of darkblotched rockfish to the C/P sector until later in the season, or potentially eliminate the possibility or doing so during the 2014 calendar year entirely, and is therefore impractical. Failing to transfer darkblotched rockfish to the C/P sector in a timely manner could result in unnecessary restriction of fisheries if the C/P sector exceeded its darkblotched allocation. Providing the C/P sector fishermen an opportunity to harvest their limits of Pacific whiting without interruption and without exceeding their darkblotched rockfish bycatch limit allows harvest as intended by the Council, consistent with the best scientific information available. The Pacific whiting fishery contributes a large amount of revenue to the coastal communities of Washington and Oregon and this change allows continued harvest of Pacific whiting while continuing to prevent ACLs of overfished species and the allocations for target species from being exceeded. No aspect of this action is controversial,

and changes of this nature were anticipated in the biennial harvest specifications and management measures established for 2013–2014.

Delaying these changes would also keep management measures in place that are not based on the best available information. Such delay would impair achievement of the PCGFMP goals and objectives of managing for appropriate harvest levels while providing for year-round fishing and marketing opportunities. Accordingly, for the reasons stated above, NMFS finds good cause to waive prior notice and comment and to waive the delay in effectiveness.

NMFS has reinitiated section 7 consultation on the PCGFMP with respect to its effects on listed salmonids. In the event the consultation identifies either reasonable and prudent alternatives to address jeopardy concerns or reasonable and prudent measures to minimize incidental take, NMFS would exercise necessary authorities in coordination to the extent possible with the Council to put such additional alternatives or measures into place. After reviewing the available information, NMFS has concluded that, consistent with sections 7(a)(2) and 7(d) of the ESA, this action will not jeopardize any listed species, would not adversely modify any designated critical habitat, and will not result in any irreversible or irretrievable commitment of resources that would have the effect of foreclosing the formulation or implementation of any reasonable and prudent alternative measures.

List of Subjects in 50 CFR Part 660

Fisheries, Fishing, Indian Fisheries.

Dated: November 17, 2014.

Alan D. Risenhoover,

*Director, Office of Sustainable Fisheries,
National Marine Fisheries Service.*

For the reasons set out in the preamble, 50 CFR part 660 is amended as follows:

PART 660—FISHERIES OFF WEST COAST STATES

■ 1. The authority citation for part 660 continues to read as follows:

Authority: 16 U.S.C. 1801 *et seq.* and 16 U.S.C. 773 *et seq.*

■ 2. Table 2b to subpart C is revised to read as follows:

BILLING CODE 3510–22–P

Table 2b. To Part 660, Subpart C - 2014, and Beyond, Allocations by Species or Species Group. (Weights in Metric Tons)					
Species	Fishery HG	Allocations			
		Trawl		Non-trawl	
		%	Mt	%	Mt
Arrowtooth flounder	3,671	95%	3,487	5%	184
Bocaccio - S of 40°10' N. lat. a/	328.6	NA	79.0	NA	249.6
Canary rockfish a/ b/	101.5	NA	54.1	NA	47.4
Chilipepper - S of 40°10' N. Lat.	1,423	75%	1,067	25%	356
Cowcod - S of 40°10' N. lat. a/	2.9	NA	1.0	NA	1.9
Darkblotched rockfish c/	309.2	95%	293.7	5%	15.5
Dover sole	23,410	95%	22,240	5%	1,171
English sole	5,543	95%	5,266	5%	277
Lingcod					
N of 40°10' N. lat.	2,600	45%	1,170	55%	1,430
S of 40°10' N. lat.	1,054	45%	474	55%	580
Longnose skate a/	1,928	90%	1,735	10%	193
Longspine thornyhead					
N of 34°27' N. lat.	1,912	95%	1,816	5%	96
Minor shelf rockfish north a/	903	60.2%	543	39.8%	359
Minor slope rockfish north	1,098	81%	889	19%	209
Minor shelf rockfish south a/	668	12.2%	81	87.8%	587
Minor slope rockfish south	601	63%	379	37%	222
Other flatfish	4,682	90%	4,214	10%	468
Pacific cod	1,191	95%	1,131	5%	60
POP - N of 40°10' N. lat. d/	136.5	95%	129.7	5%	6.8
Pacific whiting	TBA	100%	TBA	0%	TBA
Petrable sole a/	2,418.0	NA	2383.0	NA	35.0
Sablefish					
N of 36° N. lat.	See Table 1c of this subpart				
S of 36° N. lat.	1,555.0	42%	653	58%	902
Shortspine thornyhead					
N of 34°27' N. lat.	1,466	95%	1,393	5%	73
S of 34°27' N. lat.	351	NA	50	NA	301
Splitnose - S of 40°10' N. Lat.	1,658	95%	1,575	5%	83
Starry Flounder	1,521	50%	761	50%	761
Widow e/	1,411	91%	1,284	9%	127
Yelloweye rockfish a/	12.2	NA	1.0	NA	11.2
Yellowtail - N of 40°10' N. Lat.	3,681	88%	3,239	12%	442

^a Allocations decided through the biennial specification process.

^b 13 mt of the total trawl allocation of canary rockfish is allocated to the at-sea whiting fisheries, as follows: 5.4 mt for the mothership fishery, and 7.6 mt for the catcher/processor fishery.

^c 9 percent (26.4 mt) of the total trawl allocation for darkblotched rockfish is allocated to the whiting fisheries, as follows: 11.1 mt for the shorebased IFQ fishery, 6.3 mt for the mothership fishery, and 9.0 mt for the catcher/processor fishery. Effective at 2000 hours local time on October 17, 2014, the amount of darkblotched rockfish available to the catcher/processor fishery was reduced by 3.0 mt, to 6.0 mt, and the amount available to the mothership fishery was raised by 3.0 mt, to 9.3 mt. The amount available to the catcher/processor fishery was subsequently raised back to 9.0 mt by distributing to the catcher/processor fishery 3.0 mt of the 18.4 mt initially deducted from the ACL to account for mortality in the

incidental open access fishery, consistent with § 660.60(c)(3)(ii). The tonnage calculated here for the whiting portion of the shorebased IFQ fishery contributes to the total shorebased trawl allocation, which is found at § 660.140(d)(1)(ii)(D).

^d 30 mt of the total trawl allocation for POP is allocated to the whiting fisheries, as follows: 12.6 mt for the shorebased IFQ fishery, 7.2 mt for the mothership fishery, and 10.2 mt for the catcher/processor fishery. The tonnage calculated here for the whiting portion of the shorebased IFQ fishery contributes to the total shorebased trawl allocation, which is found at § 660.140(d)(1)(ii)(D).

^e 500 mt of the total trawl allocation for widow rockfish is allocated to the whiting fisheries, as follows: 210 mt for the shorebased IFQ fishery, 120 mt for the mothership fishery, and 170 mt for the catcher/processor fishery. The tonnage calculated here for the whiting portion of the shorebased IFQ fishery contributes to the

total shorebased trawl allocation, which is found at § 660.140(d)(1)(ii)(D).

[FR Doc. 2014-27489 Filed 11-19-14; 8:45 am]

BILLING CODE 3510-22-C

DEPARTMENT OF COMMERCE**National Oceanic and Atmospheric Administration****50 CFR Part 679****[Docket No. 130925836–4174–02]****RIN 0648–XD630****Fisheries of the Exclusive Economic Zone Off Alaska; Dusky Rockfish in the Western Regulatory Area of the Gulf of Alaska**

AGENCY: National Marine Fisheries Service (NMFS), National Oceanic and Atmospheric Administration (NOAA), Commerce.

ACTION: Temporary rule; closure.

SUMMARY: NMFS is prohibiting directed fishing for dusky rockfish in the Western Regulatory Area of the Gulf of Alaska (GOA). This action is necessary to prevent exceeding the 2014 total allowable catch of dusky rockfish in the Western Regulatory Area of the GOA.

DATES: Effective 1200 hours, Alaska local time (A.l.t.), November 17, 2014, through 2400 hours, A.l.t., December 31, 2014.

FOR FURTHER INFORMATION CONTACT: Josh Keaton, 907–586–7228.

SUPPLEMENTARY INFORMATION: NMFS manages the groundfish fishery in the GOA exclusive economic zone according to the Fishery Management Plan for Groundfish of the Gulf of Alaska (FMP) prepared by the North Pacific Fishery Management Council under authority of the Magnuson-Stevens Fishery Conservation and Management Act. Regulations governing fishing by U.S. vessels in accordance with the FMP appear at subpart H of 50 CFR part 600 and 50 CFR part 679.

The 2014 total allowable catch (TAC) of dusky rockfish in the Western Regulatory Area of the GOA is 317 metric tons (mt) as established by the final 2014 and 2015 harvest specifications for groundfish of the (79 FR 12890, March 6, 2014).

In accordance with § 679.20(d)(1)(i), the Administrator, Alaska Region, NMFS (Regional Administrator), has determined that the 2014 TAC of dusky rockfish in the Western Regulatory Area of the GOA will soon be reached. Therefore, the Regional Administrator is establishing a directed fishing allowance of 267 mt, and is setting aside the remaining 50 mt as bycatch to support other anticipated groundfish fisheries. In accordance with § 679.20(d)(1)(iii), the Regional Administrator finds that this directed fishing allowance has been reached.

Consequently, NMFS is prohibiting directed fishing for dusky rockfish in the Western Regulatory Area of the GOA.

After the effective date of this closure the maximum retainable amounts at § 679.20(e) and (f) apply at any time during a trip.

Classification

This action responds to the best available information recently obtained from the fishery. The Assistant Administrator for Fisheries, NOAA (AA), finds good cause to waive the requirement to provide prior notice and opportunity for public comment pursuant to the authority set forth at 5 U.S.C. 553(b)(B) as such requirement is impracticable and contrary to the public interest. This requirement is impracticable and contrary to the public interest as it would prevent NMFS from responding to the most recent fisheries data in a timely fashion and would delay the closure of directed fishing for dusky rockfish in the Western Regulatory Area of the GOA. NMFS was unable to publish a notice providing time for public comment because the most recent, relevant data only became available as of November 14, 2014.

The AA also finds good cause to waive the 30-day delay in the effective date of this action under 5 U.S.C. 553(d)(3). This finding is based upon the reasons provided above for waiver of prior notice and opportunity for public comment.

This action is required by § 679.20 and is exempt from review under Executive Order 12866.

Authority: 16 U.S.C. 1801 *et seq.*

Dated: November 17, 2014.

Alan D. Risenhoover,
Director, Office of Sustainable Fisheries,
National Marine Fisheries Service.

[FR Doc. 2014–27475 Filed 11–17–14; 4:15 pm]

BILLING CODE 3510–22–P

DEPARTMENT OF COMMERCE**National Oceanic and Atmospheric Administration****50 CFR Part 679****[Docket No. 130925836–4174–02]****RIN 0648–XD631****Fisheries of the Exclusive Economic Zone Off Alaska; Pacific Ocean Perch in the Western Regulatory Area of the Gulf of Alaska**

AGENCY: National Marine Fisheries Service (NMFS), National Oceanic and

Atmospheric Administration (NOAA), Commerce.

ACTION: Temporary rule; closure.

SUMMARY: NMFS is prohibiting directed fishing for Pacific ocean perch in the Western Regulatory Area of the Gulf of Alaska (GOA). This action is necessary to prevent exceeding the 2014 total allowable catch of Pacific ocean perch in the Western Regulatory Area of the GOA.

DATES: Effective 1200 hours, Alaska local time (A.l.t.), November 17, 2014, through 2400 hours, A.l.t., December 31, 2014.

FOR FURTHER INFORMATION CONTACT: Josh Keaton, 907–586–7228.

SUPPLEMENTARY INFORMATION: NMFS manages the groundfish fishery in the GOA exclusive economic zone according to the Fishery Management Plan for Groundfish of the Gulf of Alaska (FMP) prepared by the North Pacific Fishery Management Council under authority of the Magnuson-Stevens Fishery Conservation and Management Act. Regulations governing fishing by U.S. vessels in accordance with the FMP appear at subpart H of 50 CFR part 600 and 50 CFR part 679.

The 2014 total allowable catch (TAC) of Pacific ocean perch in the Western Regulatory Area of the GOA is 2,399 metric tons (mt) as established by the final 2014 and 2015 harvest specifications for groundfish of the (79 FR 12890, March 6, 2014).

In accordance with § 679.20(d)(1)(i) and (ii)(B), the Administrator, Alaska Region, NMFS (Regional Administrator), has determined that the 2014 TAC of Pacific ocean perch in the Western Regulatory Area of the GOA will be taken as incidental catch in directed fisheries for other species. Therefore, the Regional Administrator is establishing a directed fishing allowance of 2,300 mt, and is setting aside 99 mt as bycatch to support other anticipated groundfish fisheries. In accordance with § 679.20(d)(1)(iii), the Regional Administrator finds that this directed fishing allowance has been reached. Consequently, NMFS is prohibiting directed fishing for Pacific ocean perch in the Western Regulatory Area of the GOA.

After the effective date of this closure the maximum retainable amounts at § 679.20(e) and (f) apply at any time during a trip.

Classification

This action responds to the best available information recently obtained from the fishery. The Assistant Administrator for Fisheries, NOAA

(AA), finds good cause to waive the requirement to provide prior notice and opportunity for public comment pursuant to the authority set forth at 5 U.S.C. 553(b)(B) as such requirement is impracticable and contrary to the public interest. This requirement is impracticable and contrary to the public interest as it would prevent NMFS from responding to the most recent fisheries data in a timely fashion and would delay the closure of directed fishing for Pacific ocean perch in the Western Regulatory Area of the GOA. NMFS was unable to publish a notice providing time for public comment because the most recent, relevant data only became available as of November 14, 2014.

The AA also finds good cause to waive the 30-day delay in the effective date of this action under 5 U.S.C. 553(d)(3). This finding is based upon the reasons provided above for waiver of prior notice and opportunity for public comment.

This action is required by § 679.20 and is exempt from review under Executive Order 12866.

Authority: 16 U.S.C. 1801 *et seq.*

Dated: November 17, 2014.

Alan D. Risenhoover,

*Director, Office of Sustainable Fisheries,
National Marine Fisheries Service.*

[FR Doc. 2014-27496 Filed 11-17-14; 4:15 pm]

BILLING CODE 3510-22-P

DEPARTMENT OF COMMERCE

National Oceanic and Atmospheric Administration

50 CFR Part 679

[Docket No. 130925836-4174-02]

RIN 0648-XD632

Fisheries of the Exclusive Economic Zone Off Alaska; Northern Rockfish in the Western Regulatory Area of the Gulf of Alaska

AGENCY: National Marine Fisheries Service (NMFS), National Oceanic and

Atmospheric Administration (NOAA), Commerce.

ACTION: Temporary rule; closure.

SUMMARY: NMFS is prohibiting directed fishing for northern rockfish in the Western Regulatory Area of the Gulf of Alaska (GOA). This action is necessary to prevent exceeding the 2014 total allowable catch of northern rockfish in the Western Regulatory Area of the GOA.

DATES: Effective 1200 hours, Alaska local time (A.l.t.), November 17, 2014, through 2400 hours, A.l.t., December 31, 2014.

FOR FURTHER INFORMATION CONTACT: Josh Keaton, 907-586-7269.

SUPPLEMENTARY INFORMATION: NMFS manages the groundfish fishery in the GOA exclusive economic zone according to the Fishery Management Plan for Groundfish of the Gulf of Alaska (FMP) prepared by the North Pacific Fishery Management Council under authority of the Magnuson-Stevens Fishery Conservation and Management Act. Regulations governing fishing by U.S. vessels in accordance with the FMP appear at subpart H of 50 CFR part 600 and 50 CFR part 679.

The 2014 total allowable catch (TAC) of northern rockfish in the Western Regulatory Area of the GOA is 1,305 metric tons (mt) as established by the final 2014 and 2015 harvest specifications for groundfish of the (79 FR 12890, March 6, 2014).

In accordance with § 679.20(d)(1)(i), the Administrator, Alaska Region, NMFS (Regional Administrator), has determined that the 2014 TAC of northern rockfish in the Western Regulatory Area of the GOA will be soon be reached. Therefore, the Regional Administrator is establishing a directed fishing allowance of 1,255 mt, and is setting aside 50 mt as bycatch to support other anticipated groundfish fisheries. In accordance with § 679.20(d)(1)(iii), the Regional Administrator finds that this directed fishing allowance has been reached. Consequently, NMFS is

prohibiting directed fishing for northern rockfish in the Western Regulatory Area of the GOA.

After the effective date of this closure the maximum retainable amounts at § 679.20(e) and (f) apply at any time during a trip.

Classification

This action responds to the best available information recently obtained from the fishery. The Assistant Administrator for Fisheries, NOAA (AA), finds good cause to waive the requirement to provide prior notice and opportunity for public comment pursuant to the authority set forth at 5 U.S.C. 553(b)(B) as such requirement is impracticable and contrary to the public interest. This requirement is impracticable and contrary to the public interest as it would prevent NMFS from responding to the most recent fisheries data in a timely fashion and would delay the closure of directed fishing for northern rockfish in the Western Regulatory Area of the GOA. NMFS was unable to publish a notice providing time for public comment because the most recent, relevant data only became available as of November 14, 2014.

The AA also finds good cause to waive the 30-day delay in the effective date of this action under 5 U.S.C. 553(d)(3). This finding is based upon the reasons provided above for waiver of prior notice and opportunity for public comment.

This action is required by § 679.20 and is exempt from review under Executive Order 12866.

Authority: 16 U.S.C. 1801 *et seq.*

Dated: November 17, 2014.

Alan D. Risenhoover,

*Director, Office of Sustainable Fisheries,
National Marine Fisheries Service.*

[FR Doc. 2014-27498 Filed 11-17-14; 4:15 pm]

BILLING CODE 3510-22-P

Proposed Rules

Federal Register

Vol. 79, No. 224

Thursday, November 20, 2014

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.

NUCLEAR REGULATORY COMMISSION

10 CFR Part 20

[NRC–2009–0279]

RIN 3150–AJ29

Radiation Protection

AGENCY: Nuclear Regulatory Commission.

ACTION: Advance notice of proposed rulemaking; extension of comment period.

SUMMARY: On July 25, 2014, the U.S. Nuclear Regulatory Commission (NRC) published for comment an advance notice of proposed rulemaking (ANPR) to obtain input from stakeholders on the development of a draft regulatory basis. The draft regulatory basis would identify potential changes to the NRC's current radiation protection regulations. The potential changes, if implemented, would achieve a closer alignment between the NRC's radiation protection regulations and the recommendations of the International Commission on Radiological Protection (ICRP) contained in ICRP Publication 103 (2007). The public comment period was originally scheduled to close on November 24, 2014. The NRC has decided to extend the public comment period on the ANPR to provide additional time for members of the public and other stakeholders to develop and submit their comments.

DATES: The comment period in the notice published on July 25, 2014 (79 FR 43284) is extended. Comments should be filed no later than March 24, 2015. Comments received after this date will be considered if it is practical to do so, but the Commission is able to ensure consideration only for comments received on or before this date.

ADDRESSES: You may submit comments by any of the following methods (unless this document describes a different method for submitting comments on a specific subject):

- *Federal Rulemaking Web site:* Go to <http://www.regulations.gov> and search for Docket ID NRC–NRC–2009–0279. Address questions about NRC dockets to Carol Gallagher; telephone: 301–287–3422; email: Carol.Gallagher@nrc.gov. For technical questions, contact the individual listed in the **FOR FURTHER INFORMATION CONTACT** section of this document.

- *Email comments to:* Rulemaking.Comments@nrc.gov. If you do not receive an automatic email reply confirming receipt, then contact us at 301–415–1677.

- *Fax comments to:* Secretary, U.S. Nuclear Regulatory Commission at 301–415–1101.

- *Mail comments to:* Secretary, U.S. Nuclear Regulatory Commission, Washington, DC 20555–0001, ATTN: Rulemakings and Adjudications Staff.

- *Hand deliver comments to:* 11555 Rockville Pike, Rockville, Maryland 20852, between 7:30 a.m. and 4:15 p.m. (Eastern Time) Federal workdays; telephone: 301–415–1677. For additional direction on obtaining information and submitting comments, see “Obtaining Information and Submitting Comments” in the **SUPPLEMENTARY INFORMATION** section of this document.

- *Comments that contain proprietary or sensitive information:* Please contact the individual listed in the **FOR FURTHER INFORMATION CONTACT** section of this document to determine the most appropriate method for submitting these comments.

FOR FURTHER INFORMATION CONTACT: Cardelia Maupin, Office of Nuclear Material Safety and Safeguards, U.S. Nuclear Regulatory Commission, Washington, DC 20555–0001; telephone: 301–415–2312; email: Cardelia.Maupin@nrc.gov.

SUPPLEMENTARY INFORMATION:

I. Obtaining Information and Submitting Comments

A. Obtaining Information

Please refer to Docket ID NRC–2009–0279 when contacting the NRC about the availability of information regarding this document. You may obtain publicly-available information related to this document by any of the following methods:

- *Federal Rulemaking Web site:* Go to <http://www.regulations.gov> and search for Docket ID NRC–2009–0279.

- *NRC's Agencywide Documents Access and Management System (ADAMS):* You may obtain publicly available documents online in the ADAMS Public Documents collection at <http://www.nrc.gov/reading-rm/adams.html>. To begin the search, select “ADAMS Public Documents” and then select “Begin Web-based ADAMS Search.” For problems with ADAMS, please contact the NRC's Public Document Room (PDR) reference staff at 1–800–397–4209, 301–415–4737, or by email to pdr.resource@nrc.gov. The ANPR document is available in ADAMS under Accession No. ML14183B023.

- *NRC's PDR:* You may examine and purchase copies of public documents at the NRC's PDR, Room O1–F21, One White Flint North, 11555 Rockville Pike, Rockville, Maryland 20852.

B. Submitting Comments

Please include Docket ID NRC–2009–0279 in the subject line of your comment submission, in order to ensure that the NRC is able to make your comment submission available to the public in this docket.

The NRC cautions you not to include identifying or contact information that you do not want to be publicly disclosed in your comment submission. The NRC will post all comment submissions at <http://www.regulations.gov> as well as enter the comment submissions into ADAMS.

The NRC does not routinely edit comment submissions to remove identifying or contact information.

If you are requesting or aggregating comments from other persons for submission to the NRC, then you should inform those persons not to include identifying or contact information that they do not want to be publicly disclosed in their comment submission. Your request should state that the NRC does not routinely edit comment submissions to remove such information before making the comment submissions available to the public or entering the comment submissions into ADAMS.

II. Background

On July 25, 2014 (79 FR 43284), the NRC published for comment an ANPR to obtain input from stakeholders on the development of a draft regulatory basis. The draft regulatory basis would identify potential changes to the NRC's current radiation protection regulations.

The potential changes, if implemented, would achieve a closer alignment between the NRC's radiation protection regulations and the recommendations in ICRP Publication 103 (2007).

The ANPR identifies specific questions and issues with respect to a possible revision of NRC's radiation protection requirements. Stakeholder comments, including responses to the specific questions, will be considered by the NRC staff when it develops the draft regulatory basis. The public comment period was originally scheduled to close on November 24, 2014. The NRC has decided to extend the public comment period to allow more time for members of the public and other stakeholders to develop and submit their comments. The deadline for submitting comments is extended to March 24, 2015.

Dated at Rockville, Maryland, this 14th day of November 2014.

For the Nuclear Regulatory Commission.

Laura A. Dudes,

Director Division of Material Safety, State, Tribal and Rulemaking Programs, Office of Nuclear Material Safety and Safeguards.

[FR Doc. 2014-27519 Filed 11-19-14; 8:45 am]

BILLING CODE 7590-01-P

DEPARTMENT OF ENERGY

10 CFR Part 431

[Docket No. EERE-2013-BT-STD-0030]

RIN 1904-AD01

Energy Conservation Standards for Commercial Packaged Boilers: Public Meeting and Availability of the Preliminary Technical Support Document

AGENCY: Office of Energy Efficiency and Renewable Energy, Department of Energy.

ACTION: Notice of public meeting and availability of preliminary technical support document.

SUMMARY: The U.S. Department of Energy (DOE) will hold a public meeting to discuss and receive comments about the preliminary analysis it has conducted for purposes of considering amended energy conservation standards for commercial packaged boilers. The meeting will cover four topics: The analytical framework, models, and tools that DOE is using to evaluate potential standards for this equipment; the results of preliminary analyses performed by DOE for this equipment; potential energy conservation standard levels derived from these analyses that DOE could consider for this equipment; and any other issues relevant to the

development of amended energy conservation standards for commercial packaged boilers. In addition, DOE encourages written comments about these subjects.

DATES: *Meeting:* DOE will hold a public meeting on December 9, 2014, from 9 a.m. to 3:30 p.m., in Washington, DC. DOE must receive requests to speak at the meeting before 4 p.m. ET, December 1, 2014. DOE must receive a signed original and an electronic copy of any statement to be given at the public meeting before 4 p.m. ET, November 24, 2014.

Comments: DOE will accept comments, data, and other information regarding this rulemaking before or after the public meeting, but no later than January 20, 2015. See section IV, "Public Participation," of this notice of public meeting (NOPM) for details.

ADDRESSES: To inform interested parties and to facilitate this process, DOE has prepared a preliminary technical support document (TSD) that is available on the DOE Web site at: http://www1.eere.energy.gov/buildings/appliance_standards/rulemaking.aspx/ruleid/79. Additionally, DOE plans to allow for participation in the public meeting via webinar. The public meeting will be held at the U.S. Department of Energy, Forrestal Building, Room 8E-089, 1000 Independence Avenue SW., Washington, DC 20585-0121. All participants will undergo security processing upon building entry. Any participant with a laptop computer or similar device (e.g., tablets), must undergo additional screening. To attend via webinar, please register here: <https://www1.gotomeeting.com/register/440130353>.

Interested persons may submit comments, identified by docket number EERE-2013-BT-STD-0030 and/or Regulation Identification Number (RIN) 1904-AD01, by any of the following methods:

- *Federal eRulemaking Portal:* www.regulations.gov. Follow the instructions for submitting comments.
- *Email:* PkgdBoilers2013STD0030@ee.doe.gov. Include the docket number EERE-2013-BT-STD-0030 and/or RIN 1904-AD01 in the subject line of the message.
- *Postal Mail:* Ms. Brenda Edwards, U.S. Department of Energy, Building Technologies Office, Mailstop EE-5B, 1000 Independence Avenue SW., Washington, DC 20585-0121. Comments, data, relevant documents and information may be submitted on printed paper or compact disc (CD) via postal mail. However, such will be

necessarily delayed, and may be damaged, during the postal mail screening process.

- *Hand Delivery/Courier:* Comments, data, relevant documents and information may be submitted in person or by courier. If possible, please submit all items on a CD, in which case it is not necessary to include printed copies. Contact Ms. Brenda Edwards, U.S. Department of Energy, Building Technologies Program, 950 L'Enfant Plaza SW., Suite 600, Washington, DC 20024. Telephone (202) 586-2945.

Docket: The commercial packaged boilers docket (EERE-2013-BT-STD-0030) is available for review at www.regulations.gov. It includes relevant **Federal Register** notices, the Framework Document, public comments, public meeting attendee lists and transcripts, and other relevant documents/materials. All documents in the docket are listed in the www.regulations.gov index. However, not all documents listed in the index may be publicly available, such as information that is exempt from public disclosure. The www.regulations.gov Web page contains instructions on how to access all documents in the docket, including public comments.

Also, the DOE Web page for commercial packaged boilers (which includes additional information about existing standards and test procedures, and the history and impacts of previous DOE regulatory actions for this category of equipment) may be viewed at http://www1.eere.energy.gov/buildings/appliance_standards/product.aspx/productid/74, and contains links to the aforementioned docket.

For detailed instructions on submitting comments and additional information on the rulemaking process, see section IV, "Public Participation," of this document. For further information on how to submit a comment, review other public comments and the docket, or participate in the public meeting, contact Ms. Brenda Edwards at (202) 586-2945 or by email: Brenda.Edwards@ee.doe.gov.

FOR FURTHER INFORMATION CONTACT: Mr. James Raba, U.S. Department of Energy, Office of Energy Efficiency and Renewable Energy, Building Technologies, EE-5B, 1000 Independence Avenue SW., Washington, DC 20585-0121. Telephone: (202) 586-8654. Email: Jim.Raba@ee.doe.gov.

Mr. Eric Stas, U.S. Department of Energy, Office of the General Counsel, GC-33, 1000 Independence Avenue SW., Washington, DC 20585-0121. Telephone: (202) 586-9507. Email: Eric.Stas@hq.doe.gov.

For information on how to submit or review public comments and on how to participate in the public meeting, contact Ms. Brenda Edwards, U.S. Department of Energy, Office of Energy Efficiency and Renewable Energy, Building Technologies, EE-5B, 1000 Independence Avenue SW., Washington, DC 20585-0121. Telephone: (202) 586-2945. Email: Brenda.Edwards@ee.doe.gov.

SUPPLEMENTARY INFORMATION:

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I. Authority

Title III, Part C¹ of the Energy Policy and Conservation Act of 1975 (EPCA), Public Law 94-163 (42 U.S.C. 6311-6317, as codified), added by Public Law 95-619, Title IV, § 441(a), sets forth a variety of provisions designed to improve energy efficiency. It established the “Energy Conservation Program for Certain Industrial Equipment,” a program covering certain commercial and industrial equipment (hereafter referred to as “covered equipment”), which includes the commercial packaged boilers that are the subject of this rulemaking.² Part A-1 specifically includes definitions (42 U.S.C. 6311), energy conservation standards (42 U.S.C. 6313), test procedures (42 U.S.C. 6314), labeling provisions (42 U.S.C. 6315), and the authority to require compliance information and certification reports from manufacturers of covered equipment (42 U.S.C. 6316).

EPCA established Federal energy conservation standards for commercial heating, air-conditioning, and water-heating equipment that generally

correspond to the levels set in the American Society of Heating, Refrigeration, and Air-Conditioning Engineers (ASHRAE) Standard 90.1, “Energy Standard for Buildings Except Low-Rise Residential Buildings,” including commercial packaged boilers.³ (42 U.S.C. 6313(a)(4)) In particular, the statute sets standards for small, large, and very large commercial package air-conditioning and heating equipment, packaged terminal air conditioners, packaged terminal heat pumps, warm air furnaces, packaged boilers, storage water heaters, instantaneous water heaters, and unfired hot water storage tanks (collectively “ASHRAE equipment”). (42 U.S.C. 6313(a)) DOE subsequently codified the statutory energy conservation standards for commercial packaged boilers in DOE’s regulations under subpart E of Title 10 of the Code of Federal Regulations (CFR), Part 431 (10 CFR Part 431). The standards for commercial packaged boilers specifically can be found at 10 CFR 431.87.

EPCA directs DOE to consider amending the existing Federal energy conservation standard for each type of covered ASHRAE equipment whenever ASHRAE amends the efficiency levels in Standard 90.1. (42 U.S.C. 6313(a)(6)(A)) For each type of listed equipment, EPCA directs that if ASHRAE amends Standard 90.1, DOE must adopt amended standards at the new ASHRAE efficiency level, unless clear and convincing evidence supports a determination that adoption of a more-stringent level would produce significant additional energy savings and would be technologically feasible and economically justified. (42 U.S.C. 6313(a)(6)(A)(ii)) If DOE decides to adopt as a national standard the efficiency levels specified in the amended ASHRAE Standard 90.1, DOE must establish such standard not later than 18 months after publication of the amended industry standard. (42 U.S.C. 6313(a)(6)(A)(ii)(I)) However, if DOE determines that a more-stringent standard is justified, then it must establish such more-stringent standard not later than 30 months after publication of the amended ASHRAE Standard 90.1. (42 U.S.C. 6313(a)(6)(B)(i))

In the event that ASHRAE does not act to amend Standard 90.1 (thereby triggering DOE to conduct an amended standards rulemaking), EPCA provides an alternative statutory mechanism for initiating such review. More specifically, EPCA requires that every

six years, the Secretary of Energy (Secretary) shall consider amending the energy conservation standards for covered commercial equipment and shall publish either a notice of determination that those standards do not need to be amended, or a notice of proposed rulemaking for more-stringent energy efficiency standards. (42 U.S.C. 6313(a)(6)(C))

On December 19, 2007, the Energy Independence and Security Act of 2007 (EISA 2007), Public Law 110-140, was signed into law, which further revised the energy conservation standards for commercial and industrial equipment. EISA 2007 amended EPCA, in relevant part, to require that not later than six years after issuance of any final rule establishing or amending a standard, the Secretary of Energy shall publish either a notice of determination that the standards for a given type of equipment do not need to be amended, or a notice of proposed rulemaking (NOPR) including new proposed standards. (42 U.S.C. 6313(a)(6)(C)(i)) This amendment was further modified by the American Energy Manufacturing Technical Corrections Act (AEMTCA), Public Law 112-210, which was signed into law on December 18, 2012. AEMTCA, amended EPCA to require that “every” six years, the Secretary of Energy shall take action to determine whether or not more-stringent standards are needed for ASHRAE equipment. (42 U.S.C. 6313(a)(6)(C)(i)) In addition, AEMTCA also amended EPCA so as to trigger DOE to review the energy savings potential of any ASHRAE/IES Standard 90.1 amendment that changes the standard levels or design requirements applicable to a given type of equipment. (42 U.S.C. 6313(a)(6)(A)(i))

Pursuant to EPCA, DOE’s energy conservation program for covered equipment consists essentially of four parts: (1) Testing; (2) labeling; (3) the establishment of Federal energy conservation standards; and (4) compliance certification and enforcement procedures. Subject to certain criteria and conditions, DOE has authority, as discussed above, to adopt amended energy conservation standards for commercial packaged boilers. In addition, DOE is required to develop test procedures to measure the energy efficiency, energy use, or estimated annual operating cost of covered equipment. (42 U.S.C. 6314(a)(2)) Manufacturers of covered equipment must use the prescribed DOE test procedure as the basis for certifying to DOE that their equipment comply with the applicable energy conservation standards adopted under EPCA and when making representations to the

¹ For editorial reasons, upon codification in the United States Code (U.S.C.), Part C was redesignated Part A-1.

² All references to EPCA in this document refer to the statute as amended through the American Energy Manufacturing Technical Corrections Act (AEMTCA), Public Law 112-210 (Dec. 18, 2012).

³ For more information, see www.ashrae.org.

public regarding the energy use or efficiency of such equipment. (42 U.S.C. 6314(d)(1)) Similarly, DOE must use these test procedures to determine whether the equipment comply with standards adopted pursuant to EPCA. The DOE test procedures for commercial packaged boilers currently appear at 10 CFR 431.86.

When setting standards for the ASHRAE equipment addressed by today's notice, EPCA, as amended by AEMTCA, prescribes certain statutory criteria for DOE to consider. See generally 42 U.S.C. 6313(a)(6)(A)–(D). Any amended standard for covered equipment more stringent than the level contained in ASHRAE Standard 90.1 must be designed to achieve the maximum improvement in energy efficiency that is technologically feasible and economically justified. (42 U.S.C. 6313(a)(6)(A)(ii)(II)) Furthermore, DOE may not adopt any more-stringent standard that would not result in the significant additional conservation of energy. *Id.* In deciding whether a proposed standard is economically justified, DOE must determine whether the benefits of the standard exceed its burdens. DOE must make this determination after receiving comments on the proposed standard, and by considering, to the maximum extent practicable, the following seven factors:

1. The economic impact of the standard on manufacturers and consumers of products subject to the standard;
2. The savings in operating costs throughout the estimated average life of the covered products in the type (or class) compared to any increase in the price, initial charges, or maintenance expenses for the covered equipment which are likely to result from the standard;
3. The total projected amount of energy savings likely to result directly from the standard;

4. Any lessening of the utility or the performance of the covered product likely to result from the standard;

5. The impact of any lessening of competition, as determined in writing by the Attorney General, that is likely to result from the standard;

6. The need for national energy conservation; and

7. Other factors the Secretary of Energy considers relevant.

(42 U.S.C. 6313(a)(6)(B)(ii)(I)–(VII))

EPCA, as codified, also contains what is known as an “anti-backsliding” provision, which prevents the Secretary of Energy from prescribing any amended standard that either increases the maximum allowable energy use or decreases the minimum required energy efficiency of a type of covered equipment. (42 U.S.C. 6313(a)(6)(B)(iii)(I)) Also, the Secretary may not prescribe an amended or new standard if interested persons have established by a preponderance of the evidence that the standard is likely to result in the unavailability in the United States of any covered equipment type (or class) of performance characteristics (including reliability, features, sizes, capacities, and volumes) that are substantially the same as those generally available in the United States. (42 U.S.C. 6313(a)(6)(B)(iii)(II))

Before proposing a standard, DOE typically seeks public input about the analytical framework, models, and tools that it will use to evaluate standards for the product or equipment at issue and the results of preliminary analyses DOE performed for that product or equipment. This NOPM announces the availability of the preliminary Technical Support Document (TSD), which details the preliminary analyses, discusses the comments DOE received from interested parties about the Framework Document, and summarizes the preliminary results of DOE's analyses. In addition, DOE is announcing a public meeting to solicit

comments, data, and other information from interested parties about its analytical framework, models, and preliminary results.

II. History of Energy Conservation Standards Rulemaking for Commercial Packaged Boilers

A. Background

The Energy Policy Act of 1992 (EPACT 1992), Public Law 102–486, amended EPCA to add commercial packaged boilers as a type of covered equipment. (42 U.S.C. 6311(1)(J)) EPACT 1992 also amended EPCA with respect to packaged boilers by providing a definition, as well as provisions setting forth applicable requirements for energy conservation standards, test procedures, labeling, and compliance certification. (42 U.S.C. 6311(11)(B); 6313(a)(4); 6314(a)(4); 6315(e); 6316(b))

Most recently, DOE amended its energy conservation standards for commercial packaged boilers through a final rule published in the **Federal Register** (FR) on July 22, 2009 (hereafter referred to as the “July 2009 final rule”). 74 FR 36312. More specifically, the July 2009 final rule updated the energy conservation standards for commercial packaged boilers to correspond to the levels in the 2007 revision of ASHRAE Standard 90.1 (*i.e.*, ASHRAE Standard 90.1–2007). *Id.* at 36355–56 (*codified at* 10 CFR 431.87). Compliance with the amended standards was required beginning on March 2, 2012. These levels are shown in Table II.1 below. Also in the July 2009 final rule, DOE again followed ASHRAE's approach in Standard 90.1–2007 and adopted a second tier of energy conservation standards for two classes of commercial packaged boilers, which are shown in Table II.2 below. Compliance with the latter standards will be required beginning on March 2, 2022. *Id.*

TABLE II.1—ENERGY CONSERVATION STANDARDS FOR COMMERCIAL PACKAGED BOILERS MANUFACTURED ON OR AFTER MARCH 2, 2012

Equipment type	Subcategory	Size category (input)	Efficiency level—Effective date: March 2, 2012*
Hot Water Commercial Packaged Boilers	Gas-fired	≥300,000 Btu/h and ≤2,500,000 Btu/h	80.0% E _T .
Hot Water Commercial Packaged Boilers	Gas-fired	>2,500,000 Btu/h	82.0% E _C .
Hot Water Commercial Packaged Boilers	Oil-fired	≥300,000 Btu/h and ≤2,500,000 Btu/h	82.0% E _T .
Hot Water Commercial Packaged Boilers	Oil-fired	>2,500,000 Btu/h	84.0% E _C .
Steam Commercial Packaged Boilers	Gas-fired—all, except natural draft	≥300,000 Btu/h and ≤2,500,000 Btu/h	79.0% E _T .
Steam Commercial Packaged Boilers	Gas-fired—all, except natural draft	>2,500,000 Btu/h	79.0% E _T .
Steam Commercial Packaged Boilers	Gas-fired—natural draft	≥300,000 Btu/h and ≤2,500,000 Btu/h	77.0% E _T .
Steam Commercial Packaged Boilers	Gas-fired—natural draft	>2,500,000 Btu/h	77.0% E _T .

TABLE II.1—ENERGY CONSERVATION STANDARDS FOR COMMERCIAL PACKAGED BOILERS MANUFACTURED ON OR AFTER MARCH 2, 2012—Continued

Equipment type	Subcategory	Size category (input)	Efficiency level—Effective date: March 2, 2012 *
Steam Commercial Packaged Boilers	Oil-fired	≥300,000 Btu/h and ≤2,500,000 Btu/h	81.0% E _T .
Steam Commercial Packaged Boilers	Oil-fired	>2,500,000 Btu/h	81.0% E _T .

* E_T means “thermal efficiency.” E_C means “combustion efficiency.”

TABLE II.2—ENERGY CONSERVATION STANDARDS FOR COMMERCIAL PACKAGED BOILERS MANUFACTURED ON OR AFTER MARCH 2, 2022

Equipment type	Subcategory	Size category (input)	Efficiency level—Effective date: March 2, 2022
Steam Commercial Packaged Boilers	Gas-fired—natural draft	≥300,000 Btu/h and ≤2,500,000 Btu/h	79.0% E _T .
Steam Commercial Packaged Boilers	Gas-fired—natural draft	>2,500,000 Btu/h	79.0% E _T .

DOE is initiating this rulemaking pursuant to 42 U.S.C. 6313(a)(6)(C), which requires that every six years, DOE must publish either: (1) A notice of the determination that standards for the equipment do not need to be amended, or (2) a NOPR including proposed energy conservation standards. As noted above, DOE’s last final rule for commercial packaged boilers was published on July 22, 2009, so as a result, DOE is required to act to publish one of the above two documents by July 22, 2015. If DOE publishes a NOPR, the agency must proceed to a final rule not later than two years after the NOPR is issued. (42 U.S.C. 6313(a)(6)(C)(iii)(I)) If DOE publishes a determination that the standards do not need to be amended, the agency must make a new determination regarding the need for amended standards not later than three years after the last determination. (42 U.S.C. 6313(a)(6)(C)(iii)(II)) Once completed, this rulemaking will satisfy DOE’s statutory obligation under 42 U.S.C. 6313(a)(6)(C).⁴

In addition, DOE notes that on August 13, 2013, DOE published a proposed determination of coverage for natural draft commercial packaged boilers in order to confirm its authority to regulate those products. 78 FR 49202. Because there is currently no statutory definition of “natural draft commercial packaged boiler,” DOE proposed to define this equipment as follows: “*Natural draft commercial packaged boiler* means a commercial packaged boiler designed to operate with negative pressure in the

firebox and in the flue connection created by a chimney or the height of the unit itself, up to the draft control device. Such boilers do not require mechanical drafting equipment to vent combustion gases, but may include mechanical devices such as mechanical flue or stack dampers to limit the heat losses through the flue vent during off-cycle.” DOE plans to include natural draft commercial packaged boilers within the scope of this rulemaking if the outcome of the proposed determination is positive. Accordingly, DOE has considered natural draft equipment for this preliminary analysis.

Lastly, DOE is also currently conducting a separate test procedure rulemaking to consider amended test procedures for commercial packaged boilers. On February 20, 2014, DOE published a request for information (RFI) in the **Federal Register** that sought comments and information from stakeholders on several issues pertaining to the commercial packaged boiler test procedure. 79 FR 9643. Any amended standard adopted as part of this rulemaking would ultimately be based on the updates to the test procedure (if any) that are adopted in the test procedure rulemaking.

B. Current Rulemaking Process

In initiating this rulemaking, DOE prepared a Framework Document, “Energy Conservation Standards Rulemaking Framework Document for Commercial Packaged Boilers,” which describes the procedural and analytical approaches DOE anticipates using to evaluate energy conservation standards for commercial packaged boilers. DOE published a notice that announced both the availability of the Framework

Document and a public meeting to discuss the proposed analytical framework for the rulemaking. That notice also invited written comments from the public. 78 FR 54197 (Sept. 3, 2013). The Framework Document is available at: http://www1.eere.energy.gov/buildings/appliance_standards/rulemaking.aspx/ruleid/79.

DOE held a public meeting on October 1, 2013, at which it described the various analyses DOE would conduct as part of the rulemaking, such as the engineering analysis, the life-cycle cost (LCC) and payback period (PBP) analyses, and the national impact analysis (NIA). Representatives of manufacturers, trade associations, environmental and energy efficiency advocates, and other interested parties attended the meeting. The participants discussed the following major topics, among others: (1) The rulemaking scope (2) test procedures for commercial packaged boilers; and (3) various issues related to the planned analyses of amended energy conservation standards.

Comments received since publication of the Framework Document have helped DOE identify and resolve issues related to the preliminary analyses. Chapter 2 of the preliminary TSD summarizes and addresses the comments received in response to the Framework Document.

III. Summary of the Analyses Performed by DOE

For the commercial packaged boiler equipment covered in this rulemaking, DOE conducted in-depth technical analyses in the following areas: (1) Engineering; (2) markups to determine

⁴ DOE notes that since DOE’s last final rule in 2009, ASHRAE has not acted to amend Standard 90.1 in terms of commercial packaged boilers, as would trigger DOE rulemaking action under 42 U.S.C. 6313(a)(6)(A).

equipment price; (3) energy use; (4) life-cycle cost and payback period; and (5) national impacts. The preliminary TSD that presents the methodology and results of each of these analyses is available at http://www1.eere.energy.gov/buildings/appliance_standards/rulemaking.aspx/ruleid/79.

DOE also conducted, and has included in the preliminary TSD, several other analyses that support the major analyses or are preliminary analyses that will be expanded upon for a NOPR if DOE determines that amended energy conservation standards are technologically feasible, economically justified, and would save a significant amount of energy, based on the information available to DOE. These analyses include: (1) The market and technology assessment; (2) the screening analysis, which contributes to the engineering analysis; and (3) the shipments analysis, which contributes to the LCC and PBP analysis and NIA. In addition to these analyses, DOE has begun preliminary work on the manufacturer impact analysis and has identified the methods to be used for the LCC consumer subgroup analysis, the emissions analysis, the employment impact analysis, the regulatory impact analysis, and the utility impact analysis. DOE will expand on these analyses in the NOPR.

A. Engineering Analysis

The engineering analysis establishes the relationship between the manufacturer selling price and efficiency levels of the equipment that DOE is evaluating as potential energy conservation standards. This relationship serves as the basis for cost-benefit calculations for individual consumers, manufacturers, and the Nation. The engineering analysis identifies representative baseline equipment, which is the starting point for analyzing technologies that provide energy efficiency improvements. "Baseline equipment" refers to a model or models having features and technologies typically found in minimally-efficient equipment currently available on the market and, for equipment already subject to energy conservation standards, a model that just meets the current standard. After identifying the baseline models, DOE estimated manufacturer selling prices by using a consistent methodology and pricing scheme that includes material costs and manufacturer markups. DOE used these inputs to develop manufacturer selling prices for the baseline and more-efficient designs. Later, in the markups analysis to

determine the installed price, DOE converts these manufacturer selling prices into installed prices. Chapter 5 of the preliminary TSD discusses the engineering analysis.

B. Markups To Determine Commercial Consumer Prices

DOE derives commercial consumer installed prices based on manufacturer markups, retailer markups, distributor markups, contractor markups (where appropriate), and sales taxes. In deriving these markups, DOE determines the major distribution channels for equipment sales, the markup associated with each party in each distribution channel, and the existence and magnitude of differences between markups for baseline equipment (baseline markups) and higher-efficiency equipment (incremental markups). DOE calculates both overall baseline and overall incremental markups based on the equipment markups at each step in each distribution channel. Chapter 6 of the preliminary TSD addresses the markups analysis.

C. Energy Use Analysis

The energy use analysis provides estimates of the annual energy consumption of commercial packaged boilers. The energy use analysis seeks to estimate the range of energy consumption of equipment that meets each of the efficiency levels considered in a given rulemaking as they are used in the field. DOE uses these values in the LCC and PBP analyses and in the NIA. Chapter 7 of the preliminary TSD addresses the energy use analysis.

D. Life-Cycle Cost and Payback Period Analyses

The LCC and PBP analyses determine the economic impact of potential standards on individual commercial consumers. The LCC is the total cost to the commercial consumer of purchasing, installing, and operating the considered commercial packaged boiler equipment over the course of its lifetime. The LCC analysis compares the LCCs of equipment designed to meet possible energy conservation standards with the LCC of the equipment likely to be installed in the absence of standards. DOE determines LCCs by considering: (1) Total installed cost to the purchaser (which consists of manufacturer selling price, distribution chain markups, sales taxes, and installation cost); (2) the operating cost of the equipment (energy cost and maintenance and repair cost); (3) equipment lifetime; and (4) a discount rate that reflects the real commercial consumer cost of capital

and puts the LCC in present-value terms. The PBP represents the number of years needed to recover the increase in purchase price (including installation cost) of higher-efficiency equipment through savings in the operating cost of the equipment. PBP is calculated by dividing the incremental increase in installed cost of the higher-efficiency equipment, compared to the baseline equipment, by the annual savings in operating costs. Chapter 8 of the preliminary TSD addresses the LCC and PBP analyses.

E. National Impact Analysis

The NIA estimates the national energy savings (NES) and the net present value (NPV) of total consumer costs and savings expected to result from amended standards at specific efficiency levels (referred to as candidate standard levels). DOE calculated NES and NPV for each candidate standard level for commercial packaged boilers as the difference between a base-case forecast (without amended standards) and the standards-case forecast (with standards). DOE determined national annual energy consumption by multiplying the number of units in use (by vintage) by the average unit energy consumption (also by vintage). Cumulative energy savings are the sum of the annual NES determined for the lifetime of the equipment shipped from 2019 to 2048. This 30-year analysis period begins in 2019, the expected first full year of compliance with the amended standards. The NPV is the sum over time of the discounted net savings each year, which consists of the difference between total operating cost savings and increases in total installed costs. Critical inputs to this analysis include shipments projections, estimated equipment lifetimes, equipment installed costs and operating costs, equipment annual energy consumption, the base case efficiency projection, and discount rates. Chapter 10 of the preliminary TSD addresses the NIA.

IV. Public Participation

DOE invites input from the public on all the topics described above. The preliminary analytical results are subject to revision following further review and input from the public. A complete and revised TSD will be made available upon issuance of a NOPR. The final rule establishing any amended energy conservation standards will contain the final analytical results and will be accompanied by a final rule TSD.

DOE encourages those who wish to participate in the public meeting to obtain the preliminary TSD from DOE's

Web site and to be prepared to discuss its contents. Once again, a copy of the preliminary TSD is available at: http://www1.eere.energy.gov/buildings/appliance_standards/rulemaking.aspx/ruleid/79. However, public meeting participants need not limit their comments to the topics identified in the preliminary TSD. DOE is also interested in receiving views concerning other relevant issues that participants believe would affect energy conservation standards for this equipment or that DOE should address in the NOPR.

Furthermore, DOE welcomes all interested parties, regardless of whether they participate in the public meeting, to submit in writing by January 20, 2015 comments, data, and other information on matters addressed in the preliminary TSD and on other matters relevant to consideration of energy conservation standards for commercial packaged boilers.

The public meeting will be conducted in an informal conference style. A court reporter will be present to record the proceedings. There shall be no discussion of proprietary information, costs or prices, market shares, or other commercial matters regulated by United States antitrust laws.

After the public meeting and the closing of the comment period, DOE will consider all timely-submitted comments and additional information obtained from interested parties, as well as information obtained through further analyses. Afterward, DOE will publish either a determination that the standards for commercial packaged boilers need not be amended or a NOPR proposing to amend those standards. The NOPR would include proposed energy conservation standards for the equipment covered by the rulemaking, and members of the public would be given an opportunity to submit written and oral comments on the proposed standards.

A. Attendance at the Public Meeting

The time and date of the public meeting are listed in the **DATES** and **ADDRESSES** sections at the beginning of this notice. The public meeting will be held at the U.S. Department of Energy, Forrestal Building, Room 4A-104, 1000 Independence Avenue SW., Washington, DC 20585-0121. To attend the public meeting, please notify Ms. Brenda Edwards at (202) 586-2945. Please note that foreign nationals participating in the public meeting are subject to advance security screening procedures which require advance notice prior to attendance at the public meeting. If a foreign national wishes to participate in the public meeting, please

inform DOE of this fact as soon as possible by contacting Ms. Regina Washington at (202) 586-1214 or by email: Regina.Washington@ee.doe.gov so that the necessary procedures can be completed.

Due to the REAL ID Act implemented by the Department of Homeland Security (DHS), there have been recent changes regarding identification (ID) requirements for individuals wishing to enter Federal buildings from specific States and U.S. territories. As a result, driver's licenses from the following States or territory will not be accepted for building entry, and instead, one of the alternate forms of ID listed below will be required.

DHS has determined that regular driver's licenses (and ID cards) from the following jurisdictions are not acceptable for entry into DOE facilities: Alaska, American Samoa, Arizona, Louisiana, Maine, Massachusetts, Minnesota, New York, Oklahoma, and Washington.

Acceptable alternate forms of Photo-ID include: U.S. Passport or Passport Card; an Enhanced Driver's License or Enhanced ID-Card issued by the States of Minnesota, New York or Washington (Enhanced licenses issued by these States are clearly marked Enhanced or Enhanced Driver's License); a military ID or other Federal government-issued Photo-ID card.

Attendees may participate in the public meeting via webinar. Registration information, participant instructions, and information about the capabilities available to webinar participants will be published on the following Web site: http://www1.eere.energy.gov/buildings/appliance_standards/rulemaking.aspx/ruleid/79. Participants are responsible for ensuring their computer systems are compatible with the webinar software.

The purpose of the meeting is to receive oral and written comments, data, and other information that would provide understanding about potential issues associated with this rulemaking. DOE must receive requests to speak at the meeting before 4:00 p.m. ET, December 1, 2014. DOE must receive a signed original and an electronic copy of any statement to be given at the public meeting before 4:00 p.m. ET, November 24, 2014.

B. Procedure for Submitting Requests To Speak

Any person who has an interest in this NOPM or who is a representative of a group or class of persons that has an interest in these issues may request an opportunity to make an oral presentation. Such persons may hand-deliver requests to speak, along with a

computer diskette or CD in WordPerfect, Microsoft Word, portable data format (PDF), or text (ASCII) file format to Ms. Brenda Edwards at the address shown in the **ADDRESSES** section at the beginning of this NOPM between 9:00 a.m. and 4:00 p.m. Monday through Friday, except Federal holidays.

Requests may also be sent by mail to the address shown in the **ADDRESSES** section or email to Brenda.Edwards@ee.doe.gov.

Persons requesting to speak should briefly describe the nature of their interest in this rulemaking and provide a telephone number for contact. DOE requests persons selected to be heard to submit an advance copy of their statements at least two weeks before the public meeting. At its discretion, DOE may permit any person who cannot supply an advance copy of their statement to participate, if that person has made advance alternative arrangements with the Building Technologies Office. The request to give an oral presentation should ask for such alternative arrangements.

C. Conduct of the Public Meeting

DOE will designate a DOE official to preside at the public meeting and may also employ a professional facilitator to aid discussion. The meeting will not be a judicial or evidentiary-type public hearing, but DOE will conduct it in accordance with section 336 of EPCA. (42 U.S.C. 6306) A court reporter will record the proceedings and prepare a transcript. DOE reserves the right to schedule the order of presentations and to establish the procedures governing the conduct of the public meeting. After the public meeting, interested parties may submit further comments on the proceedings as well as on any aspect of the rulemaking until the end of the comment period.

The public meeting will be conducted in an informal conference style. DOE will present summaries of comments received before the public meeting, allow time for presentations by participants, and encourage all interested parties to share their views on issues affecting this rulemaking. Each participant will be allowed to make a prepared general statement (within DOE-determined time limits) prior to the discussion of specific topics. DOE will permit other participants to comment briefly on any general statements.

At the end of all prepared statements on a topic, DOE will permit participants to clarify their statements briefly and comment on statements made by others. Participants should be prepared to answer questions from DOE and other participants concerning these issues.

DOE representatives may also ask questions of participants concerning other matters relevant to this rulemaking. The official conducting the public meeting will accept additional comments or questions from those attending, as time permits. The presiding official will announce any further procedural rules or modification of the above procedures that may be needed for the proper conduct of the public meeting.

A transcript of the public meeting will be posted on the DOE Web site and will also be included in the docket, which can be viewed as described in the Docket section at the beginning of this notice. In addition, any person may buy a copy of the transcript from the transcribing reporter.

D. Submission of Comments

DOE will accept comments, data, and other information regarding this rulemaking before or after the public meeting, but no later than the date provided at the beginning of this notice. Please submit comments, data, and other information as provided in the **ADDRESSES** section. Submit electronic comments in WordPerfect, Microsoft Word, PDF, or text (ASCII) file format and avoid the use of special characters or any form of encryption. Comments in electronic format should be identified by the Docket Number EERE-2013-BT-STD-0030 and/or RIN 1904-AD01 and, wherever possible, carry the electronic signature of the author. No telefacsimiles (faxes) will be accepted.

Pursuant to 10 CFR 1004.11, any person submitting information that he or she believes to be confidential and exempt by law from public disclosure should submit two copies: one copy of the document including all the information believed to be confidential and one copy of the document with the information believed to be confidential deleted. DOE will make its own determination as to the confidential status of the information and treat it according to its determination.

Factors of interest to DOE when evaluating requests to treat submitted information as confidential include: (1) A description of the items; (2) whether and why such items are customarily treated as confidential within the industry; (3) whether the information is generally known by or available from other sources; (4) whether the information has previously been made available to others without obligation concerning its confidentiality; (5) an explanation of the competitive injury to the submitting person which would result from public disclosure; (6) a date upon which such information might

lose its confidential nature due to the passage of time; and (7) why disclosure of the information would be contrary to the public interest.

V. Approval of the Office of the Secretary

The Secretary of Energy has approved publication of this notice of public meeting and availability of the preliminary technical support document.

Issued in Washington, DC, on November 13, 2014.

Kathleen B. Hogan,

Deputy Assistant Secretary for Energy Efficiency, Energy Efficiency and Renewable Energy.

[FR Doc. 2014-27380 Filed 11-19-14; 8:45 am]

BILLING CODE 6450-01-P

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 71

[Docket No. FAA-2014-0744; Airspace Docket No. 14-ACE-5]

Proposed Establishment of Class E Airspace; Tribune, KS

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Notice of proposed rulemaking (NPRM).

SUMMARY: This action proposes to establish Class E airspace at Tribune, KS. Controlled airspace is necessary to accommodate new Standard Instrument Approach Procedures (SIAPs) at Tribune Municipal Airport. The FAA is taking this action to enhance the safety and management of Instrument Flight Rules (IFR) operations for SIAPs at the airport.

DATES: Comments must be received on or before January 5, 2015.

ADDRESSES: Send comments on this proposal to the U.S. Department of Transportation, Docket Operations, 1200 New Jersey Avenue SE., West Building Ground Floor, Room W12-140, Washington, DC 20590-0001. You must identify the docket number FAA-2014-0744/Airspace Docket No. 14-ACE-5, at the beginning of your comments. You may also submit comments through the Internet at <http://www.regulations.gov>. You may review the public docket containing the proposal, any comments received, and any final disposition in person in the Dockets Office between 9:00 a.m. and 5:00 p.m., Monday through Friday, except Federal holidays. The Docket Office (telephone 1-800-

647-5527), is on the ground floor of the building at the above address.

FOR FURTHER INFORMATION CONTACT:

Rebecca Shelby, Central Service Center, Operations Support Group, Federal Aviation Administration, Southwest Region, 2601 Meacham Blvd., Fort Worth, TX 76137; telephone: 817-321-7740.

SUPPLEMENTARY INFORMATION:

Comments Invited

Interested parties are invited to participate in this proposed rulemaking by submitting such written data, views, or arguments, as they may desire. Comments that provide the factual basis supporting the views and suggestions presented are particularly helpful in developing reasoned regulatory decisions on the proposal. Comments are specifically invited on the overall regulatory, aeronautical, economic, environmental, and energy-related aspects of the proposal. Communications should identify both docket numbers and be submitted in triplicate to the address listed above. Commenters wishing the FAA to acknowledge receipt of their comments on this notice must submit with those comments a self-addressed, stamped postcard on which the following statement is made: "Comments to Docket No. FAA-2014-0744/Airspace Docket No. 14-ACE-5." The postcard will be date/time stamped and returned to the commenter.

Availability of NPRMs

An electronic copy of this document may be downloaded through the Internet at <http://www.regulations.gov>. Recently published rulemaking documents can also be accessed through the FAA's Web page at http://www.faa.gov/airports_airtraffic/air_traffic/publications/airspace_amendments/.

You may review the public docket containing the proposal, any comments received and any final disposition in person in the Dockets Office (see **ADDRESSES** section for address and phone number) between 9:00 a.m. and 5:00 p.m., Monday through Friday, except Federal holidays. An informal docket may also be examined during normal business hours at the office of the Central Service Center, 2601 Meacham Blvd., Fort Worth, TX 76137.

Persons interested in being placed on a mailing list for future NPRMs should contact the FAA's Office of Rulemaking (202) 267-9677, to request a copy of Advisory Circular No. 11-2A, Notice of Proposed Rulemaking Distribution System, which describes the application procedure.

The Proposal

This action proposes to amend Title 14, Code of Federal Regulations (14 CFR), Part 71 by establishing Class E airspace extending upward from 700 feet above the surface within a 6.5-mile radius of Tribune Municipal Airport, Tribune, KS, to accommodate new standard instrument approach procedures. Controlled airspace is needed for the safety and management of IFR operations at the airport.

Class E airspace areas are published in Paragraph 6005 of FAA Order 7400.9Y, dated August 6, 2014 and effective September 15, 2014, which is incorporated by reference in 14 CFR 71.1. The Class E airspace designation listed in this document will be published subsequently in the Order.

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

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

Environmental Review

This proposal will be subject to an environmental analysis in accordance with FAA Order 1050.1E, “Environmental Impacts: Policies and

Procedures” prior to any FAA final regulatory action.

List of Subjects in 14 CFR Part 71

Airspace, Incorporation by reference, Navigation (air).

The Proposed Amendment

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

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

- 1. The authority citation for part 71 continues to read as follows:

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

§ 71.1 [Amended]

- 2. The incorporation by reference in 14 CFR 71.1 of FAA Order 7400.9Y, Airspace Designations and Reporting Points, dated August 6, 2014, and effective September 15, 2014, is amended as follows:

Paragraph 6005 Class E airspace areas extending upward from 700 feet or more above the surface of the earth.

* * * * *

ACE KS E5 Tribune, KS [New]

Tribune Municipal Airport, KS
(Lat. 38°27′05″ N., long. 101°45′00″ W.)

That airspace extending upward from 700 feet above the surface within a 6.5-mile radius of Tribune Municipal Airport.

Issued in Fort Worth, TX, on November 12, 2014.

Robert W. Beck,

Manager, Operations Support Group, ATO
Central Service Center.

[FR Doc. 2014–27537 Filed 11–19–14; 8:45 am]

BILLING CODE 4901–14–P

COMMODITY FUTURES TRADING COMMISSION

17 CFR Part 1

RIN 3038–AE24

SECURITIES AND EXCHANGE COMMISSION

17 CFR Parts 230, 240 and 241

[Release No. 33–9681; 34–73584; File No. S7–16–11]

RIN 3235–AK65

Forward Contracts With Embedded Volumetric Optionality

AGENCY: Commodity Futures Trading Commission; Securities and Exchange Commission.

ACTION: Proposed interpretation.

SUMMARY: In accordance with section 712(d)(4) of the Dodd-Frank Wall Street Reform and Consumer Protection Act (the “Dodd-Frank Act”), the Commodity Futures Trading Commission (the “CFTC”) and the Securities and Exchange Commission (“SEC”), after consultation with the Board of Governors of the Federal Reserve System (“Board of Governors”), are jointly issuing the CFTC’s proposed clarification of its interpretation concerning forward contracts with embedded volumetric optionality. The CFTC invites public comment on all aspects of its proposed interpretation.

DATES: Comments must be received on or before December 22, 2014.

ADDRESSES: You may submit comments, identified by RIN number 3038–AE24, by any of the following methods:

- *CFTC Web site:* at <http://comments.cftc.gov>. Follow the instructions for submitting comments through the Web site.
- *Federal eRulemaking Portal:* <http://www.regulations.gov>. Follow the instructions for submitting comments.
- *Mail:* Secretary of the Commission, Commodity Futures Trading Commission, Three Lafayette Centre, 1155 21st Street NW., Washington, DC 20581.

- *Hand Delivery/Courier:* Same as Mail, above. Please submit your comments using only one method.

All comments must be submitted in English, or if not, accompanied by an English translation. Comments will be posted as received to www.cftc.gov. You should submit only information that you wish to make available publicly. If you wish the CFTC to consider information that you believe is exempt from disclosure under the Freedom of Information Act, a petition for

confidential treatment of the exempt information may be submitted according to the procedures established in § 145.9 of the CFTC's regulations, 17 CFR 145.9.

The CFTC reserves the right, but shall have no obligation, to review, pre-screen, filter, redact, refuse or remove any or all of a submission from <http://www.cftc.gov> that it may deem to be inappropriate for publication, such as obscene language. All submissions that have been redacted or removed that contain comments on the merits of the notice will be retained in the public comment file and will be considered as required under all applicable laws, and may be accessible under the Freedom of Information Act.

FOR FURTHER INFORMATION CONTACT:

CFTC: Elise Pallais, Attorney Advisor, (202) 418-5577, epallais@cftc.gov, Office of the General Counsel, Commodity Futures Trading Commission, 1155 21st Street NW., Washington, DC 20581. SEC: Carol McGee, Assistant Director, (202) 551-5870, mcgeec@sec.gov, Office of Derivatives Policy, Division of Trading and Markets, Securities and Exchange Commission, 100 F Street NE., Washington, DC 20549.

SUPPLEMENTARY INFORMATION:

I. Introduction

In *Further Definition of "Swap," Security-Based Swap," and "Security-Based Swap Agreement"; Mixed Swaps; Security-Based Swap Agreement Recordkeeping* (the "Products Release"), the CFTC provided an interpretation, in response to requests from commenters, with respect to forward contracts that provide for variations in delivery amount (*i.e.*, that contain "embedded volumetric optionality").¹ Specifically, the CFTC identified when an agreement, contract, or transaction would fall within the forward contract exclusion from the "swap" and "future delivery" definitions in the Commodity Exchange Act (the "CEA")² notwithstanding that it contains embedded volumetric optionality.³ In providing its interpretation, the CFTC was guided by and sought to reconcile agency precedent regarding forward contracts

containing embedded optionality⁴ with the statutory definition of "swap" in section 1a(47) of the CEA, which provides, among other things, that commodity options are swaps, even if physically settled.⁵

The CFTC has received several comments from market participants requesting that it modify or further clarify its interpretation.⁶ According to commenters, uncertainty with regard to the meaning of certain language in the CFTC's interpretation, particularly the seventh element, has led to confusion among market participants with regard to how to characterize certain transactions, whether as excluded forward contracts with embedded volumetric optionality or regulated trade options.

II. Proposed Interpretation

In response to commenters, the CFTC is proposing to clarify its interpretation of when an agreement, contract, or transaction with embedded volumetric optionality would be considered a forward contract.⁷ Accordingly, the CFTC is proposing to provide that an agreement, contract, or transaction falls within the forward exclusion from the

swap and future delivery definitions, notwithstanding that it contains embedded volumetric optionality, when:

1. The embedded optionality does not undermine the overall nature of the agreement, contract, or transaction as a forward contract;

2. The predominant feature of the agreement, contract, or transaction is actual delivery;

3. The embedded optionality cannot be severed and marketed separately from the overall agreement, contract, or transaction in which it is embedded;

4. The seller of a nonfinancial commodity underlying the agreement, contract, or transaction with embedded volumetric optionality intends, at the time it enters into the agreement, contract, or transaction to deliver the underlying nonfinancial commodity if the embedded volumetric optionality is exercised;

5. The buyer of a nonfinancial commodity underlying the agreement, contract or transaction with embedded volumetric optionality intends, at the time it enters into the agreement, contract, or transaction, to take delivery of the underlying nonfinancial commodity if the embedded volumetric optionality is exercised;

6. Both parties are commercial parties; and

7. The embedded volumetric optionality is primarily intended, at the time that the parties enter into the agreement, contract, or transaction, to address physical factors or regulatory requirements that reasonably influence demand for, or supply of, the nonfinancial commodity.

The first six elements are largely unchanged from the Products Release.⁸ Among them, the CFTC is proposing to modify only the fourth and fifth elements, to clarify that the CFTC's interpretation applies to embedded volumetric optionality in the form of both puts and calls.⁹ Accordingly, the CFTC's discussion of these six elements in the Products Release would remain relevant and applicable.¹⁰

The seventh element addresses the primary reason for including embedded

⁴ See *id.* at 48237-39 (citing *In re Wright*, CFTC Docket No. 97-02, 2010 WL 4388247 (CFTC Oct. 25, 2010), and *Characteristics Distinguishing Cash and Forward Contracts and "Trade" Options*, 50 FR 39656 (Sept. 30, 1985) ("1985 CFTC OGC Interpretation")).

⁵ See *id.* at 48236-37; 7 U.S.C. 1a(47)(A)(i) (defining "swap" to include "[an] option of any kind that is for the purchase or sale, or based on the value, of 1 or more . . . commodities . . .") (emphasis added). Part 32 of the CFTC's regulations includes an exemption for certain physically settled options, termed "trade options." See 17 C.F.R. 32.3. The trade option exemption is currently subject to CFTC staff no-action relief. See CFTC Letter No. 13-08 (April 5, 2013), available at <http://www.cftc.gov/ucm/groups/public/@rllettergeneral/documents/letter/13-08.pdf>.

⁶ The Products Release included a request for comment on the CFTC's interpretation. See 77 FR 48241-42. CFTC staff also solicited comments in connection with a public roundtable to discuss issues concerning end users and the Dodd-Frank Act. These comments are available at <http://comments.cftc.gov/PublicComments/CommentList.aspx?id=1256> and <http://comments.cftc.gov/PublicComments/CommentList.aspx?id=1485>, respectively.

⁷ Section 712(d)(4) provides that "[a]ny interpretation of, or guidance by either Commission regarding, a provision of this title, shall be effective only if issued jointly by the Commodity Futures Trading Commission and the Securities and Exchange Commission, after consultation with the Board of Governors, if this title requires the Commodity Futures Trading Commission and the Securities and Exchange Commission to issue joint regulations to implement the provision." While the Dodd-Frank Act would require this interpretation to be issued jointly by the CFTC and the SEC, it would be an interpretation solely of the CFTC and would not apply to the exclusion from the swap and security-based swap definitions for security forwards or to the distinction between security forwards and security futures products.

⁸ See 77 FR 48238.

⁹ As described in the Products Release, the fifth element did not appear to contemplate circumstances where the seller of the nonfinancial commodity might exercise the embedded volumetric optionality. See 77 FR 48238 ("The buyer of a nonfinancial commodity underlying the agreement, contract or transaction with embedded volumetric optionality intends, at the time it enters into the agreement, contract, or transaction, to take delivery of the underlying nonfinancial commodity if it exercises the embedded volumetric optionality.") (emphasis added).

¹⁰ See 77 FR 48238-39.

¹ See 77 FR 48207, 48238-42 (Aug. 13, 2012).

² See 7 U.S.C. 1a(47)(B)(ii) (excluding from the definition of "swap" "any sale of a nonfinancial commodity or security for deferred shipment or delivery, so long as the transaction is intended to be physically settled"); 1a(27) (excluding from the definition of "future delivery" "any sale of any cash commodity for deferred shipment or delivery").

³ See 77 FR 48238-42 & n.335. See also *id.* at 48227-36 (providing the CFTC's interpretation regarding the forward contract exclusion for nonfinancial commodities).

volumetric optionality in a forward contract. As commenters have explained, commercial parties are often unable to accurately predict their exact delivery needs or production capacity for a given nonfinancial commodity at contract initiation due to a variety of factors, such as weather and certain other “operational considerations” (e.g., transportation capacity).¹¹ The embedded volumetric optionality therefore offers commercial parties the flexibility to vary the amount of the nonfinancial commodity delivered during the life of the contract in response to uncertainty in the demand for or supply of the nonfinancial commodity.¹²

The seventh element ensures that this purpose, consistent with the historical interpretation of a forward contract,¹³ is the primary purpose for including embedded volumetric optionality in the contract. In other words, the embedded volumetric optionality must primarily be intended as a means of assuring a supply source or providing delivery flexibility in the face of uncertainty regarding the quantity of the nonfinancial commodity that may be needed or produced in the future, consistent with the purposes of a forward contract.¹⁴

¹¹ See, e.g., Letter from ONEOK, Inc. (July 22, 2011) at 4 (stating that “day-to-day changes in demand” for natural gas “may be caused by variation in weather, operational considerations, or other factors”); Letter from the American Gas Association (Oct. 12, 2012) at 9 (stating that “weather-sensitive demands” for natural gas “cannot be accurately predicted in advance”).

¹² See, e.g., Letter from the Commodity Markets Council, the National Corn Growers Association, and the Natural Gas Supply Association (April 17, 2014) at 2 (“Physical end-users need these contracts to address supply input or production output uncertainty associated with the operation of a physical business.”); Letter from the Plains All American Pipeline, L.P. (April 17, 2014) at 2 (“Such contracts provide us with the ability to allow our customers flexibility to increase or decrease the amount of purchase or sale of a commodity in response to prevailing market conditions.”).

¹³ See 77 FR 48228 (describing a forward contract as a “commercial merchandising transaction” in which delivery is delayed for “commercial convenience or necessity”).

¹⁴ See 77 FR 48228 (“The primary purpose of a forward contract is to transfer ownership of the commodity and not to transfer solely its price risk.”). See also Letter from the Commodity Markets Council, the National Corn Growers Association, and the Natural Gas Supply Association (April 17, 2014) at 2 (“[Contracts with volumetric optionality] exist to permit end-users to have agreements in place so that they can effectively and economically manage the purchase or sale of commodities related to their commercial businesses, not as a substitute for a financially settled contract or for speculative purposes.”); Letter from ONEOK, Inc. (July 22, 2011) at 7 (“Although the amounts that can be taken on delivery may vary, the primary intent of the contracts is not to provide price protection, which is clearly the intent of the contracts described in the [1985 CFTC] OGC Interpretation as trade options.”).

In response to commenters, the CFTC is proposing to modify the seventh element to further clarify its interpretation.¹⁵ To begin, the CFTC is proposing to remove reference to the “exercise or non-exercise” of the embedded volumetric optionality. This language was included to embody the longstanding principle, recognized by commenters, that intent may be ascertained by the relevant facts and circumstances surrounding the contract, including the parties’ course of performance thereunder.¹⁶ According to commenters, however, this language has created problems during contract negotiations, because certain parties feel pressure to specify the exact factors that could lead to the exercise or non-exercise of the volumetric optionality.¹⁷ By removing this language, the CFTC intends to clarify that the focus of the seventh element is intent with respect to the embedded volumetric optionality at the time of contract initiation.¹⁸ The CFTC would further advise commercial parties that they may rely on counterparty representations with respect to the intended purpose for embedding volumetric optionality in the

¹⁵ As stated in the Products Release, the seventh element reads as follows:

The exercise or non-exercise of the embedded volumetric optionality is based primarily on physical factors, or regulatory requirements, that are outside the control of the parties and are influencing demand for, or supply of, the nonfinancial commodity.

77 FR 48238 (footnotes omitted).

¹⁶ See 77 FR 48228 (“In assessing the parties’ expectations or intent regarding delivery, the CFTC consistently has applied a ‘facts and circumstances’ test.”); Letter from ONEOK, Inc. (July 22, 2011) at 6 (“The intent of the parties to defer delivery of a varying amount can be ascertained based on objective criteria, such as the pattern of deliveries in relation to variation in weather, customer demand, or other similar factors.”).

¹⁷ See, e.g., Letter from the Commodity Markets Council, the National Corn Growers Association, and the Natural Gas Supply Association (April 17, 2014) at 2 & n.3 (stating that commercial parties are “being asked for vague (and, therefore, potentially unenforceable) representations” because “the question of the reason for exercise of volumetric optionality can vary from transaction to transaction and is not known until the time of exercise”); Letter from the American Gas Association (April 17, 2014) at 10 (citing “widespread confusion as to whether counterparties must demonstrate forward contract status as of the time of entering into an agreement, or as of the time of exercise or non-exercise of delivery rights under the agreement.”).

¹⁸ For example, in choosing whether to obtain additional supply by exercising the embedded volumetric optionality under a given contract or turning to another supply source—whether storage, the spot market, or another forward contract with embedded volumetric optionality—commercial parties would be able to consider a variety of factors, including price, provided that the intended purpose for including the embedded volumetric optionality in the contract at contract initiation was to address physical factors or regulatory requirements influencing the demand for or supply of the commodity.

contract, provided they are unaware, and should not reasonably have been aware, of facts indicating a contrary purpose.

The CFTC is also proposing to remove reference to physical factors or regulatory requirements being “outside the control of the parties.” This phrase was taken from commenter letters¹⁹ but has also apparently created problems during contract negotiations, as counterparties often disagree about the degree of control they have over factors influencing their demand for or supply of the nonfinancial commodity.²⁰ By removing this language, the CFTC intends to clarify that whether the parties have some influence over factors affecting their demand for or supply of the nonfinancial commodity (e.g., the scheduling of plant maintenance, plans for business expansion) would not be inconsistent with the seventh element of the CFTC’s interpretation, provided that the embedded volumetric optionality is included in the contract at initiation primarily to address potential variability in a party’s supply of or demand for the nonfinancial commodity.

The CFTC is also proposing to clarify that the phrase “physical factors” should be construed broadly to include any fact or circumstance that could reasonably influence supply of or demand for the nonfinancial commodity under the contract. Such facts and circumstances could include not only environmental factors, such as weather or location, but relevant “operational considerations” (e.g., the availability of reliable transportation or technology) and broader social forces, such as changes in demographics or geopolitics.²¹ Concerns that are

¹⁹ See Letter from BG Americas & Global LNG (July 22, 2011) at 4 (“Variability associated with an energy customer’s physical demand is influenced by factors *outside the control of the energy suppliers (and sometimes the consumers)* . . .”); Letter from the Working Group of Commercial Energy Firms (July 22, 2011) at 8 (“Availability of production and requirements for consumption are often influenced by factors *outside the control of the parties* to an energy commodity transaction and can change on an hourly or daily basis.”) (emphasis added).

²⁰ Letter from the Plains All American Pipeline, L.P. (April 17, 2014) at 3 (“[M]any counterparties understand the [seventh element] to have failed when a counterparty has more than one alternative to meet its physical commodity needs, therefore making the choice of supply ‘within its control.’”); Letter from the Commodity Markets Council, the National Corn Growers Association, and the Natural Gas Supply Association (April 17, 2014) at 2–3 (listing as an issue stemming from the ambiguity in the seventh element “uncertainty as to whether end-users with more than one supply choice are always exercising optionality within their control”).

²¹ The CFTC reiterates that, as stated in the Products Release, system reliability issues that lead to voluntary supply curtailments would be

primarily about price risk (*e.g.*, expectations that the cash market price will increase or decrease), however, would not satisfy the seventh element absent an applicable regulatory requirement to obtain or provide the lowest price (*e.g.*, the buyer is an energy company regulated on a cost-of-service basis).²²

The CFTC understands that in certain retail electric market demand-response programs, electric utilities have the right to interrupt or curtail service to a customer to support system reliability.²³ The CFTC is proposing to clarify that, given that a key function of an electricity system operator is to ensure grid reliability, demand response agreements, even if not specifically mandated by a system operator, may be properly characterized as the product of regulatory requirements within the meaning of the seventh element.²⁴

III. Request for Comment

The CFTC believes that it would benefit from public comment about its proposed interpretation, and therefore requests public comment on all aspects of its proposed interpretation regarding forwards with embedded volumetric optionality, and on the following questions:

1. Market participants have expressed concerns about whether various types of volumetric optionality fit within the CFTC's interpretation. The CFTC recognizes that, since the interpretation is not intended to provide relief for all forms of embedded volumetric optionality, there are likely to remain concerns within the industry about the

treatment of embedded volumetric optionality within forward contracts.

The CFTC notes that, in April, 2012, the CFTC adopted an Interim Final Rule for Commodity Options (the "IFR").²⁵ Even if a contract with volumetric optionality does not fit within the seven elements of the interpretation, the CFTC believes there is widespread agreement that contracts that fail one or more of the seven elements of the CFTC's interpretation would fall within the exemption from most swaps regulation provided by the IFR. Therefore, it appears that the IFR provides a clear and well-understood mechanism through which contracts with volumetric optionality can be exempted that avoids many of the difficulties of determining whether a particular contract with volumetric optionality would satisfy the seven elements of the CFTC's interpretation.

The CFTC invites comment on whether the IFR's approach to defining the universe of swaps subject to its exemption may provide a clearer and easier mechanism for providing relief from swaps requirements than the CFTC's interpretation of forwards with embedded volumetric optionality and whether the IFR currently provides sufficient relief for such contracts.

2. Market participants have argued that the lack of clarity around the seventh element of the CFTC's interpretation has led to costs to end-users. Conceivably, since contracts that fail one or more of the seven elements would be regulated as exempt commodity trade options under the IFR, these costs are attributable to complying with the IFR. The CFTC invites comment on whether or not this is the case, and invites the submission of data quantifying those costs.

3. What factors should the CFTC consider in determining whether the proposed modifications and clarifications to the CFTC's interpretation are appropriate in view of CFTC precedent regarding the interpretation of the CEA's forward contract exclusion? Do the proposed changes provide sufficient clarity on how contracts with embedded volumetric optionality may satisfy all seven elements of the interpretation, particularly the first and second elements? Are there reasons why trying to provide further relief through the swap definition's forward contract exclusion would not be in the public interest?

By the Securities and Exchange Commission.

Brent J. Fields,
Secretary.

Dated: November 13, 2014.

Issued in Washington, DC, on November 13, 2014, by the Commodity Futures Trading Commission.

Christopher J. Kirkpatrick,
Secretary of the Commission.

Commodity Futures Trading Commission (CFTC) Appendices to Forward Contracts With Embedded Volumetric Optionality—Commission Voting Summary, Chairman's Statement, and Commissioners' Statements

Appendix 1—Commodity Futures Trading Commission Voting Summary

On this matter, Chairman Massad and Commissioners Wetjen, Bowen, and Giancarlo voted in the affirmative. No Commissioner voted in the negative.

Appendix 2—Statement of CFTC Chairman Timothy G. Massad

I support the Staff's proposed interpretation regarding forward contracts that have what is known as embedded volumetric optionality—generally speaking, contracts to buy or sell a nonfinancial commodity for deferred delivery that provide for variations in delivery amount.

One of my priorities has been to fine-tune our rules to make sure they work as intended and do not impose undue burdens or unintended consequences, particularly for the nonfinancial commercial businesses that use these markets to hedge commercial risks. We must make sure these businesses—whether they are manufacturers, farmers, ranchers or other companies—can continue to use these markets efficiently and effectively.

This proposal is part of that effort. In certain situations, commercial parties are unable to predict at the time a contract is entered into the exact quantities of the commodity that they may need or be able to supply, and the embedded volumetric optionality offers them the flexibility to vary the quantities delivered accordingly. The CFTC put out an interpretation, consisting of seven factors, to provide clarity as to when such contracts would fall within the forward contract exclusion from the swap definition, but some market participants have felt this interpretation, in particular the seventh factor, was hard to apply. In some cases, the two parties would reach different conclusions about the same contract.

Today we are proposing clarifications to the interpretation that I believe will alleviate this ambiguity and allow contracts with volumetric optionality that truly are intended to address uncertainty with respect to the parties' future production capacity or delivery needs, and not for speculative purposes or as a means to obtain one-way price protection, to fall within the exclusion.

considered "physical factors" within the scope of the seventh element. See 77 FR 48239 n.345.

²² See Letter from the Office of the General Counsel, Federal Energy Regulatory Commission (Oct. 12, 2012) at 4. The CFTC confirms that, as stated in the Products Release, the deliverable quantities allowable under embedded volumetric optionality may be justified by a combination of regulatory requirements and physical factors, such that the quantity provided for by the embedded volumetric optionality may reasonably exceed quantities required by regulation. See 77 FR 48238 n.340.

²³ See Letter from the National Rural Electric Cooperative Association, the American Public Power Association, the Large Public Power Association, and the Transmission Access Policy Study Group (Oct. 12, 2012) at 9.

²⁴ The CFTC clarifies that its interpretations regarding full requirements and output contracts, as provided in the Products Release, would be unaffected by the discussion herein. See 77 FR 48239–40. Similarly, the CFTC reiterates that, depending on the relevant facts and circumstances, capacity contracts, transmission (or transportation) service agreements, tolling agreements, and peaking supply contracts, as discussed in the Products Release, may qualify as forward contracts with embedded volumetric optionality provided they meet the elements of the CFTC's proposed interpretation. See 77 FR 48240.

²⁵ See 77 FR 25320 (April 27, 2012).

Appendix 3—Statement of CFTC Commissioner Mark P. Wetjen

This proposal further clarifying the definition of forward contracts with embedded volumetric optionality, or EVO, is intended to provide commercial firms the regulatory clarity they have sought since the original release of the seven-part test in August 2012.

The definition of a swap in the Commodity Exchange Act includes commodity options, but excludes from that definition forward contracts.²⁶ There was a policy reason for this, and at its root was a desire to ensure that Dodd-Frank captured many swaps, and swap-like contracts, that were structured to be similar to options, while also ensuring that a new regulatory regime was not inadvertently and inappropriately extended into certain physical markets.

The broad definitional language in question was designed to ensure that financial—as opposed to physical—contracts could not be structured or re-characterized to avoid the new market structure. While the swap definition does not expressly exclude options on energy and agricultural commodities, it does exclude both futures and forwards. I am confident Congress did not intend to pull contracts that historically have been treated as forwards into the new swap regime solely because of optionality in the amount of the physical commodity delivered under the contract.

As a policy matter, Congress surely recognized that the swap definition had to reflect a long-held Commission belief that contracts that are physically settled, and where delivery is required, do not pose the same systemic threats to the financial system as contracts used for speculative purposes. Moreover, Congress expanded the Commission's fraud²⁷ and anti-manipulation authority²⁸ over markets where forward contracts are traded, and left intact the Commission's surveillance authority to issue special calls to market participants for all positions and transactions related to a commodity.²⁹

²⁶ 7 U.S.C. 1a(47).

²⁷ 7 U.S.C. 9(c)(1) (“It shall be unlawful for any person, directly or indirectly, to use or employ, or attempt to use or employ, in connection with . . . a contract of sale of any commodity in interstate commerce . . . any manipulative or deceptive device or contrivance, in contravention of such rules and regulations as the Commission shall promulgate . . .”). See also 17 CFR Part 180.

²⁸ 7 U.S.C. 9(c)(3) (“[I]t shall be unlawful for any person, directly or indirectly, to manipulate or attempt to manipulate the price . . . of any commodity in interstate commerce. . .”).

²⁹ 17 CFR 18.05(b) (maintenance of books and records concerning positions and transactions in the cash commodity); 17 CFR 1.31 (pursuant to § 1.31(2), the authority to request information required to be kept in accordance with the Act or Commission regulations); 17 CFR 1.35 (pursuant to § 1.35(3), the authority to request from a futures commission merchant, retail foreign exchange dealer, introducing broker or member of a designated contract market or swap execution facility records required to be kept by § 1.31); 17 CFR 23.203 (pursuant to § 23.203(a), the authority to request and receive within 72 hours any records required to be kept by a swap dealer or major swap

As mentioned, in resolving to adopt the appropriate regulatory treatment of forward contracts with EVO, the Commission also must weigh the operational and compliance consequences of that treatment. Indeed, the Commission should bring a heightened sensitivity to these considerations in the context of the power sector because affordable electricity and heat are such fundamental needs of modern life.

The Commission's 2012 interpretation, while intended to be helpful, contained certain ambiguities in the seven-part test that created confusion among commercial end-users.

Last spring, the Commission learned at a public roundtable that some market participants may have withdrawn from the market due to those ambiguities, resulting in inferior execution for commercial firms. It is difficult to measure the exact impact of this phenomenon, but apparently it has not been a positive one for consumers of electricity and gas.

A. Ambiguity in the Seven-Part Test

In discussing the seven-part test, commentators zeroed in on two primary issues. First, many of the roundtable participants noted that the exercise or non-exercise of volumetric optionality depends on a number of factors,³⁰ some of which will be outside of the control of the parties, and some that will not.

Many also noted that parties could reasonably disagree on whether, and the degree to which, a factor is outside of the control of the parties. For example, having choice among more than one source of supply, or selecting from those choices the lowest-priced contract, to some commercial firms caused the contract to fail the seventh prong.

participant by the Act and by Commission regulations and pursuant to § 23.203(2), the authority to request records of any swap or related cash or forward transaction); 17 CFR 23.606 (pursuant to § 23.606(c), the authority to request information that a swap dealer or major swap participant is required to maintain under § 23.606(a)(1)); 17 CFR 45.2 (pursuant to § 45.2(h), the authority to request from swap execution facilities, designated contract markets, derivatives clearing organizations, swap dealers, and major swap participants records required to be kept pursuant to § 45.2.); 17 CFR 46.2 (the authority, pursuant to § 46.2(e), to request records relating to pre-enactment and transition swaps in existence on or after April 25, 2011).

³⁰ Letter from The Edison Electric Institute (“EEI”) and the Electric Power Supply Association (“EPSA”) (April 17, 2014) (“EEI/EPSA Letter”) at 3 (“The exercise or non-exercise of volumetric optionality under a forward energy contract depends on a number of factors, including but not limited to, any or all of the following: (1) The level of demand as affected by weather or market conditions; (2) the amount of unexercised volume remaining under the contract; (3) the time of the change in the level of demand relative to delivery scheduling capabilities; (4) anticipated future weather conditions; (5) the delivery location under the contract relative to the demand location; (6) the price and availability of transportation capacity (e.g. pipeline capacity) to move natural gas; (7) the price of alternative sources of supply; (8) the availability of natural gas or electricity in the spot market; and/or (9) the remaining inventory of the commodity in storage.”).

This ambiguity contributed to a second issue—market participants stated that they often do not know the exact reasons that optionality will be exercised until the time of exercise. In other words, parties are uncertain how to characterize contracts at the time of execution, and how intent at the time of exercise or non-exercise might affect that analysis.³¹

The seventh factor's ambiguity has caused a host of problems. For instance, parties have been asked to provide vague and possibly unenforceable representations in agreements.³² Parties also often disagree about the proper categorization of a transaction, resulting in them “agreeing to disagree” and considering the same transaction to be, at the same time, a swap, trade option, or a forward with EVO.³³ This has had the unintended consequence of distorting transaction data reported to the Commission.³⁴

The bottom line is that such uncertainty in the seven-part test increased transaction costs for commercial firms and limited their access to an effective risk-management tool.

B. Proposed Clarifications

This proposal appropriately modifies and clarifies the interpretation of the seventh prong. First, it clarifies that concluding whether the seventh prong is met should be determined by looking to the intent of the parties at the outset of contract initiation.

Second, the new proposal also deletes language referring to physical or regulatory factors being “outside of the control of the parties.” Deleting this ambiguous language helps clarify that parties having some influence over factors affecting their demand for a nonfinancial commodity will not per se cause a contract to fail the seventh prong.

In that vein, the proposal also notes that parties may take a variety of factors into consideration when determining whether to exercise volumetric optionality, so long as the intended purpose was to address physical factors or regulatory requirements influencing the demand for, or supply of, the commodity.

Prongs one through six of the test are also appropriately crafted to ensure that the EVO does not undermine the forward contract's overall purpose. Prongs two and three help achieve those purposes by requiring the predominant factor to be actual delivery, and prohibiting the embedded optionality from being severed and marketed separately from the overall agreement.

Prongs four and five also help deter the potential for abuse of these contracts by requiring that the seller under the contract intends to deliver, and the buyer intends to receive, the underlying commodity.

This proposal should go a long way towards providing commercial firms

³¹ Letter from the American Gas Association (April 17, 2014) (“AGA Letter”) at 10 (citing “widespread confusion as to whether counterparties must demonstrate forward contract status as of the time of entering into an agreement, or as of the time of exercise or non-exercise of delivery rights under the agreement.”).

³² AGA Letter at 2; EEI/EPSA letter at 3.

³³ NFP Electric Associations Letter at 3.

³⁴ EEI/EPSA letter at 3.

adequate guidance, but I look forward to comments on whether it is adequate enough.

Appendix 4—Concurring Statement of CFTC Commissioner Sharon Y. Bowen

This is a proposal that, I am concerned, will neither provide the clarity industry is seeking regarding the treatment of embedded volumetric options nor the safeguards that Congress intended when it passed the Dodd-Frank Wall Street Reform and Customer Protection Act.

I do not oppose the Commission's trying to better tailor our regulations to address concerns of end-users. In fact, I commend the Chairman and my fellow Commissioners for trying to address the issues that have arisen from our existing guidance and rules on embedded volumetric options. After many meetings with stakeholders and much analysis of this subject, I am convinced that the Commission should address concerns that industry has raised regarding the treatment of embedded volumetric options.

However, the proposed interpretation may not resolve the issues industry has raised. Options, even physical options, have never been interpreted by the Commission to be forward contracts. They lack the central characteristic that is critical to being a forward contract under the Commodity Exchange Act: A binding obligation to deliver at some time in the future. The history on this is clear, if there is no binding obligation to deliver, there is no forward contract.

The seventh factor was intended, essentially, as a "safe-harbor" provision. Notwithstanding the fact there is no obligation to make or take delivery for the optional portion of the specified commodity, the seventh factor was designed to allow a party's transaction to receive the forward exclusion if that party can demonstrate that it determined the specified, optional amount was necessary based upon commercial and physical factors, and exercised the option based upon those factors. In other words, this seventh factor was designed to allow embedded volumetric options to receive the forward contract exclusion treatment where their exercise was driven largely by external commercial and physical factors central to the party's commercial business, but largely beyond the control of the party. Through its conduct then, the party was demonstrating its intent to be "bound" to exercise the option if its estimate, based on the factors it used, proved to be accurate.

The Commission was trying to distinguish such a situation from a situation where the party enters into the embedded volumetric option intending to exercise the volumetric option based upon whether, at the time of exercise, it still makes economic sense to use the option. In other words, it was trying to distinguish a situation where the motivation for exercising the option was primarily or substantially based on price. In the latter case, the embedded volumetric option is hard to distinguish, in usage, from any other commodity option. There is no demonstration in the party's course of conduct that it intended to be "bound" to exercise the option at all.

While this test is far from perfect, and I can see the difficulty industry would have in

administering it, the Commission was clearly trying to find a rationale for allowing some volumetric optionality that was consistent with the Commission's historic treatment of forward contracts, while avoiding completely erasing the line between options and futures on the one hand, and cash and forward contracts on the other.

This current proposal, however, in possibly broadening the universe of options that would fit within the seventh factor, seems to depart from that rationale, and in doing so, loses that vital element of demonstrating the parties intended to be "bound" in some sense to exercise the option and consequently that the option was similar, in usage, to a forward contract. Without that, it is not clear to me how such an option can be considered consistent with a forward contract. If it cannot be considered at least similar to a forward contract, I am not sure how a party would determine that embedding such an option in a forward contract would not undermine its nature as a forward contract and thus fail the first factor of the seven-factor test.

There is nothing in the Commodity Exchange Act or Dodd-Frank that contemplates options can be deemed forward contracts simply by being associated with a forward contract. In fact, the opposite seems true: Congress specifically determined that commodity options are swaps and removed the Commission's ability to provide exemptions from the definition of swap.

Interestingly though, Congress did maintain the Commission's authority to determine how swaps that are commodity options should be regulated since Congress did not repeal the Commission's plenary authority over options, including options that are swaps. It was that plenary authority that the Commission utilized to exempt trade options from most of the regulations applicable to swaps in April 2012. It is that authority that the Commission should use here to address embedded volumetric options.

By seeking to broaden an exclusion for volumetric options embedded in forward contracts, the proposed interpretation does try to achieve a goal that industry apparently wants—they would like these options to be outside the Commission's jurisdiction rather than just exempted from regulation. However, history has shown that as the circle of exclusion widens for industry, too often the circle of protection narrows for investors and consumers.

In 1993, one Commissioner cast the lone dissenting vote against exempting over-the-counter energy derivatives from Commission regulation. She argued that exempting energy derivatives from regulation would set a dangerous precedent and would leave the public unprotected. Today's proposal seems to go farther. It excludes embedded volumetric options from the Commission's authority. Whereas with an exemption, there is the ability to later tailor it to fit the precise needs of the market and the public, there is no turning back from an exclusion.

Congress said, quite clearly, that commodity options are swaps, not forwards. Embedded volumetric options should be exempted as options, not excluded as

forwards. I know many in industry have spoken for the need for further clarity regarding the regulation of embedded volumetric options. I don't know what clarity is achieved by trying to call something what it is not. If it looks like an option, is used like an option, and works like an option, it is most likely, an option.

I think the objective of providing for clear regulatory treatment of embedded volumetric options will be far easier to implement, and far more complete, if done through fixing the trade option exemption. Regardless, this proposal is the vehicle before the Commission at present. I want us to get this interpretation right, and therefore support getting public comment on these changes. I do not believe we should contemplate such a significant change to our jurisdiction without receiving the public's views on it first. I invite all interested stakeholders to respond to this proposal and look forward to reviewing their comments.

[FR Doc. 2014-27285 Filed 11-19-14; 8:45 am]

BILLING CODE 6351-01-P; 8011-01-P

DEPARTMENT OF HOMELAND SECURITY

Coast Guard

33 CFR Part 165

[Docket No. USCG-2014-0246]

RIN 1625-AA87

Security Zone, John Joseph Moakley United States Courthouse, Boston, MA

AGENCY: Coast Guard, DHS.

ACTION: Notice of proposed rulemaking.

SUMMARY: The United States Coast Guard proposes to establish a permanent security zone within Sector Boston's Captain of the Port (COTP) Zone on the waters in the vicinity of John Joseph Moakley United States Courthouse, Boston, MA. Enforcement of this permanent security zone during high profile court proceedings at the Moakley Courthouse is necessary to protect people, property, and the port of Boston from subversive acts.

DATES: Comments and related material must be received by the Coast Guard on or before December 22, 2014.

Requests for public meetings must be received by the Coast Guard on or before December 1, 2014.

ADDRESSES: You may submit comments identified by docket number USCG-2014-0246 using any one of the following methods:

(1) *Federal eRulemaking Portal:* <http://www.regulations.gov>.

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

(3) *Mail or Delivery:* 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. Deliveries accepted between 9 a.m. and 5 p.m., Monday through Friday, except federal holidays. The telephone number is 202-366-9329.

See the "Public Participation and Request for Comments" portion of the **SUPPLEMENTARY INFORMATION** section below for further instructions on submitting comments. To avoid duplication, please use only one of these three methods.

FOR FURTHER INFORMATION CONTACT: If you have questions on this proposed rule, call or email Mr. Mark Cutter, Coast Guard Sector Boston Waterways Management Division, telephone 617-223-4000, email Mark.E.Cutter@uscg.mil. If you have questions on viewing the docket, call Cheryl Collins, Program Manager, Docket Operations, telephone 202-366-9826.

SUPPLEMENTARY INFORMATION:

Table of Acronyms

DHS Department of Homeland Security
CFR Code of Federal Regulations
COTP Captain of the Port
FR Federal Register
NPRM Notice of Proposed Rulemaking

A. Public Participation and Request for Comments

We encourage you to participate in this rulemaking by submitting comments and related materials. All comments received will be posted without change to <http://www.regulations.gov> and will include any personal information you have provided.

1. Submitting Comments

If you submit a comment, please include the docket number for this rulemaking (USCG-2014-0246), indicate the specific section of this document to which each comment applies, and provide a reason for each suggestion or recommendation. You may submit your comments and material online at <http://www.regulations.gov>, or by fax, mail, or hand delivery, but please use only one of these means. If you submit a comment online via www.regulations.gov, it will be considered received by the Coast Guard when you successfully transmit the comment. If you fax, hand deliver, or mail your comment, it will be considered as having been received by the Coast Guard when it is received at the Docket Management Facility. We recommend that you include your name and a mailing address, an email address, or a telephone number in the body of

your document so that we can contact you if we have questions regarding your submission.

To submit your comment online, go to <http://www.regulations.gov>, type the docket number (USCG-2014-0246) in the "SEARCH" box and click "SEARCH." Click on "Submit a Comment" on the line associated with this rulemaking.

If you submit your comments by mail or hand delivery, submit them in an unbound format, no larger than 8½ by 11 inches, suitable for copying and electronic filing. If you submit comments by mail and would like to know that they reached the Facility, please enclose a stamped, self-addressed postcard or envelope. We will consider all comments and material received during the comment period and may change the rule based on your comments.

2. Viewing Comments and Documents

To view comments, as well as documents mentioned in this preamble as being available in the docket, go to <http://www.regulations.gov>, type the docket number (USCG-2014-0246) in the "SEARCH" box and click "SEARCH." Click on Open Docket Folder on the line associated with this rulemaking. You may also visit the Docket Management Facility in Room W12-140 on the ground floor of the Department of Transportation West Building, 1200 New Jersey Avenue SE., Washington, DC 20590, between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

3. Privacy Act

Anyone can search the electronic form of comments received into any of our dockets by the name of the individual submitting the comment (or signing the comment, if submitted on behalf of an association, business, labor union, etc.). You may review a Privacy Act notice regarding our public dockets in the January 17, 2008, issue of the **Federal Register** (73 FR 3316).

4. Public Meeting

We do not now plan to hold a public meeting. But you may submit a request for one, using one of the methods specified under **ADDRESSES**. Please explain why you believe a public meeting would be beneficial. If we determine that one would aid this rulemaking, we will hold one at a time and place announced by a later notice in the **Federal Register**.

B. Regulatory History and Information

In previous years, the U.S. Coast Guard has received requests from

federal and state law enforcement agencies to establish a temporary security zone in the vicinity of the John Joseph Moakley United States Courthouse on a case-by-case basis to facilitate the security and safety of persons and property during high profile court proceedings. The Coast Guard now proposes to create a permanent rule that will create a permanent security zone in the vicinity of the courthouse to be enforced on a case-by-case basis at the discretion of the COTP.

C. Basis and Purpose

The legal basis for this rule is 33 U.S.C. 1231; 46 U.S.C. Chapter 701, 3306, 3703; 50 U.S.C. 191, 195; 33 CFR 1.05-1, 6.04-1, 6.04-6, and 160.5; Public Law 107-295, 116 Stat. 2064; and Department of Homeland Security Delegation No. 0170.1, which collectively authorize the Coast Guard to establish security zones.

The John Joseph Moakley United States Courthouse houses the United States Court of Appeals for the First Circuit, the United States District Court for the District of Massachusetts, and the United States Attorney's Office for the District of Massachusetts. Consequently, high profile events and court proceedings, such as the ongoing prosecution related to the Boston Marathon bombing, often take place at the Moakley Courthouse, resulting in a heightened security posture. With this in mind, the Captain of the Port, Sector Boston, has determined that a security zone is necessary to better protect and secure persons and property during high profile court proceedings and events.

Establishing a security zone on an ad hoc basis is administratively cumbersome and reduces the opportunity for public participation in the development of the rule. Thus, to lessen administrative overhead and to maximize public participation, this rule proposes to establish a security zone near the courthouse that will remain in effect permanently but will be enforced only when deemed necessary by the COTP. This permanent security zone will be published in Title 33 Code of Federal Regulations (CFR) Part 165.

D. Discussion of Rule

For the reasons explained above, the COTP Boston proposes to establish a security zone encompassing all U.S. navigable waters, from surface to bottom, within five hundred (500) yards of the John Joseph Moakley United States Courthouse (Moakley Courthouse) in Boston, MA and following any natural waterside seawall

configuration enclosed by a line connecting the following points:

Latitude	Longitude
42°21'15" N	71°02'54" W; Bounded by the curvature of the seawall, thence to
42°21'13" N	71°02'27" W; thence to
42°21'25" N	71°02'17" W; thence to
42°21'32" N	71°02'54" W; Bounded by the curvature of the seawall, thence to
42°21'18" N	71°03'01" W; thence to point of origin.

While this proposed security zone is being enforced, no person or vessel may enter or remain in it without the permission of the COTP. However, the COTP proposes to grant standing permission to enter the security zone to any vessel that goes no faster than that speed necessary to maintain a safe course, unless otherwise required by Navigation Rules and as long as such vessels remain beyond two hundred and fifty (250) yards of the Moakley Courthouse. Under certain circumstances and depending on security needs of a given situation, the COTP may predetermine before an enforcement period begins to make these standing conditions of entry less restrictive.

Regardless of the conditions of entry, any person or vessel permitted to enter the security zone must comply with the directions and orders of the COTP or the COTP's representative while said person or vessel is within the five-hundred (500) yard zone. To obtain the permissions required by this proposed regulation, individuals may reach the COTP or the COTP's representative via VHF channel 16 or 617-223-5757 (Sector Boston Command Center) to obtain permission.

This proposed security zone will be in effect permanently but will only be enforced when deemed necessary by the COTP. Anyone, including members of federal or state law enforcement agencies, may request that this security zone be enforced. The COTP will notify the public of the enforcement of this security zone by publishing a Notice of Enforcement (NOE) in the **Federal Register** and via the other means listed in 33 CFR 165.7. Such notifications will include the date and times of enforcement, along with any pre-determined conditions of entry.

E. Regulatory Analyses

We developed this proposed rule after considering numerous statutes and executive orders related to rulemaking. Below we summarize our analyses

based on these statutes or executive orders.

1. Regulatory Planning and Review

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

The Coast Guard expects minimal adverse impact on mariners from this security zone's enforcement for the following reasons. First, the security zone is expected to be enforced only a few weeks at a time and on only a few occasions per year. Second, the minimum speed necessary to maintain a safe steerageway, within five hundred (500) yards of the Moakley Courthouse closely mirrors the City of Boston's six (6) knots speed restrictions for Boston Inner Harbor. Third, the Coast Guard designed the security zone to have as minimal geographical application as possible and will permit traffic in the Fort Point Channel via law enforcement vessel escort. While water taxis servicing the Harbor Dock on the premises of the Moakley Courthouse may be impacted during an enforcement period, such impact should be minimal as the Harbor Dock at the courthouse will likely be shutdown during high profile events, and if not, the COTP is expected to permit vessels to enter via law enforcement vessel escort. Though the regular schedule commuter ferries that service Rowes Wharf will also have to transit through the two hundred and fifty (250) yard security zone, it is expected that the COTP will authorize them permission to transit through upon initial notification to the COTP or the designated on-scene representative. Fourth, mariners may pass through the security zone with authorization from the COTP or the designated on-scene representative. Finally, as mentioned previously, the Coast Guard will provide advance notification to the public anytime it intends to enforce the security zone. Such notification will be made in advance through an NOE published in the **Federal Register** and also through the local Notice to Mariners and Broadcast Notice to Mariners.

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. REGULATORY PLANNING AND REVIEW section, the Coast Guard certifies under 5 U.S.C. 605(b) that this rule would not have a significant economic impact on a substantial number of small entities.

If you think that your business, organization, or governmental jurisdiction qualifies as a small entity and that this rule would have significant economic impact on it, please submit a comment (see **ADDRESSES**) explaining why you think it qualifies and how and to what degree this rule would economically affect it.

3. Assistance for Small Entities

Under section 213(a) of the Small Business Regulatory Enforcement Fairness Act of 1996 (Pub. L. 104-121), we want to assist small entities in understanding this rule. If the rule would affect your small business, organization, or governmental jurisdiction and you have questions concerning its provisions or options for compliance, please contact the person listed in the **FOR FURTHER INFORMATION CONTACT**, above. The Coast Guard will not retaliate against small entities that question or complain about this rule or any policy or action of the Coast Guard.

4. Collection of Information

This proposed rule will not call for a new collection of information under the Paperwork Reduction Act of 1995 (44 U.S.C. 3501-3520).

5. Federalism

A rule has implications for federalism under Executive Order 13132, Federalism, if it has a substantial direct effect on 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 proposed rule under that Order and 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 proposed rule will not result in such expenditure, we do discuss the effects of this proposed rule elsewhere in this preamble.

8. *Taking of Private Property*

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

10. *Protection of Children From Environmental Health Risks*

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

11. *Indian Tribal Governments*

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

12. *Energy Effects*

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

13. *Technical Standards*

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

14. *Environment*

We have analyzed this proposed rule under Department of Homeland Security Management Directive 023–01 and Commandant Instruction M16475.ID, which guide the Coast Guard in complying with the National Environmental Policy Act of 1969 (NEPA) (42 U.S.C. 4321–4370f), and have made a preliminary determination that this action may be one of a category of actions that do not individually or cumulatively have a significant effect on the human environment.

This proposed rule involves the establishment of a security zone and thus, may be categorically excluded from further review under paragraph (34)(g) of Figure 2–1 of the Commandant Instruction. A preliminary environmental analysis checklist supporting this determination will be available in the docket where indicated under **ADDRESSES**. We seek any comments or information that may lead to the discovery of a significant environmental impact from this proposed rule.

List of Subjects in 33 CFR Part 165

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

For the reasons discussed in the preamble, the Coast Guard proposes to amend 33 CFR Part 165 as follows:

PART 165—REGULATED NAVIGATION AREAS AND LIMITED ACCESS AREAS

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

Authority: 33 U.S.C. 1231; 46 U.S.C. Chapter 701, 3306, 3703; 50 U.S.C. 191, 195; 33 CFR 1.05–1, 6.04–1, 6.04–6, and 160.5; Pub. L. 107–295, 116 Stat. 2064; Department of Homeland Security Delegation No. 0170.1.

■ 2. Add § 165.120 to read as follows:

§ 165.120 Security Zone; John Joseph Moakley United States Courthouse, Boston, MA.

(a) *Location.* This security zone encompasses all U.S. navigable waters, from surface to bottom, within five hundred (500) yards of the John Joseph Moakley United States Courthouse (Moakley Courthouse) in Boston, MA, and following any natural waterside seawall configuration enclosed by a line connecting the following points from: 42°21'15" N, 71°02'54" W bounded by

the curvature of the seawall; thence to 42°21'13" N, 71°02'27" W; thence to 42°21'25" N, 71°02'17" W; thence to 42°21'32" N, 71°02'54" W bounded by the curvature of the seawall; thence to 42°21'18" N, 71°03'01" W; thence to point of origin.

(b) *Regulations.* While this security zone is being enforced, the following regulations, along with those contained in 33 CFR 165.33, apply:

(1) No person or vessel may enter or remain in this security zone without the permission of the Captain of the Port (COTP), Sector Boston. However, the COTP hereby grants vessels permission to enter this security zone as long as such vessels remain beyond two hundred and fifty (250) yards of the Moakley Courthouse and as long as such vessels go no faster than that speed necessary to maintain a safe course, unless otherwise required by the Navigation Rules. Under certain circumstances and depending on security needs of a given situation, the COTP may predetermine before an enforcement period begins to make these entry conditions less restrictive.

(2) Although vessels have permission to enter the security zone under the conditions mentioned in the preceding paragraph, no person or vessel may come within two hundred and fifty (250) yards of the Moakley Courthouse under any conditions unless given express permission from the COTP or the COTP's designated representative. As mentioned in the preceding paragraph, the COTP may chose before an enforcement period begins to make this entry condition less restrictive. In other words, the COTP may predetermine that vessels allowed to conditionally enter the security zone may come closer to the courthouse than the two hundred and fifty (250) yards mentioned above.

(3) Any person or vessel permitted to enter the security zone shall comply with the directions and orders of the COTP or the COTP's representative. Upon being hailed by a U.S. Coast Guard vessel by siren, radio, flashing lights, or other means, the operator of a vessel within the zone shall proceed as directed. Any person or vessel within the security zone shall exit the zone when directed by the COTP or the COTP's representative.

(4) To obtain permissions required by this regulation, individuals may reach the COTP or the COTP's representative via VHF channel 16 or 617–223–5757 (Sector Boston Command Center) to obtain permission.

(5) *Penalties.* Those who violate this section are subject to the penalties set

forth in 33 U.S.C. 1232 and 50 U.S.C. 192.

(c) *Effective and enforcement period.* This security zone is in effect permanently but will only be enforced when deemed necessary by the COTP. Anyone, including members of federal or state law enforcement agencies, may request that this security zone be enforced.

(d) *Notification.* The COTP will notify the public of the enforcement of this security zone by publishing a Notice of Enforcement (NOE) in the **Federal Register** and via the other means listed in 33 CFR 165.7. Such notifications will include the date and times of enforcement, along with any pre-determined conditions of entry.

(e) *COTP representative.* The COTP's representative may be any Coast Guard commissioned, warrant, or petty officer or any Federal, state, or local law enforcement officer who has been designated by the COTP to act on the COTP's behalf. The COTP's representative may be on a Coast Guard vessel, a Coast Guard Auxiliary vessel, a state or local law enforcement vessel, or a location on shore.

Dated: November 5, 2014.

J.C. O'Connor III,

Captain, U.S. Coast Guard, Captain of the Port Boston.

[FR Doc. 2014-27160 Filed 11-19-14; 8:45 am]

BILLING CODE 9110-04-P

ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 52

[EPA-R04-OAR-2014-0444; FRL-9919-49-Region 4]

Approval and Promulgation of Implementation Plans; North Carolina Infrastructure Requirements for the 2008 Lead National Ambient Air Quality Standards

AGENCY: Environmental Protection Agency.

ACTION: Proposed rule.

SUMMARY: The Environmental Protection Agency (EPA) is proposing to approve the July 20, 2012, State Implementation Plan (SIP) submission, provided by the North Carolina Department of Environment and Natural Resources (NC DENR), Division of Air Quality (NCDQAQ) for inclusion into the North Carolina SIP. This proposal pertains to the Clean Air Act (CAA or the Act) infrastructure requirements for the 2008 Lead national ambient air quality standards (NAAQS). The CAA requires

that each state adopt and submit a SIP for the implementation, maintenance, and enforcement of each NAAQS promulgated by EPA, which is commonly referred to as an "infrastructure" SIP. NCDQAQ certified that the North Carolina SIP contains provisions that ensure the 2008 Lead NAAQS is implemented, enforced, and maintained in North Carolina (hereafter referred to as an "infrastructure SIP submission"). With the exception of provisions pertaining to prevention of significant deterioration (PSD) permitting and state boards requirements, EPA is proposing to determine that North Carolina's infrastructure SIP submission, provided to EPA on July 20, 2012, addresses the required infrastructure elements for the 2008 Lead NAAQS.

DATES: Written comments must be received on or before December 22, 2014.

ADDRESSES: Submit your comments, identified by Docket ID No. EPA-R04-OAR-2014-0444, by one of the following methods:

1. *www.regulations.gov:* Follow the on-line instructions for submitting comments.
2. *Email:* R4-RDS@epa.gov.
3. *Fax:* (404) 562-9019.
4. *Mail:* "EPA-R04-OAR-2014-0444," Regulatory Development Section, Air Planning Branch, Air, Pesticides and Toxics Management Division, U.S. Environmental Protection Agency, Region 4, 61 Forsyth Street SW., Atlanta, Georgia 30303-8960.
5. *Hand Delivery or Courier:* Lynorae Benjamin, Chief, Regulatory Development Section, Air Planning Branch, Air, Pesticides and Toxics Management Division, U.S. Environmental Protection Agency, Region 4, 61 Forsyth Street SW., Atlanta, Georgia 30303-8960. Such deliveries are only accepted during the Regional Office's normal hours of operation. The Regional Office's official hours of business are Monday through Friday, 8:30 a.m. to 4:30 p.m., excluding Federal holidays.

Instructions: Direct your comments to Docket ID No. EPA-R04-OAR-2014-0444. 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 through *www.regulations.gov* or email,

information that you consider to be CBI or otherwise protected. The *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*, 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*.

Docket: All documents in the electronic docket are listed in the *www.regulations.gov* index. Although listed in the index, some information is not publicly available, i.e., 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 in *www.regulations.gov* or in hard copy at the Regulatory Development Section, Air Planning Branch, Air, Pesticides and Toxics Management Division, U.S. Environmental Protection Agency, Region 4, 61 Forsyth Street SW., Atlanta, Georgia 30303-8960. EPA requests that if at all possible, you contact the person listed in the **FOR FURTHER INFORMATION CONTACT** section to schedule your inspection. The Regional Office's official hours of business are Monday through Friday, 8:30 a.m. to 4:30 p.m., excluding Federal holidays.

FOR FURTHER INFORMATION CONTACT: Zuri Farnago, Regulatory Development Section, Air Planning Branch, Air, Pesticides and Toxics Management Division, U.S. Environmental Protection Agency, Region 4, 61 Forsyth Street SW., Atlanta, Georgia 30303-8960. The telephone number is (404) 562-9152. Mr. Farnago can be reached via electronic mail at *farnago.zuri@epa.gov*.

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I. Background

On October 5, 1978, EPA promulgated primary and secondary NAAQS for Lead under section 109 of the Act. *See* 43 FR 46246. Both primary and secondary standards were set at a level of 1.5 micrograms per cubic meter ($\mu\text{g}/\text{m}^3$), measured as lead in total suspended particulate matter (Pb-TSP), not to be exceeded by the maximum arithmetic mean concentration averaged over a calendar quarter. This standard was based on the August 7, 1977 Air Quality Criteria for Lead. On November 12, 2008 (75 FR 81126), EPA issued a final rule to revise the primary and secondary Lead NAAQS. The revised primary and secondary Lead NAAQS were revised to $0.15 \mu\text{g}/\text{m}^3$. By statute, SIPs meeting the requirements of sections 110(a)(1) and (2) are to be submitted by states within three years after promulgation of a new or revised NAAQS. Sections 110(a)(1) and (2) require states to address basic SIP requirements, including emissions inventories, monitoring, and modeling to assure attainment and maintenance of the NAAQS. States were required to submit such SIPs to EPA no later than October 15, 2011, for the 2008 Lead NAAQS.¹

Today's action is proposing to approve North Carolina's infrastructure submission for the applicable requirements of the Lead NAAQS, with the exception of preconstruction PSD permitting requirements for major sources of sections 110(a)(2)(C), prong 3 of D(i), and (j) and the state board

requirements of 110(E)(ii). With respect to North Carolina's infrastructure SIP submission related to the provisions pertaining to the PSD permitting requirements for major sources of section 110(a)(2)(C), prong 3 of D(i), and (j), and the state board requirements complying with section 128 of the CAA for 110(a)(2)(E)(ii), EPA is not proposing any action today regarding these requirements. EPA will act on these portions of North Carolina's submission in a separate action. This action is not approving any specific rule, but rather proposing that North Carolina's already approved SIP meets certain CAA requirements.

II. What elements are required under Sections 110(a)(1) and (2)?

Section 110(a) of the CAA requires states to submit SIPs to provide for the implementation, maintenance, and enforcement of a new or revised NAAQS within three years following the promulgation of such NAAQS, or within such shorter period as EPA may prescribe. Section 110(a) imposes the obligation upon states to make a SIP submission to EPA for a new or revised NAAQS, but the contents of that submission may vary depending upon the facts and circumstances. In particular, the data and analytical tools available at the time the state develops and submits the SIP for a new or revised NAAQS affects the content of the submission. The contents of such SIP submissions may also vary depending upon what provisions the state's existing SIP already contains. In the case of the 2008 Lead NAAQS, states typically have met the basic program elements required in section 110(a)(2) through earlier SIP submissions in connection with the 1978 Lead NAAQS.

More specifically, section 110(a)(1) provides the procedural and timing requirements for SIPs. Section 110(a)(2) lists specific elements that states must meet for "infrastructure" SIP requirements related to a newly established or revised NAAQS. As mentioned above, these requirements include SIP infrastructure elements such as modeling, monitoring, and emissions inventories that are designed to assure attainment and maintenance of the NAAQS. The requirements that are the subject of this proposed rulemaking are listed below² and in EPA's October

14, 2011, memorandum entitled "Guidance on Infrastructure State Implementation Plan (SIP) Elements Required Under Sections 110(a)(1) and 110(a)(2) for the 2008 Lead (Pb) National Ambient Air Quality Standards (NAAQS)" (2011 Lead Infrastructure SIP Guidance).

- 110(a)(2)(A): Emission limits and other control measures.
- 110(a)(2)(B): Ambient air quality monitoring/data system.
- 110(a)(2)(C): Program for enforcement, prevention of significant deterioration (PSD) and new source review (NSR).³
- 110(a)(2)(D): Interstate and international transport provisions.
- 110(a)(2)(E): Adequate personnel, funding, and authority.
- 110(a)(2)(F): Stationary source monitoring and reporting.
- 110(a)(2)(G): Emergency episodes.
- 110(a)(2)(H): Future SIP revisions.
- 110(a)(2)(I): Nonattainment area plan or plan revision under part D.⁴
- 110(a)(2)(J): Consultation with government officials, public notification, and PSD and visibility protection.
- 110(a)(2)(K): Air quality modeling/data.
- 110(a)(2)(L): Permitting fees.
- 110(a)(2)(M): Consultation/participation by affected local entities.

III. What is EPA's approach to the review of infrastructure SIP submissions?

EPA is acting upon the SIP submission from North Carolina that addresses the infrastructure requirements of CAA sections 110(a)(1) and 110(a)(2) for the 2008 Lead NAAQS. Pursuant to section 110(a)(1), states must make SIP submissions "within 3 years (or such shorter period as the Administrator may prescribe) after the promulgation of a national primary ambient air quality standard (or any revision thereof)," and these SIP submissions are to provide for the "implementation, maintenance, and enforcement" of such NAAQS. The statute directly imposes on states the duty to make these SIP submissions,

Submissions required by section 110(a)(2)(C) to the extent that subsection refers to a permit program as required in part D Title I of the CAA, and (2) submissions required by section 110(a)(2)(I) which pertain to the nonattainment planning requirements of part D, Title I of the CAA. Today's proposed rulemaking does not address infrastructure elements related to section 110(a)(2)(I) or the nonattainment planning requirements of 110(a)(2)(C).

³ This rulemaking only addresses requirements for this element as they relate to attainment areas.

⁴ As mentioned above, this element is not relevant to today's proposed rulemaking.

¹ In these infrastructure SIP submissions states generally certify evidence of compliance with sections 110(a)(1) and (2) of the CAA through a combination of state regulations and statutes, some of which have been incorporated into the federally-approved SIP. In addition, certain federally-approved, non-SIP regulations may also be appropriate for demonstrating compliance with sections 110(a)(1) and (2). Unless otherwise indicated, the Title 15A regulations of the North Carolina Administrative Code ("15A NCAC") cited throughout this rulemaking have either been approved, or submitted for approval into North Carolina's federally-approved SIP. The North Carolina General Statutes ("NCGS") cited throughout this rulemaking, however, are not approved into the North Carolina SIP unless otherwise indicated.

² Two elements identified in section 110(a)(2) are not governed by the three year submission deadline of section 110(a)(1) because SIPs incorporating necessary local nonattainment area controls are not due within three years after promulgation of a new or revised NAAQS, but rather due at the time the nonattainment area plan requirements are due pursuant to section 172. These requirements are: (1)

and the requirement to make the submissions is not conditioned upon EPA's taking any action other than promulgating a new or revised NAAQS. Section 110(a)(2) includes a list of specific elements that "each such plan" submission must address.

EPA has historically referred to these SIP submissions made for the purpose of satisfying the requirements of CAA sections 110(a)(1) and 110(a)(2) as "infrastructure SIP" submissions. Although the term "infrastructure SIP" does not appear in the CAA, EPA uses the term to distinguish this particular type of SIP submission from submissions that are intended to satisfy other SIP requirements under the CAA, such as "nonattainment SIP" or "attainment plan SIP" submissions to address the nonattainment planning requirements of part D of title I of the CAA, "regional haze SIP" submissions required by EPA rule to address the visibility protection requirements of CAA section 169A, and nonattainment new source review permit program submissions to address the permit requirements of CAA, title I, part D.

Section 110(a)(1) addresses the timing and general requirements for infrastructure SIP submissions, and section 110(a)(2) provides more details concerning the required contents of these submissions. The list of required elements provided in section 110(a)(2) contains a wide variety of disparate provisions, some of which pertain to required legal authority, some of which pertain to required substantive program provisions, and some of which pertain to requirements for both authority and substantive program provisions.⁵ EPA therefore believes that while the timing requirement in section 110(a)(1) is unambiguous, some of the other statutory provisions are ambiguous. In particular, EPA believes that the list of required elements for infrastructure SIP submissions provided in section 110(a)(2) contains ambiguities concerning what is required for inclusion in an infrastructure SIP submission.

The following examples of ambiguities illustrate the need for EPA to interpret some section 110(a)(1) and section 110(a)(2) requirements with respect to infrastructure SIP submissions for a given new or revised

NAAQS. One example of ambiguity is that section 110(a)(2) requires that "each" SIP submission must meet the list of requirements therein, while EPA has long noted that this literal reading of the statute is internally inconsistent and would create a conflict with the nonattainment provisions in part D of title I of the Act, which specifically address nonattainment SIP requirements.⁶ Section 110(a)(2)(I) pertains to nonattainment SIP requirements and part D addresses when attainment plan SIP submissions to address nonattainment area requirements are due. For example, section 172(b) requires EPA to establish a schedule for submission of such plans for certain pollutants when the Administrator promulgates the designation of an area as nonattainment, and section 107(d)(1)(B) allows up to two years, or in some cases three years, for such designations to be promulgated.⁷ This ambiguity illustrates that rather than apply all the stated requirements of section 110(a)(2) in a strict literal sense, EPA must determine which provisions of section 110(a)(2) are applicable for a particular infrastructure SIP submission.

Another example of ambiguity within sections 110(a)(1) and 110(a)(2) with respect to infrastructure SIPs pertains to whether states must meet all of the infrastructure SIP requirements in a single SIP submission, and whether EPA must act upon such SIP submission in a single action. Although section 110(a)(1) directs states to submit "a plan" to meet these requirements, EPA interprets the CAA to allow states to make multiple SIP submissions separately addressing infrastructure SIP elements for the same NAAQS. If states elect to make such multiple SIP submissions to meet the infrastructure SIP requirements, EPA can elect to act on such submissions either individually or in a larger combined action.⁸

⁶ See, e.g., "Rule To Reduce Interstate Transport of Fine Particulate Matter and Ozone (Clean Air Interstate Rule); Revisions to Acid Rain Program; Revisions to the NO_x SIP Call; Final Rule," 70 FR 25162, at 25163–65 (May 12, 2005) (explaining relationship between timing requirement of section 110(a)(2)(D) versus section 110(a)(2)(I)).

⁷ EPA notes that this ambiguity within section 110(a)(2) is heightened by the fact that various subparts of part D set specific dates for submission of certain types of SIP submissions in designated nonattainment areas for various pollutants. Note, e.g., that section 182(a)(1) provides specific dates for submission of emissions inventories for the ozone NAAQS. Some of these specific dates are necessarily later than three years after promulgation of the new or revised NAAQS.

⁸ See, e.g., "Approval and Promulgation of Implementation Plans; New Mexico; Revisions to the New Source Review (NSR) State Implementation Plan (SIP); Prevention of Significant Deterioration (PSD) and Nonattainment

Similarly, EPA interprets the CAA to allow it to take action on the individual parts of one larger, comprehensive infrastructure SIP submission for a given NAAQS without concurrent action on the entire submission. For example, EPA has sometimes elected to act at different times on various elements and sub-elements of the same infrastructure SIP submission.⁹

Ambiguities within sections 110(a)(1) and 110(a)(2) may also arise with respect to infrastructure SIP submission requirements for different NAAQS. Thus, EPA notes that not every element of section 110(a)(2) would be relevant, or as relevant, or relevant in the same way, for each new or revised NAAQS. The states' attendant infrastructure SIP submissions for each NAAQS therefore could be different. For example, the monitoring requirements that a state might need to meet in its infrastructure SIP submission for purposes of section 110(a)(2)(B) could be very different for different pollutants because the content and scope of a state's infrastructure SIP submission to meet this element might be very different for an entirely new NAAQS than for a minor revision to an existing NAAQS.¹⁰

EPA notes that interpretation of section 110(a)(2) is also necessary when EPA reviews other types of SIP submissions required under the CAA. Therefore, as with infrastructure SIP submissions, EPA also has to identify and interpret the relevant elements of section 110(a)(2) that logically apply to these other types of SIP submissions. For example, section 172(c)(7) requires that attainment plan SIP submissions required by part D have to meet the "applicable requirements" of section 110(a)(2). Thus, for example, attainment

New Source Review (NSR) Permitting," 78 FR 4339 (January 22, 2013) (EPA's final action approving the structural PSD elements of the New Mexico SIP submitted by the State separately to meet the requirements of EPA's 2008 PM_{2.5} NSR rule), and "Approval and Promulgation of Air Quality Implementation Plans; New Mexico; Infrastructure and Interstate Transport Requirements for the 2006 PM_{2.5} NAAQS," (78 FR 4337) (January 22, 2013) (EPA's final action on the infrastructure SIP for the 2006 PM_{2.5} NAAQS).

⁹ On December 14, 2007, the State of Tennessee, through the Tennessee Department of Environment and Conservation, made a SIP revision to EPA demonstrating that the State meets the requirements of sections 110(a)(1) and (2). EPA proposed action for infrastructure SIP elements (C) and (J) on January 23, 2012 (77 FR 3213) and took final action on March 14, 2012 (77 FR 14976). On April 16, 2012 (77 FR 22533) and July 23, 2012 (77 FR 42997), EPA took separate proposed and final actions on all other section 110(a)(2) infrastructure SIP elements of Tennessee's December 14, 2007 submittal.

¹⁰ For example, implementation of the 1997 PM_{2.5} NAAQS required the deployment of a system of new monitors to measure ambient levels of that new indicator species for the new NAAQS.

⁵ For example: Section 110(a)(2)(E)(i) provides that states must provide assurances that they have adequate legal authority under state and local law to carry out the SIP; section 110(a)(2)(C) provides that states must have a SIP-approved program to address certain sources as required by part C of title I of the CAA; and section 110(a)(2)(G) provides that states must have legal authority to address emergencies as well as contingency plans that are triggered in the event of such emergencies.

plan SIP submissions must meet the requirements of section 110(a)(2)(A) regarding enforceable emission limits and control measures and section 110(a)(2)(E)(i) regarding air agency resources and authority. By contrast, it is clear that attainment plan SIP submissions required by part D would not need to meet the portion of section 110(a)(2)(C) that pertains to the PSD program required in part C of title I of the CAA, because PSD does not apply to a pollutant for which an area is designated nonattainment and thus subject to part D planning requirements. As this example illustrates, each type of SIP submission may implicate some elements of section 110(a)(2) but not others.

Given the potential for ambiguity in some of the statutory language of section 110(a)(1) and section 110(a)(2), EPA believes that it is appropriate to interpret the ambiguous portions of section 110(a)(1) and section 110(a)(2) in the context of acting on a particular SIP submission. In other words, EPA assumes that Congress could not have intended that each and every SIP submission, regardless of the NAAQS in question or the history of SIP development for the relevant pollutant, would meet each of the requirements, or meet each of them in the same way. Therefore, EPA has adopted an approach under which it reviews infrastructure SIP submissions against the list of elements in section 110(a)(2), but only to the extent each element applies for that particular NAAQS.

Historically, EPA has elected to use guidance documents to make recommendations to states for infrastructure SIPs, in some cases conveying needed interpretations on newly arising issues and in some cases conveying interpretations that have already been developed and applied to individual SIP submissions for particular elements.¹¹ EPA issued the Lead Infrastructure SIP Guidance on October 14, 2011.¹² EPA developed this document to provide states with up-to-date guidance for the 2008 Lead infrastructure SIPs. Within this

guidance, EPA describes the duty of states to make infrastructure SIP submissions to meet basic structural SIP requirements within three years of promulgation of a new or revised NAAQS. EPA also made recommendations about many specific subsections of section 110(a)(2) that are relevant in the context of infrastructure SIP submissions. The guidance also discusses the substantively important issues that are germane to certain subsections of section 110(a)(2). Significantly, EPA interprets sections 110(a)(1) and 110(a)(2) such that infrastructure SIP submissions need to address certain issues and need not address others. Accordingly, EPA reviews each infrastructure SIP submission for compliance with the applicable statutory provisions of section 110(a)(2), as appropriate.¹³

EPA's approach to review of infrastructure SIP submissions is to identify the CAA requirements that are logically applicable to that submission. EPA believes that this approach to the review of a particular infrastructure SIP submission is appropriate, because it would not be reasonable to read the general requirements of section 110(a)(1) and the list of elements in 110(a)(2) as requiring review of each and every provision of a state's existing SIP against all requirements in the CAA and EPA regulations merely for purposes of assuring that the state in question has the basic structural elements for a functioning SIP for a new or revised NAAQS. Because SIPs have grown by accretion over the decades as statutory and regulatory requirements under the CAA have evolved, they may include some outmoded provisions and historical artifacts. These provisions, while not fully up to date, nevertheless may not pose a significant problem for the purposes of "implementation, maintenance, and enforcement" of a new or revised NAAQS when EPA evaluates adequacy of the infrastructure SIP submission. EPA believes that a better approach is for states and EPA to focus attention on those elements of

section 110(a)(2) of the CAA most likely to warrant a specific SIP revision due to the promulgation of a new or revised NAAQS or other factors.

Finally, EPA believes that its approach with respect to infrastructure SIP requirements is based on a reasonable reading of sections 110(a)(1) and 110(a)(2) because the CAA provides other avenues and mechanisms to address specific substantive deficiencies in existing SIPs. These other statutory tools allow EPA to take appropriately tailored action, depending upon the nature and severity of the alleged SIP deficiency. Section 110(k)(5) authorizes EPA to issue a "SIP call" whenever the Agency determines that a state's SIP is substantially inadequate to attain or maintain the NAAQS, to mitigate interstate transport, or to otherwise comply with the CAA.¹⁴ Section 110(k)(6) authorizes EPA to correct errors in past actions, such as past approvals of SIP submissions.¹⁵ Significantly, EPA's determination that an action on a state's infrastructure SIP submission is not the appropriate time and place to address all potential existing SIP deficiencies does not preclude EPA's subsequent reliance on provisions in section 110(a)(2) as part of the basis for action to correct those deficiencies at a later time. For example, although it may not be appropriate to require a state to eliminate all existing inappropriate director's discretion provisions in the course of acting on an infrastructure SIP submission, EPA believes that section 110(a)(2)(A) may be among the statutory bases that EPA relies upon in the course of addressing such deficiency in a subsequent action.¹⁶

¹⁴ For example, EPA issued a SIP call to Utah to address specific existing SIP deficiencies related to the treatment of excess emissions during SSM events. See "Finding of Substantial Inadequacy of Implementation Plan; Call for Utah State Implementation Plan Revisions," 74 FR 21639 (April 18, 2011).

¹⁵ EPA has used this authority to correct errors in past actions on SIP submissions related to PSD programs. See "Limitation of Approval of Prevention of Significant Deterioration Provisions Concerning Greenhouse Gas Emitting-Sources in State Implementation Plans; Final Rule," 75 FR 82536 (December 30, 2010). EPA has previously used its authority under CAA section 110(k)(6) to remove numerous other SIP provisions that the Agency determined it had approved in error. See, e.g., 61 FR 38664 (July 25, 1996) and 62 FR 34641 (June 27, 1997) (corrections to American Samoa, Arizona, California, Hawaii, and Nevada SIPs); 69 FR 67062 (November 16, 2004) (corrections to California SIP); and 74 FR 57051 (November 3, 2009) (corrections to Arizona and Nevada SIPs).

¹⁶ See, e.g., EPA's disapproval of a SIP submission from Colorado on the grounds that it would have included a director's discretion provision inconsistent with CAA requirements, including section 110(a)(2)(A). See, e.g., 75 FR 42342 at 42344

¹¹ EPA notes, however, that nothing in the CAA requires EPA to provide guidance or to promulgate regulations for infrastructure SIP submissions. The CAA directly applies to states and requires the submission of infrastructure SIP submissions, regardless of whether or not EPA provides guidance or regulations pertaining to such submissions. EPA elects to issue such guidance in order to assist states, as appropriate.

¹² "Guidance on Infrastructure State Implementation Plan (SIP) Elements Required under Clean Air Act Sections 110(a)(1) and 110(a)(2) for the 2008 Lead (Pb) National Ambient Air Quality Standards (NAAQS)," Memorandum from Stephen D. Page, October 14, 2001.

¹³ Although not intended to provide guidance for purposes of infrastructure SIP submissions for the 2008 Lead NAAQS, EPA notes that, following the 2011 Lead Infrastructure SIP Guidance, EPA issued the "Guidance on Infrastructure State Implementation Plan (SIP) Elements under Clean Air Act Sections 110(a)(1) and 110(a)(2)." Memorandum from Stephen D. Page, September 13, 2013. This 2013 guidance provides recommendations for air agencies' development and the EPA's review of infrastructure SIPs for the 2008 ozone primary and secondary NAAQS, the 2010 primary nitrogen dioxide (NO₂) NAAQS, the 2010 primary sulfur dioxide (SO₂) NAAQS, and the 2012 primary fine particulate matter (PM_{2.5}) NAAQS, as well as infrastructure SIPs for new or revised NAAQS promulgated in the future.

IV. What is EPA's analysis of how North Carolina addressed the elements of sections 110(a)(1) and (2) "infrastructure" provisions?

The North Carolina infrastructure submission addresses the provisions of sections 110(a)(1) and (2) as described below.

1. *110(a)(2)(A) Emission limits and other control measures:* There are several provisions within the North Carolina General Statutes (NCGS) and the North Carolina Administrative Code (NCAC) that provide NCDAQ with the necessary authority to adopt and enforce air quality controls, which include enforceable emission limitations and other control measures. Rules 15A NCAC 2D .0600 "Monitoring; Recordkeeping; Reporting;" 15A NCAC 2D .1600 "General Conformity;" 15A NCAC 2D .2200 "Special Orders;" and, 15A NCAC 2D .2600 "Source Testing," provide enforceable emission limits and other control measures, means, and techniques. In addition, NCGS 143–215.107(a)(5), "Air quality standards and classifications," provides North Carolina with the authority to "develop and adopt emission control standards as in the judgment of the Commission may be necessary to prohibit, abate, or control air pollution commensurate with established air quality standards." EPA has made the preliminary determination that these provisions and North Carolina's practices are adequate to protect the 2008 Lead NAAQS in the State.

In this action, EPA is not proposing to approve or disapprove any existing State provisions with regard to excess emissions during SSM of operations at a facility. EPA believes that a number of states have SSM provisions which are contrary to the CAA and existing EPA guidance, "State Implementation Plans: Policy Regarding Excess Emissions During Malfunctions, Startup, and Shutdown" (September 20, 1999), and the Agency plans to address such state regulations in the future.¹⁷ In the meantime, EPA encourages any state having a deficient SSM provision to take steps to correct it as soon as possible.

Additionally, in this action, EPA is not proposing to approve or disapprove any existing State rules with regard to

director's discretion or variance provisions. In the meantime, EPA encourages any state having a director's discretion or variance provision which is contrary to the CAA and EPA guidance to take steps to correct the deficiency as soon as possible.

2. *110(a)(2)(B) Ambient air quality monitoring/data system:* SIPs are required to provide for the establishment and operation of ambient air quality monitors; the compilation and analysis of ambient air quality data; and the submission of these data to EPA upon request. NCGS 143–215.107(a)(2), "Air quality standards and classifications," along with the North Carolina Annual Monitoring Network Plan, provide for an ambient air quality monitoring system in the State, which includes the monitoring of lead at appropriate locations throughout the state using the EPA approved Federal Reference Method or equivalent monitors. NCGS 143–215.107(a)(2) also provides North Carolina with the statutory authority to "determine by means of field sampling and other studies, including the examination of available data collected by any local, State or federal agency or any person, the degree of air contamination and air pollution in the State and the several areas of the State." The monitors are all part of the Air Quality Systems (AQS) and identification numbers. Annually, States develop and submit to EPA for approval statewide ambient monitoring network plans consistent with the requirements of 40 CFR Parts 50, 53, and 58. The annual network plan involves an evaluation of any proposed changes to the monitoring network, includes the annual ambient monitoring network design plan and a certified evaluation of the agency's ambient monitors and auxiliary support equipment.¹⁸ The latest monitoring network plan approved for North Carolina was submitted to EPA on July 2, 2013, and on November 25, 2013, EPA approved this plan. North Carolina's approved monitoring network plan can be accessed at www.regulations.gov using Docket ID No. EPA–R04–OAR–2014–0444. EPA has made the preliminary determination that North Carolina's SIP and practices are adequate for the ambient air quality monitoring and data system related to the 2008 Lead NAAQS.

3. *110(a)(2)(C) Program for enforcement, prevention of significant deterioration (PSD) and new source*

review (NSR): Section 110(a)(2)(C) requires that the SIPs include a program to provide for the enforcement of the measures described in section 110(a)(2)(A), and regulation of the modification and construction of any stationary source within the areas covered by the plan as necessary to assure that national ambient air quality standards are achieved, including a permit program. In this action, EPA is proposing to approve North Carolina's infrastructure SIP submission for the 2008 Lead NAAQS with respect to the general requirement in section 110(a)(2)(C) to include a program in the SIP that provides for the enforcement of emission limits and control measures, the regulation of minor sources and modifications, and the enforcement of oxides of nitrogen (NO_x) and volatile organic compounds (VOCs) emission limits to assist in the protection of air quality in nonattainment, attainment or unclassifiable areas. To meet these obligations, North Carolina cited regulations 15A NCAC 2D. 0500 "Emissions Control Standards;" 2D. 0530 "Prevention of Significant Deterioration;" and, 2D. 0531 "Sources in Nonattainment Area," each of which pertain to the construction of any new major stationary source or any project at an existing major stationary source in an area designated as attainment or unclassifiable. EPA will be acting on the preconstruction PSD permitting program requirements of section 110(a)(2)(C) in a separate action.

Enforcement: NCDAQ's above-described, SIP-approved regulations provide for enforcement of VOC and NO_x emission limits and control measures and construction permitting for new or modified stationary sources.

Preconstruction PSD Permitting for Major Sources: With respect to North Carolina's infrastructure SIP submission related to the preconstruction PSD permitting requirements for major sources of section 110(a)(2)(C), EPA is not proposing any action today regarding these requirements and instead will act on this portion of the submission in a separate action.

Regulation of minor sources and modifications: Section 110(a)(2)(C) also requires the SIP to include provisions that govern the minor source preconstruction program that regulates emissions of the 2008 Lead NAAQS. Regulation 15A NCAC 2Q .0300 "Construction Operation Permits," governs the preconstruction permitting of modifications and construction of minor stationary sources.

EPA has made the preliminary determination that North Carolina's SIP and practices are adequate for

(July 21, 2010) (proposed disapproval of director's discretion provisions); 76 FR 4540 (Jan. 26, 2011) (final disapproval of such provisions).

¹⁷ On February 22, 2013, EPA published a proposed action in the *Federal Register* entitled, "State Implementation Plans: Response to Petition for Rulemaking; Findings of Substantial Inadequacy; and SIP Calls to Amend Provisions Applying to Excess Emissions During Periods of Startup, Shutdown, and Malfunction; Proposed Rule." 78 FR 12459.

¹⁸ On occasion, proposed changes to the monitoring network are evaluated outside of the network plan approval process in accordance with 40 CFR Part 58.

enforcement of control measures and regulation of minor sources and modifications related to the 2008 Lead NAAQS.

4. *110(a)(2)(D)(i) and (ii) Interstate and International transport provisions:* Section 110(a)(2)(D)(i) has two components; 110(a)(2)(D)(i)(I) and 110(a)(2)(D)(i)(II). Each of these components have two subparts resulting in four distinct components, commonly referred to as “prongs,” that must be addressed in infrastructure SIP submissions. The first two prongs, which are codified in section 110(a)(2)(D)(i)(I), are provisions that prohibit any source or other type of emissions activity in one state from contributing significantly to nonattainment of the NAAQS in another state (“prong 1”), and interfering with maintenance of the NAAQS in another state (“prong 2”). The third and fourth prongs, which are codified in section 110(a)(2)(D)(i)(II), are provisions that prohibit emissions activity in one state interfering with measures required to prevent significant deterioration of air quality in another state (“prong 3”), or to protect visibility in another state (“prong 4”). Section 110(a)(2)(D)(ii) requires SIPs to include provisions insuring compliance with sections 115 and 126 of the Act, relating to interstate and international pollution abatement.

With respect to North Carolina’s infrastructure SIP submission related to the interstate transport requirements of section 110(a)(2)(D)(i)(II) (prong 3), EPA is not proposing any action today regarding this requirement and instead will act on this portion of the submission in a separate action.

110(a)(2)(D)(i)(I) *prongs 1 and 2:* Section 110(a)(2)(D)(i) requires infrastructure SIP submissions to include provisions prohibiting any source or other type of emissions activity in one state from contributing significantly to nonattainment in, or interfering with maintenance of the NAAQS in another state. The physical properties of lead prevent lead emissions from experiencing that same travel or formation phenomena as PM_{2.5} and ozone for interstate transport as outlined in prongs 1 and 2. More specifically, there is a sharp decrease in the lead concentrations, at least in the coarse fraction, as the distance from a lead source increases. EPA believes that the requirements of prongs 1 and 2 can be satisfied through a state’s assessment as to whether a lead source located within its State in close proximity to a state border has emissions that contribute significantly to the nonattainment or interfere with maintenance of the NAAQS in the

neighboring state. For example, EPA’s experience suggests that sources located more than two miles from the state border or that sources that emit less than 0.5 tpy generally appear unlikely to contribute significantly to the nonattainment in another state. North Carolina has one lead source that has emissions which exceed 0.5 tons per year (tpy), however, the source is located approximately 45 miles from the State border.¹⁹ As a result of its distance to the border, EPA believes it is unlikely to contribute significantly to the nonattainment or interfere with maintenance of the NAAQS in another state. Therefore, EPA has made the preliminary determination that North Carolina’s SIP meets the requirements of section 110(a)(2)(D)(i)(I).

110(a)(2)(D)(i)(II) *Prong 3:* With respect to North Carolina’s infrastructure SIP submission related to the interstate transport requirements of section 110(a)(2)(D)(i)(II) prong 3, EPA is not proposing any action today regarding these requirements and will act on this portion of the submission in a separate action.

110(a)(2)(D)(i)(II) *prong 4:* With regard to section 110(a)(2)(D)(i)(II), the visibility sub-element, referred to as prong 4, significant visibility impacts from stationary source lead emissions are expected to be limited to short distances from the source. Lead stationary sources in North Carolina are located distances from Class I areas such that visibility impacts are negligible. The 2011 Lead Infrastructure SIP Guidance notes that the lead constituent of PM would likely not travel far enough to affect Class I areas and that the visibility provisions of the CAA do not directly regulate lead. EPA therefore does not expect states to address visibility in lead infrastructure submittals. Thus, EPA concludes there are no new applicable visibility protection obligations under section 110(a)(2)(D)(i)(II) as a result of the 2008 Lead NAAQS. Accordingly, EPA has preliminarily determined that the North Carolina SIP meets the relevant visibility requirements of prong 4 of section 110(a)(2)(D)(i).

110(a)(2)(D)(ii)—*Interstate and International transport provisions:* Regulations 15A NCAC 2D .0530 “Prevention of Significant Deterioration” and 15A NCAC 2D .0531 “Sources of Nonattainment Areas” provide how NCDAQ will notify neighboring states of potential impacts

from new or modified sources consistent with the requirements of 40 CFR 51.166. In addition, North Carolina does not have any pending obligation under sections 115 and 126 of the CAA. EPA has made the preliminary determination that North Carolina’s SIP and practices are adequate for insuring compliance with the applicable requirements relating to interstate and international pollution abatement for the 2008 Lead NAAQS.

6. *110(a)(2)(E) Adequate personnel, funding, and authority.* Section 110(a)(2)(E) requires that each implementation plan provide (i) necessary assurances that the State will have adequate personnel, funding, and authority under state law to carry out its implementation plan, (ii) that the State comply with the requirements respecting State Boards pursuant to section 128 of the Act, and (iii) necessary assurances that, where the State has relied on a local or regional government, agency, or instrumentality for the implementation of any plan provision, the State has responsibility for ensuring adequate implementation of such plan provisions. EPA is proposing to approve North Carolina’s SIP as meeting the requirements of sub-elements 110(a)(2)(E)(i) and (iii). EPA will act on sub-element (ii) in separate action. EPA’s rationale for today’s proposal respecting sub-element (i) and (iii) is described in turn below.

To satisfy the requirements of sections 110(a)(2)(E)(i) and (iii), North Carolina’s infrastructure SIP submission cites regulation 15A NCAC 2Q. 0200 “Permit Fees,” which provides the mechanism by which stationary sources that emit air pollutants pay a fee based on the quantity of emissions emitted. State statutes NCGS 143–215.3 “General powers of Commission and Department: auxiliary powers,” and NCGS 143–215.107(a)(1) “Air quality standards and classifications” provide NCDAQ with the statutory authority “[t]o prepare and develop, after proper study, a comprehensive plan or plans for the prevention, abatement and control of air pollution in the State or in any designated area of the State.” As further evidence of the adequacy of NCDAQ’s resources, EPA submitted a letter to North Carolina on February 28, 2014, outlining 105 grant commitments and the current status of these commitments for fiscal year 2013. The letter EPA submitted to North Carolina can be accessed at www.regulations.gov using Docket ID No. EPA–R04–OAR–2014–0444. Annually, states update these grant commitments based on current SIP requirements, air quality planning, and applicable requirements related to the

¹⁹ The one facility in North Carolina that has lead emissions greater than 0.5 tpy is the Saint Gobain Containers facility located at 2201 Firestone Pkwy Ne, Wilson, NC 27893. The lead emissions from this facility are .53 tpy.

NAAQS. North Carolina satisfactorily met all commitments agreed to in the Air Planning Agreement for fiscal year 2013, therefore North Carolina's grants were finalized and closed out.

With respect to North Carolina's infrastructure SIP submission related to the state board requirements of section 110(a)(2)(E)(ii), EPA is not proposing any action today regarding this requirement and will act on this portion of the submission in a separate action.

EPA has made the preliminary determination that North Carolina has adequate resources for implementation of sections 110(a)(2)(E)(i) and (iii) of the 2008 Lead NAAQS.

7. *110(a)(2)(F) Stationary source monitoring and reporting:* North Carolina's infrastructure SIP submission describes how the State establishes requirements for emissions compliance testing and utilizes emissions sampling and analysis. It further describes how the State ensures the quality of its data through observing emissions and monitoring operations. NCDAQ uses these data to track progress towards maintaining the NAAQS, develop control and maintenance strategies, identify sources and general emission levels, and determine compliance with emission regulations and additional EPA requirements. These requirements are incorporated into the SIP at 15A NCAC 2D .0604 "Exceptions to Monitoring and Reporting Requirements;" 15A NCAC 2D .0605 "General Recordkeeping and Reporting Requirements;" 15A NCAC 2D .0611 "Monitoring Emissions from Other Sources;" 15A NCAC 2D .0612 "Alternative Monitoring and Reporting Procedures;" 15A NCAC 2D .0613 "Quality Assurance Program;" and, 15A NCAC 2D .0614 "Compliance Assurance Monitoring." In addition, Rule 15A NCAC 2D .0605(c) "General Recordkeeping and Reporting Requirements," allows for the use of credible evidence in the event that the NCDAQ Director has evidence that a source is violating an emission standard or permit condition, the Director may require that the owner or operator of any source submit to the Director any information necessary to determine the compliance status of the source. In addition, EPA is unaware of any provision preventing the use of credible evidence in the North Carolina SIP.

Stationary sources are required to submit periodic emissions reports to the State by Rule 15A NCAC 2Q .0207 "Annual Emissions Reporting." In addition, North Carolina is required to submit emissions data to EPA for purposes of the National Emissions Inventory (NEI). The NEI is EPA's

central repository for air emissions data. EPA published the Air Emissions Reporting Rule (AERR) on December 5, 2008, which modified the requirements for collecting and reporting air emissions data. See 73 FR 76539. The AERR shortened the time states had to report emissions data from 17 to 12 months, giving states one calendar year to submit emissions data. All states are required to submit a comprehensive emissions inventory every three years and report emissions for certain larger sources annually through EPA's online Emissions Inventory System. States report emissions data for the six criteria pollutants and the precursors that form them—NO_x, sulfur dioxide, ammonia, lead, carbon monoxide, particulate matter, and volatile organic compounds. Many states also voluntarily report emissions of hazardous air pollutants. North Carolina made its latest update to the 2011 NEI on June 3, 2014. EPA compiles the emissions data, supplementing it where necessary, and releases it to the general public through the Web site <http://www.epa.gov/ttn/chief/eiinformation.html>. EPA has made the preliminary determination that North Carolina's SIP and practices are adequate for the stationary source monitoring systems obligations for the 2008 Lead NAAQS.

7. *110(a)(2)(G)—Emergency episodes:* This section requires that states demonstrate authority comparable with section 303 of the CAA and adequate contingency plans to implement such authority. North Carolina's infrastructure SIP submission cites 15A NCAC 2D .0300 "Air Pollution Emergencies" as identifying air pollution emergency episodes and preplanned abatement strategies, and providing the means to implement emergency air pollution episode measures. In addition, NCGS 143–215.3(a)(12) provides NC DENR with the authority to declare an emergency when it finds that a generalized condition of water or air pollution which is causing imminent danger to the health or safety of the public. This statute also allows, in the absence of a generalized condition of air pollution, should the Secretary find "that the emissions from one or more air contaminant sources . . . is causing imminent danger to human health and safety or to fish and wildlife, he may with the concurrence of the Governor order the person or persons responsible for the operation or operations in question to immediately reduce or discontinue the emissions of air contaminants . . . or to take such other measures as are, in his judgment, necessary." EPA also notes that NCDAQ

maintains a Web site that provides the public with notice of the health hazards associated with Lead NAAQS exceedances, measures the public can take to help prevent such exceedances, and the ways in which the public can participate in the regulatory process. See <http://www.ncair.org/news/>. EPA has made the preliminary determination that North Carolina's SIP and practices are adequate to satisfy the emergency powers obligations of the 2008 Lead NAAQS.

8. *110(a)(2)(H) Future SIP revisions:* NCDAQ is responsible for adopting air quality rules and revising SIPs as needed to attain or maintain the NAAQS in North Carolina. Statutes NCGS 143–215.107(a)(1) and (a)(10) grant NCDAQ the broad authority to implement the CAA, and as such, provides NCDAQ the authority to prepare and develop, after proper study, a comprehensive plan for the prevention of air pollution. These statutes also provide NCDAQ the ability and authority to respond to calls for SIP revisions, and has provided a number of SIP revisions over the years for implementation of the NAAQS. Accordingly, EPA has made the preliminary determination that North Carolina's SIP and practices adequately demonstrate a commitment to provide future SIP revisions related to the 2008 Lead NAAQS, when necessary.

9. *110(a)(2)(J):* EPA is proposing to approve North Carolina's infrastructure SIP for the 2008 Lead NAAQS with respect to the general requirement in section 110(a)(2)(J) to include a program in the SIP that provides for meeting the applicable consultation requirements of section 121, the public notification requirements of section 127, and visibility protection. With respect to North Carolina's infrastructure SIP submission related to the preconstruction PSD permitting requirements, EPA is not proposing any action today regarding these requirements and instead will act on these portions of the submission in a separate action. EPA's rationale for applicable consultation requirements of section 121, the public notification requirements of section 127, and visibility is described below.

110(a)(2)(J)(121 consultation) Consultation with government officials: 15A NCAC 2D.1600 "General Conformity;" 15A NCAC 2D .2000 "Transportation Conformity;" and 15A NCAC 2D .0531 "Sources in Nonattainment Areas," along with the Regional Haze SIP Plan (which allows for consultation between appropriate state, local, and tribal air pollution control agencies as well as the

corresponding Federal Land Managers), provide for consultation with government officials whose jurisdictions might be affected by SIP development activities. These consultation procedures were developed in coordination with the transportation partners in the State and are consistent with the approaches used for development of mobile inventories for SIPs. Implementation of transportation conformity as outlined in the consultation procedures requires NCDAQ to consult with federal, state and local transportation and air quality agency officials on the development of motor vehicle emissions budgets. EPA has made the preliminary determination that North Carolina's SIP and practices adequately demonstrate that the State meets applicable requirements related to consultation with government officials for the 2008 Lead NAAQS when necessary.

110(a)(2)(j) (127 public notification) *Public notification:* 15A NCAC 2D .0300 "Air Pollution Emergencies" provides North Carolina with the authority to declare an emergency and notify the public accordingly when it finds that a generalized condition of water or air pollution which is causing imminent danger to the health or safety of the public. In addition, the North Carolina SIP process affords the public an opportunity to participate in regulatory and other efforts to improve air quality by holding public hearings for interested persons to appear and submit written or oral comments. For example, 15A NCAC 2D .0530 "Prevention of Significant Deterioration," requires the owners and operators of major stationary sources and major modifications to apply for and receive, as appropriate, a permit as described in 15A NCAC 02Q .0300. 15A NCAC 02Q. 306 provides for public notice for comments with an opportunity to request a public hearing on the draft permits required pursuant to 15A NCAC 2D. 0530. EPA also notes that NCDAQ maintains a Web site that provides the public with notice of the health hazards associated with Lead NAAQS exceedances, measures the public can take to help prevent such exceedances, and the ways in which the public can participate in the regulatory process. See <http://www.ncair.org/news/>.

EPA has made the preliminary determination that North Carolina's SIP and practices adequately demonstrate the State's ability to provide public notification related to the 2008 Lead NAAQS when necessary.

110(a)(2)(j) PSD and Visibility Protection: The 2011 Lead Infrastructure SIP Guidance notes that EPA does not

generally treat the visibility protection aspects of section 110(a)(2)(j) as applicable for purposes of the infrastructure SIP approval process. EPA recognizes that states are subject to visibility protection and regional haze program requirements under Part C of the Act (which includes sections 169A and 169B). However, in the event of the establishment of a new primary NAAQS, the visibility protection and regional haze program requirements under part C do not change. Thus, EPA concludes there are no new applicable visibility protection obligations under section 110(a)(2)(j) as a result of the 2008 Lead NAAQS, and as such, EPA is proposing to approve section 110(a)(2)(j) of NC DENR's infrastructure SIP submission as it relates to visibility protection.

10. 110(a)(2)(K) Air quality and modeling/data: 15A NCAC 2D .0530 "Prevention of Significant Deterioration" and 15A NCAC 2D .0531 "Sources in Nonattainment Areas," require that air modeling be conducted in accordance with 40 CFR part 51, Appendix W "Guideline on Air Quality Models." These regulations demonstrate that North Carolina has the authority to perform air quality modeling and to provide relevant data for the purpose of predicting the effect on ambient air quality of the 2008 Lead NAAQS. Additionally, North Carolina supports a regional effort to coordinate the development of emissions inventories and conduct regional modeling for several NAAQS, including the 2008 Lead NAAQS, for the Southeastern states. Taken as a whole, North Carolina's air quality regulations demonstrate that NCDAQ has the authority to provide relevant data for the purpose of predicting the effect on ambient air quality of the 2008 Lead NAAQS. EPA has made the preliminary determination that North Carolina's SIP and practices adequately demonstrate the State's ability to provide for air quality and modeling, along with analysis of the associated data, related to the 2008 Lead NAAQS when necessary.

11. 110(a)(2)(L) Permitting fees: This element necessitates that the SIP require the owner or operator of each major stationary source to pay to the permitting authority, as a condition of any permit required under the CAA, a fee sufficient to cover (i) the reasonable costs of reviewing and acting upon any application for such a permit, and (ii) if the owner or operator receives a permit for such source, the reasonable costs of implementing and enforcing the terms and conditions of any such permit (not including any court costs or other costs

associated with any enforcement action), until such fee requirement is superseded with respect to such sources by the Administrator's approval of a fee program under title V.

To satisfy these requirements, North Carolina's infrastructure SIP submission cites NCGS 143–215.3 "General powers of Commission and Department; auxiliary Powers," which directs NCDAQ to require a processing fee in an amount sufficient for the reasonable cost of reviewing and acting upon PSD and NNSR permits. Regulation 15A NCAC 2Q .0200 "Permit Fees," implements this directive and requires the owner or operator of each major stationary source to pay to the permitting authority, as a condition of any permit required under the CAA, a sufficient fee to cover the costs of the permitting program. Additionally, North Carolina has a fully approved title V operating permit program at that covers the cost of implementation and enforcement of PSD and NNSR permits after they have been issued. EPA has made the preliminary determination that North Carolina's practices adequately provide for permitting fees related to the 2008 Lead NAAQS, when necessary.

12. 110(a)(2)(M) Consultation/participation by affected local entities: This element requires states to provide for consultation and participation in SIP development by local political subdivisions affected by the SIP. North Carolina 15A NCAC 2D .0530 "Prevention of Significant Deterioration," and NCGS 150B–21.1 and –21.2 authorize and require NCDAQ to advise, consult, cooperate and enter into agreements with other agencies of the state, the Federal Government, other states, interstate agencies, groups, political subdivisions, and industries affected by the provisions of this act, rules, or policies of the Department. EPA has made the preliminary determination that North Carolina's SIP and practices adequately demonstrate consultation with affected local entities related to the 2008 Lead NAAQS, when necessary.

V. Proposed Action

With the exception of the PSD permitting requirements for major sources of sections 110(a)(2)(C), prong 3 of (D)(i), and (j), and the state board requirements of section 110(a)(E)(ii), EPA is proposing to approve that NCDAQ's infrastructure SIP submission, submitted June 20, 2012, for the 2008 Lead NAAQS meets the above described infrastructure SIP requirements. EPA is proposing to approve these portions of North Carolina's infrastructure SIP submission for the Lead NAAQS

because these aspects of the submission are consistent with section 110 of the CAA. EPA will address those portions of North Carolina's infrastructure SIP submission not acted upon through this notice in a separate action.

VI. Statutory and Executive Order Reviews

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

- Is not a "significant regulatory action" subject to review by the Office of Management and Budget under Executive Order 12866 (58 FR 51735, October 4, 1993);
 - does not impose an information collection burden under the provisions of the Paperwork Reduction Act (44 U.S.C. 3501 *et seq.*);
 - is certified as not having a significant economic impact on a substantial number of small entities under the Regulatory Flexibility Act (5 U.S.C. 601 *et seq.*);
 - does not contain any unfunded mandate or significantly or uniquely affect small governments, as described in the Unfunded Mandates Reform Act of 1995 (Pub. L. 104-4);
 - does not have Federalism implications as specified in Executive Order 13132 (64 FR 43255, August 10, 1999);
 - is not an economically significant regulatory action based on health or safety risks subject to Executive Order 13045 (62 FR 19885, April 23, 1997);
 - is not a significant regulatory action subject to Executive Order 13211 (66 FR 28355, May 22, 2001);
 - is not subject to requirements of Section 12(d) of the National Technology Transfer and Advancement Act of 1995 (15 U.S.C. 272 note) because application of those requirements would be inconsistent with the CAA; and
 - does not provide EPA with the discretionary authority to address, as appropriate, disproportionate human health or environmental effects, using practicable and legally permissible methods, under Executive Order 12898 (59 FR 7629, February 16, 1994).
- In addition, the North Carolina SIP is not approved to apply on any Indian reservation land or in any other area

where EPA or an Indian tribe has demonstrated that a tribe has jurisdiction. In those areas of Indian country, the rule does not have tribal implications as specified by Executive Order 13175 (65 FR 67249, November 9, 2000), nor will it impose substantial direct costs on tribal governments or preempt tribal law.

List of Subjects in 40 CFR Part 52

Environmental protection, Air pollution control, Intergovernmental relations, Lead, and Recordkeeping requirements.

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

Dated: November 7, 2014.

V. Anne Heard,

Acting Regional Administrator, Region 4.

[FR Doc. 2014-27504 Filed 11-19-14; 8:45 am]

BILLING CODE 6560-50-P

ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 52

[EPA-R04-OAR-2013-0772; FRL-9919-09-Region 4]

Approval and Promulgation of Implementation Plans; North Carolina; Inspection and Maintenance Program Updates

AGENCY: Environmental Protection Agency.

ACTION: Proposed rule.

SUMMARY: The Environmental Protection Agency (EPA) is proposing to approve State Implementation Plan (SIP) revisions submitted by the State of North Carolina, through the North Carolina Department of Environment and Natural Resources on January 31, 2008, May 24, 2010, October 11, 2013, and February 11, 2014, pertaining to rules for changes for the North Carolina Inspection and Maintenance (I/M) program. Specifically, these SIP revisions update the North Carolina I/M program as well as repeal one rule from the federally-approved SIP.

DATES: Written comments must be received on or before December 22, 2014.

ADDRESSES: Submit your comments, identified by Docket ID No. EPA-R04-OAR-2013-0772, by one of the following methods:

1. www.regulations.gov: Follow the on-line instructions for submitting comments.
2. Email: R4-RDS@epa.gov.
3. Fax: (404) 562-9019.
4. Mail: "EPA-R04-OAR-2013-0772," Regulatory Development Section,

Air Planning Branch, Air, Pesticides and Toxics Management Division, U.S. Environmental Protection Agency, Region 4, 61 Forsyth Street SW, Atlanta, Georgia 30303-8960.

5. Hand Delivery or Courier: Lynorae Benjamin, Chief, Regulatory Development Section, Air Planning Branch, Air, Pesticides and Toxics Management Division, U.S. Environmental Protection Agency, Region 4, 61 Forsyth Street SW, Atlanta, Georgia 30303-8960. Such deliveries are only accepted during the Regional Office's normal hours of operation. The Regional Office's official hours of business are Monday through Friday, 8:30 a.m. to 4:30 p.m., excluding federal holidays.

Instructions: Direct your comments to Docket ID No. EPA-R04-OAR-2013-0772. 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 through www.regulations.gov or email, information that you consider to be CBI or otherwise protected. The 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, 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>.

Docket: All documents in the electronic docket are listed in the www.regulations.gov index. Although listed in the index, some information is not publicly available, i.e., 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 in www.regulations.gov or in hard copy at the Regulatory Development Section, Air Planning Branch, Air, Pesticides and Toxics Management Division, U.S. Environmental Protection Agency, Region 4, 61 Forsyth Street SW, Atlanta, Georgia 30303-8960. EPA requests that if at all possible, you contact the person listed in the **FOR FURTHER INFORMATION CONTACT** section to schedule your inspection. The Regional Office's official hours of business are Monday through Friday, 8:30 a.m. to 4:30 p.m., excluding Federal holidays.

FOR FURTHER INFORMATION CONTACT: Nacosta Ward, Regulatory Development Section, Air Planning Branch, Air, Pesticides and Toxics Management Division, U.S. Environmental Protection Agency, Region 4, 61 Forsyth Street SW, Atlanta, Georgia 30303-8960. The telephone number is (404) 562-9140. Ms. Ward can be reached via electronic mail at ward.nacosta@epa.gov. For information regarding the I/M program, contact Ms. Amanetta Somerville, Air Quality Modeling and Transportation Section, at the same address above. Telephone number: (404) 562-9025; email address: somerville.amanetta@epa.gov.

SUPPLEMENTARY INFORMATION: For additional information see the associated direct final rule which is published in the Rules Section of this **Federal Register**. A detailed rationale for the approval is set forth in the direct final rule. If no relevant adverse comments are received in response to this rule by December 22, 2014, no further activity is contemplated. If EPA receives relevant adverse comments by December 22, 2014, the direct final rule will be withdrawn and all relevant adverse comments received during the public comment period will be addressed in a subsequent final rule based on this proposed rule. EPA will not institute a second comment period on this action. Any parties interested in commenting on this document must do so by December 22, 2014.

Dated: October 23, 2014.

V. Anne Heard,

Acting Regional Administrator, Region 4.

[FR Doc. 2014-27027 Filed 11-19-14; 8:45 am]

BILLING CODE 6560-50-P

FEDERAL COMMUNICATIONS COMMISSION

47 CFR Part 54

[WC Docket No. 10-90; DA 14-1499]

Proposed Methodology for Connect America High-Cost Universal Service Support Recipients To Measure and Report Speed and Latency Performance to Fixed Locations

AGENCY: Federal Communications Commission.

ACTION: Proposed rule.

SUMMARY: In this document, the Wireline Competition Bureau, the Wireless Telecommunications Bureau, and the Office of Engineering and Technology seek to further develop the record on how compliance with speed obligations should be determined for recipients of high-cost support that deploy broadband networks to serve fixed locations.

DATES: Comments due December 22, 2014.

ADDRESSES: Interested parties may file comments on or before December 22, 2014. All pleadings are to reference WC Docket No. 10-90. Comments may be filed using the Commission's Electronic Comment Filing System (ECFS) or by filing paper copies, by any of the following methods:

- **Electronic Filers:** Comments may be filed electronically using the Internet by accessing the ECFS: <http://fjallfoss.fcc.gov/ecfs2/>.
- **Paper Filers:** Parties who choose to file by paper must file an original and one copy of each filing.
- **People with Disabilities:** To request materials in accessible formats for people with disabilities (Braille, large print, electronic files, audio format), send an email to fcc504@fcc.gov or call the Consumer & Governmental Affairs Bureau at (202) 418-0530 (voice), (202) 418-0432 (tty).

For detailed instructions for submitting comments and additional information on the rulemaking process, see the **SUPPLEMENTARY INFORMATION** section of this document.

FOR FURTHER INFORMATION CONTACT: Alexander Minard, Wireline Competition Bureau at (202) 418-7400 or TTY (202) 418-0484.

SUPPLEMENTARY INFORMATION: This is a synopsis of the Wireline Competition Bureau's Public Notice (Notice) in WC Docket No. 10-90; DA 14-1499, released October 16, 2014. The complete text of this document is available for inspection and copying during normal business hours in the FCC Reference

Information Center, Portals II, 445 12th Street SW., Room CY-A257, Washington, DC 20554. The document may also be purchased from the Commission's duplicating contractor, Best Copy and Printing, Inc., 445 12th Street SW., Room CY-B402, Washington, DC 20554, telephone (800) 378-3160 or (202) 863-2893, facsimile (202) 863-2898, or via Internet at <http://www.bcpweb.com>.

I. Introduction

1. In this document, the Wireline Competition Bureau, the Wireless Telecommunications Bureau, and the Office of Engineering and Technology (together, the Bureaus) seek to further develop the record on how compliance with speed (also referred to as bandwidth) obligations should be determined for recipients of high-cost support that deploy broadband networks to serve fixed locations. In addition, the Bureaus seek comment on whether the same testing methodologies adopted for price cap carriers accepting model-based Phase II support should be applied to other recipients of support to serve fixed locations, such as rate-of-return providers and those that are awarded Connect America support through a competitive bidding process. Finally, the Bureaus seek comment on the circumstances that would trigger an audit of the speed and latency metrics.

II. Measuring Compliance With Service Obligations

A. Speed Performance Measurement

2. The record received in response to the 2011 *USF/ICC Transformation Order and Further Notice of Proposed Rulemaking*, 76 FR 73830, November 29, 2011 and 76 FR 78384, December 16, 2011, on the methodology to be implemented for testing compliance with service obligations was not well developed. The Bureaus now seek to refresh the record on the methodology to be used for demonstrating compliance with the speed obligation for ETCs that receive high cost support to deploy broadband networks to fixed locations. Should internal network management system (NMS) tools be used to measure speed performance? Alternatively, should external measurement tools such as Speedtest/Ookla or Network Diagnostic Tests (NDT) by M-Labs? Are there better and more reliable methods of measuring speed?

3. Internal NMS tools vary among providers. How can the Commission ensure that internal NMS tool measurements are valid? Will such tools account for multiple transmission

control protocol (TCP) streams, TCP window sizes, TCP slow start, and other factors in speed measurement? How would measurements from such tools be verified? Are these types of tools too burdensome or complex for speed measurements? Would such tools have any effect on customer service if used during peak periods? If external testing is adopted, how would measurements be verified? Are there better external measurement tools than those identified above?

4. What testing parameters should be used for speed testing? Should they be different for internal and external testing?

5. What testing parameters should be used to measure broadband performance for wireless providers offering service at a given address? Should the testing parameters be different if the service utilizes a fixed attachment to the building?

6. The Bureaus propose to require all ETCs subject to broadband performance obligations to serve fixed locations to utilize testing parameters for speed similar to those already adopted for latency for price cap carriers. Specifically, the Bureaus propose to adopt a methodology that would require measurements to be made once hourly during peak periods, 7:00 p.m. to 11:00 p.m. daily local time, over four consecutive weeks, require 95 percent of the observations to be at or above the specified minimum speed, define the endpoints for the measurement as the customer premises to Commission-designated IXP locations, require testing to occur at least annually, and require a minimum of 50 randomly selected customers locations to be tested within the geographic area being funded in a given state. To the extent parties argue that the process adopted for latency testing be adjusted and used for speed testing, they should describe with specificity what changes should be made. The Bureaus also seek comment on whether the data usage in the proposed tests would have a significant effect on consumers and, if so, how such effects could be mitigated. Should any data caps or monthly usage limits be adjusted to prevent the testing from affecting consumers?

7. The Bureaus propose to allow ETCs, including but not limited to price cap carriers, the option of testing compliance with speed requirements through the MBA program, similar to what WCB adopted for latency obligations. If the Bureaus were to do so, could they apply the same conditions and parameters as adopted for latency testing? Would any changes be needed?

8. Should the testing options and parameters be the same for rate-of-return carriers and providers awarded support through the Phase II competitive bidding process as for price cap carriers? If not, what should they be and why?

9. The Bureaus seek to augment the record received in response to the 2011 *USF/ICC Transformation Order and FNPRM* based on the considerations outlined above. Specifically, parties such as AT&T and Alaska Communications Systems argued that the testing mechanism should not require measuring service at all end-user locations. A testing mechanism for speed similar to that adopted for latency would only require testing at a certain number of locations. Frontier advocated that the Commission provide a choice of measurement test options. A speed-testing mechanism similar to that adopted for latency would provide two options for testing. A number of rural associations stated that the Commission should not impose measurement requirements until technically feasible, less burdensome testing procedures were available. A speed testing mechanism similar to that adopted for latency should be easily manageable for even very small carriers. The Bureaus seek comment on these tentative conclusions.

B. Latency Performance Testing for Rate-of-Return Carriers and Providers Awarded Connect America Support Through Competitive Bidding

10. The Bureaus seek comment on whether the two methods adopted to test price cap carrier compliance with latency service obligations should also be used to test compliance with latency service obligations for other recipients of high-cost support with a broadband public interest obligation to serve fixed locations. If so, should the testing parameters be the same for rate-of-return providers and those that are awarded Phase II support through a competitive bidding process as adopted for price cap carriers? If not, what should those parameters be and why?

11. The latency-testing options adopted for price cap carriers should provide at least one readily achievable method suitable for small, rural carriers. The Bureaus seek comment on this tentative conclusion. In response to the 2011 *USF/ICC Transformation FNPRM*, rural carriers argued that broadband performance should only be measured for those portions of the network controlled by the provider or its commonly-controlled affiliates. The Bureaus note that in the *Phase II Price Cap Order*, 78 FR 70881, November 27,

2013, WCB rejected this argument for price cap carriers because (1) testing only part of the network will not demonstrate the quality of service being provided to the end user and (2) carriers have a number of options to influence the quality of service from their transit and/or peering providers. Would that same reasoning be applicable to other providers, such as rate-of-return carriers and non-traditional providers that may receive support through a competitive bidding process?

C. Use of MBA Program for Testing and Reporting

12. The MBA program developed out of a recommendation by the National Broadband Plan to improve the availability of information for consumers about their broadband service. The program examines service offerings from the largest broadband providers—which collectively account for over 80 percent of all U.S. wireline broadband connections—using automated, direct measurements of broadband performance delivered to the homes of thousands of volunteer broadband subscribers. The methodology for the program focuses on measuring broadband performance of an Internet service provider's network, specifically performance from the consumer Internet access point, or consumer gateway, to a close major Internet gateway point. A collaborative process involving Commission staff, industry representatives, and academics was used to determine the test suite and operations for the MBA program.

13. The MBA program uses whiteboxes deployed to individual consumers, called panelists, to collect data on service levels. These whiteboxes perform periodic tests to determine the speed and latency of the service at a particular panelist's location, and the results of the tests are automatically sent to and recorded by an independent vendor. Panelists are selected via a process that allows for consumer registration and verification by the service provider followed by activation as a testing panelist. More than 13,000 whiteboxes have been shipped since the MBA program began.

14. Currently, the MBA program tests wireline offerings of 15 large broadband providers and one satellite-based provider. If the Bureaus were to adopt a regime in which ETCs subject to broadband public interest obligations could demonstrate compliance with broadband testing requirements through their MBA results, would that encourage additional providers, including smaller providers, to seek to join the MBA? Could the MBA accommodate a large

number of additional participants? Is it feasible for smaller providers to participate in the MBA, particularly if they must pay the administrative and hardware costs of the whiteboxes? Are these costs likely to be greater or less than the cost of performing ping-type tests from 50 locations for latency and the testing that will be required to verify speed? Would allowing additional providers to join the MBA provide more detailed and more accurate information on provider performance at lower total cost?

15. If additional providers join the MBA program for performance testing, should their data be made public and reported in the annual MBA reports as is done for other MBA providers? Should the MBA program consider creating a separate category of membership for providers that want to limit testing to Connect America-supported areas?

16. The Bureaus seek comment on these and any other issues surrounding additional provider participation in the MBA program.

D. Commission-Developed Testing Mechanism

17. In the event that joining the MBA program proves infeasible for additional providers, the Bureaus seek comment on whether the Commission should implement a performance testing platform specifically for Connect America-supported broadband services. One possibility is to implement an oversight mechanism that would be similar to the MBA program. Like the MBA program, this could be a hardware-based test infrastructure administered by one or more service vendors with whiteboxes deployed to consumers throughout Connect America-supported areas. Having a single entity, such as USAC, procure the necessary vendor and infrastructure to administer this program would minimize the overall cost of the program as well as the costs to participating providers. The Bureaus seek comment on whether such a program would be feasible. If so, should it be similar to the MBA program, or is there a better way to measure broadband performance?

18. If the Commission were to implement such a testing mechanism, should all ETCs subject to broadband public interest obligations to serve fixed locations be required to participate? To the extent commenters argue that any ETCs should be exempt, they should identify with specificity the costs and benefits of requiring them to participate, and identify alternative means of achieving the Commission's oversight objectives.

19. The Bureaus estimate that the total costs for an MBA-type performance oversight program for ETCs receiving high-cost support to serve fixed locations would be approximately \$4.2 million, which would include the necessary hardware and software as well as an initial allocation of 5,000 whiteboxes, in the first year and approximately \$5.9 million each year thereafter (which incorporates an additional 5,000 whiteboxes per year). Our total cost calculation was based on the following estimates:

	Year 1 expenses (millions)	Annual expenses after year 1 (millions)
Whiteboxes (client testing devices)	\$1.2	\$1
Core Servers	1.7	1.65
Program Administrative Expenses (could be performed by USAC)	1.3	1.3
Total Cost	4.2	3.9

The cost estimates above are based on having a single entity contract for the necessary hardware and services to minimize costs through streamlined administration and bulk hardware purchases. If the Commission were to implement such a centralized testing program, should these costs be borne by participating providers or by USAC as part of its oversight over the universal service fund? Should USAC pay the costs of the core servers, with participating providers paying the costs of the whiteboxes deployed in their service areas? If USAC were to pay all of the equipment costs, including the whiteboxes, the Bureaus anticipate that the only cost for providers would be primarily to verify the services of the panelists selected in a particular provider's service territory.

20. If the Commission were to adopt such an approach, how many whiteboxes should be deployed in each supported area? Should the number be the same for all providers, vary based on the number of customers in the supported area, or be based on some

other calculation? Should individual consumers or consumer groups located in areas served by a Connect America-supported provider be allowed to participate in such an MBA-type mechanism by purchasing their own whiteboxes? Such "citizen testing" would allow interested individuals to evaluate the quality of their services while providing additional testing data.

21. The Bureaus seek comment on the initial performance measurement test suite that should be used, if the Commission were to implement an MBA-type testing mechanism. The MBA's current test suite includes 13 tests that measure various aspects of network performance with respect to speed and latency and was developed on a consensus basis by academics, regulators, and industry participants. Would the MBA's test suite be an appropriate for a Connect America testing mechanism, or could it be modified in some fashion? What aspects of the MBA test suite are necessary to meet the Commission's objectives that

ETCs meet their broadband public interest obligations?

22. The MBA program has found that allowing consumers with whiteboxes (referred to as panelists) access to their testing data is an incentive to obtaining a high number of volunteers. Should a Commission-designed testing mechanism for high-cost recipients allow end user participants access to their own testing data? MBA results are currently made publically available via the Commission's Web site. Should the Commission publish test results? Making such data public would allow consumers and policy makers to evaluate whether ETCs are meeting their service obligations and allow comparisons of service quality among providers. Is there any reason that such performance results should be kept confidential? If so, should the results be treated as confidential for a particular period of time?

III. Auditing Speed and Latency

23. In the *USF/ICC Transformation Order*, the Commission concluded that the results of speed and latency metric testing “will be subject to audit.” The Bureaus seek to further develop the record on procedures for implementing this requirement for all recipients of Connect America funding. In particular, the Bureaus seek comment on how to incorporate this requirement into the existing Beneficiary Compliance Audit Program (BCAP), and whether additional audits specifically focused on broadband performance should be implemented outside of BCAP.

24. High-cost recipients today are subject to random and for-cause USAC audits. The Bureaus seek comment on the circumstances that would warrant examining broadband performance for cause. In particular, what events should trigger a for cause audit of speed and latency metrics? For example, failure to file a certification that service obligations are being met or a certification that standards are not being met would likely require an immediate audit. Similarly, because MBA results are publicly available, should MBA test results that demonstrate a failure to meet service obligations trigger an audit? Should consumer or other credible complaints regarding the quality of service result in an audit? If customer complaints are used to initiate an audit, the Bureaus seek comment on how this should be done. Should complaints to state/local regulatory agencies, the Commission, and/or public watchdog organizations trigger audits? If so, how many complaints over what time period and what type of complaints should be triggering events for a performance audit? Should requests from local, state, or tribal authorities be sufficient to trigger an audit? Are there other events that should trigger an audit? Proposed audit triggers should address both ensuring that performance standards are met and minimizing administrative costs.

25. In addition, the Bureaus seek comment on whether a provider whose

audit demonstrates a need for ongoing monitoring be required to pay the costs of this additional monitoring. Should results of audits be made publicly available? If not, what justifications support keeping such results private and for how long?

IV. Procedural Matters

26. *Initial Regulatory Flexibility Act Analysis.* The *USF/ICC Transformation Order* included an Initial Regulatory Flexibility Analysis (IRFA) pursuant to 5 U.S.C. 603, exploring the potential impact on small entities of the Commission’s proposal. The Bureaus invite parties to file comments on the IRFA in light of this additional notice.

27. *Initial Paperwork Reduction Act of 1995 Analysis.* This document seeks comment on a potential new or revised information collection requirement. If the Commission adopts any new or revised information collection requirement, the Commission will publish a separate notice in the **Federal Register** inviting the public to comment on the requirement, as required by the Paperwork Reduction Act of 1995, Public Law 104–13 (44 U.S.C. 3501–3520). In addition, pursuant to the Small Business Paperwork Relief Act of 2002, Public Law 107–198, the Commission seeks specific comment on how it might “further reduce the information collection burden for small business concerns with fewer than 25 employees.”

28. *Filing Requirements.* Pursuant to §§ 1.415 and 1.419 of the Commission’s rules, interested parties may file comments on or before the dates indicated on the first page of this document. Comments may be filed using the Commission’s Electronic Comment Filing System (ECFS).

- **Electronic Filers:** Comments may be filed electronically using the Internet by accessing the ECFS: <http://fjallfoss.fcc.gov/ecfs2/>.

- **Paper Filers:** Parties who choose to file by paper must file an original and one copy of each filing. If more than one docket or rulemaking number appears in the caption of this proceeding, filers

must submit two additional copies for each additional docket or rulemaking number.

29. Filings can be sent by hand or messenger delivery, by commercial overnight courier, or by first-class or overnight U.S. Postal Service mail. All filings must be addressed to the Commission’s Secretary, Office of the Secretary, Federal Communications Commission.

- All hand-delivered or messenger-delivered paper filings for the Commission’s Secretary must be delivered to FCC Headquarters at 445 12th Street SW., Room TW–A325, Washington, DC 20554. The filing hours are 8:00 a.m. to 7:00 p.m. All hand deliveries must be held together with rubber bands or fasteners. Any envelopes and boxes must be disposed of *before* entering the building.

- Commercial overnight mail (other than U.S. Postal Service Express Mail and Priority Mail) must be sent to 9300 East Hampton Drive, Capitol Heights, MD 20743.

- U.S. Postal Service first-class, Express, and Priority mail must be addressed to 445 12th Street SW., Washington, DC 20554.

30. **People with Disabilities:** To request materials in accessible formats for people with disabilities (Braille, large print, electronic files, audio format), send an email to fcc504@fcc.gov or call the Consumer & Governmental Affairs Bureau at (202) 418–0530 (voice), (202) 418–0432 (tty).

31. In addition, one copy of each pleading must be sent to each of the following:

(1) Alexander Minard, Telecommunications Access Policy Division, Wireline Competition Bureau, 445 12th Street SW., 5–B442, Washington, DC 20554; email: alexander.minard@fcc.gov.

(2) Suzanne Yelen, Industry Analysis and Technology Division, Wireline Competition Bureau, 445 12th Street SW., Room 6–B115, Washington, DC 20554; email: suzanne.yelen@fcc.gov.

32. The proceeding shall be treated as a “permit-but-disclose” proceeding in accordance with the Commission’s *ex parte* rules. Persons making *ex parte* presentations must file a copy of any written presentation or a memorandum summarizing any oral presentation within two business days after the presentation (unless a different deadline applicable to the Sunshine period applies). Persons making oral *ex parte* presentations are reminded that memoranda summarizing the presentation must (1) list all persons attending or otherwise participating in the meeting at which the *ex parte* presentation was made, and (2) summarize all data presented and arguments made during the

presentation. If the presentation consisted in whole or in part of the presentation of data or arguments already reflected in the presenter’s written comments, memoranda or other filings in the proceeding, the presenter may provide citations to such data or arguments in his or her prior comments, memoranda, or other filings (specifying the relevant page and/or paragraph numbers where such data or arguments can be found) in lieu of summarizing them in the memorandum. Documents shown or given to Commission staff during *ex parte* meetings are deemed to be *written ex parte* presentations and must be filed consistent with rule § 1.1206(b). In proceedings governed by rule § 1.49(f) or for which the

Commission has made available a method of electronic filing, written *ex parte* presentations and memoranda summarizing oral *ex parte* presentations, and all attachments thereto, must be filed through the electronic comment filing system available for that proceeding, and must be filed in their native format (e.g., .doc, .xml, .ppt, searchable .pdf). Participants in this proceeding should familiarize themselves with the Commission’s *ex parte* rules.

Federal Communications Commission.

Ryan B. Palmer,

Chief, Telecommunications Access Policy Division, Wireline Competition Bureau.

[FR Doc. 2014–27429 Filed 11–19–14; 8:45 am]

BILLING CODE 6712–01–P

Notices

Federal Register

Vol. 79, No. 224

Thursday, November 20, 2014

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.

COMMISSION ON CIVIL RIGHTS

Agenda and Notice of Public Meeting of the New York Advisory Committee

Dates and Times: Wednesday, December 3, 2014 at 12:00 p.m. [ET]

Place: Via Teleconference. Public Dial-in 1-877-446-3914; Listen Line Code: 2154992.

TDD: Dial Federal Relay Service 1-800-977-8339 give the operator the following number: 202-376-7533—or by email at ero@usccr.gov.

Notice is hereby given, pursuant to the provisions of the rules and regulations of the U.S. Commission on Civil Rights (Commission), and the Federal Advisory Committee Act (FACA), that a planning meeting of the New York Advisory Committee to the Commission will convene via conference call on Wednesday, December 3, 2014. The purpose of the planning meeting is for the Advisory Committee to vote on its report on the use of solitary confinement for youth in New York.

The meeting will be conducted via conference call. In order to reserve a sufficient number of lines, members of the public, including persons with hearing impairments, who wish to listen to the conference call, are asked to either call (202-376-7533) or email the Eastern Regional Office (ERO), (ero@usccr.gov) ten days in advance of the scheduled meeting. Persons with hearing impairments must first dial the Federal Relay Service TDD: 1-800-977-8339 and give the operator the Eastern Regional Office number (202-376-7533).

Members of the public who call-in can expect to incur charges for calls they initiate over wireless lines, and the Commission will not refund any incurred charges. Callers will incur no charge for calls they initiate over land-line connections to the toll-free telephone number.

Members of the public are entitled to submit written comments. The comments must be received in the ERO by January 3, 2015. Comments may be mailed to the Eastern Regional Office, U.S. Commission on Civil Rights, 1331 Pennsylvania Avenue, Suite 1150, Washington, DC 20425, faxed to (202) 376-7548, or emailed to Evelyn Bohor at erousccr.gov. Persons who desire additional information may contact the Eastern Regional Office at 202-376-7533.

Records generated from these meetings may be inspected and reproduced at the Eastern Regional Office, as they become available, both before and after each meeting. Persons interested in the work of this advisory committee are advised to go to the Commission's Web site, www.usccr.gov, or to contact the Eastern Regional Office at the above phone number, email or street address.

The meetings will be conducted pursuant to the provisions of the rules and regulations of the Commission and FACA.

Dated November 14, 2014.

David Mussatt,

Chief, Regional Programs Coordination Unit.

[FR Doc. 2014-27419 Filed 11-19-14; 8:45 am]

BILLING CODE 6335-01-P

COMMISSION ON CIVIL RIGHTS

Notice of Public Meeting of the Illinois Advisory Committee for a Meeting To Discuss and Vote on Its Report on Civil Rights Issues Related to Comprehensive Immigration Reform

AGENCY: U.S. Commission on Civil Rights.

ACTION: Notice of meeting.

SUMMARY: Notice is hereby given, pursuant to the provisions of the rules and regulations of the U.S. Commission on Civil Rights (Commission) and the Federal Advisory Committee Act that the Illinois Advisory Committee (Committee) will hold a meeting on Thursday, December 4, 2014, at 4:00 p.m. CST for the purpose of discussing its report on civil rights issues related to comprehensive immigration reform. The Committee will discuss and vote on sending the report and its recommendations to the Commission.

Members of the public can listen to the discussion. This meeting is available

to the public through the following toll-free call-in number: 888-430-8705, conference ID: 3695823. Any interested member of the public may call this number and listen to the meeting. The conference call operator will ask callers to identify themselves, the organization they are affiliated with (if any), and an email address prior to placing callers into the conference room. Callers can expect to incur charges for calls they initiate over wireless lines, and the Commission will not refund any incurred charges. Callers will incur no charge for calls they initiate over land-line connections to the toll-free telephone number. Persons with hearing impairments may also follow the proceedings by first calling the Federal Relay Service at 1-800-977-8339 and providing the Service with the conference call number and conference ID number.

Member of the public are also entitled to submit written comments; the comments must be received in the regional office by January 4, 2015. Written comments may be mailed to the Midwestern Regional Office, U.S. Commission on Civil Rights, 55 W. Monroe St., Suite 410, Chicago, IL 60615. They may also be faxed to the Commission at (312) 353-8324, or emailed to Administrative Assistant, Carolyn Allen at callen@usccr.gov. Persons who desire additional information may contact the Midwestern Regional Office at (312) 353-8311.

Records generated from this meeting may be inspected and reproduced at the Midwestern Regional Office, as they become available, both before and after the meeting. Records of the meeting will be available via www.facadatabase.gov under the Commission on Civil Rights, Illinois Advisory Committee link. Persons interested in the work of this Committee are directed to the Commission's Web site, <http://www.usccr.gov>, or may contact the Midwestern Regional Office at the above email or street address.

Agenda

Welcome and Introductions
4:00 p.m. to 4:05 p.m.

Barbara Abrajano, Chair
Discussion of Civil Rights and
Comprehensive Immigration
Reform in Illinois report
4:05 p.m. to 4:45 p.m.
Illinois Advisory Committee

Discussion of Ongoing Projects

4:45 p.m. to 5:00 p.m.

Adjournment

5:00 p.m.

DATES: The meeting will be held on Thursday, December 4, 2014, at 4:00 p.m. CST.

Public Call Information

Dial: 888-430-8705, Conference ID: 3695823.

Dated November 14, 2014.

David Mussatt,

Chief, Regional Programs Unit.

[FR Doc. 2014-27420 Filed 11-19-14; 8:45 am]

BILLING CODE 6335-01-P

DEPARTMENT OF COMMERCE**National Oceanic and Atmospheric Administration**

RIN 0648-XD362

Final Atlantic Highly Migratory Species (HMS) Management-Based Research Needs and Priorities Document

AGENCY: National Marine Fisheries Service (NMFS), National Oceanic and Atmospheric Administration (NOAA), Commerce.

ACTION: Notice of availability.

SUMMARY: NMFS announces the availability of the Final Atlantic HMS Management-Based Research Needs and Priorities document. The purpose of this document is to communicate key research needs that directly support Atlantic HMS management. Atlantic HMS are defined as bluefin, bigeye, albacore, yellowfin, and skipjack tunas, swordfish, billfish (blue marlin, white marlin, roundscale spearfish, longbill spearfish, and sailfish), and sharks.

ADDRESSES: Electronic copies of the Final Atlantic HMS Management-Based Research Needs and Priorities document may also be obtained on the Internet at: http://www.nmfs.noaa.gov/sfa/hms/documents/final_hms_research_plan_2014.pdf

FOR FURTHER INFORMATION CONTACT: Steve Durkee by phone at (202) 670-6637.

SUPPLEMENTARY INFORMATION: The Atlantic HMS Management-Based Research Needs and Priorities document was developed by the Highly Migratory Species (HMS) Management Division of NMFS to communicate key research needs that directly support Atlantic HMS management. Atlantic HMS are defined as bluefin, bigeye, albacore, yellowfin, and skipjack tunas, swordfish, billfish (blue marlin, white

marlin, roundscale spearfish, longbill spearfish, and sailfish), and sharks. The document contains a list of near and long-term research needs and priorities that can be used by individuals and groups interested in Atlantic HMS to identify key research needs, improve management, reduce duplication, prioritize limited funding, and form a potential basis for future funding. The priorities range from biological/ecological needs to socio-economic needs.

A draft version of this document was made available to the public on July 10, 2014 (79 FR 39367), and comments were requested on the content and usefulness. The draft version was also discussed at the September 2014 HMS Advisory Panel meeting. A few comments were received suggesting additional research needs and re-prioritization, many of which were incorporated. However, the final version remains largely unchanged from the draft. Many commenters felt the document was useful, including when applying for competitive research grants.

The document is one of several efforts to highlight key research needs for HMS. One early effort, the HMS Research Plan, was developed by NMFS scientists across HMS disciplines in response to identify specific research needs based upon known data gaps. This document complements the HMS Research Plan currently in draft and, although of different purpose, some aspects of the HMS Research Plan were included in this document. Other efforts are also underway in the Agency to identify key research needs relevant to Atlantic HMS management, such as the National Recreational Action Agenda and Regional Plans and the National Bycatch Reduction Engineering Program.

At this time, specific funding for the priorities outlined in this document has not been identified. However, the Agency is currently undergoing a strategic review of both management and science planning processes and resource allocations. This document will inform the strategic review of management planning and resource allocations. Additionally, there are several Requests for Proposals (RFPs) that support different types of competitively awarded funds for research. Some of these RFPs include funds for the Bycatch Reduction Engineering Program, Cooperative Research Program, and Saltonstall-Kennedy Grant Program. More information on these RFPs is available on the NOAA Fisheries Web site (www.nmfs.noaa.gov). This priorities

document may be used by interested scientists who are applying for these or other funds as a way to highlight the need for the research.

While some of the priorities were derived from stock assessment reviews, other priorities were identified while developing and proposing management measures. Many of the research priorities address key data gaps and/or ways to reduce fishing mortality and/or bycatch to more effectively manage HMS fisheries, either directly or by improving stock assessments. Because these needs were identified by fishery managers, these research priorities were not correspond directly with the research priorities and needs identified by the scientists throughout NMFS.

Ongoing survey and monitoring programs are not discussed unless there is a specific suggestion for expansion of an existing program. These survey and monitoring programs, which include but are not limited to shark nursery and essential fish habitat studies, fishery-independent surveys, and observer programs, are vital to stock assessments and effective HMS management. These ongoing survey and monitoring programs should be considered high priority.

Authority: 16 U.S.C. 971 *et seq.*, and 1801 *et seq.*

Dated: November 17, 2014.

Alan D. Risenhoover,

Director, Office of Sustainable Fisheries, National Marine Fisheries Service.

[FR Doc. 2014-27485 Filed 11-19-14; 8:45 am]

BILLING CODE 3510-22-P

DEPARTMENT OF DEFENSE**Department of the Air Force****Notice of Intent To Grant an Exclusive Patent License**

AGENCY: Department of the Air Force, Department of Defense.

ACTION: Notice of Intent.

SUMMARY: Pursuant to the provisions of Part 404 of Title 37, Code of Federal Regulations, which implements Public Law 96-517, as amended; the Department of the Air Force announces its intention to grant InfaRed Imaging Systems, Inc. (INRIS), a corporation of the State of Ohio, having a place of business at 22718 Holycross Epps Road, Marysville, Ohio 43040.

DATES: The Air Force intends to grant a license for the patent and pending applications unless a written objection is received within fifteen (15) calendar days from the date of publication of this Notice.

ADDRESSES: Written objection should be sent to: Air Force Materiel Command Law Office, AFMCLO/JAZ, 2240 B Street, Rm 101, Wright-Patterson AFB, OH 45433-7109; Facsimile: (937) 255-3733.

FOR FURTHER INFORMATION CONTACT: Air Force Materiel Command Law Office, AFMCLO/JAZ, 2240 B Street, Rm 101, Wright-Patterson AFB, OH 45433-7109; Facsimile: (937) 255-3733.

SUPPLEMENTARY INFORMATION: An exclusive license in any right, title and interest of the Air Force in:

U.S. Patent No. 6,230,046, entitled "System and method for enhanced visualization of subcutaneous structures," by Robert L. Crane, Byron P. Edmonds, Charles C. Lovett; Walter E. Johnson, claiming priority as a Continuation-In-Part filed 28 of U.S. Serial No. 08/442,041 filed 16 May 1995 (related and previously licensed);

U.S. Patent No. 7,917,193, entitled "Determining inserted catheter end location and orientation", by Robert L. Crane;

U.S. Patent No. 8,548,572, entitled "Determining Inserted Catheter End Location and Orientation", by Robert L. Crane;

U.S. Patent No. 8,649,848, entitled "Synchronization of Illumination Source and Sensor for Improved Visualization of Subcutaneous Structures", by Robert L. Crane and Michael P. Buchin;

U.S. Serial No. 10/421,270, entitled "Method for Detection and Display of Extravasation and Infiltration of fluids and Substances in Subdermal of Intradermal Tissue", by Robert L. Crane and David M. Callard;

U.S. Serial No. 14/175,156, entitled "Synchronization of Illumination Source and Sensor for Improved Visualization of Subcutaneous Structures", by Robert L. Crane and Michael P. Buchin.

Henry Williams,

Civ, Acting Air Force Federal Register Liaison Officer.

[FR Doc. 2014-27415 Filed 11-19-14; 8:45 am]

BILLING CODE 5001-10-P

DEPARTMENT OF DEFENSE

Department of the Army

Advisory Committee on Arlington National Cemetery; Request for Nominations

AGENCY: Department of the Army, DoD.

ACTION: Notice; Request for Nominations.

SUMMARY: The Advisory Committee on Arlington National Cemetery is an independent Federal advisory committee chartered to provide the Secretary of Defense, through the Secretary of the Army, independent advice and recommendations on Arlington National Cemetery, including, but not limited to cemetery administration, the erection of memorials at the cemetery, and master planning for the cemetery. The Secretary of the Army may act on the Committee's advice and recommendations. The Committee is comprised of no more than nine (9) members. Subject to the approval of the Secretary of Defense, the Secretary of the Army appoints no more than seven (7) of these members. The purpose of this notice is to solicit nominations from a wide range of highly qualified persons to be considered for appointment to the Committee. Nominees may be appointed as members of the Committee and its sub-committees for terms of service ranging from one to four years. This notice solicits nominations to fill Committee membership vacancies that may occur through July 20, 2016. Nominees must be preeminent authorities in their respective fields of interest or expertise.

DATES: All nominations must be received at (see **ADDRESSES**) no later than January 31, 2015.

ADDRESSES: Interested persons may submit a resume for consideration by the Department of the Army to the Committee's Designated Federal Officer at the following address: Advisory Committee on Arlington National Cemetery, ATTN: Designated Federal Officer (DFO) (Ms. Yates), Arlington National Cemetery, Arlington, VA 22211.

FOR FURTHER INFORMATION CONTACT: Ms. Renea C. Yates, Designated Federal Officer, by email at renea.c.yates.civ@mail.mil or by telephone 703-614-1248.

SUPPLEMENTARY INFORMATION: The Advisory Committee on Arlington National Cemetery was established pursuant to Title 10, United States Code, Section 4723. The selection, service and appointment of members of the Committee are covered by the Committee Charter, available on the Arlington National Cemetery Web site www.arlingtoncemetery.mil/AboutUs/Charter.aspx. The substance of these provisions of the Charter is as follows:

a. Selection. The Committee Charter provides that the Committee shall be comprised of no more than nine members, all of whom are preeminent authorities in their respective fields of interest or expertise. Of these, no more

than seven members are nominated by the Secretary of the Army.

By direction of the Secretary of the Army, all resumes submitted in response to this notice will be presented to and reviewed by a panel of three senior Army leaders. Potential nominees shall be prioritized after review and consideration of their resumes for: Demonstrated technical/professional expertise; preeminence in a field(s) of interest or expertise; potential contribution to membership balance in terms of the points of view represented and the functions to be performed; potential organizational and financial conflicts of interest; commitment to our Nation's veterans and their families; and published points of view relevant to the objectives of the Committee. The panel will provide the DFO with a prioritized list of potential nominees for consideration by the Executive Director, Army National Military Cemeteries, in making an initial recommendation to the Secretary of the Army. The Executive Director, Army National Military Cemeteries; the Secretary of the Army; and the Secretary of Defense are not limited or bound by the recommendations of the Army senior leader panel. Sources in addition to this **Federal Register** notice may be utilized in the solicitation and selection of nominations.

b. Service. The Secretary of Defense may approve the appointment of a Committee member for a one-to-four year term of service; however, no member, unless authorized by the Secretary of Defense, may serve on the Committee or authorized subcommittee for more than two consecutive terms of service. The Secretary of the Army shall designate the Committee Chair from the total Advisory Committee membership. The Committee meets at the call of the DFO, in consultation with the Committee Chair. It is estimated that the Committee meets four times per year.

c. Appointment. The operations of the Committee and the appointment of members are subject to the Federal Advisory Committee Act (Pub. L. 92-463, as amended) and departmental implementing regulations, including Department of Defense Instruction 5105.04, Department of Defense Federal Advisory Committee Management Program, available at <http://www.dtic.mil/whs/directives/corres/pdf/510504p.pdf>. Appointed members who are not full-time or permanent part-time Federal officers or employees shall be appointed as experts and consultants under the authority of Title 5, United States Code, Section 3109 and shall serve as special government employees. Committee members appointed as

special government employees shall serve without compensation except that travel and per diem expenses associated with official Committee activities are reimbursable.

Additional information about the Committee is available on the Internet at: <http://www.arlingtoncemetery.mil/AboutUs/Advisory.aspx>

Brenda S. Bowen,

Army Federal Register Liaison Officer.

[FR Doc. 2014-27491 Filed 11-19-14; 8:45 am]

BILLING CODE 3710-08-P

DEPARTMENT OF DEFENSE

Department of the Army; Corps of Engineers

Notice of Intent To Prepare a Draft Environmental Impact Statement (EIS), Initiate the Public Scoping Period and Host Public Scoping Meetings for the Great Lakes and Mississippi River Interbasin Study ("GLMRIS")—Evaluation of Aquatic Nuisance Species Controls Near Brandon Road Lock and Dam

AGENCY: Department of the Army, U.S. Army Corps of Engineers, DoD.

ACTION: Notice of intent.

SUMMARY: The Chicago District, U.S. Army Corps of Engineers (USACE) announces its intent to (1) prepare a Draft EIS, (2) accept public comments and (3) host public scoping meetings in Lemont, Illinois at Argonne National Laboratories and Chicago, Illinois for GLMRIS—Evaluation of Aquatic Nuisance Species Controls near Brandon Road Lock and Dam (GLMRIS—Brandon Road).

In collaboration with other Federal, State, and local agencies as well as non-governmental entities, USACE is evaluating structural and nonstructural options and technologies near the Brandon Road Lock and Dam site. This effort is an interim response to the GLMRIS authority. The purpose of the GLMRIS—Brandon Road evaluation is to consider a control point to reduce the risk of upstream transfer of ANS, from the Mississippi River (MR) Basin into the Great Lakes (GL) Basin through the Chicago Area Waterway System (CAWS), to the maximum extent possible. The GLMRIS—Brandon Road effort will seek to minimize adverse impacts to waterway users or resources.

DATES: The NEPA scoping period ends on January 16, 2015. The GLMRIS—Brandon Road NEPA Public Scoping meetings are scheduled for December 6, 2014 in Lemont, Illinois at Argonne National Laboratories, and December 9,

2014 in Chicago, Illinois. Please refer to the "Scoping and Public Involvement" section below for information regarding the public scoping meeting and for instructions on how to submit public comments.

FOR FURTHER INFORMATION CONTACT: For further information and/or questions about GLMRIS, please contact USACE, Chicago District, Project Manager, Mr. David Wethington, by mail: USACE, Chicago District, 231 S. LaSalle, Suite 1500, Chicago, Illinois 60604, or by email: david.m.wethington@usace.army.mil.

For media inquiries, please contact USACE, Chicago District, Public Affairs Officer, Ms. Lynne Whelan, by mail: USACE, Chicago District, 231 S. LaSalle, Suite 1500, Chicago, Illinois 60604, by phone: 312.846.5330 or by email: lynne.e.whelan@usace.army.mil.

SUPPLEMENTARY INFORMATION:

1. *Background.* In January 2014, USACE released the GLMRIS Report, which evaluated the potential range of alternatives to control ANS transfer between the GL and MR basins via the CAWS. In GLMRIS, USACE has interpreted the term "prevent" to mean the reduction of risk to the maximum extent possible, because it may not be technologically feasible to achieve an absolute solution.

The GLMRIS Report identified eight alternatives, six of which were structural alternatives. Three structural alternatives established an ANS control point near Brandon Road Lock and Dam in Joliet, Illinois. The GLMRIS Report identified the Brandon Road control point as a single location that can address upstream transfer of MR ANS through the CAWS.

Based on evaluations presented in the GLMRIS Report and in response to stakeholder input, USACE has been directed by the Assistant Secretary of the Army (Civil Works) to proceed with a formal evaluation of potential ANS controls to be applied near the Brandon Road Lock and Dam, located near Joliet, Illinois. The GLMRIS—Brandon Road effort will evaluate the range of options or technologies available to prevent additional MR ANS transfer through the CAWS into the GL Basin.

This effort will assess the potential of various ANS controls to address the one-way, upstream transfer of ANS through the approach channel and/or lock chamber at Brandon Road Lock and Dam, and seek to minimize any adverse impacts to waterway users or resources.

The Brandon Road Lock and Dam Historic District includes the Brandon Road Lock and Dam and was retroactively listed on the National

Register of Historic Places on March 11, 2004.

GLMRIS will be conducted in accordance with NEPA and with the *Economic and Environmental Principles and Guidelines for Water and Related Land Resource Implementation Studies*, Water Resources Council, March 10, 1983.

2. *Scoping and Public Involvement.* USACE will accept comments related to GLMRIS—Brandon Road until January 16, 2014.

All forms of comments received during the scoping period will be weighted equally. Using input obtained during the scoping period, USACE will refine the scope of GLMRIS to focus on significant issues, as well as eliminate issues that are not significant from further detailed study.

Comments may be submitted in the following ways:

- GLMRIS project Web site: Use the web comment function found at <http://glmrис.anl.gov/>.
- NEPA Scoping Meeting: USACE is hosting scoping meetings and asks those who wish to make oral comments in person to register on the GLMRIS project Web site at <http://glmrис.anl.gov/>. Each meeting's on-line registration to speak will be closed at 10 a.m. central time the day of the meeting. Those who do not register to speak via the GLMRIS Web site may register at the meeting. Those registering through the Web site may be given a preference over those that register to make an oral comment at the meeting. Each individual wishing to make oral comments shall be given three (3) minutes, and a stenographer will document oral comments;
- Mail: Mail written comments to GLMRIS—Brandon Road Scoping, 231 S. LaSalle, Suite 1500, Chicago, Illinois 60604. Comments must be postmarked by January 16, 2014; and
- Hand Delivery: Comments may be hand-delivered to the Chicago District, USACE office located at 231 S. LaSalle, Suite 1500, Chicago, Illinois 60604 between 8:00 a.m. and 4:30 p.m. Comments must be received by January 16, 2014.

The public meetings will begin with a brief presentation regarding the study followed by an oral comment period. During the meeting, USACE will also collect written comments.

The public meetings are scheduled for the following:

- 1:00 p.m. to 4:00 p.m. on Saturday, December 6, 2014, at Argonne National Laboratory's Theory and Computing Sciences Building, located at Theory and Computing Sciences Building, Building 240, Argonne National

Laboratory, 9700 S. Cass Avenue, Argonne, Illinois 60439 (directions available on the GLMRIS project Web site), and

- 3:00 p.m. to 6:00 p.m. on Tuesday, December 9, 2014, at the Gleacher Center, located at 450 North Cityfront Plaza Drive, Chicago, Illinois 60611. Please see the GLMRIS project Web site at <http://glmr.is.anl.gov/> for directions, more information regarding the meeting and if you wish to make an oral comment.

Comments received during the scoping period will be posted on the GLMRIS project Web site and will become part of the EIS.

If you require assistance under the Americans with Disabilities Act, please contact Ms. Lynne Whelan via email at lynne.e.whelan@usace.army.mil or phone at (312) 846-5330 at least seven (7) working days prior to the meeting to request arrangements.

3. *Significant Issues.* Issues associated with the proposed study are likely to include, but will not be limited to impacts of ANS on current waterway uses and resources; impacts of potential ANS controls on current waterway uses and resources; and statutory and legal responsibilities relative to the lakes and waterways. Examples of waterway uses and resources that may be impacted by ANS include significant natural resources such as ecosystems and threatened and endangered species, commercial and recreational fisheries, and current recreational uses of the lakes and waterways. Examples of current waterway uses that may be impacted by potential ANS controls are commercial and recreational navigation, flood risk management and water supply and quality.

4. *Availability of the Draft Environmental Impact Statement.* Availability of the Draft EIS is contingent upon sufficient allocation of funding for the study. Draft EIS availability will be announced to the public in the **Federal Register** in compliance with 40 CFR 1506.9 and 1506.10.

5. *Authority.* This action is being undertaken pursuant to the Water Resources and Development Act of 2007, Section 3061, Pub. L. 110-114, 121 STAT. 1121, and the National Environmental Policy Act of 1969 (NEPA), 42 U.S.C. 4321, et seq., as amended.

Dated: November 14, 2014.

Susanne J. Davis, P.E.,
Chief, Planning Branch, Chicago District,
Corps of Engineers.

[FR Doc. 2014-27531 Filed 11-19-14; 8:45 am]

BILLING CODE 3720-58-P

DEPARTMENT OF EDUCATION

[Docket No. ED-2014-ICCD-0152]

Agency Information Collection Activities; Comment Request; Personal Authentication Service (PAS) for FSA ID

AGENCY: Federal Student Aid (FSA), Department of Education (ED).

ACTION: Notice.

SUMMARY: In accordance with the Paperwork Reduction Act of 1995 (44 U.S.C. chapter 3501 *et seq.*), ED is proposing a new information collection. **DATES:** Interested persons are invited to submit comments on or before January 20, 2015.

ADDRESSES: Comments submitted in response to this notice should be submitted electronically through the Federal eRulemaking Portal at <http://www.regulations.gov> by selecting Docket ID number ED-2014-ICCD-0152 or via postal mail, commercial delivery, or hand delivery. If the regulations.gov site is not available to the public for any reason, ED will temporarily accept comments at ICDocketMgr@ed.gov. Please note that comments submitted by fax or email and those submitted after the comment period will not be accepted; ED will ONLY accept comments during the comment period in this mailbox when the regulations.gov site is not available. Written requests for information or comments submitted by postal mail or delivery should be addressed to the Director of the Information Collection Clearance Division, U.S. Department of Education, 400 Maryland Avenue SW., LBJ, Mailstop L-OM-2-2E319, Room 2E103, Washington, DC 20202.

FOR FURTHER INFORMATION CONTACT: For specific questions related to collection activities, please contact Beth Grebeldinger, 202 377-4018.

SUPPLEMENTARY INFORMATION: The Department of Education (ED), in accordance with the Paperwork Reduction Act of 1995 (PRA) (44 U.S.C. 3506(c)(2)(A)), provides the general public and Federal agencies with an opportunity to comment on proposed, revised, and continuing collections of information. This helps the Department assess the impact of its information collection requirements and minimize the public's reporting burden. It also helps the public understand the Department's information collection requirements and provide the requested data in the desired format. ED is soliciting comments on the proposed information collection request (ICR) that is described below. The Department of

Education is especially interested in public comment addressing the following issues: (1) Is this collection necessary to the proper functions of the Department; (2) will this information be processed and used in a timely manner; (3) is the estimate of burden accurate; (4) how might the Department enhance the quality, utility, and clarity of the information to be collected; and (5) how might the Department minimize the burden of this collection on the respondents, including through the use of information technology. Please note that written comments received in response to this notice will be considered public records.

Title of Collection: Personal Authentication Service (PAS) for FSA ID.

OMB Control Number: 1845-NEW.

Type of Review: A new information collection.

Respondents/Affected Public: Individuals or Households.

Total Estimated Number of Annual Responses: 55,300,000.

Total Estimated Number of Annual Burden Hours: 7,370,000.

Abstract: Federal Student Aid (FSA) is replacing the current PIN system with the Personal Authentication Service (PAS) which will employ an FSA ID, a standard user name and password solution. In order to create an FSA ID to gain access to certain FSA systems (FAFSA on the Web, NSLDS, StudentLoans.gov, etc.) a user must register on-line for an FSA ID account. The FSA ID will allow the customer to have a single identity, even if there is a name change or change to other personally identifiable information. The information collected to create the FSA ID enables electronic authentication and authorization of users for FSA web-based applications and information and protects users from unauthorized access to user accounts on all protected FSA sites.

Dated: November 17, 2014.

Kate Mullan,

Acting Director, Information Collection Clearance Division, Privacy, Information and Records Management Services, Office of Management.

[FR Doc. 2014-27509 Filed 11-19-14; 8:45 am]

BILLING CODE 4000-01-P

DEPARTMENT OF ENERGY

Secretary of Energy Advisory Board; Meeting

AGENCY: Department of Energy.

ACTION: Notice of Open Meeting.

SUMMARY: This notice announces an open meeting of the Secretary of Energy Advisory Board (SEAB). SEAB was reestablished pursuant to the Federal Advisory Committee Act (Pub. L. 92–463, 86 Stat. 770) (the Act). This notice is provided in accordance with the Act.

DATES: Wednesday, December 3, 2014 8:30 a.m.–12:15 p.m. (MST).

ADDRESSES: NREL Education Center, National Renewable Energy Laboratory, 15013 Denver West Parkway, Golden, CO, 80401.

FOR FURTHER INFORMATION CONTACT: Karen Gibson, Designated Federal Officer, U.S. Department of Energy, 1000 Independence Avenue SW., Washington, DC 20585; telephone (202) 586–3787; or email at: seab@hq.doe.gov.

SUPPLEMENTARY INFORMATION:

Background: The Board was established to provide advice and recommendations to the Secretary on the Department's basic and applied research, economic and national security policy, educational issues, operational issues, and other activities as directed by the Secretary.

Purpose of the Meeting: This meeting is the quarterly meeting of the Board.

Tentative Agenda: The meeting will start at 8:30 a.m. on December 3rd. The tentative meeting agenda includes updates on the work of the SEAB task forces, briefings on topics of interest from the Lab and DOE, and comments from the public. The meeting will conclude at 12:15 p.m. Agenda updates will be posted on the SEAB Web site: www.energy.gov/seab.

Public Participation: The meeting is open to the public. Individuals who would like to attend must RSVP to Karen Gibson no later than 5:00 p.m. on Wednesday, November 26, 2014 at seab@hq.doe.gov. Please provide your name, organization, citizenship, and contact information. Anyone attending the meeting will be required to present government-issued identification. Individuals and representatives of organizations who would like to offer comments and suggestions may do so. Approximately 15 minutes will be reserved for public comments. Time allotted per speaker will depend on the number who wish to speak but will not exceed 3 minutes. The Designated Federal Officer is empowered to conduct the meeting in a fashion that will facilitate the orderly conduct of business. Those wishing to speak should register to do so beginning at 8:30 a.m. on December 3rd.

Those not able to attend the meeting or who have insufficient time to address the committee are invited to send a written statement to Karen Gibson, U.S.

Department of Energy, 1000 Independence Avenue SW, Washington DC 20585, email to: seab@hq.doe.gov.

Minutes: The minutes of the meeting will be available by contacting Ms. Gibson. She may be reached at the postal address or email address above, or by visiting SEAB's Web site at www.energy.gov/seab.

Issued in Washington, DC, on November 14, 2014.

LaTanya R. Butler,
Committee Management Officer.

[FR Doc. 2014–27487 Filed 11–19–14; 8:45 am]

BILLING CODE 6450–01–P

DEPARTMENT OF ENERGY

Record of Decision and Floodplain Statement of Findings for the Freeport LNG Expansion, L.P. Export Application

AGENCY: Office of Fossil Energy, Department of Energy.

ACTION: Record of Decision.

SUMMARY: The U.S. Department of Energy (DOE) announces its decision in FE Docket Nos. 10–161–LNG and 11–161–LNG to issue DOE/FE Order Nos. 3282–C and 3357–B, granting Freeport LNG Expansion L.P., FLNG Liquefaction, LLC, FLNG Liquefaction 2, LLC, and FLNG Liquefaction 3, LLC (collectively, FLEX) final long-term multi-contract authority to export domestically produced liquefied natural gas (LNG) by vessel to nations with which the United States has not entered into a free trade agreement providing for national treatment for trade in natural gas (non-FTA countries). Order Nos. 3282–C and 3357–B are issued under section 3 of the Natural Gas Act (NGA). The proposed exports will originate from the existing Freeport Terminal, located on Quintana Island, southeast of the City of Freeport in Brazoria County, Texas, from liquefaction and related facilities to be constructed. DOE participated as a cooperating agency with the Federal Energy Regulatory Commission (FERC) in preparing an environmental impact statement (EIS) analyzing the potential environmental impacts of the proposed Liquefaction Project that, if constructed, will be used to support the export authorization sought from DOE's Office of Fossil Energy (DOE/FE).

ADDRESSES: The EIS and this Record of Decision (ROD) are available on DOE's National Environmental Policy Act (NEPA) Web site at <http://energy.gov/nepa/nepa-documents>. Order Nos. 3282–C and 3357–B are available on DOE/FE's Web site at <http://energy.gov/>

[fe/downloads/listing-doe-fe-authorizations-issued-2014](http://energy.gov/downloads/listing-doe-fe-authorizations-issued-2014). For additional information about the dockets in these proceedings, contact Larine Moore, U.S. Department of Energy, Office of Natural Gas Regulatory Activities, Office of Fossil Energy, Room 3E–042, 1000 Independence Avenue SW., Washington, DC 20585.

FOR FURTHER INFORMATION CONTACT: To obtain additional information about the project, the EIS, or the ROD, contact Mr. John Anderson, U.S. Department of Energy, Office of Natural Gas Regulatory Activities, Office of Fossil Energy, Room 3E–042, 1000 Independence Avenue SW., Washington, DC 20585, (202) 586–5600; or Mr. Edward LeDuc, U.S. Department of Energy, Office of the Assistant General Counsel for Environment, 1000 Independence Avenue SW., Washington, DC 20585, (202) 586–4007.

SUPPLEMENTARY INFORMATION: DOE prepared this ROD and Floodplain Statement of Findings pursuant to the National Environmental Policy Act of 1969 (42 United States Code [U.S.C.] 4321, et seq.), and in compliance with the Council on Environmental Quality (CEQ) implementing regulations for NEPA (40 Code of Federal Regulations [CFR] parts 1500 through 1508), DOE's implementing procedures for NEPA (10 CFR Part 1021), and DOE's "Compliance with Floodplain and Wetland Environmental Review Requirements" (10 CFR part 1022).

Background

On May 17, 2013, DOE/FE issued Order No. 3282¹ to Freeport LNG Expansion L.P. and FLNG Liquefaction, LLC, pursuant to section 3(a) of the NGA.² DOE/FE subsequently amended Order No. 3282 to add FLNG Liquefaction 2, LLC and FLNG Liquefaction 3, LLC as applicants and authorizations holders, together with Freeport LNG Expansion L.P. and FLNG Liquefaction, LLC (collectively, FLEX), and clarified the order in other respects.³ Order No. 3282, as amended,

¹ *Freeport LNG Expansion L.P. and FLNG Liquefaction, LLC*, DOE/FE Order No. 3282, FE Docket No. 10–161–LNG, Order Conditionally Granting Long-Term Multi-Contract Authorization to Export Liquefied Natural Gas by Vessel from the Freeport LNG Terminal on Quintana Island, Texas to Non-Free Trade Agreement Nations (May 17, 2013).

² 15 U.S.C. 717b(a). This authority is delegated to the Assistant Secretary for Fossil Energy pursuant to Redesignation Order No. 00–002.04F (July 11, 2013).

³ On February 7, 2014, DOE/FE issued Order No. 3282–A, which added FLNG Liquefaction 2, LLC and FLNG Liquefaction 3, LLC as applicants and authorization holders. On June 6, 2014, DOE/FE

conditionally granted FLEX's Application⁴ in FE Docket No. 10–161–LNG for long-term, multi-contract authority to export domestically produced LNG by vessel to non-FTA countries. DOE/FE conditionally authorized FLEX to export LNG in a volume equivalent to 511 billion cubic feet per year (Bcf/yr) of natural gas (1.4 Bcf per day (Bcf/d)), or approximately 9 million metric tons per annum (mtpa) of LNG, for a term of 20 years.

On November 15, 2013, DOE/FE granted a second non-FTA conditional authorization to FLEX in DOE/FE Order No. 3357.⁵ Order No. 3357, as subsequently amended in Order No. 3357–A,⁶ conditionally authorized FLEX to export LNG in a volume equivalent to 146 Bcf/yr of natural gas (0.4 Bcf/d) for a 20-year term. Together with the 1.4 Bcf/d conditionally authorized in the first non-FTA order, FLEX's total combined non-FTA export volume of 1.8 Bcf/d of natural gas (657 Bcf/yr) mirrors the known liquefaction capacity of the Liquefaction Project. All of FLEX's proposed exports will originate from the existing Freeport Terminal, located on Quintana Island, southeast of the City of Freeport in Brazoria County, Texas, and the liquefaction and related facilities to be constructed by FLEX, as described below.

In June of 2004, the Federal Energy Regulatory Commission (FERC) issued an order authorizing Freeport LNG Development, L.P. to site, construct, and operate what is now known as Phase I of the Freeport Terminal. In September of 2006 FERC issued an order authorizing the Phase II expansion of the Freeport LNG Terminal, which included an expansion of the Freeport Terminal's send-out capacity. In December of 2011, in FERC Docket No. CP12–29–000, FLEX filed with FERC an application requesting authorization to expand and modify its previously authorized import facilities to facilitate the import and export of LNG at the Freeport Terminal (the Phase II

Modification Project). In August 2012, in FERC Docket No. CP12–509–000, FLEX filed an application with FERC to site, construct, and operate the Liquefaction Project at the Freeport Terminal under NGA section 3. FERC reviewed FLEX's application for the Liquefaction Project in FERC Docket No. CP12–509–000 in conjunction with FLEX's application for approval of the Phase II Modification Project in FERC Docket No. CP12–29–000.

At the time that DOE/FE issued the above-referenced non-FTA conditional authorizations to FLEX, the matters in FERC Docket Nos. CP12–29–000 and CP12–509–000 were still pending. Accordingly, the non-FTA conditional authorizations addressed the record evidence in their respective dockets and entered findings on all non-environmental issues considered under NGA section 3(a), including the economic impacts, international impacts, and security of gas supply associated with FLEX's proposed exports. Because DOE/FE must also consider environmental issues, DOE/FE conditioned its authorizations on the satisfactory completion of FLEX's environmental review process under NEPA, and on DOE/FE's issuance of a finding of no significant impact or a record of decision (ROD).⁷

Project Description

The proposed facilities will be integrated into the existing Freeport Terminal, which presently consists of a marine berth, two 160,000 m³ full containment LNG storage tanks, LNG vaporization systems, associated utilities, and a 9.6-mile pipeline and meter station. The Phase II Modification Project calls for improvements to facilities previously authorized by FERC, including the re-orientation and modification of the Phase II marine berthing dock, modifying the LNG transfer pipelines between the second marine dock and LNG storage tanks (one of which is yet to be constructed but was approved with the authorization for the Phase II expansion), and the improvement of the current access road system, all contained within the previously authorized operational area of the Freeport Terminal.

In addition, the Liquefaction Project consists of multiple components, including a Liquefaction Plant at and adjacent to the existing Quintana Island terminal and facilities located beyond Quintana Island. The Liquefaction Plant would consist of three propane pre-cooled mixed refrigerant liquefaction

trains, each capable of producing a nominal 4.4 million metric tons per annum (mtpa) of LNG (13.2 mtpa total) for export, which equates to a total liquefaction capacity of approximately 1.8 Bcf/d of natural gas.

In support of the Liquefaction Plant, FLEX proposes to construct a natural gas Pretreatment Plant located about 2.5 miles north of the existing Quintana Island terminal. The Pretreatment Plant would process the gas for liquefaction. In addition, FLEX proposed to construct several interconnecting pipelines and utility lines including a 5.0-mile-long, 12-inch diameter boil-off gas (BOG) pipeline from the terminal to the Pretreatment Plant (referred together as the Pipeline/Utility Line System). The Liquefaction Plant, the Pretreatment Plant, and the Pipeline/Utility Line System, together with the associated appurtenant structures, are collectively referred to as the Liquefaction Project.

The EIS Process

In accordance with NEPA, FERC issued a draft Environmental Impact Statement (EIS) for the proposed Liquefaction Project and Phase II Modification Project on March 14, 2014. (79 FR 15,989). The draft EIS was mailed to stakeholders, including landowners, the cooperating agencies, and those who previously made comments during the NEPA scoping process. Issues raised by commenters included concerns regarding: air pollution (including air toxics, greenhouse gases, deposition impacts; and compliance with the National Ambient Air Quality Standards), safety and lack of an emergency response plan, construction traffic, noise and dust, lack of housing for construction workers, visual impacts, impacts on property values, water use and Freeport LNG's source of water, land use impacts, ability to safely build the facility on dredge spoils, impacts on the historic Town of Quintana, expanding the scope of the cumulative impact analysis and alternatives analysis, recreational impacts, noxious odors, and the positive impacts from job creation.

The final EIS, published on June 20, 2014 (79 FR 35,345), recommended that FERC approve FLEX's proposed Liquefaction Project and Phase II Modification Project subject to 83 environmental conditions. On July 30, 2014, FERC issued its Order granting FLEX's requested authorization to modify previously authorized LNG facilities to facilitate the import and export of LNG at FLEX's Quintana Island terminal and granted authorization to site, construct, and operate the proposed facilities, subject

issued Order No. 3282–B, which further amended Order No. 3282 to clarify certain ordering paragraphs.

⁴ Application of Freeport LNG Expansion L.P., *et al.*, for Long-Term Authorization to Export Liquefied Natural Gas to Non-Free Trade Agreement Countries, FE Docket No. 10–161–LNG (Dec. 17, 2010).

⁵ *Freeport LNG Expansion L.P. et al.*, DOE/FE Order No. 3357, FE Docket No. 11–161–LNG, Order Conditionally Granting Long-Term Multi-Contract Authorization to Export Liquefied Natural Gas by Vessel from the Freeport LNG Terminal on Quintana Island, Texas to Non-Free Trade Agreement Nations (Nov. 15, 2013).

⁶ On June 6, 2014, DOE/FE issued Order No. 3357–A, which amended Order No. 3357 to clarify the terms of that Order's conditional authorization.

⁷ See DOE/FE Order No. 3282 at 123 (Ordering Para. F).

to the 83 environmental conditions contained in Appendix A of that order.⁸

In accordance with 40 CFR 1506.3, after an independent review of FERC's final EIS, DOE adopted the EIS on October 3, 2014 (DOE/EIS-0487), and the U.S. Environmental Protection Agency published a notice of that adoption in the **Federal Register** on October 10, 2014. (79 FR 61304).

Addendum to Environmental Review Documents Concerning Exports of Natural Gas From the United States (Addendum)

On June 4, 2014, DOE/FE published the Draft Addendum for public comment (79 FR 32258). Although not required by NEPA, DOE/FE prepared the Addendum in an effort to be responsive to the public and to provide the best information available on a subject that had been raised by commenters. The Addendum is a review of existing literature and was intended to provide information only on the resource areas potentially impacted by unconventional gas production.

The 45-day comment period on the Draft Addendum closed on July 21, 2014. DOE/FE received 40,745 comments in 18 separate submissions, and considered those comments in issuing the Addendum on August 15, 2014. DOE provided a summary of the comments received and responses to substantive comments in Appendix B of the Addendum. DOE/FE has incorporated the Draft Addendum, comments, and final Addendum into the record in its FLEX proceeding.

Alternatives

The EIS conducted an alternatives analysis for the Liquefaction Project and found no other practicable alternative that would result in less environmental impact that would still address the purpose and need of the Projects. Alternatives considered included the No Action Alternative, system alternatives, and site alternatives. With respect to the No Action Alternative, the EIS concluded that this alternative is not viable as FLEX would not be able to provide U.S. natural gas producers with new access to global gas suppliers and meet contractual obligations.

For the Phase II Modification Project, the EIS determined that the location, design, and purpose is wholly dependent on the existing plant facilities and operations at the Quintana Island terminal; therefore, other geographically separate sites beyond the

terminal were not evaluated and no system alternatives exist that could achieve the terminal's operational flexibility and capabilities.

With respect to system alternatives for the Liquefaction Project, the EIS analyzed other proposed LNG export facilities on the West Coast, Gulf Coast, and East Coast of the United States and whether these could be considered system alternatives. In all cases the EIS found that these alternatives would not address the Liquefaction Project's purpose and would not offer any significant environmental advantage.

The EIS also considered the possibility of expanding the size of another proposed LNG export terminal to address FLEX's desired export capacity. However, this alternative would involve further impacts such as: construction of additional liquefaction infrastructure plus the potential need for expanded docking facilities. Hence, the environmental impacts would not be significantly different than those that would occur as a result of the Liquefaction Project.

Additionally, the EIS evaluated site alternatives for the components of the Liquefaction Project, but did not find any viable alternatives. Siting of the Liquefaction Plant was dictated by the need to be close to the existing offloading areas, LNG storage tanks, docking area, and other existing LNG infrastructure at the Quintana Island terminal. Moreover, the proposed siting makes maximum use of the available areas within the existing Quintana Island terminal.

The EIS evaluated the feasibility of lowering the pad elevation of the Liquefaction Plant to determine whether this would lessen impacts on visibility, noise, safety, stormwater, and site engineering. However, the EIS determined that this would not provide substantial improvements in visibility and noise attenuation, and would result in significant geological safety, engineering, traffic and soil disposal issues. With respect to the siting of the Pretreatment Plant, the EIS assessed ten alternative sites, all of which were deemed unsuitable due to site constraints and environmental impacts, except for one site. However, based on comments from residents regarding the lack of a suitable evacuation route in case of emergency at the alternative site, and concerns about noise, air emissions, water discharges, materials storage, and flood protection, the EIS concludes that the proposed site is the preferred site.

With respect to siting of the Pipeline/Utility Line System, the main alternative siting criteria were the functional interdependency and

geographic locations of the proposed process facilities (Liquefaction Plant and Pretreatment Plant), FLEX's existing natural gas sendout pipeline, and the existing sendout pipeline meter station at Stratton Ridge. The Liquefaction Plant, Pretreatment Plant, and Stratton Ridge Meter Station represent fixed receipt or delivery points for the natural gas transported by the sendout pipeline and utilized in the liquefaction process. The existing sendout pipeline route constitutes the preferred route as it follows an existing right-of-way and minimizes environmental impacts.

Environmentally Preferred Alternative

When compared against the other action alternatives assessed in the EIS, as discussed above, the Liquefaction Project/Phase II Modification Project is the environmentally preferred alternative. While the No-Action Alternative would avoid the environmental impacts identified in the EIS, adoption of this alternative would not meet the project objectives.

Decision

DOE has decided to issue Order Nos. 3282-C and 3357-B authorizing FLEX to export domestically produced LNG by vessel from the Freeport LNG Terminal on Quintana Island, Texas to non-FTA countries up to the equivalent of 1.8 Bcf/d of natural gas for a term of 20 years.

Concurrently with this Record of Decision, DOE is issuing Order Nos. 3282-C and 3357-B in which it finds that the granting of the requested authorizations have not been shown to be inconsistent with the public interest, and that the applications should be granted subject to compliance with the terms and conditions set forth in Order Nos. 3282-C and 3357-B, including the environmental conditions adopted in the FERC Order at Appendix A. Additionally, the authorizations are conditioned on FLEX's compliance with any other preventative and mitigative measures imposed by other Federal or state agencies.

Basis of Decision

DOE's decision is based upon the analysis of potential environmental impacts presented in the EIS, and DOE's determination in Order Nos. 3282-C and 3357-B that the opponents of the applications have failed to overcome the statutory presumption that the proposed export authorizations are not inconsistent with the public interest. Although not required by NEPA, DOE also considered the Addendum, which summarizes available information on potential upstream impacts associated

⁸ Freeport LNG Development, L.P., et al., Order Granting Authorization Under Section 3 of the Natural Gas Act, 148 FERC ¶ 61,076 (July 30, 2014) [FERC Order].

with unconventional natural gas activities, such as hydraulic fracturing.

Mitigation

As a condition of its decision to issue Order Nos. 3282–C and 3357–B authorizing FLEX to export LNG to non-FTA countries, DOE is imposing requirements that will avoid or minimize the environmental impacts of the project. These conditions include the environmental conditions adopted in the FERC Order at Appendix A. Mitigation measures beyond those included in DOE Order Nos. 3282–C and 3357–B that are enforceable by other Federal and state agencies are additional conditions of Order Nos. 3282–C and 3357–B. With these conditions, DOE has determined that all practicable means to avoid or minimize environmental harm from the project have been adopted.

Floodplain Statement of Findings

DOE prepared this Floodplain Statement of Findings in accordance with DOE's regulations entitled "Compliance with Floodplain and Wetland Environmental Review Requirements" (10 CFR part 1022). The required floodplain and wetland assessment was conducted during development and preparation of the EIS (see Sections 4.1.1.3 and 4.3.1.1 of the EIS). DOE determined that the placement of some project components within floodplains would be unavoidable.

However, the current design for the project minimizes floodplain impacts to the extent practicable.

Issued in Washington, DC on November 14, 2014.

Christopher A. Smith,

Principal Deputy Assistant Secretary, Office of Fossil Energy.

[FR Doc. 2014–27486 Filed 11–19–14; 8:45 am]

BILLING CODE 6450–01–P

ENVIRONMENTAL PROTECTION AGENCY

[FRL–9919–54–OAR]

California State Motor Vehicle Pollution Control Standards; Malfunction and Diagnostic System Requirements for 2010 and Subsequent Model Year Heavy-Duty Engines; Request for Waiver Determination; Opportunity for Public Hearing and Comment

AGENCY: Environmental Protection Agency (EPA).

ACTION: Notice of opportunity for public hearing and comment.

SUMMARY: The California Air Resources Board (CARB) has notified EPA that it has adopted amendments to its "Malfunction and Diagnostic System Requirements for 2010 and Subsequent Model Year Heavy-Duty Engines" regulation (HD OBD Requirements) and its "Enforcement of Malfunction and Diagnostic System Requirements for 2010 and Subsequent Model-Year Heavy-Duty Engines" regulation (HD OBD Enforcement Regulation), collectively referred to herein as HD OBD Regulations. EPA previously granted California a waiver for its HD OBD Regulations as amended in 2010. CARB adopted further amendments to the HD OBD Regulations in 2013 ("2013 HD OBD amendments"). By letter dated February 12, 2014, CARB requested that EPA confirm that the 2013 HD OBD amendments are within the scope of the previously granted waiver or, alternatively, that EPA grant a full waiver of preemption for the amendments. This notice announces that EPA has tentatively scheduled a public hearing to consider California's request for waiver of the 2013 HD OBD amendments, and that EPA is additionally now accepting written comment on California's request.

DATES: EPA has tentatively scheduled a public hearing concerning CARB's request on January 14, 2015 at 10 a.m. ET. EPA will hold a hearing only if any party notifies EPA by December 15, 2014 to express interest in presenting the Agency with oral testimony. Parties that wish to present oral testimony at the public hearing should provide written notice to David Read at the email address noted below. If EPA receives a request for a public hearing, that hearing will be held at the William Jefferson Clinton Building (North), Room 5530 at 1200 Pennsylvania Ave. NW., Washington, DC 20460. If EPA does not receive a request for a public hearing, then EPA will not hold a hearing, and will instead consider CARB's request based on written submissions to the docket. Any party may submit written comments until February 16, 2015.

Any person who wishes to know whether a hearing will be held may call David Read at (734) 214–4367 on or after December 17, 2014.

ADDRESSES: Submit your comments, identified by Docket ID No. EPA–HQ–OAR–2014–0699, by one of the following methods:

- On-Line at <http://www.regulations.gov>: Follow the On-Line Instructions for Submitting Comments.
- Email: a-and-r-docket@epa.gov.

- Fax: (202) 566–1741.
- Mail: Air and Radiation Docket, Docket ID No. EPA–HQ–OAR–2014–0699, U.S. 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.

On-Line Instructions for Submitting Comments: Direct your comments to Docket ID No. EPA–HQ–OAR–2014–0699. EPA's policy is that all comments we receive will be included in the public docket without change and may be made available online at <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 <http://www.regulations.gov> or email. The <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 <http://www.regulations.gov>, your email address will automatically be 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>.

EPA will make available for public inspection materials submitted by CARB, written comments received from any interested parties, and any testimony given at the public hearing. Materials relevant to this proceeding are contained in the Air and Radiation

Docket and Information Center, maintained in Docket ID No. EPA-HQ-OAR-2014-0699. Publicly available docket materials are available either electronically through <http://www.regulations.gov> or in hard copy at the Air and Radiation Docket in the EPA Headquarters Library, EPA West Building, Room 3334, 1301 Constitution Avenue NW., Washington, DC. The Public Reading Room is open to the public on all federal government work days from 8:30 a.m. to 4:30 p.m.; generally, it is open Monday through Friday, excluding holidays. The telephone number for the Reading Room is (202) 566-1744. The Air and Radiation Docket and Information Center's Web site is <http://www.epa.gov/oar/docket.html>. The electronic mail (email) address for the Air and Radiation Docket is: a-and-r-Docket@epa.gov, the telephone number is (202) 566-1742, and the fax number is (202) 566-9744. An electronic version of the public docket is available through the federal government's electronic public docket and comment system. You may access EPA dockets at <http://www.regulations.gov>. After opening the <http://www.regulations.gov> Web site, enter EPA-HQ-OAR-2014-0699, in the "Enter Keyword or ID" fill-in box to view documents in the record. Although a part of the official docket, the public docket does not include CBI or other information whose disclosure is restricted by statute.

EPA's Office of Transportation and Air Quality also maintains a Web page that contains general information on its review of California waiver requests. Included on that page are links to prior waiver and authorization **Federal Register** notices. The page can be accessed at <http://www.epa.gov/otaq/cafr.htm>.

FOR FURTHER INFORMATION CONTACT: David Read, Attorney, Office of Transportation and Air Quality, U.S. Environmental Protection Agency, 2565 Plymouth Road, Ann Arbor, MI 48105. Telephone: (734) 214-4367. Fax: (734) 214-4212. Email: read.david@epa.gov.

SUPPLEMENTARY INFORMATION:

I. California's HD OBD Regulations

CARB initially adopted the HD OBD Requirements in December 2005. The HD OBD Requirements require manufacturers to install compliant HD OBD systems with diesel and gasoline powered engines used in vehicles having a gross vehicle weight rating greater than 14,000 pounds. HD OBD systems monitor emission-related components and systems for proper operation and for deterioration or

malfunctions that cause emissions to exceed specific thresholds.

EPA issued a waiver under section 209(b) of the Clean Air Act (CAA or Act) for the HD OBD Requirements in 2008.¹ In 2010, CARB updated the regulation to align the HD OBD Requirements with OBD regulations applicable to medium-duty vehicles, and adopted the HD OBD Enforcement Regulation. EPA issued California a waiver for the 2010 HD OBD Regulations in December 2012.² CARB subsequently updated the HD OBD Regulations again in 2013. CARB formally adopted the 2013 HD OBD amendments on June 26, 2013, and they became operative under state law on July 31, 2013. The HD OBD Requirements are codified at title 13, California Code of Regulations, section 1971.1. The HD OBD Enforcement Regulation is codified at title 13, California Code of Regulations, section 1971.5.

The 2013 amendments that are subject of this notice are intended to ease, clarify, or add flexibility to California's previously waived HD OBD requirements. By letter dated February 12, 2014,³ CARB submitted to EPA a request for a determination that the 2013 HD OBD amendments are within the scope of the previous HD OBD waiver or, alternatively, that EPA grant California a waiver of preemption for the 2013 amendments to its HD OBD regulations.

II. Clean Air Act Waivers of Preemption

Section 209(a) of the CAA preempts states and local governments from setting emission standards for new motor vehicles and engines. It provides:

No State or any political subdivision thereof shall adopt or attempt to enforce any standard relating to the control of emissions from new motor vehicles or new motor vehicle engines subject to this part. No state shall require certification, inspection or any other approval relating to the control of emissions from any new motor vehicle or new motor vehicle engine as condition precedent to the initial retail sale, titling (if any), or registration of such motor vehicle, motor vehicle engine, or equipment.

Through operation of section 209(b) of the Act, California is able to seek and receive a waiver of section 209(a)'s preemption. If certain criteria are met, section 209(b)(1) of the Act requires the Administrator, after notice and

opportunity for public hearing, to waive application of the prohibitions of section 209(a). Section 209(b)(1) only allows a waiver to be granted for any state that had adopted standards (other than crankcase emission standards) for the control of emissions from new motor vehicles or new motor vehicle engines prior to March 30, 1966, if the state determines that its standards will be, in the aggregate, at least as protective of public health and welfare as applicable Federal standards (*i.e.*, if such state makes a "protectiveness determination"). Because California was the only state to have adopted standards prior to 1966, it is the only state that is qualified to seek and receive a waiver.⁴ The Administrator must grant⁵ a waiver unless she finds that: (A) California's above-noted "protectiveness determination" is arbitrary and capricious;⁶ (B) California does not need such state standards to meet compelling and extraordinary conditions;⁷ or (C) California's standards and accompanying enforcement procedures are not consistent with section 202(a) of the Act.⁸ EPA has previously stated that consistency with section 202(a) requires that California's standards must be technologically feasible within the lead time provided, giving due consideration to costs, and that California and applicable Federal test procedures be consistent.⁹

If California amends regulations that were previously granted a waiver, EPA can confirm that the amended regulations are within the scope of the previously granted waiver. Such within-the-scope amendments are permissible without a full waiver review if three conditions are met. First, the amended

⁴ See S. Rep. No. 90-403 at 632 (1967).

⁵ EPA's review of California regulations under section 209 is not a broad review of the reasonableness of the regulations or its compatibility with all other laws. Sections 209(b) and 209(e) of the Clean Air Act limit EPA's authority to deny California requests for waivers and authorizations to the three criteria listed therein. As a result, EPA has consistently refrained from denying California's requests for waivers and authorizations based on any other criteria. In instances where the U.S. Court of Appeals has reviewed EPA decisions declining to deny waiver requests based on criteria not found in section 209(b), the Court has upheld and agreed with EPA's determination. See *Motor and Equipment Manufacturers Ass'n v. Nichols*, 142 F.3d 449, 462-63, 466-67 (D.C. Cir. 1998), *Motor and Equipment Manufacturers Ass'n v. EPA*, 627 F.2d 1095, 1111, 1114-20 (D.C. Cir. 1979). See also 78 FR 58090, 58120 (September 20, 2013).

⁶ CAA § 209(b)(1)(A).

⁷ CAA § 209(b)(1)(B).

⁸ CAA § 209(b)(1)(C).

⁹ See, e.g., 74 FR 32767 (July 8, 2009); see also *Motor and Equipment Manufacturers Association v. EPA*, 627 F.2d 1095, 1126 (D.C. Cir. 1979).

¹ 73 FR 52042 (September 8, 2008).

² 77 FR 73459 (December 10, 2012).

³ CARB, "Request for Waiver Action Pursuant to Clean Air Act Section 209(b) for California's Heavy-Duty Engine On-Board Diagnostic System Requirements (HD OBD) and On-Board Diagnostic System Requirements for Passenger Cars, Light-Duty Trucks, and Medium-Duty Vehicles and Engines (OBD II)," February 12, 2014.

regulations must not undermine California's determination that its standards, in the aggregate, are as protective of public health and welfare as applicable federal standards. Second, the amended regulations must not affect consistency with section 202(a) of the Act. Third, the amended regulations must not raise any "new issues" affecting EPA's prior waivers.

III. EPA's Request for Comments

EPA invites public comment on CARB's request, including but not limited to the following issues.

A. 2013 HD OBD Amendments Within-the-Scope or Full Waiver

First, we request comment on whether CARB's 2013 HD OBD amendments should be considered under the within-the-scope analysis or whether they should be considered under the full waiver criteria. Specifically, we request comment on whether California's 2013 HD OBD amendments (1) undermine California's previous determination that its standards, in the aggregate, are at least as protective of public health and welfare as comparable federal standards, (2) affect the consistency of California's requirements with section 202(a) of the Act, and (3) raise any other "new issue" affecting EPA's previous waiver or authorization determinations.

B. Whether 2013 HD OBD Amendments Meet the Criteria for New Waiver

Should any party believe that CARB's 2013 HD OBD amendments do not merit consideration as within-the-scope of the previous waivers, EPA also requests comment on whether those amendments meet the criteria for full waiver. Specifically, we request comment on: (a) Whether CARB's determination that its standards, in the aggregate, are at least as protective of public health and welfare as applicable federal standards is arbitrary and capricious, (b) whether California needs such standards to meet compelling and extraordinary conditions, and (c) whether California's standards and accompanying enforcement procedures are consistent with section 202(a) of the CAA.

IV. Procedures for Public Participation

If a hearing is held, the Agency will make a record of the proceedings. Interested parties may arrange with the reporter at the hearing to obtain a copy of the transcript at their own expense. Regardless of whether a public hearing is held, EPA will keep the record open until February 16, 2015. Upon expiration of the comment period, EPA will render a decision on CARB's request based on the record from the

public hearing, if any, all relevant written submissions, and other information that the Agency deems pertinent. All information will be available for inspection at the EPA Air Docket No. EPA-HQ-OAR-2014-0699.

Persons with comments containing proprietary information must distinguish such information from other comments to the greatest extent possible and label it as "Confidential Business Information" ("CBI"). If a person making comments wants EPA to base its decision on a submission labeled as CBI, then a non-confidential version of the document that summarizes the key data or information should be submitted to the public docket. To ensure that proprietary information is not inadvertently placed in the public docket, submissions containing such information should be sent directly to the contact person listed above and not to the public docket. Information covered by a claim of confidentiality will be disclosed by EPA only to the extent allowed, and according to the procedures set forth in 40 CFR part 2. If no claim of confidentiality accompanies the submission when EPA receives it, EPA will make it available to the public without further notice to the person making comments.

Dated: November 12, 2014.

Christopher Grundler,

Director, Office of Transportation and Air Quality, Office of Air and Radiation.

[FR Doc. 2014-27495 Filed 11-19-14; 8:45 am]

BILLING CODE 6560-50-P

ENVIRONMENTAL PROTECTION AGENCY

[FRL-9919-55-OAR]

California State Motor Vehicle Pollution Control Standards; Malfunction and Diagnostic System Requirements for 2004 and Subsequent Model Year Passenger Cars, Light-Duty Trucks, and Medium-Duty Vehicles and Engines; Request for Waiver Determination; Opportunity for Public Hearing and Comment

AGENCY: Environmental Protection Agency (EPA).

ACTION: Notice of Opportunity for Public Hearing and Comment.

SUMMARY: The California Air Resources Board (CARB) has notified EPA that it has adopted amendments to regulations entitled "Malfunction and Diagnostic System Requirements—2004 and Subsequent Model-Year Passenger Cars, Light-Duty Trucks, and Medium-Duty Vehicles and Engines" (OBD II

Requirements) and amendments to regulations entitled "Enforcement of Malfunction and Diagnostic System Requirements for 2004 and Subsequent Model-Year Passenger Cars, Light-Duty Trucks, and Medium-Duty Vehicles and Engines" (OBD II Enforcement Regulation). CARB adopted amendments to the OBD II Requirements through rulemakings in 1997, 2003, 2007 and 2010, and to the OBD II Requirements and OBD II Enforcement Regulation in 2012 and 2013. These amendments are collectively referred to herein as the OBD II Amendments. EPA previously granted California a waiver for the original OBD II Requirements, as last amended in 1995. EPA has also previously given notice and taken comments on the 1997 and 2003 OBD II amendments, but did not act on California's waiver requests for those amendments. CARB now requests that EPA confirm that all the OBD II Amendments be found within the scope of the previously granted waiver or, alternatively, that EPA grant a full waiver of preemption for the various amendments. This notice announces that EPA has tentatively scheduled a public hearing to consider California's requests for the 2007, 2010, 2012, and 2013 OBD II Amendments, and that EPA is additionally accepting written comment on California's waiver requests, and on the effect of the 2007, 2010, 2012, and 2013 OBD II Amendments on the prior 1997 and 2003 OBD II Amendments for which EPA previously took comments.

DATES: EPA has tentatively scheduled a public hearing concerning CARB's request on January 14, 2015 at 10 a.m. ET. EPA will hold a hearing only if any party notifies EPA by December 15, 2014 to express interest in presenting the Agency with oral testimony. Parties that wish to present oral testimony at the public hearing should provide written notice to David Read at the email address noted below. If EPA receives a request for a public hearing, that hearing will be held at the William Jefferson Clinton Building (North), Room 5530 at 1200 Pennsylvania Ave. NW., Washington, DC 20460. If EPA does not receive a request for a public hearing, then EPA will not hold a hearing, and will instead consider CARB's request based on written submissions to the docket. Any party may submit written comments until February 16, 2015.

Any person who wishes to know whether a hearing will be held may call David Read at (734) 214-4367 on or after December 17, 2014.

ADDRESSES: Submit your comments, identified by Docket ID No. EPA-HQ-OAR-2013-0573, by one of the following methods:

- On-Line at <http://www.regulations.gov>:

Follow the On-Line Instructions for Submitting Comments.

- Email: a-and-r-docket@epa.gov.

- Fax: (202) 566-1741.

- Mail: Air and Radiation Docket, Docket ID No. EPA-HQ-OAR-2013-0573, U.S. 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.

On-Line Instructions for Submitting Comments: Direct your comments to Docket ID No. EPA-HQ-OAR-2013-0573. EPA's policy is that all comments we receive will be included in the public docket without change and may be made available online at <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 <http://www.regulations.gov> or email. The <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 <http://www.regulations.gov>, your email address will automatically be 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>.

EPA will make available for public inspection materials submitted by CARB, written comments received from any interested parties, and any testimony given at the public hearing. Materials relevant to this proceeding are contained in the Air and Radiation Docket and Information Center, maintained in Docket ID No. EPA-HQ-OAR-2013-0573. Publicly available docket materials are available either electronically through <http://www.regulations.gov> or in hard copy at the Air and Radiation Docket in the EPA Headquarters Library, EPA West Building, Room 3334, 1301 Constitution Avenue NW., Washington, DC. The Public Reading Room is open to the public on all federal government work days from 8:30 a.m. to 4:30 p.m.; generally, it is open Monday through Friday, excluding holidays. The telephone number for the Reading Room is (202) 566-1744. The Air and Radiation Docket and Information Center's Web site is <http://www.epa.gov/oar/docket.html>. The electronic mail (email) address for the Air and Radiation Docket is: a-and-r-docket@epa.gov, the telephone number is (202) 566-1742, and the fax number is (202) 566-9744. An electronic version of the public docket is available through the federal government's electronic public docket and comment system. You may access EPA dockets at <http://www.regulations.gov>. After opening the <http://www.regulations.gov> Web site, enter EPA-HQ-OAR-2013-0573, in the "Enter Keyword or ID" fill-in box to view documents in the record. Although a part of the official docket, the public docket does not include CBI or other information whose disclosure is restricted by statute.

EPA's Office of Transportation and Air Quality also maintains a Web page that contains general information on its review of California waiver requests. Included on that page are links to prior waiver and authorization **Federal Register** notices. The page can be accessed at <http://www.epa.gov/otaq/cafr.htm>.

FOR FURTHER INFORMATION CONTACT: David Read, Attorney, Office of Transportation and Air Quality, U.S. Environmental Protection Agency, 2565 Plymouth Road, Ann Arbor, MI 48105. Telephone: (734) 214-4367. Fax: (734) 214-4212. Email: read.david@epa.gov.

SUPPLEMENTARY INFORMATION:

I. California's OBD II Requirements and Enforcement Regulation

CARB initially adopted the OBD II Requirements in July 1990 and then adopted amendments in 1992, 1993, and 1995. The OBD II Requirements direct motor vehicle manufacturers to incorporate vehicle onboard diagnostic (OBD) systems meeting particular requirements on all new passenger cars, light-duty trucks, and medium-duty vehicles and engines. Specifically, manufacturers are required to install OBD II systems that effectively monitor all emission-related components and systems on the motor vehicle for proper operation and for deterioration or malfunctions that cause emissions to exceed specific thresholds. The regulations also require that OBD II systems provide specific diagnostic information in a standardized format through a standardized serial data link on-board the vehicles to ensure that service and repair technicians can properly and promptly repair identified malfunctions.

In October 1996,¹ EPA issued a waiver under section 209(b) of the Clean Air Act ("CAA" or "the Act") for the OBD II Requirements adopted in 1990 and as amended in 1992, 1993, and 1995. CARB subsequently adopted further amendments to the OBD II Requirements in 1997 and 2003² and requested that EPA confirm those amendments to be within the scope of the previously granted OBD II waiver.³ EPA published a notice of opportunity for hearing and comment on the 1997 and 2003 California requests on February 5, 2004.⁴ The 1997 and 2003 waiver requests are currently pending a determination by EPA.

On August 9, 2007, CARB adopted additional amendments to the OBD II Requirements and minor amendments to the OBD II Enforcement Regulation. The amendments became operative on November 9, 2007. The 2007 OBD II Requirements amendments were made, *inter alia*, to address manufacturer

¹ The decision was signed on October 2, 1996, and published at 61 FR 53371 (October 11, 1996).

² The Board initially approved the amendments at rulemakings held respectively on December 12, 1996, April 25, 2002, and September 28, 2006.

³ On December 24, 1997, CARB requested that the 1997 amendments be found within the scope of the previously granted waiver. On October 30, 2003, CARB requested that the 2003 amendments be found within the scope of the previously granted waiver. The October 30, 2003, request further asked that the OBD II Enforcement Regulation be found within the scope of the previously granted waiver for "California's Enforcement of New and In-Use Vehicle Standards," title 13, Cal. Code Regs. Section 2100 *et seq.* (see 61 FR 53371 (October 11, 1996), 43 FR 9344 (March 7, 1978), and 43 FR 25729 (June 14, 1978)).

⁴ See 69 FR 5542 (February 5, 2004).

compliance concerns and to align the monitoring requirements with those adopted by CARB in 2005 for heavy duty diesel engines. By letter dated January 22, 2008, CARB requested that EPA find that the 2007 amendments fall within the scope of the previous waiver.

On April 5, 2010, CARB adopted additional amendments to the OBD II Requirements, but not to the OBD II Enforcement Regulation. The amendments became operative on June 17, 2010. The 2010 OBD II Requirements amendments were made primarily to harmonize the medium-duty diesel vehicle requirements with proposed revisions to monitoring requirements for heavy duty diesel engines. By letter dated December 15, 2010, CARB requested that EPA find that the 2010 OBD II Requirements amendments fall within the scope of the previous waiver or, alternatively, that a new waiver be granted for the amendments.

On March 12, 2012, and on June 26, 2013, CARB adopted additional amendments to the OBD II Requirements and to the OBD II Enforcement Regulation. The 2012 OBD II amendments became operative August 7, 2012. The 2013 OBD II amendments became operative on July 31, 2013. The 2012 OBD II amendments were primarily made to relax and/or clarify OBD II requirements in response to manufacturer concerns. The 2013 OBD II amendments primarily affect medium-duty vehicles, to align the OBD II monitoring requirements with those adopted by CARB for heavy duty diesel engines. By letter dated February 12, 2014, CARB requested that EPA find that the 2012 and 2013 OBD II amendments fall within the scope of the previous waiver or, alternatively, that a full waiver be granted for the amendments.

The various amendments to the OBD II Requirements are codified at title 13, California Code of Regulations, section 1968.2. The various amendments to the OBD II Enforcement Regulation are codified at title 13, California Code of Regulations, section 1968.5.

CARB seeks a determination that the 2007, 2010, 2012, and 2013 OBD II Amendments are within the scope of the previous waiver or, alternatively, that EPA grant California a full waiver of preemption for the OBD II Amendments.

II. Clean Air Act Waivers of Preemption

Section 209(a) of the Clean Air Act preempts states and local governments from setting emission standards for new motor vehicles and engines. It provides:

No State or any political subdivision thereof shall adopt or attempt to enforce any standard relating to the control of emissions from new motor vehicles or new motor vehicle engines subject to this part. No state shall require certification, inspection or any other approval relating to the control of emissions from any new motor vehicle or new motor vehicle engine as condition precedent to the initial retail sale, titling (if any), or registration of such motor vehicle, motor vehicle engine, or equipment.

Through operation of section 209(b) of the Act, California is able to seek and receive a waiver of section 209(a)'s preemption. If certain criteria are met, section 209(b)(1) of the Act requires the Administrator, after notice and opportunity for public hearing, to waive application of the prohibitions of section 209(a). Section 209(b)(1) only allows a waiver to be granted for any state that had adopted standards (other than crankcase emission standards) for the control of emissions from new motor vehicles or new motor vehicle engines prior to March 30, 1966, if the state determines that its standards will be, in the aggregate, at least as protective of public health and welfare as applicable Federal standards (*i.e.*, if such state makes a "protectiveness determination"). Because California was the only state to have adopted standards prior to 1966, it is the only state that is qualified to seek and receive a waiver.⁵ The Administrator must grant⁶ a waiver unless she finds that: (A) California's above-noted "protectiveness determination" is arbitrary and capricious;⁷ (B) California does not need such state standards to meet compelling and extraordinary conditions;⁸ or (C) California's standards and accompanying enforcement procedures are not consistent with section 202(a) of the Act.⁹ EPA has previously stated that consistency with section 202(a) requires

⁵ See S. Rep. No. 90–403 at 632 (1967).

⁶ EPA's review of California regulations under section 209 is not a broad review of the reasonableness of the regulations or its compatibility with all other laws. Sections 209(b) and 209(e) of the Clean Air Act limit EPA's authority to deny California requests for waivers and authorizations to the three criteria listed therein. As a result, EPA has consistently refrained from denying California's requests for waivers and authorizations based on any other criteria. In instances where the U.S. Court of Appeals has reviewed EPA decisions declining to deny waiver requests based on criteria not found in section 209(b), the Court has upheld and agreed with EPA's determination. See *Motor and Equipment Manufacturers Ass'n v. Nichols*, 142 F.3d 449, 462–63, 466–67 (D.C. Cir. 1998), *Motor and Equipment Manufacturers Ass'n v. EPA*, 627 F.2d 1095, 1111, 1114–20 (D.C. Cir. 1979). See also 78 FR 58090, 58120 (September 20, 2013).

⁷ CAA § 209(b)(1)(A).

⁸ CAA § 209(b)(1)(B).

⁹ CAA § 209(b)(1)(C).

that California's standards must be technologically feasible within the lead time provided, giving due consideration to costs, and that California and applicable Federal test procedures be consistent.¹⁰

If California amends regulations that were previously granted a waiver, EPA can confirm that the amended regulations are within the scope of the previously granted waiver. Such within-the-scope amendments are permissible without a full waiver review if three conditions are met. First, the amended regulations must not undermine California's determination that its standards, in the aggregate, are as protective of public health and welfare as applicable federal standards. Second, the amended regulations must not affect consistency with section 202(a) of the Act. Third, the amended regulations must not raise any "new issues" affecting EPA's prior waivers.

III. EPA's Request for Comments

EPA invites public comment on each of CARB's requests, including but not limited to the following issues.

A. 2007, 2010, 2012, and 2013 OBD II Amendments Within-the-Scope or Full Waiver

First, we request comment on whether CARB's 2007, 2010, 2012, and 2013 OBD II Amendments, whether individually or collectively assessed, should be considered under the within-the-scope analysis or whether they should be considered under the full waiver criteria. Specifically, we request comment on whether California's 2007, 2010, 2012, and 2013 OBD II Amendments (1) undermine California's previous determination that its standards, in the aggregate, are at least as protective of public health and welfare as comparable Federal standards, (2) affect the consistency of California's requirements with section 202(a) of the Act, and (3) raise any other "new issue" affecting EPA's previous waiver or authorization determinations.

B. Whether 2007, 2010, 2012, and 2013 OBD II Amendments Meet the Criteria for Full Waiver

Should any party believe that the 2007, 2010, 2012, or 2013 OBD II Amendments do not merit consideration as within-the-scope of the previous waiver, EPA also requests comment on whether those amendments meet the criteria for full waiver. Specifically, we request comment on: (a) whether

¹⁰ See, e.g., 74 FR 32767 (July 8, 2009); see also *Motor and Equipment Manufacturers Association v. EPA*, 627 F.2d 1095, 1126 (D.C. Cir. 1979).

CARB's determination that its standards, in the aggregate, are at least as protective of public health and welfare as applicable federal standards is arbitrary and capricious, (b) whether California needs such standards to meet compelling and extraordinary conditions, and (c) whether California's standards and accompanying enforcement procedures are consistent with section 202(a) of the Clean Air Act.

C. Effect of Newer OBD II Amendments on 1997 or 2003 Amendments

As stated above, EPA has previously given notice and taken comments on CARB's requests for within-the-scope determinations related to CARB's 1997 and 2003 OBD II amendments. As those requests are still pending, EPA will additionally take comment on any relevant effects of the 2007 and 2010 amendments on the prior 1997 and 2003 OBD II amendments. EPA will consider such comments in any decision on CARB's 1997 and 2003 OBD II amendments as well.

IV. Procedures for Public Participation

If a hearing is held, the Agency will make a record of the proceedings. Interested parties may arrange with the reporter at the hearing to obtain a copy of the transcript at their own expense. Regardless of whether a public hearing is held, EPA will keep the record open until February 16, 2015. Upon expiration of the comment period, EPA will render a decision on CARB's request based on the record from the public hearing, if any, all relevant written submissions, and other information that the Agency deems pertinent. All information will be available for inspection at the EPA Air Docket No. EPA-HQ-OAR-2013-0573.

Persons with comments containing proprietary information must distinguish such information from other comments to the greatest extent possible and label it as "Confidential Business Information" ("CBI"). If a person making comments wants EPA to base its decision on a submission labeled as CBI, then a non-confidential version of the document that summarizes the key data or information should be submitted to the public docket. To ensure that proprietary information is not inadvertently placed in the public docket, submissions containing such information should be sent directly to the contact person listed above and not to the public docket. Information covered by a claim of confidentiality will be disclosed by EPA only to the extent allowed, and according to the procedures set forth in 40 CFR part 2. If no claim of confidentiality

accompanies the submission when EPA receives it, EPA will make it available to the public without further notice to the person making comments.

Dated: November 12, 2014.

Christopher Grundler,

Director, Office of Transportation and Air Quality, Office of Air and Radiation.

[FR Doc. 2014-27503 Filed 11-19-14; 8:45 am]

BILLING CODE 6560-50-P

FEDERAL COMMUNICATIONS COMMISSION

[OMB 3060-0565, 3060-0912 and 3060-0922]

Information Collections Being Reviewed by the Federal Communications Commission Under Delegated Authority

AGENCY: Federal Communications Commission.

ACTION: Notice and request for comments.

SUMMARY: As part of its continuing effort to reduce paperwork burdens, and as required by the Paperwork Reduction Act (PRA) of 1995 (44 U.S.C. 3501-3520), the Federal Communication Commission (FCC or Commission) invites the general public and other Federal agencies to take this opportunity to comment on the following information collections. Comments are requested concerning: Whether the proposed collection of information is necessary for the proper performance of the functions of the Commission, including whether the information shall have practical utility; the accuracy of the Commission's burden estimate; ways to enhance the quality, utility, and clarity of the information collected; ways to minimize the burden of the collection of information on the respondents, including the use of automated collection techniques or other forms of information technology; and ways to further reduce the information collection burden on small business concerns with fewer than 25 employees. The FCC may not conduct or sponsor a collection of information unless it displays a currently valid OMB control number. No person shall be subject to any penalty for failing to comply with a collection of information subject to the PRA that does not display a valid OMB control number.

DATES: Written PRA comments should be submitted on or before January 20, 2015. If you anticipate that you will be submitting comments, but find it difficult to do so within the period of

time allowed by this notice, you should advise the contact listed below as soon as possible.

ADDRESSES: Direct all PRA comments to Cathy Williams, FCC, via email PRA@fcc.gov and to Cathy.Williams@fcc.gov.

FOR FURTHER INFORMATION CONTACT: For additional information about the information collection, contact Cathy Williams at (202) 418-2918.

SUPPLEMENTARY INFORMATION:

OMB Control Number: 3060-0565.

Title: Section 76.944, Commission Review of Franchising Authority Decisions on Rates for the Basic Service Tier and Associated Equipment.

Form Number: N/A.

Type of Review: Extension of a currently approved collection.

Respondents: Business or other for-profit entities; State, Local or Tribal Government.

Number of Respondents and Responses: 32 respondents; 32 responses.

Estimated Time per Response: 2-30 hours.

Frequency of Response: On occasion reporting requirement; Third party disclosure requirement.

Obligation to Respond: Required to obtain benefits. The statutory authority for this collection of information is contained in Sections 4(i) and 623 of the Communications Act of 1934, as amended.

Nature and Extent of Confidentiality: There is no need for confidentiality with this collection of information.

Total Annual Burden: 816 hours.

Total Annual Costs: \$4,800.

Privacy Impact Assessment(s): No impact(s).

Needs and Uses: 47 CFR 76.944(b) provides that any participant at the franchising authority level in a ratemaking proceeding may file an appeal of the franchising authority's decision with the Commission within 30 days of release of the text of the franchising authority's decision as computed under § 1.4(b) of this chapter. Appeals shall be served on the franchising authority or other authority that issued the rate decision. Where the state is the appropriate decision-making authority, the state shall forward a copy of the appeal to the appropriate local official(s). Oppositions may be filed within 15 days after the appeal is filed, and must be served on the parties appealing the rate decision. Replies may be filed seven (7) days after the last day for oppositions and shall be served on the parties to the proceeding.

OMB Control Number: 3060-0922.

Type of Review: Extension of a currently approved collection.

Title: Broadcast Mid-Term Report, FCC Form 397.

Form Number: FCC Form 397.

Respondents: Business or other for-profit entities; Not-for-profit institutions.

Number of Respondents and

Responses: 1,180 respondents and 1,180 responses.

Estimated Time per Response: 0.5 hours.

Frequency of Response: Mid-point reporting requirement.

Total Annual Burden: 590 hours.

Total Annual Cost: No costs.

Obligation to Respond: Required to obtain or retain benefits. The statutory authority for this collection of information is contained in Sections 154(i) and 303 of the Communications Act of 1934, as amended.

Nature and Extent of Confidentiality: There is no need for confidentiality with this collection of information.

Privacy Impact Assessment(s): No impact(s).

Needs and Uses: The Broadcast Mid-Term Report (FCC Form 397) is required to be filed by each broadcast television station that is part of an employment unit with five or more full-time employees and each broadcast radio station that is part of an employment unit with more than ten full-time employees. It is a data collection device used to assess broadcast compliance with EEO outreach requirements in the middle of license terms that are eight years in duration.

OMB Control Number: 3060-0912.

Title: Sections 76.501, 76.503 and 76.504, Cable Attribution Rules.

Form Number: N/A.

Type of Review: Extension of a currently approved collection.

Respondents: Business and other for-profit entities

Number of Respondents and

Responses: 40 respondents; 40 responses.

Estimated Time per Response: 1 to 4 hours.

Frequency of Response: On occasion reporting requirements.

Total Annual Burden: 100 hours.

Total Annual Costs: No costs.

Obligation To Respond: Required to obtain or retain benefits. The statutory authority for this collection is contained in Sections 4(i) and 613(f) of the Communications Act of 1934, as amended.

Nature and Extent of Confidentiality: There is no need for confidentiality with this collection of information.

Privacy Impact Assessment(s): No impact(s).

Needs and Uses: 47 CFR 76.501 Notes 2(f)(1) and 2(f)(3); 47 CFR 76.503 Note

2(b)(3); 47 CFR 76.504 Note 1(b)(1) requires limited partners, Registered Limited Liability Partnerships ("RLLPs"), and Limited Liability Companies ("LLCs") attempting to insulate themselves from attribution to file a certification of "non-involvement" with the Commission. LLCs who submit the non-involvement certification are also required to submit a statement certifying that the relevant state statute authorizing LLCs permits an LLC member to insulate itself in the manner required by our criteria.

Sections 76.501 Note 2, 76.503 Note 2, and 76.504 Note 1, also provides that officers and directors of an entity are considered to have a cognizable interest in the entity with which they are associated. If any such entity engages in businesses in addition to its primary media business, it may request the Commission to waive attribution for any officer or director whose duties and responsibilities are wholly unrelated to its primary business. The officers and directors of a parent company of a media entity with an attributable interest in any such subsidiary entity shall be deemed to have a cognizable interest in the subsidiary unless the duties and responsibilities of the officer or director involved are wholly unrelated to the media subsidiary and a statement properly documenting this fact is submitted to the Commission. This statement may be included on the Licensee Qualification Report.

47 CFR 76.503 Note 2(b)(1) includes a requirement for limited partners who are not materially involved, directly or indirectly, in the management or operation of the media-related activities of the partnership to certify that fact or be attributed to a limited partnership interest.

47 CFR 76.503(g) states "Prior to acquiring additional multichannel video-programming providers, any cable operator that serves 20% or more of multichannel video-programming subscribers nationwide shall certify to the Commission, concurrent with its applications to the Commission for transfer of licenses at issue in the acquisition, that no violation of the national subscriber limits prescribed in this section will occur as a result of such acquisition."

Federal Communications Commission.

Marlene H. Dortch,

Secretary, Office of the Secretary, Office of the Managing Director.

[FR Doc. 2014-27461 Filed 11-19-14; 8:45 am]

BILLING CODE 6712-01-P

FEDERAL COMMUNICATIONS COMMISSION

[OMB 3060-1095 and 3060-0888]

Information Collections Being Submitted for Review and Approval to the Office of Management and Budget

AGENCY: Federal Communications Commission.

ACTION: Notice and request for comments.

SUMMARY: As part of its continuing effort to reduce paperwork burdens, and as required by the Paperwork Reduction Act (PRA) of 1995 (44 U.S.C. 3501-3520), the Federal Communication Commission (FCC or Commission) invites the general public and other Federal agencies to take this opportunity to comment on the following information collections. Comments are requested concerning: Whether the proposed collection of information is necessary for the proper performance of the functions of the Commission, including whether the information shall have practical utility; the accuracy of the Commission's burden estimate; ways to enhance the quality, utility, and clarity of the information collected; ways to minimize the burden of the collection of information on the respondents, including the use of automated collection techniques or other forms of information technology; and ways to further reduce the information collection burden on small business concerns with fewer than 25 employees.

The FCC may not conduct or sponsor a collection of information unless it displays a currently valid OMB control number. No person shall be subject to any penalty for failing to comply with a collection of information subject to the PRA that does not display a valid OMB control number.

DATES: Written comments should be submitted on or before December 22, 2014. If you anticipate that you will be submitting comments, but find it difficult to do so within the period of time allowed by this notice, you should advise the contacts below as soon as possible.

ADDRESSES: Direct all PRA comments to Nicholas A. Fraser, OMB, via email Nicholas_A_Fraser@omb.eop.gov; and to Cathy Williams, FCC, via email PRA@fcc.gov and to Cathy.Williams@fcc.gov. Include in the comments the OMB control number as shown in the **SUPPLEMENTARY INFORMATION** section below.

FOR FURTHER INFORMATION CONTACT: For additional information or copies of the

information collection, contact Cathy Williams at (202) 418–2918. To view a copy of this information collection request (ICR) submitted to OMB: (1) Go to the Web page <<http://www.reginfo.gov/public/do/PRAMain>>, (2) look for the section of the Web page called “Currently Under Review,” (3) click on the downward-pointing arrow in the “Select Agency” box below the “Currently Under Review” heading, (4) select “Federal Communications Commission” from the list of agencies presented in the “Select Agency” box, (5) click the “Submit” button to the right of the “Select Agency” box, (6) when the list of FCC ICRs currently under review appears, look for the OMB control number of this ICR and then click on the ICR Reference Number. A copy of the FCC submission to OMB will be displayed.

SUPPLEMENTARY INFORMATION:

OMB Control Number: 3060–0888.

Title: Section 1.221, Notice of hearing; appearances; Section 1.229 Motions to enlarge, change, or delete issues; Section 1.248 Prehearing conferences; hearing conferences; Section 76.7, Petition Procedures; Section 76.9, Confidentiality of Proprietary Information; Section 76.61, Dispute Concerning Carriage; Section 76.914, Revocation of Certification; Section 76.1001, Unfair Practices; Section 76.1003, Program Access Proceedings; Section 76.1302, Carriage Agreement Proceedings; Section 76.1513, Open Video Dispute Resolution.

Form Number: Not applicable.

Type of Review: Extension of a currently approved collection.

Respondents: Businesses or other for-profit.

Number of Respondents and Responses: 684 respondents; 684 responses.

Estimated Time per Response: 6.1 to 90.5 hours.

Frequency of Response: On occasion reporting requirement; Third party disclosure requirement.

Obligation to Respond: Required to obtain or retain benefits. The statutory authority for this collection of information is contained in Sections 4(i), 303(r), and 628 of the Communications Act of 1934, as amended.

Total Annual Burden: 34,816 hours.

Total Annual Cost: \$3,160,080.

Privacy Act Impact Assessment: No impact(s).

Nature and Extent of Confidentiality: A party that wishes to have confidentiality for proprietary information with respect to a submission it is making to the

Commission must file a petition pursuant to the pleading requirements in Section 76.7 and use the method described in Sections 0.459 and 76.9 to demonstrate that confidentiality is warranted.

Needs and Uses: On October 5, 2012, we released a Report and Order, Revision of the Commission’s Program Access Rules et al., MB Docket No. 12–68 et al., FCC 12–123 (Oct. 5, 2012) (“R&O”). In the R&O, we declined to extend the preemptive prohibition on exclusive contracts for satellite-delivered programming between any cable operator and any cable-affiliated programming vendor in served areas beyond its October 5, 2012 expiration date (the “exclusive contract prohibition”). The expiration of the exclusive contract prohibition in served areas eliminates the filing of complaints alleging the existence of an impermissible exclusive contract in a served area. Although exclusive contracts in served areas are no longer preemptively prohibited as a result of the R&O, a multichannel video programming distributor (“MVPD”) may file a program access complaint with the Commission alleging that a particular exclusive contract violates Section 628(b) of the Communications Act of 1934, as amended (the “Act”), and Section 76.1001(a) of the Commission’s Rules. 47 U.S.C. 548(b) (prohibiting “unfair acts” that have the “purpose or effect” of “significantly hindering or preventing” the complainant from providing satellite cable programming or satellite broadcast programming); 47 CFR 76.1001(a).

47 CFR 1.221(h) requires that, in a program carriage complaint proceeding filed pursuant to § 76.1302 that the Chief, Media Bureau refers to an administrative law judge for an initial decision, each party, in person or by attorney, shall file a written appearance within five calendar days after the party informs the Chief Administrative Law Judge that it elects not to pursue alternative dispute resolution pursuant to § 76.7(g)(2) or, if the parties have mutually elected to pursue alternative dispute resolution pursuant to § 76.7(g)(2), within five calendar days after the parties inform the Chief Administrative Law Judge that they have failed to resolve their dispute through alternative dispute resolution. The written appearance shall state that the party will appear on the date fixed for hearing and present evidence on the issues specified in the hearing designation order.

47 CFR 1.229(b)(3) requires that, in a program carriage complaint proceeding filed pursuant to § 76.1302 that the

Chief, Media Bureau refers to an administrative law judge for an initial decision, a motion to enlarge, change, or delete issues shall be filed within 15 calendar days after the deadline for submitting written appearances pursuant to § 1.221(h), except that persons not named as parties to the proceeding in the designation order may file such motions with their petitions to intervene up to 30 days after publication of the full text or a summary of the designation order in the **Federal Register**.

47 CFR 1.229(b)(4) provides that any person desiring to file a motion to modify the issues after the expiration of periods specified in paragraphs (a), (b)(1), (b)(2), and (b)(3) of 47 CFR 1.229, shall set forth the reason why it was not possible to file the motion within the prescribed period.

47 CFR 1.248(a) provides that the initial prehearing conference as directed by the Commission shall be scheduled 30 days after the effective date of the order designating a case for hearing, unless good cause is shown for scheduling such conference at a later date, except that for program carriage complaints filed pursuant to § 76.1302 that the Chief, Media Bureau refers to an administrative law judge for an initial decision, the initial prehearing conference shall be held no later than 10 calendar days after the deadline for submitting written appearances pursuant to § 1.221(h) or within such shorter or longer period as the Commission may allow on motion or notice consistent with the public interest.

47 CFR 1.248(b) provides that the initial prehearing conference as directed by the presiding officer shall be scheduled 30 days after the effective date of the order designating a case for hearing, unless good cause is shown for scheduling such conference at a later date, except that for program carriage complaints filed pursuant to § 76.1302 that the Chief, Media Bureau refers to an administrative law judge for an initial decision, the initial prehearing conference shall be held no later than 10 calendar days after the deadline for submitting written appearances pursuant to § 1.221(h) or within such shorter or longer period as the presiding officer may allow on motion or notice consistent with the public interest.

47 CFR 76.7. Pleadings seeking to initiate FCC action must adhere to the requirements of Section 76.6 (general pleading requirements) and Section 76.7 (initiating pleading requirements). Section 76.7 is used for numerous types of petitions and special relief petitions, including general petitions seeking

special relief, waivers, enforcement, show cause, forfeiture and declaratory ruling procedures.

47 CFR 76.7(g)(2) provides that, in a proceeding initiated pursuant to § 76.7 that is referred to an administrative law judge, the parties may elect to resolve the dispute through alternative dispute resolution procedures, or may proceed with an adjudicatory hearing, provided that the election shall be submitted in writing to the Commission and the Chief Administrative Law Judge.

47 CFR 76.9. A party that wishes to have confidentiality for proprietary information with respect to a submission it is making to the FCC must file a petition pursuant to the pleading requirements in Section 76.7 and use the method described in Sections 0.459 and 76.9 to demonstrate that confidentiality is warranted. The petitions filed pursuant to this provision are contained in the existing information collection requirement and are not changed by the rule changes.

47 CFR 76.61(a) permits a local commercial television station or qualified low power television station that is denied carriage or channel positioning or repositioning in accordance with the must-carry rules by a cable operator to file a complaint with the FCC in accordance with the procedures set forth in Section 76.7. Section 76.61(b) permits a qualified local noncommercial educational television station that believes a cable operator has failed to comply with the FCC's signal carriage or channel positioning requirements (Sections 76.56 through 76.57) to file a complaint with the FCC in accordance with the procedures set forth in Section 76.7.

47 CFR 76.61(a)(1) states that whenever a local commercial television station or a qualified low power television station believes that a cable operator has failed to meet its carriage or channel positioning obligations, pursuant to Sections 76.56 and 76.57, such station shall notify the operator, in writing, of the alleged failure and identify its reasons for believing that the cable operator is obligated to carry the signal of such station or position such signal on a particular channel.

47 CFR 76.61(a)(2) states that the cable operator shall, within 30 days of receipt of such written notification, respond in writing to such notification and either commence to carry the signal of such station in accordance with the terms requested or state its reasons for believing that it is not obligated to carry such signal or is in compliance with the channel positioning and repositioning and other requirements of the must-carry rules. If a refusal for carriage is

based on the station's distance from the cable system's principal headend, the operator's response shall include the location of such headend. If a cable operator denies carriage on the basis of the failure of the station to deliver a good quality signal at the cable system's principal headend, the cable operator must provide a list of equipment used to make the measurements, the point of measurement and a list and detailed description of the reception and over-the-air signal processing equipment used, including sketches such as block diagrams and a description of the methodology used for processing the signal at issue, in its response.

47 CFR 76.914(c) permits a cable operator seeking revocation of a franchising authority's certification to file a petition with the FCC in accordance with the procedures set forth in Section 76.7.

47 CFR 76.1003(a) permits any multichannel video programming distributor (MVPD) aggrieved by conduct that it believes constitute a violation of the FCC's competitive access to cable programming rules to commence an adjudicatory proceeding at the FCC to obtain enforcement of the rules through the filing of a complaint, which must be filed and responded to in accordance with the procedures specified in Section 76.7, except to the extent such procedures are modified by Section 76.1003.

47 CFR 76.1001(b)(2) permits any multichannel video programming distributor to commence an adjudicatory proceeding by filing a complaint with the Commission alleging that a cable operator, a satellite cable programming vendor in which a cable operator has an attributable interest, or a satellite broadcast programming vendor, has engaged in an unfair act involving terrestrially delivered, cable-affiliated programming, which must be filed and responded to in accordance with the procedures specified in § 76.7, except to the extent such procedures are modified by §§ 76.1001(b)(2) and 76.1003. In program access cases involving terrestrially delivered, cable-affiliated programming, the defendant has 45 days from the date of service of the complaint to file an answer, unless otherwise directed by the Commission. A complainant shall have the burden of proof that the defendant's alleged conduct has the purpose or effect of hindering significantly or preventing the complainant from providing satellite cable programming or satellite broadcast programming to subscribers or consumers; an answer to such a complaint shall set forth the defendant's reasons to support a finding that the

complainant has not carried this burden. In addition, a complainant alleging that a terrestrial cable programming vendor has engaged in discrimination shall have the burden of proof that the terrestrial cable programming vendor is wholly owned by, controlled by, or under common control with a cable operator or cable operators, satellite cable programming vendor or vendors in which a cable operator has an attributable interest, or satellite broadcast programming vendor or vendors; an answer to such a complaint shall set forth the defendant's reasons to support a finding that the complainant has not carried this burden. In addition, a complainant that wants a currently pending complaint involving terrestrially delivered, cable-affiliated programming considered under the rules must submit a supplemental filing alleging that the defendant has engaged in an unfair act after the effective date of the rules. In such case, the complaint and supplement will be considered pursuant to the rules and the defendant will have an opportunity to answer the supplemental filing, as set forth in the rules.

47 CFR 76.1003(b) requires any aggrieved MVPD intending to file a complaint under this section to first notify the potential defendant cable operator, and/or the potential defendant satellite cable programming vendor or satellite broadcast programming vendor, that it intends to file a complaint with the Commission based on actions alleged to violate one or more of the provisions contained in Sections 76.1001 or 76.1002 of this part. The notice must be sufficiently detailed so that its recipient(s) can determine the nature of the potential complaint. The potential complainant must allow a minimum of ten (10) days for the potential defendant(s) to respond before filing a complaint with the Commission.

47 CFR 76.1003(c) describes the required contents of a program access complaint, in addition to the requirements of Section 76.7 of this part.

47 CFR 76.1003(c)(3) requires a program access complaint to contain evidence that the complainant competes with the defendant cable operator, or with a multichannel video programming distributor that is a customer of the defendant satellite cable programming or satellite broadcast programming vendor or a terrestrial cable programming vendor alleged to have engaged in conduct described in § 76.1001(b)(1).

47 CFR 76.1003(d) states that, in a case where recovery of damages is

sought, the complaint shall contain a clear and unequivocal request for damages and appropriate allegations in support of such claim.

47 CFR 76.1003(e)(1) requires cable operators, satellite cable programming vendors, or satellite broadcast programming vendors whom expressly reference and rely upon a document in asserting a defense to a program access complaint filed or in responding to a material allegation in a program access complaint filed pursuant to Section 76.1003, to include such document or documents, such as contracts for carriage of programming referenced and relied on, as part of the answer. Except as otherwise provided or directed by the Commission, any cable operator, satellite cable programming vendor or satellite broadcast programming vendor upon which a program access complaint is served under this section shall answer within forty-five (45) days of service of the complaint.

47 CFR 76.1003(e)(2) requires an answer to an exclusivity complaint to provide the defendant's reasons for refusing to sell the subject programming to the complainant. In addition, the defendant may submit its programming contracts covering the area specified in the complaint with its answer to refute allegations concerning the existence of an impermissible exclusive contract. If there are no contracts governing the specified area, the defendant shall so certify in its answer. Any contracts submitted pursuant to this provision may be protected as proprietary pursuant to Section 76.9 of this part.

47 CFR 76.1003(e)(3) requires an answer to a discrimination complaint to state the reasons for any differential in prices, terms or conditions between the complainant and its competitor, and to specify the particular justification set forth in Section 76.1002(b) of this part relied upon in support of the differential.

47 CFR 76.1003(e)(4) requires an answer to a complaint alleging an unreasonable refusal to sell programming to state the defendant's reasons for refusing to sell to the complainant, or for refusing to sell to the complainant on the same terms and conditions as complainant's competitor, and to specify why the defendant's actions are not discriminatory.

47 CFR 76.1003(f) provides that, within fifteen (15) days after service of an answer, unless otherwise directed by the Commission, the complainant may file and serve a reply which shall be responsive to matters contained in the answer and shall not contain new matters.

47 CFR 76.1003(g) states that any complaint filed pursuant to this subsection must be filed within one year of the date on which one of three specified events occurs.

47 CFR 76.1003(h) sets forth the remedies that are available for violations of the program access rules, which include the imposition of damages, and/or the establishment of prices, terms, and conditions for the sale of programming to the aggrieved multichannel video programming distributor, as well as sanctions available under title V or any other provision of the Communications Act.

47 CFR 76.1003(j) states in addition to the general pleading and discovery rules contained in § 76.7 of this part, parties to a program access complaint may serve requests for discovery directly on opposing parties, and file a copy of the request with the Commission. The respondent shall have the opportunity to object to any request for documents that are not in its control or relevant to the dispute. Such request shall be heard, and determination made, by the Commission. Until the objection is ruled upon, the obligation to produce the disputed material is suspended. Any party who fails to timely provide discovery requested by the opposing party to which it has not raised an objection as described above, or who fails to respond to a Commission order for discovery material, may be deemed in default and an order may be entered in accordance with the allegations contained in the complaint, or the complaint may be dismissed with prejudice.

47 CFR 76.1003(l) permits a program access complainant seeking renewal of an existing programming contract to file a petition along with its complaint requesting a temporary standstill of the price, terms, and other conditions of the existing programming contract pending resolution of the complaint, to which the defendant will have the opportunity to respond within 10 days of service of the petition, unless otherwise directed by the Commission.

47 CFR 76.1302(a) states that any video programming vendor or multichannel video programming distributor aggrieved by conduct that it believes constitute a violation of the regulations set forth in this subpart may commence an adjudicatory proceeding at the Commission to obtain enforcement of the rules through the filing of a complaint.

47 CFR 76.1302(b) states that any aggrieved video programming vendor or multichannel video programming distributor intending to file a complaint under this section must first notify the

potential defendant multichannel video programming distributor that it intends to file a complaint with the Commission based on actions alleged to violate one or more of the provisions contained in Section 76.1301 of this part. The notice must be sufficiently detailed so that its recipient(s) can determine the specific nature of the potential complaint. The potential complainant must allow a minimum of ten (10) days for the potential defendant(s) to respond before filing a complaint with the Commission.

47 CFR 76.1302(c) specifies the content of carriage agreement complaints.

47 CFR 76.1302(c)(1) provides that a program carriage complaint filed pursuant to § 76.1302 must contain the following: Whether the complainant is a multichannel video programming distributor or video programming vendor, and, in the case of a multichannel video programming distributor, identify the type of multichannel video programming distributor, the address and telephone number of the complainant, what type of multichannel video programming distributor the defendant is, and the address and telephone number of each defendant.

47 CFR 76.1302(d) sets forth the evidence that a program carriage complaint filed pursuant to § 76.1302 must contain in order to establish a prima facie case of a violation of § 76.1301.

47 CFR 76.1302(e)(1) provides that a multichannel video programming distributor upon whom a program carriage complaint filed pursuant to § 76.1302 is served shall answer within sixty (60) days of service of the complaint, unless otherwise directed by the Commission.

47 CFR 76.1302(e)(2) states that an answer to a program carriage complaint shall address the relief requested in the complaint, including legal and documentary support, for such response, and may include an alternative relief proposal without any prejudice to any denials or defenses raised.

47 CFR 76.1302(f) states that within twenty (20) days after service of an answer, unless otherwise directed by the Commission, the complainant may file and serve a reply which shall be responsive to matters contained in the answer and shall not contain new matters.

47 CFR 76.1302(h) states that any complaint filed pursuant to this subsection must be filed within one year of the date on which one of three events occurs.

47 CFR 76.1302(j)(1) states that upon completion of such adjudicatory proceeding, the Commission shall order appropriate remedies, including, if necessary, mandatory carriage of a video programming vendor's programming on defendant's video distribution system, or the establishment of prices, terms, and conditions for the carriage of a video programming vendor's programming.

47 CFR 76.1302(k) permits a program carriage complainant seeking renewal of an existing programming contract to file a petition along with its complaint requesting a temporary standstill of the price, terms, and other conditions of the existing programming contract pending resolution of the complaint, to which the defendant will have the opportunity to respond within 10 days of service of the petition, unless otherwise directed by the Commission. To allow for sufficient time to consider the petition for temporary standstill prior to the expiration of the existing programming contract, the petition for temporary standstill and complaint shall be filed no later than thirty (30) days prior to the expiration of the existing programming contract.

47 CFR 76.1513(a) permits any party aggrieved by conduct that it believes constitute a violation of the FCC's regulations or in section 653 of the Communications Act (47 U.S.C. 573) to commence an adjudicatory proceeding at the Commission to obtain enforcement of the rules through the filing of a complaint, which must be filed and responded to in accordance with the procedures specified in Section 76.7, except to the extent such procedures are modified by Section 76.1513.

47 CFR 76.1513(b) provides that an open video system operator may not provide in its carriage contracts with programming providers that any dispute must be submitted to arbitration, mediation, or any other alternative method for dispute resolution prior to submission of a complaint to the Commission.

47 CFR 76.1513(c) requires that any aggrieved party intending to file a complaint under this section must first notify the potential defendant open video system operator that it intends to file a complaint with the Commission based on actions alleged to violate one or more of the provisions contained in this part or in Section 653 of the Communications Act. The notice must be in writing and must be sufficiently detailed so that its recipient(s) can determine the specific nature of the potential complaint. The potential complainant must allow a minimum of

ten (10) days for the potential defendant(s) to respond before filing a complaint with the Commission.

47 CFR 76.1513(d) describes the contents of an open video system complaint.

47 CFR 76.1513(e) addresses answers to open video system complaints.

47 CFR 76.1513(f) states within twenty (20) days after service of an answer, the complainant may file and serve a reply which shall be responsive to matters contained in the answer and shall not contain new matters.

47 CFR 76.1513(g) requires that any complaint filed pursuant to this subsection must be filed within one year of the date on which one of three events occurs.

47 CFR 76.1513(h) states that upon completion of the adjudicatory proceeding, the Commission shall order appropriate remedies, including, if necessary, the requiring carriage, awarding damages to any person denied carriage, or any combination of such sanctions. Such order shall set forth a timetable for compliance, and shall become effective upon release.

OMB Control No.: 3060–1095.

Title: Surrenders of Authorizations for International Carrier, Space Station and Earth Station Licensees.

Form No.: N/A.

Type of Review: Revision of a currently approved collection.

Respondents: Business or other for-profit entities.

Number of Respondents: 8 respondents; 8 responses.

Estimated Time per Response: 1 hour.

Frequency of Response: On occasion reporting requirement.

Obligation to Respond: Voluntary.

The statutory authority for this information collection is contained in Sections 4(i), 7(a), 11, 303(c), 303(f), 303(g), and 303(r) of the Communications Act of 1934, as amended; 47 U.S.C. 154(i), 157(a), 161, 303(c), 303(f), 303(g), and 303(r).

Total Annual Burden: 8 hours.

Annual Cost Burden: None.

Privacy Act Impact Assessment: No impact(s).

Nature and Extent of Confidentiality: In general, there is no need for confidentiality with is collection of information.

Needs and Uses: This collection will be submitted to the Office of Management and Budget (OMB) as a revision after this 60 day comment period has ended in order to obtain the full three-year clearance from OMB.

The purpose of the revision is to remove the information collection requirements that are contained in 47 CFR 25.110 from OMB Control No.

3060–1095. The information collection requirements that are contained in 47 CFR 25.110 were consolidated into OMB Control No. 3060–0678.

Licensees file surrenders of authorizations with the Commission on a voluntary basis. This information is used by Commission staff to issue Public Notices to announce the surrenders of authorization to the general public. The Commission's release of Public Notices is critical to keeping the general public abreast of the licensees' discontinuance of telecommunications services.

Without this collection of information, licensees would be required to submit surrenders of authorizations to the Commission by letter which is more time consuming than submitting such requests to the Commission electronically. In addition, Commission staff would spend an extensive amount of time processing surrenders of authorizations received by letter.

The collection of information saves time for both licensees and Commission staff since they are received in MyIBFS electronically and include only the information that is essential to process the requests in a timely manner. Furthermore, the E-filing module expedites the Commission staff's announcement of surrenders of authorizations via Public Notice.

Federal Communications Commission.

Marlene H. Dortch,

Secretary, Office of the Secretary, Office of the Managing Director.

[FR Doc. 2014–27460 Filed 11–19–14; 8:45 am]

BILLING CODE 6712–01–P

FEDERAL COMMUNICATIONS COMMISSION

[IB Docket No. 04–286; DA 14–1637]

Seventh Meeting of the Advisory Committee for the 2015 World Radio Communication Conference

AGENCY: Federal Communications Commission.

ACTION: Notice.

SUMMARY: In accordance with the Federal Advisory Committee Act, this notice advises interested persons that the seventh meeting of the WRC–15 Advisory Committee will be held on December 17, 2014, at the Federal Communications Commission. The Advisory Committee will consider recommendations from its Informal Working Groups.

DATES: December 17, 2014; 11:00 a.m.

ADDRESSES: Federal Communications Commission, 445 12th Street SW., Room TW-C305, Washington, DC 20554.

FOR FURTHER INFORMATION CONTACT: Alexander Roytblat, Designated Federal Official, WRC-15 Advisory Committee, FCC International Bureau, Strategic Analysis and Negotiations Division, at (202) 418-7501.

SUPPLEMENTARY INFORMATION: The Federal Communications Commission (FCC) established the WRC-15 Advisory Committee to provide advice, technical support and recommendations relating to the preparation for the 2015 World Radiocommunication Conference (WRC-15).

In accordance with the Federal Advisory Committee Act, Public Law 92-463, as amended, this notice advises interested persons of the seventh meeting of the WRC-15 Advisory Committee. Additional information regarding the WRC-15 Advisory Committee is available on the Advisory Committee's Web site, <http://www.fcc.gov/encyclopedia/world-radiocommunication-conference-wrc-15>. The meeting is open to the public. The meeting will be broadcast live with open captioning over the Internet from the FCC Live Web page at www.fcc.gov/live. Comments may be presented at the WRC-15 Advisory Committee meeting or in advance of the meeting by email to: WRC-15@fcc.gov.

Open captioning will be provided for this event. Other reasonable accommodations for people with disabilities are available upon request. Requests for such accommodations should be submitted via email to fcc504@fcc.gov or by calling the Consumer & Governmental Affairs Bureau at (202) 418-0530 (voice), (202)

418-0432 (TTY). Such requests should include a detailed description of the accommodation needed. In addition, please include a way for the FCC to contact the requester if more information is needed to fill the request. Please allow at least five days' advance notice; last minute requests will be accepted, but may not be possible to accommodate.

The proposed agenda for the seventh meeting is as follows:

Agenda

Seventh Meeting of the WRC-15 Advisory Committee, Federal Communications Commission, 445 12th Street SW., Room TW-C305, Washington, DC 20554, December 17, 2014; 11:00 a.m.

1. Opening Remarks
2. Approval of Agenda
3. Approval of the Minutes of the Sixth Meeting
4. IWG Reports and Documents Relating to Preliminary Views and Draft Proposals
5. Future Meetings
6. Other Business

Federal Communications Commission.

Troy F. Tanner,

Deputy Chief, International Bureau.

[FR Doc. 2014-27520 Filed 11-19-14; 8:45 am]

BILLING CODE 6712-01-P

FEDERAL COMMUNICATIONS COMMISSION

Sunshine Meeting Act; Canceled

Special Commission Meeting Scheduled for October 24, 2014

The Federal Communications Commission has canceled the Special

Commission Meeting on the subject listed below, previously scheduled for Friday, October 24, 2014 at 445 12th Street SW., Washington, DC. This item has been adopted by the Commission.

Bureau	Subject
Enforcement	Title: Enforcement Bureau Action. Summary: The Commission will consider whether to take an enforcement action.

Additional information concerning this meeting may be obtained from Meribeth McCarrick, Office of Media Relations, telephone number (202) 418-0500; TTY 1-888-835-5322.

Federal Communications Commission.

Marlene H. Dortch,

Secretary.

[FR Doc. 2014-27565 Filed 11-18-14; 11:15 am]

BILLING CODE 6712-01-P

FEDERAL COMMUNICATIONS COMMISSION

Sunshine Act Meeting

Open Commission Meeting; Friday, November 21, 2014

The Federal Communications Commission will hold an Open Meeting on the subjects listed below on Friday, November 21, 2014. The meeting is scheduled to commence at 10:30 a.m. in Room TW-C305, at 445 12th Street SW., Washington, DC.

Item No.	Bureau	Subject
1	MEDIA	TITLE: Amendment of Section 73.1216 of the Commission's Rules Related to Broadcast Licensee-Conducted Contests. SUMMARY: The Commission will consider a Notice of Proposed Rulemaking to provide broadcasters greater flexibility in their disclosure of contest terms.
2	WIRELINE COMPETITION	TITLE: Ensuring Customer Premises Equipment Backup Power for Continuity of Communications (PS Docket No. 14-174); Technology Transitions (GN Docket No. 13-5); Amendment of Certain of the Commission's Part 1 Rules of Practice and Procedure and Part 0 Rules of Commission Organization (GC Docket No. 10-44); Policies and Rules Governing Retirement of Copper Loops by Incumbent Local Exchange Carriers (RM-11358); and Special Access for Price Cap Local Exchange Carriers (WC Docket No. 05-25). SUMMARY: The Commission will consider a Notice of Proposed Rulemaking, Declaratory Ruling, and Order to facilitate the transition to next generation networks by promoting and preserving the Commission's public safety, consumer protection, and competition goals.
3	PUBLIC SAFETY AND HOMELAND SECURITY	TITLE: 911 Governance and Accountability (PS Docket No. 14-193) and Improving 911 Reliability (PS Docket No. 13-75).

Item No.	Bureau	Subject
4	INTERNATIONAL	SUMMARY: The Commission will consider a Policy Statement and Notice of Proposed Rulemaking regarding its approach to 911 governance and proposing mechanisms to ensure continued accountability for reliable 911 services as technologies evolve. TITLE: ITU Plenipotentiary Conference Presentation. SUMMARY: The Commission will hear a presentation regarding the 2014 International Telecommunication Union (ITU) Plenipotentiary Conference. The presentation will include a summary of key issues addressed at the Plenipotentiary and the conference outcomes.

The meeting site is fully accessible to people using wheelchairs or other mobility aids. Sign language interpreters, open captioning, and assistive listening devices will be provided on site. Other reasonable accommodations for people with disabilities are available upon request. In your request, include a description of the accommodation you will need and a way we can contact you if we need more information. Last minute requests will be accepted, but may be impossible to fill. Send an email to: fcc504@fcc.gov or call the Consumer & Governmental Affairs Bureau at 202-418-0530 (voice), 202-418-0432 (tty).

Additional information concerning this meeting may be obtained from Meribeth McCarrick, Office of Media Relations, (202) 418-0500; TTY 1-888-835-5322. Audio/Video coverage of the meeting will be broadcast live with open captioning over the Internet from the FCC Live Web page at www.fcc.gov/live.

For a fee this meeting can be viewed live over George Mason University's Capitol Connection. The Capitol Connection also will carry the meeting live via the Internet. To purchase these services call (703) 993-3100 or go to www.capitolconnection.gmu.edu.

Copies of materials adopted at this meeting can be purchased from the FCC's duplicating contractor, Best Copy and Printing, Inc. (202) 488-5300; Fax (202) 488-5563; TTY (202) 488-5562. These copies are available in paper format and alternative media, including large print/type; digital disk; and audio and video tape. Best Copy and Printing, Inc. may be reached by email at FCC@BCPIWEB.com.

Federal Communications Commission,
Marlene H. Dortch,
 Secretary.

[FR Doc. 2014-27568 Filed 11-18-14; 11:15 am]

BILLING CODE 6712-01-P

FEDERAL DEPOSIT INSURANCE CORPORATION

Agency Information Collection Activities: Submission for OMB Review; Comment Request (3064-0084)

AGENCY: Federal Deposit Insurance Corporation (FDIC).

ACTION: Notice and request for comment.

SUMMARY: The FDIC, 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 the renewal of an existing information collection, as required by the Paperwork Reduction Act of 1995 (44 U.S.C. chapter 35). On September 8, 2014, (79 FR 53196), the FDIC requested comment for 60 days on a proposal to renew the following information collection: Account Based Disclosures in Connection with Federal Reserve Regulations E, CC, and DD. No comments were received. The FDIC hereby gives notice of its plan to submit to OMB a request to approve the renewal of this collection, and again invites comment on this renewal.

DATES: Comments must be submitted on or before December 22, 2014.

ADDRESSES: Interested parties are invited to submit written comments to the FDIC by any of the following methods:

- <http://www.FDIC.gov/regulations/laws/federal/>.
- **Email:** comments@fdic.gov Include the name and number of the collection in the subject line of the message.
- **Mail:** Gary A. Kuiper (202.898.3877) Counsel or John Popeo (202.898.6923), Counsel, MB-3098, Federal Deposit Insurance Corporation, 550 17th Street NW., Washington, DC 20429.
- **Hand Delivery:** Comments may be hand-delivered to the guard station at the rear of the 17th Street Building (located on F Street), on business days between 7:00 a.m. and 5:00 p.m.

All comments should refer to the relevant OMB control number. A copy

of the comments may also be submitted to the OMB desk officer for the FDIC: Office of Information and Regulatory Affairs, Office of Management and Budget, New Executive Office Building, Washington, DC 20503.

FOR FURTHER INFORMATION CONTACT: Gary A. Kuiper or John Popeo, at the FDIC address above.

SUPPLEMENTARY INFORMATION:

Proposal To Renew the Following Currently-Approved Collection of Information

Title: Account Based Disclosures in Connection with Federal Reserve Regulations E, CC, and DD.

OMB Number: 3064-0084.

Affected Public: Insured financial institutions.

Estimated Annual Burden Hours:

Regulation E: 2,664,895 hours.

Regulation CC: 471,551 hours.

Regulation DD: 325,398 hours.

Total Estimated Burden Hours:

3,461,844 hours.

General Description of Collection: The FDIC's OMB-approved collection provides for the application of the information collection requirements of three FRB rules to state nonmember banks. The three rules are:

- Regulation E ("Electronic Fund Transfers," 12 CFR Part 205);
- Regulation CC ("Availability of Funds," 12 CFR Part 229); and
- Regulation DD ("Truth in Savings," 12 CFR Part 230).

Generally, the Regulation E disclosures are designed to ensure consumers receive adequate disclosure of basic terms, costs, and rights relating to electronic fund transfer (EFT) services provided to them so that they can make informed decisions. Like Regulation E, Regulation CC has consumer protection disclosure requirements. Specifically, Regulation CC requires depository institutions to make funds deposited in transaction accounts available within specified time periods, disclose their availability policies to customers, and begin accruing interest on such deposits promptly.

Regulation DD also has similar consumer protection disclosure requirements that are intended to assist consumers in comparing deposit accounts offered by institutions, principally through the disclosure of fees, the annual percentage yield, and other account terms. Regulation DD requires depository institutions to disclose yields, fees, and other terms concerning deposit accounts to consumers at account opening, upon request, and when changes in terms occur.

Request for Comment

Comments are invited on: (a) Whether the collection of information is necessary for the proper performance of the FDIC's functions, including whether the information has practical utility; (b) the accuracy of the estimates of the burden of the information collection, including the validity of the methodology and assumptions used; (c) ways to enhance the quality, utility, and clarity of the information to be collected; and (d) ways to minimize the burden of the information collection on respondents, including through the use of automated collection techniques or other forms of information technology. All comments will become a matter of public record.

Dated at Washington, DC, this 14th day of November, 2014.

Federal Deposit Insurance Corporation.

Robert E. Feldman,
Executive Secretary.

[FR Doc. 2014-27416 Filed 11-19-14; 8:45 am]

BILLING CODE 6714-01-P

FEDERAL DEPOSIT INSURANCE CORPORATION

Sunshine Act Meeting

Pursuant to the provisions of the "Government in the Sunshine Act" (5 U.S.C. 552b), notice is hereby given that at 10:16 a.m. on Tuesday, November 18, 2014, the Board of Directors of the Federal Deposit Insurance Corporation met in closed session to consider matters related to the Corporation's supervision, corporate, and resolution activities.

In calling the meeting, the Board determined, on motion of Vice Chairman Thomas M. Hoenig, seconded by Director Jeremiah O. Norton (Appointive), concurred in by Director Richard Cordray (Director, Consumer Financial Protection Bureau), Director Thomas J. Curry (Comptroller of the Currency), and Chairman Martin J. Gruenberg, that Corporation business required its consideration of the matters

which were to be the subject of this meeting on less than seven days' notice to the public; that no earlier notice of the meeting was practicable; that the public interest did not require consideration of the matters in a meeting open to public observation; and that the matters could be considered in a closed meeting by authority of subsections (c)(4), (c)(6), (c)(8), (c)(9)(A)(ii), (c)(9)(B), and (c)(10) of the "Government in the Sunshine Act" (5 U.S.C. 552b(c)(4), (c)(6), (c)(8), (c)(9)(A)(ii), (c)(9)(B), and (c)(10)).

The meeting was held in the Board Room of the FDIC Building located at 550-17th Street NW., Washington, DC.

Dated: November 18, 2014.

Federal Deposit Insurance Corporation.

Robert E. Feldman,
Executive Secretary.

[FR Doc. 2014-27604 Filed 11-18-14; 4:15 pm]

BILLING CODE P

FEDERAL MARITIME COMMISSION

Notice of Agreements Filed

The Commission hereby gives notice of the filing of the following agreements under the Shipping Act of 1984. Interested parties may submit comments on the agreements to the Secretary, Federal Maritime Commission, Washington, DC 20573, within twelve days of the date this notice appears in the **Federal Register**. Copies of the agreements are available through the Commission's Web site (www.fmc.gov) or by contacting the Office of Agreements at (202) 523-5793 or tradeanalysis@fmc.gov.

Agreement No.: 010099-059.

Title: International Council of Containership Operators.

Parties: A.P. Moller-Maersk A/S; American President Lines, Ltd.; APL Co. Pte. Ltd.; China Shipping Container Lines Co., Ltd.; CMA CGM, S.A.; Compañía Chilena de Navegación Interoceánica S.A.; Compania Sudamericana de Vapores S.A.; COSCO Container Lines Co. Ltd; Crowley Maritime Corporation; Evergreen Marine Corporation (Taiwan), Ltd.; Hamburg-Süd KG; Hanjin Shipping Co., Ltd.; Hapag-Lloyd AG; Hyundai Merchant Marine Co., Ltd.; Kawasaki Kisen Kaisha, Ltd.; Mediterranean Shipping Co. S.A.; Mitsui O.S.K. Lines, Ltd.; Nippon Yusen Kaisha; Orient Overseas Container Line, Ltd.; Pacific International Lines (Pte) Ltd.; United Arab Shipping Company (S.A.G.); Wan Hai Lines Ltd.; Yang Ming Transport Marine Corp.; and Zim Integrated Shipping Services Ltd.

Filing Party: John Longstreth, Esq.; K & L Gates LLP; 1601 K Street NW., Washington, DC 20006-1600.

Synopsis: The amendment changes the address of APL Co. Pte. Ltd.

Agreement No.: 012154-003.

Title: APL/Hamburg Süd Space Charter Agreement.

Parties: APL Co. Pte. Ltd. and American President Lines, Ltd. (acting as one party); and Hamburg Süd KG

Filing Party: Eric C. Jeffrey, Esq.; Nixon Peabody LLP; 401 9th Street NW., Suite 900, Washington, DC 20004.

Synopsis: The amendment updates the principal address of APL Co. Pte, Ltd.

Agreement No.: 012272-001.

Title: MSC/Zim Amazon Service Vessel Sharing Agreement.

Parties: MSC Mediterranean Shipping Company S.A. and Zim Integrated Shipping Services, Ltd.

Filing Party: Wayne R. Rohde, Esq.; Cozen O'Connor; 1627 I Street NW., Suite 1100, Washington, DC 20006.

Synopsis: The agreement would add Colombia to the geographic scope of the agreement, adjust the duration of the agreement, and restate the agreement.

By Order of the Federal Maritime Commission.

Dated: November 14, 2014.

Rachel E. Dickon,
Assistant Secretary.

[FR Doc. 2014-27417 Filed 11-19-14; 8:45 am]

BILLING CODE 6730-01-P

FEDERAL RESERVE SYSTEM

Change in Bank Control Notices; Acquisitions of Shares of a Bank or Bank Holding Company

The notificants listed below have applied under the Change in Bank Control Act (12 U.S.C. 1817(j)) and § 225.41 of the Board's Regulation Y (12 CFR 225.41) to acquire shares of a bank or bank holding company. The factors that are considered in acting on the notices are set forth in paragraph 7 of the Act (12 U.S.C. 1817(j)(7)).

The notices are available for immediate inspection at the Federal Reserve Bank indicated. The notices also will be available for inspection at the offices of the Board of Governors. Interested persons may express their views in writing to the Reserve Bank indicated for that notice or to the offices of the Board of Governors. Comments must be received not later than December 5, 2014.

A. Federal Reserve Bank of Atlanta (Chapelle Davis, Assistant Vice President) 1000 Peachtree Street NE., Atlanta, Georgia 30309:

1. *Louisiana Bancorp, Inc. Employee Stock Ownership Plan, and Carolyn Marie Fink, as trustee*, both of Metairie, Louisiana; to acquire additional shares of Louisiana Bancorp, Inc., and thereby indirectly acquire additional voting shares of Bank of New Orleans, both in Metairie, Louisiana.

B. Federal Reserve Bank of Kansas City (Dennis Denney, Assistant Vice President) 1 Memorial Drive, Kansas City, Missouri 64198-0001:

1. *The Charles & Donna Moyer Irrevocable Trust; Cambell Moyer, individually and as trustee; Melynda Moyer, Emily Moyer Jasnowski, and Tess Moyer, all of Aurora, Nebraska; Steve Arnett and Maggie Arnett, both of Wood River, Nebraska; Scott Moyer, San Francisco, California; Tom Moyer, Arvada, Colorado; Andrew Moyer and Alexa Moyer, both of Omaha, Nebraska; Chris Moyer, Pasadena, California; Steve Moyer, New York, New York; Michelle Moyer, Brooklyn, New York; Eleanor Jane Moyer, Grand Island, Nebraska; and Judy Moyer, Sun City West, Arizona*; all as members of the Moyer Family Group, to retain voting shares of Heritage Group, Inc., Aurora, Nebraska, and thereby indirectly retain voting shares of Heritage Bank, Wood River, Nebraska.

Board of Governors of the Federal Reserve System, November 17, 2014.

Michael J. Lewandowski,
Associate Secretary of the Board.

[FR Doc. 2014-27492 Filed 11-19-14; 8:45 am]

BILLING CODE 6210-01-P

FEDERAL RESERVE SYSTEM

Formations of, Acquisitions by, and Mergers of Bank Holding Companies

The companies listed in this notice have applied to the Board for approval, pursuant to the Bank Holding Company Act of 1956 (12 U.S.C. 1841 *et seq.*) (BHC Act), Regulation Y (12 CFR part 225), and all other applicable statutes and regulations to become a bank holding company and/or to acquire the assets or the ownership of, control of, or the power to vote shares of a bank or bank holding company and all of the banks and nonbanking companies owned by the bank holding company, including the companies listed below.

The applications listed below, as well as other related filings required by the Board, are available for immediate inspection at the Federal Reserve Bank indicated. The applications will also be available for inspection at the offices of the Board of Governors. Interested persons may express their views in writing on the standards enumerated in

the BHC Act (12 U.S.C. 1842(c)). If the proposal also involves the acquisition of a nonbanking company, the review also includes whether the acquisition of the nonbanking company complies with the standards in section 4 of the BHC Act (12 U.S.C. 1843). Unless otherwise noted, nonbanking activities will be conducted throughout the United States.

Unless otherwise noted, comments regarding each of these applications must be received at the Reserve Bank indicated or the offices of the Board of Governors not later than December 15, 2014.

A. Federal Reserve Bank of Atlanta (Chapelle Davis, Assistant Vice President) 1000 Peachtree Street NE., Atlanta, Georgia 30309:

1. IBERIABANK Corporation, Lafayette, Louisiana, to merge with Old Florida Bancshares, Inc., Orlando, Florida, and thereby acquire its two subsidiaries, Old Florida Bank and New Traditions Bank, both in Orlando, Florida.

Board of Governors of the Federal Reserve System, November 17, 2014.

Michael J. Lewandowski,
Associate Secretary of the Board.

[FR Doc. 2014-27479 Filed 11-19-14; 8:45 am]

BILLING CODE 6210-01-P

GENERAL SERVICES ADMINISTRATION

[Notice-CECANF-2014-07; Docket No. 2014-0005; Sequence No. 7]

Commission To Eliminate Child Abuse and Neglect Fatalities; Announcement of Meeting

AGENCY: Commission To Eliminate Child Abuse and Neglect Fatalities, General Services Administration.

ACTION: Meeting notice.

SUMMARY: The Commission To Eliminate Child Abuse and Neglect Fatalities (CECANF), a Federal Advisory Committee established by the Protect Our Kids Act of 2012, will hold a meeting open to the public on Thursday, December 4, 2014 in Philadelphia, Pennsylvania.

DATES: The meeting will be held on Thursday, December 4, 2014, from 9:00 a.m. to 12:00 p.m. Eastern Standard Time.

ADDRESSES: CECANF will convene its meeting at the Philadelphia Marriott, 1201 Market Street, Philadelphia, PA 19107. This site is accessible to individuals with disabilities. The meeting will also be made available via teleconference and/or Webinar.

Submit comments identified by "Notice-CECANF-2014-07," by either of the following methods:

- **Regulations.gov:** <http://www.regulations.gov>. Submit comments via the Federal eRulemaking portal by searching for "Notice-CECANF-2014-07." Select the link "Comment Now" that corresponds with "Notice-CECANF-2014-07." Follow the instructions provided on the screen. Please include your name, organization name (if any), and "Notice-CECANF-2014-07" on your attached document.

- **Mail:** Commission to Eliminate Child Abuse and Neglect Fatalities, c/o General Services Administration, Agency Liaison Division, 1800 F St. NW., Room 7003D, Washington, DC 20006.

Instructions: Please submit comments only and cite "Notice-CECANF-2014-07" in all correspondence related to this notice. 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: Visit the CECANF Web site at <https://eliminatechildabusefatalities.sites.usa.gov/> or contact Ms. Patricia Brincefield, Communications Director, at 202-818-9596, 1800 F St. NW., Room 7003D, Washington, DC 20006.

SUPPLEMENTARY INFORMATION:

Background: CECANF was established to develop a national strategy and recommendations for reducing fatalities resulting from child abuse and neglect.

Agenda: The purpose of the meeting being held on December 4, 2014 is for Commission members to meet with national and international researchers to obtain: (1) A more in-depth understanding of the use of predictive analytics for identifying children at an increased risk for fatalities and near fatalities, (2) a research perspective on how current national data collection systems could be enhanced to better inform practice and policy, and (3) information about additional research that could lead to a better understanding of the issue of child abuse and neglect fatalities. The agenda for the meeting can be found on the CECANF Web site at <https://eliminatechildabusefatalities.sites.usa.gov/events/>

Attendance at the Meeting: Individuals interested in attending the meeting in person or participating by webinar and teleconference must register in advance. To register to attend in person or by webinar/phone, please go to <https://attendee.gotowebinar.com/register/5499503537289586178> and

follow the prompts. Once you register, you will receive a confirmation email with the webinar login and teleconference number. The room only has capacity for 115 people, so please register early if you plan to attend in person. Members of the public will not have the opportunity to ask questions or otherwise participate in the meeting.

However, members of the public wishing to comment should follow the steps detailed under the heading Addresses in this publication or contact us via the CECANF Web site at <https://eliminatechildabusefatalities.sites.usa.gov/contact-us/>.

Detailed meeting minutes will be posted within 90 days of the meeting on the CECANF Web site in the Events section: <https://eliminatechildabusefatalities.sites.usa.gov/events/>

Dated: November 13, 2014.

Karen White,

Executive Assistant.

[FR Doc. 2014-27437 Filed 11-19-14; 8:45 am]

BILLING CODE 6820-34-P

DEPARTMENT OF HEALTH AND HUMAN SERVICES

Office of the Secretary

[Document Identifier: HHS-OS-0990-NEW-60D]

Agency Information Collection Activities; Proposed Collection; Public Comment Request

AGENCY: Office of the Assistant Secretary for Health, Office of Adolescent Health, HHS.

ACTION: Notice.

SUMMARY: In compliance with section 3506(c)(2)(A) of the Paperwork Reduction Act of 1995, the Office of the Secretary (OS), Department of Health and Human Services, announces plans to submit a new Information Collection Request (ICR), described below, to the Office of Management and Budget (OMB). Prior to submitting that ICR to OMB, OS seeks comments from the public regarding the burden estimate, below, or any other aspect of the ICR.

DATES: Comments on the ICR must be received on or before January 20, 2015.

ADDRESSES: Submit your comments to Information.CollectionClearance@hhs.gov or by calling (202) 690-6162.

FOR FURTHER INFORMATION CONTACT: Information Collection Clearance staff, Information.CollectionClearance@hhs.gov or (202) 690-6162.

SUPPLEMENTARY INFORMATION: When submitting comments or requesting information, please include the document identifier HHS-OS-0990-NEW-60D for reference.

Information Collection Request Title: Pregnancy Assistance Fund Feasibility and Design Study (FADS).

Abstract: The Office of Adolescent Health (OAH), U.S. Department of Health and Human Services (HHS) is requesting approval by OMB on a new collection. The Pregnancy Assistance Fund (PAF) evaluation will provide information about program design, implementation, and impacts through two core components: A rigorous assessment of program impacts and implementation, and a descriptive examination of program design. This

proposed information collection request includes instruments related to the in-depth implementation study that complements the impact study. The data collected from these instruments will provide a detailed understanding of program implementation.

Need and Proposed Use of the Information: The data will serve two main purposes. First, the information will enable the study team to produce clear, detailed descriptions of each intervention that is evaluated and the counterfactual in each site. This documentation is critical for understanding the meaning of impact estimates. Second, the data will be used to assess fidelity of implementation and the quality of program delivery. This information is essential for determining whether the interventions were implemented well and whether the evaluation provided a good test of each site's intervention.

Likely Respondents: The 140 program administrators and case managers and 200 youth participants in 3 impact study sites.

TOTAL ESTIMATED ANNUALIZED BURDEN—HOURS

Form name	Number of respondents	Number of responses per respondent	Average burden per response (in hours)	Total burden hours
Semi-structured interview	12	2	1	24
Staff focus group	17	1	1	17
Staff survey	47	1	.5	24
Program attendance and content coverage protocol	2	12	.5	12
Youth focus group	67	1	1.5	100.5
Total .....	.....	.....	.....	177.5

OS specifically requests comments on (1) the necessity and utility of the proposed information collection for the proper performance of the agency's functions, (2) the accuracy of the estimated burden, (3) ways to enhance the quality, utility, and clarity of the information to be collected, and (4) the use of automated collection techniques or other forms of information technology to minimize the information collection burden.

Darius Taylor,

Information Collection Clearance Officer.

[FR Doc. 2014-27473 Filed 11-19-14; 8:45 am]

BILLING CODE 4168-11-P

DEPARTMENT OF HEALTH AND HUMAN SERVICES

Centers for Disease Control and Prevention

[60Day-15-0920]

Proposed Data Collections Submitted for Public Comment and Recommendations

The Centers for Disease Control and Prevention (CDC), as part of its continuing effort to reduce public burden, invites the general public and other Federal agencies to take this opportunity to comment on proposed and/or continuing information collections, as required by the Paperwork Reduction Act of 1995. To request more information on the below proposed project or to obtain a copy of the information collection plan and instruments, call 404-639-7570 or send comments to Leroy A. Richardson, 1600 Clifton Road, MS-D74, Atlanta, GA 30333 or send an email to omb@cdc.gov.

Comments submitted in response to this notice will be summarized and/or included in the request for Office of Management and Budget (OMB) approval. Comments are invited on: (a) Whether the proposed collection of information is necessary for the proper performance of the functions of the agency, including whether the information shall have practical utility; (b) the accuracy of the agency's estimate of the burden of the proposed collection of information; (c) ways to enhance the

quality, utility, and clarity of the information to be collected; (d) ways to minimize the burden of the collection of information on respondents, including through the use of automated collection techniques or other forms of information technology; and (e) estimates of capital or start-up costs and costs of operation, maintenance, and purchase of services to provide information. Burden means the total time, effort, or financial resources expended by persons to generate, maintain, retain, disclose or provide information to or for a Federal agency. This includes the time needed to review instructions; to develop, acquire, install and utilize technology and systems for the purpose of collecting, validating and verifying information, processing and maintaining information, and disclosing and providing information; to train personnel and to be able to respond to a collection of information, to search data sources, to complete and review the collection of information; and to transmit or otherwise disclose the information. Written comments should be received within 60 days of this notice.

Proposed Project

Data Collection Through Web Based Surveys for Evaluating Act Against AIDS Social Marketing Campaign Phases Targeting Consumers (Generic ICR, OMB# 0920-0920, Expires 2/28/2015)—Extension—National Center for HIV/AIDS, Viral Hepatitis, STD and TB Prevention (NCHHSTP), Centers for Disease Control and Prevention (CDC).

Background and Brief Description

In response to the continued HIV epidemic in our country, CDC has launched Act Against AIDS, a 5-year, multifaceted communication campaign to reduce HIV incidence in the United States. CDC plans to release the campaign in phases, with some of the phases running concurrently. Each phase of the campaign will use mass media and direct-to-consumer channels to deliver HIV prevention and testing messages. Some components of the campaign will be designed to provide basic education and increase awareness of HIV/AIDS among the general public, and others will be targeted to specific

subgroups or communities at greatest risk of infection. The current study addresses the need to assess the effectiveness of these social marketing messages aimed at increasing HIV awareness and delivering HIV prevention and testing messages among at-risk populations.

This extension of an ongoing study will evaluate the *Act Against AIDS* (AAA) social marketing campaign aimed at increasing HIV/AIDS awareness, increasing prevention behaviors, and improving HIV testing rates among consumers. A total of 12,000 respondents were originally approved for this generic ICR (0920-0920) and since the original approval date, 1,250 respondents have participated in the surveys under the following mini ICRs: 0920-13AHP; 0920-13YR and 0920-13DD. The information collected from each of the data collections were used to evaluate specific AAA campaign phases. We are requesting additional time to continue to survey other AAA target audiences and campaign phases and measuring exposure to each phase of the campaign and interventions implemented under AAA. Through this extension, we plan to reach the remaining approved 10,750 respondents. In order to obtain the remaining respondents, we anticipate screening approximately 17,915 individuals.

Depending on the target audience for the campaign phase, the study screener will vary. The study screener may address one or more of the following items: race/ethnicity, sexual behavior, and sexual orientation. Each survey will have a core set of items asked in all rounds, as well as a module of questions relating to specific AAA activities and communication initiatives.

Survey respondents will be selected from a combination of sources, including a national opt-in email list sample and respondent lists generated by partnership organizations (e.g., the National Urban League, the National Medical Association). A total of 10,750 participants will self-administer the survey at home on personal computers over a 3-year period.

There is no cost to the respondents other than their time.

ESTIMATED ANNUALIZED BURDEN HOURS

Respondents	Form name	Number of respondents	Number of responses per respondent	Average burden per response (in hours)	Total burden (in hours)
Individuals (male and female) aged 18 years and older.	Study Screener	17,915	1	2/60	597

ESTIMATED ANNUALIZED BURDEN HOURS—Continued

Respondents	Form name	Number of respondents	Number of responses per respondent	Average burden per response (in hours)	Total burden (in hours)
Individuals (male and female) aged 18 years and older.	Survey Module	3,583	1	30/60	1,792
Total .....	.....	.....	.....	.....	2,389

Leroy A. Richardson,

Chief, Information Collection Review Office,
Office of Scientific Integrity, Office of the
Associate Director for Science, Office of the
Director, Centers for Disease Control and
Prevention.

[FR Doc. 2014-27467 Filed 11-19-14; 8:45 am]

BILLING CODE 4163-18-P

DEPARTMENT OF HEALTH AND HUMAN SERVICES

Food and Drug Administration

[Docket No. FDA-2014-N-0373]

Agency Information Collection Activities; Submission for Office of Management and Budget Review; Comment Request; Risk and Benefit Perception Scale Development

AGENCY: Food and Drug Administration, HHS.

ACTION: Notice.

SUMMARY: The Food and Drug Administration (FDA) is announcing that a proposed collection of information has been submitted to the Office of Management and Budget (OMB) for review and clearance under the Paperwork Reduction Act of 1995.

DATES: Fax written comments on the collection of information by December 22, 2014.

ADDRESSES: To ensure that comments on the information collection are received, OMB recommends that written comments be faxed to the Office of Information and Regulatory Affairs, OMB, Attn: FDA Desk Officer, FAX: 202-395-7285, or emailed to oir_submission@omb.eop.gov. All comments should be identified with the

OMB control number 0910-New and title, “Risk and Benefit Perception Scale Development.” Also include the FDA docket number found in brackets in the heading of this document.

FOR FURTHER INFORMATION CONTACT: FDA PRA Staff, Office of Operations, Food and Drug Administration, 8455 Colesville Rd., COLE-14526, Silver Spring, MD 20993-0002, PRASStaff@fda.hhs.gov.

SUPPLEMENTARY INFORMATION: In compliance with 44 U.S.C. 3507, FDA has submitted the following proposed collection of information to OMB for review and clearance.

Risk and Benefit Perception Scale Development (OMB Control Number 0910-New)

Section 1701(a)(4) of the Public Health Service Act (PHS Act) (42 U.S.C. 300u(a)(4)) authorizes FDA to conduct research relating to health information. Section 1003(d)(2)(c) of the Federal Food, Drug, and Cosmetic Act (the FD&C Act) (21 U.S.C. 393(b)(2)(c)) authorizes FDA to conduct research relating to drugs and other FDA regulated products in carrying out the provisions of the FD&C Act.

FDA requires that prescription drug advertisements be balanced in their presentation of risk and benefit information. Patients receive information on drugs not only from their doctors and pharmacies, through patient labeling and FDA-mandated Medication Guides, but also online, on social networks and via direct-to-consumer (DTC) television and print advertising. Moreover, research suggests that consumers struggle with the concepts of risk and efficacy (Ref. 1) and often overestimate drug efficacy (Ref. 2).

As a result, it is important for FDA to understand and accurately measure how consumers are making sense of this information and how it impacts decisions related to prescription drugs.

FDA’s Office of Prescription Drug Promotion (OPDP) has an active research program that investigates how DTC advertising influences consumer knowledge, perceptions, and behavior. As OPDP’s research program has matured, the way in which we measure risk and benefit perception has evolved over time. This has resulted in perception measures that, while internally valid, tend to vary by study. Consequently, FDA needs a pool of reliable and valid measurement items for assessing consumers’ drug risk and benefit perceptions—as well as other elements of prescription drug decision making—consistently across studies. The purpose of this project is to create that measurement pool, thus increasing the rigor and efficiency of FDA’s research.

I. Design Overview

We will conduct pretesting prior to main data collection to assess the psychometric properties and identify any measurement challenges (e.g., misinterpretation, lack of variance) with candidate measurement items. We also will use the pretesting to examine factors that may affect future study results and analyses (e.g., response scale midpoints, moderating variables). We will conduct two sequential pretest waves (n=500 per wave; n=1,000 total) with the following target populations: (1) Individuals diagnosed with chronic pain and (2) individuals diagnosed with hypertension.

EXHIBIT 1—PRETEST STUDY DESIGN

Wave	Medical condition		
	Chronic pain	Hypertension	
Wave 1	n=250	n=250	500
Wave 2	n=250	n=250	500
Total	500	500	1,000

In the main study phase, we will conduct four sequential waves of iterative testing to fully assess the measurement properties of the candidate items and create the final pool of measurements. We will conduct

the first two waves of the main study with members of the target populations (hypertension and chronic pain) to refine the measurement items for those groups and the second two waves with members of the general population who

do not have the target health conditions to determine if measurement reliability and validity change when the advertised drug addresses a condition that study participants do not have (n=2,500 per wave; n=10,000).

EXHIBIT 2—ITERATIVE TESTING DESIGN—ILLNESS POPULATION SAMPLE

Chronic pain ad					Hypertension ad				
Ad type	Drug risk level	Drug benefit level		Control	Ad type	Drug risk level	Drug benefit level		Control
		High	Low				High	Low	
Wave 1									
Print	High	n=125	n=125	n=125	Print	High	n=125	n=125	n=125
	Low	n=125	n=125			Low	n=125	n=125	
Television	High	n=125	n=125	n=125	Television	High	n=125	n=125	n=125
	Low	n=125	n=125			Low	n=125	n=125	
Wave 2									
Print	High	n=125	n=125	n=125	Print	High	n=125	n=125	n=125
	Low	n=125	n=125			Low	n=125	n=125	
Television	High	n=125	n=125	n=125	Television	High	n=125	n=125	n=125
	Low	n=125	n=125			Low	n=125	n=125	

EXHIBIT 3—ITERATIVE TESTING DESIGN—GENERAL POPULATION SAMPLE

Chronic pain ad					Hypertension ad				
Ad type	Drug risk level	Drug benefit level		Control	Ad type	Drug risk level	Drug benefit level		Control
		High	Low				High	Low	
Wave 3									
Print	High	n=125	n=125	n=125	Print	High	n=125	n=125	n=125
	Low	n=125	n=125			Low	n=125	n=125	
Television	High	n=125	n=125	n=125	Television	High	n=125	n=125	n=125
	Low	n=125	n=125			Low	n=125	n=125	
Wave 4									
Print	High	n=125	n=125	n=125	Print	High	n=125	n=125	n=125
	Low	n=125	n=125			Low	n=125	n=125	
Television	High	n=125	n=125	n=125	Television	High	n=125	n=125	n=125
	Low	n=125	n=125			Low	n=125	n=125	

II. Procedure

A. Pretests

Each participant will be randomly assigned to view either a print ad or a television ad for a fictitious prescription drug indicated to treat chronic pain or hypertension and will be asked to complete a brief online survey assessing their benefit/risk perceptions, intentions, and attitudes toward the drug. Based on the pretest findings, we will revise and remove candidate items prior to full-scale testing.

B. Main Study

Each participant will be randomly assigned to view either a print or television ad for a fictitious prescription drug for hypertension or chronic pain and will be asked to complete a brief

online survey assessing their benefit/risk perceptions, intentions, and attitudes toward the drug. In the first two main study waves, participants will view an ad that matches the sample's medical condition (chronic pain or hypertension). In the final two main study waves, participants will be randomly assigned to view either the chronic pain stimuli or the high blood pressure stimuli.

The entire procedure is expected to last approximately 30 minutes. This will be a one-time (rather than annual) information collection. Note: The survey length has changed from 20 minutes to 30 minutes since the 60-day notice was published. This is because cognitive interviews did not result in as much reduction in question numbers as

originally expected. As this is a measurement validation study, it is important to include enough items on the questionnaire for sufficient comparison in order to identify those that perform the best. We have explained this change in survey length in responses to comments and have factored it in to the estimated burden.

In the **Federal Register** of April 21, 2014 (79 FR 22143), FDA published a 60-day notice requesting public comment on the proposed collection of information. One comment was received from the company Eli Lilly, Inc. We respond to the points in Lilly's comment below.

(Comment 1) "Lilly seeks further clarity to better understand how FDA intends to apply the risk and benefit

measurement items being developed through this study. FDA suggests in the **Federal Register** notice that the measurement items would be only used to enhance future FDA research initiatives; however, the precise nature and purpose of such planned research is unclear. Lilly suggests that any intended use of the measurement items to evaluate the effectiveness of drug advertising disseminated by industry would be inappropriate and beyond the jurisdiction and authorities granted to FDA.”

(Response) Section 1701(a)(4) of the Public Health Service Act (42 U.S.C. 300u(a)(4)) authorizes FDA to conduct research relating to health information. Section 903(d)(2)(C) of the FD&C Act (21 U.S.C. 393(d)(2)(C)) authorizes FDA to conduct research relating to drugs and other FDA-regulated products in carrying out the provisions of the FD&C Act. We believe that these statutes provide a broad authority for FDA to conduct research related to prescription drug promotion as described in the information collection request. As already explained in the information collection request, the nature and purpose of this research is “to understand and accurately measure how consumers are making sense of this information and how it impacts decisions related to prescription drugs.” We believe that this research is crucial in ensuring that consumers are receiving prescription drug information that is truthful and nonmisleading, and that prescription drugs are not being misbranded. FDA expects that any other purpose of this research will become clear only upon its completion, and FDA intends to make the research results and the final scale publicly-available.

(Comment 2) “Although FDA intends to narrow the pool of survey questions during the pretesting stage of the research, we have concerns that the current questionnaire is extremely cumbersome and would likely exceed 20 minutes to complete. Further, based on the currently designed instrument, it is questionable whether in fact FDA would have success in respondents’ fully completing the survey.”

(Response) Since the submission of the 60-day notice, the cognitive interviews have been completed (OMB control number 0910–0695). We did not reduce the number of items as much as expected based on those interviews. Thus, we are recommending changing the questionnaire to 30-minutes in length, and burden estimates have been calculated accordingly. Even so, no respondent would ever answer the full list of questions provided in the 60-day

notice; instead, the full questionnaire is the pool of items from which the questionnaire will be developed. We will test subsets of these candidate items using a form A/form B approach so that no respondent ever answers more than a 30-minute survey. In addition, some items may only be tested on one pretest and not the other or in one wave of a survey. No respondent would ever see all of these questions.

We take the survey length very seriously. We will be conducting two rounds of pretesting to refine the questionnaire and reduce the number of items, resulting in 30-minute (or shorter) questionnaires for the pretests and main study. We are sensitive to issues regarding respondent fatigue and its impact upon completion rates. We have employed similar online surveys on several previous studies, and we have obtained high completion rates, typically 90 percent or higher. For example, on a recent study entitled “Experimental Study: Examination of Corrective Direct-to-Consumer Television Advertising” (OMB control number 0910–0737), we had a pool of 1,071 eligible respondents and only 14 of those respondents failed to complete the survey. We anticipate that the completion rate for this study will be similar.

(Comment 3) “In general, specific questions proposed in the draft questionnaire may be unanswerable by the respondent if not addressed specifically in the test stimulus. For example, Q23 “How long will Drug X/ Drug Y’s negative side effects last once they begin?” If the duration of a drug’s side effects is not communicated in the stimulus, data captured would be purely speculative on the part of the consumer, especially without inclusion of a “don’t know or no opinion” option for the respondent.”

(Response) Respondents will be exposed to information about the drug’s indication and side effects in the ad and will then be asked to provide their perceptions of the drug’s effectiveness and risk profiles. The questions are not intended to measure factual knowledge about the fictitious drug. By definition, one’s perception is a subjective assessment and thus, does not need to be tied directly to a verbatim statement in the advertisement. Whether or not participants are forming perceptions about other attributes of the drug, such as how long side effects last, is an empirical question and the purpose of this study. Refining the questions, such as adding a “don’t know” option, will be further addressed by pretesting.

(Comment 4) “In addition to the redundant and overlapping questions,

several proposed questions appear to be unanswerable. The drafted questionnaire creates a high burden in complexity and time for the consumer and may cause significant respondent fatigue that could result in unreliable or incomplete data collection. Given these significant design issues related to the draft study questionnaire, Lilly suggests that FDA provide further details on how the questions in the draft questionnaire will be narrowed from the pretest stage to the iterative stage of the research and further evaluate the burden and likelihood to complete for the iterative testing stage.”

(Response) The pool of questions will be narrowed and refined through two methods. The first method involved cognitive testing of draft measures (for a full discussion of the cognitive interviews, see OMB control number 0910–0695). The goal of the cognitive interviews was to refine and narrow the measurement pool that will be subsequently pretested and then tested in an experimental study. The second method will involve iterative testing and analysis of draft measures to establish scale reliability and internal validity using survey methods. For a full discussion of the pretesting and experimental study, see Section I, Design and Section II, Procedure.

(Comment 5) “Additionally, it is not clear why some batteries of questions, such as those questions under the validity testing section (Q63–Q77) are included. These questions do not seem aligned with the research objective.”

(Response) These items are included for the purpose of testing the convergent validity of the other items in our item pool (measures of risk and benefit perceptions). The items in Q63–Q77 come from the previously validated Beliefs about Medicines Questionnaire (BMQ) (Ref. 3). As an example, if the benefit perception items perform as intended, they should be highly correlated with positive beliefs about medicines, as measured by the BMQ scale.

(Comment 6) “Finally, questions 78–82 seem better placed in a battery of questions for the screening or consumer selection phase.”

(Response) We believe that the constructs captured by questions 78–82 may moderate the relationship between ad content and respondents’ risk and benefit perceptions. We include them on the survey to keep the screener as short as possible, which reduces the burden on individuals who ultimately do not qualify for the study. They will not be used for screening as we do not plan to include or exclude any

individuals based on their responses to these questions.

(Comment 7) “Lilly suggests that the survey design be improved to better align with the research objectives, to avoid bias and to mitigate extreme respondent fatigue. Lilly recommends that FDA modify the data collection instrument to address the points noted above and seek additional public comment on the revised design.”

(Response) Given our responses and points of clarification above, we believe that the current design is rigorous and meets FDA’s research objectives. The design allows us to test and validate measurement items for consumers’ risk and benefit perceptions. By randomizing respondents to the various ads with different benefit and risk information, we have controlled for underlying differences in respondent

demographics and thereby have reduced the potential for selection bias (Ref. 4) and enhanced study validity. As we have described above, we also have designed the study to minimize respondent fatigue by testing only the most promising candidate items and by ensuring a survey length of no more than 30 minutes.

TABLE 1—ESTIMATED ANNUAL REPORTING BURDEN¹

Activity	Number of respondents	Number of responses per respondent	Total annual responses	Hours per response ²	Total hours
Pretest screener	2,000	1	2,000	0.03 (2 minutes)	60
Main study screener	20,000	1	20,000	0.03 (2 minutes)	600
Pretest	² 1,100	1	1,100	.5 (30 minutes)	550
Main Study	10,200	1	10,200	.5 (30 minutes)	5,100
Total					6,310

¹ There are no capital costs or operating and maintenance costs associated with this collection of information.

² With online surveys, several participants may be completing the survey at the time that the total target sample is reached. Those participants are allowed to complete the survey, which can result in the number of completes going slightly over the target number. Thus, if our target is 1,000, we have rounded up by an additional 100 to allow for some overage.

III. References

The following references have been placed on display in the Division of Dockets Management (see **ADDRESSES**) and may be seen by interested persons between 9 a.m. and 4 p.m., Monday through Friday, and are available electronically at <http://www.regulations.gov>.

1. Lipkus, I. M., “Numeric, Verbal, and Visual Formats of Conveying Health Risks: Suggested Best Practices and Future Recommendations,” *Medical Decision Making*, 27(5), 696–713 (2007).
2. Aikin, K. J., J. L. Swasy, and A.C. Braman, “Patient and Physician Attitudes and Behaviors Associated with DTC Promotion of Prescription Drugs—Summary of FDA Survey Research Results,” FDA, Center for Drug Evaluation and Research, 19 (2004).
3. Horne, R., J. Weinman, and M. Hankins, “The Beliefs About Medicines Questionnaire: The Development and Evaluation of a New Method for Assessing the Cognitive Representation of Medication,” *Psychology and Health*, 14, 1–24 (1999).
4. Kunz, R., G. E. Vist, and A. D. Ochman, “Randomization to Protect Against Selection Bias in Healthcare Trials,” *The Cochrane Library*, Issue 2 (2008).

Dated: November 14, 2014.

Leslie Kux,

Associate Commissioner for Policy.

[FR Doc. 2014–27431 Filed 11–19–14; 8:45 am]

BILLING CODE 4164–01–P

DEPARTMENT OF HEALTH AND HUMAN SERVICES

Health Resources and Services Administration

National Vaccine Injury Compensation Program: Revised Amount of the Average Cost of a Health Insurance Policy

The Health Resources and Services Administration (HRSA) is publishing an updated monetary amount of the average cost of a health insurance policy as it relates to the National Vaccine Injury Compensation Program (VICP).

Section 100.2 of the VICP’s implementing regulation (42 CFR Part 100) states that the revised amounts of an average cost of a health insurance policy, as determined by the Secretary, are to be published periodically in a notice in the **Federal Register** and filed with the United States Court of Federal Claims (the Court). This figure is calculated using the most recent Medical Expenditure Panel Survey—Insurance Component (MEPS–IC) data available as the baseline for the average monthly cost of a health insurance policy. This baseline is adjusted by the annual percentage increase/decrease obtained from the most recent annual Kaiser Family Foundation and Health Research and Educational Trust (KFF/HRET) Employer Health Benefits survey or other authoritative source that may be more accurate or appropriate.

In 2014, MEPS–IC, available at www.meps.ahrq.gov, published the

annual 2013 average total single premium per enrolled employee at private-sector establishments that provide health insurance. The figure published was \$5,571. This figure is divided by 12-months to determine the cost per month of \$464.25. The \$464.25 shall be increased or decreased by the percentage change reported by the most recent KFF/HRET, available at www.kff.org. The percentage increase from 2013 to 2014 was published at 2 percent. By adding this percentage increase, the calculated average monthly cost of a health insurance policy is \$473.54 for 2014.

Therefore, the Secretary announces that the revised average cost of a health insurance policy under the VICP is \$473.54 per month. In accordance with § 100.2, the revised amount was effective upon its delivery by the Secretary to the Court. Such notice was delivered to the Court on November 13, 2014.

Dated: November 13, 2014.

Mary K. Wakefield,
Administrator.

[FR Doc. 2014–27432 Filed 11–19–14; 8:45 am]

BILLING CODE 4165–15–P

DEPARTMENT OF HEALTH AND HUMAN SERVICES

National Institutes of Health

Office of the Director, National Institutes of Health; Notice of Meeting

Pursuant to section 10(a) of the Federal Advisory Committee Act, as amended (5 U.S.C. App.), notice is hereby given of a meeting of the Advisory Committee to the Director, National Institutes of Health.

The meeting will be open to the public, with attendance limited to space available. Individuals who plan to attend and need special assistance, such as sign language interpretation or other reasonable accommodations, should notify the Contact Person listed below in advance of the meeting.

Name of Committee: Advisory Committee to the Director, National Institutes of Health.

Date: December 11–12, 2014.

Time: December 11, 2014, 8:30 a.m. to 6:00 p.m.

Agenda: NIH Director's Report, NIH IC Director Report and ACD Working Group Reports.

Place: National Institutes of Health, Building 31, Room 6C6, 31 Center Drive, 6th Floor, Bethesda, MD 20892.

Time: December 12, 2014, 8:00 a.m. to Adjournment.

Agenda: Reproducibility update, NIH AIDS Portfolio and other business of the Committee.

Place: National Institutes of Health, Building 31, Room 6C6, 31 Center Drive, 6th Floor, Bethesda, MD 20892.

Contact Person: Gretchen Wood, Staff Assistant, National Institutes of Health, Office of the Director, One Center Drive, Building 1, Room 126, Bethesda, MD 20892, 301–496–4272, woodgs@od.nih.gov.

Any interested person may file written comments with the committee by forwarding the statement to the Contact Person listed on this notice. The statement should include the name, address, telephone number, and when applicable, the business or professional affiliation of the interested person.

In the interest of security, NIH has instituted stringent procedures for entrance onto the NIH campus. All visitor vehicles, including taxicabs, hotel, and airport shuttles will be inspected before being allowed on campus. Visitors will be asked to show one form of identification (for example, a government-issued photo ID, driver's license, or passport) and to state the purpose of their visit.

When available, additional information regarding this meeting will be available on the Advisory Committee to the Director's home page: <http://acd.od.nih.gov>.

(Catalogue of Federal Domestic Assistance Program Nos. 93.14, Intramural Research Training Award; 93.22, Clinical Research Loan Repayment Program for Individuals from Disadvantaged Backgrounds; 93.232, Loan Repayment Program for Research Generally; 93.39, Academic Research

Enhancement Award; 93.936, NIH Acquired Immunodeficiency Syndrome Research Loan Repayment Program; 93.187, Undergraduate Scholarship Program for Individuals from Disadvantaged Backgrounds, National Institutes of Health, HHS)

Dated: November 14, 2014.

Anna Snouffer,

Deputy Director, Office of Federal Advisory Committee Policy.

[FR Doc. 2014–27449 Filed 11–19–14; 8:45 am]

BILLING CODE 4140–01–P

DEPARTMENT OF THE INTERIOR

National Park Service

**[NPS–WASO–NAGPRA–17163;
PPWOCRADN0–PCU00RP14.R50000]**

Native American Graves Protection and Repatriation Review Committee: Meeting

AGENCY: National Park Service, Interior.

ACTION: Notice.

SUMMARY: Notice is hereby given in accordance with the Federal Advisory Committee Act, (5 U.S.C. Appendix 1–16), of a meeting of the Native American Graves Protection and Repatriation Review Committee (Review Committee). The Review Committee will meet on March 3–4, 2015. All meetings will be open to the public.

DATES: The Review Committee will meet on March 3–4, 2015. Public comment requests and accompanying materials must be received by February 2, 2015, and requests for culturally unidentifiable (CUI) disposition must be received by January 16, 2015. Requests for findings of fact must be received by January 5, 2015. Requests to convene parties and facilitate the resolution of a dispute must be received by January 5, 2015.

ADDRESSES: The Review Committee will meet in the Murray D. Lincoln Campus Center, 1 Campus Center Way, University of Massachusetts Amherst, Amherst, MA 01003, on March 3–4, 2015. Electronic submissions are to be sent to nagpra_dfo@nps.gov.

SUPPLEMENTARY INFORMATION: Notice is hereby given in accordance with the Federal Advisory Committee Act, (5 U.S.C. Appendix 1–16), of a meeting of the Review Committee. The Review Committee was established in Section 8 of the Native American Graves Protection and Repatriation Act of 1990 (NAGPRA), 25 U.S.C. 3006.

The Review Committee will meet on March 3–4, 2015, in the Murray D. Lincoln Campus Center, 1 Campus Center Way, University of

Massachusetts Amherst, Amherst, MA, from 8:30 a.m. to 5:00 p.m. (EASTERN). This meeting will be open to the public. The agenda for this meeting will include the discussion of the Review Committee Report to Congress for 2015; discussion of dispute procedures; and, if published, comments upon proposed regulations to revise 43 CFR Part 10. In addition, the agenda may include requests to the Review Committee for a recommendation to the Secretary of the Interior, as required by law, in order to effect the agreed-upon disposition of Native American human remains determined to be culturally unidentifiable; public comment by Indian tribes, Native Hawaiian organizations, museums, Federal agencies, and the public; requests to the Review Committee, pursuant to 25 U.S.C. 3006 (c)(3), for review and findings of fact related to the identity or cultural affiliation of human remains or other cultural items, or the return of such items; and facilitation of the resolution of disputes among parties convened by the Review Committee pursuant to 25 U.S.C. 3006 (c)(4). Presentation to the Review Committee by telephone may be requested but is not guaranteed. The agenda and materials for this meeting will be posted on or before February 17, 2015, at <http://www.nps.gov/nagpra>.

The Review Committee is soliciting public comment by Indian tribes, Native Hawaiian organizations, museums, and Federal agencies on the following two topics: (1) The progress made, and any barriers encountered, in implementing NAGPRA and (2) the outcomes of disputes reviewed by the Review Committee pursuant to 25 U.S.C. 3006 (c)(4). The Review Committee also will consider other public comment by Indian tribes, Native Hawaiian organizations, museums, Federal agencies, and the public. A public comment request must, at minimum, include an abstract of the presentation and contact information for the presenter(s). Public comment requests and presentation materials must be received by February 2, 2015.

The Review Committee will consider requests for a recommendation to the Secretary of the Interior, as required by law, in order to effect the agreed-upon disposition of Native American human remains determined to be CUI. A CUI disposition request must include the appropriate, completed form posted on the National NAGPRA Program Web site and, as applicable, the ancillary materials noted on the form. To access and download the appropriate form—either the form for CUI with a “tribal land” or “aboriginal land” provenience

or the form for CUI without a “tribal land” or “aboriginal land” provenience—go to <http://www.nps.gov/nagpra>, and then click on “Request for CUI Disposition Forms.” CUI disposition requests must be received by January 16, 2015.

The Review Committee will consider requests, pursuant to 25 U.S.C. 3006 (c)(3), for review and findings of fact related to the identity or cultural affiliation of human remains or other cultural items, or the return of such items, where consensus among affected parties is unclear or uncertain. A request for findings of fact must be accompanied by a statement of the fact(s) at issue and supporting materials, including those exchanged by the parties to consultation concerning the Native American human remains and/or other cultural items. To access procedures for presenting findings of fact, go to <http://www.nps.gov/nagpra/REVIEW/Procedures.htm>. Requests for findings of fact must be received by January 5, 2015.

The Review Committee will consider requests, pursuant to 25 U.S.C. 3006 (c)(4), to convene parties and facilitate the resolution of a dispute, where consensus clearly has not been reached among affected parties regarding the identity or cultural affiliation of human remains or other cultural items, or the return of such items. A request to convene parties and facilitate the resolution of a dispute must be accompanied by a statement of the decision of the museum or Federal agency subject to the dispute resolution request, a statement of the issue and the materials exchanged by the parties concerning the Native American human remains and/or other cultural items. To access procedures for presenting disputes, go to <http://www.nps.gov/nagpra/REVIEW/Procedures.htm>. Requests to convene parties and facilitate resolution of a dispute must be received by January 5, 2015.

Electronic submissions should be sent to nagpra_dfo@nps.gov. Such items are subject to posting on the National NAGPRA Program Web site prior to the meeting.

General Information

Information about NAGPRA, the Review Committee, and Review Committee meetings is available on the National NAGPRA Program Web site at <http://www.nps.gov/nagpra>. For the Review Committee’s meeting procedures, click on “Review Committee,” then click on “Procedures.” Meeting minutes may be accessed by going to the Web site, then clicking on “Review Committee,” and

then clicking on “Meeting Minutes.” Approximately fourteen weeks after each Review Committee meeting, the meeting transcript is posted on the National NAGPRA Program Web site.

Review Committee members are appointed by the Secretary of the Interior. The Review Committee is responsible for monitoring the NAGPRA inventory and identification process; reviewing and making findings related to the identity or cultural affiliation of cultural items, or the return of such items; facilitating the resolution of disputes; compiling an inventory of culturally unidentifiable human remains that are in the possession or control of each Federal agency and museum, and recommending specific actions for developing a process for disposition of such human remains; consulting with Indian tribes and Native Hawaiian organizations and museums on matters affecting such tribes or organizations lying within the scope of work of the Review Committee; consulting with the Secretary of the Interior on the development of regulations to carry out NAGPRA; and making recommendations regarding future care of repatriated cultural items. The Review Committee’s work is carried out during the course of meetings that are open to the public.

Before including your address, telephone 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 may 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: November 14, 2014.

Alma Ripps,
Chief, Office of Policy.

[FR Doc. 2014–27463 Filed 11–19–14; 8:45 am]

BILLING CODE 4310–EE–P

DEPARTMENT OF THE INTERIOR

National Park Service

[NPS–NERO–PAGR–16976; PPNEPAGR00/PMP00UP05.YP0000/PX.P01569241]

Notice of 2015 Meetings for the Paterson Great Falls National Historical Park Advisory Commission

AGENCY: National Park Service, Interior.

ACTION: Notice of meetings.

SUMMARY: As required by the Federal Advisory Committee Act (5 U.S.C. Appendix 1–16), the National Park

Service is hereby giving notice of the 2015 schedule of meetings for the Paterson Great Falls National Historical Park Advisory Commission. The Commission is authorized by the Omnibus Public Land Management Act of 2009 (16 U.S.C. 4101ll(e)(2)), “. . . to advise the Secretary in the development and implementation of the management plan.” Agendas for these meetings will be provided on the Commission Web site at <http://www.nps.gov/pagr/parkmgmt/federal-advisory-commission.htm>.

DATES: The Commission will meet on the following dates in 2015: Thursday, January 8, 2015, 2:00–5:00 p.m. (snow date: January 15, 2015, 2:00–5:00 p.m.) (Eastern); Thursday, April 9, 2015, 2:00–5:00 p.m. (Eastern); Thursday, July 9, 2015, 2:00–5:00 p.m. (Eastern); and Thursday, October 8, 2015, 2:00–5:00 p.m. (Eastern).

ADDRESSES: All meetings will be held at the Paterson Museum, 2 Market Street (intersection of Market and Spruce Streets), Paterson, NJ.

FOR FURTHER INFORMATION CONTACT:

Darren Boch, Superintendent and Designated Federal Officer, Paterson Great Falls National Historical Park, 72 McBride Avenue, Paterson, NJ 07501, (973) 523–2630.

SUPPLEMENTARY INFORMATION: Topics to be discussed include updates on the status of the Paterson Great Falls National Historical Park General Management Plan.

The meetings will be open to the public and time will be reserved during each meeting for public comment. Oral comments will be summarized for the record. If individuals wish to have their comments recorded verbatim, they must submit them in writing. Written comments and requests for agenda items may be sent to: Federal Advisory Commission, Paterson Great Falls National Historical Park, 72 McBride Avenue, Paterson, NJ 07501. Written comments may also be sent by email to pagr_gmp@nps.gov.

Before including your address, telephone 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 may 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. All comments will be made part of the public record and will be electronically distributed to all Committee members.

Dated: November 14, 2014.

Alma Rippes,

Chief, Office of Policy.

[FR Doc. 2014–27459 Filed 11–19–14; 8:45 am]

BILLING CODE 4310–EE–P

DEPARTMENT OF THE INTERIOR

National Park Service

[NPS–WASO–DPOL–17162;
PPWODIREPO][PPMPSPD1Y.YM0000]

Notice of December 5, 2014, Teleconference Meeting of the National Park System Advisory Board

AGENCY: National Park Service, Interior.

ACTION: Meeting Notice.

SUMMARY: Notice is hereby given in accordance with the Federal Advisory Committee Act, 5 U.S.C. Appendix 1–16, that the National Park System Advisory Board will conduct a teleconference meeting on December 5, 2014. Members of the public may attend the meeting in person in Washington, DC.

DATES: The teleconference meeting will be held on December 5, 2014, from 3:00 p.m., to 5:00 p.m., Eastern Standard Time, inclusive.

ADDRESSES: The teleconference meeting will be conducted in Conference Room 2023 of the Stewart Lee Udall Department of the Interior Building, 1849 C Street NW., Washington, DC 20240, telephone (202) 208–3818. Photo identification is required for entry to this Federal building.

Agenda: During this teleconference, the Board will deliberate the report of its Philanthropy and Partnerships Committee.

FOR FURTHER INFORMATION CONTACT: For information concerning the National Park System Advisory Board or to request to address the Board, contact Shirley Sears, National Park Service, MC 0004–Policy, 1849 C Street NW., Washington, DC 20240, telephone (202) 354–3955, email shirley_sears@nps.gov.

SUPPLEMENTARY INFORMATION: Due to the limited scope of this meeting, the National Park Service has determined that a teleconference will be the most efficient way to convene the Board members. The Board meeting will be open to the public in the same way that other Board meetings have been open to the public. Space and facilities to accommodate the public are limited and attendees will be accommodated on a first-come basis. Opportunities for oral comment will be limited to no more than 3 minutes per speaker. The Board's Chairman will determine the total

allotted time for oral comments; it will be no more than 15 minutes total. Anyone may file with the Board a written statement concerning matters to be discussed. Before including your address, telephone 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 may 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.

Draft minutes of the meeting will be available for public inspection about 12 weeks after the meeting in the 12th floor conference room at 1201 Eye Street NW., Washington, DC.

Dated: November 14, 2014.

Alma Rippes,

Chief, Office of Policy.

[FR Doc. 2014–27464 Filed 11–19–14; 8:45 am]

BILLING CODE 4310–EE–P

INTERNATIONAL TRADE COMMISSION

[Investigation Nos. 731–TA–1014, 1016, and 1017 (Second Review)]

Polyvinyl Alcohol From China, Japan, and Korea; Notice of Commission Determination To Conduct Full Five- Year Reviews and Scheduling of Full Five-Year Reviews

AGENCY: United States International Trade Commission.

ACTION: Notice.

SUMMARY: The Commission hereby gives notice of the scheduling of full reviews pursuant to section 751(c)(5) of the Tariff Act of 1930 (19 U.S.C. 1675(c)(5)) to determine whether revocation of the antidumping duty orders on polyvinyl alcohol from China, Japan, and Korea would be likely to lead to continuation or recurrence of material injury within a reasonably foreseeable time. The Commission has determined to exercise its authority to extend the review period by up to 90 days pursuant to 19 U.S.C. 1675(c)(5)(B). For further information concerning the conduct of these reviews and rules of general application, consult the Commission's Rules of Practice and Procedure, part 201, subparts A through E (19 CFR part 201), and part 207, subparts A, D, E, and F (19 CFR part 207).

DATES: *Effective Date:* November 13, 2014.

FOR FURTHER INFORMATION CONTACT:

Mary Messer (202–205–3193), Office of Investigations, U.S. International Trade Commission, 500 E Street SW., Washington, DC 20436. Hearing-impaired persons can obtain information on this matter by contacting the Commission's TDD terminal on 202–205–1810. Persons with mobility impairments who will need special assistance in gaining access to the Commission should contact the Office of the Secretary at 202–205–2000. General information concerning the Commission may also be obtained by accessing its internet server (<http://www.usitc.gov>). The public record for these reviews may be viewed on the Commission's electronic docket (EDIS) at <http://edis.usitc.gov>.

SUPPLEMENTARY INFORMATION:

Background. On June 6, 2014, the Commission determined that responses to its notice of institution of the subject five-year reviews were such that full reviews pursuant to section 751(c)(5) of the Act should proceed. The Commission found that the domestic interested party group responses to its notice of institution (79 FR 11821, March 3, 2014) were adequate and the respondent interested party group responses were inadequate. The Commission also found that other circumstances warranted conducting full reviews.¹ A record of the Commissioners' votes, the Commission's statement on adequacy, and any individual Commissioner's statements are available from the Office of the Secretary and at the Commission's Web site.

Participation in the reviews and public service list. Persons, including industrial users of the subject merchandise and, if the merchandise is sold at the retail level, representative consumer organizations, wishing to participate in these reviews as parties must file an entry of appearance with the Secretary to the Commission, as provided in section 201.11 of the Commission's rules, by 45 days after publication of this notice. A party that filed a notice of appearance following publication of the Commission's notice of institution of the reviews need not file an additional notice of appearance. The Secretary will maintain a public service list containing the names and addresses of all persons, or their representatives, who are parties to the reviews.

Limited disclosure of business proprietary information (BPI) under an administrative protective order (APO)

¹ Chairman Williamson and Commissioners Pinkert and Schmidlein dissenting.

and BPI service list. Pursuant to section 207.7(a) of the Commission's rules, the Secretary will make BPI gathered in these reviews available to authorized applicants under the APO issued in the reviews, provided that the application is made by 45 days after publication of this notice. Authorized applicants must represent interested parties, as defined by 19 U.S.C. 1677(9), who are parties to the reviews. A party granted access to BPI following publication of the Commission's notice of institution of the reviews need not reapply for such access. A separate service list will be maintained by the Secretary for those parties authorized to receive BPI under the APO.

Staff report. The prehearing staff report in the reviews will be placed in the nonpublic record on Monday, February 23, 2015, and a public version will be issued thereafter, pursuant to section 207.64 of the Commission's rules.

Hearing. The Commission will hold a hearing in connection with the reviews beginning at 9:30 a.m. on Thursday, March 12, 2015, at the U.S. International Trade Commission Building. Requests to appear at the hearing should be filed in writing with the Secretary to the Commission on or before Thursday, March 5, 2015. A nonparty who has testimony that may aid the Commission's deliberations may request permission to present a short statement at the hearing. All parties and nonparties desiring to appear at the hearing and make oral presentations should attend a prehearing conference to be held at 9:30 a.m. on Friday, March 6, 2015, at the U.S. International Trade Commission Building. Oral testimony and written materials to be submitted at the public hearing are governed by sections 201.6(b)(2), 201.13(f), 207.24, and 207.66 of the Commission's rules. Parties must submit any request to present a portion of their hearing testimony *in camera* no later than 7 business days prior to the date of the hearing.

Written submissions. Each party to the review may submit a prehearing brief to the Commission. Prehearing briefs must conform with the provisions of section 207.65 of the Commission's rules; the deadline for filing is Tuesday, March 3, 2015. Parties may also file written testimony in connection with their presentation at the hearing, as provided in section 207.24 of the Commission's rules, and posthearing briefs, which must conform with the provisions of section 207.67 of the Commission's rules. The deadline for filing posthearing briefs is Monday, March 23, 2015. In addition, any person who has

not entered an appearance as a party to the reviews may submit a written statement of information pertinent to the subject of the reviews on or before Monday, March 23, 2015. On Monday, May 4, 2015, the Commission will make available to parties all information on which they have not had an opportunity to comment. Parties may submit final comments on this information on or before Wednesday, May 6, 2015, but such final comments must not contain new factual information and must otherwise comply with section 207.68 of the Commission's rules. All written submissions must conform with the provisions of section 201.8 of the Commission's rules; any submissions that contain BPI must also conform with the requirements of sections 201.6, 207.3, and 207.7 of the Commission's rules. The Commission's Handbook on E-Filing, available on the Commission's Web site at <http://edis.usitc.gov>, elaborates upon the Commission's rules with respect to electronic filing.

Additional written submissions to the Commission, including requests pursuant to section 201.12 of the Commission's rules, shall not be accepted unless good cause is shown for accepting such submissions, or unless the submission is pursuant to a specific request by a Commissioner or Commission staff.

In accordance with sections 201.16(c) and 207.3 of the Commission's rules, each document filed by a party to the reviews must be served on all other parties to the reviews (as identified by either the public or BPI service list), and a certificate of service must be timely filed. The Secretary will not accept a document for filing without a certificate of service.

Authority: These reviews are being conducted under authority of title VII of the Tariff Act of 1930; this notice is published pursuant to section 207.62 of the Commission's rules.

Issued: November 17, 2014.

By order of the Commission.

Lisa R. Barton,

Secretary to the Commission.

[FR Doc. 2014-27474 Filed 11-19-14; 8:45 am]

BILLING CODE 7020-02-P

INTERNATIONAL TRADE COMMISSION

[Investigation No. 337-TA-920]

Certain Integrated Circuits and Products Containing the Same; Commission Decision Not To Review an Initial Determination Terminating the Investigation in Its Entirety Based on a Settlement Agreement; Termination of the Investigation

AGENCY: U.S. International Trade Commission.

ACTION: Notice.

SUMMARY: Notice is hereby given that the U.S. International Trade Commission has determined not to review the presiding administrative law judge's ("ALJ") initial determination ("ID") (Order No. 17) terminating the investigation in its entirety based on a settlement agreement.

FOR FURTHER INFORMATION CONTACT:

Robert Needham, Office of the General Counsel, U.S. International Trade Commission, 500 E Street SW., Washington, DC 20436, telephone (202) 708-5468. 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 (<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 2, 2014, based on a complaint filed by Freescale Semiconductor, Inc. ("Freescale") of Austin, Texas. 79 FR 37770-71. The complaint alleges violations of section 337 of the Tariff Act of 1930, as amended, 19 U.S.C. 1337, in the importation into the United States, the sale for importation, and the sale within the United States after importation of certain integrated circuits and products containing the same through the infringement of certain claims of U.S. Patent Nos. 5,962,926; 7,158,432; 7,230,505; 7,518,947; 7,626,276; and 7,746,716. *Id.* at 37770. The Commission's notice of investigation named as respondents

MediaTek Inc. of Hsinchu City, Taiwan and MediaTek USA Inc. of San Jose, California (together, "MediaTek"); Acer Inc. of New Taipei City, Taiwan; AmTRAN Technology Co. Ltd. of New Taipei, Taiwan; AmTRAN Logistics, Inc. of Irvine, California; ASUSTek Computer Inc. of Taipei, Taiwan; ASUS Computer International, Inc. of Fremont, California; BLU Products, Inc., of Doral, Florida; Sharp Corporation of Osaka, Japan; Sharp Electronics Corporation of Mahwah, New Jersey; Sharp Electronics Manufacturing Company of America, Inc. of San Diego, California; Sony Corporation of Tokyo, Japan; Sony EMCS (Malaysia) of Penang, Malaysia; Toshiba America Information Systems, Inc. of Irvine, California; Toshiba Logistics America, Inc. of Irvine, California; TPV Display Technology (Xiamen) Co. of Fujian, China; Trend Smart America, Ltd. of Lake Forest, California; Vizio, Inc. of Irvine, California; Yamaha Corporation of Buena Park, California; Lenovo Group Ltd. of Beijing, China; Lenovo (United States) Inc. of Morrisville, North Carolina; Best Buy Co., Inc. of Richfield, Minnesota; Newegg Inc. of City of Industry, California; Buy.com Inc. d/b/a Rakuten.com Shopping of Aliso Viejo, California; Walmart Stores, Inc. of Bentonville, Arkansas; Amazon.com, Inc. of Seattle, Washington; B&H Foto & Electronics Corp. of New York, New York; and Costco Wholesale Corporation of Issaquah, Washington (collectively, "Respondents"). *Id.* at 37771. The Office of Unfair Import Investigations was also named as a party to the investigation. *Id.*

On September 29, 2014, Freescale and MediaTek filed a joint motion to terminate the entire investigation with prejudice based on a settlement agreement covering all Respondents. On October 3, 2014, Freescale and MediaTek filed a joint motion for leave to file a corrected version of its motion based on comments received from the ALJ's attorney-advisor and the Commission Investigative Attorney ("IA").

On October 7, 2014, the IA filed a response to the corrected motion, and contended that the motion should be granted-in-part. The IA stated that the moving parties' request to have the investigation terminated "with prejudice" should be denied, because the Commission has previously declined to terminate investigations with prejudice. The IA contended that the remainder of the motion complied with the Commission's rules, so the investigation should be terminated in its entirety without prejudice.

On October 16, 2014, the ALJ issued the subject ID, granting the moving

parties' motion to file a corrected motion and granting-in-part the moving parties' corrected motion. The ALJ declined to terminate the investigation "with prejudice." The ALJ found that the remainder of the motion complied with the Commission's rules. Specifically, the ALJ found that the moving parties had submitted their settlement agreement, and had stated that there were no other agreements, written or oral, express or implied, between Freescale and Respondents concerning the subject matter of the investigation, and that the termination of the investigation does not impose any undue burden on the public health and welfare, competitive conditions in the United States economy, the production of like or directly competitive articles in the United States, and United States consumers. The ALJ thus terminated the investigation in its entirety without prejudice based on the settlement agreement. No petitions for review of the ID were filed.

The Commission has determined not to review the subject ID.

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 Part 210 of the Commission's Rules of Practice and Procedure (19 CFR part 210).

By order of the Commission.

Issued: November 14, 2014.

Lisa R. Barton,

Secretary to the Commission.

[FR Doc. 2014-27458 Filed 11-19-14; 8:45 am]

BILLING CODE 7020-02-P

INTERNATIONAL TRADE COMMISSION

[Investigation No. 337-TA-927]

Certain Noise Cancelling Headphones and Components Thereof; Commission Determination Not To Review an Initial Determination Granting a Joint Motion To Terminate the Investigation Based on a Settlement Agreement

AGENCY: U.S. International Trade Commission.

ACTION: Notice.

SUMMARY: Notice is hereby given that the U.S. International Trade Commission has determined not to review an initial determination ("ID") (Order No. 7) issued by the presiding administrative law judge ("ALJ") granting a joint motion to terminate the investigation based on a settlement agreement.

FOR FURTHER INFORMATION CONTACT:

Michael Liberman, Esq., Office of the General Counsel, U.S. International Trade Commission, 500 E Street SW., Washington, DC 20436, telephone (202) 205-3115. 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 under section 337 of the Tariff Act of 1930, 19 U.S.C. 1337, on September 2, 2014, based on a complaint filed by Bose Corporation of Framingham, Massachusetts ("Bose"). *See* 79 FR 52041 (Sep. 2, 2014). The complaint alleges violations of section 337 of the Tariff Act of 1930, as amended, 19 U.S.C. 1337, in the importation into the United States, the sale for importation, and the sale within the United States after importation of certain noise cancelling headphones and components thereof by reason of infringement of certain claims of U.S. Patent Nos. 6,717,537; 8,073,150; 8,073,151; 8,054,992; and 8,345,888. The respondents named in the Commission's notice of investigation are Beats Electronics, LLC of Culver City, California; Beats Electronics International Ltd. of Dublin, Ireland; Fugang Electronic (Dong Guan) Co. Ltd. of Guang-Dong, China; and PCH International Ltd. of Blackrock, Cork, Ireland (collectively, "Beats"). A Commission investigative attorney ("the IA") is participating in the investigation.

On October 10, 2014, complainant Bose and respondents Beats filed a joint motion to terminate this investigation in its entirety based on a settlement agreement, and a memorandum in support thereof. The IA filed a response supporting the motion.

On October 15, 2014, the ALJ issued the subject ID finding that the joint motion complies with the Commission Rules. The ALJ found that termination of the investigation is in the public interest inasmuch as termination would

conserve public and private resources. The ALJ granted the motion. No party petitioned for review of the subject ID. The Commission has determined not to review the ID.

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 Part 210 of the Commission's Rules of Practice and Procedure (19 CFR Part 210).

Issued: November 17, 2014.

By order of the Commission.

Lisa R. Barton,

Secretary to the Commission.

[FR Doc. 2014-27472 Filed 11-19-14; 8:45 am]

BILLING CODE 7020-02-P

DEPARTMENT OF LABOR

Office of the Secretary

Agency Information Collection Activities; Submission for OMB Review; Comment Request; Davis-Bacon Certified Payroll

ACTION: Notice.

SUMMARY: The Department of Labor (DOL) is submitting the Wage and Hour Division (WHD) sponsored information collection request (ICR) titled, "Davis-Bacon Certified Payroll," to the Office of Management and Budget (OMB) for review and approval for continued use, without change, in accordance with the Paperwork Reduction Act of 1995 (PRA), 44 U.S.C. 3501 et seq. Public comments on the ICR are invited.

DATES: The OMB will consider all written comments that agency receives on or before December 22, 2014.

ADDRESSES: A copy of this ICR with applicable supporting documentation; including a description of the likely respondents, proposed frequency of response, and estimated total burden may be obtained free of charge from the RegInfo.gov Web site at http://www.reginfo.gov/public/do/PRAViewICR?ref_nbr=201411-1235-001 (this link will only become active on the day following publication of this notice) or by contacting Michel Smyth by telephone at 202-693-4129, TTY 202-693-8064, (these are not toll-free numbers) or by email at DOL_PRA_PUBLIC@dol.gov.

Submit comments about this request by mail or courier to the Office of Information and Regulatory Affairs, Attn: OMB Desk Officer for DOL-WHD, Office of Management and Budget, Room 10235, 725 17th Street NW., Washington, DC 20503; by Fax: 202-

395-5806 (this is not a toll-free number); or by email: OIRA_submission@omb.eop.gov. Commenters are encouraged, but not required, to send a courtesy copy of any comments by mail or courier to the U.S. Department of Labor-OASAM, Office of the Chief Information Officer, Attn: Departmental Information Compliance Management Program, Room N1301, 200 Constitution Avenue NW., Washington, DC 20210; or by email: DOL_PRA_PUBLIC@dol.gov.

FOR FURTHER INFORMATION CONTACT:

Michel Smyth by telephone at 202-693-4129, TTY 202-693-8064, (these are not toll-free numbers) or by email at DOL_PRA_PUBLIC@dol.gov.

Authority: 44 U.S.C. 3507(a)(1)(D).

SUPPLEMENTARY INFORMATION: This ICR seeks to extend PRA authority for the Davis-Bacon Certified Payroll information collection. The Copeland Act requires contractors and subcontractors performing work on federally financed or assisted construction contracts to furnish weekly a statement with respect to the wages paid each employee during the preceding week. *See* 40 U.S.C. 3145(a); 29 CFR 3.3(b). Regulations 29 CFR 5.5(a)(3)(ii)(A) requires contractors to submit weekly a copy of all payrolls to the Federal agency contracting for or financing the construction project, if the agency is a party to the contract, accompanied by a signed Statement of Compliance indicating that the payrolls are correct and complete and that each laborer or mechanic has been paid not less than the proper Davis-Bacon prevailing wage rate for the work performed. *See* 29 CFR 5.5(a)(3)(ii)(B). The DOL has developed optional use Form WH-347, Payroll Form, to aide contractors and subcontractors performing work on federally financed or assisted construction contracts in meeting weekly payroll reporting requirements. *See* 29 CFR 5.5(a)(3)(ii)(A); *see also*, 29 CFR 3.3(b). Properly filled out, this form will satisfy the requirements of Regulations 29 CFR parts 3 and 5 as to payrolls submitted in connection with contracts subject to the Davis-Bacon and Related Acts. Copeland Act section 2 authorizes this information collection. *See* 40 U.S.C. 3145(a).

Consistent with the development of additional tools to increase transparency in the accounting of information collection burdens across Federal agencies, the DOL seeks for the Davis-Bacon Certified Payroll to be designated a common form that may be used by all Federal agencies. This designation will not change the collection, except that

the burdens associated with the ICR would be apportioned to each contracting agency, in accordance with its use of certified payrolls, instead of all burdens being allocated to the DOL.

This information collection is subject to the PRA. A Federal agency generally cannot conduct or sponsor a collection of information, and the public is generally not required to respond to an information collection, unless it is approved by the OMB under the PRA and displays a currently valid OMB Control Number. In addition, notwithstanding any other provisions of law, no person shall generally be subject to penalty for failing to comply with a collection of information that does not display a valid Control Number. *See* 5 CFR 1320.5(a) and 1320.6. The DOL obtains OMB approval for this information collection under Control Number 1235-0008.

OMB authorization for an ICR cannot be for more than three (3) years without renewal, and the current approval for this collection is scheduled to expire on January 31, 2015. The DOL seeks to extend PRA authorization for this information collection for three (3) more years, without any change to existing requirements. The DOL notes that existing information collection requirements submitted to the OMB receive a month-to-month extension while they undergo review. For additional substantive information about this ICR, see the related notice published in the **Federal Register** on June 9, 2014 (79 FR 33001).

Interested parties are encouraged to send comments to the OMB, Office of Information and Regulatory Affairs at the address shown in the **ADDRESSES** section within thirty (30) days of publication of this notice in the **Federal Register**. In order to help ensure appropriate consideration, comments should mention OMB Control Number 1235-0008. The OMB is particularly interested in comments that:

- Evaluate whether the proposed collection of information is necessary for the proper performance of the functions of the agency, including whether the information will have practical utility;
- Evaluate the accuracy of the agency's estimate of the burden of the proposed collection of information, including the validity of the methodology and assumptions used;
- Enhance the quality, utility, and clarity of the information to be collected; and
- Minimize the burden of the collection of information on those who are 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.

Agency: DOL—WHD.

Title of Collection: Davis-Bacon

Certified Payroll.

OMB Control Number: 1235–0008.

Affected Public: Private sector—businesses or other for-profits.

Total Estimated Number of Respondents: 89,498.

Total Estimated Number of Responses: 8,233,816.

Total Estimated Annual Time Burden: 7,684,895 hours.

Total Estimated Annual Other Costs Burden: \$1,086,863.

Dated: November 14, 2014.

Michel Smyth,

Departmental Clearance Officer.

[FR Doc. 2014–27477 Filed 11–19–14; 8:45 am]

BILLING CODE 4510–27–P

DEPARTMENT OF LABOR

Office of the Secretary

Senior Executive Service; Appointment of Members to the Performance Review Board

Title 5 U.S.C. 4314(c)(4) provides that Notice of the Appointment of the individual to serve as a member of the Performance Review Board of the Senior Executive Service shall be published in the **Federal Register**.

The following individuals are hereby appointed to serve on the Department's Performance Review Board:

Permanent Membership

Chair—Deputy Secretary—Christopher P. Lu

Vice-Chair—Assistant Secretary for Administration and Management—T. Michael Kerr

Alternate Vice-Chair—Director, Human Resources Center—Sydney T. Rose
Executive Secretary—Director, Executive Resources—Kim L.H. Green
Performance Officer—Director, Performance Management Center—Holly A. Donnelly

Rotating Membership—Appointments Expires on 09/30/16

BLS—Jay A. Mousa, Associate Commissioner for Office of Field Operations

BLS—Nancy F. Ruiz de Gamboa, Assistant Commissioner for Office of Administration

ETA—Leslie G. Range, Regional Administrator, Atlanta

MSHA—Patricia W. Silvey, Deputy Assistant Secretary for Operations

OASAM—Cheryl A. Greenaugh, Director, Chief Information Program Management Office

OASAM—Charlotte A. Hayes, Deputy Assistant Secretary for Policy

OASAM—Naomi M. Barry-Perez,

Director, Civil Rights Center

OFCCP—Debra A. Carr, Division of Policy, Planning and Program Development

OFCCP—Diana S. Sen, Regional Director, New York

OLMS—Stephen J. Willertz, Director, Office of Enforcement and International Union Audits

OWCP—Antonio A. Rios, Director, Longshore and Harbor Workers' Compensation Program

SOL—Michael D. Felsen, Regional Solicitor, Boston

SOL—Jeffrey L. Nesvet, Associate Solicitor for Employment and Training Legal Services

WB—Joan Y. Harrigan-Farrelly, Deputy Director

WHD—Patricia J. Davidson, Deputy Administrator, Office of Program Operations

For Further Information Contact: Ms. Kim L.H. Green, Director, Office of Executive Resources, Room N2453, U.S. Department of Labor, Frances Perkins Building, 200 Constitution Ave. NW., Washington, DC 20210, telephone: (202) 693–7642.

Signed at Washington, DC on 20th day of November.

Thomas E. Perez,

Secretary of Labor.

[FR Doc. 2014–27439 Filed 11–19–14; 8:45 am]

BILLING CODE 4510–23–P

DEPARTMENT OF LABOR

Employment and Training Administration

[TA–W–85,417, TA–W–85,417A]

West Linn Paper Company, a Subsidiary of Belgravia Investments, Inc., Including On-Site Leased Workers From Galt Foundation, West Linn, OR; Columbia River Logistics, Inc. (CRL), a Subsidiary of Belgravia Investments, Inc., Including On-Site Leased Workers From Resource Staffing, Vancouver, WA; Amended Certification Regarding Eligibility To Apply for Worker Adjustment Assistance

In accordance with Section 223 of the Trade Act of 1974, as amended (“Act”), 19 U.S.C. 2273, the Department of Labor issued a Certification of Eligibility to Apply for Worker Adjustment Assistance on August 18, 2014, applicable to workers of West Linn

Paper Company, a subsidiary of Belgravia Investments, Inc., including on-site leased workers from Galt Foundation, West Linn, Oregon (TA–W–85,417). The Department's Notice of Determination was published in the **Federal Register** on September 9, 2014 (Volume 79 FR Page 53450).

At the request of a state workforce office, the Department reviewed the certification for workers of the subject firm. The firm is engaged in the production of coated paper.

The investigation confirmed that worker separations at Columbia River Logistics, Inc. (CRL), including on-site leased workers from Resource Staffing, Vancouver, Washington, (TA–W–85,417) are attributable to increased imports of coated paper, as are worker separations at the West Linn, Oregon facility.

The amended notice applicable to TA–W–85,417 and TA–W–85,417A is hereby issued as follows:

All workers of West Linn Paper Company, a subsidiary of Belgravia Investments, Inc., including on-site leased workers from Galt Foundation, West Linn, Oregon (TA–W–85,417) and Columbia River Logistics, Inc., including Resource Staffing, Vancouver, Washington (TA–W–85,417A) who became totally or partially separated from employment on or after July 8, 2013 through August 18, 2016, and all workers in the group threatened with total or partial separation from employment on the date of certification through two years from the date of certification, are eligible to apply for adjustment assistance under Chapter 2 of Title II of the Trade Act of 1974, as amended.

Signed in Washington, DC, this 9th day of October, 2014.

Michael W. Jaffe,

Certifying Officer, Office of Trade Adjustment Assistance.

[FR Doc. 2014–27483 Filed 11–19–14; 8:45 am]

BILLING CODE P

DEPARTMENT OF LABOR**Employment and Training Administration**

[TA-W-82,165L]

Interstate Brands Corporation (IBC) a Wholly Owned Subsidiary of Hostess Brands, Inc. Including On-Site Leased Workers From Stivers Temporary Personnel, Real Time Staffing Services, Inc. (Doing Business as Select Staffing AKA Koosharem, LLC) and REMX Operating at Locations Throughout the State of Illinois; Amended Certification Regarding Eligibility To Apply for Worker Adjustment Assistance

In accordance with Section 223 of the Trade Act of 1974, as amended ("Act"), 19 U.S.C. 2273, the Department of Labor issued a Certification of Eligibility to Apply for Worker Adjustment Assistance on February 19, 2013, applicable to workers of Interstate Brands Corporation (IBC), a wholly owned subsidiary of Hostess Brands, Inc., including on-site leased workers from Stivers Temporary Personnel, operating throughout the state of Illinois. The Department's notice of determination was published in the **Federal Register** on February 25, 2014 (78 FR 12795).

At the request of a state workforce office, the Department reviewed the certification for workers of the subject firm. The workers were engaged in activities related to the production of baked goods.

The company reports that workers leased from Real Time Staffing Services, Inc. (doing business as Select Staffing aka Koosharem, LLC) and Remx were employed on-site at the Schiller Park, Illinois location of Interstate Brands Corporation (IBC), a wholly owned subsidiary of Hostess Brands, Inc. The Department has determined that these workers were sufficiently under the control of the subject firm to be considered leased workers.

Based on these findings, the Department is amending this certification to include workers leased from Real Time Staffing Services, Inc. (doing business as Select Staffing aka Koosharem, LLC) and Remx working on-site at the Schiller Park, Illinois location of Interstate Brands Corporation (IBC), a wholly owned subsidiary of Hostess Brands, Inc.

The amended notice applicable to TA-W-82,165L is hereby issued as follows:

All workers of Interstate Brands Corporation (IBC), a wholly owned subsidiary of Hostess Brands, Inc., including

on-site leased workers from Stivers Temporary Personnel, Real Time Staffing Services, Inc. (doing business as Select Staffing aka Koosharem, LLC) and Remx, operating throughout the state of Illinois, who became totally or partially separated from employment on or after November 19, 2011 through February 19, 2015, and all workers in the group threatened with total or partial separation from employment on the date of certification through two years from the date of certification, are eligible to apply for adjustment assistance under Chapter 2 of Title II of the Trade Act of 1974, as amended.

Signed in Washington, DC, this 8th day of October, 2014.

Michael W. Jaffe,

Certifying Officer, Office of Trade Adjustment Assistance.

[FR Doc. 2014-27488 Filed 11-19-14; 8:45 am]

BILLING CODE 4

DEPARTMENT OF LABOR**Employment and Training Administration**

[TA-W-82,571, TA-W-82,571A, TA-W-82,571B]

Lexisnexis/Matthew Bender, a Reed Elsevier, Inc. Subsidiary, Not Including the Customer Service and Fulfillment Departments Albany, NY; Lexisnexis, Customer Support and Fulfillment Departments, Miamisburg, OH; Lexisnexis/Matthew Bender, a Reed Elsevier, Inc. Subsidiary, Customer Support and Fulfillment Department, Albany, NY; Amended Certification Regarding Eligibility To Apply for Worker Adjustment Assistance

In accordance with Section 223 of the Trade Act of 1974, as amended ("Act"), 19 U.S.C. 2273, the Department of Labor issued a Certification of Eligibility to Apply for Worker Adjustment Assistance on May 8, 2013, applicable to workers of LexisNexis/Matthew Bender, a Reed Elsevier, Inc. Subsidiary, not including the Customer Service and Fulfillment Departments Albany, New York. The Department's notice of determination was published in the **Federal Register** on May 30, 2013 (78 FR 32464).

At the request of State Workforce Office, the Department reviewed the certification for workers of the subject firm. The workers are engaged in activities related to the supply of online legal research tools and solutions services.

The investigation revealed that worker separations in the Customer Service and Fulfillment Departments in Albany, New York are attributable to an acquisition of services from a foreign country. Workers in those departments

had been covered under a previous certification (TA-W-81,638A) that expired on June 1, 2014.

The amended notice applicable to TA-W-82,571 is hereby issued as follows:

All workers of LexisNexis/Matthew Bender, A Reed Elsevier, Inc. Subsidiary, not including the Customer Service and Fulfillment Departments, Albany, New York (TA-W-82,571) and LexisNexis, Customer Support and Fulfillment Departments, Miamisburg, Ohio (TA-W-82,571A) who became totally or partially separated from employment on or after March 18, 2013 through May 8, 2015, and all workers in the group threatened with total or partial separation from employment on the date of certification through two years from the date of certification, are eligible to apply for adjustment assistance under Chapter 2 of Title II of the Trade Act of 1974, as amended, and

All workers of LexisNexis, Customer Support and Fulfillment Departments, Miamisburg, Ohio (TA-W-82,571A) and LexisNexis/Matthew Bender, a Reed Elsevier, Inc. Subsidiary, Customer Support and Fulfillment Department, Albany, New York (TA-W-82,571B), who became totally or partially separated from employment on or after June 2, 2014 through May 8, 2015, and all workers in the group threatened with total or partial separation from employment on the date of certification through two years from the date of certification, are eligible to apply for adjustment assistance under Chapter 2 of Title II of the Trade Act of 1974, as amended.

Signed in Washington, DC, this 8th day of October, 2014.

Michael W. Jaffe,

Certifying Officer, Office of Trade Adjustment Assistance.

[FR Doc. 2014-27482 Filed 11-19-14; 8:45 am]

BILLING CODE 4

DEPARTMENT OF LABOR**Employment and Training Administration**

Investigations Regarding Eligibility To Apply for Worker Adjustment Assistance

Petitions have been filed with the Secretary of Labor under Section 221(a) of the Trade Act of 1974 ("the Act") and are identified in the Appendix to this notice. Upon receipt of these petitions, the Director of the Office of Trade Adjustment Assistance, Employment and Training Administration, has instituted investigations pursuant to Section 221(a) of the Act.

The purpose of each of the investigations is to determine whether the workers are eligible to apply for adjustment assistance under Title II, Chapter 2, of the Act. The investigations will further relate, as appropriate, to the

determination of the date on which total or partial separations began or threatened to begin and the subdivision of the firm involved.

The petitioners or any other persons showing a substantial interest in the subject matter of the investigations may request a public hearing, provided such request is filed in writing with the Director, Office of Trade Adjustment

Assistance, at the address shown below, not later than December 1, 2014).

Interested persons are invited to submit written comments regarding the subject matter of the investigations to the Director, Office of Trade Adjustment Assistance, at the address shown below, not later than December 1, 2014.

The petitions filed in this case are available for inspection at the Office of the Director, Office of Trade Adjustment

Assistance, Employment and Training Administration, U.S. Department of Labor, Room N-5428, 200 Constitution Avenue NW., Washington, DC 20210.

Signed at Washington, DC, this 30th day of October 2014.

Michael W. Jaffe,

Certifying Officer, Office of Trade Adjustment Assistance.

Appendix

11 TAA PETITIONS INSTITUTED BETWEEN 10/20/14 AND 10/24/14

TA-W	Subject firm (petitioners)	Location	Date of institution	Date of petition
85604	Anchor Danly (State/One-Stop)	Kentwood, MI	10/20/14	10/03/14
85605	GE Energy/Critical Power (State/One-Stop)	Galion, OH	10/20/14	10/17/14
85606	The Store Kraft Manufacturing Company (Company)	Beatrice, NE	10/20/14	10/17/14
85607	Air System Components, Inc. (Company)	Ponca City, OK	10/21/14	10/20/14
85608	Silberline Manufacturing Company Incorporated (Union)	Tamaqua, PA	10/21/14	10/20/14
85609	RNYK LLC., J & R Music World (Workers)	New York, NY	10/21/14	10/20/14
85610	Fairchild Semiconductor, Corp. (Company)	West Jordan, UT	10/21/14	10/20/14
85611	GrafTech International Holdings Inc. (Company)	Parma, OH	10/22/14	10/21/14
85612	CA Inc. (State/One-Stop)	Plano, TX	10/22/14	10/21/14
85613	Midair USA (State/One-Stop)	Rome, NY	10/23/14	10/21/14
85614	Metglas, Inc. (Company)	Conway, SC	10/23/14	10/22/14

[FR Doc. 2014-27494 Filed 11-19-14; 8:45 am]

BILLING CODE 4510-FN-P

DEPARTMENT OF LABOR

Employment and Training Administration

Notice of Determinations Regarding Eligibility To Apply for Worker Adjustment Assistance and Alternative Trade Adjustment Assistance

In accordance with Section 223 of the Trade Act of 1974, as amended (19 U.S.C. 2273) the Department of Labor herein presents summaries of determinations regarding eligibility to apply for trade adjustment assistance for workers (TA-W) number and alternative trade adjustment assistance (ATAA) by (TA-W) number issued during the period of October 20, 2014 through October 24, 2014.

In order for an affirmative determination to be made for workers of a primary firm and a certification issued regarding eligibility to apply for worker adjustment assistance, each of the group eligibility requirements of Section 222(a) of the Act must be met.

I. Section (a)(2)(A) all of the following must be satisfied:

A. a significant number or proportion of the workers in such workers' firm, or an appropriate subdivision of the firm, have become totally or partially separated, or are threatened to become totally or partially separated;

B. the sales or production, or both, of such firm or subdivision have decreased absolutely; and

C. increased imports of articles like or directly competitive with articles produced by such firm or subdivision have contributed importantly to such workers' separation or threat of separation and to the decline in sales or production of such firm or subdivision; or

II. Section (a)(2)(B) both of the following must be satisfied:

A. a significant number or proportion of the workers in such workers' firm, or an appropriate subdivision of the firm, have become totally or partially separated, or are threatened to become totally or partially separated;

B. there has been a shift in production by such workers' firm or subdivision to a foreign country of articles like or directly competitive with articles which are produced by such firm or subdivision; and

C. One of the following must be satisfied:

1. The country to which the workers' firm has shifted production of the articles is a party to a free trade agreement with the United States;

2. the country to which the workers' firm has shifted production of the articles to a beneficiary country under the Andean Trade Preference Act, African Growth and Opportunity Act, or the Caribbean Basin Economic Recovery Act; or

3. there has been or is likely to be an increase in imports of articles that are

like or directly competitive with articles which are or were produced by such firm or subdivision.

Also, in order for an affirmative determination to be made for secondarily affected workers of a firm and a certification issued regarding eligibility to apply for worker adjustment assistance, each of the group eligibility requirements of Section 222(b) of the Act must be met.

(1) significant number or proportion of the workers in the workers' firm or an appropriate subdivision of the firm have become totally or partially separated, or are threatened to become totally or partially separated;

(2) the workers' firm (or subdivision) is a supplier or downstream producer to a firm (or subdivision) that employed a group of workers who received a certification of eligibility to apply for trade adjustment assistance benefits and such supply or production is related to the article that was the basis for such certification; and

(3) either—

(A) the workers' firm is a supplier and the component parts it supplied for the firm (or subdivision) described in paragraph (2) accounted for at least 20 percent of the production or sales of the workers' firm; or

(B) a loss or business by the workers' firm with the firm (or subdivision) described in paragraph (2) contributed importantly to the workers' separation or threat of separation.

In order for the Division of Trade Adjustment Assistance to issue a

certification of eligibility to apply for Alternative Trade Adjustment Assistance (ATAA) for older workers, the group eligibility requirements of Section 246(a)(3)(A)(ii) of the Trade Act must be met.

1. Whether a significant number of workers in the workers' firm are 50 years of age or older.

2. Whether the workers in the workers' firm possess skills that are not easily transferable.

3. The competitive conditions within the workers' industry (i.e., conditions within the industry are adverse).

Affirmative Determinations for Worker Adjustment Assistance

The following certifications have been issued. The date following the company name and location of each determination references the impact date for all workers of such determination.

None.

Affirmative Determinations for Worker Adjustment Assistance and Alternative Trade Adjustment Assistance

The following certifications have been issued. The date following the company name and location of each determination references the impact date for all workers of such determination.

The following certifications have been issued. The requirements of Section 222(a)(2)(A) (increased imports) and Section 246(a)(3)(A)(ii) of the Trade Act have been met.

85,443, *Eclipse Manufacturing Co.*
Sheboygan, Wisconsin, July 23,
2013.

85,550, *Rcad Milling, Champagne,*
Illinois, September 23, 2013.

85,557, *Aero Electric, Inc., Seven*
Locations in Torrance, California,
September 25, 2013.

85,560, *Heraeus Shin-Etsu America,*
Inc., Camas, Washington,
September 23, 2013.

85,564, *Prestolite Electric Incorporated,*
Arcade, New York, September 29,
2013.

85,566, *Evergreen Packaging Inc.*
Clinton, Iowa, September 30, 2013.

85,568, *SILLCO, Huntingdon,*
Tennessee, September 30, 2013.

85,569, *Metrie Inc., Monroe,*
Washington, October 1, 2013.

85,592, *Micro Power Electronics, Inc.,*
Beaverton, Oregon, October 10,
2013.

Negative Determinations for Alternative Trade Adjustment Assistance

In the following cases, it has been determined that the requirements of 246(a)(3)(A)(ii) have not been met for the reasons specified.

None.

Negative Determinations for Worker Adjustment Assistance and Alternative Trade Adjustment Assistance

In the following cases, the investigation revealed that the eligibility criteria for worker adjustment assistance have not been met for the reasons specified.

The workers' firm does not produce an article as required for certification under Section 222 of the Trade Act of 1974.

85,539, *American Express Travel*
Related Services Company, Inc.,
Salt Lake City, Utah.

85,555, *Artic Timber, Inc., Cosmopolis,*
Washington.

85,577, *British Airways, PLC, Jamaica,*
New York.

Determinations Terminating Investigations of Petitions for Worker Adjustment Assistance

After notice of the petitions was published in the **Federal Register** and on the Department's Web site, as required by Section 221 of the Act (19 U.S.C. 2271), the Department initiated investigations of these petitions.

The following determinations terminating investigations were issued in cases where these petitions were not filed in accordance with the requirements of 29 CFR 90.11. Every petition filed by workers must be signed by at least three individuals of the petitioning worker group. Petitioners separated more than one year prior to the date of the petition cannot be covered under a certification of a petition under Section 223(b), and therefore, may not be part of a petitioning worker group. For one or more of these reasons, these petitions were deemed invalid.

85,590, *Echelon Furniture, Gas City,*
Indiana.

I hereby certify that the aforementioned determinations were issued during the period of October 20, 2014 through October 24, 2014. These determinations are available on the Department's Web site www.tradeact/taa/taa_search_form.cfm under the searchable listing of determinations or by calling the Office of Trade Adjustment Assistance toll free at 888-365-6822.

Signed at Washington, DC, this 30th day of October 2014.

Michael W. Jaffe,
Certifying Officer, Office of Trade Adjustment Assistance.

[FR Doc. 2014-27493 Filed 11-19-14; 8:45 am]

BILLING CODE 4510-FN-P

DEPARTMENT OF LABOR

Mine Safety and Health Administration

Petitions for Modification of Application of Existing Mandatory Safety Standards

AGENCY: Mine Safety and Health Administration, Labor.

ACTION: Notice.

SUMMARY: Section 101(c) of the Federal Mine Safety and Health Act of 1977 and 30 CFR part 44 govern the application, processing, and disposition of petitions for modification. This notice is a summary of petitions for modification submitted to the Mine Safety and Health Administration (MSHA) by the parties listed below to modify the application of existing mandatory safety standards codified in Title 30 of the Code of Federal Regulations.

DATES: All comments on the petitions must be received by the Office of Standards, Regulations and Variances on or before December 22, 2014.

ADDRESSES: You may submit your comments, identified by "docket number" on the subject line, by any of the following methods:

1. *Electronic Mail:* zzMSHA-comments@dol.gov. Include the docket number of the petition in the subject line of the message.

2. *Facsimile:* 202-693-9441.

3. *Regular Mail or Hand Delivery:* MSHA, Office of Standards, Regulations and Variances, 1100 Wilson Boulevard, Room 2350, Arlington, Virginia 22209-3939, Attention: Sheila McConnell, Acting Director, Office of Standards, Regulations and Variances. Persons delivering documents are required to check in at the receptionist's desk on the 21st floor. Individuals may inspect copies of the petitions and comments during normal business hours at the address listed above.

MSHA will consider only comments postmarked by the U.S. Postal Service or proof of delivery from another delivery service such as UPS or Federal Express on or before the deadline for comments.

FOR FURTHER INFORMATION CONTACT: Barbara Barron, Office of Standards, Regulations and Variances at 202-693-9447 (Voice), barron.barbara@dol.gov (Email), or 202-693-9441 (Facsimile). [These are not toll-free numbers.]

SUPPLEMENTARY INFORMATION:

I. Background

Section 101(c) of the Federal Mine Safety and Health Act of 1977 (Mine Act) allows the mine operator or representative of miners to file a petition to modify the application of any

mandatory safety standard to a coal or other mine if the Secretary of Labor determines that:

1. An alternative method of achieving the result of such standard exists which will at all times guarantee no less than the same measure of protection afforded the miners of such mine by such standard; or

2. That the application of such standard to such mine will result in a diminution of safety to the miners in such mine.

In addition, the regulations at 30 CFR 44.10 and 44.11 establish the requirements and procedures for filing petitions for modification.

II. Petitions for Modification

Docket Numbers: M–2014–035–C and M–2014–036–C.

Petitioner: Sunrise Coal LLC, 12661 Agricare Road, Oaktown, Indiana 47561.

Mines: Oaktown Fuels Mine No. 1, MSHA I.D. No. 12–02394, and Oaktown Fuels Mine No. 2, MSHA I.D. No. 12–02418, both located in Knox County, Indiana.

Regulation Affected: 30 CFR 75.1101–1(b) (Deluge-type water spray systems).

Modification Request: The petitioner requests a modification of the existing standard to permit weekly examinations and functional testing of the deluge-type water fire suppression systems to be conducted in lieu of providing blow-off dust covers. The petitioner proposes to conduct weekly examinations and functional tests of the deluge system to provide an improvement in safety and to ensure that the spray nozzles do not become plugged. The petitioner states that replacing the dust caps creates an unnecessary hazard by exposing miners to the risk of a slip/fall type accident. The petitioner further states that:

(1) A person trained in the testing procedures specific to the deluge-type water spray system utilized at each belt drive will, once every seven 7 days:

(a) Conduct a visual examination of each of the deluge-type water spray fire suppression systems.

(b) Conduct a functional test of the deluge-type water spray fire suppression systems by actuating the system and observing its performance.

(c) Record the results of the examination and functional test in a book maintained on the surface, made available to authorized representatives of the Secretary and retained at the mine for one year.

(2) Any malfunction or clogged nozzle detected as a result of the weekly examination or functional test will be corrected immediately.

(3) The procedure used to perform the functional test will be posted at or near

each belt drive that utilizes a deluge-type water spray fire suppression system.

The petitioner asserts that the proposed alternative method will at all times guarantee no less than the same measure or protection afforded by the existing standard.

Docket Number: M–2014–019–M.

Petitioner: J.S. Redpath Corporation, 1410 Greg Street Suite 404, Sparks, Nevada 89431.

Mine: Sumitomo Metal Mining Pogo LLC, Pogo Mine, MSHA I.D. No. 50–01642, 49 Mile Shaw Creek Road, Delta Junction, Alaska 99737, located in Southeast Fairbanks County, Alaska.

Regulation Affected: 30 CFR 57.14207 (Parking procedures for unattended equipment).

Modification Request: The petitioner requests a modification of the existing standard to eliminate the use of park brakes on light vehicle fleets during the coldest months of the year for only the surface areas of the Pogo Mine Site. The petitioner states that:

(1) The coldest of months of the year in Southeast Fairbanks County, Alaska are between October 15th and April 1st.

(2) The fleet vehicles are currently Ford F series 4X4 pickup trucks and one 4X4 Ford passenger van. All of the vehicles are equipped with automatic transmissions.

(3) This modification request is only for these types of vehicles with external cable and park brake assemblies.

(4) The alternate method of securing these light vehicles will be the use of a parking ditch, or a parking rack. When the vehicles are parked on the surface during the cold months the two front tires or two back tires of the vehicle will be put into a parking ditch 5 to 6 inches deep, or driven into the parking rack. The parking racks are constructed of 4-inch steel angle iron. Along with the parking ditch or rack the vehicles will be secured with chock blocks on both sides of an opposite axle tire.

(5) The vehicles are used both underground and on the surface. When the vehicles are used in the wet underground environment and then driven to the surface, the extreme cold temperatures immediately cause the park brake components to freeze. Temperatures at the mine often exceed -50 degrees Fahrenheit for extended periods of time. Setting the park brakes will damage the brakes and will often lock the tires in place.

(6) The vehicles are driven in and out of the mine many times in a 24-hour period. They are used to haul men, equipment, tools and supplies. The vehicles are an extremely important part

of the mine's day to day operations. The vehicles are maintained in a safe and reliable condition and are inspected prior to each shift use.

(7) The parking racks will be constructed in approximate 20 foot width. The bottom side of the parking rack will have some form of metal teeth to create friction between the rack and ground to keep it from sliding on a frozen surface.

The petitioner asserts that the proposed alternative method will at all times guarantee no less than the same measure of protection afforded by the existing standard.

Dated: November 14, 2014.

Sheila McConnell,

Acting Director, Office of Standards, Regulations and Variances.

[FR Doc. 2014–27514 Filed 11–19–14; 8:45 am]

BILLING CODE 4510–43–P

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

[Notice (14–120)]

Performance Review Board, Senior Executive Service (SES)

AGENCY: National Aeronautics and Space Administration (NASA).

ACTION: Notice of Membership of SES Performance Review Board.

SUMMARY: The Civil Service Reform Act of 1978, Public Law 95–454 (Section 405) requires that appointments of individual members to the Performance Review Board (PRB) be published in the **Federal Register**.

The performance review function for the SES in NASA is being performed by the NASA PRB. The following individuals are serving on the Board:

Performance Review Board

Chairperson, Associate Administrator,
NASA Headquarters

Chair, Executive Resources Board,
NASA Headquarters

Deputy Associate Administrator, NASA
Headquarters

Associate Administrator for Mission
Support Directorate, NASA
Headquarters

Associate Administrator for Diversity
and Equal Opportunity, NASA
Headquarters

Cheryl E. Parker,

Federal Register Liaison Officer.

[FR Doc. 2014–27469 Filed 11–19–14; 8:45 am]

BILLING CODE 7510–13–P

NATIONAL LABOR RELATIONS BOARD

Amendment of Statement of Organization and Functions; Restructuring of National Labor Relations Board's Field Organization

November 14, 2014.

AGENCY: National Labor Relations Board.

ACTION: Notice of administrative change in status of the Jacksonville, Florida Resident Office (Region 12) of the National Labor Relations Board, which will be closed and the area will be served by agents working from other locations.

SUMMARY: The National Labor Relations Board is closing its Jacksonville, Florida Resident Office because it has determined that closing the office and serving the area with agents working at other locations, will result in significant savings while continuing to effectively serve the area currently served by this office.

DATES: *Effective Date:* The change announced above with respect to the Jacksonville, Florida office will be effective December 1, 2014.

FOR FURTHER INFORMATION CONTACT: Gary Shinnners, Executive Secretary, 1099 14th Street NW., Room 11600, Washington, DC 20570. Telephone: (202) 273-1067

SUPPLEMENTARY INFORMATION: The National Labor Relations Board has decided to close its Jacksonville, Florida Resident Office. This change is prompted by an examination of the staffing, caseloads, and rental and operating costs for the Jacksonville office which has been occupied by only one employee for more than two years. Because of the declining intake in this area, it is not expected that additional employees would be added to this office in the foreseeable future. The employee who has been working in the Jacksonville office will be converted to a Resident Agent and will continue to perform the same work as now except that the employee will not work from an Agency office. When needed, this employee will be assisted by agents from the Agency's Tampa office. This revision is nonsubstantive or merely procedural in nature. The Board expects no adverse impact on the quality of casehandling as a result of the office closure.

Region 12, which handles cases arising in Florida, certain counties in Georgia, and Puerto Rico is headed by a Regional Director, who works in the Tampa, Florida Regional office and has full authority for the processing of both

unfair labor practice and representation cases in that area. Currently, the other employees in this Region work in offices in Tampa, Miami, and Jacksonville, Florida and in San Juan, Puerto Rico. Under this proposal, all offices except the Jacksonville office will continue to be open. The geographical area covered by the Region will not be changed.

The most recent list of Regional and Subregional Offices was published at 65 FR 53228-53229 on August 29, 2000, as amended at 78 FR 44602-44603 on Wednesday, July 24, 2012.

Concurrent with this Notice, the NLRB is revising its Statement of Organization and Functions to delete reference to the Jacksonville, Florida office as a place where persons can obtain service in Region 12. The revision to the Board's Statement of Organization and Functions is attached.

Since April 2014, the NLRB has solicited and received feedback on the proposed closure of the Jacksonville, Florida office. The decision to close this office and restructure the Agency's operations in the manner set forth here was informed by comments from stakeholders, members of Congress and Agency employees. Because this is a general notice that is related to the organization of the NLRB, it is not a regulation or rule subject to Executive Order 12866.

Pursuant to the change set forth here, the National Labor Relations Board is amending its Statement of Organization and Functions as follows:

Part 201—Description of Organization

Subpart B—Description of Field Organization

(A) "Areas Served by Regional and Subregional Offices" is amended in following manner:

(1) Region 12 is amended to read as follows:

Region 12. Tampa, Florida. In Florida, services Alachua, Baker, Bradford, Brevard, Broward, Charlotte, Citrus, Clay, Collier, Columbia, Dad, De Soto, Dixie, Duval, Flagler, Gadsden, Gilchrist, Glades, Hamilton, Hardee, Hendry, Hernando, Highlands, Hillsborough, Indian River, Jefferson, Lafayette, Lake, Lee Leon, Levy, Madison, Manatee, Marion, Martin, Monroe, Nassau, Okeechobee, Orange, Osceola, Palm Beach, Pasco, Pinellas, Polk, Putnam, St. Johns, St. Lucie, Sarasota, Seminole, Sumter, Suwannee, Taylor, Union, Volusia and Wakulla Counties; and in Georgia services Appling, Atkinson, Bacon, Brantley, Brooks, Camden, Charlton, Clinch, Coffee, Decatur, Echols, Glynn, Grady, Jeff Davis, Lanier, Lowndes, Pierce,

Seminole, Thomas, Ware, and Wayne Counties.

Subregion 24. Hato Rey, Puerto Rico, Services Puerto Rico and the U.S. Virgin Islands.

Persons may also obtain service at the Resident Office located in Miami, Florida.

Dated: November 14, 2014.

By Direction of the Board.

William B. Cowen,

Solicitor.

[FR Doc. 2014-27356 Filed 11-19-14; 8:45 am]

BILLING CODE 7545-01-P

NUCLEAR REGULATORY COMMISSION

[NRC-2014-0251; EA-14-156]

In the Matter of Issuance of a Non-Manufacturing and Distribution Service Provider Order

AGENCY: Nuclear Regulatory Commission.

ACTION: Order imposing trustworthiness and reliability requirements for unescorted access to certain radioactive material; issuance.

SUMMARY: The U.S. Nuclear Regulatory Commission (NRC) issued an order imposing trustworthiness and reliability requirements for unescorted access to certain radioactive material by request of a service provider licensee that is not a manufacturer or distribution. The order was issued on October 2, 2014, and became effective immediately.

DATES: *Effective Date:* October 2, 2014.

ADDRESSES: Please refer to Docket ID NRC-2014-0251 when contacting the NRC about the availability of information regarding this document. You may obtain publicly-available information related to this action by the following methods:

- Federal Rulemaking Web site: Go to <http://www.regulations.gov> and search for Docket ID NRC-2014-0251. Address questions about NRC dockets to Carol Gallagher; telephone: 301-287-3422; email: Carol.Gallagher@nrc.gov. For questions about this Order, contact the individual listed in the **FOR FURTHER INFORMATION CONTACT** section of this document.

- NRC's Agencywide Documents Access and Management System (ADAMS): You may access publicly available documents online in the NRC Library at <http://www.nrc.gov/reading-rm/adams.html>. To begin the search, select "ADAMS Public Documents" and then select "Begin Web-based ADAMS Search." For problems with ADAMS,

please contact the NRC's Public Document Room (PDR) reference staff at 1-800-397-4209, 301-415-4737, or by email to pdr.resource@nrc.gov. The ADAMS accession number for each document referenced in this document (if that document is available in ADAMS) is provided the first time that a document is referenced.

- NRC's PDR: You may examine and purchase copies of public documents at the NRC's PDR, Room O1-F21, One White Flint North, 11555 Rockville Pike, Rockville, Maryland 20852.

FOR FURTHER INFORMATION CONTACT: Michelle Killian, Office of Nuclear Material Safety and Safeguards, U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001; telephone: 301-415-6711; email: Michelle.Killian@nrc.gov.

SUPPLEMENTARY INFORMATION: The text of the Order is attached.

Dated at Rockville, Maryland, this 13th day of November 2014.

For the Nuclear Regulatory Commission.

Catherine Haney,

Director, Office of Nuclear Material Safety and Safeguards.

UNITED STATES NUCLEAR REGULATORY COMMISSION

EA-14-156

In the Matter of Certain Licensees Requesting Unescorted Access to Radioactive Material

Order Imposing Trustworthiness and Reliability Requirements for Unescorted Access to Certain Radioactive Material (Effective Immediately)

I

The licensee identified in Attachment 1¹ to this Order holds a license issued by the U.S. Nuclear Regulatory Commission (NRC) or an Agreement State, in accordance with the Atomic Energy Act (AEA) of 1954, as amended. The license authorizes it to perform services on devices containing certain radioactive material for customers licensed by the NRC or an Agreement State to possess and use certain quantities of the radioactive materials listed in Attachment 2 to this Order. Commission regulations at 10 CFR 20.1801 or equivalent Agreement State regulations require licensees to secure, from unauthorized removal or access, licensed materials that are stored in controlled or unrestricted areas. Commission regulations at 10 CFR 20.1802 or equivalent Agreement State regulations require licensees to control

and maintain constant surveillance of licensed material that is in a controlled or unrestricted area and that is not in storage.

II

Subsequent to the terrorist events of September 11, 2001, the NRC issued immediately effective Security Orders to NRC and Agreement State licensees under the Commission's authority to protect the common defense and security of the nation. The Orders required certain manufacturing and distribution (M&D) licensees to implement Additional Security Measures (ASMs) for the radioactive materials listed in Attachment 2 to this Order (the radionuclides of concern), to supplement the existing regulatory requirements. The ASMs included requirements for determining the trustworthiness and reliability of individuals that require unescorted access to the radionuclides of concern. Section 652 of the Energy Policy Act of 2005, which became law on August 8, 2005, amended Section 149 of the AEA to require fingerprinting and a Federal Bureau of Investigation (FBI) identification and criminal history records check for "any individual who is permitted unescorted access to radioactive materials or other property subject to regulation by the Commission that the Commission determines to be of such significance to the public health and safety or the common defense and security as to warrant fingerprinting and background checks." Section 149 of the AEA also requires that "all fingerprints obtained by an individual or entity shall be submitted to the Attorney General of the United States through the Commission for identification and a criminal history records check." Due to the 2005 revision of the AEA, the trustworthiness and reliability requirements of the ASMs were updated and the M&D licensees were issued additional Orders imposing the new fingerprinting requirements.

In late 2005, the NRC and the Agreement States began issuing Increased Controls (IC) Orders or other legally binding requirements to licensees who are authorized to possess the radionuclides of concern at IC licensee facilities. Paragraph IC 1.c, in Attachment B of the December 1, 2005, IC Order, "Increased Controls for Licensees That Possess Sources Containing Radioactive Material Quantities of Concern," stated that "service providers shall be escorted unless determined to be trustworthy and reliable by an NRC-required background investigation as an employee of a manufacturing and distribution

licensee" (70 FR 72130). Starting in December 2007, the NRC and the Agreement States began issuing additional Orders or other legally binding requirements to the IC licensees, imposing the new fingerprinting requirements. In the December 13, 2007, Fingerprinting Order, paragraph IC 1.c of the prior Order was superseded by the requirement that "Service provider licensee employees shall be escorted unless determined to be trustworthy and reliable by an NRC-required background investigation" (72 FR 70901). However, the NRC did not require background investigations for non-M&D service provider licensees. Consequently, only service representatives of certain M&D licensees may be granted unescorted access to the radionuclides of concern at an IC licensee facility, even though non-M&D service provider licensees provide similar services and have the same degree of knowledge of the devices they service as M&D licensees. To maintain appropriate access control to the radionuclides of concern, and to allow M&D licensees and non-M&D service provider licensees to have the same level of access at customers' facilities, NRC is imposing trustworthiness and reliability requirements for unescorted access to the radionuclides of concern set forth in Table 1 of Attachment 2 of this Order. These requirements apply to non-M&D service provider licensees that request and have a need for unescorted access by their representatives to the radionuclides of concern at IC and part 37 licensee facilities. These trustworthiness and reliability requirements are equivalent to the requirements for M&D licensees who perform services requiring unescorted access to the radionuclides of concern.

In order to provide assurance that non-M&D service provider licensees are implementing prudent measures to achieve a consistent level of protection for service providers requiring unescorted access to the radionuclides of concern at IC and part 37 licensee facilities, the licensee identified in Attachment 1 to this Order shall implement the requirements of this Order. In addition, pursuant to 10 CFR 2.202, because of potentially significant adverse impacts associated with a deliberate malevolent act by an individual with unescorted access to the radionuclides of concern, I find that the public health, safety, and interest require this Order to be effective immediately.

III

Accordingly, pursuant to Sections 81, 149, 161b, 161i, 161o, 182, and 186 of

¹ Attachment 1 contains sensitive information and will not be released to the public.

the Atomic Energy Act of 1954, as amended, and the Commission's regulations in 10 CFR 2.202, 10 CFR parts 20, 30 and 33, IT IS HEREBY ORDERED, EFFECTIVE IMMEDIATELY, THAT THE LICENSEE IDENTIFIED IN ATTACHMENT 1 TO THIS ORDER COMPLY WITH THE REQUIREMENTS SET FORTH IN THIS ORDER.

A.1. The licensee shall establish and maintain a fingerprinting program that meets the requirements of Attachment 3 to this Order for individuals that require unescorted access to the radionuclides of concern. The licensee shall complete implementation of the requirements of Attachment 3 to this Order within one hundred eighty (180) days of the date of this Order, or before providing written verification to another licensee subject to the IC or part 37 requirements, or attesting to or certifying the trustworthiness and reliability of a service provider for unescorted access to the radionuclides of concern at a customer's facility.

A.2. Within ninety (90) days of the date of this Order, the licensee shall designate a "Reviewing Official" for determining unescorted access to the radioactive materials as listed in Attachment 2 to this Order by other individuals. Before submittal of the individual's fingerprints to the NRC, the licensee must perform a trustworthiness and reliability review per the requirements in Attachment 3 of the Order. The licensee must verify the employment history, education, and personal references of the designated Reviewing Official for at least the past three (3) years. Additionally, the designated Reviewing Official must be authorized unescorted access to the radioactive materials listed in Attachment 2 to this Order as part of his or her job duties or have access to Safeguards Information. After this process, the licensee designates the Reviewing Official to NRC by submitting the individual's fingerprints and processing fee.

A.3. Fingerprints for unescorted access need not be taken if a designated Reviewing Official is relieved from the fingerprinting requirement by 10 CFR 73.61, or has been favorably adjudicated by a U.S. Government program involving fingerprinting and a FBI identification and criminal history records check² within the last five (5)

years, or for any person who has an active federal security clearance (provided in the latter two cases that they make available the appropriate documentation³). The licensee may provide, for NRC review, written confirmation from the Agency/employer which granted the federal security clearance or reviewed the FBI identification and criminal history records results based upon a fingerprint identification check. The NRC will determine whether, based on the written confirmation, the designated Reviewing Official may have unescorted access to the radioactive materials listed in Attachment 2 to this Order, and therefore, be permitted to serve as the licensee's Reviewing Official.⁴

A.4. A designated Reviewing Official may not review the results from the FBI identification and criminal history records checks or make unescorted access determinations until the NRC has approved the individual as the licensee's Reviewing Official.

A.5. The NRC will determine whether this individual (or any subsequent Reviewing Official) may have unescorted access to the radionuclides of concern, and therefore, will be permitted to serve as the licensee's Reviewing Official. The NRC-approved Reviewing Official shall be the recipient of the results of the FBI identification and criminal history records check of the other licensee employees requiring unescorted access to the radioactive materials listed in Attachment 2 to this Order, and shall control such information as specified in the "Protection of Information" section of Attachment 3 to this Order.

A.6. The NRC-approved Reviewing Official shall determine whether an individual may have unescorted access

and toxins in accordance with 42 CFR part 73, and (5) Hazardous Material security threat assessment for hazardous material endorsement to commercial drivers license in accordance with 49 CFR part 1572, Customs and Border Protection's Free and Secure Trade (FAST) Program. The FAST program is a cooperative effort between the Bureau of Customs and Border Protection and the governments of Canada and Mexico to coordinate processes for the clearance of commercial shipments at the U.S.-Canada and U.S.-Mexico borders. Participants in the FAST program, which requires successful completion of a background records check, may receive expedited entrance privileges at the northern and southern borders.

³ This documentation must allow the NRC or NRC-approved Reviewing Official to verify that the individual has fulfilled the unescorted access requirements of Section 149 of the AEA by submitting to fingerprinting and a FBI identification and criminal history records check.

⁴ The NRC's determination of this individual's unescorted access to the radionuclides of concern in accordance with the process described in Enclosure 4 to the transmittal letter of this Order is an administrative determination that is outside the scope of this Order.

to radioactive materials that equal or exceed the quantities in Attachment 2 to this Order, in accordance with the requirements described in Attachment 3 to this Order.

B. Prior to requesting fingerprints from a licensee employee, a copy of this Order shall be provided to that person.

C.1. The licensee shall, in writing, within twenty-five (25) days of the date of this Order, notify the Commission, (1) if it is unable to comply with any of the requirements described in this Order, including Attachment 3 to this Order, (2) if compliance with any of the requirements is unnecessary in its specific circumstances, or (3) if implementation of any of the requirements would cause the licensee to be in violation of the provisions of any Commission or Agreement State regulation or its license. The notification shall provide the licensee's justification for seeking relief from or variation of any specific requirement.

C.2. The licensee shall complete implementation of the requirements of Attachment 3 to this Order within one hundred eighty (180) days of the date of this Order.

C.3. The licensee shall report to the Commission when they have achieved full compliance with the requirements described in Attachment 3 to this Order. The report shall be made within twenty-five (25) days after full compliance has been achieved.

C.4. If during the implementation period of this Order, the licensee is unable, due to circumstances beyond its control, to meet the requirements of this Order by March 30, 2015, the licensee shall request, in writing, that the Commission grant an extension of time to implement the requirements. The request shall provide the licensee's justification for seeking additional time to comply with the requirements of this Order.

C.5. Licensees shall notify the NRC's Headquarters Operations Office at 301-816-5100 within 24 hours if the results from a FBI identification and criminal history records check indicate that an individual is identified on the FBI's Terrorist Screening Data Base.

Licensee responses to C.1, C.2., C.3., and C.4. above shall be submitted in writing to the Director, Office of Federal and State Materials and Environmental Management Programs, U.S. Nuclear Regulatory Commission, Washington, DC 20555. Licensee responses shall be marked as "Security-Related Information—Withhold Under 10 CFR 2.390."

The Director, Office of Federal and State Materials and Environmental Management Programs, may, in writing,

² Examples of such programs include (1) National Agency Check, (2) Transportation Worker Identification Credentials in accordance with 49 CFR part 1572, (3) Bureau of Alcohol Tobacco Firearms and Explosives background checks and clearances in accordance with 27 CFR part 555, (4) Health and Human Services security risk assessments for possession and use of select agents

relax or rescind any of the above conditions upon demonstration of good cause by the licensee.

IV

In accordance with 10 CFR 2.202, the licensee must, and any other person adversely affected by this Order may, submit an answer to this Order within twenty-five (25) days of the date of this Order. In addition, the licensee and any other person adversely affected by this Order may request a hearing on this Order within twenty-five (25) days of the date of the Order. Where good cause is shown, consideration will be given to extending the time to request a hearing. A request for extension of time must be made, in writing, to the Director, Division of Materials Safety and State Agreements, Office of Federal and State Materials and Environmental Management Programs, U.S. Nuclear Regulatory Commission, Washington, DC 20555, and include a statement of good cause for the extension.

The answer may consent to this Order. If the answer includes a request for a hearing, it shall, under oath or affirmation, specifically set forth the matters of fact and law on which the licensee relies and the reasons as to why the Order should not have been issued. If a person other than the licensee requests a hearing, that person shall set forth with particularity the manner in which his interest is adversely affected by this Order and shall address the criteria set forth in 10 CFR 2.309(d).

A request for a hearing must be filed in accordance with the NRC E-Filing rule, which became effective on October 15, 2007. The E-Filing Final Rule was issued on August 28, 2007 (72 FR 49139). The E-Filing process requires participants to submit and serve documents over the internet or, in some cases, to mail copies on electronic optical storage media. Participants may not submit paper copies of their filings unless they seek a waiver in accordance with the procedures described below.

To comply with the procedural requirements associated with E-Filing, at least five (5) days prior to the filing deadline the requestor must contact the Office of the Secretary by email at HEARINGDOCKET@NRC.GOV, or by calling (301) 415-1677, to request (1) a digital ID certificate, which allows the participant (or its counsel or representative) to digitally sign documents and access the E-Submittal server for any NRC proceeding in which it is participating; and/or (2) creation of an electronic docket for the proceeding (even in instances when the requestor (or its counsel or representative) already holds an NRC-issued digital ID

certificate). Each requestor will need to download the Workplace Forms Viewer™ to access the Electronic Information Exchange (EIE), a component of the E-Filing system. The Workplace Forms Viewer™ is free and is available at <http://www.nrc.gov/site-help/e-submittals/install-viewer.html>. Information about applying for a digital ID certificate also is available on NRC's public Web site at <http://www.nrc.gov/site-help/e-submittals/apply-certificates.html>.

Once a requestor has obtained a digital ID certificate, had a docket created, and downloaded the EIE viewer, it can then submit a request for a hearing through the EIE. Submissions should be in Portable Document Format (PDF) in accordance with NRC guidance available on the NRC public Web site at <http://www.nrc.gov/site-help/e-submittals.html>. A filing is considered complete at the time the filer submits its document through the EIE.

To be timely, electronic filings must be submitted to the EIE system no later than 11:59 p.m. Eastern Time on the due date. Upon receipt of a transmission, the E-Filing system time-stamps the document and sends the submitter an email notice confirming receipt of the document. The EIE system also distributes an email notice that provides access to the document to the NRC Office of the General Counsel and any others who have advised the Office of the Secretary that they wish to participate in the proceeding, so that the filer need not serve the document on those participants separately. Therefore, any others who wish to participate in the proceeding (or their counsel or representative) must apply for and receive a digital ID certificate before a hearing request is filed so that they may obtain access to the document via the E-Filing system.

A person filing electronically may seek assistance through the "Contact Us" link located on the NRC Web site at <http://www.nrc.gov/site-help/e-submittals.html> or by calling the NRC technical help line, which is available between 8:00 a.m. and 8:00 p.m., Eastern Time, Monday through Friday. The help line number is (866) 672-7640.

Participants who believe that they have good cause for not submitting documents electronically must, in accordance with 10 CFR 2.302(g), file an exemption request with the initial paper filing showing good cause as to why the participant cannot file electronically and requesting authorization to continue to submit documents in paper format. Such filings must be submitted by (1) first class mail addressed to the Office of the Secretary of the

Commission, U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001, Attention: Rulemaking and Adjudications Staff; or (2) courier, express mail, or expedited delivery service to the Office of the Secretary, Sixteenth Floor, One White Flint North, 11555 Rockville Pike, Rockville, Maryland, 20852, Attention: Rulemaking and Adjudications Staff. Participants filing a document in this manner are responsible for serving the document on all other participants. Filing is considered complete by first-class mail as of the time of deposit in the mail, or by courier, express mail, or expedited delivery service upon depositing the document with the provider of the service.

Documents submitted in adjudicatory proceedings will appear in NRC's electronic hearing docket, which is available to the public at <http://ehd1.nrc.gov/EHD/>, unless excluded pursuant to an order of the Commission, an Atomic Safety and Licensing Board, or a Presiding Officer. Participants are requested not to include personal privacy information, such as social security numbers, home addresses, or home phone numbers in their filings. With respect to copyrighted works, except for limited excerpts that serve the purpose of the adjudicatory filings and would constitute a Fair Use application, participants are requested not to include copyrighted materials in their works.

If a hearing is requested by the licensee or a person whose interest is adversely affected, the Commission will issue an Order designating the time and place of any hearing. If a hearing is held the issue to be considered at such hearing shall be whether this Order should be sustained.

Pursuant to 10 CFR 2.202(c)(2)(i), the licensee may, in addition to requesting a hearing, at the time the answer is filed or sooner, move the presiding officer to set aside the immediate effectiveness of the Order on the ground that the Order, including the need for immediate effectiveness, is not based on adequate evidence but on mere suspicion, unfounded allegations, or error.

In the absence of any request for hearing, or written approval of an extension of time in which to request a hearing, the provisions specified in Section III above shall be final twenty-five (25) days from the date of this Order without further order or proceedings. If an extension of time for requesting a hearing has been approved, the provisions specified in Section III shall be final when the extension expires if a hearing request has not been received.

AN ANSWER OR A REQUEST FOR HEARING SHALL NOT STAY THE IMMEDIATE EFFECTIVENESS OF THIS ORDER.

Dated this 2nd day of October, 2014.

For The Nuclear Regulatory Commission.
Brian E. Holian,
Acting Director, Office of Federal and State Materials and Environmental Management Programs.

Attachment 1: List of Applicable Materials Licensees

Redacted

Attachment 2: Table 1: Radionuclides of Concern

TABLE 1—RADIONUCLIDES OF CONCERN

Radionuclide	Quantity of concern ¹ (TBq)	Quantity of concern ² (Ci)
Am-241	0.6	16
Am-241/Be	0.6	16
Cf-252	0.2	5.4
Cm-244	0.5	14
Co-60	0.3	8.1
Cs-137	1	27
Gd-153	10	270
Ir-192	0.8	22
Pm-147	400	11,000
Pu-238	0.6	16
Pu-239/Be	0.6	16
Ra-226	0.4	11
Se-75	2	54
Sr-90 (Y-90)	10	270
Tm-170	200	5,400
Yb-169	3	81
Combinations of radioactive materials listed above ³	(⁴)	.....

¹ The aggregate activity of multiple, collocated sources of the same radionuclide should be included when the total activity equals or exceeds the quantity of concern.

² The primary values used for compliance with this Order are Terabecquerels (TBq). The curie (Ci) values are rounded to two significant figures for informational purposes only.

³ Radioactive materials are to be considered aggregated or collocated if breaching a common physical security barrier (e.g., a locked door at the entrance to a storage room) would allow access to the radioactive material or devices containing the radioactive material.

⁴ If several radionuclides are aggregated, the sum of the ratios of the activity of each source, i , of radionuclide, n , $A_{(i,n)}$, to the quantity of concern for radionuclide n , $Q_{(n)}$, listed for that radionuclide equals or exceeds one. [(aggregated source activity for radionuclide A) ÷ (quantity of concern for radionuclide A)] + [(aggregated source activity for radionuclide B) ÷ (quantity of concern for radionuclide B)] + etc. . . . ≥ 1

Guidance for Aggregation of Sources

NRC supports the use of the International Atomic Energy Association's (IAEA) source categorization methodology as defined in IAEA Safety Standards Series No. RS-G-1.9, "Categorization of Radioactive Sources," (2005) (see http://www-pub.iaea.org/MTCD/publications/PDF/Pub1227_web.pdf) and as endorsed by the agency's Code of Conduct for the Safety and Security of Radioactive Sources, January 2004 (see http://www-pub.iaea.org/MTCD/publications/PDF/Code-2004_web.pdf). The Code defines a three-tiered source categorization scheme. Category 1 corresponds to the largest source strength (equal to or greater than 100 times the quantity of concern values listed in Table 1.) and Category 3, the smallest (equal or exceeding one-tenth the quantity of concern values listed in Table 1.). Additional security measures apply to sources that are equal to or greater than the quantity of concern values listed in Table 1, plus aggregations of smaller sources that are equal to or greater than the quantities in Table 1. Aggregation only applies to sources that are collocated.

Licensees who possess individual sources in total quantities that equal or exceed the Table 1 quantities are required to implement additional security measures. Where there are many small (less than the quantity of concern values) collocated sources whose total aggregate activity equals or exceeds the Table 1 values, licensees are to implement additional security measures.

Some source handling or storage activities may cover several buildings, or several locations within specific buildings. The question then becomes, "When are sources considered collocated for purposes of aggregation?" For purposes of the additional controls, sources are considered collocated if breaching a single barrier (e.g., a locked door at the entrance to a storage room) would allow access to the sources. Sources behind an outer barrier should be aggregated separately from those behind an inner barrier (e.g., a locked source safe inside the locked storage room). However, if both barriers are simultaneously open, then all sources within these two barriers are considered to be collocated. This logic should be continued for other barriers within or behind the inner barrier.

The following example illustrates the point: A lockable room has sources stored in it. Inside the lockable room, there are two shielded safes with additional sources in them. Inventories are as follows:

The room has the following sources outside the safes: Cf-252, 0.12 TBq (3.2 Ci); Co-60, 0.18 TBq (4.9 Ci), and Pu-238, 0.3 TBq (8.1 Ci). Application of the unity rule yields: $(0.12 \div 0.2) + (0.18 \div 0.3) + (0.3 \div 0.6) = 0.6 + 0.6 + 0.5 = 1.7$. Therefore, the sources would require additional security measures.

Shielded safe #1 has a 1.9 TBq (51 Ci) Cs-137 source and a 0.8 TBq (22 Ci) Am-241 source. In this case, the sources would require additional security measures,

regardless of location, because they each exceed the quantities in Table 1.

Shielded safe #2 has two Ir-192 sources, each having an activity of 0.3 TBq (8.1 Ci). In this case, the sources would not require additional security measures while locked in the safe. The combined activity does not exceed the threshold quantity 0.8 TBq (22 Ci).

Because certain barriers may cease to exist during source handling operations (e.g., a storage location may be unlocked during periods of active source usage), licensees should, to the extent practicable, consider two modes of source usage—"operations" (active source usage) and "shutdown" (source storage mode). Whichever mode results in the greatest inventory (considering barrier status) would require additional security measures for each location.

Use the following method to determine which sources of radioactive material require implementation of the Additional Security Measures:

- Include any single source equal to or greater than the quantity of concern in Table 1
- Include multiple collocated sources of the same radionuclide when the combined quantity equals or exceeds the quantity of concern
- For combinations of radionuclides, include multiple collocated sources of different radionuclides when the aggregate quantities satisfy the following unity rule:

$[(\text{amount of radionuclide A}) \div (\text{quantity of concern of radionuclide A})] + [(\text{amount of radionuclide B}) \div (\text{quantity of concern of radionuclide B})] + \text{etc.} \dots \geq 1$

Attachment 3: Requirements for Service Provider Licensees Providing Written Verification Attesting to or Certifying the Trustworthiness and Reliability of Service Providers for Unescorted Access to Certain Radioactive Material at Customer Facilities, Including Requirements for Fingerprinting and Criminal History Checks

A. General Requirements

Licensees subject to the provisions of this Order shall comply with the requirements of this attachment. The term “certain radioactive material” means the radionuclides in quantities equal to or greater than the quantities listed in Attachment 2 to this Order.

1. The Licensee shall provide the customer's facility written verification attesting to or certifying the trustworthiness and reliability of an individual as a service provider only for employees the Licensee has approved in writing (see requirement A.3 below). The Licensee shall request unescorted access to certain radioactive material at customer licensee facilities only for approved service providers that require the unescorted access in order to perform a job duty.

2. The trustworthiness, reliability, and true identity of a service provider shall be determined based on a background investigation. The background investigation shall address at least the past three (3) years, and as a minimum, include fingerprinting and a Federal Bureau of Investigation (FBI) criminal history records check as required in Section B, verification of employment history, education, and personal references. If a service provider's employment has been less than the required three (3) year period, educational references may be used in lieu of employment history.

3. The Licensee shall document the basis for concluding that there is reasonable assurance that a service provider requiring unescorted access to certain radioactive material at a customer facility is trustworthy and reliable, and does not constitute an unreasonable risk for unauthorized use of the radioactive material. The Licensee shall maintain a list of service providers approved for unescorted access to certain radioactive material.

4. The Licensee shall retain documentation regarding the trustworthiness and reliability of approved service providers for three years after the individual no longer requires unescorted access to certain radioactive material associated with the Licensee's activities.

5. Each time the Licensee revises the list of approved service providers (see requirement 3 above), the Licensee shall retain the previous list for three (3) years after the revision.

6. The Licensee shall provide to a customer written certification for each service provider for whom unescorted access to certain radioactive material at the customer's facility

is required and requested. The written certification shall be dated and signed by the Reviewing Official. A new written certification is not required if an individual service provider returns to the customer facility within three years, provided the customer has retained the prior certification.

B. Specific Requirements Pertaining to Fingerprinting and Criminal History Records Checks

1. The Licensee shall fingerprint each service provider to be approved for unescorted access to certain radioactive materials following the procedures outlined in Enclosure 3 of the transmittal letter. The Licensee shall review and use the information received from the FBI identification and criminal history records check and ensure that the provisions contained in the subject Order and this attachment are satisfied.

2. The Licensee shall notify each affected individual that the fingerprints will be used to secure a review of his/her criminal history record and inform the individual of the procedures for revising the record or including an explanation in the record, as specified in the “Right to Correct and Complete Information” section of this attachment.

3. Fingerprints for unescorted access need not be taken if an employed individual (e.g., a Licensee employee, contractor, manufacturer, or supplier) is relieved from the fingerprinting requirement by 10 CFR 73.61, or any person who has been favorably decided by a U.S. Government program involving fingerprinting and an FBI identification and criminal history records check (e.g., National Agency Check, Transportation Worker Identification Credentials in accordance with 49 CFR Part 1572, Bureau of Alcohol Tobacco Firearms and Explosives background checks and clearances in accordance with 27 CFR Part 555, Health and Human Services security risk assessments for possession and use of select agents and toxins in accordance with 42 CFR Part 73, Hazardous Material security threat assessment for hazardous material endorsement to commercial drivers license in accordance with 49 CFR Part 1572, Customs and Border Protection's Free and Secure Trade Program⁵) within the last five (5) years, or any person who has an active federal security clearance (provided in the latter two cases that they make available the appropriate documentation⁶). Written confirmation from the Agency/employer which granted the federal security clearance or reviewed the FBI criminal history records

⁵ The FAST program is a cooperative effort between the Bureau of Customs and Border Protection and the governments of Canada and Mexico to coordinate processes for the clearance of commercial shipments at the U.S.-Canada and U.S.-Mexico borders. Participants in the FAST program, which requires successful completion of a background records check, may receive expedited entrance privileges at the northern and southern borders.

⁶ This documentation must allow the Reviewing Official to verify that the individual has fulfilled the unescorted access requirements of Section 149 of the AEA by submitting to fingerprinting and an FBI identification and criminal history records check.

results based upon a fingerprint identification check must be provided. The Licensee must retain this documentation for a period of three (3) years from the date the individual no longer requires unescorted access to certain radioactive material associated with the Licensee's activities.

4. All fingerprints obtained by the Licensee pursuant to this Order must be submitted to the Commission for transmission to the FBI.

5. The Licensee shall review the information received from the FBI and consider it, in conjunction with the trustworthiness and reliability requirements of Section A of this attachment, in making a determination whether to approve and certify the individual for unescorted access to certain radioactive materials.

6. The Licensee shall use any information obtained as part of a criminal history records check solely for the purpose of determining an individual's suitability for unescorted access to certain radioactive materials.

7. The Licensee shall document the basis for its determination whether to approve the individual for unescorted access to certain radioactive materials.

C. Prohibitions

A Licensee shall not base a final determination to not provide certification for unescorted access to certain radioactive material for an individual solely on the basis of information received from the FBI involving: an arrest more than one (1) year old for which there is no information of the disposition of the case, or an arrest that resulted in dismissal of the charge or an acquittal.

A Licensee shall not use information received from a criminal history check obtained pursuant to this Order in a manner that would infringe upon the rights of any individual under the First Amendment to the Constitution of the United States, nor shall the Licensee use the information in any way which would discriminate among individuals on the basis of race, religion, national origin, sex, or age.

D. Right To Correct and Complete Information

Prior to any final adverse determination, the Licensee shall make available to the individual the contents of any criminal records obtained from the FBI for the purpose of assuring correct and complete information. Written confirmation by the individual of receipt of this notification must be maintained by the Licensee for a period of one (1) year from the date of the notification.

If, after reviewing the record, an individual believes that it is incorrect or incomplete in any respect and wishes to change, correct, or update the alleged deficiency, or to explain any matter in the record, the individual may initiate challenge procedures. These procedures include either direct application by the individual challenging the record to the agency (i.e., law enforcement agency) that contributed the questioned information, or direct challenge as to the accuracy or completeness of any entry on the criminal history record to the Assistant Director, Federal Bureau of Investigation Identification Division, Washington, DC 20537-9700 (as set

forth in 28 CFR Part 16.30 through 16.34). In the latter case, the FBI forwards the challenge to the agency that submitted the data and requests that agency to verify or correct the challenged entry. Upon receipt of an Official communication directly from the agency that contributed the original information, the FBI Identification Division makes any changes necessary in accordance with the information supplied by that agency. The Licensee must provide at least ten (10) days for an individual to initiate an action challenging the results of an FBI identification and criminal history records check after the record is made available for his/her review. The Licensee may make a final unescorted access to certain radioactive material determination based upon the criminal history record only upon receipt of the FBI's ultimate confirmation or correction of the record. Upon a final adverse determination on unescorted access to certain radioactive material, the Licensee shall provide the individual its documented basis for denial. Unescorted access to certain radioactive material shall not be granted to an individual during the review process.

E. Protection of Information

1. Each Licensee who obtains a criminal history record on an individual pursuant to this Order shall establish and maintain a system of files and procedures for protecting the record and the personal information from unauthorized disclosure.

2. The Licensee may not disclose the record or personal information collected and maintained to persons other than the subject individual, his/her representative, or to those who have a need to access the information in performing assigned duties in the process of determining whether to verify the individual for unescorted access to certain radioactive material. No individual authorized to have access to the information may re-disseminate the information to any other individual who does not have a need-to-know.

3. The personal information obtained on an individual from a criminal history record check may be transferred to another Licensee if the Licensee holding the criminal history record check receives the individual's written request to re-disseminate the information contained in his/her file, and the gaining Licensee verifies information such as the individual's name, date of birth, social security number, sex, and other applicable physical characteristics for identification purposes.

4. The Licensee shall make criminal history records, obtained under this section, available for examination by an authorized representative of the NRC to determine compliance with the regulations and laws.

5. The Licensee shall retain all fingerprints and criminal history records from the FBI, or a copy if the individual's file has been transferred:

- a. For three (3) years after the individual no longer requires unescorted access, or
- b. for three (3) years after unescorted access to certain radioactive material was denied.

After the required three (3) year period, these documents shall be destroyed by a

method that will prevent reconstruction of the information in whole or in part.

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SECURITIES AND EXCHANGE COMMISSION

[Release No. 34-73594; File No. SR-BATS-2014-055]

Self-Regulatory Organizations; BATS Exchange, Inc.; Notice of Filing of a Proposed Rule Change, and Amendment No. 1 Thereto, To Establish a New Market Data Product Called the BATS One Feed

November 14, 2014.

Pursuant to Section 19(b)(1) of the Securities Exchange Act of 1934 ("Act"),¹ and Rule 19b-4 thereunder,² notice is hereby given that on October 30, 2014, BATS Exchange, Inc. (the "Exchange" or "BATS") filed with the Securities and Exchange Commission ("Commission") the proposed rule change as described in Items I and II below, which Items have been prepared by the Exchange. On November 13, 2014, the Exchange filed Amendment No. 1 to the proposed rule change. The Commission is publishing this notice to solicit comments on the proposed rule change, as amended, from interested persons.

I. Self-Regulatory Organization's Statement of the Terms of Substance of the Proposed Rule Change

The Exchange filed a proposal to establish a new market data product called the BATS One Feed.

The text of the proposed rule change is available at the Exchange's Web site at <http://www.directedge.com/>, at the principal office of the Exchange, and at the Commission's Public Reference Room.

II. Self-Regulatory Organization's Statement of the Purpose of, and Statutory Basis for, the Proposed Rule Change

In its filing with the Commission, the Exchange included statements concerning the purpose of and basis for the proposed rule change and discussed any comments it received on the proposed rule change. The text of these statements may be examined at the places specified in Item IV below. The Exchange has prepared summaries, set forth in Sections A, B, and C below, of the most significant parts of such statements.

¹ 15 U.S.C. 78s(b)(1).

² 17 CFR 240.19b-4.

A. Self-Regulatory Organization's Statement of the Purpose of, and Statutory Basis for, the Proposed Rule Change

1. Purpose

The Exchange proposes to establish a new market data product called the BATS One Feed. As described more fully below, the BATS One Feed is a data feed that will disseminate, on a real-time basis, the aggregate best bid and offer ("BBO") of all displayed orders for securities traded on BATS and its affiliated exchanges³ (collectively, the "BATS Exchanges") and for which the BATS Exchanges report quotes under the Consolidated Tape Association ("CTA") Plan or the Nasdaq/UTP Plan.⁴ The BATS One Feed will also contain the individual last sale information for BATS and each of its affiliated exchanges. In addition, the BATS One Feed will contain optional functionality which will enable recipients to elect to receive aggregated two-sided quotations from the BATS Exchanges for up to five (5) price levels.

The BATS One Feed offers market data vendors and purchasers a suitable alternative to the use of consolidated data where consolidated data are not required to be purchased or displayed. The Exchange proposes to offer the BATS One Feed voluntarily in response to demand from vendors, and subscribers that are interested in receiving the aggregate BBO and last sale information from the BATS Exchanges as part of a single data feed. Specifically, BATS One can be used by industry professionals and retail investors looking for a cost effective, easy-to-administer, high quality market data product with the characteristics of the BATS One Feed.

The Exchange believes that the BATS One Feed would provide high-quality, comprehensive last sale and BBO data for the BATS Exchanges in a unified

³ The Exchange's affiliated exchanges are EDGA Exchange, Inc. ("EDGA"), EDGX Exchange, Inc. ("EDGX"), and BATS Y-Exchange, Inc. ("BYX"). On January 31, 2014, Direct Edge Holdings LLC ("DE Holdings"), the former parent company of the Exchange and EDGA, completed its business combination with BATS Global Markets, Inc., the parent company of BATS and BYX. See Securities Exchange Act Release No. 71449 (January 30, 2014), 79 FR 6961 (February 5, 2014) (SR-EDGX-2013-43). Upon completion of the business combination, DE Holdings and BATS Global Markets, Inc. each became intermediate holding companies, held under a single new holding company. The new holding company, formerly named "BATS Global Markets Holdings, Inc.," changed its name to "BATS Global Markets, Inc."

⁴ The Exchange understands that each of the BATS Exchanges will separately file substantially similar proposed rule changes with the Commission to implement the BATS One Feed and its related fees.

view and respond to subscriber demand for such a product. The Exchange notes that an anticipated end user might use the BATS One Feed for purposes of identifying an indicative price of Tape A, B, and C securities through leveraging the depth and breadth of BATS Exchanges without having to purchase consolidated data and thus it would not be a latency-sensitive product. The Exchange does not anticipate that an end user would, or could, use the BATS One Feed data for purposes of making order-routing or trading decisions. Rather, the Exchange notes that under Rule 603 of Regulation NMS, the BATS One Feed could not be substituted for consolidated data in all instances in which consolidated data is used and certain subscribers would still be required to purchase consolidated data for trading and order-routing purposes.⁵

Finally, the proposed BATS One Feed would provide investors with new options for receiving market data and compete with similar market data products proposed by the New York Stock Exchange, Inc. ("NYSE") and those currently offered by the Nasdaq Stock Market LLC ("Nasdaq").⁶ The provision of new options for investors to receive market data was a primary goal of the market data amendments adopted by Regulation NMS.⁷

Description of the BATS One Feed

The BATS One Feed will contain the aggregate BBO of the BATS Exchanges for all securities that are traded on the BATS Exchanges and for which the BATS Exchanges report quotes under the CTA Plan or the Nasdaq/UTP Plan. The aggregate BBO would include the total size of all orders at the BBO

available on all BATS Exchanges.⁸ The BATS One Feed would also disseminate last sale information for each of the individual BATS Exchanges (collectively with the aggregate BBO, the "BATS One Summary Feed"). The last sale information will include the price, size, time of execution, and individual BATS Exchange on which the trade was executed. The last sale message will also include the cumulative number of shares executed on all BATS Exchanges for that trading day. The Exchange will disseminate the aggregate BBO of the BATS Exchanges and last sale information through the BATS One Feed no earlier than each individual BATS Exchange provides its BBO and last sale information to the processors under the CTA Plan or the Nasdaq/UTP Plan.

The BATS One Feed would also consist of Symbol Summary, Market Status, Retail Liquidity Identifier on behalf of BYX, Trading Status, and Trade Break messages. The Symbol Summary message will include the total executed volume across all BATS Exchanges. The Market Status message is disseminated to reflect a change in the status of one of the BATS Exchanges. For example, the Market Status message will indicate whether one of the BATS Exchanges is experiencing a systems issue or disruption and quotation or trade information from that market is not currently being disseminated via the BATS One Feed as part of the aggregated BBO. The Market Status message will also indicate where BATS Exchange is no longer experiencing a systems issue or disruption to properly reflect the status of the aggregated BBO.

The Retail Liquidity Identifier indicator message will be disseminated via the BATS One Feed on behalf of the BYX only pursuant to BYX's Retail Price Improvement ("RPI") Program.⁹ The Retail Liquidity Identifier indicates when RPI interest priced at least \$0.001 better than BYX's Protected Bid or Protected Offer for a particular security is available in the System. The

Exchange proposes to disseminate the Retail Liquidity Indicator via the BATS One Feed in the same manner as it is currently disseminated through consolidated data streams (i.e., pursuant to the Consolidated Tape Association Plan/Consolidated Quotation Plan, or CTA/CQ, for Tape A and Tape B securities, and the Nasdaq UTP Plan for Tape C securities) as well as through proprietary BYX data feeds. The Retail Liquidity Identifier will reflect the symbol and the side (buy or sell) of the RPI interest, but does not include the price or size of the RPI interest. In particular, like CQ and UTP quoting outputs, the BATS One Feed will include a field for codes related to the Retail Price Improvement Identifier. The codes indicate RPI interest that is priced better than BYX's Protected Bid or Protected Offer by at least the minimum level of price improvement as required by the Program.

The Trade Break message will indicate when an execution on a BATS Exchange is broken in accordance with the individual BATS Exchange's rules.¹⁰ The Trading Status message will indicate the current trading status of a security on each individual BATS Exchange. For example, a Trading Status message will be sent when a short sale price restriction is in effect pursuant to Rule 201 of Regulation SHO ("Short Sale Circuit Breaker"),¹¹ or the security is subject to a trading halt, suspension or pause declared by the listing market. A Trading Status message will be sent whenever a security's trading status changes.

Optional Aggregate Depth of Book. The BATS One Feed will also contain optional functionality which will enable recipients to receive two-sided quotations from the BATS Exchanges for five (5) price levels for all securities that are traded on the BATS Exchanges in addition to the BATS One Summary Feed ("BATS One Premium Feed"). For each price level on one of the BATS Exchanges, the BATS One Premium Feed option of the BATS One Feed will include a two-sided quote and the number of shares available to buy and sell at that particular price level.¹²

Implementation Date

The Exchange anticipates making available the BATS One feed as soon as

⁵ 17 CFR 242.603(c).

⁶ See Nasdaq Basic, <http://www.nasdaqtrader.com/Trader.aspx?id=NASDAQbasic> (last visited May 29, 2014) (data feed offering the BBO and Last Sale information for all U.S. exchange-listed securities based on liquidity within the Nasdaq market center, as well as trades reported to the FINRA/Nasdaq Trade Reporting Facility ("TRF")); Nasdaq NLS Plus, <http://www.nasdaqtrader.com/Trader.aspx?id=NLSplus> (last visited July 8, 2014) (data feed providing last sale data as well as consolidated volume from the following Nasdaq OMX markets for U.S. exchange-listed securities: Nasdaq, FINRA/Nasdaq TRF, Nasdaq OMX BX, and Nasdaq OMX PSX); Securities Exchange Act Release No. 72750 (August 4, 2014), 79 FR 46494 (August 8, 2014) (SR-NYSE-2014-40) (Notice of Filing of Proposed Rule Change Establishing the NYSE Best Quote & Trades ("BQT") Data Feed); <http://www.nyxdata.com/Data-Products/NYSE-Best-Quote-and-Trades> (last visited May 27, 2014) (data feed providing unified view of BBO and last sale information for the NYSE, NYSE Arca, and NYSE MKT).

⁷ See Securities Exchange Act Release No. 51808 (June 9, 2005), 70 FR 37496, at 37503 (June 29, 2005) (Regulation NMS Adopting Release).

⁸ The Exchange notes that quotations of odd lot size, which is generally less than 100 shares, are included in the total size of all orders at a particular price level in the BATS One Feed but are currently not reported by the BATS Exchanges to the consolidated tape.

⁹ For a description of BYX's RPI Program, see BYX Rule 11.24. See also Securities Exchange Act Release No. 68303 (November 27, 2012), 77 FR 71652 (December 3, 2012) (SR-BYX-2012-019) (Order Granting Approval of Proposed Rule Change, as Modified by Amendment No. 2, to Adopt a Retail Price Improvement Program); Securities Exchange Act Release No. 67734 (August 27, 2012), 77 FR 53242 (August 31, 2012) (SR-BYX-2012-019) (Notice of Filing of Proposed Rule Change to Adopt a Retail Price Improvement Program).

¹⁰ See, e.g., Exchange and EDGA Rule 11.13, Clearly Erroneous Executions, and BATS and BYX Rule 11.17, Clearly Erroneous Executions.

¹¹ 17 CFR 242.200(g); 17 CFR 242.201

¹² Recipients who do not elect to receive the BATS One Premium Feed will receive the aggregate BBO of the BATS Exchanges under the BATS Summary Feed, which, unlike the BATS Premium Feed, would not delineate the size available at the BBO on each individual BATS Exchange.

practicable after approval of the proposed rule change by the Commission and the effectiveness of a rule filing to establish the fees for BATS One.¹³

2. Statutory Basis

The Exchange believes that the proposed BATS One Feed is consistent with Section 6(b) of the Act,¹⁴ in general, and furthers the objectives of Section 6(b)(5) of the Act,¹⁵ in particular, in that it is 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 to protect investors and the public interest, and that it is not designed to permit unfair discrimination among customers, brokers, or dealers. This proposal is in keeping with those principles in that it promotes increased transparency through the dissemination of the BATS One Feed. The Exchange also believes this proposal is consistent with Section 6(b)(5) of the Act because it protects investors and the public interest and promotes just and equitable principles of trade by providing investors with new options for receiving market data as requested by market data vendors and purchasers that expressed an interest in exchange-only data for instances where consolidated data is no longer required to be purchased and displayed. The proposed rule change would benefit investors by facilitating their prompt access to real-time last sale information and best-bid-and-offer information contained in the BATS One Feed.

The Exchange also believes that the proposed rule change is consistent with Section 11(A) of the Act¹⁶ in that it supports (i) fair competition among brokers and dealers, among exchange markets, and between exchange markets and markets other than exchange markets and (ii) the availability to brokers, dealers, and investors of information with respect to quotations for and transactions in securities. Furthermore, the proposed rule change is consistent with Rule 603 of Regulation NMS,¹⁷ which provides that any national securities exchange that distributes information with respect to quotations for or transactions in an NMS stock do so on terms that are not unreasonably discriminatory.

In adopting Regulation NMS, the Commission granted self-regulatory organizations and broker-dealers increased authority and flexibility to offer new and unique market data to consumers of such data. It was believed that this authority would expand the amount of data available to users and consumers of such data and also spur innovation and competition for the provision of market data. The Exchange believes that the data products proposed herein are precisely the sort of market data products that the Commission envisioned when it adopted Regulation NMS. The Commission concluded that Regulation NMS—by lessening regulation of the market in proprietary data—would itself further the Act's goals of facilitating efficiency and competition:

[E]fficiency is promoted when broker-dealers who do not need the data beyond the prices, sizes, market center identifications of the NBBO and consolidated last sale information are not required to receive (and pay for) such data. The Commission also believes that efficiency is promoted when broker-dealers may choose to receive (and pay for) additional market data based on their own internal analysis of the need for such data.¹⁸

By removing “unnecessary regulatory restrictions” on the ability of exchanges to sell their own data, Regulation NMS advanced the goals of the Act and the principles reflected in its legislative history.

If the free market should determine whether proprietary data is sold to broker-dealers at all, it follows that the price at which such data is sold should be set by the market as well. The BATS One Feed is precisely the sort of market data product that the Commission envisioned when it adopted Regulation NMS.

The BATS One Feed would be distributed and purchased on a voluntary basis, in that neither the BATS Exchanges nor market data distributors are required by any rule or regulation to make this data available. Accordingly, distributors and users can discontinue use at any time and for any reason, including due to an assessment of the reasonableness of fees charged.

The Exchange believes that the proposed BATS One Feed will offer an alternative to the use of consolidated data products and proprietary data products offered by the NYSE and Nasdaq. Nasdaq Basic is a product that includes two feeds, QBBO, which provides BBO information for all U.S. exchange-listed securities on Nasdaq and NLS Plus, which provides last sale

data as well as consolidated volume from the following Nasdaq OMX markets for U.S. exchange-listed securities: Nasdaq, FINRA/Nasdaq TRF,¹⁹ Nasdaq OMX BX, and Nasdaq OMX PSX.²⁰ According to Nasdaq, seven vendors and more than 1,000 firms subscribe to Nasdaq Basic, including 9 out of 10 of the largest banks.²¹

Likewise, the NYSE has proposed NYSE BQT, which would include the BBO and last sale information for the NYSE, NYSE Arca, and NYSE MKT.²² The Exchange believes the BATS One Feed will offer a competitive alternative to the existing Nasdaq Basic product and the proposed NYSE product.

In addition, the proposal would not permit unfair discrimination because the product will be available to all of the Exchange's customers and market data vendors on an equivalent basis. In addition, any customer that wishes to purchase one or more of the individual data feeds offered by the BATS Exchanges would be able to do so.

In addition, the Exchange does not believe that the proposal would permit unfair discrimination among customers, brokers, or dealers and thus is consistent with the Act because the Exchange will be offering the product on terms that a competing vendor could offer a competing product. Specifically, the proposed data feed does not represent Exchange core data, but rather a new product that represents an aggregation and consolidation of existing, previously filed individual market data products of the BATS Exchanges. As such, a competing vendor could similarly obtain the

¹⁹ See Nasdaq Basic, <http://www.nasdaqtrader.com/Trader.aspx?id=NASDAQbasic> (last visited May 29, 2014) (data feed offering the BBO and Last Sale information for all U.S. exchange-listed securities based on liquidity within the Nasdaq market center, as well as trades reported to the FINRA/Nasdaq TRF).

²⁰ See Nasdaq NLS Plus, <http://www.nasdaqtrader.com/Trader.aspx?id=NLSplus> (last visited July 8, 2014) (data feed providing last sale data as well as consolidated volume from the following Nasdaq OMX markets for U.S. exchange-listed securities: Nasdaq, FINRA/Nasdaq TRF, Nasdaq OMX BX, and Nasdaq OMX PSX).

²¹ See Nasdaq Basic, Doing More with Less, available at <http://www.brainshark.com/nasdaqomx/vu?pi=zG8z33O6ozAgBpz0&tx=preview&preview=1> and <http://www.nasdaqtrader.com/Trader.aspx?id=NASDAQbasic#vendors>.

²² See Securities Exchange Act Release No. 72750 (August 4, 2014), 79 FR 46494 (August 8, 2014) (SR-NYSE-2014-40) (Notice of Filing of Proposed Rule Change Establishing the NYSE BQT Data Feed); <http://www.nyxdata.com/Data-Products/NYSE-Best-Quote-and-Trades> (last visited May 27, 2014) (data feed providing unified view of BBO and last sale information for the NYSE, NYSE Arca, and NYSE MKT).

¹³ The Exchange intends to file a separate proposal establishing the fees for BATS One.

¹⁴ 15 U.S.C. 78f.

¹⁵ 15 U.S.C. 78f(b)(5).

¹⁶ 15 U.S.C. 78k-1.

¹⁷ See 17 CFR 242.603.

¹⁸ See Securities Exchange Act Release No. 51808 (June 9, 2005), 70 FR 37496 (June 29, 2005) (File No. S7-10-04).

underlying data feeds and perform a similar aggregation and consolidation function to create the same data product with the same latency and cost as the Exchange.

The Exchange has taken into consideration its affiliated relationship with EDGA, EDGX, and BATS in its design of the BATS One Feed to assure that vendors would be able to offer a similar product on the same terms as the Exchange, both from the perspective of latency and cost. As discussed above, the Exchange proposes to offer the BATS One Feed voluntarily in response to demand from vendors, and subscribers that are interested in receiving the aggregate BBO and last sale information from the BATS Exchanges as part of a single data feed. Specifically, BATS One can be used by industry professionals and retail investors looking for a cost effective, easy-to-administer, high quality market data product with the characteristics of the BATS One Feed. The BATS One Feed would help protect a free and open market by providing vendors and subscribers additional choices in receiving this type of market data, thus promoting competition and innovation.

With respect to latency, the path for distribution by the Exchange of BATS One Feed would not be faster than a vendor that independently created a BATS One-like product could distribute its own product. As such, the proposed BATS One data feed is a data product that a competing vendor could create and sell without being in a disadvantaged position relative to the Exchange. In recognition that the Exchange is the source of its own market data and is affiliated with EDGX, EDGA and BATS, the Exchange represents that the source of the market data it would use to create the proposed BATS One Feed is available to other vendors. Specifically, the Exchange would use the following data feeds to create the proposed BATS One Feed, each of which is available to other vendors: the EdgeBook Depth feed for EDGX, the EdgeBook Depth feed for EDGA, the BYX PITCH Feed, and the BATS PITCH Feed. The BATS Exchanges will continue to make available these individual underlying feeds, and thus, the source of the market data it would use to create the proposed BATS One feed is the same as the source available to other vendors.

In order to create the BATS One Feed, the Exchange will receive the individual data feeds from each BATS Exchange and, in turn, aggregate and summarize that data to create the BATS One Feed. This is the same process a competing vendor would undergo should it create

a market data product similar to the BATS One Feed to distribute to its end users. In addition, the servers of most competing vendors are likely located in the same facilities as the Exchange, and, therefore, should receive the individual data feed from each BATS Exchange on or about the same time the Exchange would for it to create the BATS One Feed. Therefore, a competing vendor that is located in the same facilities as the Exchange could obtain the underlying data feeds from the BATS Exchanges on the same latency basis as the system that would be performing the aggregation and consolidation of the proposed BATS One Feed and provide the same type of product to its customers with the same latency they could achieve by purchasing the BATS One Feed from the Exchange. As such, the Exchange would not have any unfair advantage over competing vendors with respect to obtaining data from the individual BATS Exchanges, in fact, the technology supporting the BATS One Feed would similarly need to obtain the Exchange's data feed as well and even this connection would be on a level playing field with a competing vendor located at the same facility as the Exchange. The Exchange has designed the BATS One data feed so that it would not have a competitive advantage over a competing vendor with respect to the speed of access to those underlying data feeds. Likewise, the BATS One data feed would not have a speed advantage vis-à-vis competing vendors located in the same data center as the Exchange with respect to access to end user customers, whether those end users are also located in the same data center or not.

With regard to cost, the Exchange will file a separate rule filing with the Commission to establish fees for BATS One which would be designed to ensure that vendors could compete with the Exchange by creating a similar product as the BATS One Feed. The pricing the Exchange would charge for the BATS One Feed would not be lower than the cost to a vendor of receiving the underlying data feeds and of maintaining servers in the same facility as the Exchange to receive the data feeds with no greater latency than the Exchange. The pricing the Exchange would charge clients for the BATS One Feed compared to the cost of the individual data feeds from the BATS Exchanges would enable a vendor to receive the underlying data feeds and offer a similar product on a competitive basis and with no greater latency than the Exchange. The Distribution Fees that the Exchange intends to propose for the BATS One Feed would be equal to the

combined fee of subscribing to each individual data feed,²³ therefore, enabling a vendor to create a competing product based on the individual data feeds and charge its clients a fee that it believes reflects the value of the aggregation and consolidation function that is competitive with BATS One Feed pricing. The Exchanges believes that the incremental cost to a particular vendor for aggregation can be supported by the vendor's revenue opportunity and may be inconsequential if such vendor already has systems in place to perform these functions as part of creating its proprietary market data products and is able to allocate these costs over numerous products and customer relationships. For these reasons, the Exchange believes that vendors could readily offer a product similar to the BATS One Feed on a competitive basis at a similar cost.

B. Self-Regulatory Organization's Statement on Burden on Competition

The Exchange does not believe that the proposed rule change will result in any burden on competition that is not necessary or appropriate in furtherance of the purposes of the Act, as amended. Because other exchanges already offer similar products,²⁴ the Exchange's proposed BATS One Feed will enhance competition. Specifically, the BATS One Feed was developed to compete with similar market data products offered by Nasdaq and proposed by the NYSE.²⁵ The BATS One Feed will foster competition by providing an alternative market data product to those offered by Nasdaq and the NYSE. This proposed new data feed provides investors with new options for receiving market data, which was a primary goal of the market data amendments adopted by Regulation NMS.²⁶

The proposed BATS One Feed would enhance competition by offering a market data product that is designed to compete directly with similar products offered by the NYSE and Nasdaq. Nasdaq Basic is a product that includes two feeds, QBBO, which provides BBO information for all U.S. exchange-listed securities on Nasdaq and NLS Plus, which provides last sale data as well as

²³ The combined external distribution fee for the individual data feeds of the BATS Exchanges is \$12,500.00 per month. The monthly external distribution fee is \$2,500 per month for the EdgeBook Depth feed for the Exchange, \$2,500 per month for the EdgeBook Depth feed for EDGA, \$2,500 for the BYX PITCH Feed, and \$5,000 for the BATS PITCH Feed.

²⁴ See *supra* note 6.

²⁵ *Id.*

²⁶ See Securities Exchange Act Release No. 51808 (June 9, 2005), 70 FR 37496, at 37503 (June 29, 2005) (Regulation NMS Adopting Release).

consolidated volume from the following Nasdaq OMX markets for U.S. exchange-listed securities: Nasdaq, FINRA/Nasdaq TRF,²⁷ Nasdaq OMX BX, and Nasdaq OMX PSX.²⁸ Likewise, NYSE BQT includes BBO and last sale information for the NYSE, NYSE Arca, and NYSE MKT.²⁹ As a result, Nasdaq Basic and NYSE BQT comprise a significant view of the market on any given day and both include data from multiple trading venues. As the BATS Exchanges are consistently one of the top exchange operators by market share for U.S. equities trading, excluding opening and closing auction volume, the data included within the BATS One Feed will provide investors with an alternative to Nasdaq Basic and NYSE BQT and a new option for obtaining a broad market view, consistent with the primary goal of the market data amendments adopted by Regulation NMS.³⁰

The Exchange believes the BATS One Feed will further enhance competition by providing External Distributors with a data feed that allows them to more quickly and efficiently integrate into their existing products. Today, Distributors subscribe to various market data products offered by single exchanges and resell that data, either separately or in the aggregate, to their subscribers as part of their own market data offerings. Distributors may incur administrative costs when consolidating and augmenting the data to meet their subscriber's need. Consequently, many External Distributors will simply choose to not take the data because of the effort and cost required to aggregate data from separate feeds into their existing products. Those same Distributors have expressed interest in the BATS One

Feed so that they may easily incorporate aggregated or summarized BATS Exchange data into their own products without themselves incurring the costs of the repackaging and aggregating the data it would receive by subscribing to each market data product offered by the individual BATS Exchanges. The Exchange, therefore, believes that by providing market data that encompasses combined data from affiliated exchanges, the Exchange enables certain External Distributors with the ability to compete in the provision of similar content with other External Distributors, where they may not have done so previously if they were required to subscribe to the depth-of-book feeds from each individual BATS Exchange.

Although the Exchange considers the acceptance of the BATS One Feed by External Distributors as important to the success of the product, depending on their needs, External Distributors may choose not to subscribe to the BATS One Feed and may rather receive the BATS Exchange individual market data products and incorporate them into their specific market data products. For example, the BATS Premium Feed provides depth-of-book information for up to five price levels while each of the BATS Exchange's individual data feeds offer complete depth-of-book and are not limited to five price levels.³¹ Those subscribers who wish to view the complete depth-of-book from each individual BATS Exchange may prefer to subscribe to one or all of individual BATS Exchange depth-of-book data feeds instead of the BATS One Feed. The BATS One Feed simply provides another option for Distributors to choose from when selecting a product that meets their market data needs. Subscribers who seek a broader market view but do not need complete depth-of-book may select the BATS One Feed while subscribers that seek the complete depth-of-book information may subscribe to the depth-of-book feeds of each individual BATS Exchange.

Exchange Not the Exclusive Distributor of BATS One. Although the BATS Exchanges are the exclusive distributors of the individual data feeds from which certain data elements would be taken to create the BATS One Feed, the Exchange would not be the exclusive distributor of the aggregated and consolidated information that would compose the proposed BATS One Feed. Vendors would be able, if they chose, to create a data feed with the

same information as the BATS One Feed and distribute it to their clients on a level-playing field with respect to latency and cost as compared to the Exchange's proposed BATS One Feed. The pricing the Exchange would charge for the BATS One Feed would not be lower than the cost to a vendor of receiving the underlying data feeds and of maintaining servers in the same facility as the Exchange to receive the data feeds with no greater latency than the Exchange. In addition, the pricing the Exchange would charge clients for the BATS One Feed compared to the cost of the individual data feeds from the BATS Exchanges would enable a vendor to receive the underlying data feeds and offer a similar product on a competitive basis and with no greater latency than the Exchange.

Latency. The BATS One Feed is not intended to compete with similar products offered by External Distributors. Rather, it is intended to assist External Distributors in incorporating aggregated and summarized data from the BATS Exchanges into their own market data products that are provided to the end user. Therefore, Distributors will receive the data, who will, in turn, make available BATS One Feed to their end users, either separately or as incorporated into the various market data products they provide. As stated above, Distributors have expressed a desire for a product like the BATS One Feed so that they may easily incorporate aggregated or summarized BATS Exchange data into their own products without themselves incurring the administrative costs of repackaging and aggregating the data it would receive by subscribing to each market data product offered by the individual BATS Exchanges.

Notwithstanding the above, the Exchange believes that External Distributors may create a product similar to BATS One Feed based on the market data products offered by the individual BATS Exchanges with no greater latency than the Exchange. As discussed above, in order to create the BATS One Feed, the Exchange will receive the individual data feeds from each BATS Exchange and, in turn, aggregate and summarize that data to create the BATS One Feed. This is the same process an External Distributor would undergo should it create a market data product similar to the BATS One Feed to distribute to its end users. In addition, the servers of most External Distributors are likely located in the same facilities as the Exchange, and, therefore, should receive the individual data feed from each BATS Exchange on

²⁷ See Nasdaq Basic, <http://www.nasdaqtrader.com/Trader.aspx?id=NASDAQBasic> (last visited May 29, 2014) (data feed offering the BBO and Last Sale information for all U.S. exchange-listed securities based on liquidity within the Nasdaq market center, as well as trades reported to the FINRA/Nasdaq TRF).

²⁸ See Nasdaq NLS Plus, <http://www.nasdaqtrader.com/Trader.aspx?id=NLSplus> (last visited July 8, 2014) (data feed providing last sale data as well as consolidated volume from the following Nasdaq OMX markets for U.S. exchange-listed securities: Nasdaq, FINRA/Nasdaq TRF, Nasdaq OMX BX, and Nasdaq OMX PSX).

²⁹ See Securities Exchange Act Release No. 72750 (August 4, 2014), 79 FR 46494 (August 8, 2014) (SR-NYSE-2014-40) (Notice of Filing of Proposed Rule Change Establishing the NYSE BQT Data Feed); <http://www.nyse.com/Data-Products/NYSE-Best-Quote-and-Trades> (last visited May 27, 2014) (data feed providing unified view of BBO and last sale information for the NYSE, NYSE Arca, and NYSE MKT).

³⁰ See Securities Exchange Act Release No. 51808 (June 9, 2005), 70 FR 37496, at 37503 (June 29, 2005) (Regulation NMS Adopting Release).

³¹ See EDGA Rule 13.8, EDGX Rule 13.8, BZX Rule 11.22(a) and (c), and BYX Rule 11.22 (a) and (c) for a description of the depth of book feeds offered by each of the BATS Exchanges.

or about the same time the Exchange would for it to create the BATS One Feed.

The Exchange has designed the BATS One data feed so that it would not have a competitive advantage over a competing vendor with respect to the speed of access to those underlying data feeds. Likewise, the BATS One data feed would not have a speed advantage vis-à-vis competing vendors located in the same data center as the Exchange with respect to access to end user customers, whether those end users are also located in the same data center or not. Therefore, the Exchange believes that it will not incur any potential latency advantage that will result in any burden on competition that is not necessary or appropriate in furtherance of the purposes of the Act.

Cost. With regard to cost, the Exchange will file a separate rule filing with the Commission to establish fees for BATS One that would be designed to ensure that vendors could compete with the Exchange by creating a similar product as the BATS One Feed. The pricing the Exchange would charge clients for the BATS One Feed compared to the cost of the individual data feeds from the BATS Exchanges would enable a vendor to receive the underlying data feeds and offer a similar product on a competitive basis and with no greater latency than the Exchange. The Distribution Fees that the Exchange proposes for the BATS One Feed are equal to the combined fee of subscribing to each individual data feed,³² therefore, enabling a vendor to create a competing product based on the individual data feeds and charge its clients a fee that it believes reflects the value of the aggregation and consolidation function that is competitive with BATS One Feed pricing. The Exchanges believes that the incremental cost to a particular vendor for aggregation can be supported by the vendor's revenue opportunity and may be inconsequential if such vendor already has systems in place to perform these functions as part of creating its proprietary market data products and is able to allocate these costs over numerous products and customer relationships. For these reasons, the Exchange believes that vendors could readily offer a product similar to the BATS One Feed on a competitive basis at a similar cost.

C. Self-Regulatory Organization's Statement on Comments on the Proposed Rule Change Received From Members, Participants, or Others

A similar proposed rule change was initially filed with the Commission on July 18, 2014 and published for comment in the **Federal Register** on August 1, 2014.³³ The Commission received no comment letters in response to that proposed rule change. However, three letters were submitted to the Commission commenting on a companion BATS and EDGA filings that propose to offer the same feed.³⁴ On September 15, 2014, the Commission extended its review period until October 30, 2014.³⁵ On October 29, 2014, the Exchange withdrew the initial proposed rule change. The points raised by the Themis Letter and Shatto Letter are either not responsive to the issues raised in the proposal or aimed at existing elements of U.S. market structure that have been previously approved by the Commission.

The thrust of the SIFMA Letter is aimed at the proposed fees which are being removed from this proposed rule change and are to be filed with the Commission via a separate rule filing. While the SIFMA Letter correctly states that the Exchange has marketed the BATS One Feed since August 1, 2014, the SIFMA Letter incorrectly asserts that the Exchange has offered the BATS One Feed since that same date. All of the Exchange's marketing materials have included statements that the BATS One Feed's implementation was pending to SEC approval, and at no point has the Exchange offered the BATS One product for any use other than for testing and certification.

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

³³ See Securities Exchange Act Release No. 72690 (July 28, 2014), 79 FR 44929 (August 1, 2014) (SR-BYX-2014-011).

³⁴ But see Letter from Sal Arnuk and Joe Saluzzi, Themis Trading LLC, to Elizabeth M. Murphy, Secretary, Commission, dated August 21, 2014 (SR-BATS-2014-028) ("Themis Letter"); Letter from Ira D. Hammerman, General Counsel, SIFMA, to Kevin O'Neill, Deputy Secretary, Commission, dated August 22, 2014 (SR-BATS-2014-028) ("SIFMA Letter") (letters commenting on companion BATS filing that proposes to offer the same feed); and Letter from Suzanne Hamlet Shatto to the Commission, dated August 19, 2014 (SR-EDGA-2014-16) ("Shatto Letter") (letter commenting on companion EDGA filing that proposes to offer the same feed).

³⁵ See Securities Exchange Act Release No. 73102 (September 15, 2014), 79 FR 56419 (September 19, 2014).

up to 90 days of such date (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 Exchange consents, the Commission shall:

(A) By order approve or disapprove such 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. Please include File Number SR-BATS-2014-055 on the subject line.

Paper Comments

- Send paper comments in triplicate to Secretary, Securities and Exchange Commission, 100 F Street NE., Washington, DC 20549-1090.
- All submissions should refer to File Number SR-BATS-2014-055. 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 BATS. 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

³² See *supra* note 22.

available publicly. All submissions should refer to File Number SR-BATS-2014-055 and should be submitted on or before December 11, 2014].

For the Commission, by the Division of Trading and Markets, pursuant to delegated authority.³⁶

Kevin M. O'Neill,

Deputy Secretary.

[FR Doc. 2014-27442 Filed 11-19-14; 8:45 am]

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SECURITIES AND EXCHANGE COMMISSION

[Release No. 34-73596; File No. SR-EDGA-2014-25]

Self-Regulatory Organizations; EDGA Exchange, Inc.; Notice of Filing of a Proposed Rule Change, and Amendment No. 1 Thereto, To Establish a New Market Data Product Called the BATS One Feed

November 14, 2014.

Pursuant to Section 19(b)(1) of the Securities Exchange Act of 1934 ("Act"),¹ and Rule 19b-4 thereunder,² notice is hereby given that on October 30, 2014, EDGA Exchange, Inc. (the "Exchange" or "EDGA") filed with the Securities and Exchange Commission ("Commission") the proposed rule change as described in Items I and II below, which Items have been prepared by the Exchange. On November 13, 2014, the Exchange filed Amendment No. 1 to the proposed rule change. The Commission is publishing this notice to solicit comments on the proposed rule change, as amended, from interested persons.

I. Self-Regulatory Organization's Statement of the Terms of Substance of the Proposed Rule Change

The Exchange filed a proposal to establish a new market data product called the BATS One Feed.

The text of the proposed rule change is available at the Exchange's Web site at <http://www.directedge.com/>, at the principal office of the Exchange, and at the Commission's Public Reference Room.

II. Self-Regulatory Organization's Statement of the Purpose of, and Statutory Basis for, the Proposed Rule Change

In its filing with the Commission, the Exchange included statements concerning the purpose of and basis for the proposed rule change and discussed

any comments it received on the proposed rule change. The text of these statements may be examined at the places specified in Item IV below. The Exchange has prepared summaries, set forth in Sections A, B, and C below, of the most significant parts of such statements.

A. Self-Regulatory Organization's Statement of the Purpose of, and Statutory Basis for, the Proposed Rule Change

1. Purpose

The Exchange proposes to establish a new market data product called the BATS One Feed. As described more fully below, the BATS One Feed is a data feed that will disseminate, on a real-time basis, the aggregate best bid and offer ("BBO") of all displayed orders for securities traded on EDGA and its affiliated exchanges³ (collectively, the "BATS Exchanges") and for which the BATS Exchanges report quotes under the Consolidated Tape Association ("CTA") Plan or the Nasdaq/UTP Plan.⁴ The BATS One Feed will also contain the individual last sale information for EDGA and each of its affiliated exchanges. In addition, the BATS One Feed will contain optional functionality which will enable recipients to elect to receive aggregated two-sided quotations from the BATS Exchanges for up to five (5) price levels.

The BATS One Feed offers market data vendors and purchasers a suitable alternative to the use of consolidated data where consolidated data are not required to be purchased or displayed. The Exchange proposes to offer the BATS One Feed voluntarily in response to demand from vendors, and subscribers that are interested in receiving the aggregate BBO and last sale information from the BATS Exchanges as part of a single data feed. Specifically, BATS One can be used by

industry professionals and retail investors looking for a cost effective, easy-to-administer, high quality market data product with the characteristics of the BATS One Feed.

The Exchange believes that the BATS One Feed would provide high-quality, comprehensive last sale and BBO data for the BATS Exchanges in a unified view and respond to subscriber demand for such a product. The Exchange notes that an anticipated end user might use the BATS One Feed for purposes of identifying an indicative price of Tape A, B, and C securities through leveraging the depth and breadth of BATS Exchanges without having to purchase consolidated data and thus it would not be a latency-sensitive product. The Exchange does not anticipate that an end user would, or could, use the BATS One Feed data for purposes of making order-routing or trading decisions. Rather, the Exchange notes that under Rule 603 of Regulation NMS, the BATS One Feed could not be substituted for consolidated data in all instances in which consolidated data is used and certain subscribers would still be required to purchase consolidated data for trading and order-routing purposes.⁵

Finally, the proposed BATS One Feed would provide investors with new options for receiving market data and compete with similar market data products proposed by the New York Stock Exchange, Inc. ("NYSE") and those currently offered by the Nasdaq Stock Market LLC ("Nasdaq").⁶ The provision of new options for investors to receive market data was a primary goal of the market data amendments adopted by Regulation NMS.⁷

⁵ 17 CFR § 242.603(c).

⁶ See Nasdaq Basic, <http://www.nasdaqtrader.com/Trader.aspx?id=NASDAQbasic> (last visited May 29, 2014) (data feed offering the BBO and Last Sale information for all U.S. exchange-listed securities based on liquidity within the Nasdaq market center, as well as trades reported to the FINRA/Nasdaq Trade Reporting Facility ("TRF")); Nasdaq NLS Plus, <http://www.nasdaqtrader.com/Trader.aspx?id=NLSplus> (last visited July 8, 2014) (data feed providing last sale data as well as consolidated volume from the following Nasdaq OMX markets for U.S. exchange-listed securities: Nasdaq, FINRA/Nasdaq TRF, Nasdaq OMX BX, and Nasdaq OMX PSX); Securities Exchange Act Release No. 72750 (August 4, 2014), 79 FR 46494 (August 8, 2014) (SR-NYSE-2014-40) (Notice of Filing of Proposed Rule Change Establishing the NYSE Best Quote & Trades ("BQT") Data Feed); <http://www.nyse.com/Data-Products/NYSE-Best-Quote-and-Trades> (last visited May 27, 2014) (data feed providing unified view of BBO and last sale information for the NYSE, NYSE Arca, and NYSE MKT).

⁷ See Securities Exchange Act Release No. 51808 (June 9, 2005), 70 FR 37496, at 37503 (June 29, 2005) (Regulation NMS Adopting Release).

³ EDGA's affiliated exchanges are EDGX Exchange, Inc. ("EDGX"), BATS Exchange, Inc. ("BATS"), and BATS Y-Exchange, Inc. ("BYX"). On January 31, 2014, Direct Edge Holdings LLC ("DE Holdings"), the former parent company of the Exchange and EDGA, completed its business combination with BATS Global Markets, Inc., the parent company of BATS and BYX. See Securities Exchange Act Release No. 71449 (January 30, 2014), 79 FR 6961 (February 5, 2014) (SR-EDGX-2013-43). Upon completion of the business combination, DE Holdings and BATS Global Markets, Inc. each became intermediate holding companies, held under a single new holding company. The new holding company, formerly named "BATS Global Markets Holdings, Inc.," changed its name to "BATS Global Markets, Inc."

⁴ The Exchange understands that each of the BATS Exchanges will separately file substantially similar proposed rule changes with the Commission to implement the BATS One Feed and its related fees.

³⁶ 17 CFR 200.30-3(a)(12).

¹ 15 U.S.C. 78s(b)(1).

² 17 CFR 240.19b-4.

Description of the BATS One Feed

The BATS One Feed will contain the aggregate BBO of the BATS Exchanges for all securities that are traded on the BATS Exchanges and for which the BATS Exchanges report quotes under the CTA Plan or the Nasdaq/UTP Plan. The aggregate BBO would include the total size of all orders at the BBO available on all BATS Exchanges.⁸ The BATS One Feed would also disseminate last sale information for each of the individual BATS Exchanges (collectively with the aggregate BBO, the “BATS One Summary Feed”). The last sale information will include the price, size, time of execution, and individual BATS Exchange on which the trade was executed. The last sale message will also include the cumulative number of shares executed on all BATS Exchanges for that trading day. The Exchange will disseminate the aggregate BBO of the BATS Exchanges and last sale information through the BATS One Feed no earlier than each individual BATS Exchange provides its BBO and last sale information to the processors under the CTA Plan or the Nasdaq/UTP Plan.

The BATS One Feed would also consist of Symbol Summary, Market Status, Retail Liquidity Identifier on behalf of BYX, Trading Status, and Trade Break messages. The Symbol Summary message will include the total executed volume across all BATS Exchanges. The Market Status message is disseminated to reflect a change in the status of one of the BATS Exchanges. For example, the Market Status message will indicate whether one of the BATS Exchanges is experiencing a systems issue or disruption and quotation or trade information from that market is not currently being disseminated via the BATS One Feed as part of the aggregated BBO. The Market Status message will also indicate where BATS Exchange is no longer experiencing a systems issue or disruption to properly reflect the status of the aggregated BBO.

The Retail Liquidity Identifier indicator message will be disseminated via the BATS One Feed on behalf of the BYX only pursuant to BYX’s Retail Price Improvement (“RPI”) Program.⁹ The

Retail Liquidity Identifier indicates when RPI interest priced at least \$0.001 better than BYX’s Protected Bid or Protected Offer for a particular security is available in the System. The Exchange proposes to disseminate the Retail Liquidity Indicator via the BATS One Feed in the same manner as it is currently disseminated through consolidated data streams (i.e., pursuant to the Consolidated Tape Association Plan/Consolidated Quotation Plan, or CTA/CQ, for Tape A and Tape B securities, and the Nasdaq UTP Plan for Tape C securities) as well as through proprietary BYX data feeds. The Retail Liquidity Identifier will reflect the symbol and the side (buy or sell) of the RPI interest, but does not include the price or size of the RPI interest. In particular, like CQ and UTP quoting outputs, the BATS One Feed will include a field for codes related to the Retail Price Improvement Identifier. The codes indicate RPI interest that is priced better than BYX’s Protected Bid or Protected Offer by at least the minimum level of price improvement as required by the Program.

The Trade Break message will indicate when an execution on a BATS Exchange is broken in accordance with the individual BATS Exchange’s rules.¹⁰ The Trading Status message will indicate the current trading status of a security on each individual BATS Exchange. For example, a Trading Status message will be sent when a short sale price restriction is in effect pursuant to Rule 201 of Regulation SHO (“Short Sale Circuit Breaker”),¹¹ or the security is subject to a trading halt, suspension or pause declared by the listing market. A Trading Status message will be sent whenever a security’s trading status changes.

Optional Aggregate Depth of Book. The BATS One Feed will also contain optional functionality which will enable recipients to receive two-sided quotations from the BATS Exchanges for five (5) price levels for all securities that are traded on the BATS Exchanges in addition to the BATS One Summary Feed (“BATS One Premium Feed”). For each price level on one of the BATS Exchanges, the BATS One Premium Feed option of the BATS One Feed will include a two-sided quote and the

number of shares available to buy and sell at that particular price level.¹²

Implementation Date

The Exchange anticipates making available the BATS One feed as soon as practicable after approval of the proposed rule change by the Commission and the effectiveness of a rule filing to establish the fees for BATS One.¹³

2. Statutory Basis

The Exchange believes that the proposed BATS One Feed is consistent with Section 6(b) of the Act,¹⁴ in general, and furthers the objectives of Section 6(b)(5) of the Act,¹⁵ in particular, in that it is 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 to protect investors and the public interest, and that it is not designed to permit unfair discrimination among customers, brokers, or dealers. This proposal is in keeping with those principles in that it promotes increased transparency through the dissemination of the BATS One Feed. The Exchange also believes this proposal is consistent with Section 6(b)(5) of the Act because it protects investors and the public interest and promotes just and equitable principles of trade by providing investors with new options for receiving market data as requested by market data vendors and purchasers that expressed an interest in exchange-only data for instances where consolidated data is no longer required to be purchased and displayed. The proposed rule change would benefit investors by facilitating their prompt access to real-time last sale information and best-bid-and-offer information contained in the BATS One Feed.

The Exchange also believes that the proposed rule change is consistent with Section 11(A) of the Act¹⁶ in that it supports (i) fair competition among brokers and dealers, among exchange markets, and between exchange markets and markets other than exchange markets and (ii) the availability to brokers, dealers, and investors of information with respect to quotations

⁸ The Exchange notes that quotations of odd lot size, which is generally less than 100 shares, are included in the total size of all orders at a particular price level in the BATS One Feed but are currently not reported by the BATS Exchanges to the consolidated tape.

⁹ For a description of BYX’s RPI Program, see BYX Rule 11.24. See also Securities Exchange Act Release No. 68303 (November 27, 2012), 77 FR 71652 (December 3, 2012) (SR-BYX-2012-019) (Order Granting Approval of Proposed Rule Change,

as Modified by Amendment No. 2, to Adopt a Retail Price Improvement Program); Securities Exchange Act Release No. 67734 (August 27, 2012), 77 FR 53242 (August 31, 2012) (SR-BYX-2019-019) (Notice of Filing of Proposed Rule Change to Adopt a Retail Price Improvement Program).

¹⁰ See, e.g., Exchange and EDGA Rule 11.13, Clearly Erroneous Executions, and BATS and BYX Rule 11.17, Clearly Erroneous Executions.

¹¹ 17 CFR 242.200(g); 17 CFR 242.201.

¹² Recipients who do not elect to receive the BATS One Premium Feed will receive the aggregate BBO of the BATS Exchanges under the BATS Summary Feed, which, unlike the BATS Premium Feed, would not delineate the size available at the BBO on each individual BATS Exchange.

¹³ The Exchange intends to file a separate proposal establishing the fees for BATS One.

¹⁴ 15 U.S.C. 78f.

¹⁵ 15 U.S.C. 78f(b)(5).

¹⁶ 15 U.S.C. 78k-1.

for and transactions in securities. Furthermore, the proposed rule change is consistent with Rule 603 of Regulation NMS,¹⁷ which provides that any national securities exchange that distributes information with respect to quotations for or transactions in an NMS stock do so on terms that are not unreasonably discriminatory.

In adopting Regulation NMS, the Commission granted self-regulatory organizations and broker-dealers increased authority and flexibility to offer new and unique market data to consumers of such data. It was believed that this authority would expand the amount of data available to users and consumers of such data and also spur innovation and competition for the provision of market data. The Exchange believes that the data products proposed herein are precisely the sort of market data products that the Commission envisioned when it adopted Regulation NMS. The Commission concluded that Regulation NMS—by lessening regulation of the market in proprietary data—would itself further the Act's goals of facilitating efficiency and competition:

[E]fficiency is promoted when broker-dealers who do not need the data beyond the prices, sizes, market center identifications of the NBBO and consolidated last sale information are not required to receive (and pay for) such data. The Commission also believes that efficiency is promoted when broker-dealers may choose to receive (and pay for) additional market data based on their own internal analysis of the need for such data.¹⁸

By removing “unnecessary regulatory restrictions” on the ability of exchanges to sell their own data, Regulation NMS advanced the goals of the Act and the principles reflected in its legislative history.

If the free market should determine whether proprietary data is sold to broker-dealers at all, it follows that the price at which such data is sold should be set by the market as well. The BATS One Feed is precisely the sort of market data product that the Commission envisioned when it adopted Regulation NMS.

The BATS One Feed would be distributed and purchased on a voluntary basis, in that neither the BATS Exchanges nor market data distributors are required by any rule or regulation to make this data available. Accordingly, distributors and users can discontinue use at any time and for any

reason, including due to an assessment of the reasonableness of fees charged.

The Exchange believes that the proposed BATS One Feed will offer an alternative to the use of consolidated data products and proprietary data products offered by the NYSE and Nasdaq. Nasdaq Basic is a product that includes two feeds, QBBO, which provides BBO information for all U.S. exchange-listed securities on Nasdaq and NLS Plus, which provides last sale data as well as consolidated volume from the following Nasdaq OMX markets for U.S. exchange-listed securities: Nasdaq, FINRA/Nasdaq TRF,¹⁹ Nasdaq OMX BX, and Nasdaq OMX PSX.²⁰ According to Nasdaq, seven vendors and more than 1,000 firms subscribe to Nasdaq Basic, including 9 out of 10 of the largest banks.²¹

Likewise, the NYSE has proposed NYSE BQT, which would include the BBO and last sale information for the NYSE, NYSE Arca, and NYSE MKT.²² The Exchange believes the BATS One Feed will offer a competitive alternative to the existing Nasdaq Basic product and the proposed NYSE product.

In addition, the proposal would not permit unfair discrimination because the product will be available to all of the Exchange's customers and market data vendors on an equivalent basis. In addition, any customer that wishes to purchase one or more of the individual data feeds offered by the BATS Exchanges would be able to do so.

In addition, the Exchange does not believe that the proposal would permit unfair discrimination among customers, brokers, or dealers and thus is

consistent with the Act because the Exchange will be offering the product on terms that a competing vendor could offer a competing product. Specifically, the proposed data feed does not represent Exchange core data, but rather a new product that represents an aggregation and consolidation of existing, previously filed individual market data products of the BATS Exchanges. As such, a competing vendor could similarly obtain the underlying data feeds and perform a similar aggregation and consolidation function to create the same data product with the same latency and cost as the Exchange.

The Exchange has taken into consideration its affiliated relationship with EDGX, BYX, and BZX in its design of the BATS One Feed to assure that vendors would be able to offer a similar product on the same terms as the Exchange, both from the perspective of latency and cost. As discussed above, the Exchange proposes to offer the BATS One Feed voluntarily in response to demand from vendors, and subscribers that are interested in receiving the aggregate BBO and last sale information from the BATS Exchanges as part of a single data feed. Specifically, BATS One can be used by industry professionals and retail investors looking for a cost effective, easy-to-administer, high quality market data product with the characteristics of the BATS One Feed. The BATS One Feed would help protect a free and open market by providing vendors and subscribers additional choices in receiving this type of market data, thus promoting competition and innovation.

With respect to latency, the path for distribution by the Exchange of BATS One Feed would not be faster than a vendor that independently created a BATS One-like product could distribute its own product. As such, the proposed BATS One data feed is a data product that a competing vendor could create and sell without being in a disadvantaged position relative to the Exchange. In recognition that the Exchange is the source of its own market data and is affiliated with EDGX, BATS and BYX, the Exchange represents that the source of the market data it would use to create the proposed BATS One Feed is available to other vendors. Specifically, the Exchange would use the following data feeds to create the proposed BATS One Feed, each of which is available to other vendors: The Exchange's EdgeBook Depth feed, the EdgeBook Depth feed for EDGX, the BYX PITCH Feed, and the BATS PITCH Feed. The BATS Exchanges will continue to make

¹⁹ See Nasdaq Basic, <http://www.nasdaqtrader.com/Trader.aspx?id=NASDAQBasic> (last visited May 29, 2014) (data feed offering the BBO and Last Sale information for all U.S. exchange-listed securities based on liquidity within the Nasdaq market center, as well as trades reported to the FINRA/Nasdaq TRF).

²⁰ See Nasdaq NLS Plus, <http://www.nasdaqtrader.com/Trader.aspx?id=NLSplus> (last visited July 8, 2014) (data feed providing last sale data as well as consolidated volume from the following Nasdaq OMX markets for U.S. exchange-listed securities: Nasdaq, FINRA/Nasdaq TRF, Nasdaq OMX BX, and Nasdaq OMX PSX).

²¹ See Nasdaq Basic, Doing More with Less, available at <http://www.brainshark.com/nasdaqomx/vu?pi=zG8z33O6ozAgBpz0&tx=preview&preview=1> and <http://www.nasdaqtrader.com/Trader.aspx?id=NASDAQBasic#vendors>.

²² See Securities Exchange Act Release No. 72750 (August 4, 2014), 79 FR 46494 (August 8, 2014) (SR-NYSE-2014-40) (Notice of Filing of Proposed Rule Change Establishing the NYSE BQT Data Feed); <http://www.nyxdata.com/Data-Products/NYSE-Best-Quote-and-Trades> (last visited May 27, 2014) (data feed providing unified view of BBO and last sale information for the NYSE, NYSE Arca, and NYSE MKT).

¹⁷ See 17 CFR 242.603.

¹⁸ See Securities Exchange Act Release No. 51808 (June 9, 2005), 70 FR 37496 (June 29, 2005) (File No. S7-10-04).

available these individual underlying feeds, and thus, the source of the market data it would use to create the proposed BATS One feed is the same as the source available to other vendors.

In order to create the BATS One Feed, the Exchange will receive the individual data feeds from each BATS Exchange and, in turn, aggregate and summarize that data to create the BATS One Feed. This is the same process a competing vendor would undergo should it create a market data product similar to the BATS One Feed to distribute to its end users. In addition, the servers of most competing vendors are likely located in the same facilities as the Exchange, and, therefore, should receive the individual data feed from each BATS Exchange on or about the same time the Exchange would for it to create the BATS One Feed. Therefore, a competing vendor that is located in the same facilities as the Exchange could obtain the underlying data feeds from the BATS Exchanges on the same latency basis as the system that would be performing the aggregation and consolidation of the proposed BATS One Feed and provide the same type of product to its customers with the same latency they could achieve by purchasing the BATS One Feed from the Exchange. As such, the Exchange would not have any unfair advantage over competing vendors with respect to obtaining data from the individual BATS Exchanges, in fact, the technology supporting the BATS One Feed would similarly need to obtain the Exchange's data feed as well and even this connection would be on a level playing field with a competing vendor located at the same facility as the Exchange. The Exchange has designed the BATS One data feed so that it would not have a competitive advantage over a competing vendor with respect to the speed of access to those underlying data feeds. Likewise, the BATS One data feed would not have a speed advantage vis-à-vis competing vendors located in the same data center as the Exchange with respect to access to end user customers, whether those end users are also located in the same data center or not.

With regard to cost, the Exchange will file a separate rule filing with the Commission to establish fees for BATS One which would be designed to ensure that vendors could compete with the Exchange by creating a similar product as the BATS One Feed. The pricing the Exchange would charge for the BATS One Feed would not be lower than the cost to a vendor of receiving the underlying data feeds and of maintaining servers in the same facility as the Exchange to receive the data feeds with no greater latency than the

Exchange. The pricing the Exchange would charge clients for the BATS One Feed compared to the cost of the individual data feeds from the BATS Exchanges would enable a vendor to receive the underlying data feeds and offer a similar product on a competitive basis and with no greater latency than the Exchange. The Distribution Fees that the Exchange intends to propose for the BATS One Feed would be equal to the combined fee of subscribing to each individual data feed,²³ therefore, enabling a vendor to create a competing product based on the individual data feeds and charge its clients a fee that it believes reflects the value of the aggregation and consolidation function that is competitive with BATS One Feed pricing. The Exchanges believes that the incremental cost to a particular vendor for aggregation can be supported by the vendor's revenue opportunity and may be inconsequential if such vendor already has systems in place to perform these functions as part of creating its proprietary market data products and is able to allocate these costs over numerous products and customer relationships. For these reasons, the Exchange believes that vendors could readily offer a product similar to the BATS One Feed on a competitive basis at a similar cost.

B. Self-Regulatory Organization's Statement on Burden on Competition

The Exchange does not believe that the proposed rule change will result in any burden on competition that is not necessary or appropriate in furtherance of the purposes of the Act, as amended. Because other exchanges already offer similar products,²⁴ the Exchange's proposed BATS One Feed will enhance competition. Specifically, the BATS One Feed was developed to compete with similar market data products offered by Nasdaq and proposed by the NYSE.²⁵ The BATS One Feed will foster competition by providing an alternative market data product to those offered by Nasdaq and the NYSE. This proposed new data feed provides investors with new options for receiving market data, which was a primary goal of the market

data amendments adopted by Regulation NMS.²⁶

The proposed BATS One Feed would enhance competition by offering a market data product that is designed to compete directly with similar products offered by the NYSE and Nasdaq. Nasdaq Basic is a product that includes two feeds, QBBO, which provides BBO information for all U.S. exchange-listed securities on Nasdaq and NLS Plus, which provides last sale data as well as consolidated volume from the following Nasdaq OMX markets for U.S. exchange-listed securities: Nasdaq, FINRA/Nasdaq TRF,²⁷ Nasdaq OMX BX, and Nasdaq OMX PSX.²⁸ Likewise, NYSE BQT includes BBO and last sale information for the NYSE, NYSE Arca, and NYSE MKT.²⁹ As a result, Nasdaq Basic and NYSE BQT comprise a significant view of the market on any given day and both include data from multiple trading venues. As the BATS Exchanges are consistently one of the top exchange operators by market share for U.S. equities trading, excluding opening and closing auction volume, the data included within the BATS One Feed will provide investors with an alternative to Nasdaq Basic and NYSE BQT and a new option for obtaining a broad market view, consistent with the primary goal of the market data amendments adopted by Regulation NMS.³⁰

The Exchange believes the BATS One Feed will further enhance competition by providing External Distributors with a data feed that allows them to more quickly and efficiently integrate into their existing products. Today, Distributors subscribe to various market

²⁶ See Securities Exchange Act Release No. 51808 (June 9, 2005), 70 FR 37496, at 37503 (June 29, 2005) (Regulation NMS Adopting Release).

²⁷ See Nasdaq Basic, <http://www.nasdaqtrader.com/Trader.aspx?id=NASDAQBasic> (last visited May 29, 2014) (data feed offering the BBO and Last Sale information for all U.S. exchange-listed securities based on liquidity within the Nasdaq market center, as well as trades reported to the FINRA/Nasdaq TRF).

²⁸ See Nasdaq NLS Plus, <http://www.nasdaqtrader.com/Trader.aspx?id=NLSPlus> (last visited July 8, 2014) (data feed providing last sale data as well as consolidated volume from the following Nasdaq OMX markets for U.S. exchange-listed securities: Nasdaq, FINRA/Nasdaq TRF, Nasdaq OMX BX, and Nasdaq OMX PSX).

²⁹ See Securities Exchange Act Release No. 72750 (August 4, 2014), 79 FR 46494 (August 8, 2014) (SR-NYSE-2014-40) (Notice of Filing of Proposed Rule Change Establishing the NYSE BQT Data Feed); <http://www.nyse.com/Data-Products/NYSE-Best-Quote-and-Trades> (last visited May 27, 2014) (data feed providing unified view of BBO and last sale information for the NYSE, NYSE Arca, and NYSE MKT).

³⁰ See Securities Exchange Act Release No. 51808 (June 9, 2005), 70 FR 37496, at 37503 (June 29, 2005) (Regulation NMS Adopting Release).

²³ The combined external distribution fee for the individual data feeds of the BATS Exchanges is \$12,500.00 per month. The monthly external distribution fee is \$2,500 per month for the EdgeBook Depth feed for the Exchange, \$2,500 per month for the EdgeBook Depth feed for EDGA, \$2,500 for the BYX PITCH Feed, and \$5,000 for the BATS PITCH Feed.

²⁴ See *supra* note 6.

²⁵ *Id.*

data products offered by single exchanges and resell that data, either separately or in the aggregate, to their subscribers as part of the their own market data offerings. Distributors may incur administrative costs when consolidating and augmenting the data to meet their subscriber's need. Consequently, many External Distributors will simply choose to not take the data because of the effort and cost required to aggregate data from separate feeds into their existing products. Those same Distributors have expressed interest in the BATS One Feed so that they may easily incorporate aggregated or summarized BATS Exchange data into their own products without themselves incurring the costs of the repackaging and aggregating the data it would receive by subscribing to each market data product offered by the individual BATS Exchanges. The Exchange, therefore, believes that by providing market data that encompasses combined data from affiliated exchanges, the Exchange enables certain External Distributors with the ability to compete in the provision of similar content with other External Distributors, where they may not have done so previously if they were required to subscribe to the depth-of-book feeds from each individual BATS Exchange.

Although the Exchange considers the acceptance of the BATS One Feed by External Distributors as important to the success of the product, depending on their needs, External Distributors may choose not to subscribe to the BATS One Feed and may rather receive the BATS Exchange individual market data products and incorporate them into their specific market data products. For example, the BATS Premium Feed provides depth-of-book information for up to five price levels while each of the BATS Exchange's individual data feeds offer complete depth-of-book and are not limited to five price levels.³¹ Those subscribers who wish to view the complete depth-of-book from each individual BATS Exchange may prefer to subscribe to one or all of individual BATS Exchange depth-of-book data feeds instead of the BATS One Feed. The BATS One Feed simply provides another option for Distributors to choose from when selecting a product that meets their market data needs. Subscribers who seek a broader market view but do not need complete depth-of-book may select the BATS One Feed while subscribers that seek the complete

depth-of-book information may subscribe to the depth-of-book feeds of each individual BATS Exchanges.

Exchange Not the Exclusive Distributor of BATS One. Although the BATS Exchanges are the exclusive distributors of the individual data feeds from which certain data elements would be taken to create the BATS One Feed, the Exchange would not be the exclusive distributor of the aggregated and consolidated information that would compose the proposed BATS One Feed. Vendors would be able, if they chose, to create a data feed with the same information as the BATS One Feed and distribute it to their clients on a level-playing field with respect to latency and cost as compared to the Exchange's proposed BATS One Feed. The pricing the Exchange would charge for the BATS One Feed would not be lower than the cost to a vendor of receiving the underlying data feeds and of maintaining servers in the same facility as the Exchange to receive the data feeds with no greater latency than the Exchange. In addition, the pricing the Exchange would charge clients for the BATS One Feed compared to the cost of the individual data feeds from the BATS Exchanges would enable a vendor to receive the underlying data feeds and offer a similar product on a competitive basis and with no greater latency than the Exchange.

Latency. The BATS One Feed is not intended to compete with similar products offered by External Distributors. Rather, it is intended to assist External Distributors in incorporating aggregated and summarized data from the BATS Exchanges into their own market data products that are provided to the end user. Therefore, Distributors will receive the data, who will, in turn, make available BATS One Feed to their end users, either separately or as incorporated into the various market data products they provide. As stated above, Distributors have expressed a desire for a product like the BATS One Feed so that they may easily incorporate aggregated or summarized BATS Exchange data into their own products without themselves incurring the administrative costs of repackaging and aggregating the data it would receive by subscribing to each market data product offered by the individual BATS Exchanges.

Notwithstanding the above, the Exchange believes that External Distributors may create a product similar to BATS One Feed based on the market data products offered by the individual BATS Exchanges with no greater latency than the Exchange. As

discussed above, in order to create the BATS One Feed, the Exchange will receive the individual data feeds from each BATS Exchange and, in turn, aggregate and summarize that data to create the BATS One Feed. This is the same process an External Distributor would undergo should it create a market data product similar to the BATS One Feed to distribute to its end users. In addition, the servers of most External Distributors are likely located in the same facilities as the Exchange, and, therefore, should receive the individual data feed from each BATS Exchange on or about the same time the Exchange would for it to create the BATS One Feed.

The Exchange has designed the BATS One data feed so that it would not have a competitive advantage over a competing vendor with respect to the speed of access to those underlying data feeds. Likewise, the BATS One data feed would not have a speed advantage vis-à-vis competing vendors located in the same data center as the Exchange with respect to access to end user customers, whether those end users are also located in the same data center or not. Therefore, the Exchange believes that it will not incur any potential latency advantage that will result in any burden on competition that is not necessary or appropriate in furtherance of the purposes of the Act.

Cost. With regard to cost, the Exchange will file a separate rule filing with the Commission to establish fees for BATS One that would be designed to ensure that vendors could compete with the Exchange by creating a similar product as the BATS One Feed. The pricing the Exchange would charge clients for the BATS One Feed compared to the cost of the individual data feeds from the BATS Exchanges would enable a vendor to receive the underlying data feeds and offer a similar product on a competitive basis and with no greater latency than the Exchange. The Distribution Fees that the Exchange proposes for the BATS One Feed are equal to the combined fee of subscribing to each individual data feed,³² therefore, enabling a vendor to create a competing product based on the individual data feeds and charge its clients a fee that it believes reflects the value of the aggregation and consolidation function that is competitive with BATS One Feed pricing. The Exchanges believes that the incremental cost to a particular vendor for aggregation can be supported by the vendor's revenue opportunity and may be inconsequential if such vendor already has systems in place to perform

³¹ See EDGA Rule 13.8, EDGX Rule 13.8, BZX Rule 11.22(a) and (c), and BYX Rule 11.22 (a) and (c) for a description of the depth of book feeds offered by each of the BATS Exchanges.

³² See *supra* note 22.

these functions as part of creating its proprietary market data products and is able to allocate these costs over numerous products and customer relationships. For these reasons, the Exchange believes that vendors could readily offer a product similar to the BATS One Feed on a competitive basis at a similar cost.

C. Self-Regulatory Organization's Statement on Comments on the Proposed Rule Change Received From Members, Participants, or Others

A similar proposed rule change was initially filed with the Commission on July 14, 2014 and published for comment in the **Federal Register** on August 1, 2014.³³ The Commission received one comment letter in response to that proposed rule change.³⁴ In addition, two letters were submitted to the Commission commenting on a companion BZX filing that proposed to offer the same feed.³⁵ On September 15, 2014, the Commission extended its review period until October 30, 2014.³⁶ On October 29, 2014, the Exchange withdrew the initial proposed rule change. The points raised by the Themis Letter and Shatto Letter are either not responsive to the issues raised in the proposal or aimed at existing elements of U.S. market structure that have been previously approved by the Commission.

The thrust of the SIFMA Letter is aimed at the proposed fees which are being removed from this proposed rule change and are to be filed with the Commission via a separate rule filing. While the SIFMA Letter correctly states that the Exchange has marketed the BATS One Feed since August 1, 2014, the SIFMA Letter incorrectly asserts that the Exchange has offered the BATS One Feed since that same date. All of the Exchange's marketing materials have included statements that the BATS One Feed's implementation was pending to SEC approval, and at no point has the

Exchange offered the BATS One product for any use other than for testing and certification.

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 of such date (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 Exchange consents, the Commission shall:

- (A) By order approve or disapprove such 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. Please include File Number SR-EDGA-2014-25 on the subject line.

Paper Comments

- Send paper comments in triplicate to Secretary, Securities and Exchange Commission, 100 F Street NE., Washington, DC 20549-1090.
- All submissions should refer to File Number SR-EDGA-2014-25. 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 EDGA. 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-2014-25 and should be submitted on or before December 11, 2014.

For the Commission, by the Division of Trading and Markets, pursuant to delegated authority.³⁷

Kevin M. O'Neill,
Deputy Secretary.

[FR Doc. 2014-27445 Filed 11-19-14; 8:45 am]

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SECURITIES AND EXCHANGE COMMISSION

[Release No. 34-73593; File No. SR-NYSEMKT-2014-95]

Self-Regulatory Organizations; NYSE MKT LLC; Notice of Filing of Proposed Rule Change Amending Rule 13—Equities and Related Rules Governing Order Types and Modifiers To Clarify the Nature of Order Types

November 14, 2014.

Pursuant to Section 19(b)(1)¹ of the Securities Exchange Act of 1934 ("Act")² and Rule 19b-4 thereunder,³ notice is hereby given that, on October 31, 2014, NYSE MKT LLC ("Exchange" or "NYSE MKT") filed with the Securities and Exchange Commission ("Commission") the proposed rule change as described in Items I and II below, which Items have been prepared by the self-regulatory organization. The Commission is publishing this notice to solicit comments on the proposed rule change from interested persons.

I. Self-Regulatory Organization's Statement of the Terms of Substance of the Proposed Rule Change

The Exchange proposes to amend Rule 13—Equities and related rules governing order types and modifiers. The text of the proposed rule change is available on the Exchange's Web site at www.nyse.com, at the principal office of the Exchange, and at the Commission's Public Reference Room.

³⁷ 17 CFR 200.30-3(a)(12).

¹ 15 U.S.C. 78s(b)(1).

² 15 U.S.C. 78a.

³ 17 CFR 240.19b-4.

³³ See Securities Exchange Act Release No. 72689 (July 28, 2014), 79 FR 44917 (August 1, 2014) (SR-EDGA-2014-16).

³⁴ See Letter from Suzanne Hamlet Shatto to the Commission, dated August 19, 2014 (SR-EDGA-2014-16) ("Shatto Letter") (letter commenting on companion EDGA filing that proposes to offer the same feed).

³⁵ But see Letter from Sal Arnuk and Joe Saluzzi, Themis Trading LLC, to Elizabeth M. Murphy, Secretary, Commission, dated August 21, 2014 (SR-BATS-2014-028) ("Themis Letter"); Letter from Ira D. Hammerman, General Counsel, SIFMA, to Kevin O'Neill, Deputy Secretary, Commission, dated August 22, 2014 (SR-BATS-2014-028) ("SIFMA Letter") (letters commenting on companion BATS filing that proposes to offer the same feed).

³⁶ See Securities Exchange Act Release No. 73098 (September 15, 2014), 79 FR 56415 (September 19, 2014).

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

On June 5, 2014, in a speech entitled "Enhancing Our Market Equity Structure," Mary Jo White, Chair of the Securities and Exchange Commission ("SEC" or the "Commission") requested the equity exchanges to conduct a comprehensive review of their order types and how they operate in practice, and as part of this review, consider appropriate rule changes to help clarify the nature of their order types.⁴ Subsequent to the Chair's speech, the SEC's Division of Trading and Markets requested that the equity exchanges complete their reviews and submit any proposed rule changes by November 1, 2014.⁵

The Exchange notes that it continually assesses its rules governing order types and undertook on its own initiative a review of its rules related to order functionality to assure that its various order types, which have been adopted and amended over the years, accurately describe the functionality associated with those order types, and more specifically, how different order types may interact. As a result of that review, the Exchange submitted a proposed rule change to delete rules relating to functionality that was not available.⁶ In addition, over the years,

when filing rule changes to adopt new functionality, the Exchange has used those filings as an opportunity to streamline related existing rule text for which functionality has not changed.⁷

The Exchange is filing this proposed rule change to continue with its efforts to review and clarify its rules governing order types, as appropriate. Specifically, the Exchange notes that Rule 13—Equities ("Rule 13") is currently structured alphabetically, and does not include subsection numbering. The Exchange proposes to provide additional clarity to Rule 13 by re-grouping and re-numbering current rule text and making other non-substantive, clarifying changes. The proposed rule changes are not intended to reflect changes to functionality but rather to clarify Rule 13 to make it easier to navigate.⁸ In addition, the Exchange proposes to amend certain rules to remove references to functionality that is no longer operative.

Proposed Rule 13 Restructure

The Exchange proposes to re-structure Rule 13 to re-group existing order types and modifiers together along functional lines.

Proposed new subsection (a) of Rule 13 would set forth the Exchange's order types that are the foundation for all other order type instructions, i.e., the primary order types. The proposed primary order types would be:

- **Market Orders.** Rule text governing Market Orders would be moved to new Rule 13(a)(1). The Exchange proposes a non-substantive change to replace the reference to "Display Book" with a reference to "Exchange systems." The Exchange notes that it proposes to capitalize the term "Market Order" throughout new Rule 13.

- **Limit Orders.** Rule text governing Limit Orders would be moved to new Rule 13(a)(2). The Exchange proposes a non-substantive change to capitalize the term "Limit Order," and to shorten the definition in a manner that streamlines

the rule text without changing the meaning of the rule. The Exchange notes that it proposes to capitalize the term "Limit Order" throughout new Rule 13.

The Exchange notes that it proposes to delete the definition of "Auto Ex Order" because all orders entered electronically at the Exchange are eligible for automatic execution in accordance with Rules 1000–1004—Equities and therefore the Exchange does not believe that it needs to separately define an Auto Ex Order. Rather than maintain a separate definition, the Exchange proposes to specify in proposed Rule 13(a) that all orders entered electronically at the Exchange are eligible for automatic execution consistent with the terms of the order and Rules 1000–1004—Equities. The Exchange notes that Rule 13 currently provides for specified instructions for orders that may not execute on arrival, even if marketable, e.g., a Limit Order designated ALO, or may only be eligible to participate in an auction, accordingly, the terms of the order also control whether a marketable order would automatically execute upon arrival. The Exchange further proposes to specify that interest represented manually by Floor brokers, i.e., orally bid or offered at the point of sale on the Trading Floor, is not eligible for automatic execution. The Exchange notes that the order types currently specified in the definition for auto ex order are already separately defined in Rule 13 or Rule 70(a)(ii)—Equities (definition of G order).

Proposed new subsection (b) of Rule 13 would set forth the existing Time in Force Modifiers that the Exchange makes available for orders entered at the Exchange. The Exchange proposes to: (i) Move rule text governing Day Orders to new Rule 13(b)(1), without any substantive changes to the rule text; (ii) move rule text governing Good til Cancelled Orders to new Rule 13(b)(2), without any substantive changes to the rule text; and (iii) move rule text governing Immediate or Cancel Orders to new Rule 13(b)(3) without any changes to rule text. The Exchange notes that these time-in-force conditions are not separate order types, but rather are modifiers to orders. Accordingly, the Exchange proposes to re-classify them as modifiers and remove the references to the term "Order." In addition, as noted above, the Exchange proposes to capitalize the term "Limit Order" in Rule 13(b).

Proposed new subsection (c) of Rule 13 would specify the Exchange's existing Auction-Only Orders. In moving the rule text, the Exchange proposes the following non-substantive

⁴ See Mary Jo White, Chair, Securities and Exchange Commission, Speech at the Sandler, O'Neill & Partners, L.P. Global Exchange and Brokerage Conference (June 5, 2014) (available at www.sec.gov/News/Speech/Detail/Speech/1370542004312#.U5HL-fmw/jiw).

⁵ See Letter from James Burns, Deputy Director, Division of Trading and Markets, Securities and Exchange Commission, to Jeffrey C. Sprecher, Chief Executive Officer, Intercontinental Exchange, Inc., dated June 20, 2014.

⁶ See Securities Exchange Act Release No. 71898 (April 8, 2014), 79 FR 20957 (April 14, 2014) (SR-NYSEMKT-2014-27) (amending rules governing pegging interest to conform to functionality that is available at the Exchange).

⁷ See, e.g., Securities Exchange Act Release Nos. 68305 (Nov. 28, 2012), 77 FR 71853 (Dec. 4, 2012) (SR-NYSEMKT-2012-67) (amending rules governing pegging interest to, among other things, make non-substantive changes, including moving the rule text from Rule 70.26—Equities to Rule 13, to make the rule text more focused and streamlined) ("2012 Pegging Filing"), and 71175 (Dec. 23, 2013), 78 FR 79534 (Dec. 30, 2013) (SR-NYSEMKT-2013-25) (approval order for rule proposal that, among other things, amended Rule 70 governing Floor broker reserve e-quotes that streamlined the rule text without making substantive changes) ("2013 Reserve e-Quote Filing").

⁸ The Exchange notes that its affiliated exchanges, New York Stock Exchange LLC ("NYSE") and NYSE Arca, Inc. are proposing similar restructuring of their respective order type rules to group order types and modifiers. See SR-NYSE-2014-59 and SR-NYSEArca-2014-130.

changes: (i) Capitalize the terms “Limit Order,” “CO Order,” and “Market Order”; (ii) move the rule text for CO Orders to new Rule 13(c)(1); (iii) rename a “Limit ‘At the Close’ Order” as a “Limit-on-Close (LOC) Order” and move the rule text to new Rule 13(c)(2); (iv) rename a “Limit ‘On-the-Open’ Order” as a “Limit-on-Open (LOO) Order” and move the rule text to new Rule 13(c)(3); (v) rename a “Market ‘At-the-Close’ Order” as a “Market-on-Close (MOC) Order” and move the rule text to new Rule 13(c)(4); and (vi) rename a “Market ‘On-the-Open’ Order” as a “Market-on-Open (MOO) Order” and move the rule text to new Rule 13(c)(5).

Proposed new subsection (d) of Rule 13 would specify the Exchange’s existing orders that include instructions not to display all or a portion of the order. The order types proposed to be included in this new subsection are:

- **Mid-point Passive Liquidity (“MPL”) Orders.** Existing rule text governing MPL Orders would be moved to new Rule 13(d)(1) with non-substantive changes to capitalize the term Limit Order, update cross references, and refer to “Add Liquidity Only” as ALO, since ALO is now a separately defined term in new Rule 13(e)(1). The Exchange also proposes to clarify the rule text by deleting the term “including” from the phrase “[a]n MPL Order is not eligible for manual executions, including openings, re-openings, and closings,” because MPL Orders would not participate in an opening, re-opening, or closing that is effectuated electronically.⁹ The Exchange further proposes to make a substantive amendment to the rule text set forth in new Rule 13(d)(1)(C) to specify that Exchange systems would reject an MPL Order on entry if the Minimum Triggering Volume (“MTV”) is larger than the size of the order and would reject a request to partially cancel a resting MPL Order if it would result in the MTV being larger than the size of the order and make conforming changes to the existing rule text. The Exchange would continue to enforce an MTV restriction if the unexecuted portion of an MPL Order with an MTV is less than the MTV. The Exchange believes that this proposed rule change would prevent an entering firm from causing an MPL Order to have an MTV that is larger than the order, thereby bypassing contra-side interest that is larger than the size of the MPL Order.¹⁰ Finally, the

Exchange proposes to make a non-substantive change to new Rule 13(d)(1)(E) to replace the term “discretionary trade” with “d-Quote,” because d-Quotes are the only type of Exchange interest that is eligible to include discretionary pricing instructions.¹¹

- **Reserve Orders.** Existing rule text governing Reserve Orders would be moved to new Rule 13(d)(2) with non-substantive changes to capitalize the term “Limit Order” and hyphenate the term “Non-Displayed.” The Exchange proposes further non-substantive changes to the rule text governing Minimum Display Reserve Orders, which would be in new Rule 13(d)(2)(C), to clarify that a Minimum Display Reserve Order would participate in both automatic and manual executions. This is existing functionality relating to Minimum Display Reserve Orders¹² and the proposed rule text aligns with Rule 70(f)(i)—Equities governing Floor broker Minimum Display Reserve e-Quotes.¹³ Similarly, the Exchange proposes non-substantive changes to the rule text governing Non-Displayed Reserve Orders, which would be in new Rule 13(d)(2)(D), to clarify that a Non-Displayed Reserve Order would not participate in manual executions. This is existing functionality relating to Non-Displayed Reserve Orders¹⁴ and the

have an MTV larger than the size of the order, the Exchange will announce by Trader Update when this element of the proposed rule change will be implemented.

¹¹ See Rule 70.25—Equities (Discretionary Instructions for Bids and Offers Represented via Floor Broker Agency Interest Files (e-QuotesSM)).

¹² On October 1, 2008, the Commission approved the Exchange’s rule proposal to establish new membership, member firm conduct, and equity trading rules that were based on the existing NYSE rules to reflect that equities trading on the Exchange would be supported by the NYSE’s trading system. See Securities Exchange Act Release No. 58705 (Oct. 1, 2008), 73 FR 58995 (Oct. 8, 2008) (SR-Amex-2008-63) (approval order). Because the Exchange’s rules are based on the existing NYSE rules, the Exchange believes that pre-October 1, 2008 NYSE rule filings provide guidance concerning Exchange equity rules. See Securities Exchange Act Release No. 57688 (April 18, 2008), 73 FR 22194 at 22197 (April 24, 2008) (SR-NYSE-2008-30) (order approving NYSE rule change that, among other things, adopted new Reserve Order for which the non-displayed portion of the order is eligible to participate in manual executions) (“2008 Reserve Order Filing”).

¹³ See 2013 Reserve e-Quote Filing, *supra* n. 7.

¹⁴ See Securities Exchange Act Release No. 58845 (Oct. 24, 2008), 73 FR 64379 at 64384 (Oct. 29, 2008) (SR-NYSE-2008-46) (order approving the NYSE’s New Market Model, including adopting a Non-Displayed Reserve Order that would not be eligible to participate in manual executions); see also Securities Exchange Act Release No. 59022 (Nov. 26, 2008), 73 FR 73683 (Dec. 3, 2008) (SR-NYSEALTR-2008-10) (notice of filing and immediate effectiveness of rule change to conform Exchange equity rules with NYSE rules, including

proposed rule text aligns with Rule 70(f)(ii)—Equities governing Non-Display Reserve eQuotes excluded from the DMM.¹⁵ Finally, in proposed new Rule 13(d)(2)(E), the Exchange proposes to clarify that the treatment of reserve interest, which is available for execution only after all displayable interest at that price point has been executed, is applicable to all Reserve Orders, and is not limited to Non-Displayed Reserve Orders.¹⁶

Proposed new subsection (e) of Rule 13 would specify the Exchange’s existing order types that, by definition, do not route. The order types proposed to be included in this new subsection are:

- **Add Liquidity Only (“ALO”) Modifiers.** Existing rule text governing ALO modifiers would be moved to new Rule 13(e)(1) with non-substantive changes to capitalize the term “Limit Order” and update cross-references. Existing rule text that is being moved to new Rule 13(e)(1)(A) currently provides that Limit Orders designated ALO may participate in opens and closes, but that the ALO instructions would be ignored. Because Limit Orders designated ALO could also participate in re-openings, and the ALO instructions would similarly be ignored, the Exchange proposes to clarify new Rule 13(e)(1)(A) to provide that Limit Orders designated ALO could participate in openings, re-openings, and closings, but that the ALO instructions would be ignored.

- **Do Not Ship (“DNS”) Orders.** Existing rule text governing DNS Orders would be moved to new Rule 13(e)(2) with non-substantive changes to capitalize the term “Limit Order” and replace the reference to “Display Book” with a reference to “Exchange systems.”

- **Intermarket Sweep Order.** Existing rule text governing ISOs would be moved to new Rule 13(e)(3) with non-substantive changes to capitalize the term “Limit Order”, update cross-references, and replace the reference to “Display Book” with a reference to “Exchange’s book.”

Proposed new subsection (f) of Rule 13 would specify the Exchange’s other existing order instructions and modifiers, including:

- **Do Not Reduce (“DNR”) Modifier.** Existing rule text governing DNR Orders would be moved to new Rule 13(f)(1)

adopting NYSE New Market Model and related changes to adoption of a Non-Displayed Reserve Order).

¹⁵ See 2013 Reserve e-Quote Filing, *supra* n. 7.

¹⁶ See 2008 Reserve Order Filing *supra* n. 12 at 22196 (displayable portion of Reserve Order executed together with other displayable interest at a price point before executing with reserve portion of the order).

⁹ See Rule 123C.10—Equities (“Closings may be effectuated manually or electronically”) and Rule 123D(1)—Equities (“Openings may be effectuated manually or electronically”).

¹⁰ The Exchange notes that because of technology changes associated with rejecting MPL Orders that

with non-substantive changes to capitalize the terms “Limit Order” and “Stop Order.” In addition, the Exchange believes that because DNR instructions would be added to an order, DNR is more appropriately referred to as a modifier rather than as an order type.

- **Do Not Increase (“DNI”) Modifiers.** Existing rule text governing DNI Orders would be moved to new Rule 13(f)(2) with non-substantive changes to capitalize the terms “Limit Order” and “Stop Order.” In addition, the Exchange believes that because DNI instructions would be added to an order, DNI is more appropriately referred to as a modifier rather than as an order type.

- **Pegging Interest.** Existing rule text governing Pegging Interest and related subsections would be moved to new Rule 13(f)(3) with no changes to the existing rule text. The Exchange proposes to add rule text to new Rule 13(f)(3)(A)(iv)(a) to clarify the definition of “next best-priced available interest” in that Rule. Specifically, the Exchange has recently adopted non-displayed order types that are priced based on the PBBO, including MPL Orders, discussed above, and Retail Price Improvement Orders (“RPI”), defined in Rule 107C(a)(4)—Equities.¹⁷ Because Pegging Interest would not peg to either MPL Orders or RPIs, the Exchange proposes to clarify that for purposes of new Rule 13(f)(3)(A)(iv)(a), the term next available best-priced interest refers to the highest-(lowest-) priced buy (sell) interest within the specified price range of pegging interest to buy (sell), including displayable bids (offers), Non-Display Reserve Orders, Non-Display Reserve e-Quotes, odd-lot sized interest, and protected bids (offers) on away markets, but does not include non-displayed interest that is priced based on the PBBO. The Exchange notes that this would be applicable regardless of whether an MPL Order or RPI is marketable.¹⁸

- **Retail Modifiers.** Existing rule text governing Retail Modifiers and related

subsections would be moved to new Rule 13(f)(4) with non-substantive changes to update cross-references.

- **Self-Trade Prevention (“STP”) Modifier.** Existing rule text governing STP Modifiers and related subsections would be moved to new Rule 13(f)(5) with non-substantive changes to capitalize the terms “Limit Orders,” “Market Orders,” and “Stop Orders” and hyphenate the term “Self-Trade Prevention.”

- **Sell “Plus”—Buy “Minus” Instructions.** Existing rule text governing Sell “Plus”—Buy “Minus” Orders would be moved to new Rule 13(f)(6) with non-substantive changes to break the rule into subsections, capitalize the terms “Market Order,” “Limit Order,” and “Stop Order,” and replace the references to Display Book with references to Exchange systems. In addition, the Exchange proposes to reclassify this as an order instruction rather than as a separate order.

- **Stop Orders.** Existing rule text governing Stop Orders would be moved to new Rule 13(f)(7) with non-substantive changes to break the rule into subsections, capitalize the term “Market Order,” and replace references to “Exchange’s automated order routing system” with references to “Exchange systems.”

The Exchange proposes to make conforming changes to Rule 501(d)(2)—Equities relating to the list of order types that are not accepted for trading in UTP Securities by: (i) Replacing the term “Market or Limit at the Close” with “MOC or LOC”; (ii) replacing the term “At the Opening or At the Opening Only (“OPG”)” with “MOO or LOO”; (iii) deleting the GTX Order reference, as an order instruction that the Exchange no longer accepts; and (iv) updating the subsection rule numbering accordingly.

As part of the proposed restructure of Rule 13, the Exchange proposes to move existing rule text in Rule 13 governing the definition of “Routing Broker” to Rule 17(c), without any change to the rule text. The Exchange believes that Rule 17—Equities is a more logical location for the definition of Routing Broker because Rule 17(c)—Equities governs the operations of Routing Brokers.

In addition, the Exchange proposes to delete existing rule text in Rule 13 governing Not Held Orders and add rule text relating to not held instructions to supplementary material .20 to Rule 13. Supplementary material .20 to Rule 13 reflects obligations that members have in handling customer orders. Because not held instructions are instructions from a customer to a member or member

organization regarding the handling of an order, and do not relate to instructions accepted by Exchange systems for execution, the Exchange believes that references to not held instructions are better suited for this existing supplementary material.

Accordingly, the Exchange proposes to amend supplementary material .20 to Rule 13 to add that generally, an instruction that an order is “not held” refers to an unpriced, discretionary order voluntarily categorized as such by the customer and with respect to which the customer has granted the member or member organization price and time discretion. The Exchange believes that this proposed amendment aligns the definition of “not held” with guidance from the Financial Industry Regulatory Authority, Inc. (“FINRA”) and other markets regarding not held instructions.¹⁹ The Exchange notes that the existing Rule 13 text regarding how to mark a Not Held Order, e.g., “not held,” “disregard tape,” “take time,” etc., are outdated references regarding order marking between a customer and a member or member organization. All Exchange members and member organizations that receive customer orders are subject to Order Audit Trail System (“OATS”) obligations, consistent with Rule 7400—Equities Series and FINRA Rule 7400 Series, which require that order-handling instructions be documented in OATS. Among the order-handling instructions that can be captured in OATS is whether an order is not held.²⁰ The Exchange believes that these OATS-related obligations now govern how a member or member organization records order-handling instructions from a customer and therefore the terms currently set forth in Rule 13 relating to Not Held Orders are no longer necessary.

Finally, the Exchange proposes to amend Rule 70.25—Equities governing d-Quotes to clarify that certain functionality set forth in the Rule is no longer available. Specifically, Rule 70.25(c)(ii)—Equities currently provides

¹⁷ See Securities Exchange Act Release Nos. 71329 (Jan. 16, 2014), 79 FR 3904 (Jan. 23, 2014) (SR-NYSEMKT-2013-84) (approval order for the Exchange’s adoption of the MPL Order); and 67347 (July 3, 2012), 77 FR 40673 (July 10, 2012) (SR-NYSEAmex-2011-84) (approval order for the Exchange’s Retail Liquidity Program, which adopted the new RPI).

¹⁸ For example, assume the best protected bid (“PBB”) is \$10.00, the Exchange has pegging interest to buy at \$9.99, an MPL Order priced at \$9.98 and a Non-Displayed Reserve Order to buy priced at \$9.97. Because the PBB is outside the specified price range of the pegging interest to buy, it would peg to the next available best-priced interest, which in this scenario would be the Non-Displayed Reserve Order to buy priced at \$9.97. The pegging interest to buy would not peg to the MPL Order to buy priced at \$9.98.

¹⁹ See FINRA Regulatory Notice 11–29, Answer 3 (June 2011) (“Generally, a ‘not held’ order is an unpriced, discretionary order voluntarily categorized as such by the customer and with respect to which the customer has granted the firm price and time discretion.”). See also Definition of Market Not Held Order on Nasdaq.com Glossary of Stock Market Terms, available at <http://www.nasdaq.com/investing/glossary/m/market-not-held-order>.

²⁰ See FINRA OATS Frequently Asked Questions—Technical, at T21 (“An order submitted by a customer who gives the broker discretion as to the price and time of execution is denoted as a “Not Held” order.”), available at <http://www.finra.org/Industry/Compliance/MarketTransparency/OATS/FAQ/P085542>.

that a Floor broker may designate a maximum size of contra-side volume with which it is willing to trade using discretionary pricing instructions. Because this functionality is not available, the Exchange proposes to delete references to the maximum discretionary size parameter from Rules 70.25(c)(ii)—Equities and (c)(v)—Equities. In addition, the Exchange proposes to amend Rule 70.25(c)(iv)—Equities to clarify that the circumstances of when the Exchange would consider interest displayed by other market centers at the price at which a d-Quote may trade are not limited to determining when a d-Quote's minimum or maximum size range is met. Accordingly, the Exchange proposes to delete the clause "when determining if the d-Quote's minimum and/or maximum size range is met." The Exchange believes that the proposed changes to Rule 70.25(c)—Equities will provide clarity and transparency regarding the existing functionality relating to d-Quotes at the Exchange.

2. Statutory Basis

The proposed rule change is consistent with Section 6(b) of the Securities Exchange Act of 1934 (the "Act"),²¹ in general, and furthers the objectives of Section 6(b)(5),²² 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. Specifically, the Exchange believes that the proposed restructuring of Rule 13, to group existing order types to align by functionality, would remove impediments to and perfect the mechanism of a free and open market by ensuring that members, regulators, and the public can more easily navigate the Exchange's rulebook and better understand the order types available for trading on the Exchange. In addition, the Exchange believes that the proposed revisions to Rule 13 and related conforming changes to Rule 501(d)(2)—Equities promote clarity regarding existing functionality that has been approved in prior rule filings, but which may not have been codified in rule

text.²³ Moreover, the Exchange believes that moving rule text defining a Routing Broker to Rule 17—Equities represents a more logical location for such definition, thereby making it easier for market participants to navigate Exchange rules. Likewise, the Exchange believes the proposed changes to "Not Held Order," to move it to supplementary material .20 to Rule 13 and revise the rule text to conform with guidance from FINRA and OATS requirements, would remove impediments to and perfect the mechanism of a free and open market and a national market system by applying a uniform definition of not held instructions across multiple markets, thereby reducing the potential for confusion regarding the meaning of not held instructions.

The Exchange further believes that the proposed amendment regarding MPL Orders to reject both MPL Orders with an MTV larger than the size of the order and instructions to partially cancel an MPL Order that would result in an MTV larger than the size of the order would remove impediments to and perfect the mechanism of a free and open market and national market system in general because it could potentially reduce the ability of a member organization from using MPL Orders to bypass contra-side interest that may be larger than the size of the MPL Order.

Finally, the Exchange believes that the proposed changes to Rule 70.25(c)—Equities would remove impediments to and perfect the mechanism of a free and open market and national market system in general because it assures that the Exchange's rules align with the existing functionality available at the Exchange for d-Quotes.

B. Self-Regulatory Organization's Statement on Burden on Competition

The Exchange does not believe that the proposed rule change will impose any burden on competition that is not necessary or appropriate in furtherance of the purposes of the Act. The proposed change is not designed to address any competitive issue but rather would re-structure Rule 13 and remove rule text that relates to functionality that is no longer operative, thereby reducing confusion and making the Exchange's rules easier to navigate.

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 up to 90 days of such date (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.

IV. Solicitation of Comments

Interested persons are invited to submit written data, views, and arguments concerning the foregoing, including whether the proposed rule change is consistent with the Act. Comments may be submitted by any of the following methods:

Electronic Comments

- Use the Commission's Internet comment form (<http://www.sec.gov/rules/sro.shtml>); or
- Send an email to rule-comments@sec.gov. Please include File Number SR-NYSEMKT-2014-95 on the subject line.

Paper Comments

- Send paper comments in triplicate to Secretary, Securities and Exchange Commission, 100 F Street NE., Washington, DC 20549-1090.

All submissions should refer to File Number SR-NYSEMKT-2014-95. 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

²¹ 15 U.S.C. 78f(b).

²² 15 U.S.C. 78f(b)(5).

²³ See *supra* nn. 12–17.

provisions of 5 U.S.C. 552, will be available for Web site viewing and printing in the Commission's Public Reference Room, 100 F Street NE., Washington, DC 20549, on official business days between the hours of 10:00 a.m. and 3:00 p.m. Copies of such filing also will be available for inspection and copying at the principal office of the Exchange. All comments received will be posted without change; the Commission does not edit personal identifying information from submissions. You should submit only information that you wish to make available publicly. All submissions should refer to File Number SR-NYSEMKT-2014-95 and should be submitted on or before December 11, 2014.

For the Commission, by the Division of Trading and Markets, pursuant to delegated authority.²⁴

Kevin M. O'Neill,
Deputy Secretary.

[FR Doc. 2014-27441 Filed 11-19-14; 8:45 am]

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SECURITIES AND EXCHANGE COMMISSION

[Release No. 34-73608; File No. SR-ICEEU-2014-19]

Self-Regulatory Organizations; ICE Clear Europe Limited; Notice of Filing and Immediate Effectiveness of a Proposed Rule Change to Finance Procedures

November 14, 2014.

Pursuant to Section 19(b)(1) of the Securities Exchange Act of 1934 ("Act"),¹ and Rule 19b-4 thereunder,² notice is hereby given that on November 6, 2014, ICE Clear Europe Limited ("ICE Clear Europe" or "the Clearing House") filed with the Securities and Exchange Commission ("Commission") the proposed rule change described in Items I, II and III below, which Items have been primarily prepared by ICE Clear Europe. ICE Clear Europe filed the proposal pursuant to Section 19(b)(3)(A) of the Act,³ and Rule 19b-4(f)(4)(ii) thereunder,⁴ so that the proposal was effective upon filing with the Commission. The Commission is publishing this notice to solicit comments on the proposed rule change from interested persons.

I. Self-Regulatory Organization's Statement of the Terms of Substance of the Proposed Rule Change

The principal purpose of the proposed changes is to facilitate the use by F&O Clearing Members of an additional triparty collateral service provider.

II. Self-Regulatory Organization's Statement of the Purpose of, and Statutory Basis for, the Proposed Rule Change

In its filing with the Commission, ICE Clear Europe 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. ICE Clear Europe 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

1. Purpose

The purpose of the amendments is to modify the Finance Procedures to appoint Clearstream Banking as an additional triparty collateral service provider in addition to Euroclear Bank, which currently acts as the sole service provider. Clearstream Banking will only serve as a triparty collateral service provider for Original Margin provided in respect of F&O Contracts.

Specifically, changes are made throughout paragraph 3 of the Finance Procedures to add a reference to Clearstream Banking and to remove references to Euroclear Bank as the sole triparty collateral service provider, as appropriate. Paragraph 3.1 has been revised to designate Clearstream Banking as an additional triparty collateral service provider, solely with respect to Original Margin provided in respect of F&O Contracts. Paragraph 3.2 has been revised to reflect that there are two triparty collateral service providers, and to refer to equivalent documentation that may be required by Clearstream Banking as well as Euroclear Bank. Paragraph 3.9 has been revised to indicate that the Clearing House will provide to Clearing Members the relevant account details for the Clearing House's account at each triparty collateral service provider. Revised paragraph 3.9 also provides that the Clearing House will specify relevant details of the manner in which a Clearing Member may use a pledged

collateral arrangement in connection with a triparty collateral account. Current paragraph 3.10, which addressed pledged collateral arrangements only with Euroclear, has been removed as unnecessary. Remaining subparagraphs in paragraph 3 have been renumbered accordingly.

2. Statutory Basis

ICE Clear Europe believes that the proposed changes are consistent with the requirements of Section 17A of the Act⁵ and the regulations thereunder applicable to it. Section 17A(b)(3)(F) of the Act⁶ requires, among other things, that the rules of a clearing agency be designed to promote the prompt and accurate clearance and settlement of securities transactions and, to the extent applicable, derivative agreements, contracts, and transactions and to assure the safeguarding of securities and funds which are in the custody or control of the clearing agency or for which it is responsible.

The proposed amendments are intended to extend the Clearing House's existing triparty collateral service to allow optional use by Clearing Members of Clearstream Banking as an additional triparty collateral service provider with respect to Original Margin for F&O Contracts. The amendments do not otherwise change the substantive terms of the service. ICE Clear Europe views Clearstream Banking as substantially similar to Euroclear, the current service provider, from an operational and risk perspective and otherwise in terms of the safeguarding of funds and securities. As a result, ICE Clear Europe believes that the proposed changes will not adversely affect the safeguarding of securities or funds in the custody or control of ICE Clear Europe or for which it is responsible, and are therefore consistent with the requirements of Section 17A(b)(3)(F).⁷

B. Self-Regulatory Organization's Statement on Burden on Competition

ICE Clear Europe does not believe the proposed amendments would have any impact, or impose any burden, on competition not necessary or appropriate in furtherance of the purposes of the Act. The proposed changes will provide additional flexibility to F&O Clearing Members by permitting the use, on a voluntary basis, of an alternative triparty collateral service provider. The changes will otherwise not affect the terms or conditions of any cleared contract or the

²⁴ 17 CFR 200.30-3(a)(12).

¹ 15 U.S.C. 78s(b)(1).

² 17 CFR 240.19b-4.

³ 15 U.S.C. 78s(b)(3)(A).

⁴ 17 CFR 240.19b-4(f)(4)(iii).

⁵ 15 U.S.C. 78q-1.

⁶ 15 U.S.C. 78q-1(b)(3)(F).

⁷ 15 U.S.C. 78q-1(b)(3)(F).

standards or requirements for participation in or use of the Clearing House. Accordingly, the changes should not, in the Clearing House's view, affect the availability of clearing, access to clearing services or the costs of clearing for clearing members or other market participants.

C. Self-Regulatory Organization's Statement on Comments on the Proposed Rule Change Received From Members, Participants or Others

Written comments relating to the proposed changes to the rules have not been solicited or received. ICE Clear Europe will notify the Commission of any written comments received by ICE Clear Europe.

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)⁸ of the Act and Rule 19b-4(f)(4)(ii)⁹ thereunder because it effects a change in an existing service of a registered clearing agency that primarily affects the operations of the clearing agency with respect to products that are not securities, including futures that are not security futures, swaps that are not security-based swaps or mixed swaps, and forwards that are not security forwards, and does not significantly affect any securities clearing operations of the clearing agency or any rights or obligations of the clearing agency with respect to securities clearing or persons using such securities clearing service, within the meaning of Rule 19b-4(f)(4)(ii).¹⁰ At any time within 60 days of the filing of the proposed rule change, the Commission summarily may temporarily suspend such rule change if it appears to the Commission that such action is necessary or appropriate in the public interest, for the protection of investors, or otherwise in furtherance of the purposes of the Act.

IV. Solicitation of Comments

Interested persons are invited to submit written data, views, and arguments concerning the foregoing, including whether the proposed rule change is consistent with the Act. Comments may be submitted by any of the following methods:

Electronic Comments

- Use the Commission's Internet comment form (<http://www.sec.gov/rules/sro.shtml>) or

- Send an email to rule-comments@sec.gov. Please include File Number SR-ICEEU-2014-19 on the subject line.

Paper Comments

- Send paper comments in triplicate to Secretary, Securities and Exchange Commission, 100 F Street NE., Washington, DC 20549-1090.

All submissions should refer to File Number SR-ICEEU-2014-19. This file number should be included on the subject line if email is used. To help the Commission process and review your comments more efficiently, please use only one method. The Commission will post all comments on the Commission's Internet Web site (<http://www.sec.gov/rules/sro.shtml>). Copies of the submission, all subsequent amendments, all written statements with respect to the proposed rule change that are filed with the Commission, and all written communications relating to the proposed rule change between the Commission and any person, other than those that may be withheld from the public in accordance with the provisions of 5 U.S.C. 552, will be available for Web site viewing and printing in the Commission's Public Reference Room, 100 F Street NE., Washington, DC 20549, on official business days between the hours of 10:00 a.m. and 3:00 p.m. Copies of such filings will also be available for inspection and copying at the principal office of ICE Clear Europe and on ICE Clear Europe's Web site at <https://www.theice.com/clear-europe/regulation#rule-filings>.

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-ICEEU-2014-19 and should be submitted on or before December 11, 2014.

For the Commission, by the Division of Trading and Markets, pursuant to delegated authority.¹¹

Kevin M. O'Neill,

Deputy Secretary.

[FR Doc. 2014-27453 Filed 11-19-14; 8:45 am]

BILLING CODE 8011-01-P

SECURITIES AND EXCHANGE COMMISSION

[Release No. 34-73599; File No. SR-OC-2014-05]

Self-Regulatory Organizations; OneChicago, LLC; Notice of Filing of Proposed Rule Change To Expand the Trading Hours for Bilateral Block Trades and Bilateral EFP Trades

November 14, 2014.

Pursuant to Section 19(b)(7) of the Securities Exchange Act of 1934 (the "Act"),¹ notice is hereby given that on October 23, 2014, OneChicago, LLC ("OneChicago," "OCX," or the "Exchange") filed with the Securities and Exchange Commission ("SEC" or "Commission") the proposed rule change 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. OneChicago has also filed this rule change with the Commodity Futures Trading Commission ("CFTC"). OneChicago filed a written certification with the CFTC under Section 5c(c) of the Commodity Exchange Act ("CEA") on October 23, 2014.

I. Self-Regulatory Organization's Description of the Proposed Rule Change

OCX is proposing to expand its Trading Hours for bilateral block trades and bilateral Exchange of Future for Physical ("EFP") trades. Currently, bilateral block trades and bilateral EFP trades are permitted to be reported to the Exchange beginning at 8:00 a.m. Central Time ("CT") until 4:00 p.m. CT. Under the proposed change, market participants will be permitted to report these bilateral trades beginning at 7:00 a.m. CT. The closing time for reporting bilateral block trades and bilateral EFP trades will remain unchanged at 4:00 p.m. CT.

The text of the proposed rule change is attached as *Exhibit 4* to the filing submitted by the Exchange but is not attached to the published notice of the filing.

II. Self-Regulatory Organization's Statement of the Purpose of, and Statutory Basis for, the Proposed Rule Change

In its filing with the Commission, OneChicago included statements concerning the purpose of and basis for the proposed rule change and discussed any comments it received on the

⁸ 15 U.S.C. 78s(b)(3)(A).

⁹ 17 CFR 240.19b-4(f)(4)(ii).

¹⁰ *Id.*

¹¹ 17 CFR 200.30-3(a)(12).

¹ 15 U.S.C. 78s(b)(7).

proposed rule change. The text of these statements may be examined at the places specified in Item IV below. The self-regulatory organization has prepared summaries, set forth in sections A, B, and C below, of the most significant aspects of such statements.

A. Self-Regulatory Organization's Statement of the Purpose of, and Statutory Basis for, the Proposed Rule Change

1. Purpose

The purpose of OneChicago's filing is to update its Trading Hours by expanding the reporting time for bilateral block and bilateral EFP trades. Currently, bilateral trades may be reported to OneChicago beginning at 8:00 a.m. CT and concluding at 4:00 p.m. CT. This reporting period opens thirty minutes earlier—and closes one hour later—than the standard market hours, which are 8:30 a.m.–3:00 p.m. CT (3:15 p.m. for futures overlaying ETFs).

By expanding the bilateral trade reporting hours, OneChicago will allow market participants to utilize liquidity in the pre-market period when hedging their bilateral block trades, and also to generally increase the hours for reporting a bilateral EFP. Since the Exchange Rules require the reporting of bilateral trades within a certain timeframe, market participants cannot execute the underlying security portion of their block and EFP trades before permissible reporting hours. With the proposed change, market participants will be able to execute and timely report bilateral trades that involved underlying security executions that occurred as early as 7:00 a.m. CT.

2. Statutory Basis

OneChicago believes that the proposed rule change is consistent with Section 6(b) of the Act,² in general, and furthers the objectives of Section 6(b)(5) of the Act,³ in particular, in that it is designed to foster cooperation and coordination with persons engaged in facilitating transactions in securities, and remove impediments to and perfect the mechanism of a free and open market and national market system. OneChicago believes that expanding the bilateral trade reporting hours removes an impediment to trading that OneChicago market participants currently experience. By restricting bilateral trade reporting to an 8:00 a.m. CT opening time, market participants are currently unable to report bilateral trades executed before that time.

B. Self-Regulatory Organization's Statement on Burden on Competition

OneChicago does not believe that the proposed rule change will impose any impact, or impose any burden, on competition not necessary or appropriate in furtherance of the purposes of the Act. The rule change simply expands the trading hours for bilateral trades and does not impose any new burdens on any market participants. The Exchange believes that the proposed rule change is equitable and not unfairly discriminatory because all of the amended rules apply equally to 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 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 rule change will become operative on November 10, 2014.

At any time within 60 days of the date of effectiveness of the proposed rule change, the Commission, after consultation with the CFTC, may summarily abrogate the proposed rule change and require that the proposed rule change be refiled in accordance with the provisions of Section 19(b)(1) of the Act.⁴

IV. Solicitation of Comments

Interested persons are invited to submit written data, views, and arguments concerning the foregoing, including whether the proposed rule change is consistent with the Act. Comments may be submitted by any of the following methods:

Electronic Comments

- Use the Commission's Internet comment form (<http://www.sec.gov/rules/sro.shtml>); or
- Send an email to rule-comments@sec.gov. Please include File Number SR-OC-2014-05 on the subject line.

Paper Comments

- Send paper comments in triplicate to Brent J. Fields, Secretary, Securities and Exchange Commission, 100 F Street NE., Washington, DC 20549-1090. All submissions should refer to File Number SR-OC-2014-05. This file number should be included on the subject line if email is used. To help the Commission process and review your

comments more efficiently, please use only one method. The Commission will post all comments on the Commission's Internet Web site (<http://www.sec.gov/rules/sro.shtml>). Copies of the submission, all subsequent amendments, all written statements with respect to the proposed rule change that are filed with the Commission, and all written communications relating to the proposed rule change between the Commission and any person, other than those that may be withheld from the public in accordance with the provisions of 5 U.S.C. 552, will be available for Web site viewing and printing in the Commission's Public Reference Room, 100 F Street NE., Washington, DC 20549, on official business days between the hours of 10:00 a.m. and 3:00 p.m. Copies of such filing also will be available for inspection and copying at the principal offices of the Exchange. All comments received will be posted without change; the Commission does not edit personal identifying information from submissions. You should submit only information that you wish to make available publicly. All submissions should refer to File Number SR-OC-2014-05, and should be submitted on or before December 11, 2014.

For the Commission, by the Division of Trading and Markets, pursuant to delegated authority.⁵

Kevin M. O'Neill,

Deputy Secretary.

[FR Doc. 2014-27448 Filed 11-19-14; 8:45 am]

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SECURITIES AND EXCHANGE COMMISSION

[Release No. 34-73595; File No. SR-BYX-2014-030]

Self-Regulatory Organizations; BATS Y-Exchange, Inc.; Notice of Filing of a Proposed Rule Change, and Amendment No. 1 Thereto, To Establish a New Market Data Product Called the BATS One Feed

November 14, 2014.

Pursuant to Section 19(b)(1) of the Securities Exchange Act of 1934 ("Act"),¹ and Rule 19b-4 thereunder,² notice is hereby given that on October 30, 2014, BATS Y-Exchange, Inc. (the "Exchange" or "BYX") filed with the Securities and Exchange Commission ("Commission") the proposed rule

² 15 U.S.C. 78f(b).

³ 15 U.S.C. 78(f)(b)(5).

⁴ 15 U.S.C. 78s(b)(1).

⁵ 17 CFR 200.30-3(a)(12).

¹ 15 U.S.C. 78s(b)(1).

² 17 CFR 240.19b-4.

change as described in Items I and II below, which Items have been prepared by the Exchange. On November 13, 2014, the Exchange filed Amendment No. 1 to the proposed rule change. The Commission is publishing this notice to solicit comments on the proposed rule change, as amended, from interested persons.

I. Self-Regulatory Organization's Statement of the Terms of Substance of the Proposed Rule Change

The Exchange filed a proposal to establish a new market data product called the BATS One Feed.

The text of the proposed rule change is available at the Exchange's Web site at <http://www.directedge.com/>, at the principal office of the Exchange, and at the Commission's Public Reference Room.

II. Self-Regulatory Organization's Statement of the Purpose of, and Statutory Basis for, the Proposed Rule Change

In its filing with the Commission, the Exchange included statements concerning the purpose of and basis for the proposed rule change and discussed any comments it received on the proposed rule change. The text of these statements may be examined at the places specified in Item IV below. The Exchange has prepared summaries, set forth in Sections A, B, and C below, of the most significant parts of such statements.

A. Self-Regulatory Organization's Statement of the Purpose of, and Statutory Basis for, the Proposed Rule Change

1. Purpose

The Exchange proposes to establish a new market data product called the BATS One Feed. As described more fully below, the BATS One Feed is a data feed that will disseminate, on a real-time basis, the aggregate best bid and offer ("BBO") of all displayed orders for securities traded on BYX and its affiliated exchanges³ (collectively, the "BATS Exchanges") and for which

the BATS Exchanges report quotes under the Consolidated Tape Association ("CTA") Plan or the Nasdaq/UTP Plan.⁴ The BATS One Feed will also contain the individual last sale information for BYX and each of its affiliated exchanges. In addition, the BATS One Feed will contain optional functionality which will enable recipients to elect to receive aggregated two-sided quotations from the BATS Exchanges for up to five (5) price levels.

The BATS One Feed offers market data vendors and purchasers a suitable alternative to the use of consolidated data where consolidated data are not required to be purchased or displayed. The Exchange proposes to offer the BATS One Feed voluntarily in response to demand from vendors, and subscribers that are interested in receiving the aggregate BBO and last sale information from the BATS Exchanges as part of a single data feed. Specifically, BATS One can be used by industry professionals and retail investors looking for a cost effective, easy-to-administer, high quality market data product with the characteristics of the BATS One Feed.

The Exchange believes that the BATS One Feed would provide high-quality, comprehensive last sale and BBO data for the BATS Exchanges in a unified view and respond to subscriber demand for such a product. The Exchange notes that an anticipated end user might use the BATS One Feed for purposes of identifying an indicative price of Tape A, B, and C securities through leveraging the depth and breadth of BATS Exchanges without having to purchase consolidated data and thus it would not be a latency-sensitive product. The Exchange does not anticipate that an end user would, or could, use the BATS One Feed data for purposes of making order-routing or trading decisions. Rather, the Exchange notes that under Rule 603 of Regulation NMS, the BATS One Feed could not be substituted for consolidated data in all instances in which consolidated data is used and certain subscribers would still be required to purchase consolidated data for trading and order-routing purposes.⁵

Finally, the proposed BATS One Feed would provide investors with new options for receiving market data and compete with similar market data products proposed by the New York Stock Exchange, Inc. ("NYSE") and those currently offered by the Nasdaq

Stock Market LLC ("Nasdaq").⁶ The provision of new options for investors to receive market data was a primary goal of the market data amendments adopted by Regulation NMS.⁷

Description of the BATS One Feed

The BATS One Feed will contain the aggregate BBO of the BATS Exchanges for all securities that are traded on the BATS Exchanges and for which the BATS Exchanges report quotes under the CTA Plan or the Nasdaq/UTP Plan. The aggregate BBO would include the total size of all orders at the BBO available on all BATS Exchanges.⁸ The BATS One Feed would also disseminate last sale information for each of the individual BATS Exchanges (collectively with the aggregate BBO, the "BATS One Summary Feed"). The last sale information will include the price, size, time of execution, and individual BATS Exchange on which the trade was executed. The last sale message will also include the cumulative number of shares executed on all BATS Exchanges for that trading day. The Exchange will disseminate the aggregate BBO of the BATS Exchanges and last sale information through the BATS One Feed no earlier than each individual BATS Exchange provides its BBO and last sale information to the processors under the CTA Plan or the Nasdaq/UTP Plan.

The BATS One Feed would also consist of Symbol Summary, Market Status, Retail Liquidity Identifier on behalf of BYX, Trading Status, and Trade Break messages. The Symbol Summary message will include the total

⁶ See Nasdaq Basic, <http://www.nasdaqtrader.com/Trader.aspx?id=NASDAQbasic> (last visited May 29, 2014) (data feed offering the BBO and Last Sale information for all U.S. exchange-listed securities based on liquidity within the Nasdaq market center, as well as trades reported to the FINRA/Nasdaq Trade Reporting Facility ("TRF")); Nasdaq NLS Plus, <http://www.nasdaqtrader.com/Trader.aspx?id=NLSplus> (last visited July 8, 2014) (data feed providing last sale data as well as consolidated volume from the following Nasdaq OMX markets for U.S. exchange-listed securities: Nasdaq, FINRA/Nasdaq TRF, Nasdaq OMX BX, and Nasdaq OMX PSX); Securities Exchange Act Release No. 72750 (August 4, 2014), 79 FR 46494 (August 8, 2014) (SR-NYSE-2014-40) (Notice of Filing of Proposed Rule Change Establishing the NYSE Best Quote & Trades ("BQT") Data Feed); <http://www.nyse.com/Data-Products/NYSE-Best-Quote-and-Trades> (last visited May 27, 2014) (data feed providing unified view of BBO and last sale information for the NYSE, NYSE Arca, and NYSE MKT).

⁷ See Securities Exchange Act Release No. 51808 (June 9, 2005), 70 FR 37496, at 37503 (June 29, 2005) (Regulation NMS Adopting Release).

⁸ The Exchange notes that quotations of odd lot size, which is generally less than 100 shares, are included in the total size of all orders at a particular price level in the BATS One Feed but are currently not reported by the BATS Exchanges to the consolidated tape.

³ The Exchange's affiliated exchanges are EDGA Exchange, Inc. ("EDGA"), EDGX Exchange, Inc. ("EDGX"), and BATS Exchange, Inc. ("BATS"). On January 31, 2014, Direct Edge Holdings LLC ("DE Holdings"), the former parent company of the Exchange and EDGA, completed its business combination with BATS Global Markets, Inc., the parent company of BATS and BYX. See Securities Exchange Act Release No. 71449 (January 30, 2014), 79 FR 6961 (February 5, 2014) (SR-EDGX-2013-43). Upon completion of the business combination, DE Holdings and BATS Global Markets, Inc. each became intermediate holding companies, held under a single new holding company. The new holding company, formerly named "BATS Global Markets Holdings, Inc.," changed its name to "BATS Global Markets, Inc."

⁴ The Exchange understands that each of the BATS Exchanges will separately file substantially similar proposed rule changes with the Commission to implement the BATS One Feed and its related fees.

⁵ 17 CFR § 242.603(c).

executed volume across all BATS Exchanges. The Market Status message is disseminated to reflect a change in the status of one of the BATS Exchanges. For example, the Market Status message will indicate whether one of the BATS Exchanges is experiencing a systems issue or disruption and quotation or trade information from that market is not currently being disseminated via the BATS One Feed as part of the aggregated BBO. The Market Status message will also indicate where BATS Exchange is no longer experiencing a systems issue or disruption to properly reflect the status of the aggregated BBO.

The Retail Liquidity Identifier indicator message will be disseminated via the BATS One Feed on behalf of the BYX only pursuant to BYX's Retail Price Improvement ("RPI") Program.⁹ The Retail Liquidity Identifier indicates when RPI interest priced at least \$0.001 better than BYX's Protected Bid or Protected Offer for a particular security is available in the System. The Exchange proposes to disseminate the Retail Liquidity Indicator via the BATS One Feed in the same manner as it is currently disseminated through consolidated data streams (i.e., pursuant to the Consolidated Tape Association Plan/Consolidated Quotation Plan, or CTA/CQ, for Tape A and Tape B securities, and the Nasdaq UTP Plan for Tape C securities) as well as through proprietary BYX data feeds. The Retail Liquidity Identifier will reflect the symbol and the side (buy or sell) of the RPI interest, but does not include the price or size of the RPI interest. In particular, like CQ and UTP quoting outputs, the BATS One Feed will include a field for codes related to the Retail Price Improvement Identifier. The codes indicate RPI interest that is priced better than BYX's Protected Bid or Protected Offer by at least the minimum level of price improvement as required by the Program.

The Trade Break message will indicate when an execution on a BATS Exchange is broken in accordance with the individual BATS Exchange's rules.¹⁰ The Trading Status message will

indicate the current trading status of a security on each individual BATS Exchange. For example, a Trading Status message will be sent when a short sale price restriction is in effect pursuant to Rule 201 of Regulation SHO ("Short Sale Circuit Breaker"),¹¹ or the security is subject to a trading halt, suspension or pause declared by the listing market. A Trading Status message will be sent whenever a security's trading status changes.

Optional Aggregate Depth of Book. The BATS One Feed will also contain optional functionality which will enable recipients to receive two-sided quotations from the BATS Exchanges for five (5) price levels for all securities that are traded on the BATS Exchanges in addition to the BATS One Summary Feed ("BATS One Premium Feed"). For each price level on one of the BATS Exchanges, the BATS One Premium Feed option of the BATS One Feed will include a two-sided quote and the number of shares available to buy and sell at that particular price level.¹²

Implementation Date

The Exchange anticipates making available the BATS One feed as soon as practicable after approval of the proposed rule change by the Commission and the effectiveness of a rule filing to establish the fees for BATS One.¹³

2. Statutory Basis

The Exchange believes that the proposed BATS One Feed is consistent with Section 6(b) of the Act,¹⁴ in general, and furthers the objectives of Section 6(b)(5) of the Act,¹⁵ in particular, in that it is 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 to protect investors and the public interest, and that it is not designed to permit unfair discrimination among customers, brokers, or dealers. This proposal is in keeping with those principles in that it promotes increased transparency through the dissemination of the BATS One Feed. The Exchange also believes this proposal is consistent with Section

6(b)(5) of the Act because it protects investors and the public interest and promotes just and equitable principles of trade by providing investors with new options for receiving market data as requested by market data vendors and purchasers that expressed an interest in exchange-only data for instances where consolidated data is no longer required to be purchased and displayed. The proposed rule change would benefit investors by facilitating their prompt access to real-time last sale information and best-bid-and-offer information contained in the BATS One Feed.

The Exchange also believes that the proposed rule change is consistent with Section 11(A) of the Act¹⁶ in that it supports (i) fair competition among brokers and dealers, among exchange markets, and between exchange markets and markets other than exchange markets and (ii) the availability to brokers, dealers, and investors of information with respect to quotations for and transactions in securities. Furthermore, the proposed rule change is consistent with Rule 603 of Regulation NMS,¹⁷ which provides that any national securities exchange that distributes information with respect to quotations for or transactions in an NMS stock do so on terms that are not unreasonably discriminatory.

In adopting Regulation NMS, the Commission granted self-regulatory organizations and broker-dealers increased authority and flexibility to offer new and unique market data to consumers of such data. It was believed that this authority would expand the amount of data available to users and consumers of such data and also spur innovation and competition for the provision of market data. The Exchange believes that the data products proposed herein are precisely the sort of market data products that the Commission envisioned when it adopted Regulation NMS. The Commission concluded that Regulation NMS—by lessening regulation of the market in proprietary data—would itself further the Act's goals of facilitating efficiency and competition:

[E]fficiency is promoted when broker-dealers who do not need the data beyond the prices, sizes, market center identifications of the NBBO and consolidated last sale information are not required to receive (and pay for) such data. The Commission also believes that efficiency is promoted when broker-dealers may choose to receive (and pay for) additional market data based on their

⁹ For a description of BYX's RPI Program, see BYX Rule 11.24. See also Securities Exchange Act Release No. 68303 (November 27, 2012), 77 FR 71652 (December 3, 2012) (SR-BYX-2012-019) (Order Granting Approval of Proposed Rule Change, as Modified by Amendment No. 2, to Adopt a Retail Price Improvement Program); Securities Exchange Act Release No. 67734 (August 27, 2012), 77 FR 53242 (August 31, 2012) (SR-BYX-2012-019) (Notice of Filing of Proposed Rule Change to Adopt a Retail Price Improvement Program).

¹⁰ See, e.g., Exchange and EDGA Rule 11.13, Clearly Erroneous Executions, and BATS and BYX Rule 11.17, Clearly Erroneous Executions.

¹¹ 17 CFR 242.200(g); 17 CFR 242.201.

¹² Recipients who do not elect to receive the BATS One Premium Feed will receive the aggregate BBO of the BATS Exchanges under the BATS Summary Feed, which, unlike the BATS Premium Feed, would not delineate the size available at the BBO on each individual BATS Exchange.

¹³ The Exchange intends to file a separate proposal establishing the fees for BATS One.

¹⁴ 15 U.S.C. 78f.

¹⁵ 15 U.S.C. 78f(b)(5).

¹⁶ 15 U.S.C. 78k-1.

¹⁷ See 17 CFR 242.603.

own internal analysis of the need for such data.¹⁸

By removing “unnecessary regulatory restrictions” on the ability of exchanges to sell their own data, Regulation NMS advanced the goals of the Act and the principles reflected in its legislative history.

If the free market should determine whether proprietary data is sold to broker-dealers at all, it follows that the price at which such data is sold should be set by the market as well. The BATS One Feed is precisely the sort of market data product that the Commission envisioned when it adopted Regulation NMS.

The BATS One Feed would be distributed and purchased on a voluntary basis, in that neither the BATS Exchanges nor market data distributors are required by any rule or regulation to make this data available. Accordingly, distributors and users can discontinue use at any time and for any reason, including due to an assessment of the reasonableness of fees charged.

The Exchange believes that the proposed BATS One Feed will offer an alternative to the use of consolidated data products and proprietary data products offered by the NYSE and Nasdaq. Nasdaq Basic is a product that includes two feeds, QBBO, which provides BBO information for all U.S. exchange-listed securities on Nasdaq and NLS Plus, which provides last sale data as well as consolidated volume from the following Nasdaq OMX markets for U.S. exchange-listed securities: Nasdaq, FINRA/Nasdaq TRF,¹⁹ Nasdaq OMX BX, and Nasdaq OMX PSX.²⁰ According to Nasdaq, seven vendors and more than 1,000 firms subscribe to Nasdaq Basic, including 9 out of 10 of the largest banks.²¹

Likewise, the NYSE has proposed NYSE BQT, which would include the BBO and last sale information for the

NYSE, NYSE Arca, and NYSE MKT.²² The Exchange believes the BATS One Feed will offer a competitive alternative to the existing Nasdaq Basic product and the proposed NYSE product.

In addition, the proposal would not permit unfair discrimination because the product will be available to all of the Exchange’s customers and market data vendors on an equivalent basis. In addition, any customer that wishes to purchase one or more of the individual data feeds offered by the BATS Exchanges would be able to do so.

In addition, the Exchange does not believe that the proposal would permit unfair discrimination among customers, brokers, or dealers and thus is consistent with the Act because the Exchange will be offering the product on terms that a competing vendor could offer a competing product. Specifically, the proposed data feed does not represent Exchange core data, but rather a new product that represents an aggregation and consolidation of existing, previously filed individual market data products of the BATS Exchanges. As such, a competing vendor could similarly obtain the underlying data feeds and perform a similar aggregation and consolidation function to create the same data product with the same latency and cost as the Exchange.

The Exchange has taken into consideration its affiliated relationship with EDGA, EDGX, and BATS in its design of the BATS One Feed to assure that vendors would be able to offer a similar product on the same terms as the Exchange, both from the perspective of latency and cost. As discussed above, the Exchange proposes to offer the BATS One Feed voluntarily in response to demand from vendors, and subscribers that are interested in receiving the aggregate BBO and last sale information from the BATS Exchanges as part of a single data feed. Specifically, BATS One can be used by industry professionals and retail investors looking for a cost effective, easy-to-administer, high quality market data product with the characteristics of the BATS One Feed. The BATS One Feed would help protect a free and open market by providing vendors and subscribers additional choices in

receiving this type of market data, thus promoting competition and innovation.

With respect to latency, the path for distribution by the Exchange of BATS One Feed would not be faster than a vendor that independently created a BATS One-like product could distribute its own product. As such, the proposed BATS One data feed is a data product that a competing vendor could create and sell without being in a disadvantaged position relative to the Exchange. In recognition that the Exchange is the source of its own market data and is affiliated with EDGX, EDGA and BATS, the Exchange represents that the source of the market data it would use to create the proposed BATS One Feed is available to other vendors. Specifically, the Exchange would use the following data feeds to create the proposed BATS One Feed, each of which is available to other vendors: the EdgeBook Depth feed for EDGX, the EdgeBook Depth feed for EDGA, the BYX PITCH Feed, and the BATS PITCH Feed. The BATS Exchanges will continue to make available these individual underlying feeds, and thus, the source of the market data it would use to create the proposed BATS One feed is the same as the source available to other vendors.

In order to create the BATS One Feed, the Exchange will receive the individual data feeds from each BATS Exchange and, in turn, aggregate and summarize that data to create the BATS One Feed. This is the same process a competing vendor would undergo should it create a market data product similar to the BATS One Feed to distribute to its end users. In addition, the servers of most competing vendors are likely located in the same facilities as the Exchange, and, therefore, should receive the individual data feed from each BATS Exchange on or about the same time the Exchange would for it to create the BATS One Feed. Therefore, a competing vendor that is located in the same facilities as the Exchange could obtain the underlying data feeds from the BATS Exchanges on the same latency basis as the system that would be performing the aggregation and consolidation of the proposed BATS One Feed and provide the same type of product to its customers with the same latency they could achieve by purchasing the BATS One Feed from the Exchange. As such, the Exchange would not have any unfair advantage over competing vendors with respect to obtaining data from the individual BATS Exchanges, in fact, the technology supporting the BATS One Feed would similarly need to obtain the Exchange’s data feed as well and even this connection would be on a level

¹⁸ See Securities Exchange Act Release No. 51808 (June 9, 2005), 70 FR 37496 (June 29, 2005) (File No. S7-10-04).

¹⁹ See Nasdaq Basic, <http://www.nasdaqtrader.com/Trader.aspx?id=NASDAQbasic> (last visited May 29, 2014) (data feed offering the BBO and Last Sale information for all U.S. exchange-listed securities based on liquidity within the Nasdaq market center, as well as trades reported to the FINRA/Nasdaq TRF).

²⁰ See Nasdaq NLS Plus, <http://www.nasdaqtrader.com/Trader.aspx?id=NLSplus> (last visited July 8, 2014) (data feed providing last sale data as well as consolidated volume from the following Nasdaq OMX markets for U.S. exchange-listed securities: Nasdaq, FINRA/Nasdaq TRF, Nasdaq OMX BX, and Nasdaq OMX PSX).

²¹ See Nasdaq Basic, Doing More with Less, available at <http://www.brainspark.com/nasdaqomx/vu?pi=zG8z3306ozAgBpz0&tx=preview&preview=1> and <http://www.nasdaqtrader.com/Trader.aspx?id=NASDAQbasic#vendors>.

²² See Securities Exchange Act Release No. 72750 (August 4, 2014), 79 FR 46494 (August 8, 2014) (SR-NYSE-2014-40) (Notice of Filing of Proposed Rule Change Establishing the NYSE BQT Data Feed); <http://www.nyxdata.com/Data-Products/NYSE-Best-Quote-and-Trades> (last visited May 27, 2014) (data feed providing unified view of BBO and last sale information for the NYSE, NYSE Arca, and NYSE MKT).

playing field with a competing vendor located at the same facility as the Exchange. The Exchange has designed the BATS One data feed so that it would not have a competitive advantage over a competing vendor with respect to the speed of access to those underlying data feeds. Likewise, the BATS One data feed would not have a speed advantage vis-à-vis competing vendors located in the same data center as the Exchange with respect to access to end user customers, whether those end users are also located in the same data center or not.

With regard to cost, the Exchange will file a separate rule filing with the Commission to establish fees for BATS One which would be designed to ensure that vendors could compete with the Exchange by creating a similar product as the BATS One Feed. The pricing the Exchange would charge for the BATS One Feed would not be lower than the cost to a vendor of receiving the underlying data feeds and of maintaining servers in the same facility as the Exchange to receive the data feeds with no greater latency than the Exchange. The pricing the Exchange would charge clients for the BATS One Feed compared to the cost of the individual data feeds from the BATS Exchanges would enable a vendor to receive the underlying data feeds and offer a similar product on a competitive basis and with no greater latency than the Exchange. The Distribution Fees that the Exchange intends to propose for the BATS One Feed would be equal to the combined fee of subscribing to each individual data feed,²³ therefore, enabling a vendor to create a competing product based on the individual data feeds and charge its clients a fee that it believes reflects the value of the aggregation and consolidation function that is competitive with BATS One Feed pricing. The Exchanges believe that the incremental cost to a particular vendor for aggregation can be supported by the vendor's revenue opportunity and may be inconsequential if such vendor already has systems in place to perform these functions as part of creating its proprietary market data products and is able to allocate these costs over numerous products and customer relationships. For these reasons, the Exchange believes that vendors could readily offer a product similar to the

BATS One Feed on a competitive basis at a similar cost.

B. Self-Regulatory Organization's Statement on Burden on Competition

The Exchange does not believe that the proposed rule change will result in any burden on competition that is not necessary or appropriate in furtherance of the purposes of the Act, as amended. Because other exchanges already offer similar products,²⁴ the Exchange's proposed BATS One Feed will enhance competition. Specifically, the BATS One Feed was developed to compete with similar market data products offered by Nasdaq and proposed by the NYSE.²⁵ The BATS One Feed will foster competition by providing an alternative market data product to those offered by Nasdaq and the NYSE. This proposed new data feed provides investors with new options for receiving market data, which was a primary goal of the market data amendments adopted by Regulation NMS.²⁶

The proposed BATS One Feed would enhance competition by offering a market data product that is designed to compete directly with similar products offered by the NYSE and Nasdaq. Nasdaq Basic is a product that includes two feeds, QBBO, which provides BBO information for all U.S. exchange-listed securities on Nasdaq and NLS Plus, which provides last sale data as well as consolidated volume from the following Nasdaq OMX markets for U.S. exchange-listed securities: Nasdaq, FINRA/Nasdaq TRF,²⁷ Nasdaq OMX BX, and Nasdaq OMX PSX.²⁸ Likewise, NYSE BQT includes BBO and last sale information for the NYSE, NYSE Arca, and NYSE MKT.²⁹ As a result, Nasdaq Basic and

NYSE BQT comprise a significant view of the market on any given day and both include data from multiple trading venues. As the BATS Exchanges are consistently one of the top exchange operators by market share for U.S. equities trading, excluding opening and closing auction volume, the data included within the BATS One Feed will provide investors with an alternative to Nasdaq Basic and NYSE BQT and a new option for obtaining a broad market view, consistent with the primary goal of the market data amendments adopted by Regulation NMS.³⁰

The Exchange believes the BATS One Feed will further enhance competition by providing External Distributors with a data feed that allows them to more quickly and efficiently integrate into their existing products. Today, Distributors subscribe to various market data products offered by single exchanges and resell that data, either separately or in the aggregate, to their subscribers as part of the their own market data offerings. Distributors may incur administrative costs when consolidating and augmenting the data to meet their subscriber's need. Consequently, many External Distributors will simply choose to not take the data because of the effort and cost required to aggregate data from separate feeds into their existing products. Those same Distributors have expressed interest in the BATS One Feed so that they may easily incorporate aggregated or summarized BATS Exchange data into their own products without themselves incurring the costs of the repackaging and aggregating the data it would receive by subscribing to each market data product offered by the individual BATS Exchanges. The Exchange, therefore, believes that by providing market data that encompasses combined data from affiliated exchanges, the Exchange enables certain External Distributors with the ability to compete in the provision of similar content with other External Distributors, where they may not have done so previously if they were required to subscribe to the depth-of-book feeds from each individual BATS Exchange.

Although the Exchange considers the acceptance of the BATS One Feed by External Distributors as important to the success of the product, depending on their needs, External Distributors may choose not to subscribe to the BATS One Feed and may rather receive the BATS Exchange individual market data

²⁴ See *supra* note 6.

²⁵ *Id.*

²⁶ See Securities Exchange Act Release No. 51808 (June 9, 2005), 70 FR 37496, at 37503 (June 29, 2005) (Regulation NMS Adopting Release).

²⁷ See Nasdaq Basic, <http://www.nasdaqtrader.com/Trader.aspx?id=NASDAQBasic> (last visited May 29, 2014) (data feed offering the BBO and Last Sale information for all U.S. exchange-listed securities based on liquidity within the Nasdaq market center, as well as trades reported to the FINRA/Nasdaq TRF).

²⁸ See Nasdaq NLS Plus, <http://www.nasdaqtrader.com/Trader.aspx?id=NLSPlus> (last visited July 8, 2014) (data feed providing last sale data as well as consolidated volume from the following Nasdaq OMX markets for U.S. exchange-listed securities: Nasdaq, FINRA/Nasdaq TRF, Nasdaq OMX BX, and Nasdaq OMX PSX).

²⁹ See Securities Exchange Act Release No. 72750 (August 4, 2014), 79 FR 46494 (August 8, 2014) (SR-NYSE-2014-40) (Notice of Filing of Proposed Rule Change Establishing the NYSE BQT Data Feed); <http://www.nyxddata.com/Data-Products/NYSE-Best-Quote-and-Trades> (last visited May 27, 2014) (data feed providing unified view of BBO and last sale information for the NYSE, NYSE Arca, and NYSE MKT).

²³ The combined external distribution fee for the individual data feeds of the BATS Exchanges is \$12,500.00 per month. The monthly external distribution fee is \$2,500 per month for the EdgeBook Depth feed for the Exchange, \$2,500 per month for the EdgeBook Depth feed for EDGA, \$2,500 for the BYX PITCH Feed, and \$5,000 for the BATS PITCH Feed.

³⁰ See Securities Exchange Act Release No. 51808 (June 9, 2005), 70 FR 37496, at 37503 (June 29, 2005) (Regulation NMS Adopting Release).

products and incorporate them into their specific market data products. For example, the BATS Premium Feed provides depth-of-book information for up to five price levels while each of the BATS Exchange's individual data feeds offer complete depth-of-book and are not limited to five price levels.³¹ Those subscribers who wish to view the complete depth-of-book from each individual BATS Exchange may prefer to subscribe to one or all of individual BATS Exchange depth-of-book data feeds instead of the BATS One Feed. The BATS One Feed simply provides another option for Distributors to choose from when selecting a product that meets their market data needs. Subscribers who seek a broader market view but do not need complete depth-of-book may select the BATS One Feed while subscribers that seek the complete depth-of-book information may subscribe to the depth-of-book feeds of each individual BATS Exchange.

Exchange Not the Exclusive Distributor of BATS One. Although the BATS Exchanges are the exclusive distributors of the individual data feeds from which certain data elements would be taken to create the BATS One Feed, the Exchange would not be the exclusive distributor of the aggregated and consolidated information that would compose the proposed BATS One Feed. Vendors would be able, if they chose, to create a data feed with the same information as the BATS One Feed and distribute it to their clients on a level-playing field with respect to latency and cost as compared to the Exchange's proposed BATS One Feed. The pricing the Exchange would charge for the BATS One Feed would not be lower than the cost to a vendor of receiving the underlying data feeds and of maintaining servers in the same facility as the Exchange to receive the data feeds with no greater latency than the Exchange. In addition, the pricing the Exchange would charge clients for the BATS One Feed compared to the cost of the individual data feeds from the BATS Exchanges would enable a vendor to receive the underlying data feeds and offer a similar product on a competitive basis and with no greater latency than the Exchange.

Latency. The BATS One Feed is not intended to compete with similar products offered by External Distributors. Rather, it is intended to assist External Distributors in incorporating aggregated and

summarized data from the BATS Exchanges into their own market data products that are provided to the end user. Therefore, Distributors will receive the data, who will, in turn, make available BATS One Feed to their end users, either separately or as incorporated into the various market data products they provide. As stated above, Distributors have expressed a desire for a product like the BATS One Feed so that they may easily incorporate aggregated or summarized BATS Exchange data into their own products without themselves incurring the administrative costs of repackaging and aggregating the data it would receive by subscribing to each market data product offered by the individual BATS Exchanges.

Notwithstanding the above, the Exchange believes that External Distributors may create a product similar to BATS One Feed based on the market data products offered by the individual BATS Exchanges with no greater latency than the Exchange. As discussed above, in order to create the BATS One Feed, the Exchange will receive the individual data feeds from each BATS Exchange and, in turn, aggregate and summarize that data to create the BATS One Feed. This is the same process an External Distributor would undergo should it create a market data product similar to the BATS One Feed to distribute to its end users. In addition, the servers of most External Distributors are likely located in the same facilities as the Exchange, and, therefore, should receive the individual data feed from each BATS Exchange on or about the same time the Exchange would for it to create the BATS One Feed.

The Exchange has designed the BATS One data feed so that it would not have a competitive advantage over a competing vendor with respect to the speed of access to those underlying data feeds. Likewise, the BATS One data feed would not have a speed advantage vis-à-vis competing vendors located in the same data center as the Exchange with respect to access to end user customers, whether those end users are also located in the same data center or not. Therefore, the Exchange believes that it will not incur any potential latency advantage that will result in any burden on competition that is not necessary or appropriate in furtherance of the purposes of the Act.

Cost. With regard to cost, the Exchange will file a separate rule filing with the Commission to establish fees for BATS One that would be designed to ensure that vendors could compete with the Exchange by creating a similar

product as the BATS One Feed. The pricing the Exchange would charge clients for the BATS One Feed compared to the cost of the individual data feeds from the BATS Exchanges would enable a vendor to receive the underlying data feeds and offer a similar product on a competitive basis and with no greater latency than the Exchange. The Distribution Fees that the Exchange proposes for the BATS One Feed are equal to the combined fee of subscribing to each individual data feed,³² therefore, enabling a vendor to create a competing product based on the individual data feeds and charge its clients a fee that it believes reflects the value of the aggregation and consolidation function that is competitive with BATS One Feed pricing. The Exchange believes that the incremental cost to a particular vendor for aggregation can be supported by the vendor's revenue opportunity and may be inconsequential if such vendor already has systems in place to perform these functions as part of creating its proprietary market data products and is able to allocate these costs over numerous products and customer relationships. For these reasons, the Exchange believes that vendors could readily offer a product similar to the BATS One Feed on a competitive basis at a similar cost.

C. Self-Regulatory Organization's Statement on Comments on the Proposed Rule Change Received From Members, Participants, or Others

A similar proposed rule change was initially filed with the Commission on July 18, 2014 and published for comment in the **Federal Register** on August 1, 2014.³³ The Commission received no comment letters in response to that proposed rule change. However, three letters were submitted to the Commission commenting on a companion BATS and EDGA filings that propose to offer the same feed.³⁴ On September 15, 2014, the Commission extended its review period until October

³² See *supra* note 22.

³³ See Securities Exchange Act Release No. 72690 (July 28, 2014), 79 FR 44929 (August 1, 2014) (SR-BYX-2014-011).

³⁴ But see Letter from Sal Arnuk and Joe Saluzzi, Themis Trading LLC, to Elizabeth M. Murphy, Secretary, Commission, dated August 21, 2014 (SR-BATS-2014-028) ("Themis Letter"); Letter from Ira D. Hammerman, General Counsel, SIFMA, to Kevin O'Neill, Deputy Secretary, Commission, dated August 22, 2014 (SR-BATS-2014-028) ("SIFMA Letter") (letters commenting on companion BATS filing that proposes to offer the same feed); and Letter from Suzanne Hamlet Shatto to the Commission, dated August 19, 2014 (SR-EDGA-2014-16) ("Shatto Letter") (letter commenting on companion EDGA filing that proposes to offer the same feed).

³¹ See EDGA Rule 13.8, EDGX Rule 13.8, BZX Rule 11.22(a) and (c), and BYX Rule 11.22 (a) and (c) for a description of the depth of book feeds offered by each of the BATS Exchanges.

30, 2014.³⁵ On October 29, 2014, the Exchange withdrew the initial proposed rule change. The points raised by the Themis Letter and Shatto Letter are either not responsive to the issues raised in the proposal or aimed at existing elements of U.S. market structure that have been previously approved by the Commission.

The thrust of the SIFMA Letter is aimed at the proposed fees which are being removed from this proposed rule change and are to be filed with the Commission via a separate rule filing. While the SIFMA Letter correctly states that the Exchange has marketed the BATS One Feed since August 1, 2014, the SIFMA Letter incorrectly asserts that the Exchange has offered the BATS One Feed since that same date. All of the Exchange's marketing materials have included statements that the BATS One Feed's implementation was pending to SEC approval, and at no point has the Exchange offered the BATS One product for any use other than for testing and certification.

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 of such date (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 Exchange consents, the Commission shall:

- (A) By order approve or disapprove such 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. Please include File Number SR-BYX-2014-030 on the subject line.

Paper Comments

- Send paper comments in triplicate to Secretary, Securities and Exchange

Commission, 100 F Street NE., Washington, DC 20549-1090. All submissions should refer to File Number SR-BYX-2014-030. 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 BYX. 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-BYX-2014-030 and should be submitted on or before December 11, 2014.

For the Commission, by the Division of Trading and Markets, pursuant to delegated authority.³⁶

Kevin M. O'Neill,
Deputy Secretary.

[FR Doc. 2014-27443 Filed 11-19-14; 8:45 am]

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SECURITIES AND EXCHANGE COMMISSION

[Release No. 34-73607; File No. SR-CME-2014-43]

Self-Regulatory Organizations; Chicago Mercantile Exchange Inc.; Notice of Filing and Immediate Effectiveness of Proposed Rule Change in Connection With the Acceptance of USD Malaysian Palm Olein Calendar (Cleared Only) Contracts for Clearing

November 14, 2014.

Pursuant to Section 19(b)(1) of the Securities Exchange Act of 1934

(“Act”)¹ and Rule 19b-4 thereunder² notice is hereby given that, on November 6, 2014, Chicago Mercantile Exchange Inc. (“CME”) 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 CME. CME filed the proposal pursuant to Section 19(b)(3)(A) of the Act,³ and Rule 19b-4(f)(4)(ii)⁴ thereunder, so that the proposal was effective upon filing with the Commission. The Commission is publishing this notice to solicit comments on the proposed rule change from interested persons.

I. Self-Regulatory Organization's Statement of the Terms of Substance of the Proposed Rule Change

CME is proposing rule changes that are limited to its business as a derivatives clearing organization (“DCO”). More specifically, the proposed rule change would add rules related to the acceptance of the USD Malaysian Palm Olein Calendar (Cleared Only) Contract for clearing.

II. Self-Regulatory Organization's Statement of the Purpose of, and Statutory Basis for, the Proposed Rule Change

In its filing with the Commission, CME included statements concerning the purpose 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. CME 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

CME is registered as a DCO with the Commodity Futures Trading Commission (“CFTC”) and offers clearing services for many different futures and swaps products. The proposed rule change that is the subject of this filing is limited to CME's business as a DCO offering clearing services for CFTC-regulated swaps products. More specifically, the proposed rule change is related to CME's initial listing of the USD Malaysian Palm Olein Calendar Swap (Cleared Only) for clearing.

¹ 15 U.S.C. 78s(b)(1).

² 17 CFR 240.19b-4.

³ 15 U.S.C. 78s(b)(3)(A).

⁴ 17 CFR 240.19b-4(f)(4)(ii).

³⁵ See Securities Exchange Act Release No. 73102 (September 15, 2014), 79 FR 56419 (September 19, 2014).

³⁶ 17 CFR 200.30-3(a)(12).

The USD Malaysian Palm Olein Calendar Swaps would fit within a subset of one or more groups, categories, types, or classes of CFTC-regulated swaps that CME already accepts for clearing. For example, CME currently accepts for clearing physical-commodity calendar swaps that financially-settle to a commercially-acceptable, publicly-accessible and timely disseminated price series including the following: CME USD Malaysian Crude Palm Oil Calendar Swap (CPC); CBOT Wheat Calendar Swap (WCS); CBOT Corn Calendar Swap (CCS); CBOT Soybean Calendar Swap (SNS); and the CBOT KC HRW Wheat Calendar Swap (KWS).

The proposed new rules include a new product Chapter 204B in the CME rulebook. New rule 204B00 would specify that the USD Malaysian Palm Olein Calendar Swaps listed by CME would be for clearing-only, would be available only to “eligible contract participants” as defined in Section 1a(18) of the Commodity Exchange Act, and would be subject to the applicable provisions of the CME rulebook. New Rule 204B01 would lay out the various contract specifications of the USD Malaysian Palm Olein Calendar Swaps including, the unit of clearing, hours for clearing entry, minimum price increments, months cleared, position limits, last day of clearing, and liquidation during the delivery month. The proposed contracts would be liquidated by cash settlement as set forth in proposed Rule 204B02. Clearing members holding open positions in USD Malaysian Palm Olein Calendar Swaps at the time of termination of clearing would be required to make payment to and receive payment through CME in accordance with normal variation settlement procedures based on a settlement price equal to the final settlement price (as described in Rule 204B03.). As specified in proposed Rule 204B03, the final settlement price for the contracts would be determined through use of a third party service provider, i.e., the cumulative average of each Thomson Reuters “Malaysia RBD Palm Olein” third forward month closing time assessment for each business day of the contract month. Rule 204B04 specifies that daily settlement prices shall be generated each business day the CME is open using the most recent available Thomson Reuters values. Under proposed rule 204B05, the final settlement day for the proposed contracts would be on the last CME business day of the swap contract month. Under proposed rule 204B06, all disputes between interested parties may

be settled by CME arbitration. Finally, proposed new rule 204B07 sets out CME’s disclaimer regarding limitations of liability.

The changes that are described in this filing are limited to listing the new USD Malaysian Palm Olein Calendar Swaps. The proposed changes are therefore limited to CME’s business as a DCO clearing products under the exclusive jurisdiction of the CFTC and do not impact CME’s security-based swap clearing business in any way. The changes will be effective on filing. CME notes that it has also certified the proposed rule change that is the subject of this filing to its primary regulator, the Commodity Futures Trading Commission (“CFTC”), in a separate filing, CME Submission No. 14–254. The text of the CME proposed rule amendments is attached, with additions underlined and deletions in brackets.

CME believes the proposed rule change is consistent with the requirements of the Act including Section 17A of the Act.⁵ CME is proposing the amendments to facilitate the listing of a new clearing-only physical-commodity calendar swap that financially-settles to a commercially-acceptable, publicly-accessible and timely disseminated price series. The addition of this new derivative product is designed to promote the prompt and accurate clearance and settlement of securities transactions and, to the extent applicable, derivatives agreements, contracts, and transactions, to assure the safeguarding of securities and funds which are in the custody or control of the clearing agency or for which it is responsible, and, in general, to protect investors and the public interest consistent with Section 17A(b)(3)(F) of the Act.⁶

Furthermore, the proposed changes are limited in their effect to products offered under CME’s authority to act as a DCO. The products that are the subject of this filing are under the exclusive jurisdiction of the CFTC. As such, the proposed CME changes are limited to CME’s activities as a DCO clearing swaps that are not security-based swaps, futures that are not security futures and forwards that are not security forwards. CME notes that the policies of the CFTC with respect to administering the Commodity Exchange Act are comparable to a number of the policies underlying the Act, such as promoting market transparency for over-the-counter derivatives markets, promoting the prompt and accurate clearance of

transactions and protecting investors and the public interest.

Because the proposed changes are limited in their effect to products offered under CME’s authority to act as a DCO, the proposed changes are properly classified as effecting a change in an existing service of CME that:

(a) Primarily affects the clearing operations of CME with respect to products that are not securities, including futures that are not security futures, swaps that are not security-based swaps or mixed swaps, and forwards that are not security forwards; and

(b) does not significantly affect any securities clearing operations of CME or any rights or obligations of CME with respect to securities clearing or persons using such securities-clearing service.

As such, the changes are therefore consistent with the requirements of Section 17A of the Act⁷ and are properly filed under Section 19(b)(3)(A)⁸ and Rule 19b–4(f)(4)(ii)⁹ thereunder.

B. Self-Regulatory Organization’s Statement on Burden on Competition

CME does not believe that the proposed rule change will have any impact, or impose any burden, on competition. The proposed amendments CME would simply facilitate the listing of a new clearing-only physical-commodity calendar swap. Further, the changes are limited to CME’s derivatives clearing business and, as such, do not affect the security-based swap clearing activities of CME in any way and therefore would not impose any burden on competition that is inappropriate 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

CME has not solicited, and does not intend to solicit, comments regarding this proposed rule change. CME has not received any unsolicited written comments from interested parties.

III. Date of Effectiveness of the Proposed Rule Change and Timing for Commission Action

The foregoing rule change has become effective upon filing pursuant to Section 19(b)(3)(A)¹⁰ of the Act and Rule 19b–4(f)(4)(ii)¹¹ thereunder. At any time within 60 days of the filing of the

⁷ 15 U.S.C. 78q–1.

⁸ 15 U.S.C. 78s(b)(3)(A).

⁹ 17 CFR 240.19b–4(f)(4)(iii).

¹⁰ 15 U.S.C. 78s(b)(3)(A).

¹¹ 17 CFR 240.19b–4(f)(4)(ii).

⁵ 15 U.S.C. 78q–1.

⁶ 15 U.S.C. 78q–1(b)(3)(F).

proposed rule change, the Commission summarily may temporarily suspend such rule change if it appears to the Commission that such action is necessary or appropriate in the public interest, for the protection of investors, or otherwise in furtherance of the purposes of the Act.

IV. Solicitation of Comments

Interested persons are invited to submit written data, views, and arguments concerning the foregoing, including whether the proposed rule change is consistent with the Act. Comments may be submitted by any of the following methods:

Electronic Comments

- Use the Commission's Internet comment form (<http://www.sec.gov/rules/sro.shtml>); or
- Send an email to rule-comments@sec.gov. Please include File Number SR-CME-2014-43 on the subject line.

Paper Comments

- Send paper comments in triplicate to Secretary, Securities and Exchange Commission, 100 F Street NE., Washington, DC 20549-1090.

All submissions should refer to File Number SR-CME-2014-43. 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 Room, 100 F Street NE., Washington, DC 20549, on official business days between the hours of 10:00 a.m. and 3:00 p.m. Copies of such filing will also be available for inspection and copying at the principal office of CME and on CME's Web site at <http://www.cmegroup.com/market-regulation/rule-filings.html>.

All comments received will be posted without change; the Commission does not edit personal identifying information from submissions. You should submit only information that you wish to make available publicly. All

submissions should refer to File Number SR-CME-2014-43 and should be submitted on or before December 11, 2014.

For the Commission, by the Division of Trading and Markets, pursuant to delegated authority.¹²

Kevin M. O'Neill,

Deputy Secretary.

[FR Doc. 2014-27452 Filed 11-19-14; 8:45 am]

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SECURITIES AND EXCHANGE COMMISSION

[Release No. 34-73600; File No. SR-ISEGemini-2014-28]

Self-Regulatory Organizations; ISE Gemini, LLC; Notice of Filing and Immediate Effectiveness of Proposed Rule Change To Amend the Schedule of Fees

November 14, 2014.

Pursuant to Section 19(b)(1) of the Securities Exchange Act of 1934 (the "Act"),¹ and Rule 19b-4 thereunder,² notice is hereby given that on November 3, 2014, ISE Gemini, LLC (the "Exchange" or "ISE Gemini") filed with the Securities and Exchange Commission ("SEC" or "Commission") the proposed rule change, as described in Items I, II, and III below, which Items have been prepared by the 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 the Substance of the Proposed Rule Change

ISE Gemini is proposing to amend its Schedule of Fees to introduce a new higher maker rebate for certain Market Maker orders. The text of the proposed rule change is available on the Exchange's Internet Web site at <http://www.ise.com>, at the principal office of the Exchange, and at the Commission's Public Reference Room.

II. Self-Regulatory Organization's Statement of the Purpose of, and Statutory Basis for, the Proposed Rule Change

In its filing with the Commission, the Exchange included statements concerning the purpose of, and basis for, the proposed rule change and discussed any comments it received on the proposed rule change. The text of these statements may be examined at the

places specified in Item IV below. The self-regulatory organization has prepared summaries, set forth in Sections A, B and C below, of the most significant aspects of such statements.

A. Self-Regulatory Organization's Statement of the Purpose of, and Statutory Basis for, the Proposed Rule Change

1. Purpose

The purpose of the proposed rule change is to amend the Schedule of Fees to introduce a new higher maker rebate for certain Market Maker³ orders. The Exchange's Schedule of Fees has separate tables for fees applicable to Standard Options and Mini Options. The Exchange notes that while the discussion below relates to fees for Standard Options, the fees for Mini Options, which are not discussed below, are and shall continue to be 1/10th of the fees for Standard Options.

Currently, Market Maker orders that add liquidity on ISE Gemini are provided a maker rebate in Penny Symbols⁴ and SPY of \$0.30 per contract for Tier 1, \$0.32 per contract for Tier 2, \$0.34 per contract for Tier 3, \$0.37 per contract for Tier 4, and \$0.38 per contract for Tier 5. In Non-Penny Symbols⁵ this maker rebate is \$0.40 per contract for Tier 1, \$0.42 per contract for Tier 2, and \$0.44 per contract for Tier 3, \$0.47 per contract for Tier 4, and \$0.49 per contract for Tier 5. In order to incentivize Market Makers to quote more aggressively on ISE Gemini, the Exchange now proposes to provide a higher maker rebate to Tier 2 members that meet an additional average daily volume ("ADV") threshold with respect to Market Maker orders executed in a given month.⁶ In particular, Market Makers that achieve Tier 2 and execute an ADV of 100,000 to 124,999 contracts in a given month, including both maker and taker volume, will qualify for a maker rebate of \$0.33 per contract in Penny Symbols and SPY, and \$0.43 per contract in Non-Penny Symbols.

³ The term Market Maker refers to "Competitive Market Makers" and "Primary Market Makers" collectively. Market Makers orders sent to the Exchange by an Electronic Access Member are assessed fees and rebates at the same level as Market Maker orders. See footnote 2, Schedule of Fees, Section I and II.

⁴ "Penny Symbols" are options overlying all symbols listed on ISE Gemini that are in the Penny Pilot Program.

⁵ "Non-Penny Symbols" are options overlying all symbols excluding Penny Symbols.

⁶ A Tier 2 member is a member that executes a Total Affiliated Member ADV of 50,000 to 124,999 contracts, Priority Customer Maker ADV of 20,000 to 49,999 contracts, or a Total Affiliated Member ADV of 40,000 to 99,999 contracts with a minimum Priority Customer Maker ADV of 15,000 contracts.

¹² 17 CFR 200.30-3(a)(12).

¹ 15 U.S.C. 78s(b)(1).

² 17 CFR 240.19b-4.

2. Statutory Basis

The Exchange believes that the proposed rule change is consistent with the provisions of Section 6 of the Act,⁷ in general, and Section 6(b)(4) of the Act,⁸ in particular, in that 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 believes that the proposed fee change is reasonable and equitable as the new maker rebate is designed to attract additional volume from Market Makers that do not qualify for Tier 3 or higher maker rebates. The Exchange believes that providing higher maker rebates for orders executed by Market Makers that have achieved the volume threshold for this new “sub-tier” will attract that order flow to ISE Gemini, and thereby create additional liquidity to the benefit of all market participants who trade on the Exchange. The Exchange further believes that the proposed rule change is not unfairly discriminatory as all Market Makers that achieve the new volume threshold will receive the same maker rebate. The Exchange does not believe that it is unfairly discriminatory to offer this higher rebate only to Market Maker orders as Market Makers are subject to additional requirements and obligations (such as quoting requirements) that other market participants are not. Moreover, the Exchange believes that the proposed fee change will encourage Market Makers to quote more aggressively on the Exchange in order to qualify for the new maker rebate, which will benefit all market participants.

The Exchange notes that it has determined to charge fees and provide rebates in Mini Options at a rate that is 1/10th the rate of fees and rebates the Exchange provides for trading in Standard Options. The Exchange believes it is reasonable and equitable and not unfairly discriminatory to assess lower fees and rebates to provide market participants an incentive to trade Mini Options on the Exchange. The Exchange believes the proposed fees and rebates are reasonable and equitable in light of the fact that Mini Options have a smaller exercise and assignment value, specifically 1/10th that of a standard option contract, and, as such, is providing fees and rebates for Mini Options that are 1/10th of those applicable to Standard Options.

B. Self-Regulatory Organization's Statement on Burden on Competition

In accordance with Section 6(b)(8) of the Act,⁹ the Exchange does not believe that the proposed rule change will impose any burden on intermarket or intramarket competition that is not necessary or appropriate in furtherance of the purposes of the Act. To the contrary, the Exchange believes that the proposed fee change will promote competition as it is designed to allow ISE Gemini to better compete for order flow by offering higher rebates to orders executed by Market Makers that meet the new volume threshold for the new “sub tier.” The Exchange operates in a highly competitive market in which market participants can readily direct their order flow to competing venues. In such an environment, the Exchange must continually review, and consider adjusting, its fees to remain competitive with other exchanges. For the reasons described above, the Exchange believes that the proposed fee changes reflect this competitive environment.

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)(A)(ii) of the Act,¹⁰ and subparagraph (f)(2) of Rule 19b-4 thereunder,¹¹ because it establishes a due, fee, or other charge imposed by ISE Gemini.

At any time within 60 days of the filing of such proposed rule change, the Commission summarily may temporarily suspend such rule change if it appears to the Commission that such action is necessary or appropriate in the public interest, for the protection of investors, or otherwise in furtherance of the purposes of the Act. If the Commission takes such action, the Commission shall institute proceedings to determine whether the proposed rule should be approved or disapproved.

⁹ 15 U.S.C. 78f(b)(8).

¹⁰ 15 U.S.C. 78s(b)(3)(A)(ii).

¹¹ 17 CFR 240.19b-4(f)(2).

IV. Solicitation of Comments

Interested persons are invited to submit written data, views, and arguments concerning the foregoing, including whether the proposed rule change is consistent with the Act. Comments may be submitted by any of the following methods:

Electronic Comments

- Use the Commission's Internet comment form (<http://www.sec.gov/rules/sro.shtml>); or
- Send an email to rule-comments@sec.gov. Please include File Number SR-ISEGemini-2014-28 on the subject line.

Paper Comments

- Send paper comments in triplicate to Brent J. Fields, Secretary, Securities and Exchange Commission, 100 F Street NE., Washington, DC 20549-1090.

All submissions should refer to File Number SR-ISEGemini-2014-28. This file number should be included on the subject line if email is used. To help the Commission process and review your comments more efficiently, please use only one method. The Commission will post all comments on the Commission's Internet Web site (<http://www.sec.gov/rules/sro.shtml>). Copies of the submission, all subsequent amendments, all written statements with respect to the proposed rule change that are filed with the Commission, and all written communications relating to the proposed rule change between the Commission and any person, other than those that may be withheld from the public in accordance with the provisions of 5 U.S.C. 552, will be available for Web site viewing and printing in the Commission's Public Reference Room, 100 F Street NE., Washington, DC 20549 on official business days between the hours of 10:00 a.m. and 3:00 p.m. Copies of such filing also will be available for inspection and copying at the principal office of the Exchange. All comments received will be posted without change; the Commission does not edit personal identifying information from submissions. You should submit only information that you wish to make available publicly. All submissions should refer to File Number SR-ISEGemini-2014-28, and should be submitted on or before December 11, 2014.

⁷ 15 U.S.C. 78f.

⁸ 15 U.S.C. 78f(b)(4).

For the Commission, by the Division of Trading and Markets, pursuant to delegated authority.¹²

Kevin M. O'Neill,
Deputy Secretary.

[FR Doc. 2014-27450 Filed 11-19-14; 8:45 am]

BILLING CODE 8011-01-P

SECURITIES AND EXCHANGE COMMISSION

[Release No. 34-73601; File No. SR-ISE-2014-51]

Self-Regulatory Organizations; International Securities Exchange, LLC; Notice of Filing and Immediate Effectiveness of Proposed Rule Change To Amend the Schedule of Fees

November 14, 2014.

Pursuant to Section 19(b)(1) of the Securities Exchange Act of 1934 (the "Act"),¹ and Rule 19b-4 thereunder,² notice is hereby given that on November 3, 2014, the International Securities Exchange, LLC (the "Exchange" or the "ISE") filed with the Securities and Exchange Commission ("SEC" or "Commission") the proposed rule change, as described in Items I, II, and III below, which Items have been prepared by the 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 the Substance of the Proposed Rule Change

The ISE is proposing to (1) eliminate special fees for Singly Listed Symbols, and (2) amend its rules for excluding days from its average daily volume ("ADV") calculations when the market is not open for the entire trading day. The text of the proposed rule change is available on the Exchange's Web site (<http://www.ise.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 these statements may be examined at

the places specified in Item IV below. The self-regulatory organization has prepared summaries, set forth in sections A, B and C below, of the most significant aspects of such statements.

A. Self-Regulatory Organization's Statement of the Purpose of, and Statutory Basis for, the Proposed Rule Change

1. Purpose

The Exchange proposes to (1) eliminate special fees for Singly Listed Symbols,³ and (2) amend its rules for excluding days from its ADV calculations when the market is not open for the entire trading day. Each of the proposed changes is described in more detail below. The Exchange's Schedule of Fees has separate fees applicable to Standard Options and Mini Options. The Exchange notes that while the discussion below relates to fees for Standard Options, the fees for Mini Options, which are not discussed below, are and shall continue to be 1/10th of the fees for Standard Options.

1. Singly Listed Symbols

Other than applicable response fees, simple Priority Customer⁴ orders in Non-Select symbols⁵ executed on the Exchange are generally not charged a transaction fee or fee for Crossing Orders,⁶ including a fee for Price Improvement Mechanism ("PIM") orders of fewer than 100 contracts. By contrast, the Exchange charges Priority Customer orders in a special group of Non-Select Symbols that trade solely on the ISE ("Singly Listed Symbols") a fee of \$0.20 per contract for regular and Crossing Orders, including PIM orders of 100 or fewer contracts. The Exchange now proposes to eliminate the special fees for these Singly Listed Symbols, which will now be subject to the same fees as other Priority Customer orders in Non-Select Symbols.

In connection with this change, the Exchange also proposes to remove other references to Singly Listed Symbols, including the definition of Singly Listed

Symbols in the Preface to the Schedule of Fees, and certain fee waivers that apply to Singly Listed Symbols as described below. The Exchange has a Payment for Order Flow ("PFOF") fee of \$0.70 per contract, which is paid by Market Makers⁷ for each Priority Customer contract executed against the Market Maker in Non-Select Symbols other than Singly Listed Symbols and FX Option Symbols,⁸ or for Flash Orders⁹ and Complex Orders. In addition, Market Makers making or taking liquidity receive a discount of \$0.02 per contract in Standard Options only when trading against Priority Customer orders preferenced to them in the Complex order book in equity options that are able to be listed and traded on more than one options exchange. This discount similarly does not apply to Singly Listed Symbols and FX Options Symbols, or to option classes designated by the Exchange to receive a guaranteed allocation pursuant to ISE Rule 722(b)(3)(i)(B). As the Exchange is eliminating special fees for Singly Listed Symbols, the five symbols currently designated as Singly Listed Symbols will now be subject to the PFOF program and will be eligible for the Market Maker complex order discount described above.

2. ADV Calculation

The Exchange provides a Market Maker Plus¹⁰ rebate for adding liquidity of \$0.22 per contract instead of the regular \$0.20 per contract for Market Makers that meet the quoting requirements for Market Maker Plus and are affiliated with an Electronic Access Member that executes a total affiliated Priority Customer ADV of 200,000 contracts or more in a calendar month. Similarly, the Exchange charges a discounted Priority Customer taker fee of \$0.25 per contract instead of the

⁷ The term "Market Makers" refers to "Competitive Market Makers" and "Primary Market Makers" collectively. See ISE Rule 100(a)(25).

⁸ "FX Option Symbols" are options overlying AUM, GBP, EUU and NDO.

⁹ A "Flash Order" is an order that is exposed at the National Best Bid or Offer by the Exchange to all members for execution, as provided under Supplementary Material .02 to ISE Rule 1901.

¹⁰ A Market Maker Plus is a Market Maker who is on the National Best Bid or National Best Offer at least 80% of the time for series trading between \$0.03 and \$3.00 (for options whose underlying stock's previous trading day's last sale price was less than or equal to \$100) and between \$0.10 and \$3.00 (for options whose underlying stock's previous trading day's last sale price was greater than \$100) in premium in each of the front two expiration months. A Market Maker's single best and single worst quoting days each month based on the front two expiration months, on a per symbol basis, will be excluded in calculating whether a Market Maker qualifies for this rebate, if doing so will qualify a Market Maker for the rebate.

¹² 17 CFR 200.30-3(a)(12).

¹ 15 U.S.C. 78s(b)(1).

² 17 CFR 240.19b-4.

³ "Singly Listed Symbols" are options overlying FXO, QQEW, PLTM, SMDD and FIW.

⁴ A "Priority Customer" is a person or entity that is not a broker/dealer in securities, and does not place more than 390 orders in listed options per day on average during a calendar month for its own beneficial account(s), as defined in ISE Rule 100(a)(37A).

⁵ "Non-Select Symbols" are options overlying all symbols excluding Select Symbols.

⁶ A "Crossing Order" is an order executed in the Exchange's Facilitation Mechanism, Solicited Order Mechanism, Price Improvement Mechanism (PIM) or submitted as a Qualified Contingent Cross order. For purposes of this Fee Schedule, orders executed in the Block Order Mechanism are also considered Crossing Orders.

regular \$0.30 per contract for members with a total affiliated Priority Customer ADV that equals or exceeds 200,000 contracts. And for PIM orders of 100 or fewer contracts, the Exchange charges a discounted fee of \$0.03 per contract instead of the regular \$0.05 per contract

for non-Priority Customer orders executed by members that have an ADV of 20,000 or more Priority Customer contracts in a given month executed in the PIM.¹¹

In addition, the Exchange provides tiered rebates for Priority Customer

complex orders when these orders trade with non-Priority Customer orders in the complex order book, or trade with quotes and orders on the regular order book, based on the member's ADV in Priority Customer complex contracts as shown in the table below.

PRIORITY CUSTOMER COMPLEX ORDER REBATE

Priority customer complex ADV	Select symbols ¹²	Non-select symbols
Tier 1; 0–29,999	(\$0.30)	(\$0.63)
Tier 2; 30,000–74,999	(\$0.35)	(\$0.71)
Tier 3; 75,000–124,999	(\$0.39)	(\$0.75)
Tier 4; 125,000–224,999	(\$0.41)	(\$0.80)
Tier 5; 225,000–299,999	(\$0.43)	(\$0.82)
Tier 6; 300,000+	(\$0.45)	(\$0.83)

Currently, for purposes of determining Priority Customer ADV¹³ and Priority Customer Complex ADV, any day that the market is not open for the entire trading day may be excluded from such calculation. Although the regular and complex order books may function independently, the Exchange interprets this rule to require a general halt in trading before days can be excluded pursuant to this rule. This means, for instance, that if the regular market is open for trading but the complex order book is not accepting orders, the day could not be excluded from ADV calculations for complex order tiers, even though complex order volume on the ISE would be negatively impacted for that day. The Exchange now proposes to independently exclude days from its ADV calculations when the regular or complex order books are not open for the entire trading day. As proposed, days may be excluded from the Exchange's regular and complex order ADV calculations, if the corresponding order book is not open for the entire trading day.

Furthermore, the Exchange notes that some members may be inadvertently disadvantaged when the ISE removes a day from its ADV calculation if the member executes a large volume of contracts during that day. As this disadvantages members that continue to trade significant volume on days where the regular or complex order book is halted, the Exchange proposes to only exclude days for members that would have a lower ADV with the day included.

2. Statutory Basis

The Exchange believes that the proposed rule change is consistent with the provisions of Section 6 of the Act,¹⁴ in general, and Section 6(b)(4) of the Act,¹⁵ in particular, in that 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.

1. Singly Listed Symbols

The Exchange believes that it is reasonable and equitable to eliminate special fees for Singly Listed Symbols as this will simplify the Schedule of Fees to the benefit of members and investors. The Singly Listed Symbols account for a negligible amount of volume traded and the Exchange believes that it is no longer necessary to distinguish between multiply- and singly-listed options in determining the applicable execution fees described above. Furthermore, the Exchange believes that this proposed change is not unfairly discriminatory as members will now pay the same fees regardless of whether a particular symbol is multiply- or singly-listed.

2. ADV Calculation

The Exchange believes that it is reasonable and equitable to separately account for the regular and complex order books when determining whether a day may be excluded from its ADV calculations. Without this proposed change, aberrant low volume days would have to be counted for ADV purposes if an issue in one order book did not affect the entire market at ISE, resulting in an unintended cost increase

for members. The proposed change preserves the Exchange's intent behind adopting volume-based pricing by adjusting the ADV calculations to account for days where there is no general trading halt but one or the other order book is nevertheless unavailable to members. Similarly, the Exchange believes that it is reasonable and equitable to only exclude a day from its ADV calculations for members that would otherwise have a lower ADV for the month. Without this change, members that step up and trade significant volume on days where the regular or complex order book is unavailable for a portion of the trading day may be negatively impacted, resulting in an effective cost increase for those members. The Exchange further believes that the proposed changes to its ADV calculations are not unfairly discriminatory because they apply equally to all members and ADV calculations. As is the ISE's current practice, the Exchange will provide a notice, and post it on the Exchange's Web site, to inform members of any day that is to be excluded from its ADV calculations in connection with this proposed rule change.

The Exchange notes that it has determined to charge fees and provide rebates in Mini Options at a rate that is 1/10th the rate of fees and rebates the Exchange provides for trading in Standard Options. The Exchange believes it is reasonable and equitable and not unfairly discriminatory to assess lower fees and rebates to provide market participants an incentive to trade Mini Options on the Exchange. The

¹¹ This discounted fee is applied retroactively to all eligible PIM volume in that month once the threshold has been reached.

¹² "Select Symbols" are options overlying all symbols listed on the ISE that are in the Penny Pilot Program.

¹³ The Exchange notes that this provision currently references "total affiliated" Priority Customer ADV and proposes to clarify that this encompasses all calculations that include Priority Customer ADV, such as Priority Customer PIM ADV

discussed above, which is a subset of total affiliated Priority Customer ADV.

¹⁴ 15 U.S.C. 78f.

¹⁵ 15 U.S.C. 78f(b)(4).

Exchange believes the proposed fees and rebates are reasonable and equitable in light of the fact that Mini Options have a smaller exercise and assignment value, specifically 1/10th that of a standard option contract, and, as such, is providing fees and rebates for Mini Options that are 1/10th of those applicable to Standard Options.

B. Self-Regulatory Organization's Statement on Burden on Competition

In accordance with Section 6(b)(8) of the Act,¹⁶ the Exchange does not believe that the proposed rule change will impose any burden on intermarket or intramarket competition that is not necessary or appropriate in furtherance of the purposes of the Act. The Exchange believes that eliminating special fees for Singly Listed Symbols will reduce the complexity of the Schedule of Fees to the benefit of members and investors, and will not have any competitive impact. In addition, the Exchange believes that the proposed modifications to its ADV calculation are pro-competitive and will result in lower total costs to end users, a positive outcome of competitive markets. The Exchange operates in a highly competitive market in which market participants can readily direct their order flow to competing venues. In such an environment, the Exchange must continually review, and consider adjusting, its fees and rebates to remain competitive with other exchanges. For the reasons described above, the Exchange believes that the proposed fee changes reflect this competitive environment.

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)(A)(ii) of the Act¹⁷ and subparagraph (f)(2) of Rule 19b-4 thereunder,¹⁸ because it establishes a due, fee, or other charge imposed by ISE.

At any time within 60 days of the filing of such proposed rule change, the Commission summarily may temporarily suspend such rule change if it appears to the Commission that such action is necessary or appropriate in the public interest, for the protection of investors, or otherwise in furtherance of the purposes of the Act. If the Commission takes such action, the Commission shall institute proceedings to determine whether the proposed rule should be approved or disapproved.

IV. Solicitation of Comments

Interested persons are invited to submit written data, views, and arguments concerning the foregoing, including whether the proposed rule change is consistent with the Act. Comments may be submitted by any of the following methods:

Electronic Comments

- Use the Commission's Internet comment form (<http://www.sec.gov/rules/sro.shtml>); or
- Send an email to rule-comments@sec.gov. Please include File Number SR-ISE-2014-51 on the subject line.

Paper Comments

- Send paper comments in triplicate to Brent J. Fields, Secretary, Securities and Exchange Commission, 100 F Street NE., Washington, DC 20549-1090. All submissions should refer to File Number SR-ISE-2014-51. This file number should be included on the subject line if email is used. To help the Commission process and review your comments more efficiently, please use only one method. The Commission will post all comments on the Commission's Internet Web site (<http://www.sec.gov/rules/sro.shtml>). Copies of the submission, all subsequent amendments, all written statements with respect to the proposed rule change that are filed with the Commission, and all written communications relating to the proposed rule change between the Commission and any person, other than those that may be withheld from the public in accordance with the provisions of 5 U.S.C. 552, will be available for Web site viewing and printing in the Commission's Public Reference Room, 100 F Street NE., Washington, DC 20549 on official business days between the hours of 10:00 a.m. and 3:00 p.m. Copies of such filing also will be available for inspection and copying at the principal office of the Exchange. All comments received will be posted without change; the Commission does not edit personal identifying information from

submissions. You should submit only information that you wish to make available publicly. All submissions should refer to File Number SR-ISE-2014-51, and should be submitted on or before December 11, 2014.

For the Commission, by the Division of Trading and Markets, pursuant to delegated authority.¹⁹

Kevin M. O'Neill,
Deputy Secretary.

[FR Doc. 2014-27451 Filed 11-19-14; 8:45 am]

BILLING CODE 8011-01-P

SECURITIES AND EXCHANGE COMMISSION

[Release No. 34-73598; File No. SR-NYSEArca-2014-56]

Self-Regulatory Organizations; NYSE Arca, Inc.; Notice of Designation of a Longer Period for Commission Action on Proceedings To Determine Whether To Approve or Disapprove a Proposed Rule Change Relating to Listing and Trading of Shares of the PIMCO Income Exchange-Traded Fund Under NYSE Arca Equities Rule 8.600

November 14, 2014.

On May 1, 2014, NYSE Arca, Inc. filed with the Securities and Exchange Commission ("Commission"), pursuant to Section 19(b)(1) of the Securities Exchange Act of 1934 ("Act")¹ and Rule 19b-4 thereunder,² a proposed rule change to list and trade shares of the PIMCO Income Exchange-Traded Fund under NYSE Arca Equities Rule 8.600. The proposed rule change was published for comment in the **Federal Register** on May 21, 2014.³ On June 24, 2014, the Commission designated a longer period within which to approve the proposed rule change, disapprove the proposed rule change, or institute proceedings to determine whether to disapprove the proposed rule change.⁴ On August 19, 2014, the Commission instituted proceedings under Section 19(b)(2)(B) of the Act⁵ to determine whether to approve or disapprove the

¹⁹ 17 CFR 200.30-3(a)(12).

¹ 15 U.S.C. 78s(b)(1).

² 17 CFR 240.19b-4.

³ See Securities Exchange Act Release No. 72170 (May 15, 2014), 79 FR 29231.

⁴ See Securities Exchange Act Release No. 72458, 79 FR 36849 (Jun. 30, 2014). The Commission determined that it was appropriate to designate a longer period within which to take action on the proposed rule change so that it has sufficient time to consider the proposed rule change. Accordingly, the Commission designated August 19, 2014 as the date by which it should approve, disapprove, or institute proceedings to determine whether to disapprove the proposed rule change.

⁵ 15 U.S.C. 78s(b)(2)(B).

¹⁶ 15 U.S.C. 78f(b)(8).

¹⁷ 15 U.S.C. 78s(b)(3)(A)(ii).

¹⁸ 17 CFR 240.19b-4(f)(2).

proposed rule change.⁶ The Commission received no comments on the proposed rule change.

Section 19(b)(2) of the Act⁷ provides that, after initiating disapproval proceedings, the Commission shall issue an order approving or disapproving the proposed rule change not later than 180 days after the date of publication of notice of filing of the proposed rule change. The Commission may, however, extend the period for issuing an order approving or disapproving the proposed rule change by not more than 60 days if the Commission determines that a longer period is appropriate and publishes the reasons for that determination. The proposed rule change was published for notice and comment in the **Federal Register** on May 21, 2014.⁸ The 180th day after publication of the notice of the filing of the proposed rule change in the **Federal Register** is November 17, 2014, and the 240th day after publication of the notice of the filing of the proposed rule change in the **Federal Register** is January 16, 2015.

The Commission finds it appropriate to designate a longer period within which to issue an order approving or disapproving the proposed rule change so that it has sufficient time to consider the proposed rule change.

Accordingly, the Commission, pursuant to Section 19(b)(2) of the Act,⁹ designates January 16, 2015 as the date by which the Commission shall either approve or disapprove the proposed rule change (File No. SR-NYSEArca-2014-56).

For the Commission, by the Division of Trading and Markets, pursuant to delegated authority.¹⁰

Kevin M. O'Neill,
Deputy Secretary.

[FR Doc. 2014-27447 Filed 11-19-14; 8:45 am]

BILLING CODE 8011-01-P

⁶ See Securities Exchange Act Release No. 72867, 79 FR 50720 (Aug. 25, 2014). Specifically, the Commission instituted proceedings to allow for additional analysis of the proposed rule change's consistency with Section 6(b)(5) of the Act, 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," and "to protect investors and the public interest." See *id.*

⁷ 15 U.S.C. 78s(b)(2).

⁸ See *supra* note 3 and accompanying text.

⁹ 15 U.S.C. 78s(b)(2).

¹⁰ 17 CFR 200.30-3(a)(57).

SECURITIES AND EXCHANGE COMMISSION

[Release No. 34-73602; File No. SR-NYSEArca-2014-120]

Self-Regulatory Organizations; NYSE Arca, Inc.; Notice of Filing of Amendment No. 2 to Proposed Rule Change Relating to Listing and Trading Shares of the Sit Rising Rate Fund Under NYSE Arca Equities Rule 8.200

November 14, 2014.

On October 16, 2014, NYSE Arca, Inc. ("Exchange" or "NYSE Arca") filed with the Securities and Exchange Commission ("Commission"), pursuant to Section 19(b)(1)¹ of the Securities Exchange Act of 1934 ("Exchange Act")² and Rule 19b-4 thereunder,³ a proposed rule change to list and trade shares of the Sit Rising Rate Fund under NYSE Arca Equities Rule 8.200. The proposed rule change was published for comment in the **Federal Register** on November 4, 2014.⁴ The Commission received no comments on the proposal.

Pursuant to Section 19(b)(1) of the Act⁵ and Rule 19b-4 thereunder,⁶ notice is hereby given that, on November 6, 2014, the Exchange filed with the Commission Amendment No. 2 to the proposed rule change, as described in Sections I and II below, which Sections have been prepared by the Exchange.⁷ The Commission is publishing this notice to solicit comments from interested persons on the proposed rule change, as modified by Amendment No. 2 thereto.

I. Self-Regulatory Organization's Statement of the Terms of Substance of the Proposed Rule Change

The Exchange proposes to list and trade shares of the Sit Rising Rate Fund under NYSE Arca Equities Rule 8.200. The text of the proposed rule change is available on the Exchange's Web site at www.nyse.com, at the principal office of the Exchange, and at the Commission's Public Reference Room.

II. Self-Regulatory Organization's Statement of the Purpose of, and the Statutory Basis for, the Proposed Rule Change

In its filing with the Commission, the self-regulatory organization included

¹ 15 U.S.C. 78s(b)(1).

² 15 U.S.C. 78a.

³ 17 CFR 240.19b-4.

⁴ See Securities Exchange Act Release No. 73464 (Oct. 29, 2014), 79 FR 65437.

⁵ 15 U.S.C. 78s(b)(1).

⁶ 17 CFR 240.19b-4.

⁷ Amendment No. 2 replaces SR-NYSEArca-2014-120 and supersedes such filing in its entirety. Amendment No. 1 was filed on November 3, 2014 and withdrawn on November 6, 2014.

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

NYSE Arca Equities Rule 8.200, Commentary .02 permits the trading of Trust Issued Receipts ("TIRs") either by listing or pursuant to unlisted trading privileges ("UTP").⁸ The Exchange proposes to list and trade shares ("Shares") of the Sit Rising Rate Fund ("Fund") pursuant to NYSE Arca Equities Rule 8.200. The Fund is a series of the ETF Managers Group Commodity Trust I (the "Trust"), a Delaware statutory trust.⁹

The Exchange notes that the Commission has previously approved the listing and trading of other issues of TIRs on the American Stock Exchange LLC,¹⁰ trading on NYSE Arca pursuant to UTP,¹¹ and listing on NYSE Arca.¹² In addition, the Commission has approved the listing and trading of other exchange-traded fund-like products linked to the performance of underlying currencies and commodities.¹³

⁸ Commentary .02 to NYSE Arca Equities Rule 8.200 applies to Trust Issued Receipts that invest in "Financial Instruments." The term "Financial Instruments," as defined in Commentary .02(b)(4) to NYSE Arca Equities Rule 8.200, means any combination of investments, including cash; securities; options on securities and indices; futures contracts; options on futures contracts; forward contracts; equity caps, collars and floors; and swap agreements.

⁹ The Trust submitted a registration statement with respect to the Fund on Form S-1 under the Securities Act of 1933 ("1933 Act") on October 7, 2014 (File No. 333-199190) (the "Registration Statement"). The description of the Fund and the Shares contained herein are based, in part, on the Registration Statement.

¹⁰ See, e.g., Securities Exchange Act Release No. 58161 (July 15, 2008), 73 FR 42380 (July 21, 2008) (SR-Amex-2008-39).

¹¹ See, e.g., Securities Exchange Act Release No. 58163 (July 15, 2008), 73 FR 42391 (July 21, 2008) (SR-NYSEArca-2008-73).

¹² See, e.g., Securities Exchange Act Release No. 70209 (August 15, 2013), 78 FR 51269 (June 24, 2013) (SR-NYSEArca-2013-60); Securities Exchange Act Release No. 58457 (September 3, 2008), 73 FR 52711 (September 10, 2008) (SR-NYSEArca-2008-91).

¹³ See, e.g., Securities Exchange Act Release Nos. 56131 (July 25, 2007), 72 FR 42212 (August 1, 2007) (SR-NYSEArca-2007-57) (order approving listing and trading on NYSE Arca of shares of eight issues

Continued

According to the Registration Statement, the Fund's sponsor and investment manager is ETF Managers Capital LLC ("ETPMC") or the "Sponsor"), a limited liability company that is a commodity pool operator ("CPO") that is registered with the Commodity Futures Trading Commission ("CFTC")¹⁴ and is a member of the National Futures Association ("NFA"). U.S. Bancorp Fund Services will be the transfer agent, custodian and administrator for the Fund ("Custodian" or "Administrator"). Esposito Securities LLC (the "Distributor") will provide statutory and wholesaling distribution services.¹⁵

Fund's Investment Objective and Strategy

The Fund's investment objective will be to profit from rising interest rates by tracking the performance of a portfolio (the "Benchmark Portfolio") consisting of exchange traded futures contracts and options on futures on 2, 5 and 10-year U.S. Treasury securities ("Treasury Instruments") weighted to achieve a targeted negative 10-year average effective portfolio duration (the "Benchmark Component Instruments"). The Fund will seek to achieve its investment objective by investing in the Benchmark Component Instruments currently constituting the Benchmark Portfolio. The Fund will invest in the Treasury Instruments in the same weighting as the Benchmark Portfolio.

The Benchmark Portfolio will be maintained by Sit Fixed Income Advisors II, LLC ("Sit")¹⁶ and will be rebalanced, reconstituted, or both, monthly, typically on the 15th of each month and on the next business day if the 15th is a holiday, weekend, or other day on which the national exchanges are closed, to maintain a negative 10-

year average effective duration. The Benchmark Portfolio and the Fund will each maintain a short position in Treasury Instruments. The Fund will not use futures contracts or options to obtain leveraged investment results. The Benchmark Component Instruments constituting the Benchmark Portfolio and anticipated rebalancing dates, as well as the daily holdings of the Fund, will be available on the Fund's Web site at www.risingratefund.com.

The weightings of the Treasury Instruments constituting the Benchmark Portfolio and the Fund will be based on each maturity's duration contribution. Longer duration treasuries will account for a more meaningful portion of the Fund's price sensitivity to changes in interest rates. As of October 9, 2014, the Benchmark Portfolio consisted of:

Treasury instrument (%)	Percent of portfolio
2 Year U.S. Treasury Futures ..	45
5 Year U.S. Treasury Futures ..	30
5 Year U.S. Treasury Call Options	15
10 Year U.S. Treasury Put Options	10
	100

The relative weightings of the Benchmark Component Instruments will be shifted between maturities only when there are material changes in the shape of the yield curve, for example, if the Federal Reserve began raising short term interest rates more than long term interest rates. In such an instance, Sit, which maintains the Benchmark Portfolio, will increase the weightings of the 2-year and reduce the weighting in the 10-year maturity Treasury Instruments. Conversely, Sit will do the opposite if the Federal Reserve began raising long term interest rates more than short term interest rates. Reconstitution and rebalancing each will occur monthly, on the 15th, or on the next [sic] business day if the 15th is a holiday, weekend, or other day on which the national exchanges are closed, unless there are radical changes in the yield curve such that effective duration is outside of a range from negative nine to negative 11-year average effective duration, in which case Sit will adjust the maturities of the Treasury Instruments before the next expected monthly reconstitution.

The Sponsor anticipates that approximately 5% to 15% of the Fund's assets will be used as payment for or collateral for Treasury Instruments. In order to collateralize its Treasury Instrument positions the Fund will hold such assets, from which it will post

margin to its futures commission merchant ("FCM"), in an amount equal to the margin required by the relevant exchange, and transfer to its FCM any additional amounts that may be separately required by the FCM.¹⁷ Any assets not required to be posted as margin with the FCM will be held at the Fund's administrator in cash or cash equivalents as discussed below.

The Benchmark Portfolio will be invested in Benchmark Component Instruments and rebalanced, as noted above, to maintain a negative average effective portfolio duration of approximately 10 years. Duration is a measure of estimated price sensitivity relative to changes in interest rates. Portfolios with longer durations are typically more sensitive to changes in interest rates. For example, if interest rates rise by 1%, the market value of a security with an effective duration of 5 years would decrease by 5%, with all other factors being constant, and likewise the market value of a security with an effective duration of negative 5 years would increase by 5%, with all other factors being constant. Duration estimates are based on certain assumptions by Sit and are subject to a number of limitations. Duration is a more accurate estimate of price sensitivity provided interest rate changes are small and occur equally in short-term and long-term securities. Investments in debt securities typically decrease in value when interest rates rise. The risk is usually greater for longer-term debt securities.

The Fund will incur certain expenses in connection with its operations. The Fund will hold cash or cash equivalents such as U.S. Treasuries or other high credit quality, short-term fixed-income or similar securities (such as shares of money market funds) for direct investment or as collateral for the Treasury Instruments and for other liquidity purposes and to meet redemptions that may be necessary on an ongoing basis. These expenses and income from the cash and cash equivalent holdings may cause imperfect correlation between changes in the Fund's NAV and changes in the Benchmark Portfolio, because the Benchmark Portfolio does not reflect expenses or income.

¹⁷ When establishing positions in Treasury Instruments, the Fund will be required to deposit initial margin with a value of approximately 3% to 10% of the value of each Treasury Instrument position at the time it is established. These margin requirements are subject to change from time to time by the exchange or the FCM. On a daily basis, the Fund will be obligated to pay, or entitled to receive, variation margin in an amount equal to the change in the daily settlement level of its Treasury Instruments positions.

of Commodity Trust Shares); 57456 (March 7, 2008), 73 FR 13599 (March 13, 2008) (SR-NYSEArca-2007-91) (order granting accelerated approval for NYSE Arca listing and trading of shares of the iShares GS Commodity Trusts); 59781 (April 17, 2009), 74 FR 18771 (April 24, 2009) (SR-NYSEArca-2009-28) (order granting accelerated approval for NYSE Arca listing and trading of shares of the ETFS Silver Trust); 59895 (May 8, 2009), 74 FR 22993 (May 15, 2009) (SR-NYSEArca-2009-40) (order granting accelerated approval for NYSE Arca listing the ETFS Gold Trust); 62527 (July 19, 2010), 75 FR 43606 (July 26, 2010) (SR-NYSEArca-2010-44) (order approving listing and trading on NYSE Arca of shares of the United States Commodity Index Fund).

¹⁴ The Sponsor is not a broker-dealer or affiliated with a broker-dealer.

¹⁵ This Amendment No. 2 to SR-NYSEArca-2014-120 replaces SR-NYSEArca-2014-120 as originally filed and supersedes such filing in its entirety. The Exchange has withdrawn Amendment No. 1 to SR-NYSEArca-2014-120.

¹⁶ Sit is not affiliated with the Sponsor. Sit is not a broker-dealer or affiliated with a broker-dealer.

Net Asset Value

According to the Registration Statement, the net asset value (“NAV”) of the Fund will be calculated by taking the current market value of its total assets, subtracting any liabilities, and dividing that total by the total number of outstanding Shares.

The Administrator will calculate the NAV daily and the NAV will be released after 4:00 p.m. Eastern Time (“E.T.”), the end of the Core Trading Session on the Exchange. For purposes of calculating NAV, the Administrator will use the closing price of the Treasury Instruments on the U.S. exchanges on which the Treasury Instruments are traded (primarily on the exchanges within the Chicago Mercantile Exchange Group of exchanges and other national exchanges (collectively, the “Futures Exchanges”). The Administrator will value all other holdings of the Fund at (1) current market value, if quotations for such property are readily available, or (2) fair value, as reasonably determined by the Administrator, if the current market value cannot be determined. Once the value of the Treasury Instruments and interest earned on the Fund’s cash and cash equivalents has been determined, the Administrator will subtract all accrued expenses and liabilities of the Fund as of the time of calculation in order to calculate the net asset value of the Fund.

Intraday Indicative Value (“IIV”)

According to the Registration Statement, the Exchange will calculate and disseminate throughout the core trading session on each trading day an updated IIV for the Fund. The IIV will be calculated by using the Fund’s prior day’s closing NAV per share as a base and updating that value throughout the trading day to reflect changes in the most recently reported trade price for the Benchmark Component Instruments. The net asset value of the Fund’s cash and cash equivalent holdings, on the other hand, will not be updated throughout the day.

The IIV will be calculated on a per share basis every 15 seconds during the Core Trading Session (9:30 a.m. E.T. to 4:00 p.m. E.T.) on the Exchange. The normal trading hours of the Futures Exchanges are 10:00 a.m. to 2:30 p.m. E.T. This means that there is a gap in time at the beginning and the end of each day during which the Fund’s Shares are traded on the Exchange but real-time Futures Exchanges trading prices for contracts traded on the Futures Exchanges are unavailable. During such gaps in time the IIV will be

calculated based on the end of day price of such contracts from the Futures Exchanges’ immediately preceding trading session.

According to the Registration Statement, the Fund will provide the independent third party calculator with information to calculate the IIV, but the Fund will not be involved in the actual calculation of the IIV and is not responsible for the calculation or dissemination of the IIV. The Fund makes no warranty as to the accuracy of the IIV. The IIV should not be viewed as a “real-time” update of NAV because the IIV is not calculated in the same manner as NAV, which will be computed once per day.

The Exchange disseminates the IIV through the facilities of CTA/CQ High Speed Lines. In addition, the IIV is published on the NYSE Arca’s Web site and is available through on-line information services such as Bloomberg and Reuters.

According to the Registration Statement, dissemination of the IIV provides additional information that is not otherwise available to the public and is useful to investors and market professionals in connection with the trading of the Fund Shares on the Exchange. Investors and market professionals are able throughout the trading day to compare the market price of the Fund and the IIV. If the market price of the Fund Shares diverges significantly from the IIV, market professionals will have an incentive to execute arbitrage trades. Such arbitrage trades can tighten the tracking between the market price of the Fund and the IIV and thus can be beneficial to all market participants.

The IIV should not be viewed as an actual real time update of the NAV, because the NAV is calculated only once at the end of each trading day based upon the relevant end of day values of the Fund’s investments. The IIV also should not be viewed as a precise value of the Shares.

In addition to the IIV, the value of the Benchmark Portfolio (excluding the cash and cash equivalent holdings) will be calculated every 15 seconds on a delayed basis and disseminated through similar means as the IIV.

Creation and Redemption of Shares

The Fund will offer and issue Shares only in aggregations of a specified number of Shares (each, a “Creation Unit”). Creation Unit sizes will be 25,000 Shares per Creation Unit. The Creation Unit size for the Fund may change. The Fund will create and redeem Shares from time to time in one or more “Creation Baskets” or

“Redemption Baskets” as described below. The creation and redemption of baskets will only made in exchange for delivery to the Fund or the distribution by the Fund of the amount of Treasuries and any cash represented by the baskets being created or redeemed, the amount of which is based on the combined NAV of the number of Shares included in the baskets being created or redeemed determined as of 4:00 p.m. E.T. on the day the order to create or redeem baskets is properly received.

On any business day other than a day when any of the NYSE Arca, the Futures Exchanges or the New York Stock Exchange are closed for regular trading (“Business Day”), an Authorized Purchaser¹⁸ may place an order with the Distributor to create one or more baskets. Purchase orders must be placed by 12:00 p.m. E.T. or the close of regular trading on the NYSE Arca, whichever is earlier. The day on which the Distributor receives a valid purchase order is referred to as the purchase order date. By placing a purchase order, an Authorized Purchaser agrees to deposit Treasuries, cash or a combination of Treasuries and cash, as described below. Prior to the delivery of baskets for a purchase order, the Authorized Purchaser must also have wired to the Custodian the non-refundable transaction fee due for the purchase order.

The total deposit required to create each basket (“Creation Basket Deposit”) is the amount of Treasuries and/or cash that is in the same proportion to the total assets of the Fund (net of estimated accrued but unpaid fees, expenses and other liabilities) on the purchase order date as the number of Shares to be created under the purchase order is in proportion to the total number of Shares outstanding on the purchase order dates. ETFMC determines, directly in its sole discretion or in consultation with the Administrator, the requirements for Treasuries and the amount of cash, including the maximum permitted remaining maturity of a Treasury and proportions of Treasury and cash that

¹⁸ Authorized Purchasers will be the only persons that may place orders to create and redeem baskets. Authorized Purchasers must be (1) registered broker-dealers or other securities market participants, and (2) have an account with the Depository Trust Company. To become an Authorized Purchaser, a person must enter into an Authorized Purchaser Agreement with ETFMC. The Authorized Purchaser Agreement provides the procedures for the creation and redemption of baskets and for the delivery of the Treasuries and any cash required for such creation and redemptions. The Authorized Purchaser Agreement and the related procedures attached thereto may be amended by the Fund, without the consent of any limited partner or shareholder or Authorized Purchaser.

may be included in deposits to create baskets. The Distributor will publish such requirements at the beginning of each Business Day. The amount of cash deposit required is the difference between the aggregate market value of the Treasuries required to be included in a Creation Basket Deposit as of 4:00 p.m. E.T. on the date the order to purchase is properly received and the total required deposit.

The procedures by which an Authorized Purchaser can redeem one or more baskets mirror the procedures for the creation of baskets. On any Business Day, an Authorized Purchaser may place an order with the Distributor to redeem one or more baskets. Redemption orders must be placed by 12:00 p.m. E.T. or the close of regular trading on the NYSE Arca, whichever is earlier. A redemption order so received will be effective on the date it is received in satisfactory form by the Distributor. The redemption procedures allow Authorized Purchasers to redeem baskets and do not entitle an individual shareholder to redeem any Shares in an amount less than a Redemption Basket, or to redeem baskets other than through an Authorized Purchaser.

The redemption distribution due from the Fund will be delivered to the Authorized Purchaser by 3:00 p.m. E.T. on the third business day following the redemption order date if, by 3:00 p.m. E.T. on such third business day, the Fund's account at the Depository Trust Company ("DTC") has been credited with the baskets to be redeemed. If the Fund's DTC account has not been credited with all of the baskets to be redeemed by such time, the redemption distribution will be delivered to the extent of whole baskets received. Any remainder of the redemption distribution will be delivered on the next business day to the extent of remaining whole baskets received if the Fund receives the fee applicable to the extension of the redemption distribution date which ETFMC may, from time to time, determine and the remaining baskets to be redeemed are credited to the Fund's DTC account by 3:00 p.m. E.T. on such next business day. Any further outstanding amount of the redemption order shall be cancelled.

The Exchange will obtain a representation prior to listing of the Fund from the Trust that the NAV per Share will be calculated daily and made available to all market participants at the same time.

The Fund will meet the initial and continued listing requirements applicable to TIRs in NYSE Arca Equities Rule 8.200 and Commentary .02 thereto. With respect to application

of Rule 10A-3¹⁹ under the Act, the Fund will rely on the exception contained in Rule 10A-3(c)(7).²⁰ A minimum of 100,000 Shares of the Fund will be outstanding as of the start of trading on the Exchange.

The Fund's investments will be consistent with the Fund's investment objective and will not be used to enhance leverage. That is, the Fund's investments will not be used to seek performance that is a multiple (e.g., 2X or 3X) or inverse multiple of the Fund's Benchmark Portfolio.

A more detailed description of the Fund as well as investment risks, creation and redemption procedures and fees is set forth in the Registration Statement.

Availability of Information Regarding the Shares

The Fund's Web site, www.risingratefund.com, will be publicly accessible at no charge prior to the public offering of Shares and will include a form of the prospectus for that may be downloaded. The Web site will include additional quantitative information updated on a daily basis, including (a) the current NAV per Share daily and the prior Business Day's NAV and the reported closing price; (b) the mid-point of the bid-ask price in relation to the NAV as of the time the NAV is calculated (the "Bid-Ask Price"); (c) calculation of the premium or discount of such price against such NAV; (d) the Bid-Ask Price of Shares determined using the highest bid and lowest offer as of the time of calculation of the NAV; (e) data in chart form displaying the frequency distribution of discounts and premiums of the Bid-Ask Price against the NAV, within appropriate ranges for each of the four (4) previous calendar quarters; (f) the prospectus; and (g) other applicable quantitative information.

In addition, a basket composition file, which includes the security names and share quantities required to be delivered in exchange for Fund Shares, together with estimates and actual cash components, will be publicly disseminated daily prior to the opening of the Exchange via the National Securities Clearing Corporation. The basket represents one Creation Unit of the Fund.

Investors can also obtain the Trust's Statement of Additional Information ("SAI"), Shareholder Reports and Form N-CSR. The Trust's SAI and Shareholder Reports are available free upon request from the Trust, and those

documents and the Form N-CSR may be viewed on-screen or downloaded from the Commission's Web site at www.sec.gov. Information regarding market price and trading volume of the Shares will be continually available on a real-time basis throughout the day on brokers' computer screens and other electronic services. Information regarding the previous day's closing price and trading volume information for the Shares will be published daily in the financial section of newspapers.

The Exchange represents that quotation and last sale information for the Treasury Instruments will be widely disseminated through a variety of major market data vendors worldwide, such as Bloomberg and Reuters. In addition, the Exchange further represents that complete real-time price (and volume) data for such contracts is available by subscription from Reuters and Bloomberg. The Futures Exchanges also provide delayed futures price (and volume) information on current and past trading sessions and market news free of charge on their Web sites for Treasury Instruments. The specific contract specifications for such contracts are also available at the Futures Exchanges Web sites, as well as other financial informational sources. The price of Treasury Instruments also is available on a 24-hour basis from major market data vendors. Information relating to trading, including price and volume information, in Treasury Instruments will be available from major market data vendors and from the exchanges on which Treasury Instruments trade.

The Fund will provide Web site disclosure of its portfolio holdings daily and will include the names, quantity, price and market value of the Treasury Instruments held by the Fund and other financial instruments such as Treasury Bills, if any, and the characteristics of such instruments and cash equivalents, and amount of cash held in the portfolio of the Fund. This Web site disclosure of the portfolio composition of the Fund will occur at the same time as the disclosure by the Sponsor of the portfolio composition to authorized participants so that all market participants are provided portfolio composition information at the same time. Therefore, the same portfolio information will be provided on the public Web site as well as in electronic files provided to authorized participants. Accordingly, each investor will have access to the current portfolio composition of the Fund through the Fund's Web site.

The IIV will be calculated by using the Fund's prior day's closing NAV per

¹⁹ 17 CFR 240.10A-3.

²⁰ 17 CFR 240.10A-3(c)(7).

share as a base and updating that value throughout the trading day to reflect changes in the most recently reported trade price for the Treasury Instruments. The IIV per Share will be widely disseminated by one or more major market data vendors at least every 15 seconds during the Core Trading Session.²¹

The NAV for the Shares will be disseminated to all market participants at the same time. The Exchange will also make available on its Web site daily trading volume of the Shares and the closing prices of such Shares. The intra-day closing prices and settlement prices of the Treasury Instruments are or will be readily available from the Web sites of the Futures Exchanges on which Treasury Instruments are traded. The relevant exchanges trading Treasury Instruments also provide delayed futures information on current and past trading sessions and market news free of charge on their respective Web sites.

Quotation information from brokers and dealers or major market data vendors will be available for U.S. Treasuries or other high credit quality, short-term fixed-income or similar securities (such as shares of money market funds).

Quotation and last-sale information regarding the Shares will be disseminated through the facilities of the CTA. In addition, the Fund's Web site, www.risingratefund.com, will display the applicable end of day closing NAV.

Availability of Information About the Benchmark Portfolio

The daily closing Benchmark Portfolio level and the percentage change in the daily closing level for the Benchmark Portfolio will be publicly available from one or more major market data vendors. The intraday value of the Benchmark Portfolio, updated every 15 seconds, will also be available through major market data vendors.

Pricing information regarding the Treasury Instruments will also be available from the Futures Exchanges Web sites. Similar information regarding the Treasury securities underlying the Treasury Instruments will be publicly available from various financial information service providers. Information relating to the weighting of Treasury Instruments and the Benchmark Portfolio methodology is also available on the Web site for Fund at www.risingratefund.com.

Trading Rules

The Exchange deems the Shares to be equity securities, thus rendering trading in the Shares subject to the Exchange's existing rules governing the trading of equity securities. Shares will trade on the NYSE Arca Marketplace from 4:00 a.m. to 8:00 p.m. E.T. in accordance with NYSE Arca Equities Rule 7.34 (Opening, Core, and Late Trading Sessions). The Exchange has appropriate rules to facilitate transactions in the Shares during all trading sessions. As provided in NYSE Arca Equities Rule 7.6, Commentary .03, the minimum price variation ("MPV") for quoting and entry of orders in equity securities traded on the NYSE Arca Marketplace is \$0.01, with the exception of securities that are priced less than \$1.00 for which the MPV for order entry is \$0.0001.

The Shares will conform to the initial and continued listing criteria under NYSE Arca Equities Rule 8.200. The Exchange represents that, for initial and/or continued listing, the Fund will be in compliance with Rule 10A-3²² under the Act, as provided by NYSE Arca Equities Rule 5.3. A minimum of 100,000 Shares for the Fund will be outstanding at the commencement of trading on the Exchange.

The trading of the Shares will be subject to NYSE Arca Equities Rule 8.200, Commentary .02(e), which sets forth certain restrictions on Equity Trading Permit ("ETP") Holders acting as registered Market Makers in TIRs to facilitate surveillance. See "Surveillance" below for more information.

With respect to trading halts, the Exchange may consider all relevant factors in exercising its discretion to halt or suspend trading in the Shares. Trading may be halted because of market conditions or for reasons that, in the view of the Exchange, make trading in the Shares inadvisable. These may include: (1) The extent to which trading is not occurring in the underlying Treasury Instruments, (2) if the creation or redemption of Shares is suspended for a period that, in the judgment of the Exchange, may detrimentally impact Exchange trading of the Shares, or (3) whether other unusual conditions or circumstances detrimental to the maintenance of a fair and orderly market are present. In addition, trading in Shares will be subject to trading halts caused by extraordinary market volatility pursuant to the Exchange's "circuit breaker" rule²³ or by the halt or

suspension of trading of the underlying Treasury Instruments.

The Exchange represents that the Exchange may halt trading during the day in which an interruption to the dissemination of the IIV, the Benchmark Portfolio or the value of the underlying Treasury Instruments occurs. If an interruption to the dissemination of the IIV, the Benchmark Portfolio or the value of the underlying Treasury Instruments persists past the trading day in which it occurred, the Exchange will halt trading no later than the beginning of the trading day following the interruption. In addition, if the Exchange becomes aware that the NAV with respect to the Shares is not disseminated to all market participants at the same time, it will halt trading in the Shares until such time as the NAV is available to all market participants.

Surveillance

The Exchange represents that trading in the Shares will be subject to the existing trading surveillances, administered by the Financial Industry Regulatory Authority ("FINRA") on behalf of the Exchange, which are designed to detect violations of Exchange rules and applicable federal securities laws.²⁴ The Exchange represents that these procedures are adequate to properly monitor Exchange trading of the Shares in all trading sessions and to deter and detect violations of Exchange rules and federal securities laws applicable to trading on the Exchange.

The surveillances referred to above generally focus on detecting securities trading outside their normal patterns, which could be indicative of manipulative or other violative activity. When such situations are detected, surveillance analysis follows and investigations are opened, where appropriate, to review the behavior of all relevant parties for all relevant trading violations.

FINRA, on behalf of the Exchange, will communicate as needed regarding trading in the Shares and underlying Treasury Instruments with other markets and entities that are members of the Intermarket Surveillance Group ("ISG"), and FINRA, on behalf of the Exchange, may obtain trading information regarding trading in the Shares and underlying Treasury Instruments from such markets and other entities. In addition, the Exchange may obtain information regarding

²¹ Currently, it is the Exchange's understanding that several major market data vendors display and/or make widely available IIVs taken from the CTA or other data feeds.

²² 17 CFR 240.10A-3.

²³ See NYSE Arca Equities Rule 7.12.

²⁴ FINRA surveils trading on the Exchange pursuant to a regulatory services agreement. The Exchange is responsible for FINRA's performance under this regulatory services agreement.

trading in the Shares and underlying Treasury Instruments from markets and other entities that are members of ISG or with which the Exchange has in place a comprehensive surveillance sharing agreement.²⁵ FINRA, on behalf of the Exchange, is able to access, as needed, trade information for certain fixed income securities held by the Fund reported to FINRA's Trade Reporting and Compliance Engine ("TRACE").

For components traded on exchanges, not more than 10% of the components traded on exchanges shall consist of components whose principal trading market is not a member of ISG or is a market with which the Exchange does not have a comprehensive surveillance sharing agreement.

In addition, the Exchange also has a general policy prohibiting the distribution of material, non-public information by its employees.

Information Bulletin

Prior to the commencement of trading, the Exchange will inform its ETP Holders in an Information Bulletin ("Bulletin") of the special characteristics and risks associated with trading the Shares. Specifically, the Bulletin will discuss the following: (1) The procedures for purchases and redemptions of Shares in Creation Basket aggregations (and that Shares are not individually redeemable); (2) NYSE Arca Equities Rule 9.2(a), which imposes a duty of due diligence on its ETP Holders to learn the essential facts relating to every customer prior to trading the Shares; (3) the risks involved in trading the Shares during the Opening and Late Trading Sessions when an updated IIV will not be calculated or publicly disseminated; (4) how information regarding the IIV is disseminated; (5) the requirement that ETP Holders deliver a prospectus to investors purchasing newly issued Shares prior to or concurrently with the confirmation of a transaction; and (6) trading information.

In addition, the Bulletin will reference that the Fund is subject to various fees and expenses described in the Registration Statement. The Bulletin will discuss any exemptive, no-action, and interpretive relief granted by the Commission from any rules under the Act. The Bulletin will also disclose that the NAV for the Shares will be calculated after 4:00 p.m. E.T. each trading day.

The Information Circular will disclose that information about the Shares of the Fund will be publicly available on the Fund's Web site.

2. Statutory Basis

The basis under the Act for this proposed rule change is the requirement under Section 6(b)(5)²⁶ that an exchange have rules that are designed to prevent fraudulent and manipulative acts and practices, to promote just and equitable principles of trade, to remove impediments to, and perfect the mechanism of a free and open market and, in general, to protect investors and the public interest.

The Exchange believes that the proposed rule change is designed to prevent fraudulent and manipulative acts and practices in that the Shares will be listed and traded on the Exchange pursuant to the initial and continued listing criteria in NYSE Arca Equities Rule 8.200 and Commentary .02 thereto. The Fund will seek to achieve its investment objective by tracking the performance of the Benchmark Portfolio. The Fund will invest in the Treasury Instruments in the same weighting as the Benchmark Portfolio. The Sponsor represents that the Fund will invest in Treasury Instruments in a manner consistent with the Fund's investment objective and will not use futures contracts or options to obtain leveraged investment results. The Sponsor is not broker-dealer or affiliated with a broker-dealer. The Sponsor represents that it will implement and maintain procedures designed to prevent the use and dissemination of material non-public information. Sit, which maintains the Benchmark Portfolio, is not affiliated with the Sponsor and is not a broker-dealer or affiliated with a broker-dealer.

The Exchange has in place surveillance procedures that are adequate to properly monitor trading in the Shares in all trading sessions and to deter and detect violations of Exchange rules and applicable federal securities laws. FINRA, on behalf of the Exchange, will communicate as needed regarding trading in the Shares and underlying Treasury Instruments with other markets and other entities that are members of the ISG, and FINRA, on behalf of the Exchange, may obtain trading information regarding trading in the Shares and underlying Treasury Instruments from such markets and other entities. In addition, the Exchange may obtain information regarding trading in the Shares and underlying Treasury Instruments from markets and

other entities that are members of ISG or with which the Exchange has in place a comprehensive surveillance sharing agreement. FINRA, on behalf of the Exchange, is able to access, as needed, trade information for certain fixed income securities held by the Fund reported to TRACE. For components traded on exchanges, not more than 10% of the components traded on exchanges shall consist of components whose principal trading market is not a member of ISG or is a market with which the Exchange does not have a comprehensive surveillance sharing agreement. The NAV for the Shares will be disseminated to all market participants at the same time. The Exchange will also make available on its Web site daily trading volume of the Shares and the closing prices of such Shares. The intra-day closing prices and settlement prices of the Treasury Instruments are or will be readily available from the Web sites of the Futures Exchanges on which Treasury Instruments are traded. The Futures Exchanges trading Treasury Instruments also provide delayed futures information on current and past trading sessions and market news free of charge on their respective Web sites.

In addition, quotation information from brokers and dealers or major market data vendors will be available for U.S. Treasuries or other high credit quality, short-term fixed-income or similar securities (such as shares of money market funds).

Quotation and last-sale information regarding the Shares will be disseminated through the facilities of the CTA. In addition, the Fund's Web site, www.risingratefund.com, will display the applicable end of day closing NAV.

The daily closing Benchmark Portfolio level and the percentage change in the daily closing level for the Benchmark Portfolio will be publicly available from one or more major market data vendors. The intraday value of the Benchmark Portfolio, updated every 15 seconds, will also be available on a major market data vendor. Pricing information regarding the Treasury Instruments will also be available from the Futures Exchanges Web sites. Similar information regarding the Treasury securities underlying the Treasury Instruments will be publicly available from various financial information service providers. Information relating to the weighting of Treasury Instruments and the Benchmark Portfolio methodology is also available on the Web site for Fund at www.risingratefund.com.

²⁵ For a list of the current members of ISG, see www.isgportal.org. The Exchange notes that not all instruments traded by the Fund may trade on markets that are members of ISG or with which the Exchange has in place a comprehensive surveillance sharing agreement.

²⁶ 15 U.S.C. 78f(b)(5).

Trading may be halted because of market conditions or for reasons that, in the view of the Exchange, make trading in the Shares inadvisable. These may include: (1) The extent to which trading is not occurring in the underlying Treasury Instruments, (2) if the creation or redemption of Shares is suspended for a period that, in the judgment of the Exchange, may detrimentally impact Exchange trading of the Shares, or (3) whether other unusual conditions or circumstances detrimental to the maintenance of a fair and orderly market are present. Trading in Shares will be subject to trading halts caused by extraordinary market volatility pursuant to the Exchange's "circuit breaker" rule or by the halt or suspension of trading of the Treasury Instruments. The Exchange represents that the Exchange may halt trading during the day in which an interruption to the dissemination of the IIV, the Benchmark Portfolio or the value of the underlying Treasury Instruments occurs. If an interruption to the dissemination of the IIV, the Benchmark Portfolio or the value of the underlying Treasury Instruments persists past the trading day in which it occurred, the Exchange will halt trading no later than the beginning of the trading day following the interruption. In addition, if the Exchange becomes aware that the NAV with respect to the Shares is not disseminated to all market participants at the same time, it will halt trading in the Shares until such time as the NAV is available to all market participants.

The proposed rule change is designed to promote just and equitable principles of trade and to protect investors and the public interest in that a large amount of information is publicly available regarding the Shares, thereby promoting market transparency. The Fund's NAV will be disseminated to all market participants at the same time. The IIV will be disseminated at least every 15 seconds during the Core Trading Session. Trading in the Shares will be halted if the circuit breaker parameters in NYSE Arca Equities Rule 7.12 have been reached or because of market conditions or for reasons that, in the view of the Exchange, make trading in the Shares inadvisable. Moreover, prior to the commencement of trading, the Exchange will inform its ETP Holders in an Information Bulletin of the special characteristics and risks associated with trading the Shares.

The proposed rule change is designed to perfect the mechanism of a free and open market and, in general, to protect investors and the public interest in that it will facilitate the listing and trading of an additional type of trust issued

receipts that will enhance competition among market participants, to the benefit of investors and the marketplace. As noted above, FINRA, on the Exchange's behalf, has in place surveillance procedures relating to trading in the Shares and underlying Treasury Instruments and may obtain information via ISG from other exchanges that are members of ISG or with which the Exchange has entered into a comprehensive surveillance sharing agreement. In addition, as noted above, investors will have ready access to information regarding the Fund's holdings, IIV, and quotation and last sale information for the Shares.

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 purpose of the Act. The Exchange notes that the proposed rule change will facilitate the listing and trading of an additional type of Trust Issued Receipts product that will principally hold fixed income securities and derivatives thereon, and that will enhance competition among market participants, to the benefit of investors and the marketplace.

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 November 4, 2014 (the date of publication in the **Federal Register** of notice of the proposed rule change as initially filed with the Commission), or within such longer period up to 90 days of that date (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.

IV. Solicitation of Comments

Interested persons are invited to submit written data, views, and arguments concerning the foregoing, including whether the proposed rule

change, as modified by Amendment No. 2, is consistent with the Act. Comments may be submitted by any of the following methods:

Electronic Comments

- Use the Commission's Internet comment form (<http://www.sec.gov/rules/sro.shtml>); or
- Send an email to rule-comments@sec.gov. Please include File Number SR-NYSEArca-2014-120 on the subject line.

Paper Comments

- Send paper comments in triplicate to Secretary, Securities and Exchange Commission, 100 F Street NE., Washington, DC 20549-1090.

All submissions should refer to File Number SR-NYSEArca-2014-120. This file number should be included on the subject line if email is used. To help the Commission process and review your comments more efficiently, please use only one method. The Commission will post all comments on the Commission's Internet Web site <http://www.sec.gov/rules/sro.shtml>. Copies of the submission, all subsequent amendments, all written statements with respect to the proposed rule change that are filed with the Commission, and all written communications relating to the proposed rule change between the Commission and any person, other than those that may be withheld from the public in accordance with the provisions of 5 U.S.C. 552, will be available for Web site viewing and printing in the Commission's Public Reference Room, 100 F Street NE., Washington, DC 20549, on official business days between the hours of 10:00 a.m. and 3:00 p.m. Copies of the filing also will be available for inspection and copying at the principal office of the Exchange. All comments received will be posted without change; the Commission does not edit personal identifying information from submissions. You should submit only information that you wish to make available publicly.

All submissions should refer to File Number SR-NYSEArca-2014-120 and should be submitted on or before December 11, 2014.

For the Commission, by the Division of Trading and Markets, pursuant to delegated authority.²⁷

Kevin M. O'Neill,
Deputy Secretary.

[FR Doc. 2014-27456 Filed 11-19-14; 8:45 am]

BILLING CODE 8011-01-P

²⁷ 17 CFR 200.30-3(a)(12).

SECURITIES AND EXCHANGE COMMISSION

[Release No. 34-73597; File No. SR-EDGX-2014-25]

Self-Regulatory Organizations; EDGX Exchange, Inc.; Notice of Filing of a Proposed Rule Change, and Amendment No. 1 Thereto, To Establish a New Market Data Product Called the BATS One Feed

November 14, 2014.

Pursuant to Section 19(b)(1) of the Securities Exchange Act of 1934 (“Act”),¹ and Rule 19b-4 thereunder,² notice is hereby given that on October 30, 2014, EDGX Exchange, Inc. (the “Exchange” or “EDGX”) filed with the Securities and Exchange Commission (“Commission”) the proposed rule change as described in Items I and II below, which Items have been prepared by the Exchange. On November 13, 2014, the Exchange filed Amendment No. 1 to the proposed rule change. The Commission is publishing this notice to solicit comments on the proposed rule change, as amended, from interested persons.

I. Self-Regulatory Organization’s Statement of the Terms of Substance of the Proposed Rule Change

The Exchange filed a proposal to establish a new market data product called the BATS One Feed.

The text of the proposed rule change is available at the Exchange’s Web site at <http://www.directedge.com/>, at the principal office of the Exchange, and at the Commission’s Public Reference Room.

II. Self-Regulatory Organization’s Statement of the Purpose of, and Statutory Basis for, the Proposed Rule Change

In its filing with the Commission, the Exchange included statements concerning the purpose of and basis for the proposed rule change and discussed any comments it received on the proposed rule change. The text of these statements may be examined at the places specified in Item IV below. The Exchange has prepared summaries, set forth in Sections A, B, and C below, of the most significant parts of such statements.

A. Self-Regulatory Organization’s Statement of the Purpose of, and Statutory Basis for, the Proposed Rule Change

1. Purpose

The Exchange proposes to establish a new market data product called the BATS One Feed. As described more fully below, the BATS One Feed is a data feed that will disseminate, on a real-time basis, the aggregate best bid and offer (“BBO”) of all displayed orders for securities traded on EDGX and its affiliated exchanges³ (collectively, the “BATS Exchanges”) and for which the BATS Exchanges report quotes under the Consolidated Tape Association (“CTA”) Plan or the Nasdaq/UTP Plan.⁴ The BATS One Feed will also contain the individual last sale information for EDGX and each of its affiliated exchanges. In addition, the BATS One Feed will contain optional functionality which will enable recipients to elect to receive aggregated two-sided quotations from the BATS Exchanges for up to five (5) price levels.

The BATS One Feed offers market data vendors and purchasers a suitable alternative to the use of consolidated data where consolidated data are not required to be purchased or displayed. The Exchange proposes to offer the BATS One Feed voluntarily in response to demand from vendors, and subscribers that are interested in receiving the aggregate BBO and last sale information from the BATS Exchanges as part of a single data feed. Specifically, BATS One can be used by industry professionals and retail investors looking for a cost effective, easy-to-administer, high quality market data product with the characteristics of the BATS One Feed.

The Exchange believes that the BATS One Feed would provide high-quality, comprehensive last sale and BBO data for the BATS Exchanges in a unified

view and respond to subscriber demand for such a product. The Exchange notes that an anticipated end user might use the BATS One Feed for purposes of identifying an indicative price of Tape A, B, and C securities through leveraging the depth and breadth of BATS Exchanges without having to purchase consolidated data and thus it would not be a latency-sensitive product. The Exchange does not anticipate that an end user would, or could, use the BATS One Feed data for purposes of making order-routing or trading decisions. Rather, the Exchange notes that under Rule 603 of Regulation NMS, the BATS One Feed could not be substituted for consolidated data in all instances in which consolidated data is used and certain subscribers would still be required to purchase consolidated data for trading and order-routing purposes.⁵

Finally, the proposed BATS One Feed would provide investors with new options for receiving market data and compete with similar market data products proposed by the New York Stock Exchange, Inc. (“NYSE”) and those currently offered by the Nasdaq Stock Market LLC (“Nasdaq”).⁶ The provision of new options for investors to receive market data was a primary goal of the market data amendments adopted by Regulation NMS.⁷

Description of the BATS One Feed

The BATS One Feed will contain the aggregate BBO of the BATS Exchanges for all securities that are traded on the BATS Exchanges and for which the BATS Exchanges report quotes under the CTA Plan or the Nasdaq/UTP Plan. The aggregate BBO would include the total size of all orders at the BBO

⁵ 17 CFR 242.603(c).

⁶ See Nasdaq Basic, <http://www.nasdaqtrader.com/Trader.aspx?id=NASDAQbasic> (last visited May 29, 2014) (data feed offering the BBO and Last Sale information for all U.S. exchange-listed securities based on liquidity within the Nasdaq market center, as well as trades reported to the FINRA/Nasdaq Trade Reporting Facility (“TRF”)); Nasdaq NLS Plus, <http://www.nasdaqtrader.com/Trader.aspx?id=NLSplus> (last visited July 8, 2014) (data feed providing last sale data as well as consolidated volume from the following Nasdaq OMX markets for U.S. exchange-listed securities: Nasdaq, FINRA/Nasdaq TRF, Nasdaq OMX BX, and Nasdaq OMX PSX); Securities Exchange Act Release No. 72750 (August 4, 2014), 79 FR 46494 (August 8, 2014) (SR-NYSE-2014-40) (Notice of Filing of Proposed Rule Change Establishing the NYSE Best Quote & Trades (“BQT”) Data Feed); <http://www.nyse.com/Data-Products/NYSE-Best-Quote-and-Trades> (last visited May 27, 2014) (data feed providing unified view of BBO and last sale information for the NYSE, NYSE Arca, and NYSE MKT).

⁷ See Securities Exchange Act Release No. 51808 (June 9, 2005), 70 FR 37496, at 37503 (June 29, 2005) (Regulation NMS Adopting Release).

³ EDGX’s affiliated exchanges are EDGA Exchange, Inc. (“EDGA”), BATS Exchange, Inc. (“BATS”), and BATS Y-Exchange, Inc. (“BYX”). On January 31, 2014, Direct Edge Holdings LLC (“DE Holdings”), the former parent company of the Exchange and EDGA, completed its business combination with BATS Global Markets, Inc., the parent company of BATS and BYX. See Securities Exchange Act Release No. 71449 (January 30, 2014), 79 FR 6961 (February 5, 2014) (SR-EDGX-2013-43). Upon completion of the business combination, DE Holdings and BATS Global Markets, Inc. each became intermediate holding companies, held under a single new holding company. The new holding company, formerly named “BATS Global Markets Holdings, Inc.,” changed its name to “BATS Global Markets, Inc.”

⁴ The Exchange understands that each of the BATS Exchanges will separately file substantially similar proposed rule changes with the Commission to implement the BATS One Feed and its related fees.

¹ 15 U.S.C. 78s(b)(1).

² 17 CFR 240.19b-4.

available on all BATS Exchanges.⁸ The BATS One Feed would also disseminate last sale information for each of the individual BATS Exchanges (collectively with the aggregate BBO, the “BATS One Summary Feed”). The last sale information will include the price, size, time of execution, and individual BATS Exchange on which the trade was executed. The last sale message will also include the cumulative number of shares executed on all BATS Exchanges for that trading day. The Exchange will disseminate the aggregate BBO of the BATS Exchanges and last sale information through the BATS One Feed no earlier than each individual BATS Exchange provides its BBO and last sale information to the processors under the CTA Plan or the Nasdaq/UTP Plan.

The BATS One Feed would also consist of Symbol Summary, Market Status, Retail Liquidity Identifier on behalf of BYX, Trading Status, and Trade Break messages. The Symbol Summary message will include the total executed volume across all BATS Exchanges. The Market Status message is disseminated to reflect a change in the status of one of the BATS Exchanges. For example, the Market Status message will indicate whether one of the BATS Exchanges is experiencing a systems issue or disruption and quotation or trade information from that market is not currently being disseminated via the BATS One Feed as part of the aggregated BBO. The Market Status message will also indicate where BATS Exchange is no longer experiencing a systems issue or disruption to properly reflect the status of the aggregated BBO.

The Retail Liquidity Identifier indicator message will be disseminated via the BATS One Feed on behalf of the BYX only pursuant to BYX’s Retail Price Improvement (“RPI”) Program.⁹ The Retail Liquidity Identifier indicates when RPI interest priced at least \$0.001 better than BYX’s Protected Bid or Protected Offer for a particular security is available in the System. The

Exchange proposes to disseminate the Retail Liquidity Indicator via the BATS One Feed in the same manner as it is currently disseminated through consolidated data streams (i.e., pursuant to the Consolidated Tape Association Plan/Consolidated Quotation Plan, or CTA/CQ, for Tape A and Tape B securities, and the Nasdaq UTP Plan for Tape C securities) as well as through proprietary BYX data feeds. The Retail Liquidity Identifier will reflect the symbol and the side (buy or sell) of the RPI interest, but does not include the price or size of the RPI interest. In particular, like CQ and UTP quoting outputs, the BATS One Feed will include a field for codes related to the Retail Price Improvement Identifier. The codes indicate RPI interest that is priced better than BYX’s Protected Bid or Protected Offer by at least the minimum level of price improvement as required by the Program.

The Trade Break message will indicate when an execution on a BATS Exchange is broken in accordance with the individual BATS Exchange’s rules.¹⁰ The Trading Status message will indicate the current trading status of a security on each individual BATS Exchange. For example, a Trading Status message will be sent when a short sale price restriction is in effect pursuant to Rule 201 of Regulation SHO (“Short Sale Circuit Breaker”),¹¹ or the security is subject to a trading halt, suspension or pause declared by the listing market. A Trading Status message will be sent whenever a security’s trading status changes.

Optional Aggregate Depth of Book. The BATS One Feed will also contain optional functionality which will enable recipients to receive two-sided quotations from the BATS Exchanges for five (5) price levels for all securities that are traded on the BATS Exchanges in addition to the BATS One Summary Feed (“BATS One Premium Feed”). For each price level on one of the BATS Exchanges, the BATS One Premium Feed option of the BATS One Feed will include a two-sided quote and the number of shares available to buy and sell at that particular price level.¹²

Implementation Date

The Exchange anticipates making available the BATS One feed as soon as

practicable after approval of the proposed rule change by the Commission and the effectiveness of a rule filing to establish the fees for BATS One.¹³

2. Statutory Basis

The Exchange believes that the proposed BATS One Feed is consistent with Section 6(b) of the Act,¹⁴ in general, and furthers the objectives of Section 6(b)(5) of the Act,¹⁵ in particular, in that it is 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 to protect investors and the public interest, and that it is not designed to permit unfair discrimination among customers, brokers, or dealers. This proposal is in keeping with those principles in that it promotes increased transparency through the dissemination of the BATS One Feed. The Exchange also believes this proposal is consistent with Section 6(b)(5) of the Act because it protects investors and the public interest and promotes just and equitable principles of trade by providing investors with new options for receiving market data as requested by market data vendors and purchasers that expressed an interest in exchange-only data for instances where consolidated data is no longer required to be purchased and displayed. The proposed rule change would benefit investors by facilitating their prompt access to real-time last sale information and best-bid-and-offer information contained in the BATS One Feed.

The Exchange also believes that the proposed rule change is consistent with Section 11(A) of the Act¹⁶ in that it supports (i) fair competition among brokers and dealers, among exchange markets, and between exchange markets and markets other than exchange markets and (ii) the availability to brokers, dealers, and investors of information with respect to quotations for and transactions in securities. Furthermore, the proposed rule change is consistent with Rule 603 of Regulation NMS,¹⁷ which provides that any national securities exchange that distributes information with respect to quotations for or transactions in an NMS stock do so on terms that are not unreasonably discriminatory.

¹³ The Exchange intends to file a separate proposal establishing the fees for BATS One.

¹⁴ 15 U.S.C. 78f.

¹⁵ 15 U.S.C. 78f(b)(5).

¹⁶ 15 U.S.C. 78k–1.

¹⁷ See 17 CFR 242.603.

⁸ The Exchange notes that quotations of odd lot size, which is generally less than 100 shares, are included in the total size of all orders at a particular price level in the BATS One Feed but are currently not reported by the BATS Exchanges to the consolidated tape.

⁹ For a description of BYX’s RPI Program, see BYX Rule 11.24. See also Securities Exchange Act Release No. 68303 (November 27, 2012), 77 FR 71652 (December 3, 2012) (SR-BYX-2012-019) (Order Granting Approval of Proposed Rule Change, as Modified by Amendment No. 2, to Adopt a Retail Price Improvement Program); Securities Exchange Act Release No. 67734 (August 27, 2012), 77 FR 53242 (August 31, 2012) (SR-BYX-2012-019) (Notice of Filing of Proposed Rule Change to Adopt a Retail Price Improvement Program).

¹⁰ See, e.g., Exchange and EDGA Rule 11.13, Clearly Erroneous Executions, and BATS and BYX Rule 11.17, Clearly Erroneous Executions.

¹¹ 17 CFR 242.200(g); 17 CFR 242.201

¹² Recipients who do not elect to receive the BATS One Premium Feed will receive the aggregate BBO of the BATS Exchanges under the BATS Summary Feed, which, unlike the BATS Premium Feed, would not delineate the size available at the BBO on each individual BATS Exchange.

In adopting Regulation NMS, the Commission granted self-regulatory organizations and broker-dealers increased authority and flexibility to offer new and unique market data to consumers of such data. It was believed that this authority would expand the amount of data available to users and consumers of such data and also spur innovation and competition for the provision of market data. The Exchange believes that the data products proposed herein are precisely the sort of market data products that the Commission envisioned when it adopted Regulation NMS. The Commission concluded that Regulation NMS—by lessening regulation of the market in proprietary data—would itself further the Act's goals of facilitating efficiency and competition:

[E]fficiency is promoted when broker-dealers who do not need the data beyond the prices, sizes, market center identifications of the NBBO and consolidated last sale information are not required to receive (and pay for) such data. The Commission also believes that efficiency is promoted when broker-dealers may choose to receive (and pay for) additional market data based on their own internal analysis of the need for such data.¹⁸

By removing “unnecessary regulatory restrictions” on the ability of exchanges to sell their own data, Regulation NMS advanced the goals of the Act and the principles reflected in its legislative history.

If the free market should determine whether proprietary data is sold to broker-dealers at all, it follows that the price at which such data is sold should be set by the market as well. The BATS One Feed is precisely the sort of market data product that the Commission envisioned when it adopted Regulation NMS.

The BATS One Feed would be distributed and purchased on a voluntary basis, in that neither the BATS Exchanges nor market data distributors are required by any rule or regulation to make this data available. Accordingly, distributors and users can discontinue use at any time and for any reason, including due to an assessment of the reasonableness of fees charged.

The Exchange believes that the proposed BATS One Feed will offer an alternative to the use of consolidated data products and proprietary data products offered by the NYSE and Nasdaq. Nasdaq Basic is a product that includes two feeds, QBBO, which provides BBO information for all U.S.

exchange-listed securities on Nasdaq and NLS Plus, which provides last sale data as well as consolidated volume from the following Nasdaq OMX markets for U.S. exchange-listed securities: Nasdaq, FINRA/Nasdaq TRF,¹⁹ Nasdaq OMX BX, and Nasdaq OMX PSX.²⁰ According to Nasdaq, seven vendors and more than 1,000 firms subscribe to Nasdaq Basic, including 9 out of 10 of the largest banks.²¹

Likewise, the NYSE has proposed NYSE BQT, which would include the BBO and last sale information for the NYSE, NYSE Arca, and NYSE MKT.²² The Exchange believes the BATS One Feed will offer a competitive alternative to the existing Nasdaq Basic product and the proposed NYSE product.

In addition, the proposal would not permit unfair discrimination because the product will be available to all of the Exchange's customers and market data vendors on an equivalent basis. In addition, any customer that wishes to purchase one or more of the individual data feeds offered by the BATS Exchanges would be able to do so.

In addition, the Exchange does not believe that the proposal would permit unfair discrimination among customers, brokers, or dealers and thus is consistent with the Act because the Exchange will be offering the product on terms that a competing vendor could offer a competing product. Specifically, the proposed data feed does not represent Exchange core data, but rather a new product that represents an aggregation and consolidation of existing, previously filed individual market data products of the BATS

Exchanges. As such, a competing vendor could similarly obtain the underlying data feeds and perform a similar aggregation and consolidation function to create the same data product with the same latency and cost as the Exchange.

The Exchange has taken into consideration its affiliated relationship with EDGA, BYX, and BZX in its design of the BATS One Feed to assure that vendors would be able to offer a similar product on the same terms as the Exchange, both from the perspective of latency and cost. As discussed above, the Exchange proposes to offer the BATS One Feed voluntarily in response to demand from vendors, and subscribers that are interested in receiving the aggregate BBO and last sale information from the BATS Exchanges as part of a single data feed. Specifically, BATS One can be used by industry professionals and retail investors looking for a cost effective, easy-to-administer, high quality market data product with the characteristics of the BATS One Feed. The BATS One Feed would help protect a free and open market by providing vendors and subscribers additional choices in receiving this type of market data, thus promoting competition and innovation.

With respect to latency, the path for distribution by the Exchange of BATS One Feed would not be faster than a vendor that independently created a BATS One-like product could distribute its own product. As such, the proposed BATS One data feed is a data product that a competing vendor could create and sell without being in a disadvantaged position relative to the Exchange. In recognition that the Exchange is the source of its own market data and is affiliated with EDGA, BATS and BYX, the Exchange represents that the source of the market data it would use to create the proposed BATS One Feed is available to other vendors. Specifically, the Exchange would use the following data feeds to create the proposed BATS One Feed, each of which is available to other vendors: The Exchange's EdgeBook Depth feed, the EdgeBook Depth feed for EDGA, the BYX PITCH Feed, and the BATS PITCH Feed. The BATS Exchanges will continue to make available these individual underlying feeds, and thus, the source of the market data it would use to create the proposed BATS One feed is the same as the source available to other vendors.

In order to create the BATS One Feed, the Exchange will receive the individual data feeds from each BATS Exchange and, in turn, aggregate and summarize that data to create the BATS One Feed.

¹⁹ See Nasdaq Basic, <http://www.nasdaqtrader.com/Trader.aspx?id=NASDAQBasic> (last visited May 29, 2014) (data feed offering the BBO and Last Sale information for all U.S. exchange-listed securities based on liquidity within the Nasdaq market center, as well as trades reported to the FINRA/Nasdaq TRF).

²⁰ See Nasdaq NLS Plus, <http://www.nasdaqtrader.com/Trader.aspx?id=NLSPlus> (last visited July 8, 2014) (data feed providing last sale data as well as consolidated volume from the following Nasdaq OMX markets for U.S. exchange-listed securities: Nasdaq, FINRA/Nasdaq TRF, Nasdaq OMX BX, and Nasdaq OMX PSX).

²¹ See Nasdaq Basic, Doing More with Less, available at <http://www.brainshark.com/nasdaqomx/vu?pi=zG8z33O6ozAgBpz0&tx=preview&preview=1> and <http://www.nasdaqtrader.com/Trader.aspx?id=NASDAQBasic#vendors>.

²² See Securities Exchange Act Release No. 72750 (August 4, 2014), 79 FR 46494 (August 8, 2014) (SR-NYSE-2014-40) (Notice of Filing of Proposed Rule Change Establishing the NYSE BQT Data Feed); <http://www.nyxdata.com/Data-Products/NYSE-Best-Quote-and-Trades> (last visited May 27, 2014) (data feed providing unified view of BBO and last sale information for the NYSE, NYSE Arca, and NYSE MKT).

¹⁸ See Securities Exchange Act Release No. 51808 (June 9, 2005), 70 FR 37496 (June 29, 2005) (File No. S7-10-04).

This is the same process a competing vendor would undergo should it create a market data product similar to the BATS One Feed to distribute to its end users. In addition, the servers of most competing vendors are likely located in the same facilities as the Exchange, and, therefore, should receive the individual data feed from each BATS Exchange on or about the same time the Exchange would for it to create the BATS One Feed. Therefore, a competing vendor that is located in the same facilities as the Exchange could obtain the underlying data feeds from the BATS Exchanges on the same latency basis as the system that would be performing the aggregation and consolidation of the proposed BATS One Feed and provide the same type of product to its customers with the same latency they could achieve by purchasing the BATS One Feed from the Exchange. As such, the Exchange would not have any unfair advantage over competing vendors with respect to obtaining data from the individual BATS Exchanges, in fact, the technology supporting the BATS One Feed would similarly need to obtain the Exchange's data feed as well and even this connection would be on a level playing field with a competing vendor located at the same facility as the Exchange. The Exchange has designed the BATS One data feed so that it would not have a competitive advantage over a competing vendor with respect to the speed of access to those underlying data feeds. Likewise, the BATS One data feed would not have a speed advantage vis-à-vis competing vendors located in the same data center as the Exchange with respect to access to end user customers, whether those end users are also located in the same data center or not.

With regard to cost, the Exchange will file a separate rule filing with the Commission to establish fees for BATS One which would be designed to ensure that vendors could compete with the Exchange by creating a similar product as the BATS One Feed. The pricing the Exchange would charge for the BATS One Feed would not be lower than the cost to a vendor of receiving the underlying data feeds and of maintaining servers in the same facility as the Exchange to receive the data feeds with no greater latency than the Exchange. The pricing the Exchange would charge clients for the BATS One Feed compared to the cost of the individual data feeds from the BATS Exchanges would enable a vendor to receive the underlying data feeds and offer a similar product on a competitive basis and with no greater latency than the Exchange. The Distribution Fees that

the Exchange intends to propose for the BATS One Feed would be equal to the combined fee of subscribing to each individual data feed,²³ therefore, enabling a vendor to create a competing product based on the individual data feeds and charge its clients a fee that it believes reflects the value of the aggregation and consolidation function that is competitive with BATS One Feed pricing. The Exchange believes that the incremental cost to a particular vendor for aggregation can be supported by the vendor's revenue opportunity and may be inconsequential if such vendor already has systems in place to perform these functions as part of creating its proprietary market data products and is able to allocate these costs over numerous products and customer relationships. For these reasons, the Exchange believes that vendors could readily offer a product similar to the BATS One Feed on a competitive basis at a similar cost.

B. Self-Regulatory Organization's Statement on Burden on Competition

The Exchange does not believe that the proposed rule change will result in any burden on competition that is not necessary or appropriate in furtherance of the purposes of the Act, as amended. Because other exchanges already offer similar products,²⁴ the Exchange's proposed BATS One Feed will enhance competition. Specifically, the BATS One Feed was developed to compete with similar market data products offered by Nasdaq and proposed by the NYSE.²⁵ The BATS One Feed will foster competition by providing an alternative market data product to those offered by Nasdaq and the NYSE. This proposed new data feed provides investors with new options for receiving market data, which was a primary goal of the market data amendments adopted by Regulation NMS.²⁶

The proposed BATS One Feed would enhance competition by offering a market data product that is designed to compete directly with similar products offered by the NYSE and Nasdaq. Nasdaq Basic is a product that includes two feeds, QBBO, which provides BBO information for all U.S. exchange-listed

securities on Nasdaq and NLS Plus, which provides last sale data as well as consolidated volume from the following Nasdaq OMX markets for U.S. exchange-listed securities: Nasdaq, FINRA/Nasdaq TRF,²⁷ Nasdaq OMX BX, and Nasdaq OMX PSX.²⁸ Likewise, NYSE BQT includes BBO and last sale information for the NYSE, NYSE Arca, and NYSE MKT.²⁹ As a result, Nasdaq Basic and NYSE BQT comprise a significant view of the market on any given day and both include data from multiple trading venues. As the BATS Exchanges are consistently one of the top exchange operators by market share for U.S. equities trading, excluding opening and closing auction volume, the data included within the BATS One Feed will provide investors with an alternative to Nasdaq Basic and NYSE BQT and a new option for obtaining a broad market view, consistent with the primary goal of the market data amendments adopted by Regulation NMS.³⁰

The Exchange believes the BATS One Feed will further enhance competition by providing External Distributors with a data feed that allows them to more quickly and efficiently integrate into their existing products. Today, Distributors subscribe to various market data products offered by single exchanges and resell that data, either separately or in the aggregate, to their subscribers as part of their own market data offerings. Distributors may incur administrative costs when consolidating and augmenting the data to meet their subscriber's need. Consequently, many External Distributors will simply choose to not take the data because of the effort and cost required to aggregate data from separate feeds into their existing

²⁷ See Nasdaq Basic, <http://www.nasdaqtrader.com/Trader.aspx?id=nasdaqbasic> (last visited May 29, 2014) (data feed offering the BBO and Last Sale information for all U.S. exchange-listed securities based on liquidity within the Nasdaq market center, as well as trades reported to the FINRA/Nasdaq TRF).

²⁸ See Nasdaq NLS Plus, <http://www.nasdaqtrader.com/Trader.aspx?id=NLSplus> (last visited July 8, 2014) (data feed providing last sale data as well as consolidated volume from the following Nasdaq OMX markets for U.S. exchange-listed securities: Nasdaq, FINRA/Nasdaq TRF, Nasdaq OMX BX, and Nasdaq OMX PSX).

²⁹ See Securities Exchange Act Release No. 72750 (August 4, 2014), 79 FR 46494 (August 8, 2014) (SR-NYSE-2014-40) (Notice of Filing of Proposed Rule Change Establishing the NYSE BQT Data Feed); <http://www.nyse.com/Data-Products/NYSE-Best-Quote-and-Trades> (last visited May 27, 2014) (data feed providing unified view of BBO and last sale information for the NYSE, NYSE Arca, and NYSE MKT).

³⁰ See Securities Exchange Act Release No. 51808 (June 9, 2005), 70 FR 37496, at 37503 (June 29, 2005) (Regulation NMS Adopting Release).

²³ The combined external distribution fee for the individual data feeds of the BATS Exchanges is \$12,500.00 per month. The monthly external distribution fee is \$2,500 per month for the EdgeBook Depth feed for the Exchange, \$2,500 per month for the EdgeBook Depth feed for EDGA, \$2,500 for the BYX PITCH Feed, and \$5,000 for the BATS PITCH Feed.

²⁴ See *supra* note 6.

²⁵ *Id.*

²⁶ See Securities Exchange Act Release No. 51808 (June 9, 2005), 70 FR 37496, at 37503 (June 29, 2005) (Regulation NMS Adopting Release).

products. Those same Distributors have expressed interest in the BATS One Feed so that they may easily incorporate aggregated or summarized BATS Exchange data into their own products without themselves incurring the costs of the repackaging and aggregating the data it would receive by subscribing to each market data product offered by the individual BATS Exchanges. The Exchange, therefore, believes that by providing market data that encompasses combined data from affiliated exchanges, the Exchange enables certain External Distributors with the ability to compete in the provision of similar content with other External Distributors, where they may not have done so previously if they were required to subscribe to the depth-of-book feeds from each individual BATS Exchange.

Although the Exchange considers the acceptance of the BATS One Feed by External Distributors as important to the success of the product, depending on their needs, External Distributors may choose not to subscribe to the BATS One Feed and may rather receive the BATS Exchange individual market data products and incorporate them into their specific market data products. For example, the BATS Premium Feed provides depth-of-book information for up to five price levels while each of the BATS Exchange's individual data feeds offer complete depth-of-book and are not limited to five price levels.³¹ Those subscribers who wish to view the complete depth-of-book from each individual BATS Exchange may prefer to subscribe to one or all of individual BATS Exchange depth-of-book data feeds instead of the BATS One Feed. The BATS One Feed simply provides another option for Distributors to choose from when selecting a product that meets their market data needs. Subscribers who seek a broader market view but do not need complete depth-of-book may select the BATS One Feed while subscribers that seek the complete depth-of-book information may subscribe to the depth-of-book feeds of each individual BATS Exchanges.

Exchange Not the Exclusive Distributor of BATS One. Although the BATS Exchanges are the exclusive distributors of the individual data feeds from which certain data elements would be taken to create the BATS One Feed, the Exchange would not be the exclusive distributor of the aggregated and consolidated information that would compose the proposed BATS

One Feed. Vendors would be able, if they chose, to create a data feed with the same information as the BATS One Feed and distribute it to their clients on a level-playing field with respect to latency and cost as compared to the Exchange's proposed BATS One Feed. The pricing the Exchange would charge for the BATS One Feed would not be lower than the cost to a vendor of receiving the underlying data feeds and of maintaining servers in the same facility as the Exchange to receive the data feeds with no greater latency than the Exchange. In addition, the pricing the Exchange would charge clients for the BATS One Feed compared to the cost of the individual data feeds from the BATS Exchanges would enable a vendor to receive the underlying data feeds and offer a similar product on a competitive basis and with no greater latency than the Exchange.

Latency. The BATS One Feed is not intended to compete with similar products offered by External Distributors. Rather, it is intended to assist External Distributors in incorporating aggregated and summarized data from the BATS Exchanges into their own market data products that are provided to the end user. Therefore, Distributors will receive the data, who will, in turn, make available BATS One Feed to their end users, either separately or as incorporated into the various market data products they provide. As stated above, Distributors have expressed a desire for a product like the BATS One Feed so that they may easily incorporate aggregated or summarized BATS Exchange data into their own products without themselves incurring the administrative costs of repackaging and aggregating the data it would receive by subscribing to each market data product offered by the individual BATS Exchanges.

Notwithstanding the above, the Exchange believes that External Distributors may create a product similar to BATS One Feed based on the market data products offered by the individual BATS Exchanges with no greater latency than the Exchange. As discussed above, in order to create the BATS One Feed, the Exchange will receive the individual data feeds from each BATS Exchange and, in turn, aggregate and summarize that data to create the BATS One Feed. This is the same process an External Distributor would undergo should it create a market data product similar to the BATS One Feed to distribute to its end users. In addition, the servers of most External Distributors are likely located in the same facilities as the Exchange, and,

therefore, should receive the individual data feed from each BATS Exchange on or about the same time the Exchange would for it to create the BATS One Feed.

The Exchange has designed the BATS One data feed so that it would not have a competitive advantage over a competing vendor with respect to the speed of access to those underlying data feeds. Likewise, the BATS One data feed would not have a speed advantage vis-à-vis competing vendors located in the same data center as the Exchange with respect to access to end user customers, whether those end users are also located in the same data center or not. Therefore, the Exchange believes that it will not incur any potential latency advantage that will result in any burden on competition that is not necessary or appropriate in furtherance of the purposes of the Act.

Cost. With regard to cost, the Exchange will file a separate rule filing with the Commission to establish fees for BATS One that would be designed to ensure that vendors could compete with the Exchange by creating a similar product as the BATS One Feed. The pricing the Exchange would charge clients for the BATS One Feed compared to the cost of the individual data feeds from the BATS Exchanges would enable a vendor to receive the underlying data feeds and offer a similar product on a competitive basis and with no greater latency than the Exchange. The Distribution Fees that the Exchange proposes for the BATS One Feed are equal to the combined fee of subscribing to each individual data feed,³² therefore, enabling a vendor to create a competing product based on the individual data feeds and charge its clients a fee that it believes reflects the value of the aggregation and consolidation function that is competitive with BATS One Feed pricing. The Exchanges believes that the incremental cost to a particular vendor for aggregation can be supported by the vendor's revenue opportunity and may be inconsequential if such vendor already has systems in place to perform these functions as part of creating its proprietary market data products and is able to allocate these costs over numerous products and customer relationships. For these reasons, the Exchange believes that vendors could readily offer a product similar to the BATS One Feed on a competitive basis at a similar cost.

³¹ See EDGA Rule 13.8, EDGX Rule 13.8, BZX Rule 11.22(a) and (c), and BYX Rule 11.22 (a) and (c) for a description of the depth of book feeds offered by each of the BATS Exchanges.

³² See *supra* note 22.

C. Self-Regulatory Organization's Statement on Comments on the Proposed Rule Change Received from Members, Participants, or Others

A similar proposed rule change was initially filed with the Commission on July 14, 2014 and published for comment in the **Federal Register** on August 1, 2014.³³ The Commission received no comment letters in response to that proposed rule change. However, three letters were submitted to the Commission commenting on a companion BZX and EDGA filings that proposed to offer the same feed.³⁴ On September 15, 2014, the Commission extended its review period until October 30, 2014.³⁵ On October 29, 2014, the Exchange withdrew the initial proposed rule change. The points raised by the Themis Letter and Shatto Letter are either not responsive to the issues raised in the proposal or aimed at existing elements of U.S. market structure that have been previously approved by the Commission.

The thrust of the SIFMA Letter is aimed at the proposed fees which are being removed from this proposed rule change and are to be filed with the Commission via a separate rule filing. While the SIFMA Letter correctly states that the Exchange has marketed the BATS One Feed since August 1, 2014, the SIFMA Letter incorrectly asserts that the Exchange has offered the BATS One Feed since that same date. All of the Exchange's marketing materials have included statements that the BATS One Feed's implementation was pending to SEC approval, and at no point has the Exchange offered the BATS One product for any use other than for testing and certification.

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 of such date (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 Exchange consents, the Commission shall:

- (A) By order approve or disapprove such 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. Please include File Number SR-EDGX-2014-25 on the subject line.

Paper Comments

- Send paper comments in triplicate to Secretary, Securities and Exchange Commission, 100 F Street NE., Washington, DC 20549-1090. All submissions should refer to File Number SR-EDGX-2014-25. 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 EDGX. 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-2014-25 and should be submitted on or before December 11, 2014.

For the Commission, by the Division of Trading and Markets, pursuant to delegated authority.³⁶

Kevin M. O'Neill,
Deputy Secretary.

[FR Doc. 2014-27446 Filed 11-19-14; 8:45 am]

BILLING CODE 8011-01-P

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

Third Meeting: RTCA Special Committee 231, Special Committee 231 TAWS—GPWS

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

ACTION: Meeting Notice of RTCA Special Committee 231, TAWS—GPWS.

SUMMARY: The FAA is issuing this notice to advise the public of the third meeting of the RTCA Special Committee 231, TAWS—GPWS.

DATES: The meetings will be held January 6–8 2015 from 9:00 a.m.–5:00 p.m.

ADDRESSES: The meetings will be held at RTCA Headquarters, RTCA, Inc., 1150 18th Street NW., Suite 910, Washington DC 20036.

FOR FURTHER INFORMATION CONTACT: The RTCA Secretariat, 1150 18th Street NW., Suite 910, Washington, DC 20036, or by telephone at (202) 330-0652/(202) 833-9339, fax at (202) 833-9434, or Web site at <http://www.rtca.org>.

SUPPLEMENTARY INFORMATION: Pursuant to section 10(a)(2) of the Federal Advisory Committee Act (Pub. L. 92-463, 5 U.S.C., App.), notice is hereby given for a meeting of Special Committee 231. The agenda will include the following:

January 6th—9:00 a.m.–5:00 p.m.

- Welcome/Introduction
- Administrative Remarks
- Agenda Review
- NTSB Recommendations—FAA presentation
- Summary of Working Group activities
- Other Business
- Date and Place of Next Meeting

January 7th—9:00 a.m.–5:00 p.m.

- Continuation of Plenary or Working Group Session

³⁶ 17 CFR 200.30-3(a)(12).

³³ See Securities Exchange Act Release No. 72691 (July 28, 2014), 79 FR 44892 (August 1, 2014) (SR-EDGX-2014-19).

³⁴ But see Letter from Sal Arnuk and Joe Saluzzi, Themis Trading LLC, to Elizabeth M. Murphy, Secretary, Commission, dated August 21, 2014 (SR-BATS-2014-028) ("Themis Letter"); Letter from Ira D. Hammerman, General Counsel, SIFMA, to Kevin O'Neill, Deputy Secretary, Commission, dated August 22, 2014 (SR-BATS-2014-028) ("SIFMA Letter") (letters commenting on companion BATS filing that proposes to offer the same feed); and Letter from Suzanne Hamlet Shatto to the Commission, dated August 19, 2014 (SR-EDGA-2014-16) ("Shatto Letter") (letter commenting on companion EDGA filing that proposes to offer the same feed).

³⁵ See Securities Exchange Act Release No. 73099 (September 15, 2014), 79 FR 56418 (September 19, 2014).

January 8th—9:00 a.m.–3:00 p.m.

- Continuation of Plenary or Working Group Session

Attendance is open to the interested public but limited to space availability. With the approval of the chairman, members of the public may present oral statements at the meeting. Persons wishing to present statements or obtain information should contact the person listed in the **FOR FURTHER INFORMATION CONTACT** section. Members of the public may present a written statement to the committee at any time.

Issued in Washington, DC, on November 13, 2014.

Mohannad Dawoud,

Management Analyst, NextGen, Program Oversight and Administration, Federal Aviation Administration.

[FR Doc. 2014-27555 Filed 11-19-14; 8:45 am]

BILLING CODE 4910-13-P

DEPARTMENT OF TRANSPORTATION**Federal Aviation Administration**

Notice of Release From Federal Grant Assurance Obligations for Reno-Tahoe International Airport, Reno, Nevada

AGENCY: Federal Aviation Administration, DOT.

ACTION: Notice of request to release airport land.

SUMMARY: The Federal Aviation Administration (FAA) proposes to rule and invites public comment on the application for a release of 23,974 square feet (approximately .55 acres) of airport property at Reno-Tahoe International Airport, Reno, Nevada from all conditions contained in the Grant Assurances since the parcel of land is not needed for airport purposes. The property consists of narrow strip of land approximately 25 feet wide by 850 feet long. The property is located approximately 2,500 feet east of the departure end of Reno-Tahoe Airport Runway 7/25. The property is separated from the airport operations area to the west by a public road and several non-aeronautical leaseholds and parking lots. The east side of the property is adjacent to East McCarran Boulevard. The Reno-Tahoe Airport Authority (RTAA) and the Nevada Department of Transportation propose to use the land to widen East McCarran Boulevard, a major arterial road that serves the Reno/Sparks Communities. The widening of the road represents a compatible land use that will not interfere with the airport or its operation. The interest of civil aviation continues to be served by the release. The property will be sold at

an appraised fair market value to the State of Nevada, Department of Transportation and the proceeds deposited in the airport account.

DATES: Comments must be received on the proposed land release request from federal obligations on or before December 22, 2014.

FOR FURTHER INFORMATION CONTACT:

Comments on the request may be mailed or delivered to the FAA at the following address: Mike N. Williams, Manager, Federal Aviation Administration, Phoenix Airports District Office, **Federal Register** Comment, 3800 N. Central Avenue, Suite 1025, 10th Floor, Phoenix, Arizona 85012. In addition, one copy of the comment submitted to the FAA must be mailed or delivered Ms. Laurie Weeks, Senior Manager of Properties, Reno-Tahoe Airport Authority, 2001 E. Plumb Lane, Reno, Nevada, 89502.

SUPPLEMENTARY INFORMATION: In accordance with the Wendell H. Ford Aviation Investment and Reform Act for the 21st Century (AIR 21), Public Law 106-181 (Apr. 5, 2000; 114 Stat. 61), this notice must be published in the **Federal Register** 30 days before the Secretary may waive any condition imposed on a federally obligated airport by surplus property conveyance deeds or grant agreements.

The following is a brief overview of the request:

The Reno-Tahoe Airport Authority (RTAA) of Washoe County, the owner of the Reno-Tahoe International Airport, requested a release from grant assurance obligations for approximately 23,974 square feet of airport land for sale. The property was acquired as separate parcels with federal funding under the Airport Development Aid Program (ADAP), Grant No. 6-32-0017-12, and the Airport Improvement Program, Grant No. 3-32-0017-01 and Grant No. 3-32-0017-04 for noise compatibility and approach protection.

Due to its location and current condition, the property has not been used for aeronautical purposes. The land is currently improved with landscaping only. The landscaping improvements include shrubs, trees, rock ground cover and drip-irrigation. The land is not served by domestic utilities. The land is currently zoned for industrial and commercial uses. The subject land is part of a larger parcel which was leased by the RTAA and developed with industrial/warehouse facilities in 2004. The Nevada Department of Transportation requires the strip of land to accommodate the widening of East McCarran Boulevard, a major arterial roadway in Reno and

Sparks, as part of the East McCarran Boulevard Widening Project. Because of the narrow width of the property and adjacency to the existing roadway, the land is not suitable for future airport development. The release and sale of the land will not negatively impact airport operations.

The FAA has determined the proposed release of the property Grant Assurances is categorically excluded from detailed evaluation in accordance with the National Environmental Policy Act. However, the proposed property is located within the 100-year floodplain of the Truckee River. Therefore, the FAA evaluated the proposed release from Grant Assurances in accordance with Executive Order 11988 *Floodplain Management*, and Department of Transportation Order 5650.2 *Floodplain Management and Protection*. There is no practicable alternative to constructing the East McCarran Boulevard Widening Project—Phase II in the proposed location, which is in the 100-year floodplain, because the 100-year floodplain extends throughout the project vicinity, and East McCarran Boulevard is a major existing road.

The construction of the East McCarran Boulevard Widening Project—Phase II project after release from Grant Assurances and subsequent conveyance to the Nevada Department of Transportation would not adversely affect beneficial floodplain values such as natural moderation of floodwaters, water quality maintenance, groundwater recharge, fish or wildlife habitat, or any other floodplain value. The existing property consists of artificial landscaping and parking lots which do not possess any beneficial floodplain values and the project is designed so as not to change the water storage capacity of the existing floodplain. As discussed in a Truckee River Flood Management Authority letter of July 11, 2014 to the City of Reno, while the property is within the 100-year floodplain, as part of the East McCarran Boulevard Widening Project—Phase II, the Nevada Department of Transportation intends to provide additional flood water storage capacity at a volumetric ratio of 2:1 to compensate for required project fill associated with the widening project. As part of the FAA's approval of the release of the property from Grant Assurances, the FAA will require that the RTAA condition its sale of the property to the Nevada Department of Transportation with the condition that the Department will implement the project as described in the Truckee River Flood Management Authority letter of July 11, 2014 to the City of Reno, to provide additional flood water storage capacity at a volumetric

ratio of 2:1 to compensate for required project fill associated with the East McCarran Boulevard Phase II widening project.

The sale price will be based on an appraised market value and the sale proceeds will be deposited in the airport account to be solely expended for the capital and operating costs of the Reno-Tahoe International Airport. The Reno-Tahoe International Airport, Nevada will be justly compensated, thereby serving the interests of civil aviation.

Issued in Phoenix, Arizona, on November 14, 2014.

Mike N. Williams,

Manager, Phoenix Airports District Office, Western-Pacific Region.

[FR Doc. 2014-27559 Filed 11-19-14; 8:45 am]

BILLING CODE 4910-13-P

DEPARTMENT OF TRANSPORTATION

Federal Highway Administration

Notice of Intent To Prepare an Environmental Impact Statement (EIS): Dane and Columbia Counties, Wisconsin

AGENCY: Federal Highway Administration (FHWA), Wisconsin Department of Transportation (WisDOT), DOT.

ACTION: Federal Notice of Intent to Prepare an Environmental Impact Statement (EIS).

SUMMARY: The FHWA is issuing this notice to advise the public that an EIS will be prepared for a proposed freeway corridor improvement project on I-39/90/94 from the US 12/18 Interchange to the I-39/WIS 78 interchange in Dane and Columbia Counties in south-central Wisconsin.

FOR FURTHER INFORMATION CONTACT:

Tracey Blankenship, Major Projects Program Manager, Federal Highway Administration, 525 Junction Road, Suite 8000, Madison, Wisconsin, 53717-2157, Telephone: (608) 829-7510.

SUPPLEMENTARY INFORMATION: The FHWA, in cooperation with the Wisconsin Department of Transportation (WisDOT), will prepare an EIS for proposed improvements in the I-39/90/94 corridor and adjacent local road systems from the US 12/18 interchange (Madison Beltline interchange) to the I-39/WIS 78 interchange (south of Portage), approximately 35 miles. The project limits also include WIS 30 from East Washington Avenue to I-39/90/94, I-94 from I-39/90 to County N, US 151 from I-39/90/94 to Main Street in Sun

Prairie, and the I-39/90/94, US 51 & WIS 19 triangle in DeForest, including operational areas of influence at each interchange. The purpose of this project is to address bridge structural needs including replacement of the Wisconsin River crossing; highway and roadside safety issues and design deficiencies; accommodate existing and projected traffic volumes; and improve the transportation system's ability to support local and regional tourism economies. The EIS will evaluate a range of alternatives for the I-39/90/94 mainline and system interchanges, adjacent arterial roads, and connections to the local road network. The EIS will be prepared in accordance with 23 U.S.C. 139, 23 CFR771, and 40 CFR parts 1500-1508. Completion of the draft EIS is expected in 2017, and the final EIS in 2019.

Public involvement is a critical component of the National Environmental Policy Act (NEPA) and will occur throughout the development of the draft and final EIS. All environmental documents will be made available for review by federal and state resource agencies and the public. Specific efforts to encourage involvement by, and solicit comments from, minority and low-income populations in the project study area will be made, with public involvement meetings held throughout the environmental document process. Public notice will be given as to the time and place of public involvement meetings. A public hearing will be held after the completion of the Draft EIS.

Inquiries about the EIS can be sent to i399094@dot.wi.gov. A public Web site will be maintained for the EIS to provide information about the project and allow for on-line public comment (www.i399094@dot.wi.gov). To ensure the full range of issues related to the proposed action are addressed and all significant issues identified, comments and suggestions are invited from all interested parties. Comments and questions concerning the proposed action and this notice should be directed to the FHWA address provided above.

Projects receiving Federal funds must comply with Title VI of the Civil Rights Act, and Executive Order 12898 "Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations." Federal law prohibits discrimination on the basis of race, color, age, sex, or country of national origin in the implementation of this project. It is also Federal policy to identify and address any disproportionately high and adverse

effects of federal projects on the health or environment of minority and low-income populations to the greatest extent practicable and permitted by law.

(Catalog of Federal Domestic Assistance Program Number 20.205, Highway Planning and Construction. The regulations implementing Executive Order 12372 regarding intergovernmental consultation on Federal programs and activities apply to this program.)

Issued on: November 12, 2014.

Johnny M. Gerbitz,

Field Operations Engineer, Federal Highway Administration, Madison, Wisconsin.

[FR Doc. 2014-27476 Filed 11-19-14; 8:45 am]

BILLING CODE 4910-22-P

DEPARTMENT OF TRANSPORTATION

Federal Railroad Administration

[Docket No. FRA-2014-0011-N-21]

Proposed Agency Information Collection Activities; Comment Request

AGENCY: Federal Railroad Administration (FRA), Department of Transportation (DOT).

ACTION: Notice and request for comments.

SUMMARY: In compliance with the Paperwork Reduction Act of 1995, this notice announces that the renewal Information Collection Requests (ICRs) abstracted below are being forwarded to the Office of Management and Budget (OMB) for review and comment. The ICR describes the nature of the information collection and its expected burden. The **Federal Register** notice with a 60-day comment period soliciting comments on the following collection of information was published on September 3, 2014 (79 FR 52409).

DATES: Comments must be submitted on or before December 22, 2014.

FOR FURTHER INFORMATION CONTACT: Mr. Robert Brogan, Office of Planning and Evaluation Division, RRS-21, Federal Railroad Administration, 1200 New Jersey Ave. SE., Mail Stop 25, Washington, DC 20590 (Telephone: (202) 493-6292), or Ms. Kimberly Toone, Office of Information Technology, RAD-20, Federal Railroad Administration, 1200 New Jersey Ave. SE., Mail Stop 35, Washington, DC 20590 (Telephone: (202) 493-6132). (These telephone numbers are not toll-free.)

SUPPLEMENTARY INFORMATION: The Paperwork Reduction Act of 1995 (PRA), Public Law 104-13, sec. 2, 109 Stat. 163 (1995) (codified as revised at

44 U.S.C. 3501–3520), and its implementing regulations, 5 CFR part 1320, require Federal agencies to issue two notices seeking public comment on information collection activities before OMB may approve paperwork packages. 44 U.S.C. 3506, 3507; 5 CFR 1320.5, 1320.8(d)(1), 1320.12. On September 3, 2014, FRA published a 60-day notice in the **Federal Register** soliciting comment on ICR that the agency is seeking OMB approval. See 79 FR 52409. FRA received no comments in response to this notice.

Before OMB decides whether to approve these proposed collections of information, it must provide 30 days for public comment. 44 U.S.C. 3507(b); 5 CFR 1320.12(d). Federal law requires OMB to approve or disapprove paperwork packages between 30 and 60 days after the 30 day notice is published. 44 U.S.C. 3507(b)–(c); 5 CFR 1320.12(d); see also 60 FR 44978, 44983, Aug. 29, 1995. OMB believes that the 30 day notice informs the regulated community to file relevant comments and affords the agency adequate time to digest public comments before it renders a decision. 60 FR 44983, Aug. 29, 1995. Therefore, respondents should submit their respective comments to OMB within 30 days of publication to best ensure having their full effect. 5 CFR 1320.12(c); see also 60 FR 44983, Aug. 29, 1995.

The summary below describes the nature of the information collection request (ICR) and the expected burden. The revised request is being submitted for clearance by OMB as required by the PRA.

Title: Roadway Worker Protection.

OMB Control Number: 2130–0539.

Abstract: This rule establishes regulations governing the protection of railroad employees working on or near railroad tracks. The regulation requires that each railroad devise and adopt a program of on-track safety to provide employees working along the railroad with protection from the hazards of being struck by a train or other on-track equipment. Elements of this on-track safety program include an on-track safety manual; a clear delineation of employers' responsibilities, as well as employees' rights and responsibilities thereto; well-defined procedures for communication and protection; and annual on-track safety training. The program adopted by each railroad is subject to review and approval by FRA. Part 214 regulations have been deemed different enough from the part 213 regulations as to require a separate and distinct reporting form (new Form FRA F 6180.119). Regardless of discipline, the FRA inspector will complete the

new Roadway Workplace Safety Violation Report Form (FRA F 6180.119) when recommending civil penalties for part 214 infractions.

Type of Request: Extension without change of a currently approved information collection.

Affected Public: Businesses (Railroads).

Form(s): FRA F 6180.119.

Annual Estimated Burden: 845,230 hours.

Title: Conductor Certification.

OMB Control Number: 2130–0596.

Abstract: On November 9, 2011, FRA issued regulations for certification of conductors, as required by the Rail Safety Improvement Act of 2008. See 76 FR 69802. This rule requires railroads to have a formal program for certifying conductors. As part of that program, railroads are required to have a formal process for training prospective conductors and determining that all persons are competent before permitting them to serve as a conductor. FRA issued this regulation to ensure that only those persons who meet minimum Federal safety standards serve as conductors, to reduce the rate and number of accidents and incidents, and to improve railroad safety. Although this rule does not propose any specific amendments to the regulation governing locomotive engineer certification, it does highlight areas in that regulation that may require conforming changes. The information collected under this rule is used by FRA to ensure that railroads and their employees fully comply with all the requirements of part 242, including a conductor certification/recertification program, fitness requirements, initial and periodic testing of conductors, territorial qualifications, etc.

Type of Request: Revision of a currently approved information collection.

Affected Public: Businesses (Railroads).

Form(s): N/A.

Annual Estimated Burden: 922,317 hours.

Addressee: Send comments regarding this information collections to the Office of Information and Regulatory Affairs, Office of Management and Budget, 725 Seventeenth Street NW., Washington, DC, 20503, Attention: FRA Desk Officer. Comments may also be sent via email to OMB at the following address: oira_submissions@omb.eop.gov.

Comments are invited on the following: Whether the proposed collections of information are necessary for the proper performance of the functions of the Department, including whether the information will have

practical utility; the accuracy of the Department's estimates of the burden of the proposed information collections; ways to enhance the quality, utility, and clarity of the information to be collected; and ways to minimize the burden of the collections of information on respondents, including the use of automated collection techniques or other forms of information technology.

A comment to OMB is best assured of having its full effect if OMB receives it within 30 days of publication of this notice in the **Federal Register**.

Authority: 44 U.S.C. 3501–3520.

Rebecca Pennington,
Chief Financial Officer.

[FR Doc. 2014–27436 Filed 11–19–14; 8:45 am]

BILLING CODE 4910–06–P

DEPARTMENT OF TRANSPORTATION

Surface Transportation Board

[Docket No. FD 35838]

Wisconsin & Southern Railroad, L.L.C.—Acquisition and Operation Exemption—City of Fitchburg and Village of Oregon, WI

AGENCY: Surface Transportation Board, DOT.

ACTION: Notice of acquisition and operation exemption.

SUMMARY: The Board is granting an exemption under 49 U.S.C. 10502 from the prior approval requirements of 49 U.S.C. 10902 for the Wisconsin & Southern Railroad, L.L.C. (WSOR), a Class II rail carrier, to acquire and operate a permanent, exclusive freight rail operating easement over an approximately 15-mile line of railroad (the Line) owned by the City of Fitchburg and the Village of Oregon, Wis. (the Municipalities). The Line, also known as the Evansville Line, extends between milepost 119.0, near Evansville, Wis., and milepost 134.0, near “MX” (a crossing of WSOR near Madison, Wis.), in Dane, Green, and Rock Counties. WSOR states that there has been no freight rail traffic on the Line since 1997. However, WSOR asserts that the Wisconsin River Rail Transit Commission (WRRTC), which describes itself as a governmental entity representing a consortium of nine Wisconsin counties, has recently been notified that a shipper seeking rail service is locating in the Village of Oregon. Consequently, WRRTC has requested that WSOR initiate service over the Line. WSOR states that it will enter into an agreement with the Municipalities whereby WSOR will

acquire the exclusive rail freight easement for resumption of rail operations. The Board is also granting WSOR's request for a waiver of the employee notice requirements of 49 CFR 1121.4(h). This exemption is subject to standard labor protective conditions.

DATES: This exemption will be effective on December 18, 2014. Petitions to stay must be filed by November 28, 2014. Petitions to reopen must be filed by December 8, 2014.

ADDRESSES: Send an original and 10 copies of all pleadings referring to FD 35838 to: Surface Transportation Board, 395 E Street SW., Washington, DC 20423-0001. In addition, one copy of all pleadings must be served on WSOR's representative: Karl Morell, Of Counsel, BALL JANIK LLP, Suite 225, 655 Fifteenth Street NW., Washington, DC 20005, and on all other parties of record in Docket No. FD 35838.

FOR FURTHER INFORMATION CONTACT: Jonathan Binet, (202) 245-0368. Assistance for the hearing impaired is available through the Federal Information Relay Service (FIRS) at (800) 877-8339. Copies of written filings will be available for viewing and self-copying at the Board's Public Docket Room, Room 131, and will be posted to the Board's Web site.

SUPPLEMENTARY INFORMATION: Additional information is contained in the Board's decision served on November 18, 2014, which is available on our Web site at www.stb.dot.gov.

Decided: November 17, 2014.

By the Board, Chairman Elliott, Vice Chairman Miller, and Commissioner Begeman.

Jeffrey Herzig,
Clearance Clerk.

[FR Doc. 2014-27511 Filed 11-19-14; 8:45 am]

BILLING CODE 4915-01-P

DEPARTMENT OF THE TREASURY

Fiscal Service

Surety Companies Acceptable on Federal Bonds: Electric Insurance Company

AGENCY: Bureau of the Fiscal Service, Fiscal Service, Department of the Treasury.

ACTION: Notice.

SUMMARY: This is Supplement No. 4 to the Treasury Department Circular 570, 2014 Revision, published July 1, 2014, at 79 FR 37398.

FOR FURTHER INFORMATION CONTACT: Surety Bond Branch at (202) 874-6850.

SUPPLEMENTARY INFORMATION: A Certificate of Authority as an acceptable surety on Federal bonds is hereby issued under 31 U.S.C. 9305 to the following company:

ELECTRIC INSURANCE COMPANY (NAIC# 21261). BUSINESS ADDRESS: 75 Sam Fonzo Drive, Beverly, MA 01915-1000. PHONE: (978) 921-2080. UNDERWRITING LIMITATION b/: \$52,256,000. SURETY LICENSES c/: AL, AK, AZ, AR, CA, CO, CT, DE, DC, FL, GA, HI, ID, IL, IN, IA, KS, KY, LA, ME, MD, MA, MI, MN, MS, MO, MT, NE, NV, NH, NJ, NM, NY, NC, ND, OH, OK, OR, PA, PR, RI, SC, SD, TN, TX, UT, VT, VA, WA, WV, WI, WY. INCORPORATED IN: Massachusetts.

Federal bond-approving officers should annotate their reference copies of the Treasury Circular 570 ("Circular"), 2014 Revision, to reflect this addition.

Certificates of Authority expire on June 30th each year, unless revoked prior to that date. The Certificates are subject to subsequent annual renewal as long as the companies remain qualified (see 31 CFR part 223). A list of qualified companies is published annually as of July 1st in the Circular, which outlines details as to the underwriting limitations, areas in which companies are licensed to transact surety business, and other information.

The Circular may be viewed and downloaded through the Internet at <http://www.fms.treas.gov/c570>.

Questions concerning this Notice may be directed to the U.S. Department of the Treasury, Bureau of the Fiscal Service, Financial Accounting and Services Branch, Surety Bond Branch, 3700 East-West Highway, Room 6D22, Hyattsville, MD 20782.

Dated: November 14, 2014.

Kevin McIntyre,

Manager, Financial Accounting and Services Branch.

[FR Doc. 2014-27508 Filed 11-19-14; 8:45 am]

BILLING CODE 4810-35-P

DEPARTMENT OF VETERANS AFFAIRS

Privacy Act of 1974; Report of Matching Program

AGENCY: Department of Veterans Affairs.

ACTION: Notice of Computer Matching Program.

SUMMARY: Notice is hereby given that the Department of Veterans Affairs (VA) intends to conduct a recurring computer matching program matching Department of Justice, Bureau of Prison (BOP), inmate records with VA pension, compensation, and dependency and

indemnity compensation (DIC) records. The goal of this match is to identify incarcerated veterans and beneficiaries who are receiving VA benefits, and to reduce or terminate benefits, if appropriate. The match will include records of current VA beneficiaries.

DATES: Comments on the matching agreement must be received no later than December 22, 2014. If no public comment is received, the amended system will become effective December 22, 2014.

The match will start no sooner than 30 days after publication of this notice in the **Federal Register**, or 40 days after copies of this notice and the agreement of the parties is submitted to Congress and the Office of Management and Budget, whichever is later, and end not more than 18 months after the agreement is properly implemented by the parties. The involved agencies' Data Integrity Boards (DIBs) may extend this match for 12 months provided the agencies certify to their DIBs, within three months of the ending date of the original match, that the matching program will be conducted without change and that the matching program has been conducted in compliance with the original matching program.

ADDRESSES: Written comments may be submitted through <http://www.Regulations.gov>; by mail or hand-delivery to the Director, Regulations Management (02REG), Department of Veterans Affairs, 810 Vermont Ave. NW., Room 1068, Washington, DC 20420; or by fax to 202-273-9026. Copies of comments received will be available for public inspection in the Office of Regulation Policy and Management, Room 1063B, between the hours of 8 a.m. and 4:30 p.m., Monday through Friday (except holidays). Please call 202-461-4902 for an appointment. In addition, during the comment period, comments may be viewed online through the Federal Docket Management System (FDMS) at <http://www.Regulations.gov>.

FOR FURTHER INFORMATION CONTACT: Mr. Thomas J. Murphy, Compensation and Pension Service, (202) 461-9700.

SUPPLEMENTARY INFORMATION: VA will use this information to verify incarceration and adjust VA benefit payments as prescribed by law. The proposed matching program will enable VA to accurately identify beneficiaries who are incarcerated for a felony or a misdemeanor in a Federal penal facility.

The legal authority to conduct this match is 38 U.S.C. 1505, 5106, and 5313. Section 5106 requires any Federal department or agency to provide VA such information as VA requests for the

purposes of determining eligibility for, or the amount of VA benefits, or verifying other information with respect thereto. Section 1505 provides that no VA pension benefits shall be paid to or for any person eligible for such benefits, during the period of that person's incarceration as the result of conviction of a felony or misdemeanor, beginning on the 61st day of incarceration. Section 5313 provides that VA compensation or dependency and indemnity compensation above a specified amount shall not be paid to any person eligible for such benefits, during the period of that person's incarceration as the result of conviction of a felony, beginning on the 61st day of incarceration.

The VA records involved in the match are the VA system of records,

Compensation, Pension, Education, and Vocational Rehabilitation and Employment Records—VA (58 VA 21/22/28), published at 74 FR 29275, June 19, 2009. The BOP records consist of information from the system of records identified as Inmate Central Records System, BOP #005 published on June 7, 1984 (48 FR 23711), and last amended at 67 FR 31371 (May 9, 2002).

In accordance with Title 5 U.S.C., subsection 552a(o)(2) and (r), copies of the agreement are being sent to both Houses of Congress and to the Office of Management and Budget. This notice is provided in accordance with the provisions of Privacy Act of 1974 as amended by Public Law 100–503.

Signed Authority: The Secretary of Veterans Affairs, or designee, approved

this document and authorized the undersigned to sign and submit the document to the Office of the Federal Register for publication electronically as an official document of the Department of Veterans Affairs. Jose D. Riojas, Chief of Staff, Department of Veterans Affairs approved this document on November 5, 2014, for publication.

Dated: November 17, 2014.

Kathleen M. Manwell,

VA Privacy Service, Office of Privacy and Records Management, Department of Veterans Affairs.

[FR Doc. 2014–27500 Filed 11–19–14; 8:45 am]

BILLING CODE 8320–01–P



FEDERAL REGISTER

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November 20, 2014

Part II

Department of the Interior

Fish and Wildlife Service

50 CFR Part 17

Endangered and Threatened Wildlife and Plants; Threatened Status for
Gunnison Sage-Grouse; Final Rule

DEPARTMENT OF THE INTERIOR**Fish and Wildlife Service****50 CFR Part 17**[Docket No. FWS-R6-ES-2012-0108;
4500030114]

RIN 1018-AZ20

Endangered and Threatened Wildlife and Plants; Threatened Status for Gunnison Sage-Grouse**AGENCY:** Fish and Wildlife Service, Interior.**ACTION:** Final rule.

SUMMARY: We, the U.S. Fish and Wildlife Service (Service), determine threatened species status under the Endangered Species Act of 1973, as amended (Act), for the Gunnison sage-grouse (*Centrocercus minimus*), a bird species from southwestern Colorado and southeastern Utah. The effect of this regulation will be to add the Gunnison sage-grouse to the List of Endangered and Threatened Wildlife.

DATES: This rule is effective December 22, 2014.

ADDRESSES: This final rule is available on the internet at <http://www.regulations.gov> and <http://www.fws.gov/mountain-prairie/species/birds/gunnisonsagegrouse>. Comments and materials we received, as well as supporting documentation we used in preparing this rule, are available for public inspection at <http://www.regulations.gov>. All of the comments, materials, and documentation that we considered in this rulemaking are available by appointment, during normal business hours at: U.S. Fish and Wildlife Service, Western Colorado Field Office, 445 West Gunnison Avenue, Suite 240, Grand Junction, CO 81501-5720; telephone 970-243-2778.

FOR FURTHER INFORMATION CONTACT: Susan Linner, Field Supervisor, U.S. Fish and Wildlife Service, Colorado Ecological Services Office, 134 Union Blvd., Suite 670, P.O. Box 25486 DFC, Denver, CO 80225; telephone 303-236-4774. Persons who use a telecommunications device for the deaf (TDD) may call the Federal Information Relay Service (FIRS) at 800-877-8339.

SUPPLEMENTARY INFORMATION:**Executive Summary**

Why we need to publish a rule. Under the Endangered Species Act a species may warrant protection through listing if it is endangered or threatened as those terms are defined in the Act. Listing a species as an endangered or threatened

species can only be completed by issuing a rule. In this case, we are required by a judicially approved settlement agreement to make a final determination regarding the Gunnison sage-grouse by no later than November 12, 2014. Elsewhere in today's **Federal Register** we finalize the designation of critical habitat for the species.

*This rule will finalize the listing of the Gunnison sage-grouse (*Centrocercus minimus*) as a threatened species.*

The basis for our action. Under the Endangered Species Act, we can determine that a species is an endangered or threatened species based on any of five factors: (A) The present or threatened destruction, modification, or curtailment of its habitat or range; (B) Overutilization for commercial, recreational, scientific, or educational purposes; (C) Disease or predation; (D) The inadequacy of existing regulatory mechanisms; or (E) Other natural or manmade factors affecting its continued existence.

As described in detail below, we have determined that the most substantial threats to Gunnison sage-grouse currently and in the future include habitat decline due to human disturbance (Factor A), small population size and structure (Factor E), drought (Factor E), climate change (Factor A), and disease (Factor C). Other threats that are impacting Gunnison sage-grouse to a lesser degree or in localized areas include grazing practices inconsistent with local ecological conditions, fences, invasive plants, fire, mineral development, piñon-juniper encroachment, large-scale water development (Factor A); predation (Factor C), primarily in association with anthropogenic disturbance and habitat decline due to human disturbance (Factor A); and recreation (Factor E). As described in Factor D below, some existing regulatory mechanisms are in place to conserve Gunnison sage-grouse, but individually or collectively they do not fully address the substantial threats faced by the species, particularly habitat decline, small population size and structure, drought, climate change, and disease. The threats listed above are also acting cumulatively, contributing to the challenges faced by Gunnison sage-grouse now and into the future.

Multiple partners, including private citizens, nongovernmental organizations, and Tribal, State, and Federal agencies, are engaged in conservation efforts across the range of Gunnison sage-grouse. Numerous conservation actions have been implemented or are planned for Gunnison sage-grouse, and these efforts have provided and will continue to

provide conservation benefit to the species. The Candidate Conservation Agreement with Assurances for Gunnison sage-grouse (CCAA), Gunnison Basin Candidate Conservation Agreement (CCA), conservation plans, multi-county commitments, habitat improvement projects, and similar non-regulatory conservation actions that address habitat-related impacts and issues are described and evaluated under Factor A in this rule. Federal, State, and local laws and regulations, conservation easements, and other regulatory mechanisms are evaluated under Factor D. Scientific research activities are described under Factor B and throughout this rule where applicable. Also, conservation efforts are described and evaluated as appropriate under relevant threat sections throughout this rule.

Peer review and public comment. We sought comments on the proposed rule from independent and qualified specialists to ensure that our determination is based on scientifically sound data, assumptions, and analyses. We invited these peer reviewers to comment on our listing proposal. We also considered all comments and information received during each public comment period.

Previous Federal Actions

Please refer to the proposed listing rule for the Gunnison sage-grouse (78 FR 2486, January 11, 2013) for a detailed description of previous Federal actions concerning this species. Federal actions that have occurred since that publication are described below.

On January 11, 2013, we published a rule proposing to list the Gunnison sage-grouse as endangered throughout its range (78 FR 2486), and a proposed rule to designate 1.7 million acres of critical habitat for the species (78 FR 2540). We opened a public comment period until March 12, 2013, that was subsequently extended until April 2, 2013 (78 FR 15925, March 13, 2013).

On July 19, 2013, we announced that we were extending the final rule deadline by 6 months, from September 30, 2013, to March 31, 2014; and reopened the comment period until September 3, 2013 (78 FR 43123). This extension served to solicit additional scientific information due to scientific disagreement regarding the sufficiency and accuracy of the available data relevant to our listing determinations for Gunnison sage-grouse.

On September 19, 2013, we announced the availability of a draft economic analysis and draft environmental assessment for our proposal to designate critical habitat for

Gunnison sage-grouse, and reopened the public comment period on those subjects and the proposed listing and critical habitat rules until October 19, 2013. We also announced two planned public informational sessions and public hearings for the proposed rules (78 FR 57604).

On November 4, 2013, we reopened the public comment period on the proposed rules until December 2, 2013, and announced the rescheduling of three public information sessions and public hearings that were postponed due to the lapse in government appropriations in October 2013 (78 FR 65936).

Public information sessions and public hearings were held in Gunnison, Colorado, on November 19, 2013; Montrose, Colorado, on November 20, 2013; and Monticello, Utah, on November 21, 2013.

In a press release on February 12, 2014, available on our Web page at <http://www.fws.gov/mountain-prairie/species/birds/gunnisonsagegrouse/>, we announced a 6-week extension, to May 12, 2014, for our final decision on our proposed listing and critical habitat rules. This extension was granted by the Court due to delays caused by the lapse in government appropriations in October 2013, and the resulting need to reopen a public comment period and reschedule public hearings.

In a press release on May 6, 2014, available on our Web page at <http://www.fws.gov/mountain-prairie/species/birds/gunnisonsagegrouse/>, we announced a 6-month extension, to November 12, 2014, for our final decision to list Gunnison sage-grouse under the Act. This extension was granted by the Court to provide the

Service with additional time to complete a final listing determination for the Gunnison sage-grouse, and if listed, a final critical habitat designation. In the event the Service decided to list the species as threatened, the court order also allowed for the Service to publish a proposed rule under section 4(d) of the Act (which are only available for threatened species) and finalize it with the final listing determination on November 12, if appropriate. We decided not to propose and finalize a 4(d) rule for the Gunnison sage-grouse at this time, but continue to evaluate the potential for issuing a section 4(d) rule in the future to tailor the take prohibitions of the Act to those necessary and advisable to provide for the conservation of the Gunnison sage-grouse.

Elsewhere in today's **Federal Register**, we finalize the designation of critical habitat for the species.

Background

Gunnison sage-grouse and greater sage-grouse (a similar, closely related species) have similar life histories and habitat requirements (Young 1994, p. 44). In this final rule, we use scientific information specific to the Gunnison sage-grouse where available but apply scientific management principles and scientific information for greater sage-grouse that are relevant to Gunnison sage-grouse threats, conservation needs, and strategies—a practice followed by the wildlife and land management agencies that have responsibility for management of both species and their habitat. Throughout this rule, we use *sage-grouse* in reference to both Gunnison and greater sage-grouse

whenever the scientific data and information is relevant to both species.

Species Information

A detailed summary of Gunnison sage-grouse taxonomy, the species description, historical distribution, habitat, and life-history characteristics can be found in the 12-month finding published September 28, 2010 (75 FR 59804). More recent scientific information relevant to the species and our evaluation of the species is included throughout this final rule.

Current Distribution and Population Estimates and Trends

Gunnison sage-grouse currently occur in seven populations in Colorado and Utah, occupying 3,795 square kilometers (km²) (1,511 square miles [mi²]) (Gunnison Sage-grouse Rangewide Steering Committee) [GSRSC] 2005, pp. 36–37; CDOW 2009a, p. 1). The seven populations are Gunnison Basin, San Miguel Basin, Monticello-Dove Creek, Piñon Mesa, Crawford, Cerro Summit-Cimarron-Sims Mesa, and Poncha Pass (Figure 1). A summary of land ownership and recent population estimates among these seven populations is presented in Table 1, and Figures 2 and 3, respectively. The following information and Figures 2 and 3 are based on lek count data (systematic counts of male sage-grouse attendance at traditional breeding sites) and associated population estimates from Colorado Parks and Wildlife (CPW) and the Utah Division of Wildlife Resources (UDWR) for the period 1996–2014 (CDOW 2010a, p. 2; CPW 2012a, pp. 1–4; CPW 2013a, p. 1; CPW 2014d, p. 1).

Figure 1. Locations of Current Gunnison Sage-grouse Populations.

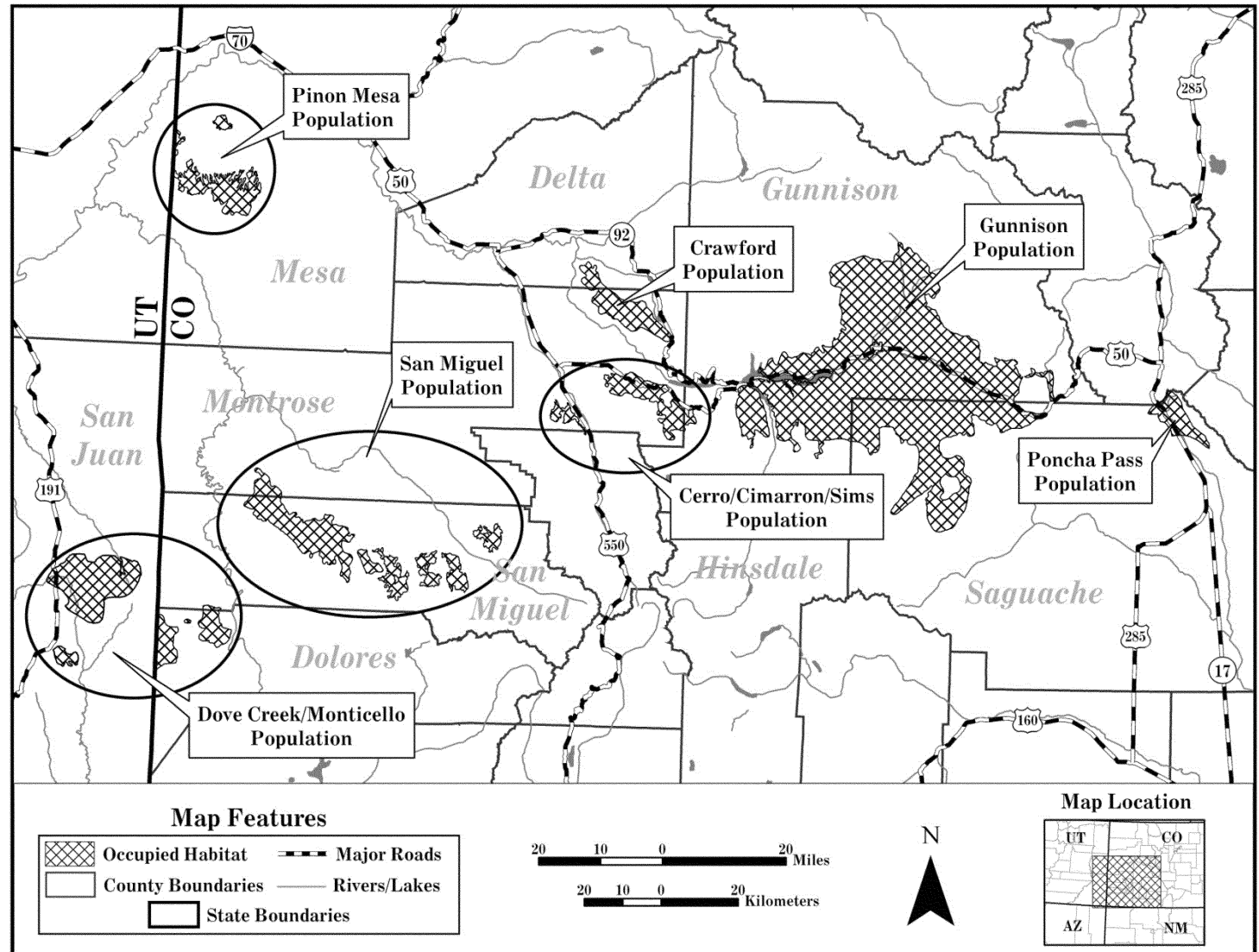


TABLE 1—PERCENT SURFACE OWNERSHIP OF GUNNISON SAGE-GROUSE OCCUPIED ^a HABITAT[GSRSC ^b 2005, pp. D-3-D-6; CDOW ^c 2009a, p. 1; CPW 2013e, spatial data]

Population	Hectares	Acres	Gunnison sage-grouse occupied habitat management and ownership						
			BLM ^d	NPS ^e	USFS ^f	CPW	CO SLB ^g	State of UT	Private
			%	%	%	%	%	%	%
Gunnison Basin	239,641	592,168	51	2	14	2	<1	0	ⁱ 30
San Miguel Basin	41,177	101,750	^g 35	0	1	11	^g 3	0	^h 49
Monticello-Dove Creek (Combined)	45,544	112,543	7	0	0	3	0	<1	90
Dove Creek	16,949	41,881	13	0	0	6	0	0	82
Monticello	28,595	70,661	5	0	0	0	0	1	94
Piñon Mesa	18,080	44,678	28	0	2	0	0	0	70
Cerro Summit-Cimarron-Sims Mesa	15,039	37,161	13	<1	0	11	0	0	76
Crawford	14,170	35,015	63	12	0	0	0	0	24
Poncha Pass	11,229	27,747	48	0	20	0	4	0	28
Rangewide	384,880	951,061	42	2	10	3	<1	<1	43

^a Occupied Gunnison sage-grouse habitat is defined as areas of suitable habitat known to be used by Gunnison sage-grouse within the last 10 years from the date of mapping, and areas of suitable habitat contiguous with areas of known use, which have no barriers to grouse movement from known use areas (GSRSC 2005, p. 54; CPW 2013e, spatial data).

^b Gunnison Sage-grouse Rangewide Steering Committee.

^c Colorado Parks and Wildlife.

^d Bureau of Land Management.

^e National Park Service.

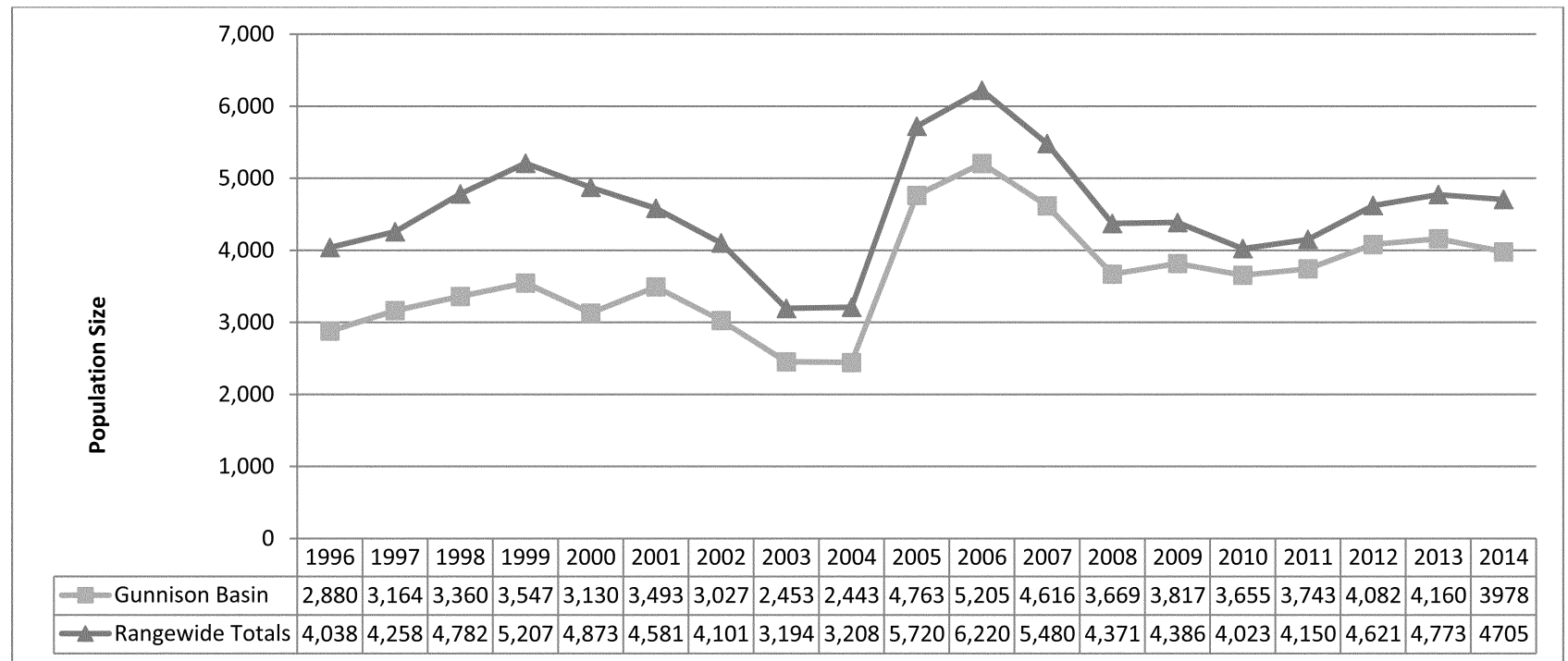
^f United States Forest Service.

^g State Land Board.

^h Estimates reported in San Miguel Basin Gunnison Sage-grouse Conservation Plan (San Miguel Basin Gunnison Sage-grouse Working Group (SMBGSWG) 2009, p. 28) vary by 2 percent in these categories from those reported here. We consider these differences insignificant.

ⁱ Includes approximately 12,000 ac of land on Pinecrest Ranch, west of Gunnison, Colorado. This is restricted fee status land held in private ownership by the Ute Mountain Ute Tribe.

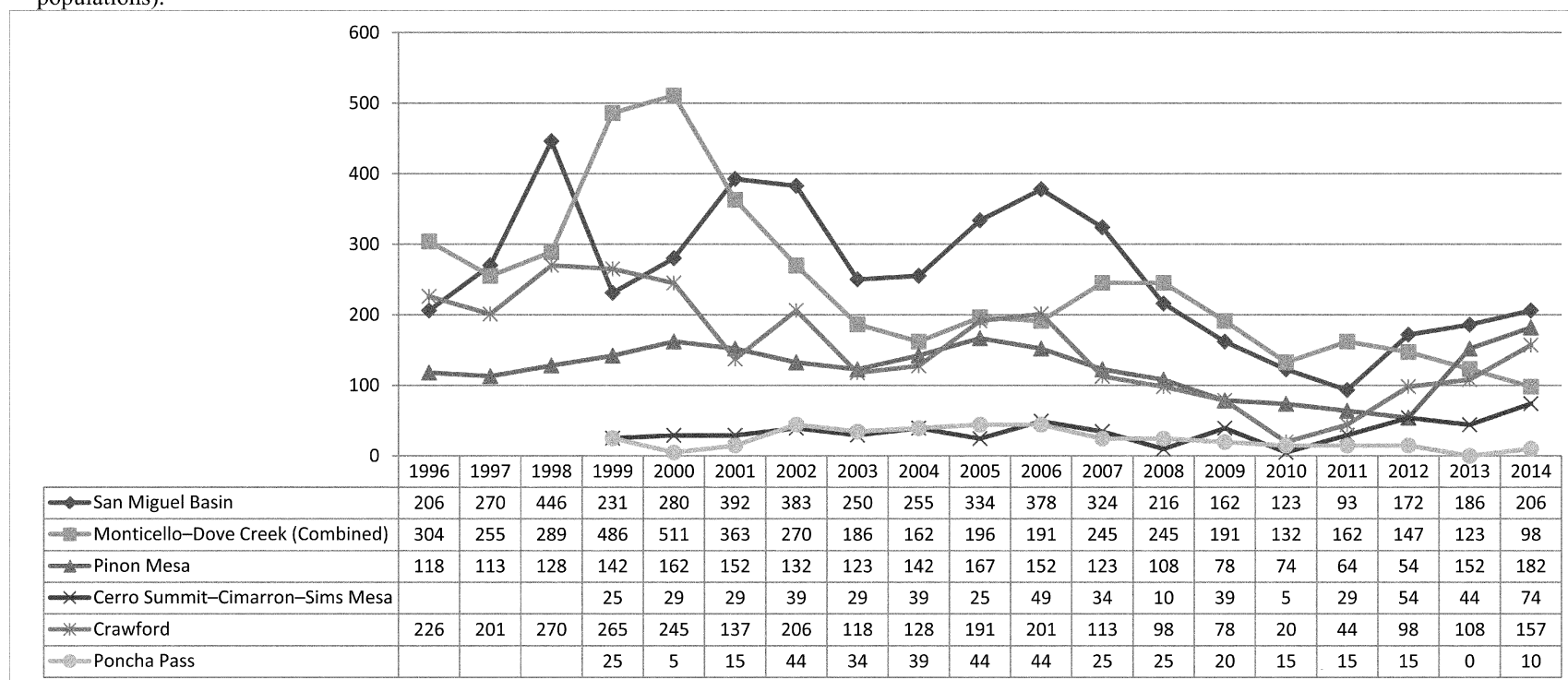
Figure 2. Population estimates by year for the Gunnison Basin population and the rangewide total Gunnison sage-grouse population derived from the formula presented in the Gunnison sage-grouse Rangewide Conservation Plan (GSRSC^a 2005, pp. 44–45) applied to high male counts on leks (CDOW^b 2012a, pp. 1–3; CPW 2013a, entire; CPW 2014d, p. 1).



^aGunnison Sage-grouse Rangewide Steering Committee

^bColorado Parks and Wildlife

Figure 3. Population estimates by year for the six satellite Gunnison sage-grouse populations derived from the formula presented in the Gunnison sage-grouse Rangewide Conservation Plan (GSRSC^a 2005, pp. 44–45) applied to high male counts on leks (CPW^b 2012a, pp. 1–3; CPW 2013a, entire; CPW 2014e, p. 6) (Note: lek counts did not occur between 1996 and 1998 for the Cerro Summit–Cimarron–Sims Mesa and Poncha Pass populations).



^aGunnison Sage-grouse Rangewide Steering Committee

^bColorado Parks and Wildlife

Lek count data are the primary means of estimating and monitoring Gunnison sage-grouse populations. However, sage-grouse populations can fluctuate widely on an annual basis, and there are concerns about the statistical reliability of population estimates based on lek counts (CDOW 2009b, pp. 1–3). Stiver *et al.* (2008, p. 474) concluded that lek counts likely underestimate population size. Another study (Davis 2012, p. 136) indicated that, based on demographic data, lek count indices overestimate population size. Although lek count data are available from as early as the 1950s for some populations, lek count protocols were first standardized and implemented in 1996 (GSRSC 2005, p. 46). Prior to 1996, lek count data are highly variable and uncertain, and are not directly comparable to recent population data (Braun 1998, p. 3; Davis 2012, pp. 139, 143). Therefore, for the purposes of evaluating current population sizes and trends, the analysis in this rule is focused on lek count data from 1996 to 2014. We also consider other available scientific information such as demographic data and population viability analyses (see Factor E). Historical distribution and population information is discussed under Factor A below.

The Gunnison Basin is the largest population (approximately 3,978 birds) and, while showing variation over the period of record, including drought cycles and harsh winters, has been relatively stable, based on lek count estimates (but see further discussion below and in the Factor E analysis). The Gunnison Basin population is the primary influence on the rangewide population size of Gunnison sage-grouse (see Figure 2); thus, the significance of this population to the species' survival and persistence is evident. The Gunnison Basin population area includes approximately 239,600 ha (592,053 ac) of occupied habitat.

In contrast, the remaining six populations, or satellite populations, are much smaller than the Gunnison Basin. All satellite populations were generally in decline until 2010; however, increases in several populations have been observed recently (Figure 3) and could be a product of numerous factors including but not limited to population cycles, translocation efforts, and increased access to leks. San Miguel and Piñon Mesa are currently the largest of the satellite populations, with 206 and 182 birds, respectively, in 2014. The Monticello-Dove Creek populations currently have less than 100 birds combined (74 and 24, respectively). The current (2014) population estimates for the two smallest populations, Cerro

Summit-Cimarron-Sims Mesa and Poncha Pass, are 74 and 16, respectively (CPW 2014d, p. 1). A count of zero birds at Poncha Pass in 2013 suggests that extirpation of this population may have occurred, although 17 birds were translocated there later that fall, and ten more in spring of 2014, with 16 known to survive into summer 2014 (see Factor B, Scientific Research and Related Conservation Efforts). The satellite population areas are much smaller than the Gunnison Basin population area, all with less than 40,500 hectares (ha) (100,000 acres [ac]) of occupied habitat (Table 1) and, with the exception of the San Miguel population, fewer than 40 males counted on leks (CDOW 2009b, p. 5; CPW 2012a, p. 3; CPW 2013a, p. 1; CPW 2014d, p. 1).

Lek count-based population estimates suggest some satellite populations have increased slightly over the last several years. However, lek count data spanning the last 19 years (1996 to 2014) as a whole indicate that all the satellite populations were generally in decline until 2010 (Figure 3). Several of the satellite populations remain in decline and all remain at population size estimates that indicate concern for their viability, ranging from 206 to 10 birds (Figure 3). Furthermore, some of the recent increases in population sizes can be attributed to translocation and survey efforts, rather than an actual increase in the population. For example, the 2014 estimated population for Piñon Mesa was 182 birds (CPW 2014d, p. 1), much greater than the 2012 estimate of 54 birds. The population in Crawford increased from 20 birds in 2010 to 157 in 2014. These increases may be due in part to the translocation of 93 birds to the Piñon Mesa population between the spring of 2010 and spring of 2013 and 73 birds to Crawford over the same period. (CPW 2014c, entire), and two new leks found in 2012 on Piñon Mesa (CPW 2012a, pp. 2–3). The potential historical range of Gunnison sage-grouse is discussed briefly below by population, and loss of historical range is discussed under Factor A.

Gunnison Basin Population—The Gunnison Basin is an intermontane (located between mountain ranges) basin that includes parts of Gunnison and Saguache Counties, Colorado. The current Gunnison Basin population is distributed across approximately 239,640 ha (592,168 ac) (Table 1), surrounding the City of Gunnison. This population comprises approximately 84 percent of the rangewide population and 62 percent of occupied habitat for the species rangewide. Elevations in the area occupied by Gunnison sage-grouse range from 2,300 to 2,900 meters (m)

(7,500 to 9,500 feet [ft]). Approximately 69 percent of the land area occupied by Gunnison sage-grouse in this population is managed by Federal agencies (67 percent) and CPW (2 percent), and the remaining 30 percent is primarily private lands, including approximately 12,000 ac on Pinecrest Ranch owned by the Ute Mountain Ute Tribe under restricted fee status. Wyoming big sagebrush (*Artemisia tridentata* ssp. *wyomingensis*) and mountain big sagebrush (*A. t.* ssp. *vaseyana*) dominate the upland vegetation, with highly variable growth form depending on local site conditions.

In 1964, Gunnison County was one of five counties containing the majority of all sage-grouse in Colorado. This was likely the case before Euro-American settlement, around the turn of the century, as well (Rogers 1964, pp. 13, 20). The 2014 population estimate for the Gunnison Basin was 3,978 birds (CPW 2014d, p. 1). Population estimates from 1996 to 2014 meet or exceed the population target of 3,000 breeding birds (based on a 10-year average) for the Gunnison Basin, as set forth by the Gunnison Sage-grouse Rangewide Conservation Plan (RCP) (CPW 2013a, p. 10; GSRSC 2005, p. 270). Based on available habitat and other considerations, the RCP identified population targets as attainable population sizes sufficient to conserve Gunnison sage-grouse in each population (GSRSC 2005, p. 255). Approximately 45 percent of leks in the Gunnison Basin occur on private land; and 55 percent are on public land administered primarily by the BLM (GSRSC 2005, p. 75). Five physiographic zones or divisions are recognized in the Gunnison Basin population area for the purposes of monitoring and management actions (CSGWG 1997, pp. 6–7).

San Miguel Basin Population—The San Miguel Basin population estimate in 2014 was 206 individuals (CPW 2014d, p. 1). Population estimates from 1996 to 2014 are less than 50 percent of the population target of 450 Gunnison sage-grouse (based on a 10-year average) for the San Miguel Basin, as set forth by the RCP (CPW 2013a, p. 12; GSRSC 2005, p. 296). This population occurs in Montrose and San Miguel Counties in Colorado, and comprises six small subpopulations (Dry Creek Basin, Hamilton Mesa, Miramonte Reservoir, Gurley Reservoir, Beaver Mesa, and Iron Springs) occupying approximately 41,177 ha (101,750 ac). Gunnison sage-grouse use some of these areas year-round, while others are used seasonally. Gunnison sage-grouse in the San Miguel Basin move widely between the six

subpopulation areas (Apa 2004, p. 29; Stiver and Gibson 2005, p. 12). The area encompassed by this population is thought to have once served as critical migration corridors between populations to the north (Piñon Mesa) and northeast (Cerro Summit-Cimarron-Sims Mesa) and to the west (Monticello-Dove Creek) (Oyler-McCance *et al.* 2005, pp. 635–636; SMBGSWG 2009, p. 9), but gene flow among these populations is currently very low (Oyler-McCance *et al.* 2005, p. 635). Historically, Gunnison sage-grouse occupied the majority of available big sagebrush (*Artemisia tridentata*) plant communities in San Miguel and Montrose Counties (Rogers 1964, pp. 22, 115).

Habitat conditions vary among the six subpopulation areas of the San Miguel Basin population areas. The following discussion addresses conditions among the subpopulations beginning in the west and moving east. The majority of occupied acres in the San Miguel Basin population (approximately 25,130 ha (62,100 ac) or 62 percent of the total population area) occur in the Dry Creek Basin subpopulation (SMBGSWG 2009, p. 28). However, the Dry Creek Basin contains some of the poorest quality habitat and the fewest individual Gunnison sage grouse numbers in the San Miguel population (SMBGSWG 2009, pp. 28, 36). Sagebrush habitat in the Dry Creek Basin area is patchily distributed. Where irrigation is possible, private lands in the southeastern portion of Dry Creek Basin are cultivated. Sagebrush habitat on private land has been heavily thinned or removed entirely (GSRSC 2005, p. 96). Elevations in the Hamilton Mesa subpopulation are approximately 610 m (2,000 ft.) higher than in the Dry Creek Basin, resulting in more mesic (moist) conditions. Agriculture is very limited on Hamilton Mesa, and the majority of the vegetation consists of oakbrush (*Quercus gambelii*) and sagebrush. Gunnison sage-grouse use the Hamilton Mesa area (1,940 ha (4,800 ac)) in the summer, but use of Hamilton Mesa during other seasons is unknown.

Gunnison sage-grouse occupy approximately 4,700 ha (11,600 ac) around Miramonte Reservoir (GSRSC 2005, p. 96). Sagebrush stands there are generally contiguous with a mixed-grass and forb understory. Occupied habitat at the Gurley Reservoir area (3,305 ha (7,500 ac)) is negatively affected by human development. Farming attempts in the Gurley Reservoir area in the early 20th century led to the removal of much of the sagebrush, although agricultural activities are now restricted primarily to the seasonally irrigated crops (hay meadows), and sagebrush has

reestablished in most of the failed pastures. However, grazing pressure and competition from introduced grasses have limited overall sagebrush representation (GSRSC 2005, pp. 96–97). Sagebrush stands in the Iron Springs and Beaver Mesa areas (2,590 ha and 3,560 ha (6,400 ac and 8,800 ac respectively)) are contiguous with a mixed-grass understory. The Beaver Mesa area has numerous scattered patches of oakbrush.

Monticello-Dove Creek Population—This population includes two separate subpopulations of Gunnison sage-grouse, the Monticello and Dove Creek subpopulations. Genetic data suggest these two subpopulations could be considered one population (GSRSC 2005, p. 37), though we are unaware of any current connectivity between the two. The larger subpopulation is near the town of Monticello in San Juan County, Utah. Gunnison sage-grouse in this subpopulation inhabit a broad plateau on the northeastern side of the Abajo Mountains, with fragmented patches of sagebrush interspersed with large grass pastures and agricultural fields. In 1972, the estimated population size ranged from 583 to 1,050 individuals; by 2002, the population size had decreased, estimated at 178 to 308 individuals (UDWR 2011, p. 1). The 2013 and 2014 population estimates are 74 individuals (CPW 2013a, p. 1; CPW 2014d, p. 1). Gunnison sage-grouse currently occupy an estimated 28,595 ha (70,661 ac) in the Monticello area (GSRSC 2005, p. 81).

The Dove Creek subpopulation is located primarily in western Dolores County, Colorado, north and west of Dove Creek, although a small portion of occupied habitat extends north into San Miguel County. The majority of sagebrush plant communities in Dolores and Montezuma Counties within Colorado were historically used by Gunnison sage-grouse (Rogers 1964, pp. 22, 112). Habitat north of Dove Creek is characterized as mountain shrub habitat, dominated by oakbrush interspersed with sagebrush. The area west of Dove Creek is dominated by sagebrush, but the habitat is highly fragmented by agricultural fields. Lek counts in the Dove Creek area were more than 50 males in 1999, suggesting a population of about 245 birds ($C = \text{High male count}; C/0.53 + (C/0.53 \times 1.6)$), but declined to 2 males in 2009 (CDOW 2009b, p. 71), suggesting a population of 10 birds at that time. Low sagebrush canopy cover, as well as low grass height, exacerbated by drought, may have led to nest failure and subsequent population declines (Connelly *et al.* 2000a, p. 974; Apa 2004,

p. 30). The 2014 population estimate was 24 individuals (CPW 2014d, p. 1).

Combined, the Monticello-Dove Creek estimated population size in 2014 was 98 individuals (CPW 2014d, p. 1). Most population estimates from 1996 to 2014 are well below the population target of 500 breeding birds (based on a 10-year average) for the Monticello-Dove Creek population, as set forth by the RCP (CPW 2013a, p. 12; GSRSC 2005, p. 278). Likewise, most population estimates from 1996 to the present time are well below the population target of 250 birds for each subpopulation alone (CPW 2013a, p. 12).

Piñon Mesa Population—The Piñon Mesa population occurs on the northwestern end of the Uncompahgre Plateau in Mesa County, about 35 km (22 mi) southwest of Grand Junction, Colorado. Gunnison sage-grouse likely occurred historically in all suitable sagebrush habitat in the Piñon Mesa area, including the Dominguez Canyon area of the Uncompahgre Plateau, southeast of Piñon Mesa proper (Rogers 1964, pp. 22, 114). Their current distribution is approximately 18,080 ha (44,678 ac) (GSRSC 2005, p. 87) which, based on a comparison of potential presettlement distribution, is approximately 6 percent of presettlement habitat on the northern portion of the Uncompahgre Plateau in Mesa County, Colorado, and Grand County, Utah. The 2014 estimated population was 182 birds (CPW 2014d, p. 1), much greater than the 2012 estimate of 54 birds. Over the last 4 years, CPW has translocated 93 sage-grouse to this area, which may have contributed to the increase observed over the past 2 to 4 years (CPW 2014c, entire), in addition to the discovery of two formerly unknown leks in 2012 (CPW 2012a, pp. 2–3). Population estimates from 1996 to 2014 are below the population target of 200 breeding birds (based on a 10-year average) for the Piñon Mesa population, as set forth by the RCP (CPW 2013a, p. 11; GSRSC 2005, p. 285). Of 12 known leks, only 4 were active in 2012 (CPW 2012a, pp. 2–3). The Piñon Mesa area may have other leks as well, but the high percentage of private land, a lack of roads, and heavy snow cover during spring make locating new leks difficult (CDOW 2009b, p. 109).

Crawford Population—The Crawford population of Gunnison sage-grouse includes approximately 14,170 ha (35,015 ac) of occupied habitat in Montrose County, Colorado, about 13 km (8 mi) southwest of the town of Crawford and north of the Gunnison River. Basin big sagebrush (*A. t. ssp. tridentata*) and black sagebrush (*A.*

nova) dominate the mid-elevation uplands (GSRSC 2005, p. 62). The 2014 estimated population was 157 individuals (CPW 2014a, p. 1), much greater than the 2010 estimate of 20 birds, and 2011 estimate of 44 birds. This observed increase could be, in part, the product of the translocation of 72 birds to the Crawford population from 2011 to the spring of 2013 (CPW 2014c, entire), although natural increases or other reasons not understood could also be contributing. Furthermore, new lek count techniques for this population were implemented in 2012 (Gunnison County 2013a, p. 190), and increased survey efforts may be partly responsible for observed increases in high male counts and population estimates (Figure 3). Population estimates from 1996 to 2014 are well below the population target of 275 breeding birds (based on a 10-year average) for the Crawford population, as set forth by the RCP (CPW 2013a, p. 11; GSRSC 2005, p. 264). Three leks are currently active in the Crawford population (CPW 2012a, p. 1), all on BLM lands near an 11-km (7-mi) stretch of road. This area represents the largest contiguous sagebrush plant community within the occupied area of the Crawford population (GSRSC 2005, p. 64).

Cerro Summit-Cimarron-Sims Mesa Population—This population is divided into two geographically separate subpopulations, both in Montrose County, Colorado: The Cerro Summit-Cimarron and Sims Mesa subpopulations. It is unknown whether sage-grouse currently move between these subpopulations.

The Cerro Summit-Cimarron subpopulation is centered about 24 km (15 mi) east of the City of Montrose. Rogers (1964, p. 115) noted a small population of sage-grouse in the Cimarron River drainage, but did not report population numbers. The same publication also reported that four individual birds were observed during lek counts at Cerro Summit in 1959. Habitat in this subpopulation area includes 15,039 ha (37,161 ac) of patchy sagebrush habitat fragmented by oakbrush and irrigated pastures. Four leks are currently known in the Cerro Summit-Cimarron group, although only two have been active in recent years (GSRSC 2005, p. 257; CPW 2012a, entire).

The Sims Mesa area, about 11 km (7 mi) south of Montrose, consists of small patches of sagebrush fragmented by piñon-juniper, residential and recreational development, and agriculture (CDOW 2009b, p. 43). Rogers (1964, p. 95) recorded eight males from lek counts at Sims Mesa in 1960. In

2000, the CPW translocated six Gunnison sage-grouse from the Gunnison Basin to Sims Mesa (Nehring and Apa 2000, p. 12). There is only one currently known lek in the Sims Mesa and, since 2003, it has not been attended by Gunnison sage-grouse. However, lek counts on Sims Mesa did not occur in 2011. A lek is designated historic when it is inactive for at least 10 consecutive years, according to CPW standards. Therefore, the current status of the Sims Mesa lek is unknown (CDOW 2009b, p. 7; CPW 2012a, p. 1).

The Cerro Summit-Cimarron-Sims Mesa population estimate in 2014 was 74 individuals (CPW 2014a, p. 1), with all birds in the Cerro Summit-Cimarron areas. Population estimates from 1996 to 2014 are below the population target of 100 breeding birds (based on a 10-year average) for this population, as set forth by the RCP (CPW 2013a, p. 11; GSRSC 2005, p. 258).

Available information indicates that some birds translocated to the Crawford area between 2011 and 2013 went to the Cerro Summit-Cimarron area, then moved back to Crawford (Crawford Area Gunnison Sage-grouse Working Group 2014, p. 3). Translocated birds also returned to the Gunnison Basin permanently (Crawford Area Gunnison Sage-grouse Working Group 2014, p. 3). Genetic information (Oyler-McCance *et al.* 2005, pp. 635–636; SMBGSWG 2009, p. 9) indicates that there was past gene flow between the Cerro Summit-Cimarron population and the San Miguel population. Therefore, we consider the Cerro Summit-Cimarron population to be an important linkage area, providing connectivity between the two largest populations, the Gunnison Basin and the San Miguel populations, as well as the Crawford population.

Poncha Pass Population—The Poncha Pass Gunnison sage-grouse population is located in Saguache County, approximately 16 km (10 mi) northwest of Villa Grove, Colorado. The known population distribution includes 11,229 ha (27,747 ac) of sagebrush habitat from the summit of Poncha Pass extending south for about 13 km (8 mi) on either side of U.S. Highway 285. Sagebrush in this area is generally intact with little fragmentation, and habitat quality throughout the area appears adequate to support a population of the species (Nehring and Apa 2000, p. 25). Despite this, the area has struggled to sustain a viable population. San Luis Creek runs through the area, providing a perennial water source and wet meadow riparian habitat for brood-rearing. Decker and Rock Creeks also provide water most of the year. However, water flows in the

area have been much lower and less dependable in recent years due to drought conditions (Nehring 2013a, pers. comm.).

The Poncha Pass population was reintroduced in the 1970s in a portion of the San Luis Valley where Gunnison sage-grouse were thought to have been extirpated by the 1950s (Rogers 1964, pp. 22, 27, 116). Reestablishment of this population began with 30 birds translocated from the Gunnison Basin in 1971 and 1972 (GSRSC 2005, p. 94). In 1992, a CPW effort to simplify hunting restrictions inadvertently opened the Poncha Pass area to sage-grouse hunting, and at least 30 grouse were harvested from this population. Due to declining population numbers since the 1992 hunt, CPW translocated 24 additional birds from the Gunnison Basin in the spring of 2000 (Nehring and Apa 2000, p. 11). In 2001 and 2002, an additional 20 and 7 birds, respectively, were moved to Poncha Pass by the CPW (GSRSC 2005, p. 94).

Translocated females have bred successfully (Apa 2004, pers. comm.), and male display activity resumed on the historical lek in the spring of 2001. The only known lek is located on BLM-administered land (CDOW 2011a, p. 1; CPW 2012a, p. 3). A high male count of 3 males occurred in 2012, resulting in an estimated population size of 15 for the Poncha Pass population. In 2013, no birds were counted at leks or in surrounding habitat despite considerable survey efforts, suggesting a population estimate of zero birds. In the fall of 2013, CPW translocated 17 birds to the Poncha Pass population from the Gunnison Basin. As of January 2014, 10 of these birds were known to be surviving (Nehring 2014, pers. comm.). In 2014, CPW translocated 10 more birds to the area. Sixteen birds were known to survive into summer of 2014 (all translocated birds had telemetry transmitters). Poncha Pass current and past population estimates from 1996 to 2013 are well below the population target of 75 birds, as set forth by the RCP (CPW 2013a, p. 12; GSRSC 2005, p. 291). We note that given the history of this population, lack of unique genetics (all sage-grouse were introduced from the Gunnison Basin), and concerns about translocation success, we do not consider this population necessary to the recovery of the species.

Additional Special Status Information

The Gunnison sage-grouse has an International Union for Conservation of Nature (IUCN) Red List Category of “endangered” (Birdlife International 2009). NatureServe currently ranks the Gunnison sage-grouse as G1—Critically

Imperiled (Nature Serve 2010, entire). The Gunnison sage-grouse is on the National Audubon Society's Watch List 2007 Red Category, which is "for species that are declining rapidly or have very small populations or limited ranges, and face major conservation threats." This information is provided here for background only; these assessments were not factored into our analysis or listing determination in this rule.

Summary of Changes From the Proposed Rule

Based upon our review of the public comments, comments from other Federal and State agencies, peer review comments, issues raised at the public hearing, and new relevant information that has become available since the publication of the proposal, we have reevaluated our proposed listing rule and made changes as appropriate. Other than minor clarifications and incorporation of additional information on the species' biology and populations, this determination differs from the proposal in the following ways:

(1) Based on our analyses of the potential threats to the species, we have determined that Gunnison sage-grouse does not meet the definition of an endangered species, contrary to our proposed rule published on January 11, 2013 (78 FR 2486).

(2) Based on our analyses, we have determined that the species meets the definition of a threatened species. Subsequently, pursuant to this final rule, the species will be added to the list of threatened species set forth in 50 CFR Part 17.

(3) We have expanded the discussion of Ongoing and Future Conservation Efforts, in Factor A below.

(4) We have found that the threat from current residential development in the Gunnison Basin is not as high as we previously concluded. See Factor A analysis and discussion.

Summary of Peer Review and Public Comments

In our January 11, 2013, proposed rules for Gunnison sage-grouse (proposed listing, 78 FR 2486; proposed critical habitat designation, 78 FR 2540), we requested written public comments on the proposal from all interested parties. At various times, public comment periods were extended or reopened (see Previous Federal Actions), with a final comment period on both proposals ending on December 2, 2013. We contacted appropriate State and Federal agencies, county governments, elected officials, scientific organizations, and other interested

parties and invited them to comment. We also published notices inviting general public comment in local newspapers throughout the species' range.

Between January 11, 2013, and December 2, 2013, we received a total of 36,171 comment letters on the listing and critical habitat proposals. Of those letters, we determined that approximately 445 were substantive comment letters; 35,535 were substantive form letters; and 191 were non-substantive comment letters. Substantive letters generally contained comments pertinent to both proposed rules, although the vast majority of comments were related to the proposed listing rule. Responses to comments related to critical habitat are provided in the final rule to designate critical habitat for Gunnison sage-grouse, published elsewhere in today's **Federal Register**. Also, we held three public hearings between November 19 and 21, 2013, in response to requests from local and State agencies and governments; we received oral comments during that time (see Previous Federal Actions). All substantive information provided during all comment periods and hearings that pertains to the listing of the species has been incorporated directly into this final rule or addressed below. For the readers' convenience, we combined similar comments and responses.

Comments From Peer Reviewers

In accordance with our peer review policy published in the **Federal Register** on July 1, 1994 (59 FR 34270), we solicited expert opinion from five independent and qualified individuals with scientific expertise on Gunnison sage-grouse biology and conservation. The purpose of the peer review was to ensure that our decisions are based on scientifically sound data, assumptions, and analyses, based on the input of appropriate experts and specialists. We received written responses from all five peer reviewers. We reviewed all comments received from the peer reviewers for substantive issues and new information regarding the listing of the Gunnison sage-grouse. One peer reviewer concluded that our proposals included a thorough and accurate review of the available scientific and commercial data on Gunnison sage-grouse, but did not provide substantive comments. The remaining four letters provided additional relevant information on biology, threats, and scientific research for the species. Two peer review letters were opposed to the proposed listing and questioned our rationale and determinations. All

substantive comments from peer reviewers are incorporated directly into this final rule or addressed in the summary of comments below.

(1) *Comment:* One peer reviewer noted that population growth models of greater sage-grouse (*C. urophasianus*) indicate adult annual survival is the most sensitive vital rate. However, in the proposed rule, we said that limitations in the quality and quantity of nesting and early brood-rearing habitats, in particular, are especially important because Gunnison sage-grouse population dynamics are most sensitive during these life-history stages (GSRSC 2005, p. G-15).

Our Response: Juvenile recruitment has been identified as the most important demographic factor influencing or limiting greater and Gunnison sage-grouse population growth rates and viability (Connelly *et al.* 2004, p. 3-11, GSRSC 2005, p. 173). In a recent demographic and population viability study of Gunnison sage-grouse (Davis 2012), juvenile survival was found to be the most influential vital rate in the Gunnison Basin population, a relatively stable population. However, adult survival was more influential in the San Miguel population, a smaller and steeply declining population where no juvenile recruitment occurred (Davis 2012, pp. 89, 93). Therefore, both juvenile survival and adult survival rates appear to be important to the species' viability. This topic is discussed further under Factor E in this final rule.

(2) *Comment:* One peer reviewer stated that the methods and rationale regarding the proposed rule's evaluation of residential development and estimated housing development in the Gunnison Basin are not clear for the following reasons: It was unclear how the potential spatial configuration of new housing units was estimated; thus calculations for habitat lost directly or indirectly are not transparent. The reviewer stated that the conclusion that the species should be listed as endangered relies heavily on the analysis of potential threats of additional anthropogenic infrastructure given increasing human populations. The peer reviewer commented that there are potential flaws in the estimated impacts of residential impact in the Gunnison Basin, which relied primarily on Aldridge *et al.* (2012, entire). The peer reviewer noted that to establish the scientific credibility of these conclusions, additional information is required describing the methodology and data used in the analysis as well as reporting the results; for example, citing the spatial data sources, specifically

establishing the methods used to come to the level of potential impact (spatially and temporally), providing results specific to each analysis, and specifically establishing the assumptions made. The peer reviewer also stated that an analysis of residential development in the satellite populations is lacking.

Our Response: In Factor A of this final rule, we reevaluate the threat of residential development in the Gunnison Basin and in the six satellite populations, and explain the framework for our assessment. In that revised analysis, based on new information regarding the location and magnitude of past development patterns in Gunnison sage-grouse habitat in the Gunnison Basin, we avoid the use of spatial zones of influence to estimate or extrapolate potential impacts of current and future development, focusing instead on human population growth rates and available developable private lands in occupied habitat.

(3) *Comment:* A peer reviewer noted that the proposed rule analysis indicated that approximately 85 percent of occupied habitat in the Gunnison Basin has an increased likelihood of current or future road-related disturbance. This conclusion would suggest that the vast majority of sagebrush habitats in the Gunnison Basin are within 700 m of a road, an exceptionally dense road network—as a comparison, Knick *et al.* 2011 (chapter 12 in *Studies in Avian Biology* No. 38 page 215) estimated that 89 percent of sage-grouse habitats were within 2.5 km of a road in Western Association of Fish and Wildlife Agencies Management Zone 7 (Colorado Plateau), road densities less than those reported here. The reviewer suggested that we provide more specificity on how we analyzed roads. The reviewer noted that, given that this analysis is specific to the spatial scale of the potential spread of invasive weeds associated with roads in general, it may benefit the discussion to include the amount of habitat within 700 m of improved surface roads as well as all roads (assuming two-tracks are included as roads in this analysis).

Our Response: Our analysis included all road types (primary, secondary, etc.) in occupied habitat in the Gunnison Basin, hence the relatively high density of road networks. We did not differentiate by road type, as our primary intent was to estimate exposure of occupied habitat to road networks in general. We revised this final rule to clarify that the extent and severity of weed invasion would vary by road type. See further discussion under “Roads” in Factor A.

(4) *Comment:* One peer reviewer commented that the proposed rule discusses the short-lived benefits of fire in sage-grouse habitats, including a flush of understory vegetation and forbs. The peer reviewer noted that the proposed rule states that beneficial effects of fire were found by studies in mesic habitats and that, therefore, some benefits may be expected from fire in those habitat types (but this is contradictory to the previous statement). The reviewer stated that effects in Wyoming sagebrush, where most studies have taken place, may be different from those in mountain sagebrush types (such as in Gunnison sage-grouse range).

Our Response: As presented in this final rule, effects of fire in sagebrush habitat and to sage-grouse are highly variable. A clear positive response of Gunnison or greater sage-grouse to fire has not been demonstrated (Braun 1998, p. 9). The few studies that have suggested fire may be beneficial for greater sage-grouse were primarily conducted in mesic areas used for brood-rearing (Klebenow 1970, p. 399; Pyle and Crawford 1996, p. 323; Gates 1983, in Connelly *et al.* 2000c, p. 90; Sime 1991, in Connelly *et al.* 2000a, p. 972). In mesic habitat, small fires may maintain a suitable habitat mosaic by reducing shrub encroachment and encouraging understory, herbaceous growth. However, without available nearby sagebrush cover, the utility of these sites is questionable, especially within the six small Gunnison sage-grouse populations where fire could further degrade the remaining habitat. More recent research related to Gunnison sage-grouse indicated that due to the fragmented nature of remaining sagebrush habitat across the species’ range, prescribed fire may be inappropriate if the goal is to improve sagebrush and overall habitat conditions for the species (Baker 2013, p. 8). This topic is discussed further under Factor A in this final rule.

(5) *Comment:* A peer reviewer recommended that our analysis include more discussion on the role of water developments in the proliferation of West Nile virus. The reviewer cited a study by Walker and Naugle (2011), arguing that West Nile outbreaks in small, isolated sage-grouse populations—similar to all except perhaps the Gunnison Basin population of Gunnison sage-grouse—may result in extirpation. Given the potential impact to populations from West Nile virus and the predicted spread of this disease associated with climate change, the reviewer stated that the effect of

anthropogenic water sources that harbor mosquitoes should be analyzed.

Our Response: In this rule, we reevaluated West Nile virus as a threat to Gunnison sage-grouse and included several new citations. We did not conduct a landscape analysis on the precise quantity or distribution of water developments, but instead focused our analysis on the known distribution of West Nile virus across Gunnison sage-grouse range. In this final rule we find that, due to the known and potential presence and distribution of West Nile virus across the majority of Gunnison sage-grouse range, the high risk of mortality and population-level impacts based on the biology of the species, and the immediacy of those potential impacts, West Nile virus is a potential future threat to Gunnison sage-grouse throughout its range. The threat of West Nile virus is currently lower in the high-elevation areas, such as the Gunnison Basin and most of the Piñon Mesa populations, but we expect it to increase in the near term due to increased drought and the predicted effects of climate change. This topic is discussed in detail under Factor C of this rule.

(6) *Comment:* A peer reviewer stated that limited evidence is provided to establish predation as a substantial threat to Gunnison sage-grouse.

Our Response: We agree that research and data linking predation and Gunnison sage-grouse abundance and viability are limited. However, available scientific information (primarily for greater sage-grouse) presented in this rule indicates that, particularly in areas of intensive habitat alteration and fragmentation, and in smaller less resilient populations, sage-grouse productivity and, potentially, population persistence could be negatively affected by predation. Because the Gunnison and greater sage-grouse have similar behavior and life-history traits, it is reasonable to assume that predator impacts on Gunnison sage-grouse are similar to those observed in greater sage-grouse. The best available information indicates that predation is having an impact on Gunnison sage-grouse, particularly in the satellite populations, where there is some evidence that predation is affecting chick and juvenile survival, especially in smaller populations. Based on the greater sage-grouse data and the limited data available for Gunnison sage-grouse, we conclude that predation is a threat. While predation likely acts as a threat in localized areas across the range of the species, the stability of the Gunnison Basin population over the last 19 years indicates that predation is not having a significant impact on that population.

We believe, however, that the effects of predation are more pronounced in the satellite populations. Given the stability of the Gunnison Basin population, we do not believe that the magnitude of this threat is significant at the rangewide level. This topic is discussed in detail in Factor C of the rule.

(7) *Comment*: A peer reviewer noted that the proposed rule's analysis on non-renewable energy development is lacking.

Our Response: This final rule includes a revised and expanded evaluation of mineral and energy development (Factor A).

(8) *Comment*: A peer reviewer stated that there are no data to support the conclusion that habitat conditions with respect to grazing are better on public lands than private lands, due in part to land health standards and more regulation.

Our Response: We agree and have revised our statement in the final rule to more accurately reflect that in our analysis of grazing under Factor A.

(9) *Comment*: A peer reviewer noted that the proposed rule states, with respect to fences, that "we anticipate that the effect on sage-grouse populations through the creation of new raptor perches and predator corridors into sagebrush habitats is similar to that of powerlines." The reviewer did not think this assumption was correct. The commenter noted that differences in height between a fence post and a utility pole would theoretically result in different spatial scales of functional habitat loss due to differences in the distance from the perch a predator could see while perched.

Our Response: The final rule has been revised to state that fence posts create perching places for raptors and corvids, which may increase their ability to prey on sage-grouse (Braun 1998, p. 145; Oyler-McCance *et al.* 2001, p. 330; Connelly *et al.* 2004, p. 13–12). This topic is discussed in detail in Factor A of this rule.

(10) *Comment*: A peer reviewer suggested that we review a recent article by Blomberg *et al.* 2012, related to climate change and invasive plants. This article suggests that characteristics of climate and landscape disturbance influence the dynamics of greater sage-grouse populations.

Our Response: We reviewed this article and cited it in Factor A (Invasive Plants) and Factor E (Drought and Extreme Weather) of this rule.

(11) *Comment*: A peer reviewer noted that the Utah population of Gunnison sage-grouse was at its highest in the 1970s and 1980s (San Juan County Working Group (SJCWG) 2000, Lupis

2005, Prather 2010). During this period, the peer reviewer stated, the primary agricultural crops in the county were winter wheat (*Triticum* spp.) and dryland alfalfa (*Medicago* spp.). Many growers did not use herbicides or insecticides at this time because of the slim profit margin in growing these crops. The peer reviewer suggested that these practices may have resulted in a greater arthropod abundance as a result of increased green vegetation and forb availability, providing more food resources for Gunnison sage-grouse. The reviewer also reported that during this period landowners frequently reported observing flocks of sage-grouse in their fields during harvest and post-harvest periods.

Our Response: While sage-grouse may forage on agricultural croplands (Commons 1997, pp. 28–35), when possible, they tend to avoid landscapes dominated by agriculture (Aldridge *et al.* 2008, p. 991). Influences resulting from agricultural activities extend into adjoining sagebrush, and include increased predation and reduced nest success due to predators associated with agriculture (Connelly *et al.* 2004, p. 7–23). Agricultural lands provide some benefits for sage-grouse as some crops such as alfalfa (*Medicago sativa*), winter wheat (*Triticum aestivum*), and pinto bean sprouts (*Phaseolus* spp.) are eaten or used seasonally for cover by Gunnison sage-grouse (Braun 1998, pers. comm., Lupis *et al.* 2006, entire). Agricultural fields and their management may provide a surplus of arthropods and forbs for Gunnison sage-grouse, and for hens with broods, in particular. Despite these seasonal benefits, crop monocultures do not provide adequate year-round food or sagebrush cover (GSRSC 2005, pp. 22–30). This topic is discussed in Factor A of this rule (Conversion to Agriculture).

(12) *Comment*: One peer reviewer felt that the proposed rule neglected to discuss the importance of Conservation Reserve Program (CRP) lands in Utah to Gunnison sage-grouse.

Our Response: Lands within the occupied range of Gunnison sage-grouse enrolled into the CRP occur within Dolores and San Miguel counties in Colorado, and San Juan County in Utah (USDA FSA 2010, entire). A significant portion of the agricultural lands in the Monticello subpopulation are enrolled in the CRP program, and some CRP lands are sometimes used by Gunnison sage-grouse as early-brood-rearing and summer-late fall habitat when they are part of a landscape that otherwise encompasses the species' seasonal habitats (Lupis *et al.* 2006, pp. 959–960; Ward 2007, p. 15). We therefore

acknowledge the benefits of CRP lands to Gunnison sage-grouse, as habitat provided under this program is generally more beneficial to the species than lands under more intensive agricultural uses such as crop production. However, CRP lands are generally lacking in the sagebrush and shrub components typically critical to the survival and reproduction of Gunnison sage-grouse and vary greatly in plant diversity and forb abundance (Lupis *et al.* 2006, pp. 959–960; Prather 2010, p. 32). As such, these CRP lands are generally of lower value or quality than native sagebrush habitats. This topic is discussed further in Factor A (Conversion to Agriculture).

(13) *Comment*: A peer reviewer noted that adult survival and nesting success in San Juan County was higher (Lupis 2005, Ward 2007) than that reported for other populations (Young 1994, Commons 1997, Apa 2004). The reviewer hypothesized that this difference may be due to the effort in San Juan County to reduce mammalian and corvid depredation (Lupis 2005, Ward 2007).

Our Response: While we acknowledge that predator control may be effective under certain circumstances, the cited studies did not evaluate the effect of predator control, nor was that their objective. They only speculated regarding the potential positive effects of predator control on the Monticello (San Juan County) population of Gunnison sage-grouse. This topic is discussed further in Factor C (Predation) of this rule.

(14) *Comment*: A peer reviewer reported that the Gunnison sage-grouse population in San Juan County may be stable or increasing based on increases in brood sizes and hatch success between 1974 and 2005 (UDWR 1974; Lupis 2005). This reviewer noted that this hypothesis was not supported by lek count indices, which indicated that the population was declining.

Our Response: Lek count data from 1996 through 2014 indicate a decline in the Monticello-Dove Creek population (located in the adjacent counties of San Juan, UT, and Dolores, CO, respectively) collectively and in both of these populations individually. Further, current population estimates are well below the Rangewide Conservation Plan (RCP) population target of 250 birds for each population alone (CPW 2013, p. 12). Sample size for the aforementioned study was limited to three nests, and predator control at the time may have contributed to relatively high nesting success (Lupis 2005, entire); the inference to be drawn from the study is, therefore, limited. The best available

scientific information indicates that the Monticello-Dove Creek population is neither stable nor secure. This topic is discussed further in this rule in the Current Distribution and Population Estimates and Trends section below; and in Factor E (Small Population Size and Structure).

(15) *Comment*: A peer reviewer provided data and information from pertinent studies conducted in Utah and Colorado that the reviewer thought could improve our analysis.

Our Response: We reviewed the provided study information and literature and found that most had already been considered in our proposed rule. In this final rule, we included all new studies, data, and information relevant to our evaluation.

(16) *Comment*: A peer reviewer thought that the proposed rule was missing a description and summary of the two decades of conservation actions completed by local communities, landowners, public and private agencies, and organizations in Utah and Colorado to conserve the species. The reviewer indicated that stakeholders in both States dedicated significant resources to conservation of the species that have abated numerous threats. The peer reviewer recommended expanding discussion of the efforts of the local working groups, the State agencies, nongovernmental organizations, and counties, as well as Natural Resources Conservation Service (NRCS) programs, including the Sage-grouse Initiative Program.

Our Response: We recognize the contributions made by multiple partners including private citizens, nongovernmental organizations, and Tribal, State, and Federal agencies that are actively engaged in conservation efforts across the range of Gunnison sage-grouse. Numerous conservation actions have been implemented for Gunnison sage-grouse, and these efforts have provided and will continue to provide conservation benefit to the species. The CCAA, Gunnison Basin CCA, conservation plans, habitat improvement projects, and similar conservation efforts that address habitat-related issues are described and evaluated under Factor A (see Conservation Programs and Efforts Related to Habitat Conservation) in this rule. Laws and regulations, conservation easements, and other regulatory mechanisms are evaluated under Factor D. Scientific research activities are described under Factor B and throughout this rule where applicable. Also, throughout this rule, conservation efforts are described under the relevant factor section.

(17) *Comment*: A peer reviewer stated that the proposed rule provides information regarding the estimated historical occupied Gunnison sage-grouse habitats, based largely on estimates of potential habitats. As such, these figures may overestimate the historical range of the species. The commenter noted that it is logical to assume that, if a species' habitat declines, so will the population. However, the peer reviewer could not find any data to support the idea that populations have declined over time.

Our Response: Our listing decision is based on the current status of Gunnison sage-grouse and the current and future threats to the species and its habitat. However, the loss of historical range and decline in abundance, and the associated causes, are informative in that they can be used to help forecast how populations and the species may respond to current and future threats.

The onset of Euro-American settlement in the 1800s resulted in significant alterations to sagebrush ecosystems throughout North America, primarily as a result of urbanization, agricultural conversion, and irrigation projects (West and Young 2000, pp. 263–265; Miller *et al.* 2011, p. 147). Areas in Colorado that supported basin big sagebrush were among the first sagebrush community types converted to agriculture because their typical soils and topography are well suited for agriculture (Rogers 1964, p. 13). Decreases in the abundance of sage-grouse paralleled the loss of range (Braun 1998, pp. 2–3), and a gradual but obvious decrease in sage-grouse distribution and numbers in Colorado had begun around 1910 (Rogers 1964, pp. 20–22).

The best available information indicates a reduction of Gunnison sage-grouse distribution since Euro-American settlement in the 1800s, with evidence of the loss of peripheral populations (Schroeder *et al.* 2004, p. 371, and references therein) and a northward and eastward trend of extirpation (Schroeder *et al.* 2004, p. 369, and references therein), meaning western and southern extents of the species' former range are now lost. Based on historical records, museum specimens, and potential sagebrush habitat distribution, the potential historical range of Gunnison sage-grouse was estimated to have been 21,376 square miles, or 13,680,590 ac (GSRSC 2005, pp. 32–35, as adapted from Schroeder *et al.* 2004, entire). This range included parts of central and southwestern Colorado, southeastern Utah, northwestern New Mexico, and northeastern Arizona (Schroeder *et al.* 2004, pp. 368, 370).

Braun *et al.* (2014, entire) provides more detail on historical distribution in Colorado that largely matches Schroeder *et al.* (2004). Not all of this historical range would have been occupied at any one time. The species' estimated current range is 1,822 square miles, or 1,166,075 ac, in central and southwestern Colorado, and southeastern Utah (Figure 1) (GSRSC 2005, pp. 32–35, as adapted from Schroeder *et al.* 2004, entire). Based on these figures, the species' current range represents about 8.5 percent of its historical range (GSRSC 2005, p. 32). Similarly, Schroeder *et al.* (2004, p. 371) estimated the species' current overall range to be 10 percent of potential presettlement habitat (prior to European settlement in the 1800s). As estimated in our final rule to designate critical habitat for Gunnison sage-grouse (published elsewhere in today's **Federal Register**), the species' "overall range" includes an estimated 1,621,008 ac in southwestern Colorado and southeastern Utah, comprising 923,314 ac (57 percent) of occupied habitat and 697,694 ac (43 percent) of unoccupied habitat. Based on these figures, the current overall range of 1,621,008 acres represents approximately 12 percent of the potential historical range of 13,680,640 ac. The estimates above indicate that approximately 88 to 93 percent of the historical range of Gunnison sage-grouse has been lost. This topic is discussed further under our introduction to Factor A.

(18) *Comment*: A peer reviewer noted that Davis (2012) suggested Gunnison sage-grouse populations in the Gunnison Basin declined slightly over the last 16 years, but that Davis concluded the Gunnison Basin population, which may comprise 85–90 percent of the entire population, is relatively stable. Population projection models based on Davis' 6-year study suggested that the Gunnison sage-grouse population in the Gunnison Basin is declining. However, the peer reviewer noted that lek count data extended farther back in time than the demographic estimates and showed that this population exhibited a considerable increase, so the peer reviewer indicated that inference from this study is limited.

Our Response: Based on an integrated analysis of 16 years of lek count and demographic data (1996–2011), Davis found that the Gunnison Basin population may have been declining slightly through the period of study (Davis 2012, p. 137). That study indicated that the Gunnison Basin population may not be as stable as previously thought, although the time span of the study may not have been long enough to reveal a broader pattern

in a larger cyclical time series (Davis 2012, p. 38). A more recent manuscript by Davis *et al.* (*in press*) states that the Gunnison Basin population (1996–2012) is “slightly declining” (line 24), and, while the growth rate of this population has been variable, it is “near stable” (line 341). Consider also that the Gunnison Basin population may not be as large as lek count-based estimates suggest, which are based solely on counting males (Davis 2012, p. 136). Davis (2012, pp. 134, 136) found that, in comparison to demographic data, lek count data showed population growth rates that varied wildly and should be interpreted with caution. This is particularly true for the lek data collected prior to 1996, before the lek survey methodology was standardized (Davis 2012, pp. 136–139). Demographic stochastic simulations resulted in a mean extinction time of 58 years for the Gunnison Basin population, without removing any birds for translocation efforts (removal of birds decreased the estimated mean extinction time) (Davis 2012, pp. 111, 137). Davis (2012, p. 92) noted, however, that if the study had been conducted just a few years earlier or later, a different trend across time could have resulted, because it was based on a 6-year period of time when the population was experiencing a slight decline. This study and other population viability analyses are evaluated in detail in Factor E (Small Population Size and Structure) of this rule.

(19) *Comment:* One peer reviewer thought that it is difficult to assess what future conditions hold, be it vegetation responses to climate change or the effects of population growth and development resulting in fragmentation and associated effects on the species of conservation concern. The reviewer thought it is also difficult to evaluate how a species such as Gunnison sage-grouse might respond to projected changes, even 5 or 10 years into the future, let alone 50–100 years. Despite these uncertainties, the peer reviewer considered the short- and long-term viability for six of the seven populations of Gunnison sage-grouse to be tenuous, at best.

Our Response: We agree with the reviewer that it is difficult to predict what will happen in the future. However, the Act requires us to determine if a species is endangered (in danger of extinction throughout all or a significant portion of its range) or threatened (likely to become and endangered species within the foreseeable future throughout all or a significant portion of its range). Thus, we are required to make assumptions or

predictions into the future based on the best available information.

We agree with the reviewer that the viability of the six smaller (“satellite”) populations is at risk (see Small Population Size and Structure below under Factor E).

(20) *Comment:* A peer reviewer noted that, while the Gunnison basin population appears to have stabilized more recently within a population cycle, the number of current and future threats makes one question whether this population will remain viable into the future. The reviewer thought existing threats, or levels of threats, appear to already threaten the Gunnison basin population. This reviewer questioned whether the remaining Gunnison basin population will persist, if other smaller populations disappear, which seems likely in the near future without considerable management efforts, given projected future threats. The reviewer also questioned whether the localized nature of a single remaining population in the Gunnison Basin is enough to prevent extirpation of the species, considering potential stochastic events and the likely continued and increasing effects of habitat degradation and fragmentation.

Our Response: Based on the best available information, we found that survival of the Gunnison Basin population alone would be insufficient to ensure the species’ long-term persistence in the face of ongoing and future threats (see Factor E (Small Population Size and Structure)).

(21) *Comment:* One peer reviewer questioned whether the Service had access to the considerable amount of telemetry data collected by Colorado Parks and Wildlife (CPW) in recent years, primarily for birds located in the Gunnison Basin. This reviewer fully supported the use of existing information and models, in lieu of restricted access to other important data. The reviewer thought that the Service had done a realistic job of proceeding with existing information, whether it be from model applications to assist with broader habitat identification across the Gunnison Basin (see Aldridge *et al.* 2012), or biological information and responses (i.e., effects of fences on sage-grouse mortality) based on studies conducted on the closely related greater sage-grouse.

Our Response: We do not have access to the telemetry data collected by CPW. This data has not been published. We do have some telemetry information provided in overview maps and the information was discussed in meetings.

As pointed out in the Species Information section, Gunnison sage-

grouse and greater sage-grouse (a similar, closely related species) have similar life histories and habitat requirements (Young 1994, p. 44). In this final rule, we use scientific information specific to the Gunnison sage-grouse where available but also apply scientific management principles and scientific information for greater sage-grouse that are relevant to Gunnison sage-grouse conservation needs and strategies, a practice followed by the wildlife and land management agencies that have responsibility for management of both species and their habitat. We have considered the best available information in our assessment, including data and studies provided by CPW.

(22) *Comment:* A peer reviewer stated that the effects of powerlines are not all the same, depending on the type of the powerline. The peer reviewer requested that we clarify what types of powerlines we are referring to, and which were evaluated in each of the studies we address.

Our Response: As described in this rule, depending on the infrastructure design, size, location, and site-specific factors, powerlines can directly affect greater sage-grouse by posing a collision and electrocution hazard (Braun 1998, pp. 145–146; Connelly *et al.* 2000a, p. 974) and can have indirect effects by decreasing lek recruitment (Braun *et al.* 2002, p. 10, Walker *et al.* 2007a, p. 2,644), increasing predation (Connelly *et al.* 2004, p. 12–13, Howe *et al.* 2014), fragmenting habitat (Braun 1998, p. 146), and facilitating the invasion of exotic annual plants (Knick *et al.* 2003, p. 612; Connelly *et al.* 2004, p. 7–25). We also specify types of powerlines (transmission or distribution) and their effects on Gunnison sage-grouse as appropriate. This topic is discussed further in Factor A (Powerlines) of this rule.

(23) *Comment:* A peer reviewer commented that the proposed rule reads as though Wisdom *et al.* (2011) tested electromagnetic fields and found sage-grouse avoidance of them. The reviewer indicates that was not the case. Wisdom *et al.* (2011) found a correlation between sage-grouse extirpations and the presence of powerlines. The reviewer suggested this effect may be related to electromagnetic fields. The reviewer cautioned that we ensure here, and throughout, that this supposition is not presented as a finding.

Our Response: We revised our analysis to explicitly state that no studies have been conducted specifically on the effects of electromagnetic fields on sage-grouse.

This topic is discussed further in Factor A (Powerlines) of this rule.

(24) *Comment:* A peer reviewer noted that Gregg *et al.* (2004) did not actually test grazing impacts on vegetation causing reduction in nest success. Rather, they found that lower heights of grass cover (below 18 cm) resulted in increased nest predation. The peer reviewer suggested that careful choice of wording may be necessary to accurately reflect what was evaluated and found by a study, versus what was inferred and speculated from the results of the study. The reviewer stated that our proposed rule suggested that Gregg *et al.* (2004) evaluated livestock reduction in grass heights and showed a direct link to reduced nesting success for sage-grouse, which was not the case.

Our Response: In this final rule, we clarified that, Gregg *et al.* (1994, p. 165) speculated that the reduction of grass heights due to livestock grazing in sage-grouse nesting and brood-rearing areas may negatively affect nesting success when cover is reduced below the 18 cm (7 in.) needed for predator avoidance. This topic is discussed further under Factor A (Domestic Grazing and Wild Ungulate Herbivory).

(25) *Comment:* A peer reviewer commented that one could argue that livestock grazing on private lands might be better managed than public lands, because individual landowners may be more cognizant of grazing practices on those lands.

Our Response: In this final rule, we state that livestock grazing allotments containing both Federal and private lands can often be managed by Federal agencies to meet land health standards through coordination and cooperation with grazing permittees (BLM 2013c, p. 1–2). However, we have no information on the extent of grazing, management, or habitat conditions on private lands in Gunnison sage-grouse range, and therefore cannot make a definitive assessment of these areas. Furthermore, although Federal land and livestock grazing may be more regulated, we cannot make any generalizations about how habitat conditions in those areas might compare with private lands where livestock grazing occurs. This topic is discussed further under Factor A (Domestic Grazing and Wild Ungulate Herbivory).

(26) *Comment:* A peer reviewer commented that the table displaying Land Health Standard data on Federal lands in Gunnison sage-grouse range is confusing.

Our Response: In this final rule, we restructured the table and included additional columns and figures to better show how numbers were calculated (see

Table 8 in Factor A (Domestic Grazing and Wild Ungulate Herbivory)). The information in the table was also updated based on comments received from Federal agencies during the public comment periods for the proposed rules.

(27) *Comment:* One peer reviewer commented that mortality of handled Gunnison sage-grouse (ranging between zero and seven percent) could be significant. The peer reviewer would prefer to see a summary of the percentages by study and age class of birds handled and a sample size to indicate the potential overall population effect. The reviewer suggested that we link the summary to match with the cited number of research related mortalities being typically below three percent. The rule stated that “Mortality from scientific research is low (two percent) and is not a threat.” These all need appropriate citations, and the differences between these numbers should be reconciled.

Our Response: In this final rule, we describe why, overall, we expect that scientific research and related conservation efforts, such as translocation of Gunnison sage-grouse, have a net conservation benefit for the species. However, some unintended, but minor negative effects are known to occur in the process. This topic is addressed further in Factor B (Scientific Research and Related Conservation Efforts, see especially Table 11 summarizing various research efforts).

(28) *Comment:* A peer reviewer noted that in our table of conservation easements, we have cumulated the percentages based on the area in easements out of the total area (rangeland) considered, as opposed to taking the average of the percentages for each population.

Our Response: In this final rule we updated conservation easement information and acres, based on Lohr and Gray (2013, entire) (see Factor A (Other Regulatory Mechanisms: Conservation Easements)). Therein, we provide conservation easement acres by population and rangeland in occupied and unoccupied habitats. We feel this is a better representation of lands protected under conservation easement for Gunnison sage-grouse; averaging those values across populations would not accurately depict protected acres for the species.

(29) *Comment:* A peer reviewer expressed concern about what the reviewer perceived as the frequent use of speculation and commentaries as empirical evidence. The peer reviewer stated that we speculate about proposed threats (e.g., climate change) that we have no information on how they may,

or may not, affect Gunnison sage-grouse. The reviewer stated that we also frequently use vague language (i.e., “may have”, or “is likely to”) and then make definitive statements about Gunnison sage-grouse in support for the proposed listing decision.

Our Response: As noted above, throughout this rule, we have carefully identified and qualified instances of speculation or hypotheses from past scientific studies and publications. Our identification of current and future threats to Gunnison sage-grouse is based on the best available scientific information, and we acknowledge where there is uncertainty associated with data or predictions. For instance, in this final rule, we discuss that climate change predictions are based on models with assumptions, and there are uncertainties regarding the magnitude of associated climate change parameters such as the amount and timing of precipitation and seasonal temperature changes.

There is also uncertainty as to the magnitude of effects of predicted climate parameters on sagebrush plant community dynamics. These factors make it difficult to predict whether, or to what extent, climate change will affect Gunnison sage-grouse. We recognize that climate change has the potential to alter Gunnison sage-grouse habitat by facilitating an increase in the distribution of cheatgrass and concurrently increasing the potential for wildfires, and reducing herbaceous vegetation and insect production in drought years, all of which would have negative effects on Gunnison sage-grouse.

This topic is discussed further in Factor A (Climate Change) of this rule, and in Factor E (Drought and Extreme Weather).

(30) *Comment:* A peer reviewer stated that we frequently make generalizations about the decline of Gunnison sage-grouse abundance, such as, “Fragmentation of sagebrush habitats are a primary cause of the decline of Gunnison and greater sage-grouse populations.” However, the reviewer notes, lek counts in the Gunnison Basin population are currently at historic high levels and have increased substantially since the mid-1990s. The reviewer further notes that lek counts from 2005–2007 were the highest counts recorded in the Gunnison Basin population. Since 2007, lek counts in Gunnison Basin have averaged 703 males.

Our Response: Loss, degradation, and fragmentation of Gunnison sage-grouse habitat is discussed in Factor A of this rule. Population trends based on 1996–2014 lek count data show stable to

slightly declining levels from 1996 through 2004, then the high levels mentioned from 2005–2007; followed by lower but stable levels since (see Figure 2). The 2008–2014 population level is higher than levels prior to 2005, but around 20 percent lower than the 2006 peak (CPW 2014e, p.2). Population trends are discussed further in the section, Current Distribution and Population Estimates and Trends; and Factor E (Small Population Size and Structure) of this rule. Also see our response to State Comment 5 below.

(31) *Comment:* One peer reviewer stated that we had not presented a case that Gunnison sage-grouse are in danger of extirpation in the Gunnison Basin. It is the largest of all Gunnison sage-grouse populations, and three different population viability analyses have all concluded it is relatively stable.

Our Response: In our proposed rule to list Gunnison sage-grouse as endangered (78 FR 2486; January 11, 2013), we found that the species is in danger of extinction throughout its range, primarily due to habitat loss, degradation, and fragmentation associated with residential and human development across its range and, in particular, in the Gunnison Basin. In this final rule we determined that the species is not currently in danger of extinction throughout its range, but is likely to become so in the foreseeable future. As a result, this final rule lists the species as threatened rather than endangered. The basis for this decision is set out in the Determination section below. We also assess the three population viability analyses (PVA) for the Gunnison Basin and other populations in Factor E (Effective Population Size and Population Viability Analyses).

(32) *Comment:* A peer reviewer noted that we present the PVA from the Rangewide Conservation Plan. However, the reviewer noted that there are two other PVAs we need to address: Garton (2005) and Davis (2012).

Our Response: All three available PVAs for Gunnison sage-grouse are included in our assessment in this final rule (Factor E, Effective Population Size and Population Viability Analyses). Also see our response to peer review comment 31 above.

(33) *Comment:* A peer reviewer noted that in referring to the PVA in the Rangewide Conservation Plan, we state that small populations (<50 birds) are “at a serious risk of extinction within the next 50 years (assuming some degree of consistency of environmental influences in sage-grouse demography).” (p. 2531). However, environmental and demographic

stochasticity were incorporated into the model (i.e., the model does not assume “consistency of environmental influences”).

Our Response: The RCP and actual PVA (see GSRSC 2005, pp. 170 and G–27) state that the estimates assumed some degree of consistency of environmental factors over time. This topic is discussed further in Factor E (Small Population Size and Structure).

(34) *Comment:* A peer reviewer commented that we misapply the terms habitat loss, fragmentation, and loss.

Our Response: In the scientific literature and community there are widely varying interpretations of habitat loss, degradation, and fragmentation processes, and various methods are applied to measure these processes. Therefore, in this final rule, we collectively refer to these processes as habitat decline, as prefaced in the Factor A section below. However, we do not alter the terminology as applied by peer-reviewed or other studies. For instance, if a particular study evaluated and presented results on habitat fragmentation, we did not interpret the study or authors to mean habitat loss, instead. This topic is discussed further in our introduction to Factor A in this rule.

(35) *Comment:* A peer reviewer stated that we argue more than once that while individual human activities or features may not be a significant threat, it is the cumulative impact of all these features that threatens the Gunnison sage-grouse. However, the peer reviewer stated that this reasoning ignores the spatial (and temporal) variation in these potential threats. The reviewer is of the opinion that proposed threats are not uniformly distributed across space and therefore will not uniformly impact Gunnison sage-grouse populations. The reviewer stated that development will only impact a very small proportion of the habitat in Gunnison Basin and will be restricted to zoned areas. The reviewer stated that preliminary analyses indicate that Gunnison sage-grouse are flexible in their movement patterns and the habitats they use (CPW Demography and Movement project, in prep.). The reviewer stated that the cumulative negative impacts are not as likely as we seem to assume.

Our Response: The historic loss of habitat and current isolation of once connected populations, the declining status of several satellite populations, and presence of current and future threats to habitat all indicate that the cumulative loss or decline of habitat has negatively influenced populations and the species as a whole and is likely to continue to do so into the future. This

topic is discussed further in our introduction to Factor A in this rule. Threats to Gunnison sage-grouse habitat are also discussed under Factor A in this rule. We agree that future residential development in occupied habitat in the Gunnison Basin is likely to be more limited than we presented in the proposed rule (see Factor A (Residential Development)), but nonetheless find, for the reasons stated in Factor A, that this development remains a threat to the species and supports our determination that the species is likely to become in danger of extinction throughout its range in the foreseeable future.

(36) *Comment:* A peer reviewer noted that, related to livestock grazing, Williams and Hild (2011) showed that vegetation conditions in the Gunnison Basin met, or exceeded, the habitat structural guidelines in the Rangewide Conservation Plan. The peer reviewer also stated that we misrepresented the objective of this study in our proposed rule, stating that it was not a grazing study and therefore our criticism is not valid. With 392 transects distributed across Gunnison Basin for this study, the reviewer did not understand our statement that “sampling is limited” (p. 2503).

Our Response: Because livestock grazing effects were not an objective of the Williams and Hild (2011) study, the extent of past or ongoing livestock grazing in these areas was not described, nor did the study compare un-grazed to grazed areas. The Williams and Hild study found that habitat conditions are likely favorable to Gunnison sage-grouse in a portion of the Gunnison Basin (Williams and Hild 2011, entire), although the relationship to livestock grazing effects in those areas is unknown. In this final rule, we clarify that there is limited ability to make inferences from this study for other areas in the Gunnison Basin, due to limitations of the study. Transect locations for the study were prioritized and selected in areas used by radio-collared Gunnison sage-grouse, potentially biasing study results. Therefore, the relationship between livestock grazing and habitat conditions is unclear in this study, and there is limited ability to infer from its conditions in other portions of the Gunnison Basin not prioritized for sampling. This topic is discussed further in Factor A (Domestic Grazing and Wildlife Herbivory) of this rule.

(37) *Comment:* A peer reviewer stated that our discussion of “presettlement” distribution of Gunnison sage-grouse was highly speculative. The peer reviewer also stated that we assume that

Gunnison sage-grouse distribution closely matches the distribution of sagebrush, and that this assumption is used by some authors (e.g., Schroeder, *et al.* 2004, Wisdom *et al.* 2011), but is not necessarily true. The peer reviewer stated that the map by Schroeder *et al.* (2004) is not meant to be a definitive description that accurately defines historical distribution, but a generalization based on available information (i.e., the model includes areas that are not habitat and omits other areas that are habitat). The peer reviewer noted that we also state Gunnison sage-grouse distribution depends on large areas of contiguous sagebrush. The peer reviewer also noted that this assumption does not seem to be well supported since Gunnison sage-grouse have existed in small, isolated populations for decades (Rogers 1964).

Our Response: Related to potential historical range of Gunnison sage-grouse, and the estimated loss of historical range, see our response to Peer Reviewer Comment 17 above. Related to our position that the species depends on sagebrush on a landscape scale for its survival, the best available science supports this, and it is an empirical principle widely accepted by sage-grouse biologists and the scientific community. As discussed in this rule, Gunnison sage-grouse depend on sagebrush for their survival and persistence, and the historical and current distribution of the Gunnison sage-grouse closely matches that of sagebrush (Patterson 1952, p. 9; Braun 1987, p. 1; Schroeder *et al.* 2004, p. 364, and references therein). Habitat fragmentation resulting from human development patterns is especially detrimental to Gunnison sage-grouse because of their dependence on large expanses of sagebrush (Patterson 1952, p. 48; Connelly *et al.* 2004, p. 4–1; Connelly *et al.* 2011a, p. 72) and more contiguous sagebrush habitats (Rogers 1964, p. 19; Wisdom *et al.* 2011, pp. 452–453). The overall declining status of several of the satellite populations (despite translocation/augmentation efforts) does not support the idea that the species is capable of persisting at low levels or in isolated conditions. Refer to Factor E in this rule for more discussion on this topic.

(38) *Comment:* A peer reviewer noted that we describe the genetic work by Oyler-McCance *et al.* (1999, 2005) that illustrates the lower genetic diversity of Gunnison sage-grouse compared to greater sage-grouse, and the lower genetic diversity of the small Gunnison sage-grouse populations compared to the Gunnison Basin population. The peer reviewer asserted that lower

genetic diversity may have important consequences, but it is unlikely to have an effect anytime in the near future and that it must be demonstrated that low genetic diversity has negative consequences on individuals and populations.

The peer reviewer stated that it is inappropriate to suggest that there is a specific population size that is necessary for long-term population survival from a genetic perspective (i.e., that there should be 500–5,000 Gunnison sage-grouse in a population for it to be viable). The peer reviewer commented that the genetic viability of a population depends on the effective population size, the type of genetic variation in the population, and type of selection acting on the population. The peer reviewer noted it is possible that animals can rapidly adapt to inbreeding by the selective elimination of the genes responsible for inbreeding depression and although highly speculative, this may be operating in the small, isolated Gunnison sage-grouse populations. So, the peer reviewer suggested that to argue that inbreeding depression due to low genetic diversity is a basis for listing the species as endangered is not warranted without empirical data focused on this specific question.

Our Response: In this final rule, we have determined that listing the species as threatened, not endangered, is the appropriate determination. We describe the potential negative consequences of genetic deterioration associated with small population size and geographic isolation under Factor E (Genetic Risks)). We also discuss this topic and other relevant information further under Factor E (Small Population Size and Structure) in this rule.

Comments From States

(1) *Comment:* The Arizona Game and Fish Department noted that there are no records of Gunnison sage-grouse ever existing in Arizona, and estimates of historical range in northeastern Arizona are based on pre-settlement occurrence of sagebrush (*Artemisia* spp.), which has largely been extirpated. Consequently, no viable habitat remains for the Gunnison sage-grouse in Arizona. Any future restoration efforts should focus on the remaining core distributions in Colorado and Utah.

Our Response: Identification of potential pre-settlement Gunnison sage-grouse habitat in Arizona was based on both historical sagebrush distribution and a 1937 observation of sage-grouse in the northeastern corner of that state (Schroeder *et al.* 2004, pp. 368–369, and references therein). Restoration or

reintroduction of Gunnison sage-grouse in Arizona is not being proposed.

(2) *Comment:* The Colorado Office of the Governor noted that letters had been sent from Colorado Parks and Wildlife (CPW) and Colorado Department of Agriculture (CDA), and recommended that the Gunnison sage-grouse should be determined not warranted for listing.

Our Response: The Colorado Office of the Governor referenced CPW and CDA letters in support of a not warranted determination for Gunnison sage-grouse, but provided no other information or data to support their position. We acknowledge receipt of letters from CPW and CDA. Their comments will be addressed in further detail in this section. Our listing determination for the Gunnison sage-grouse is explained in this final rule.

(3) *Comment:* CPW recommended the following hierarchy in the evaluation of biology and threats.

a. Use of only Gunnison sage-grouse data when it exists.

b. If Gunnison sage-grouse data does not exist, use greater sage-grouse data closest to Gunnison sage-grouse range in Colorado or Utah.

c. If greater sage-grouse data from adjacent populations does not exist, then proceed with the appropriate cautions and limited inference to available information within the range of greater sage-grouse.

Another State commenter suggested that references to greater sage-grouse be omitted altogether.

Our Response: We generally used the above approach recommended by CPW, although we did not distinguish between greater sage-grouse data from populations closest to Gunnison sage-grouse's range. We did not explicitly state that in the proposed rule—we stated that the “best available scientific and commercial data” were used. We also noted that we used information specific to the Gunnison sage-grouse where available but still applied scientific management principles for greater sage-grouse that we determined were relevant to Gunnison sage-grouse management needs and strategies. We followed the same approach in this final rule.

(4) *Comment:* CPW and CDA stated that lek counts in the San Miguel, Crawford, and Cerro Summit-Cimarron-Sims Mesa populations have increased in recent years, in contrast to the statement in the listing proposal that population trends over the last 12 years indicate that six of the populations are in decline.

Our Response: We used the same CPW lek survey data that these comments refer to in our assessment of

population trends from 2001 through 2012. Our conclusion was that the six smaller populations had stable to declining numbers from the first half of the survey period (2001–2006) to the second half of the survey period (2007–2012). We agree that the three previously mentioned populations have increased in the past 2–3 years, along with Piñon Mesa, as indicated in Figure 3 in the proposed listing rule (78 FR 2492, January 11, 2013). However, these populations are not at higher levels than in 2001–2006. It should also be noted that these declining trends in the smaller populations have occurred despite translocation efforts (see Scientific Research and Related Conservation Efforts). Without these translocations, bird numbers likely would be lower for these populations. Furthermore, in this final listing rule, we analyzed population estimates over a longer period, based on lek count data from 1996–2014 (lek count protocols were standardized in 1996 by CPW). Similar to our previous analysis, the long-term data indicate that, despite slight increases in the past several years, the satellite populations have declined overall, with the possible exception of the Cerro Summit-Cimarron-Sims Mesa population, which appears to be stable or increasing, and Piñon Mesa, with its highest count since standardized lek counts began in 1996. This topic is discussed further in the Current Distribution and Population Estimates and Trends section of this rule.

(5) *Comment:* CPW stated that the listing proposal does not acknowledge that male counts from recent lek surveys are at historic high levels in the Gunnison Basin, and notes that prior to 1996, surveys lacked a standard protocol and may have had an inconsistent counting effort.

Our Response: The proposed listing rule stated that the Gunnison Basin population, while variable, has been relatively stable over the past 13 years. As the commenter noted, survey data was not standardized until 1996, making comparisons between current populations and populations prior to 1996 difficult. If data from 1953–2014 are considered, the highest lek count occurred in 2006, as shown in Figure 2 in this final listing rule. However, apparent increases in population size based on lek count data may be the result of increased survey effort in recent years. Davis (2012, p. 139) noted a sharp increase in lek areas counted in 1996, when the protocol for lek counts was standardized in the Gunnison Basin. Therefore, the variation in the lek counts may reflect a change in survey effort and not a change in population

size. (Also see Davis 2012, p. 143, Figure 5.1, which displays the increase in lek areas counted beginning around 1996.) Additionally, Davis (2012, pp. 137–138) and Davis *et al.* (in press) indicate that the Gunnison Basin population, although relatively stable, has declined slightly in recent years, following earlier increases. These topics are discussed further in the following sections of this rule: Current Distribution and Population Estimates and Trends; and Small Population Size and Structure.

(6) *Comment:* CPW stated that both the PVA described in the RCP (GSRSC 2005) and the Garton (2005) PVA should be referenced and considered in the final rule. Another commenter stated that the Garton (2005) PVA overestimated the species' long-term viability.

Our Response: We describe and evaluate the RCP and Garton PVAs, as well as that of Davis (2012), in this final rule (see Factor E).

(7) *Comment:* CPW noted that the proposed rule to list the species cites the RCP PVA regarding the risk of extinction for small populations less than 50 birds, but does not explain why several small populations have persisted at low numbers for decades.

Our Response: The Cerro Summit-Cimarron-Sims Mesa population has had an estimated population of less than 50 birds for 14 of the past 16 years. The Poncha Pass population has remained at less than 50 birds from 1999–2014, and lek surveys found no birds in 2013. Poncha Pass is nearing extirpation, and the Cerro Summit-Cimarron-Sims Mesa population may also be at risk—with five small leks known in the Cerro Summit-Cimarron subpopulations and only one lek, which is inactive, in the Sims Mesa subpopulation. The four remaining satellite populations generally have population estimates of more than 50 birds, but less than 500 birds. These four populations would be expected to persist for a longer period of time than the two smallest populations, but are not secure from the threats described in this final rule below. Additionally, as noted in our response to State comment 4, several smaller populations have been augmented with birds from the Gunnison Basin population. Without these translocations, the numbers would have likely been lower for these populations.

As presented in this final rule, based on 1996–2014 lek count data, a number of the satellite populations are declining. Several population viability analyses indicate a high extinction risk for all of the satellite populations (see

response to Peer Review comment 31 above). Our assessment of the current and future threats to these populations indicates that these trends are likely to continue if the threats are not addressed. The best available information indicates a reduction of Gunnison sage-grouse distribution since Euro-American settlement in the 1800s, with evidence of the loss of peripheral populations and a northward and eastward trend of extirpation (Schroeder *et al.* 2004, pp. 369, 371, and references therein). These downward trends and historical losses further indicate the high vulnerability of the satellite populations to extirpation. These topics are discussed further in the following sections of this rule: Current Distribution and Population Estimates and Trends; and Small Population Size and Structure.

(8) *Comment:* CPW stated that an updated refinement of historical habitat estimated by Schroeder *et al.* (2004) is critical to an accurate assessment of changes in distribution, since they believe this study likely overestimates the historical range of Gunnison sage-grouse.

Our Response: Historical range estimates from Schroeder *et al.* (2004, pp. 370–371) were modified by the RCP (GSRSC 2005, pp. 34–35) based on more complete information on historical and current habitat and distribution of the species. We are not aware of any further refinements to estimates of historical range. Information from Braun *et al.* (2014) matches information presented by Schroeder *et al.* (2004) and does not add or detract from changes & additions to historical range presented in the RCP (GSRSC 2005, p. 33–35). Consequently, the RCP (GSRSC 2005, entire) provides the best available information concerning the likely historical range of the species. That information indicates that the Gunnison sage-grouse currently occupies about 8.5 percent of its potential historical range. Further analysis in this final rule indicates that approximately 88 to 93 percent of the historical range of Gunnison sage-grouse has been lost since Euro-American settlement. While there is some uncertainty in all of these figures, the best available information indicates there has been a considerable loss of habitat and a reduction in the range and distribution of Gunnison sage-grouse. Our listing decision is based on the current status of Gunnison sage-grouse and the current and future threats to the species and its habitat. However, the loss of historical range and decline in Gunnison sage-grouse abundance, and their causes, have contributed to the species' current status. This topic is

discussed further in our introduction to Factor A of this rule.

(9) *Comment:* CPW noted a discrepancy between current occupied range estimates of 4,720 square kilometers (km²) in our 2006 decision and 3,795 km² in the 2013 proposed rule to list the species, which results in a loss of 925 km² of currently occupied range.

Our Response: Both estimates cite GSRSC (2005). However, the 2006 final listing determination used an initial estimate based on Schroeder *et al.* (2004). The 2013 estimate is a refined estimate based on the GSRSC and CPW data.

(10) *Comment:* CPW recommended that we rely primarily on Rogers (1964) to determine historic distribution of the Gunnison sage-grouse, and noted three citations of Rogers (1964) in the proposed rule to list the species that should more precisely quote the author. Another commenter stated that historic distribution estimates by Rogers (1964) are inferior to Schroeder *et al.* (2004).

Our Response: Rogers (1964) was written prior to the identification of Gunnison sage-grouse as a separate species, and summarized overall sage-grouse distribution in Colorado (including greater sage-grouse) based on both qualitative and quantitative data and reports from various sources. This study is informative in that it provides a broad picture of the species' status, distribution, and trends in Colorado over time, among other data and information. As such, Rogers (1964) is considered and cited in this final rule. However, the study did not conduct a spatial analysis of the species' potential historic range or the loss of habitat over time, as was done by Schroeder *et al.* (2004, entire). Consequently, we concluded it is appropriate to consider and evaluate this more recent, quantitative study specific to Gunnison sage-grouse (Schroeder *et al.* 2004, entire), as modified by GSRSC (2005, pp. 34–35). We verified information derived from Rogers (1964, entire) and provided more precise citations in this final rule.

(11) *Comment:* CPW noted that the Wisdom *et al.* (2011) standard for identifying a population stronghold could likely never have been met in the range of Gunnison sage-grouse, even historically, due to the high elevation basins and naturally fragmented nature of sagebrush communities in Colorado.

Our Response: We agree that the distribution of Gunnison sage-grouse habitat is naturally disconnected due to the presence of unsuitable habitats such as forests, deserts, and canyons across the landscape (Rogers 1964, p. 19). This

is evident in Figure 18.1 of Wisdom *et al.* (2011). The authors combined the occupied and extirpated ranges of both greater sage-grouse and Gunnison sage-grouse for their “stronghold” analysis. Given the much larger range of greater sage-grouse, with typically larger patches of contiguous sagebrush habitat, conclusions from the analysis are likely more applicable to greater sage-grouse. Therefore, in this final rule, we discuss Wisdom *et al.* (2011, entire) and its conclusions, but do not further use the term “stronghold” because the term, based on the scale of analysis, was more applicable to greater sage-grouse. This topic and study is discussed further in our introduction to Factor A in this rule, and throughout the rule where applicable.

(12) *Comment:* CPW and others stated that the proposed rule used the rate of residential development associated with the entirety of Gunnison County, including the Crested Butte area, and is not representative of development rates in Gunnison sage-grouse habitats. Other commenters also noted that human population growth rates have slowed in recent years leading to slower rates of development. Lastly, commenters recommended that a single source of human population growth (such as Colorado Department of Local Affairs) be used. Other commenters suggested that the human population is increasing.

Our Response: Our estimates regarding human population growth in the Gunnison Basin in the proposed rule to list the species were largely based on Colorado Water Conservation Board studies that included all of Gunnison County, including areas not occupied by Gunnison sage-grouse, and were derived before the economic downturn (78 FR 2495, January 11, 2013). We recognize that a large portion of projected human population growth for Gunnison County is expected to occur outside of Gunnison sage-grouse occupied habitat, such as in the Crested Butte area and within the City of Gunnison. For this final rule, we apply current data from the Colorado Department of Local Affairs to our analysis of human population growth and project residential development in Gunnison and other counties across the Gunnison sage-grouse range. For each sage-grouse population area, we consider total private lands available for development as a proportion of total occupied habitat, accounting for perpetual conservation easements that would preclude or limit such development. This analysis indicates that human populations are expected to continue increasing across the species' range, but that residential development is a threat of a low

magnitude in the Gunnison Basin now, but is expected to increase in the future. Residential development is a substantial current and future threat to the San Miguel, Cerro Summit-Cimarron-Sims Mesa, and Poncha Pass populations. This topic is discussed further in the Factor A, Residential Development section of this final rule.

(13) *Comment:* CPW disagreed with the conclusion in the proposed rule that roads are a “major threat” to the continued existence of Gunnison sage-grouse and stated that the proposed rule used speculation from Oyler-McCance *et al.* (2001) that overstated the threat from roads and powerlines.

Our Response: In its discussion of roads, the proposed rule stated that “Roads within Gunnison sage-grouse habitats have been shown to impede movement of local populations between the resultant patches, with road avoidance presumably being a behavioral means to limit exposure to predation (Oyler-McCance *et al.* 2001, p. 330).” The proposed rule then gave several examples, with additional citations, of impacts due to roads including: increased disturbance, corridors for predators, invasion of exotic plants, and resultant avoidance by sage-grouse. The proposed rule does not cite Oyler-McCance *et al.* (2001) in its discussion of powerlines. In this final rule, we describe impacts from roads and conclude that increased road use and construction will continue at least through 2050, and is a current and future threat to the species (see Factor A).

(14) *Comment:* CPW and one other commenter questioned the use of Aldridge *et al.* (2012) regarding nest site selection and urged caution in applying results across the entire Gunnison Basin, particularly the firm conclusion that habitat within 2.5 km (1.6 miles (mi)) of roads and residential developments is unsuitable for the species. CPW also presented data from a GIS analysis that it conducted.

Our Response: In the proposed rule to list the species, we did not use 2.5 km (1.6 mi) in any recommendations regarding thresholds for nest selection; although we did cite papers by Aldridge *et al.* (2008 and 2011). We agree that some recommendations from the modeling effort completed by Aldridge *et al.* (2012) are based on confusing probabilities regarding selection of nest sites, in particular, the relationship between relative probability of nest occurrence and distance to residential development. Figure 5f in Aldridge *et al.* (2012) indicates that the probability of nest occurrence is greatest when the nest is approximately 2.5 km (1.6 mi)

from development. This probability decreases at both shorter and greater distances from development; although one would expect the probability of nest occurrence to continue to increase with increasing distance from residential development. The variable of residential density was more intuitive, with the likelihood of nesting decreasing with increasing residential density. Other variables such as the proportion of sagebrush cover and road density had more influence on nest site selection and were also more intuitive. For example, the probability of nesting decreased abruptly with decreasing sagebrush cover and with increasing road density. In this final rule, we updated our older citation (Aldridge *et al.* 2011); we added a citation regarding CPW's preliminary GIS analysis of the frequency of successful and unsuccessful nests at increasing distances from roads (CPW 2013b); and we do not apply spatial zones of influence to evaluate impacts of residential development as is discussed in Factor A.

(15) *Comment:* CPW urged caution in citing Braun (1995), Bui *et al.* (2010), and Aldridge and Boyce (2007) regarding impacts from roads due to the speculative nature of authors' conclusions.

Our Response: We did not cite Braun (1995) or Bui *et al.* (2010) in discussions of Factor A, including roads, in the proposed rule or in this final rule. Aldridge and Boyce (2007) were cited in discussions of residential development, roads, and nonrenewable energy development. Related to this comment, when citing Aldridge and Boyce (2007), we indicate that this and other studies cited were on greater sage-grouse. However, as discussed in our response to State comment 3 above, due to similar life histories and habitat requirements between these two species, we consider information specific to greater sage-grouse as relevant to Gunnison sage-grouse, a practice followed by the wildlife and land management agencies that have responsibility for both species and their habitats.

(16) *Comment:* CPW and some other commenters questioned the conclusions regarding powerlines and impacts on Gunnison sage-grouse from raptor perches and habitat fragmentation.

Our Response: The discussion of powerlines in the proposed rule provided numerous citations regarding aspects such as raptor perches, habitat fragmentation, and the spread of invasive plants. Citations note when the studies were specific to greater sage-grouse. In some instances, the only

information is specific to greater sage-grouse, in which case, we regard it as the best available information (see our response to comment 3). We revise our language in this final rule to clarify usage of the terms habitat loss, degradation, and fragmentation (see our response to peer review comment 34).

(17) *Comment:* CPW disagreed with the conclusion in the proposed rule to list the species that grazing in combination with climate change and other factors is a threat to Gunnison sage-grouse and questioned citations from Gregg *et al.* (1994) and Connelly *et al.* (2000a) regarding optimal grass height. CPW also noted a conflict between critical habitat requirements of grass height of 10–15 cm and aforementioned citations that recommend grass height of 18 cm or more.

Our Response: In the proposed rule, we concluded that habitat degradation resulting from improper grazing (described in Factor A in the proposed rule), particularly with the interacting factors of invasive weed expansion and climate change, is a threat to Gunnison sage-grouse persistence. The proposed rule also noted that livestock grazing may have positive effects on sage-grouse (78 FR 2501, January 11, 2013). Properly managed livestock grazing is not likely to adversely impact Gunnison sage-grouse. Gregg *et al.* (1994) described a study conducted on greater sage-grouse in Oregon and speculated about potential impacts from livestock grazing. In this final rule, we clarify that “Gregg *et al.* (1994, p. 165) speculated that the reduction of grass heights due to livestock grazing in sage-grouse nesting and brood-rearing areas may negatively affect nesting success when cover is reduced below the 18 cm (7 in.) needed for predator avoidance.” Connelly *et al.* (2000a) was not cited in the grazing discussion in the proposed rule to list, but was cited in the proposed rule to designate critical habitat. Seasonally specific primary constituent elements described in the proposed and final rules to designate critical habitat include a guideline of 10–15 cm (4–6 in) grass height based on recommendations in the RCP (GSRSC 2005, p. H–6). In this final rule, we clarify that recommendations vary for Gunnison sage-grouse habitat requirements and vegetation characteristics. We note that Connelly *et al.* (2000a, p. 977) recommended greater than 18 cm (7 in) grass height for breeding habitats, and that the GSRSC (2005, p. H–6) (the basis of the critical habitat proposal for breeding habitats) recommended a grass height of 10–15 cm (3.9–5.9 in).

(18) *Comment:* CPW noted that the proposed rule to list the species suggests that livestock trample seedlings, and that this constitutes competition. CPW stated that they were unaware of any research that has demonstrated competition between grazers and sage-grouse. One other commenter stated that Connelly *et al.* (2004) does not describe trampling of sagebrush seedlings.

Our Response: Connelly *et al.* (2004, p. 7–31) states that livestock trample sagebrush, and provides citations; we note in this final rule that Connelly *et al.* (2004) was citing other references. In the proposed rule, we surmised that livestock may compete directly with sage-grouse for rangeland resources by consuming forbs and shrubs. However, as the commenter mentions, this question has not been researched, and our conclusion is therefore inferred rather than proven. In this final rule, we deleted specific references to competition between livestock and sage-grouse. However, we present evidence that indicates consumption of important vegetation by livestock negatively affects sage-grouse that use those resources, such as the reduction of forbs and grasses that may affect chick survival (see Factor A).

(19) *Comment:* CPW disagreed with the conclusion and inference that browsing by big game on mountain shrubs resulted in a negative effect on Gunnison sage-grouse habitat.

Our Response: This final rule includes a discussion of available information regarding impacts of wild ungulate herbivory in Gunnison sage-grouse habitat, including one study (Japuntich *et al.* 2010, pp. 7–9) that documented reduced size and vigor of mountain shrubs (not sagebrush), which could reduce accumulations of drifting snow, which might in turn reduce the availability of soil moisture for forbs and grasses. If all of these impacts occurred, nesting and brood-rearing habitat could be affected. In this final rule, we conclude that the effects of livestock grazing are likely being exacerbated by intense browsing of woody species by wild ungulates in portions of the Gunnison Basin and the Crawford area (see Factor A, Domestic Grazing and Wild Ungulate Herbivory).

(20) *Comment:* CPW asserted that the proposed rule relied on speculation by Braun (1998), Oyler-McCance *et al.* (2001), and Stevens (2011) regarding the effects of fences on Gunnison sage-grouse. CPW also provided additional information regarding research it conducted that tracked more than 1,000 radio-marked greater sage-grouse and documented two mortalities from collisions with fences. A follow-up

letter from CPW also noted four mortalities resulting from collisions with utility lines. One other commenter stated that fences fragment habitat.

Our Response: We cite multiple references in Factor A of this final rule that implicate the potential impacts of fences on Gunnison sage-grouse. Based on the information provided by CPW specific to Gunnison sage-grouse, mortalities from collisions with fences and utility lines are likely minimal, and we have included the information that CPW provided on strike-related mortalities. We conclude that fences may be a contributing factor in the species' decline; however, we have no specific data on the scope of this threat (see Factor A, Fences).

(21) *Comment:* CPW stated that the Service does not know what the final measures in the Bureau of Land Management's (BLM) Resource Management Plans (RMPs) will be concerning travel management, and that the Service overstates the threat of roads. Consequently, CPW states that our conclusion that the revised RMPs are inadequate to address that threat of roads outlined by Aldridge *et al.* (2012) was premature.

Our Response: We use the best available information to reach our conclusion in this final rule that roads are a threat to Gunnison sage-grouse (see Factor A, Roads). The BLM is in the process of amending its RMPs and we do not know how road issues will be addressed in the amended plans. Under the Act, we are required to assess the adequacy of RMPs with respect to relevant threats based on the RMPs as they exist at the time of this listing decision. Thus, while we conclude that road impacts can be reduced by regulatory mechanisms, the existing mechanisms are currently not fully addressing the threat. We recognize the complexity of threats to Gunnison sage-grouse and the limited capacity of regulatory mechanisms to address some of those threats. For example, impacts caused by disease, small population size, or climate change are not easily addressed by regulatory mechanisms. However, other impacts such as current and future roads, hunting, grazing, or development can often be addressed with adequate regulatory mechanisms.

(22) *Comment:* CPW stated that the discussion regarding vegetative structure guidelines incorporated into management plans and permit renewals is confusing.

Our Response: We clarify discussions regarding vegetative structure guidelines in this final rule (see Factor A, Domestic Grazing and Wild Ungulate Herbivory).

(23) *Comment:* CPW asserted that the Service did not acknowledge that Gunnison sage-grouse habitat is highly variable rather than continuous across the landscape.

Our Response: We acknowledge that Gunnison sage-grouse habitat is highly variable across the landscape, and we do not consider it to be continuous currently or historically. We included a discussion of the naturally disconnected nature of Gunnison sage-grouse habitat in this final rule (see Factor A).

(24) *Comment:* CPW and several other commenters suggested that the Service evaluate structural habitat guidelines recommended in the RCP with data reported by the BLM and Williams and Hild (2011).

Our Response: The final rule includes conclusions from vegetation monitoring efforts in the Gunnison Basin conducted by Williams and Hild in 2010 and 2011. This topic is discussed further in the Domestic Grazing and Wildlife Herbivory section in Factor A of this final rule.

(25) *Comment:* CPW presented new information regarding small populations and inbreeding depression.

Our Response: We include and consider this information in this final rule. We note that this new information indicates that the San Miguel Basin Gunnison sage-grouse effective population size is below the level at which inbreeding depression has been observed to occur (Stiver *et al.* 2008, p. 479), and that the authors postulated that the observed lowered hatching success rate of Gunnison sage-grouse in their study may be caused by inbreeding depression. Finally, we conclude that because the remaining Gunnison sage-grouse satellite populations are smaller than the San Miguel population, they are also likely small enough to induce inbreeding depression, and could be losing adaptive potential (see Factor E).

(26) *Comment:* CPW and two other commenters disagreed with conclusions in the proposed rule regarding minimum and effective population sizes, and the amount of habitat needed to support a viable population.

Our Response: We do not recommend or adopt a specific number for a minimum viable population size, other than concluding that, based on the best available information, several of the satellite populations are trending toward extirpation. With their low absolute and effective population sizes, the satellite populations are particularly at risk from stochastic environmental and genetic factors (see Factor E, Small Population Size). We address the amount of habitat needed to provide for the conservation of the species in our

final critical habitat determination for Gunnison sage-grouse published elsewhere in today's **Federal Register**. In this final rule we also reviewed the three available PVAs for Gunnison sage-grouse, which applied various techniques to estimate the viability of populations. Collectively, these studies and population trends from 1996–2014 indicate that one or more of the satellite populations may become extinct within the foreseeable future (see Factor E).

(27) *Comment:* CPW noted that drought can impact nest success, but not adult survival, suggesting that Gunnison sage-grouse can accommodate drought cycles.

Our Response: We agree that adults are less vulnerable to impacts from drought. Adult survival rates of Gunnison sage-grouse in the Gunnison Basin were not influenced by drought conditions in 2005 (CPW 2013c, p. 9; Davis 2012, p. 55). However, if a drought persists through multiple nesting seasons, recruitment will likely be impacted. This topic is discussed further under the following sections in this final rule: Drought and Extreme Weather, Small Population Size and Structure, and Climate Change.

(28) *Comment:* CPW and CDA noted that at least 79 percent of occupied habitat in the Gunnison Basin is protected from development, including government-owned lands, private lands with Conservation Easements, Candidate Conservation Agreements with Assurances, and/or similar legal agreements that preclude development to the detriment of grouse. Therefore, these agencies asserted, the Gunnison Basin is adequately protected for the conservation of the species.

Our Response: While the conservation and habitat protection efforts undertaken in the Gunnison Basin are commendable, and help reduce the impact of development on the species and its habitat, these measures vary in their capacity to avoid or minimize impacts such as the effects of habitat decline. Consequently, we were not able to conclude that Gunnison sage-grouse habitat is adequately protected, despite the benefits of the various conservation efforts. Conservation efforts and regulatory mechanisms are evaluated in this final rule.

(29) *Comment:* CPW, the Utah Office of the Governor, and several other commenters requested clarification regarding the interpretation and use of the Significant Portion of Range (SPR) policy.

Our Response: On July 1, 2014, we published a final policy interpreting the phrase "Significant Portion of its Range" (SPR) (79 FR 37578). In

accordance with that policy, the first step in our analysis of the status of a species is to determine its status throughout all of its range. If we determine that the species is in danger of extinction (endangered), or likely to become so in the foreseeable future (threatened), throughout all of its range, we list the species as an endangered or threatened species and no SPR analysis is required. In this case, we have determined in this rule that the Gunnison sage-grouse is threatened throughout all of its range, therefore we did not perform an SPR analysis.

(30) *Comment:* CPW, CDA, and the Utah Office of the Governor asserted that speculation in the literature was sometimes portrayed as science.

Our Response: Under the standards of the Endangered Species Act (Act), we are required to base our determinations of species status on the best available information. Our first choice is information from recent, peer-reviewed publications that is specific to Gunnison sage-grouse. However, sometimes the only available information may be based on studies of greater sage-grouse. Additionally scientific data are sometimes limited, studies are conflicting, or results are uncertain or seemingly inconclusive. Scientific information includes both empirical evidence, and expert knowledge or opinion. In this final rule, we carefully identified and qualified instances of speculation or hypotheses from past scientific studies and publications.

(31) *Comment:* CDA noted that agriculture in Colorado generates \$40 billion annually, with cattle anticipated to contribute approximately \$3.5 billion to agricultural production in 2013. CDA stated that cattle production would likely be seriously harmed, should the species be listed.

Our Response: The Act does not allow us to consider economic impacts in decisions on whether to list a species, which must be made solely on the basis of scientific and commercial information related to the 5 factors in Section 4(a)(1) of the Act. Economic impacts may be considered in the designation of critical habitat, and are discussed in our final critical habitat rule. Our final critical habitat determination for Gunnison sage-grouse is published elsewhere in today's **Federal Register**.

(32) *Comment:* The Utah Office of the Governor noted that the timing on the proposed rule is based solely on the need to meet a court approved settlement date, which did not include participation by the States of Utah or Colorado. Some commenters suggested

that more time is needed for public review.

Our Response: The publication deadline for the proposed rule was set by a court approved settlement agreement; however, the timeline for this final rule was initially set according to the statutory requirements of the Act and has been extended several times by court order. The Act requires that a final listing rule be published within one year of the publication of the proposed rule. As allowed by the Act, however, we extended this statutory deadline by 6 months due to substantial disagreement regarding the sufficiency or accuracy of available data relevant to our determination. Invoking this statutory extension postponed the final listing decision from September 30, 2013 to March 31, 2014. We also re-opened the public comment period several times. In addition, due to a government shutdown in October 2013 that caused us to postpone and reschedule public meetings, the court granted our request for an additional 6 weeks beyond the statutory timeline. Finally, the court granted our subsequent request for an additional 6 month extension to allow us to consider the possibility that the species should be listed as threatened rather than endangered, and to consider whether a 4(d) rule would be appropriate. This action extended the deadline for this final rule until November 12, 2014.

(33) *Comment:* The Utah Office of the Governor stated that the Service's 2010 warranted-but-precluded finding and 2013 proposed rule to list Gunnison sage-grouse under the Act differs from the 2006 finding that concluded the species was not warranted for listing, without presentation of any new information that would indicate a different conclusion is justified. Several commenters asserted that the decision to list was due to litigation.

Our Response: Litigation resulted in a settlement agreement that established a schedule for us to submit a proposed rule to list the species or a finding that listing was not warranted by a date certain. The litigation had nothing to do with the ultimate decision to list, or not. The 2006 not-warranted, the 2010 warranted-but-precluded finding, and the 2013 proposed rule to list the species were based upon the best scientific and commercial information available at that time. The 2006 finding concluded that the rangewide population was stable to slightly increasing (71 FR 19961–19962, April 18, 2006). The 2013 proposed listing rule included information from new studies, 8 additional years of recent survey information (2006–2013), as well

as population data from 1996–2000, and concluded that the Gunnison Basin population was relatively stable and the six smaller populations were in decline (78 FR 2488, January 11, 2013). This final rule incorporates additional information received since publication of the proposed rule. The basis for our determination in this final rule is provided in the Determination section of this rule.

(34) *Comment:* The Utah Office of the Governor and one other commenter stated that a Federal listing of the species at this time provides no additional protection or resources from those already in place and that voluntary cooperation of private landowners will be much more effective in improving habitat than protections than what may be afforded by listing and critical habitat designation. The Utah Office of the Governor also noted that a final regulation providing for a listing will cause the State to reassess its conservation efforts for this species, and may result in reallocation of these efforts to other species.

Our Response: By statute, the Service must list a species if it meets the definition of threatened or endangered. There is no provision in the Act that would allow us to decline to list a species that meets the definition of threatened or endangered if no additional protection would occur. Moreover, the Act would confer additional protection to the Gunnison sage-grouse that could help arrest and reverse its decline. Once listing of the Gunnison sage-grouse becomes effective, actions authorized, funded or carried out by Federal agencies that may affect the species will require section 7 consultations under the Act in all areas occupied by the species. Section 9 prohibitions against “take” will further protect the species from human-caused mortality due to both direct effects and indirect effects such as continued habitat decline and harassment. We recognize that the voluntary cooperation of private landowners has improved conservation of the species in many areas. However, declining population trends indicate that these efforts have not been able to stabilize rangewide conditions (habitat and populations) for the species. We maintain that the best chance for conservation and ultimately recovery of the species will require both the protections afforded by listing and critical habitat designation as well as voluntary conservation measures undertaken by private landowners, with support from the States in accomplishing these measures.

(35) *Comment:* The Utah Office of the Governor described efforts of the San

Juan Local Working Group, by Federal and State agencies, private landowners, and universities to address concerns regarding declining numbers of Gunnison sage-grouse. Similarly, Colorado's Office of the Governor identified dozens of conservation efforts that have been carried out in Colorado that they believe address Gunnison sage-grouse.

Our Response: We acknowledge and commend conservation efforts undertaken in Utah and recognize their importance in a county where more than 90 percent of occupied habitat is on private lands. We also commend the conservation efforts undertaken in Colorado by CPW, local jurisdictions and other entities. This final rule describes many of the conservation measures, including local, State, and Federal laws and regulations, conservation easements, the Gunnison Basin CCA, and enrollment in the Colorado CCAA, that have been undertaken to improve or protect Gunnison sage-grouse habitat. We have carefully considered the projects and programs noted by Colorado and Utah in the development of this final rule.

(36) *Comment:* The Utah Office of the Governor described Gunnison sage-grouse population trends in Utah and stated that reliance on current population figures would be an arbitrary and capricious application of facts because adequate time has not been allowed to determine if numbers will return to stable levels following the severe winter in 2010. In contrast, CPW stated that severe winters are not a threat to the species.

Our Response: We recognize that there is annual variability in population numbers for the Gunnison sage-grouse. Consequently, we place more emphasis on longer-term population trends over a number of years than on population estimates from any given year. Our analysis considers Gunnison sage-grouse population trends from 1996 (when lek count protocols were standardized) through 2013. We do not conclude that severe winters are a threat to the species.

Comments From Federal Agencies

(37) *Comment:* We received multiple comments expressing concerns regarding the long-term viability of the Poncha Pass population, noting that bird movement between Poncha Pass and the Gunnison Basin is not likely. One commenter suggested that Poncha Pass and other small populations may be better managed as satellite populations, rather than individual self-sustaining populations.

Our Response: We are also concerned about the long-term viability of the Poncha Pass population, particularly in view of the 2013 lek count surveys, which did not detect any birds. CPW translocated 17 additional birds from the Gunnison Basin in the fall of 2013, and 10 more in spring of 2014 (CPW 2014e, p.7). Six males were counted in the Poncha Pass population during the spring 2014 lek count (CPW 2014d, p.2). This population will likely require repeated augmentations to avoid extirpation. This topic is discussed further under the following sections in this final rule: Current Distribution and Population Estimates and Trends; and Factor E.

(38) *Comment:* One agency noted that although the proposed rule to list the species repeatedly states that the effects from grazing are inconclusive, the final conclusion was that habitat degradation from improperly managed grazing, particularly with the interacting factors of invasive weed expansion and climate change, is a threat to the species. Several commenters recommended that historical grazing practices be differentiated from improved current grazing practices.

Our Response: The key word in our conclusion in the proposed rule is "improperly." Livestock grazing that is done in a manner consistent with local ecological conditions, including soil types, precipitation zones, vegetation composition and drought conditions, is not likely to negatively impact Gunnison sage-grouse, and is compatible with the needs and conservation of the species. See discussion under Factor A. The final rule also notes that properly managed livestock grazing may have positive effects on sage-grouse. We also recognize that maintenance of sustainable grazing practices on private rangelands can aid in recovery of the Gunnison sage-grouse by discouraging further conversion of the species' habitat into habitat unsuitable to the species (i.e., due to development).

(39) *Comment:* Several commenters noted that the proposed rule might have overstated the impacts from grazing on Gunnison sage-grouse habitat as indicated by BLM Land Health Assessments (LHA). A comment stated that available data may vary by office, and the LHA is only a snapshot in time; therefore, it cannot indicate trends. Additionally, grazing is only one of many causal factors on land health. The commenter also noted that failure to meet indicators for Land Health Standard 4 (which evaluates ecological indicators for Special Status Species)

may be due to population trends rather than existing habitat conditions.

Our Response: This final rule recognizes the limitations and uncertainties associated with LHA and supporting data. Our conclusion for livestock grazing effects on Gunnison sage-grouse and its habitat also acknowledges limitations associated with LHA data (see Factor A, Domestic Grazing and Wildlife Herbivory).

(40) *Comment:* One commenter recommended we clarify the impact from different fence types with regard to habitat fragmentation, increased predator activities, and collisions.

Our Response: This final rule discusses the various factors that influence fence strike risks. We acknowledge that those risks vary depending on fence design, landscape topography, and spatial configuration. In the Factor A discussion of fences, we note that in 10 years of tracking radio-collared sage-grouse in Colorado, CPW has documented only two fence strike mortalities in Gunnison sage-grouse. This information suggests that direct mortality of Gunnison sage-grouse due to fence strikes is low.

(41) *Comment:* We received a comment requesting that the Service recognize that fire and fuels treatment projects managed under very narrow parameters may be a beneficial tool in managing Gunnison sage-grouse habitat. The commenter also noted that impacts from cheatgrass on fire regimes in Colorado do not appear to be the same as in the Great Basin, and suggests that fire has a role to play in rejuvenating unoccupied or marginal habitats by creating "micro-mosaics" that benefit the species during different portions of its life cycle.

Our Response: The final rule acknowledges that small fires may have beneficial impacts to Gunnison sage-grouse habitat and concludes that fire is currently not a threat to the species. It also concludes that wildfires may become a threat in the future if cheatgrass continues to expand. Recent research indicates that prescribed fire may be inappropriate due to the direct loss and fragmentation of the remaining sagebrush habitat within the species' range, (Baker 2013, p. 8). We include this information and citation in this final rule (see Factor A, Fire).

(42) *Comment:* One commenter expressed concern regarding the potential effects of climate change to the long-term sustainability of Gunnison sage-grouse, particularly in the Dove Creek and Dry Creek areas.

Our Response: We too are concerned about the potential effects of climate change on Gunnison sage-grouse

rangewide. The final rule concludes that climate change is currently not a threat to the species, but is likely to become a threat in the foreseeable future. Our analysis includes consideration of climate change projections for the western U.S. A climate change vulnerability assessment for the Gunnison Basin described the Gunnison sage-grouse as highly vulnerable to impacts from climate change (TNC *et al.* 2011, p. iii). This topic is discussed further under Factor A, Climate Change in this final rule.

(43) *Comment:* The United States Forest Service (USFS) suggested expanding the CCA from Gunnison Basin to other Gunnison sage-grouse populations on Federal lands. One other commenter expressed concern regarding a possible expansion of the CCA to areas outside of the Gunnison Basin.

Our Response: We agree that the CCA could have benefitted Gunnison sage-grouse in other populations outside of the Gunnison Basin, and provided a means for Federal land agencies to streamline ESA section 7 requirements associated with their programs and activities. Although CCAs cannot be implemented for listed species, adoption of a similar plan that builds on the principles of the CCA is a viable option for the satellite populations in the future. We also note the BLM is now in the process of amending all field office resource management plans within the range of the Gunnison sage-grouse to increase protections for this species. This effort will likely build on what was included in the CCA for BLM-managed lands in the Gunnison Basin.

Comments From the Public

(44) *Comment:* Several commenters asserted that listing the Gunnison sage-grouse will adversely impact the local economy.

Our Response: The Act does not allow us to consider economic impacts in decisions on whether to list a species, which must be made solely on the basis of scientific and commercial information regarding the 5 factors in Section 4(a)(1) of the Act. However, economic impacts may be considered in the designation of critical habitat. Our final critical habitat determination for Gunnison sage-grouse is published elsewhere in today's **Federal Register**. As part of the process of completing the final critical habitat rule, we completed an Economic Analysis that evaluates the potential economic impacts of designating critical habitat on transportation, livestock grazing, mineral and fossil fuel extraction, residential development, recreation, agriculture, and renewable energy

(Industrial Economics, Inc. 2014). We also completed an environmental assessment pursuant to the National Environmental Policy Act (NEPA) on the proposed critical habitat designation that evaluated the affected environment, including potential economic impacts to the human environment. These are discussed further in our final critical habitat rule, published elsewhere in today's **Federal Register**.

(45) *Comment:* Several commenters suggested that the Service should work cooperatively with other Federal agencies, State wildlife agencies, farm bureaus, and local governments to partner with landowners on conservation efforts. One commenter asserted that the Service has no on-the-ground experience with Gunnison sage-grouse conservation.

Our Response: We encourage partnerships between the Service, other agencies, and landowners and have worked cooperatively in such partnership to further Gunnison sage-grouse conservation. In 2005, for example, we participated in development of the RCP (GSRSC 2005). This Plan established management guidelines throughout the range of the species. In 2006, we entered into a CCAA for the Gunnison sage-grouse with Colorado Division of Wildlife (now CPW). We estimate, in of December, 2014 when this rule becomes effective, 40 Certificates of Inclusion (CI) will have been completed for private properties, enrolling 94,391 ac in four Gunnison sage-grouse populations, although only roughly 81,156 ac of these acres fall within suitable Gunnison sage-grouse habitat. We also cooperated with Federal agencies and other stakeholders in the Gunnison Basin to complete a CCA to promote conservation of the species in the Gunnison Basin population on Federal lands. As stated above, our listing decision is based on the best available scientific information. Accordingly, our focus is on well-supported, scientific data and information for the species, generally at a broader scope than is acquired at the local level.

(46) *Comment:* Several commenters expressed differing views on whether livestock grazing in Gunnison sage-grouse habitat should be restricted.

Our Response: We determined that grazing that is inconsistent with local ecological conditions is a threat to the species, and grazing in general may have inadvertent effects at a local level (Factor A, Domestic Grazing and Wild Ungulate Herbivory).

Although grazing on both public and private lands may affect Gunnison sage-grouse, privately owned lands typically

lack a Federal nexus for section 7 consultations under the Act, in which case grazing practices would not be affected by the Act unless they were to result in "take" of Gunnison sage-grouse, as prohibited by section 9 of the Act. However, more than 300 Federal grazing allotments on nearly 405,000 ha (1,000,000 ac) are located within the final critical habitat designation (Industrial Economics, Inc. 2014, p. 3–1). On Federal allotments, through the section 7 consultation process, the managing agency (BLM or USFS) may choose to implement AUM reductions, seasonal restrictions, rotational grazing, or other changes to minimize impacts or avoid jeopardy to the species and any adverse modification to critical habitat. We do not intend to preclude grazing within critical habitat, but may seek grazing modifications where warranted to promote the conservation and recovery of the species. We discuss livestock grazing under Factor A, Domestic Grazing and Wild Ungulate Herbivory in this final rule.

(47) *Comment:* Several commenters expressed differing views on whether energy and mineral development should be further restricted.

Our Response: The Monticello-Dove Creek and San Miguel Basin populations support numerous mineral and fossil fuel extraction activities. One wind project and one potash mine are under development in the Monticello-Dove Creek population. There are no active uranium mines in Gunnison sage-grouse habitat. Oil and gas extraction occurs on both Federal and private lands within the species' range. Mineral and fossil fuel extraction activities on private lands without Federal mineral rights are unlikely to have a Federal nexus for section 7 consultations under the Act. Existing Federal regulations, such as BLM RMPs, and State regulations from the Colorado Oil and Gas Conservation Commission (COGCC) provide some protection to the species and its habitat. With respect to mineral and energy development projects on Federal lands or that otherwise have a Federal nexus (e.g., the project is authorized, funded or carried out by a Federal agency), we may seek project modifications during ESA section 7 consultations to benefit Gunnison sage-grouse. We consider current energy and mineral development a low threat to the species, as discussed under Factor A, Mineral Development and Renewable Energy Development, in this final rule.

(48) *Comment:* Several commenters expressed differing views regarding the effectiveness of predator control.

Our Response: Predator removal efforts may sometimes provide short-

term gains in sage-grouse numbers, but predator numbers quickly rebound without continual control efforts (Hagen 2011, p. 99). The impacts of predation on greater sage-grouse can increase where habitat quality has been compromised by anthropogenic activities such as exurban development and road development (Coates 2007, pp. 154–155; Bui 2009, p. 16; Hagen 2011, p. 100). This is discussed further under Factor C, Predation.

(49) *Comment:* Several commenters stated that conservation efforts and recovery should focus on public lands.

Our Response: Conservation of the Gunnison sage-grouse will require collaboration between Federal, State, and local agencies wherever the species occurs. Federal agencies manage 54 percent of currently occupied habitat for Gunnison sage-grouse. Although there is an abundance of public lands within the current range of the Gunnison sage-grouse, Federal lands alone are insufficient to conserve the species. Therefore, conservation and recovery efforts limited to public lands are not sufficient to ensure conservation of the species.

(50) *Comment:* Some commenters support or oppose development of a captive breeding program or translocation of Gunnison sage-grouse. One commenter stated that the State of Colorado does not have the funds necessary to conduct a long-term captive breeding program.

Our Response: Establishing wild populations from captive-reared gallinaceous birds is very difficult, expensive, and only rarely successful; a captive breeding program in Idaho for greater sage-grouse had only minimal success (GSRSC 2005, p. 181). The CPW started a captive-rearing program in 2009 to study whether techniques can be developed to captively rear and release Gunnison sage-grouse. To date, survival of captive-reared chicks has been low, as we cited in our proposed rule (78 FR 2518, January 11, 2013). Translocation of wild Gunnison sage-grouse from Gunnison Basin to other populations has had some success, although our understanding of translocation contributions is limited. Without these translocations, current numbers would likely be lower for these populations. These topics are discussed further under Scientific Research and Related Conservation Efforts in this final rule.

(51) *Comment:* Some commenters suggested that a Gunnison sage-grouse working group or recovery team should be established.

Our Response: Local working groups including landowners, interested

individuals and groups, local governments, land management agencies, and State wildlife agencies have developed conservation plans for the following Gunnison sage-grouse populations: Gunnison Basin, Crawford, Dove Creek, San Miguel Basin, Monticello, Piñon Mesa, and Poncha Pass. As a result, all populations with the exception of the Cerro Summit-Cimarron-Sims Mesa population have conservation plans. Following the development of these local conservation plans, the RCP (GSRSC 2005, entire) was developed, which included participation by the BLM, CPW, NPS, NRCS, USFS, the Service, and Utah Division of Wildlife Resources (UDWR). The RCP was intended to supplement local plans and provide guidance to aid in conservation of the Gunnison sage-grouse. Population targets were recommended for each population. These planning efforts are discussed in further detail in Factor A of this final rule. We also discuss future conservation measures for this species below in this final rule. The Act requires development of a recovery plan in most cases for endangered and threatened species, which often results in establishment of a recovery team.

(52) *Comment:* Some commenters suggested that sagebrush habitat should be preserved and, when necessary, recovered.

Our Response: Because sage-grouse are obligate users of sagebrush, preserving and recovering sagebrush habitat is key to sage-grouse conservation. Other habitat types such as riparian meadows and agricultural lands may also be important for Gunnison sage-grouse, but only if they are in close proximity to sagebrush-dominated habitat (75 FR 59808, September 28, 2010). Several Federal agencies as well as CPW and UDWR continue to work to improve the quality of sagebrush communities through grazing management, fencing, re-seeding, fuels management, and other habitat improvement strategies (GSRSC 2005, pp. 214–219). Listing the species and designating critical habitat will further conserve Gunnison sage-grouse habitat.

(53) *Comment:* Several commenters noted the importance of open water and wet meadows and some also suggested that these habitat types should be re-established in some areas by removal of sagebrush.

Our Response: High quality brood-rearing habitat for Gunnison sage-grouse includes mesic meadows, springs, seeps, and low vegetation riparian areas, all dependent on adequate moisture and consequently at risk in today's changing

climate (TNC *et al.* 2011, p. H–9). Prescribed burning and mechanical treatments can be used on a small scale to create a mosaic of small open patches; however, care should be taken to avoid further fragmentation of sagebrush habitat (GSRSC 2005, pp. 206–207).

(54) *Comment:* Some commenters suggested that seasonal closures of roads and recreation areas should be implemented as appropriate.

Our Response: Closures have been authorized and used by Federal agencies and counties to protect Gunnison sage-grouse habitat in several populations (BLM 2013c, attachment 2; Gunnison County Board of County Commissioners 2013a, Appendix A; NPS 2013, p. 1; USFS 2013, pp. 11 and 14). We evaluate these efforts in this final rule (see Factor A, Roads, and Factor D).

(55) *Comment:* One commenter suggested that number of leks, number of birds on leks, survival rates, and other ecological parameter be monitored and used as triggers for requiring additional conservation efforts.

Our Response: The local and rangewide conservation plans include monitoring plans. The CPW has conducted annual monitoring of these parameters following a standard protocol since 1996. Monitoring of habitat conditions, treatment actions, and compliance are an integral part of the CCAA for Gunnison sage-grouse.

(56) *Comment:* Several commenters stated that the Gunnison sage-grouse population in the Gunnison Basin is stable and not at risk of extinction; consequently, since this is a significant portion of the species' range, the species is not endangered. One commenter noted that the six smaller populations did not constitute a significant portion of the species' range.

Our Response: Please see our response to comment 29 above. We include an explanation of how we considered and applied the concept of SPR in this final rule.

(57) *Comment:* Several commenters expressed various opinions regarding the stability of the six smaller populations outside of Gunnison Basin.

Our Response: The six satellite populations are small, all were generally in decline from 1996 until 2010, and several continue to show a declining trend. The San Miguel and Piñon Mesa populations are currently the largest of the satellite populations, with 206 and 182 birds, respectively, in 2014. The Monticello-Dove Creek population currently has less than 100 birds total. Population estimates in 2014 for what have been the two smallest populations, Cerro Summit-Cimarron-Sims Mesa and

Poncha Pass, were 74 and 16, respectively (CPW 2014a, p.1). Based on lek count-based population estimates, some satellite populations have increased slightly over the last several years, or intermittently over time. However, the last 19 years (1996 to 2014) of lek count data as a whole indicate all the satellite populations are in decline in 2010. Several of the satellite populations have increased since 2010. Although population estimates for Piñon Mesa are currently higher than in any year since 1996, this population has been augmented with 93 birds from Gunnison Basin since 2010. The Crawford population has also been augmented, with 73 birds over the same period; and while the 2014 population estimate of 157 in this population is the highest since 2006, it is considerably less than the post-1996 high of 270 in 1998.

For all six satellite populations, population estimates from 1996 to 2014 are below population targets (based on a 10-year average), set forth by the RCP (CPW 2014d, p. 1; GSRSC 2005, pp. 255–302). The RCP population targets are the number of birds thought necessary to conserve Gunnison sage-grouse in those population areas (GSRSC 2005, p. 255). Combined, the satellite populations comprise about 16 percent of the rangewide population of Gunnison sage-grouse and include approximately 37 percent of rangewide occupied habitat. These topics are discussed further in Factors A and E of this rule.

(58) *Comment:* Several commenters stated that lek counts are not accurate.

Our Response: As described in this final rule (see Current Distribution and Population Estimates and Trends), lek count data are the primary means of estimating and monitoring Gunnison sage-grouse populations. However, sage-grouse populations can fluctuate widely on an annual basis, and there are concerns about the statistical reliability of population estimates based on lek counts (CDOW 2009b, pp. 1–3). Stiver *et al.* (2008, p. 474) concluded that lek counts likely underestimate population size. Another study (Davis 2012, p. 136) indicated that, based on demographic data, lek count indices overestimate population size. Although lek count data are available from as early as the 1950's for some populations, lek count protocols were first standardized and implemented in 1996 (GSRSC 2005, p. 46). Prior to 1996, lek count data are highly variable and uncertain, and are not directly comparable to recent population data (Braun 1998, p. 3; Davis 2012, pp. 139, 143). Therefore, for the purposes of evaluating current

population sizes and trends, the analysis in this final rule is focused on the standardized lek count data from 1996 to 2013. We also consider other available scientific information regarding Gunnison sage-grouse populations such as demographic data and population viability analyses (see Factor E).

(59) *Comment:* Several commenters recommended that population data prior to 2001 be evaluated.

Our Response: In the 2010 12-month finding we relied on population data over the past decade to quantitatively assess recent trends (75 FR 59808, September 28, 2010). The starting point of 2001 was also used for trend analysis in the 2013 proposed rule (78 FR 2491, January 11, 2013). In this final listing rule, we analyzed population estimates over a longer period, based on lek count data from 1996–2013. Similar to our previous analysis, the long-term data indicates that despite slight increases in the past several years, the satellite populations have declined overall, with the possible exception of the Cerro Summit-Cimarron-Sims Mesa population, which appears stable to increasing at this time.

(60) *Comment:* Some commenters stated that there are too many caveats in the rangewide conservation plan to rely on it for distribution and abundance information.

Our Response: The current distribution of the Gunnison sage-grouse is thought to be well understood, based on several decades of surveys and data. Although not conclusive, CPW aerial surveys during 2013 found no new leks or occupied areas. Nevertheless, current distribution and abundance data are estimates due to adverse weather, access, and survey error. Earlier data is further compromised by the use of incomplete museum records and historical accounts, as well as varying methodologies and survey intensities. Pre-settlement data is by necessity an extrapolation based on species accounts and the likely distribution of suitable habitat. This is the best available information, and forms the basis of historical and current distribution and abundance information, as presented in this final rule.

(61) *Comment:* Some commenters asserted that the Gunnison sage-grouse is not a separate species from greater sage-grouse.

Our Response: Gunnison sage-grouse and greater sage-grouse were recognized as separate species in 2000 based on morphological, genetic, and behavioral differences, and geographical isolation. Consequently, the American Ornithologist's Union accepted the

Gunnison sage-grouse as a distinct species. Due to the several lines of evidence separating the two species, we determined in our 2010 12-month finding that the best available information indicates that the Gunnison sage-grouse is a valid taxonomic species and a listable entity under the Act (75 FR 59804, September 28, 2010).

(62) *Comment:* Several commenters stated that habitat fragmentation and degradation are the main reasons for a steep decline in Gunnison sage-grouse abundance. One commenter asserted that we overestimated the impact from fragmentation, and another commenter asserted that habitat has not been lost or fragmented in the past 50 years.

Our Response: Habitat loss and fragmentation are recognized as primary causes of the decline in abundance and distribution of sage-grouse across western North America (Rogers 1964, pp. 13–24; Braun 1998, entire; Schroeder *et al.* 2004, p. 371), and in Gunnison sage-grouse across its former range (Oyler-McCance *et al.* 2001, p. 330; GSRSC 2005, p. 149; Wisdom *et al.* 2011, pp. 465–469). Gunnison sage-grouse depend on sagebrush for their survival and persistence, and the historical and current distribution of the Gunnison sage-grouse closely matches that of sagebrush (Patterson 1952, p. 9; Braun 1987, p. 1; Schroeder *et al.* 2004, p. 364, and references therein). Current and future threats described under Factor A of this final rule will further contribute to habitat loss and decline and, based on historical and current population trends, a continued decline in the abundance of Gunnison sage-grouse across its range.

(63) *Comment:* One commenter noted that there has been no chick survival in the Miramonte area of the San Miguel population.

Our Response: Although sample size in a study of the San Miguel Basin (Miramonte subpopulation) was small (eight chicks were studied), no chicks survived to 30 days of age, meaning no recruitment (survival of bird from hatching to breeding age) occurred over a 4-year period (Davis 2012, p. 37). We provide this information in this final rule (see Predation; and Davis Population Viability Analysis sections).

(64) *Comment:* Some commenters noted that the bio-geographical characteristics of the upper Gunnison Basin differ markedly from the lower Gunnison Basin.

Our Response: There is wide habitat variation within and between all of the Gunnison sage-grouse populations. We presume this comment is directed to the idea of population redundancy in the Gunnison Basin. This topic is discussed

in Factor E, Small Population Size and Structure, of this final rule.

(65) *Comment:* One commenter stated that there is no data indicating the Dove Creek population was within the historical range of the Gunnison sage-grouse prior to introducing the species to this area in 2010 and 2011.

Our Response: CPW began collecting lek count data from Dove Creek in 1993, which predates efforts to augment that population. Dove Creek is included in historical, recent, and current descriptions of the species' range (Schroeder *et al.* 2004, pp. 368–371). The 2006 not warranted finding described the Dove Creek subpopulation as ranging from 10–358 birds from 1995–2005 (71 FR 19957–19961, April 18, 2006).

(66) *Comment:* One commenter stated that the Dove Creek population declined following the 2002–2003 drought and has not yet rebounded.

Our Response: Drought conditions from 1999 through about 2003 (with residual effects lasting through about 2005) were closely associated with reductions in the sizes of all populations (CDOW 2009b, entire; CPW 2013c, p. 9) (see Figures 2 and 3 in this final rule) and lower nest success (CPW 2013c, p. 2). To date, several of the smaller satellite populations have not rebounded from declines around that time (see Figure 3 in this final rule).

(67) *Comment:* Some commenters stated that conversion to cropland has not fragmented sagebrush habitat in the past 20–30 years.

Our Response: As stated in this final rule (Factor A, Agricultural Conversion), except in Gunnison County, the total area of harvested cropland has declined over the past two decades in all counties within the occupied range of Gunnison sage-grouse (USDA NASS 2010, entire). Further, the majority of agricultural land use in Gunnison County is in hay production, and this has also declined over the past two decades (USDA NASS 2010, p. 1). We do not have any information to predict changes in the amount of land devoted to agricultural purposes. However, because of this long-term trend in reduced land area devoted to agriculture, we do not expect a significant amount of Gunnison sage-grouse habitat to be converted to agricultural purposes in the future.

(68) *Comment:* Some commenters stated that there are no new road projects; therefore, roads have not increased fragmentation.

Our Response: Roads of all kinds can impact Gunnison sage-grouse through direct loss of habitat, mortality from collisions, habitat fragmentation, and habitat degradation. Existing roads will

continue to require maintenance, and usage may increase due to increases in recreational activities or in the human population. We discuss roads under Factor A in this final rule.

(69) *Comment:* Several commenters stated that grazing minimizes fragmentation by preventing development, conversion to cropland, and loss of water rights.

Our Response: We agree that livestock grazing operations generally result in less habitat fragmentation than alternatives such as residential development, conversion to cropland, mineral and fossil fuel extraction, or road construction.

(70) *Comment:* Two commenters noted that ranches are no longer being subdivided; therefore, fragmentation due to this factor is not occurring.

Our Response: Exurban development and subdivision of ranches likely slowed during the recent economic downturn. However, it still occurs, particularly in the Piñon Mesa and Gunnison Basin populations, and we expect it to continue into the future in some areas. We discuss this issue in this final rule (see Factor A, Residential Development).

(71) *Comment:* Some commenters asserted that the conclusion that large blocks of sagebrush habitat are needed by Gunnison sage-grouse is in error because it is based on greater sage-grouse research. Other commenters stated that not all sagebrush habitat will support Gunnison sage-grouse.

Our Response: With regard to the first comment, references cited in the proposed and final rules regarding the need for large expanses of sagebrush sometimes pertain to greater sage-grouse, but also include references specific to Gunnison sage-grouse. References specific to Gunnison sage-grouse that discuss the need for large blocks of sagebrush habitat include Oyler-McCance *et al.* (2001, pp. 327–330), Wisdom *et al.* (2011, p. 451), and Baker (2013, p. 8). Regarding the second comment, we agree that not all sagebrush habitat will support Gunnison sage-grouse. Much sagebrush habitat is outside the current range of the species or is in patches that are too small in size and are fragmented, and some sagebrush habitat does not contain the physical and biological features necessary to sustain the species.

(72) *Comment:* One commenter stated that Blue Mesa Reservoir resulted in the largest habitat fragmentation in Gunnison County.

Our Response: Our proposed rule noted the potential impacts of development of a large irrigation project, but it was not clear that we were

referring to Blue Mesa Reservoir. As clarified in this final rule (see Factor A, Large Scale Water Development), development of Blue Mesa Reservoir in 1965 in the Gunnison Basin flooded an estimated 3,700 ha (9,200 ac), or 1.5 percent of potential habitat for Gunnison sage-grouse in the Gunnison Basin (McCall 2005, pers. comm.), and according to Gunnison County (2013a, p. 124), at least one known lek. Based on the size and location of Blue Mesa Reservoir, we presume that habitat connectivity and dispersal of birds between the Gunnison Basin population and satellite populations to the west were impacted.

(73) *Comment:* One commenter noted that mountain shrub habitat is used by the Gunnison sage-grouse and therefore, mountain shrub should not be lumped in with piñon-juniper (*Pinus edulis-Juniperus* spp.) habitat.

Our Response: We agree that some deciduous shrub communities (primarily Gambel oak and serviceberry) are used seasonally by Gunnison sage-grouse (Young *et al.* 2000, p. 451). See discussion under Factor A, Piñon-Juniper Encroachment.

(74) *Comment:* Several commenters asserted that Gunnison sage-grouse numbers were highest during a period of higher livestock grazing, and that there is no negative correlation between grazing intensity and Gunnison sage-grouse numbers. Other commenters noted either improvement or degradation of habitat associated with livestock grazing. One commenter asked what we consider to be a proper grazing regime.

Our Response: Excessive grazing by domestic livestock during the late 1800s and early 1900s, along with severe drought, significantly impacted sagebrush ecosystems (Knick *et al.* 2003, p. 616). Overgrazing by livestock was cited as one of several contributing factors in the early loss and deterioration of sagebrush range in the region (Rogers 1964, p. 13). Historical accounts indicate that overgrazing of sagebrush range in Colorado began around 1875. Overgrazing was apparently at its worst in the early 1900s and continued until the BLM was organized in 1934 (Rogers 1964, p. 13). Around 1910, a gradual but marked decline in sage-grouse numbers and distribution in Colorado had begun (Rogers 1964, pp. 20–22). This information indicates that historical livestock grazing practices and overgrazing were a contributing factor in the early loss and degradation of sagebrush habitats and initial declines in sage-grouse numbers and distribution. Although current livestock

stocking rates in the range of Gunnison sage-grouse are lower than historical levels (Laycock *et al.* 1996, p. 3), long-term effects from historical overgrazing, including changes in plant communities and soils, persist today (Knick *et al.* 2003, p. 116). In addition, widespread use of water developments across the West has since increased livestock access to sagebrush habitats, and so even reduced numbers of livestock still pose impacts (Connelly 2004, pp. 7–33, 7–35, 7–92). We know that grazing can have negative impacts to sagebrush and consequently to Gunnison sage-grouse at local scales. Grazing inconsistent with local ecological conditions is occurring over a large portion of the range of the species. Habitat degradation that can result from grazing practices inconsistent with local ecological conditions, particularly with the interacting factors of invasive weed expansion and climate change, is a threat to Gunnison sage-grouse persistence. See Factor A, Domestic Grazing and Wild Ungulate Herbivory.

(75) *Comment:* Several commenters stated that Gunnison sage-grouse chicks depend on insects in cattle manure.

Our Response: Anecdotal reports and opinion papers (Brunner 2006, p. 16; Gunnison County 2013a, p. 95) have suggested that cattle manure attracts and supports insect populations upon which sage-grouse depend for survival, and that sage-grouse “follow” cattle through pastures. However, there is no evidence to support this theory. Further, there are no data to substantiate the idea that in sagebrush areas not actively grazed by livestock, sage-grouse are limited in some way (Connelly *et al.* 2007, p. 37). This topic is discussed in Factor A of this final rule (see Factor A, Domestic Grazing and Wild Ungulate Herbivory.).

(76) *Comment:* Several commenters expressed differing opinions on whether livestock grazing reduces or increases the risk of catastrophic fire.

Our Response: We know that livestock grazing influences fire ecology in sage-grouse habitat. However, due to the spatial complexity of fire in sagebrush ecosystems (Crawford *et al.* 2004, p. 7), and the numerous factors that determine the effects of grazing on sagebrush habitats, the effects of grazing on sage-grouse by altering fire regimes likely vary widely across time and space. This topic is discussed in detail in Factor A, Domestic Grazing and Wild Ungulate Herbivory, of this final rule.

(77) *Comment:* Several commenters asked what has changed from 2006, when the Service concluded that grazing was not a threat, to 2013, when the Service concluded that grazing was a threat.

Our Response: Both the 2006 not warranted determination (71 FR 19954, April 18, 2006) and the 2013 proposed rule to list the species (78 FR 2486, January 11, 2013) presented similar observations:

- Excessive grazing by domestic livestock during the late 1800s and early 1900s, along with severe drought, significantly affected sagebrush ecosystems, causing long-term impacts that persist today.

- Although we know that historical livestock grazing practices and overgrazing were a contributing factor in the early loss and degradation of sagebrush habitats and initial declines in sage-grouse numbers and distribution, the correlation between historical grazing and reduced sage-grouse numbers is not exact.

- Habitat manipulations to improve livestock forage, such as sagebrush removal, can affect sage-grouse habitat.

In 2006, we concluded that there was insufficient data to demonstrate that current grazing was a rangewide threat to the species. In 2013, several new references related to grazing were available for consideration (Coates 2007, Hagen *et al.* 2007, Aldridge *et al.* 2008, France *et al.* 2008, BLM 2008, BLM 2009a, Gunnison County Stockgrowers 2009, Knick *et al.* 2011, Pyke 2011, Williams and Hild 2011, BLM 2012a). Our conclusion in 2013 was that habitat degradation can result from improperly managed grazing, and, particularly with the interacting factors of invasive weed expansion and climate change, is a threat to Gunnison sage-grouse persistence. Climate change was not included as a factor in 2006, but in 2013 we stated that climate change is likely to become an increasingly important threat to the persistence of Gunnison sage-grouse. We also noted in our 2013 proposed rule that livestock grazing can cause local impacts, but population-level impacts are unlikely. We make the same conclusions in this final rule (see Factor A, Domestic Grazing and Wild Ungulate Herbivory).

(78) *Comment:* Some commenters stated that wildlife herbivory needs to be addressed.

Our Response: In the proposed and final rules, we discuss wild ungulate herbivory. It occurs throughout the range of the Gunnison sage-grouse, and there are instances of overgrazing by wild ungulates on a local level. In this final rule, we note that the effects of livestock grazing are likely being exacerbated by browsing of woody species by wild ungulates in portions of the Gunnison Basin and the Crawford area (see Factor A, Domestic Grazing and Wild Ungulate Herbivory).

(79) *Comment:* One commenter noted that very little private or public land in Dolores County is grazed.

Our Response: More than 81 percent of lands in Dove Creek are privately owned. We do not have information regarding what percentage of private lands occupied by Gunnison sage-grouse in Dolores County is grazed.

(80) *Comment:* One commenter suggested that grazing should be reduced or eliminated on public lands.

Our Response: Properly managed livestock grazing is not likely to impact Gunnison sage-grouse such that it threatens populations or the species. The BLM and USFS manage grazing allotments on their lands, and currently consider conservation of Gunnison sage-grouse on many of their allotments. Allotments occur on approximately 292,000 ha (720,000 ac) or 77 percent of occupied habitat (Industrial Economics, Inc. 2013, p. 3–1). Stocking rates have declined significantly in recent years. Both agencies have designated the Gunnison sage-grouse as a “Sensitive Species.” This designation requires the BLM and the USFS to address the species in their RMPs, and their Land and Resource Management Plans (LRMPs), respectively. Management actions in these plans include changes to seasons of use, AUM reductions, rotational grazing, and other changes to grazing management practices. When the Gunnison sage-grouse is listed, actions on allotments that might affect the species will require ESA section 7 consultations under the Act in all areas occupied by the species. Section 9 prohibitions against “take” will also apply.

(81) *Comment:* Several commenters asserted that invasive plants such as cheatgrass and piñon-juniper are not a proven threat to Gunnison sage-grouse; they have only been proven a threat with greater sage-grouse. One commenter noted that cheatgrass has increased within the Gunnison sage-grouse range and is a major threat in the Gunnison Basin.

Our Response: Cheatgrass can shorten fire intervals in sagebrush communities. Piñon-juniper encroachment is potential evidence of extended fire intervals. Either change in fire intervals can adversely impact habitat for the Gunnison sage-grouse by reducing sagebrush cover. Based on what is known about the effects of cheatgrass and piñon-juniper on greater sage-grouse, it is reasonable to infer their expansion has similar effects on Gunnison sage-grouse. In this final rule we conclude that neither invasive weeds nor piñon-juniper encroachment are substantial threats to Gunnison sage-

grouse at this time, due to their limited extent; however, they are potential future threats (see Factor A, Invasive Plants and Piñon-Juniper Encroachment).

(82) *Comment:* Several commenters stated that drought is causing a decline in Gunnison sage-grouse numbers; conversely, one commenter stated that drought is not a threat. Several commenters also stated that the Monticello-Dove Creek area has degraded Gunnison sage-grouse habitat due to climate change and drought.

Our Response: The proposed rule to list the species stated that it is too speculative to conclude that drought alone is a threat to the species at this time; however, based on rapid species decline in drought years, it is likely that drought exacerbates other known threats and thus can negatively affect the species. Drought and associated effects are discussed further in Factors A and E and Cumulative Effects From Factors A through E of this rule.

(83) *Comment:* Several commenters stated that prescribed fire creates a desirable habitat mosaic, but may also cause a short-term decline in sagebrush.

Our Response: In Factor A (Fire) of the proposed and final rules we state that in mesic areas used for brood-rearing, small fires may maintain a suitable habitat mosaic by reducing shrub encroachment and encouraging understory growth. However, without available sagebrush cover nearby, the utility of these sites is questionable.

(84) *Comment:* Some commenters asserted that climate change is not a threat because it will not occur within the foreseeable future.

Our Response: Climate change is ongoing and cumulative. The proposed and final rules conclude that climate change is not a threat to the Gunnison sage-grouse at this time, but is likely to become a threat to the persistence of the species over the next 40 years. The Gunnison sage-grouse was found to be “highly vulnerable” to climate change in the Gunnison Basin (TNC *et al.* 2011, p. 48).

(85) *Comment:* Some commenters noted that fire suppression and reduced fire frequency due to grazing have caused piñon-juniper encroachment into sagebrush habitat.

Our Response: Piñon-juniper encroachment has been attributed to the reduced role of fire, the introduction of livestock grazing, increases in global carbon dioxide concentrations, climate change, and natural recovery from past disturbance. Most Gunnison sage-grouse population areas are experiencing low to moderate levels of piñon-juniper encroachment, although considerable

encroachment has occurred at Piñon Mesa (see Factor A, Piñon-Juniper Encroachment in All Population Areas). We discuss the relationship between fire and piñon-juniper encroachment in this final rule (see Factor A, Fire and Piñon-Juniper Encroachment).

(86) *Comment:* Some commenters noted that the historical fire rotation was 178–357 years in Wyoming big sagebrush (*A. t. wyomingensis*) and 90–143 years in mountain big sagebrush; these rotation intervals may or may not be changing.

Our Response: These time periods are from Bukowski and Baker (2013, p. 5). The authors concluded that fire size, rate of burning, and severity may be changing due to land-use changes, fire exclusion, and invasive species such as cheatgrass. Crawford *et al.* (2004, p. 2) stated that fire ecology changed dramatically with European settlement. In high elevation sagebrush habitat, fire return intervals increased from 12–24 years to more than 50 years, resulting in invasion of conifers and a resulting loss in shrubs and herbaceous understory; at lower elevations, fire return intervals decreased dramatically from 50–100 years to less than 10 years due to invasion by annual grasses. TNC *et al.* (2011, p. 12) predicted a trend of higher fire frequency and severity in the Gunnison Basin due to climate change.

(87) *Comment:* Two commenters noted that drought has encouraged invasive plants.

Our Response: Drought can increase the likelihood of some invasive plants such as cheatgrass out-competing native perennials. The potential effects of drought and invasive plants on Gunnison sage-grouse and its habitat are further described in Factors A (Invasive Plants) and E (Drought) of this final rule.

(88) *Comment:* One commenter stated that climate change is adversely affecting Gunnison sage-grouse, but it cannot be mitigated by the Service.

Our Response: The Service can do little to avert climate change; however, actions can be taken to minimize specific impacts and improve the resiliency of species in the face of climate change. For example, the preferred Gunnison sage-grouse habitat for early brood-rearing includes riparian areas and wet meadows near sagebrush that provide the insects and forbs essential for chick survival. These habitat types are highly vulnerable to impacts from climate change and have been seriously degraded, but management actions can be taken to maintain and restore these important habitats (TNC *et al.* 2011, p. H–9–10).

(89) *Comment:* One commenter stated that if there are similar trends in

Gunnison sage-grouse populations separated by long distances, the driver could be climate change.

Our Response: This hypothesis is plausible, although there is no evidence to support this hypothesis. This final rule discusses the potential impacts of climate change and drought in Factors A (Climate change) and E (Drought), and the associated effects on Gunnison sage-grouse.

(90) *Comment:* Several commenters stated that predator numbers have increased and are likely a threat to the Gunnison sage-grouse.

Our Response: Predator populations can increase as a result of habitat fragmentation and degradation, causing otherwise suitable habitat to become a population sink for sage-grouse. The best available information indicates that, as we stated in our proposed rule, predation is a current and future threat to the species, particularly in the satellite populations. Predation is discussed further under Factor C in this final rule.

(91) *Comment:* Several commenters suggested that predator levels could be managed to relieve the threat from predation.

Our Response: Predator removal efforts sometimes result in short-term population gains for sage-grouse, but predator numbers quickly rebound without continual control (Hagen 2011, p. 99). Predation may be limiting some of the smaller populations of Gunnison sage-grouse, and in those cases predator control efforts may be appropriate. The best available information indicates that, as we stated in our proposed rule, predation is a current and future threat to the species, particularly in the satellite populations. While predation likely acts as a threat in localized areas across the range of the species, the stability of the Gunnison Basin population over the last 19 years indicates that predation is not having a significant impact on that population. We believe, however, that the effects of predation are more pronounced in the satellite populations. Given the stability of the Gunnison Basin population, we do not believe that the magnitude of this threat is significant at the rangewide level. While predation is a threat rangewide, we believe that the effects of predation are localized and more pronounced in the satellite populations, and therefore we do not believe that the magnitude of this threat is significant (see Factor C, Predation).

(92) *Comment:* Some commenters recommended that we reevaluate our conclusions regarding nest depredation by elk (*Cervus canadensis*) and cattle.

Our Response: The proposed and final rules document that livestock can trample nests, either destroying eggs or causing abandonment by hens. We also cite references that list several species of nest predators, including elk and domestic cows (see Factor C). However, the best available information indicates that nest predation by livestock and elk has negligible impacts on Gunnison sage-grouse at the population level (See Factor C, Predation).

(93) *Comment:* Some commenters noted that many predators of Gunnison sage-grouse are protected and cannot be controlled.

Our Response: Migratory birds such as raptors are protected under the Migratory Bird Treaty Act (16 U.S.C. 703–712). Take of these species requires a Federal permit. However, most mammalian predators of Gunnison sage-grouse and some birds may be controlled. Nevertheless, predator control efforts will likely only be effective under special circumstances (see our response to comment 48).

(94) *Comment:* Some commenters believed that raptor concentrations associated with powerlines are not evidence of increased predation on Gunnison sage-grouse, and that perch deterrents are not successful over the long-term. One commenter provided a paper that summarized studies regarding sage-grouse and powerlines (EDM International, Inc. 2011).

Our Response: In the proposed and final rules, we present numerous peer-reviewed studies that have demonstrated an increase in corvids and raptors associated with powerlines and transmission lines, which we infer could logically lead to increased predation of sage-grouse. We discuss these topics further under Factors A (Powerlines) and E (Predation) in this final rule.

(95) *Comment:* Some commenters suggested that the risk from the parasite *Trypanosoma cruzi* and the encephalitis virus should be investigated.

Our Response: In Factor C of this final rule we evaluate the best available information on diseases in Gunnison sage-grouse and greater sage-grouse, including West Nile virus, an encephalitis virus lethal to greater sage-grouse and other gallinaceous birds. We also discuss other pathogens potentially relevant to Gunnison sage-grouse, based on data provided by CPW. We are not aware of other scientific information related to disease in Gunnison sage-grouse. To our knowledge, *Trypanosoma cruzi* is a disease endemic to Latin America and does not pose a threat to sage-grouse.

(96) *Comment:* Some commenters stated that there is no evidence that disease is currently a threat. One commenter noted that there is a low abundance of the mosquito species that are known vectors of West Nile virus, and all mosquitos and Gunnison sage-grouse sampled by CPW tested negative.

Our Response: In the proposed rule, we determined that West Nile virus is a potential future threat, but it, and other diseases and parasitic infections, were not considered a current threat. We received comments from the scientific community expressing concern with this conclusion, particularly in regard to West Nile virus, based on the following information: To date, West Nile virus has not been documented in Gunnison sage-grouse, but is present in all counties throughout the species' range (USGS 2013, entire). Walker and Naugle (2011, p. 140) predicted that West Nile virus outbreaks in small, isolated, and genetically depauperate populations could reduce sage-grouse numbers below a threshold from which recovery is unlikely because of limited or nonexistent demographic and genetic exchange from adjacent populations. Therefore, a West Nile virus outbreak in any Gunnison sage-grouse population, except perhaps the Gunnison Basin population, could limit the persistence of that population. This information is discussed further in Factor C of this final rule.

(97) *Comment:* One commenter stated that Sovada *et al.* (1995) does not support the assertion that red fox and corvid populations are increasing.

Our Response: We removed this citation from the final rule, because the study is not relevant to our analysis. Our proposed rule, in error, stated that Sovada *et al.* (1995, p. 5) found that “red fox and corvids, which historically were rare in the sagebrush landscape, have increased in association with human altered landscapes.” However, the author only speculated that abundance of these species had increased in sagebrush habitats over time. In this final rule, we discuss how anthropogenic pressures can influence the diversity and density of predators based on other studies (see Factor C).

(98) *Comment:* One commenter stated that predation threats to Gunnison sage-grouse cannot be presumed to be similar to predation threats to greater sage-grouse.

Our Response: In the proposed and final rules, we use the best available scientific and commercial data. We also note that we use information specific to the Gunnison sage-grouse where available but still applied scientific management principles for greater sage-

grouse that are relevant to Gunnison sage-grouse management needs and strategies.

(99) *Comment:* One commenter asserted that the threat of predation by raptors is exaggerated.

Our Response: The proposed and final rules state that predation is the most commonly identified cause of direct mortality for Gunnison sage-grouse during all life stages and discuss common predators of adults, juveniles, and eggs. We also present information from scientific studies that demonstrate the potential impact of raptor predation on sage-grouse (see Factor C, Predation).

(100) *Comment:* One commenter noted that in Dolores County at least one person has contracted West Nile virus, and a significant number of dead birds have been found.

Our Response: The proposed rule to list the species stated that there have been no confirmed avian mortalities from West Nile virus in San Miguel, Dolores, and Hinsdale Counties (78 FR 2519, January 11, 2013). For updates in the final rule, we revisited records from the Centers for Disease Control (USGS 2013, entire) for West Nile reports in Colorado and Utah. Those records indicate that a total of 84 dead wild birds (species other than Gunnison sage-grouse) infected by West Nile virus have been reported from nine counties within the current range of the Gunnison sage-grouse since 2002, when reporting began in Colorado and Utah. In this final rule we conclude that West Nile virus is a future threat to Gunnison sage-grouse (see Factor C).

(101) *Comment:* Several commenters stated that conservation easements, CCAs, and CCAAs protect Gunnison sage-grouse, either directly or through protection of sagebrush habitat. Varying estimates of lands under conservation easements were provided, with most commenters citing the properties and acreages identified in Lohr and Gray (2013). Other commenters provided estimates of lands enrolled in the CCAA. Another commenter noted that 17.4 percent of all private lands in both occupied and unoccupied proposed critical habitat are protected through either conservation easements or CCAAs. Since 1995, a commenter reported, private landowners, local, and State expenditures towards Gunnison sage-grouse conservation exceed \$31 million.

Our Response: We applaud these efforts towards Gunnison sage-grouse conservation. Continuation of conservation efforts across the species' range will be necessary for conservation and recovery of the species. Conservation easements and CCAAs

provide some level of protection for the species from future development on enrolled lands. In this final rule, we add information provided in Lohr and Gray (2013), update estimates for lands enrolled in CCAAs and conservation easements, and consider these conservation efforts in our listing decision as appropriate (see Factors A and D).

(102) *Comment:* Several commenters asserted that the current regulations are either adequate or inadequate to address threats to the Gunnison sage-grouse.

Our Response: There have been major strides in improving regulations to protect Gunnison sage-grouse and its habitat. Examples include Gunnison and Montrose County regulations for land use permitting in occupied habitat. Nonetheless, for the reasons stated in Factor D of this rule, existing regulatory mechanisms currently do not fully address the threat of habitat decline caused by human development in the species range. In addition, under the Act, the adequacy or inadequacy of regulatory mechanisms is just one of several factors upon which our determination to list a species must be based. As described in the proposed and final rules, there are multiple other threats contributing to the species' decline rangewide. Therefore, even the most protective local regulations may be insufficient to address all threats to the species, or halt recent declines in many of the populations, such that protection of the species under the Act is not warranted. In Factor D of this final rule, we evaluate the best available information related to existing regulatory mechanisms that address threats to Gunnison sage-grouse and its habitat (Factors A through C, and E).

(103) *Comment:* Several commenters stated that the Service should discuss existing land use policies and regulatory mechanisms with local governments.

Our Response: The Service has been engaged with Federal agencies, the States of Colorado and Utah, the Ute Mountain Ute Tribe, affected counties, and other interested parties throughout the listing process via letters, emails, telephone calls, meetings, and other means. Verbal and written comments have been carefully considered and in many instances incorporated into this final rule.

(104) *Comment:* Some commenters noted that resources on private lands are not managed to a lesser standard than resources on Federal lands.

Our Response: These comments may have been referring to our assessment of private lands in the grazing section of the proposed rule. In this final rule (see Factor A, Domestic Grazing and Wild

Ungulate Herbivory), we revise our language to state that we have more limited information on the extent of grazing, management, and habitat conditions on non-Federal lands. Although Federal land and livestock grazing may be more regulated, we cannot make any generalizations about how habitat conditions in those areas might compare with private lands where livestock grazing occurs. We note, however, that grazing allotments containing both Federal and private lands are, in some cases, managed to meet BLM land health standards through coordination and cooperation with grazing permittees (BLM 2013c, p. 1–2).

(105) *Comment:* Some commenters noted that as a designated “sensitive species” the BLM must address Gunnison sage-grouse conservation in their Resource Management Plans and associated activity plans.

Our Response: We acknowledge that the commenter is correct (see Factor D, Federal Laws and Regulations).

(106) *Comment:* Some commenters stated that the COGCC protects wildlife resources and their habitat.

Our Response: The COGCC implements several environmental regulations that provide protection to the Gunnison sage-grouse and its habitat. These regulations generally apply to both Federal and private lands, although they may conflict with Federal regulations in some cases. The COGCC classifies all Gunnison sage-grouse occupied habitat as “Sensitive Wildlife Habitat” that requires operators to: (1) Consult with CPW to evaluate options for minimizing adverse habitat impacts, (2) educate employees and contractors on conservation practices, (3) consolidate new facilities to minimize disturbance, (4) control road access and limit traffic, and (5) monitor wells remotely when possible. The COGCC also designates lek areas as “Restricted Surface Occupancy Areas” that requires operators to: (1) Comply with all requirements for “Sensitive Wildlife Habitat” and (2) avoid all new ground-disturbing activities if feasible. The COGCC does not require these protections in unoccupied habitat (COGCC 2014). We discuss COGCC regulations in this final rule (see Factor D, State Laws and Regulations).

(107) *Comment:* Some commenters noted that parcels of 35 ac (14 ha) or more are not exempted from State or county oversight.

Our Response: We include this information in this final rule, and acknowledge that counties have regulatory controls applicable to plus-35

acre development and projects (see Factor D, Local Laws and Regulations).

(108) *Comment:* Some commenters suggested that a PECE analysis should be conducted.

Our Response: Our Policy for Evaluation of Conservation Efforts (PECE) is used by the Service when making listing decisions under the Act. It established criteria for determining when we can consider in our listing determination future formalized conservation efforts that have not yet been implemented, or have been implemented, but have not yet demonstrated whether they are effective at the time of the listing decision. Numerous conservation actions have already been implemented for Gunnison sage-grouse, and these efforts have provided and will continue to provide conservation benefit to the species. These implemented efforts are considered in the appropriate section of this rule. Additionally, there are recently formalized future conservation efforts that intend to provide conservation benefits to the Gunnison sage-grouse; some of which have not been fully implemented or shown to be effective. A PECE analysis was conducted by the Service for these conservation efforts that are too recent to have demonstrated effectiveness as of this listing determination. This is described further under Conservation Programs and Efforts Related to Habitat Conservation. Efforts that are considered regulatory are considered under Factor D of this rule.

(109) *Comment:* Two commenters stated that the BLM and USFS must modify all existing leases and permit allotments in Gunnison sage-grouse habitat to incorporate enforceable terms and conditions to protect the species.

Our Response: Current BLM RMPs and USFS LRMPs provide some regulatory protection for the species. Changes to grazing allotment management have occurred, consistent with existing RMPs, over the past 10 years as permits have been revised or renewed. The extent to which appropriate measures to reduce or eliminate other threats to the species have been incorporated into planning documents or are being implemented, varies across the species' range and will likely continue to evolve as a result of BLM's on-going revision of several RMPs in the species' range and its planned landscape-level, targeted RMP amendments for the conservation of Gunnison sage-grouse on BLM-administered public lands in Colorado and Utah (see Factor D, Federal Laws and Regulations).

(110) *Comment:* Some commenters noted that although conservation easements are voluntary, they are legally binding once they have been recorded; therefore, they may offer regulatory protection. One commenter stated that voluntary conservation measures do not constitute adequate regulatory mechanisms if they are not enforceable and are not rangewide.

Our Response: We consider conservation easements to be an effective regulatory tool for the conservation of Gunnison sage-grouse, to the extent that they permanently limit or restrict land uses for identified conservation values and purposes and prevent long-term or permanent habitat loss (see Factor D, Other Regulatory Mechanisms: Conservation Easements). Other conservation efforts such as the CCA and CCAA are not considered regulatory mechanisms; and are therefore evaluated in Factor A, Conservation Programs and Efforts Related to Habitat Protection.

(111) *Comment:* One commenter suggested that the Land and Water Conservation Fund could be used to acquire Gunnison sage-grouse habitat.

Our Response: We agree that this would be a reasonable expenditure for the Land and Water Conservation Fund. However, there is a backlog of Federal land acquisition needs, estimated at more than \$30 billion, which could impede timely use of the Fund for this purpose.

(112) *Comment:* One commenter asserted that conservation agreements are a violation of Federal and State constitutions.

Our Response: Conservation agreements have been successfully used by Federal and State agencies for several years to improve the status of many wildlife species and their habitats; we are not aware of any instances where they have been found to be unconstitutional, nor do we have any reason to believe that they are unconstitutional.

(113) *Comment:* Several commenters stated that oil and gas companies may cease operations if the Gunnison sage-grouse is listed or critical habitat is designated for the species. Some commenters asserted that they have been unable to lease their mineral rights as a result of the anticipated listing of the species. Several commenters also noted that a large percentage of county revenues in Dolores and Montezuma Counties are from oil and gas activities.

Our Response: While restrictions may be placed on various types of development that are subject to consultation under section 7 of the Act (on Federal lands or with Federal

permitting or funding), the Service does not intend to preclude mineral or fossil fuel extraction as a result of listing or designating critical habitat. As noted in our response to comment 106, the COGCC implements several environmental regulations on both Federal and private lands that provide some protection to the Gunnison sage-grouse and occupied habitat. The BLM generally requires conservation measures on leases it issues. We may also seek project modifications during section 7 consultations to benefit Gunnison sage-grouse.

(114) *Comment:* Some commenters suggested that wind energy development should be allowed to proceed.

Our Response: The Endangered Species Act contains provisions to allow development projects to go forward even if they are within critical habitat or could result in take of a listed species, if those projects are done in accordance with sections 7 and 10 of the Act. For a discussion of wind energy development as a threat to the species, see discussion of Renewable Energy Development in Factor A.

(115) *Comment:* Some commenters expressed concern that potash mining in Gunnison sage-grouse habitat may cease operations if the species is listed or critical habitat designated. RM Potash expressed concerns that listing may delay their project (Thorson 2013).

Our Response: Potash exploration is planned on BLM lands within Gunnison sage-grouse unoccupied habitat in San Miguel and Dolores Counties. The BLM requires operators to adopt conservation efforts specified in the RMP for this area. These conservation efforts are required with or without listing the species under the Act. When the species is listed and critical habitat is designated, section 7 consultation will also be required. The amount of time necessary to complete a section 7 consultation will vary depending on the complexity of the project and the anticipated level of impacts to the species. In this final rule we consider the development of leasable minerals such as potash a low threat to the species (see Factor A, Mineral Development).

(116) *Comment:* Two commenters stated that oil and gas development threatens some Gunnison sage-grouse populations in San Miguel County.

Our Response: Approximately 13 percent of occupied habitat within the San Miguel Basin population has authorized Federal leases for oil and gas development; production is currently occurring on approximately five percent of this lease area. Currently, 25 gas wells

are active within occupied habitat and 18 additional active wells are immediately adjacent to occupied habitat. All of these wells are in or near the Dry Creek subpopulation. In this final rule we consider the development of leasable minerals such as oil and gas a low threat to the species (see Factor A, Mineral Development).

(117) *Comment:* Two commenters suggested that energy companies could contribute money for Gunnison sage-grouse conservation.

Our Response: Energy companies that pursue development in Gunnison sage-grouse habitat must follow stipulations provided in the applicable BLM RMP (if Federal minerals are involved) and comply with applicable COGCC regulations. The annual costs associated with required conservation efforts represent a contribution by energy companies.

(118) *Comment:* One commenter suggested that energy development is not a threat to the Gunnison sage-grouse because: (1) There is not adequate information to indicate that renewable energy development is a threat, and (2) impacts from non-renewable energy development are very localized.

Our Response: We do not consider renewable energy development to be a threat to the species at this time (see Factor A, Renewable Energy Development). As noted in our responses to comment 116, we consider the development of non-renewable energy (leasable minerals) a low threat to the species (see Factor A, Mineral Development).

(119) *Comment:* One commenter asked if power companies will be able to clear sagebrush under their power lines.

Our Response: The Endangered Species Act contains provisions to allow projects to go forward even if they are within habitat, critical habitat or could result in take of a listed species, if those projects are done in accordance with sections 7 and 10 of the Act. Listed species, both within and outside of critical habitat, are protected from take, which includes harming (e.g., shooting, killing, trapping, collecting) and harassing individual animals. Incidental take that may result from, but is not the purpose of, otherwise legal activities without a Federal nexus may be allowed with a permit available from the Service under section 10 of the Act. Pursuant to section 7 of the Act, Federal agencies are also required to consult with the Service regarding any action authorized, funded, or carried out by the agency that may affect a listed species, both within and outside of critical habitat, to ensure that the Federal action does not

jeopardize the existence of any listed species. Sagebrush clearing under power lines would likely need to be addressed, and effects minimized, through section 7 or 10 of the Act.

(120) *Comment:* One commenter suggested that leks in areas of energy development be relocated.

Our Response: Relocating leks is likely not in the best interest of the species. Sage-grouse often will continue to return to altered breeding habitats including leks, nesting areas, and early brood-rearing areas due to the species' strong site fidelity, despite past nesting or productivity failures (Rogers 1964, pp. 35–40; Wiens and Rotenberry 1985, p. 666; Young 1994, p. 42; Lyon 2000, p. 20; Connelly *et al.* 2004, pp. 3–4–3–6; Holloran and Anderson 2005, p. 747). Broad-scale characteristics within surrounding landscapes influence habitat selection, and adult Gunnison sage-grouse exhibit a high fidelity to all seasonal habitats, resulting in low adaptability to habitat changes. A study of greater sage-grouse concluded that strong site fidelity makes natural recolonization slow and that anthropogenic translocations into areas with no resident populations are unlikely to succeed (Doherty 2008, pp. 80–81). We believe that this conclusion applies to the Gunnison sage-grouse as well because it exhibits similar site fidelity characteristics.

(121) *Comment:* One commenter stated that information regarding impacts from energy development is based on studies of greater sage-grouse rather than Gunnison sage-grouse.

Our Response: There is more information available specific to greater sage-grouse due to the fact that Gunnison sage-grouse was not recognized as a distinct species until 2000, which means only 14 years of species-specific research is potentially available. The greater sage-grouse also has a much broader range, with several states monitoring and managing the species. The life history and ecology of the two species are very similar, therefore, with minimal information available regarding impacts to Gunnison sage-grouse from energy development, it is reasonable to also consider impacts to greater sage-grouse from energy development when determining whether or not this development is a threat to the Gunnison sage-grouse. In this final rule we do not consider renewable energy development to be a current threat to the species rangewide; we consider non-renewable energy development to be a threat of low magnitude to Gunnison sage-grouse (see Factor A, Mineral Development and Renewable Energy Development).

(122) *Comment:* One commenter asserted that the Federal government has put an end to oil and gas drilling throughout the range of the Gunnison sage-grouse.

Our Response: Of approximately 22,000 ha (54,000 ac) leased by BLM within Gunnison sage-grouse habitat in Colorado, 38 percent are currently in production, with 67 active wells. In Utah, approximately 1,100 ha (2,700 ac) are leased within Gunnison sage-grouse habitat, with none currently in production. On non-Federal lands there are five active wells in Colorado and three active wells in Utah (Industrial Economics, Inc. 2013, p. 5–4). Since 2005, the BLM has temporarily withheld new oil and gas leases from sales throughout occupied Gunnison sage-grouse habitat in Colorado. However, leases can be sold on unoccupied habitat, and oil and gas development continues on private lands.

(123) *Comment:* Several commenters stated that voluntary conservation measures and local regulations should be fully considered.

Our Response: We agree. Local regulations and voluntary conservation measures such as conservation easements, CCAAs, and CCAs provide formal protection for the Gunnison sage-grouse. We recognize that such efforts contribute to the conservation of Gunnison sage-grouse. Under Factor D we evaluate whether threats to the Gunnison sage-grouse are adequately addressed by existing regulatory mechanisms, including local regulations, conservation easements, State regulations, and Federal regulations. CCAAs and CCAs are discussed under Factor A, Conservation Programs and Efforts Related to habitat Protection.

(124) *Comment:* Several commenters stated that the DPS analysis needs to be described in more detail for the seven Gunnison sage-grouse populations.

Our Response: The term “distinct population segment” (DPS) is included in the definition of species in Section 3(16) of the Act, which describes a DPS as any species of vertebrate fish or wildlife which interbreeds when mature. We have a policy that guides our consideration of DPS issues. In addition to full taxonomic species and subspecies, a DPS of any vertebrate species is eligible for consideration for purposes of listing, delisting, or reclassifying. The authority to list a DPS is to be used sparingly and only when the biological evidence indicates that such action is warranted. In order to be considered a DPS, a population must be both discrete and significant. If a population segment is discrete and

significant, it can be evaluated with regard to whether it is endangered or threatened. This analysis is different from an SPR (Significant Portion of the Range) analysis. We considered the entire range of the Gunnison sage-grouse in our listing evaluation and found that it warranted listing throughout its range; therefore, there was no need to evaluate individual population segments for consideration as a DPS. In addition, we do not believe any biological evidence warrants the listing of any DPS.

(125) *Comment:* Several commenters stated that the proposed rules rely too much on the use of linguistically uncertain or vague wording to support their conclusions.

Our Response: Natural sciences, including wildlife biology, typically do not deal in absolutes. Studies seldom evaluate all members of a species or address all possible variables. Consequently, conclusions often include wording to address this uncertainty. Tools such as adaptive management can strengthen the decision-making process by incorporating new information and adjusting decisions accordingly. This has occurred with the Gunnison sage-grouse—as more information has become available, we have adjusted and refined our recommendations from the proposed to the final rule.

(126) *Comment:* One commenter stated that if a stressor is not a threat; the regulatory mechanisms associated with that stressor cannot be considered a threat.

Our Response: We agree. For example, if hunting is not considered a threat, then the regulations associated with hunting would not be considered inadequate. In other instances, it may not be possible to adequately address a threat through regulatory mechanisms (e.g., small population size, disease, climate change). We also recognize that regulatory mechanisms may help reduce impacts of a particular threat (e.g., residential development in Gunnison County), and yet not fully address this or other threats to the species.

(127) *Comment:* Two commenters asserted that tribal concerns have not been addressed.

Our Response: We have considered tribal concerns in this final rule. The Service underwent a Government to Government consultation with the Ute Mountain Ute Tribe regarding the Species Management Plan developed for the tribal-owned Pincrest Ranch. This topic is discussed in detail in Factor A (Conservation Programs and Efforts) of this final rule.

(128) *Comment:* Some commenters asserted that initial town hall meetings

were not conducted properly because no public meetings were held in Montezuma County, there was a faulty sound system, too short of a time-frame for the meeting, poor coordination, and some comments were not recorded.

Our Response: No public meetings were held in Montezuma County because no critical habitat was proposed in that county, nor is the species known to occur in that area. We apologize to anyone who experienced difficulties in hearing the discussions, did not feel that adequate time was provided, or felt there was poor coordination between the Service and local governments. In November, 2013, additional public hearings were held in Gunnison and Montrose, Colorado; and in Monticello, Utah to ensure that we provided adequate opportunity for public comment to occur through our hearing process. In addition, written comments were accepted during the reopened comment periods. These processes are discussed in Previous Federal Actions in this final rule.

(129) *Comment:* Two commenters asserted that the Service's decision-making process for listing is influenced by the International Union for Conservation of Nature (IUCN).

Our Response: The IUCN does not influence our decision-making process. We provided information on IUCN's ranking of the species for background only; these assessments are not factored into our analysis or listing determination in this rule. We make this clarification in this final rule (see Additional Special Status Information).

(130) *Comment:* One commenter suggested that the RCP not be considered in the listing decision because of its questionable legality and methodology.

Our Response: We believe that the RCP used sound methods which constituted the best available information at the time. The RCP specifically states that it is not a legal or regulatory document (GSRSC 2005, p. 1). Accordingly, we do not consider it a regulatory mechanism, but do consider it in Factor A as a Conservation Program and Effort. The plan was developed cooperatively by the BLM, CPW, NPS, NRCS, USFS, the Service, and UDWR. It was intended to supplement local conservation plans and provide additional guidance to aid in conservation of the Gunnison sage-grouse. New research and monitoring data has been collected since the plan was written; however, we still regard this as a valuable document. In many instances it provides the best available information regarding habitat requirements, distribution and

abundance, threats, and current conservation strategies for the species.

(131) *Comment:* Some commenters recommended that a range management school be created to address Gunnison sage-grouse and other issues.

Our Response: In 2006, the Gunnison County Stockgrowers' Association, supported by a Grazing Lands Conservation Initiative Grant, organized a training workshop, called Range Management School, for 37 participants including private ranchers, permittees of Federal grazing allotments, Federal land managers, and other interested parties. We support this type of educational program.

(132) *Comment:* Two commenters suggested that a classification of "threatened" is a better approach than a classification of "endangered."

Our Response: Based upon the analysis of additional data and new information received during the comment period, we have concluded that "threatened" is the appropriate determination. Our analysis and a detailed explanation for this determination are presented in this final rule (see Determination).

(133) *Comment:* One commenter stated that snowmobiling does not conflict with lek activities because snowmobiling season ends before lek activities begin and snowmobiling requires snow depths adequate to bury sagebrush.

Our Response: Snowmobiling was evaluated as a recreational activity under Factor E in the proposed rule to list the species. We cited several sources that identified snowmobiles as one form of recreation that may be of concern. In this final rule we conclude that recreational activities in general are not a threat at a rangewide or population level, but could impact individuals at the local level (see Factor B).

(134) *Comment:* Two commenters suggested that overutilization for scientific research may be a factor in Gunnison sage-grouse declines.

Our Response: We describe mortality risks from scientific research in the proposed and final rules to list the species and conclude that the associated mortality rate is low (two percent) and is not a threat at the population or species level (see Factor B).

(135) *Comment:* One commenter asserted that chemicals used in households and farming have affected Gunnison sage-grouse habitat more than other factors.

Our Response: We evaluate the effects of pesticides, contaminants associated with non-renewable energy development, and accidental spills associated with pipelines and

transportation corridors in this final rule. We conclude that none of these posed a threat to the species (see Factor E, Pesticides and Herbicides).

(136) *Comment:* One commenter stated that Gunnison sage-grouse are in an extinction vortex.

Our Response: "Extinction vortex" is a modeling term that describes the process in a declining population where greater rates of decline occur as the population falls below a minimum viable number and approaches extinction. This final rule evaluates population trends across the range of the Gunnison sage-grouse. We determined that this species is threatened (i.e., likely to become an endangered species within the foreseeable future throughout all of its range). However, we do not believe that the species is at this time in an "extinction vortex," which implies that extinction is inevitable.

(137) *Comment:* One commenter stated that the number of off-highway vehicle (OHV) permits issued is not a good indication of the level of OHV use.

Our Response: The proposed and final rules note that the number of annual OHV registrations in Colorado increased from approximately 12,000 in 1991 to approximately 131,000 in 2007 (see Factor E, Recreation). This information is provided simply to note that OHV activity has increased. Although other factors also should be considered in determining the level of use by OHVs, an increase of more than an order of magnitude in registrations from 1991 to 2007 indicates that the level of use increased during that time period. We conclude that recreation does not pose a rangewide threat to the species, although it has the potential to cause individual or local impacts.

(138) *Comment:* One commenter stated that aircraft-wildlife strikes pose a risk to aviation.

Our Response: We are not aware of any studies or information demonstrating that Gunnison sage-grouse collisions with aircraft have occurred or are a concern.

(139) *Comment:* One commenter stated that a recovery plan is needed.

Our Response: Recovery Plans are typically drafted after a species is listed and provide guidance for recovery of threatened and endangered species and the ecosystems upon which they depend. Section 4(f)(1) of the Act requires the Service to develop and implement these plans unless a plan will not promote the conservation of a species. Recovery plans should include: Management actions to conserve the species; objective, measurable criteria for determining when a species can be

removed from the list; and an estimate of the time and cost required to achieve recovery. We anticipate commencing a recovery planning process in the near future. Until that time, we are including a conservation strategy (see Conservation Measures for Gunnison Sage-Grouse Recovery) in this rule that will provide guidance for conservation efforts in the interim.

(140) *Comment:* Several commenters noted specific ongoing projects or programs that improve Gunnison sage-grouse habitat.

Our Response: We considered the projects and programs noted by the commenters in making our listing determination and finalizing this rule. Under Factors A and D in the proposed and final rules to list the species, we describe many of the conservation measures including local, State and Federal laws and regulations, conservation easements, the Gunnison Basin CCA, and enrollment in the Colorado CCAA that have been undertaken to improve or protect Gunnison sage-grouse habitat.

(141) *Comment:* Some commenters suggested that the Service collaborate with the Colorado Farm Bureau (CFB) in Gunnison sage-grouse management.

Our Response: We welcome input and participation from the CFB and other organizations. We received a comment letter from CFB that encouraged continued collaboration between the Service, private landowners, local and state governments, and others. We agree that working cooperatively with interested parties will aid in conservation and recovery of the Gunnison sage-grouse.

(142) *Comment:* One commenter stated that when landowners enroll lands in the Conservation Reserve Program (CRP) they often stop maintaining ponds and wet meadows to the detriment of Gunnison sage-grouse.

Our Response: We are not aware of any information regarding the extent of ponds and wet meadows lost following enrollment in the CRP. We consider enrolled lands, particularly those enrolled under the CRP State Acres for Wildlife Enhancement initiative, to improve Gunnison sage-grouse habitat in most cases. The CRP is implemented by the Farm Service Agency and promotes the conversion of environmentally sensitive land to long-term vegetative cover. The objectives of the program include reduction of soil erosion, protection of water resources, and enhancement of wildlife habitat. Approximately 23,000 ha (57,000 ac) of Gunnison sage-grouse occupied habitat are currently enrolled in the CRP

(Industrial Economics, Inc. 2013, p. 4–5).

(143) *Comment:* One commenter stated that wind farms are compatible with CRP, and wildlife protection.

Our Response: The compatibility of wind farms with CRP as they relate to Gunnison sage-grouse, and wildlife protection would vary for each site, depending on the protective measures in place for wildlife, the location and number of turbines, the type of vegetative cover, and other variables.

(144) *Comment:* One commenter stated that no explanation was provided for why Gunnison sage-grouse are no longer found in Arizona and New Mexico.

Our Response: We note in the proposed and final rules that a description of the species' historical distribution was provided in the 2010 12-month finding. In the 12-month finding, we state that much of what was once Gunnison sage-grouse habitat was lost prior to 1958 (75 FR 59808, September 28, 2010). This included habitat loss throughout Arizona and New Mexico, as well as portions of Utah and Colorado. We summarize this information in the Background and Factor A sections of this final rule.

(145) *Comment:* One commenter asserted that there is no evidence of Gunnison sage-grouse movement from Gunnison Basin to other populations.

Our Response: Both the Cerro Summit-Cimarron-Sims Mesa and Crawford populations are approximately 2 km (1.2 mi) from the Gunnison Basin population at their nearest points, which is well within movement distances documented for Gunnison sage-grouse. Sage-grouse require a diversity of seasonal habitats and are wide-ranging; therefore, they are capable of making large seasonal movements (Connelly *et al.* 2000a). Preliminary data in the Gunnison Basin documented bird movements as great as 56 km (35 mi) (Phillips 2013, p. 4). Most populations are currently geographically isolated, with low amounts of gene flow between populations. However, genetic analysis indicated that a recent migrant came to the Crawford population from the Gunnison Basin population; historically, populations were connected through more contiguous areas of sagebrush habitat (Oyler-McCance *et al.* 2005).

(146) *Comment:* One commenter recommended that we distinguish between smaller distribution power lines and larger transmission power lines when assessing impacts and planning mitigation.

Our Response: This final rule states that depending on the infrastructure

design, size, location, and other factors, powerlines can directly affect greater sage-grouse by posing a collision and electrocution hazard (Braun 1998, pp. 145–146; Connelly *et al.* 2000a, p. 974) and can have indirect effects by decreasing lek recruitment (Braun *et al.* 2002, p. 10; Walker *et al.* 2007a, p. 2,644), increasing predation (Connelly *et al.* 2004, p. 13–12), fragmenting habitat (Braun 1998, p. 146), and facilitating the invasion of exotic annual plants (Knick *et al.* 2003, p. 612; Connelly *et al.* 2004, p. 7–25) (see Factor A, Powerlines). However, we have no information to precisely measure how powerlines and transmission lines vary in design or distribution across the range of Gunnison sage-grouse, and how those effects might vary across time and space.

(147) *Comment:* One commenter asserted that the proposed rules dismissed information provided by CPW.

Our Response: In the proposed and final rules, we consider all information provided by CPW, and reference that information as appropriate throughout the rules.

(148) *Comment:* One commenter recommended citing Davis (2012) regarding nest success.

Our Response: In this final rule (see Factor E, Effective Population Size and Population Viability Analyses), we include a thorough discussion and evaluation of Davis's (2012) findings, including observed differences in nest success between populations.

(149) *Comment:* Several commenters stated that we should not interfere in CPW's management of Gunnison sage-grouse.

Our Response: We recognize the proactive management of Gunnison sage-grouse by CPW and continue to work with this agency for the species' conservation. However, our analysis in this final rule indicates that Gunnison sage-grouse meets the definition of a threatened species; therefore, we must list it under the Act.

(150) *Comment:* One commenter noted that historical Gunnison sage-grouse habitat on BLM land in the Sims Mesa area has been severely damaged by sagebrush removal.

Our Response: Sagebrush removal on Sims Mesa may have contributed to the one known lek there being currently inactive. Sage-grouse have an obligate relationship with sagebrush. The original distribution of sage-grouse closely followed that of sagebrush. Loss, fragmentation, and degradation of this habitat is a major threat and a primary reason for listing the species and

designating critical habitat. If alteration of sagebrush habitat continues, remnant populations may become extirpated.

(151) *Comment:* One commenter noted that there is not adequate data available to determine whether recent declines of Gunnison sage-grouse observed by Davis (2012) in the Gunnison Basin are short-term population fluctuations or the beginning of a long-term decline.

Our Response: We agree. This concern supports the importance of continued monitoring and conservation of Gunnison sage-grouse populations. This study is discussed and evaluated in detail in Factor E of this final rule. We believe, however, that the threat from residential development in the Gunnison Basin will increase in the future. Habitat fragmentation and disturbance from new roads, powerlines, fences, and other infrastructure are also likely to increase (see Factor A). Additionally, climate change is likely to increase the threats from drought and West Nile Virus in the future (discussed further in Factors A, C, and E). Thus, these future threats must be considered along with the results of the Davis (2012) study.

(152) *Comment:* One commenter asked if grazing will be considered “take.”

Our Response: Whether a particular activity will result in “take” is determined on a case-by-case basis. Grazing practices that could result in take can be addressed through ESA section 7 or section 10 processes as applicable, including appropriate review under the terms of the Gunnison Basin Candidate Conservation Agreement.

(153) *Comment:* Some commenters noted that all of the affected county governments have taken the following actions:

- Participation in a Memorandum of Understanding,
- Signatories to the Conservation Agreement,
- Formally committed to adopting a Habitat Prioritization Tool, which will better predict preferred habitat for the species, and
- Formally committed to updating and adopting an amended Rangewide Conservation Plan.

Our Response: We considered this information in this final rule (see Factor D, Local Laws and Regulations).

(154) *Comment:* Some commenters asserted that many of the peer review comments do not support listing.

Our Response: We requested comments from appropriate and independent individuals with scientific expertise based on their review of the

proposed rules to list the Gunnison sage-grouse and to designate critical habitat for the species. We received numerous comments back from these individuals; some in agreement, some disagreements, and many suggestions for improving the proposed rules.

Substantive comments are discussed above in the Peer Reviewer Comment section. We considered all of these comments and incorporated many of their suggestions into this final rule.

(155) *Comment:* One commenter expressed concern that hang gliding and paragliding could be impacted by listing.

Our Response: In this final rule, we conclude that recreational activities are not a threat at a rangewide or population level, but could impact the species at a local level (see Factor E, Recreation). Nevertheless, for those projects and activities with a Federal nexus, project and activity modifications may be requested by the Service through the section 7 consultation process to limit impacts on Gunnison sage-grouse, as necessary.

(156) *Comment:* One commenter noted that most of the mineral ownership is severed from surface ownership within the range of the Gunnison sage-grouse.

Our Response: In this final rule we note that the BLM has regulatory authority for oil and gas leasing on Federal lands and on private lands with split-estate, or Federal mineral estate (see Factor D, Federal Laws and Regulations).

Summary of Factors Affecting the Species

Section 4 of the Endangered Species Act (16 U.S.C. 1533), and its implementing regulations at 50 CFR part 424, set forth the procedures for adding species to the Federal Lists of Endangered and Threatened Wildlife and Plants. Under section 4(a)(1) of the Act, we may list a species based on any of the following five factors: (A) The present or threatened destruction, modification, or curtailment of its habitat or range; (B) overutilization for commercial, recreational, scientific, or educational purposes; (C) disease or predation; (D) the inadequacy of existing regulatory mechanisms; and (E) other natural or manmade factors affecting the species' continued existence. Listing actions may be warranted based on any of the above threat factors, singly or in combination.

Below, we carefully assess the best scientific and commercial information available regarding the past, present, and future threats to Gunnison sage-grouse. We consider all such

information in analyzing the five factors identified in section 4(a)(1) of the Endangered Species Act to determine whether Gunnison sage-grouse meets the definition of an endangered or threatened species.

A. The Present or Threatened Destruction, Modification, or Curtailment of Its Habitat or Range

In this section, we evaluate various factors influencing the decline of sagebrush and important sage-grouse habitats. The term *habitat decline* includes any quantitative or qualitative degradation of habitat by area, structure, function, or composition (Noss *et al.* 1995, pp. 2, 17). In this rule, we collectively refer to habitat loss, degradation, and fragmentation as ‘habitat decline’. There are varying interpretations of the term habitat decline, and various methods for measuring or evaluating it. In this rule, we apply the following general concepts and definitions to our analysis. Habitat loss or destruction (such as sagebrush conversion) includes the permanent or long-term reduction of habitat and generally occurs at smaller scales. Habitat degradation includes the reduction of habitat quality or characteristics and generally occurs at smaller scales. Habitat fragmentation, or the breaking apart of contiguous habitat, occurs at larger or landscape scales, often as the result of cumulative loss and degradation of habitat over space and time. In this final rule, we provide information indicating each of these processes has occurred across Gunnison sage-grouse range, though those processes may vary over time and space. Consequently, effects at the individual, population, and species levels due to habitat decline are variable and not always certain.

Habitat loss and fragmentation are recognized as primary causes of the decline in abundance and distribution of sage-grouse across western North America (Rogers 1964, pp. 13–24; Braun 1998, entire; Schroeder *et al.* 2004, p. 371), and in Gunnison sage-grouse in Colorado, Utah, and across their former range (Oyler-McCance *et al.* 2001, p. 330; GSRSC 2005, p. 149; Wisdom *et al.* 2011, pp. 465–469). Gunnison sage-grouse depend on sagebrush for their survival and persistence, and the historic and current distribution of the Gunnison sage-grouse closely matches that of sagebrush (Patterson 1952, p. 9; Braun 1987, p. 1; Schroeder *et al.* 2004, p. 364, and references therein). Habitat fragmentation resulting from human development patterns is especially detrimental to Gunnison sage-grouse because of their dependence on large

expanses of sagebrush (Patterson 1952, p. 48; Connelly *et al.* 2004, p. 4–1; Connelly *et al.* 2011a, p. 72) and more contiguous sagebrush habitats (Rogers 1964, p. 19; Wisdom *et al.* 2011, pp. 452–453). In addition, female Gunnison and greater sage-grouse exhibit strong site fidelity to nesting locations (Connelly *et al.* 1988; Young 1994; Lyon 2000, Connelly *et al.* 2004, Holloran and Anderson 2005, Thompson 2012). Sage-grouse often will continue to return to altered breeding habitats (leks, nesting areas, and early brood-rearing areas), despite any past failures in nesting or productivity (Rogers 1964, pp. 35–40; Wiens and Rotenberry 1985, p. 666; Young 1994, p. 42; Lyon 2000, p. 20, Connelly *et al.* 2004, pp. 3–4 to 3–6; Holloran and Anderson 2005, p. 747). Consequently, there may be lags in the response of sage-grouse to development or habitat changes, similar to those observed in other sagebrush obligate birds (Harju *et al.* 2010, entire; Wiens and Rotenberry 1985, p. 666).

The distribution of sage-grouse habitat is naturally disconnected due to the presence of unsuitable habitats such as forests, deserts, and canyons across the landscape (Rogers 1964, p. 19). However, the onset of Euro-American settlement in the 1800s resulted in significant human alterations to sagebrush ecosystems throughout North America, primarily as a result of urbanization, agricultural conversion, and irrigation projects (West and Young 2000, pp. 263–265; Miller *et al.* 2011, p. 147). Areas in Colorado that supported basin big sagebrush were among the first sagebrush community types converted to agriculture because their soils and topography are well-suited for agriculture (Rogers 1964, p. 13). Decreases in the abundance of sage-grouse paralleled the loss of range (Braun 1998, pp. 2–3), and a gradual but marked decrease in sage-grouse distribution and numbers in Colorado had begun around 1910 (Rogers 1964, pp. 20–22). Our listing decision is based on the current status of Gunnison sage-grouse and the current and future threats to the species and its habitat. However, the loss of historical range and decline in abundance, and the associated causes of those declines, have contributed to the species' current precarious status. Further, historical information can be evaluated to help forecast how populations and the species may respond to current and future threats.

Based on historical records, museum specimens, and potential sagebrush habitat distribution, the potential historic range of Gunnison sage-grouse was estimated to be 21,376 square miles,

or 13,680,590 ac (GSRSC 2005, pp. 32–35, as adapted from Schroeder *et al.* 2004, entire). This range included parts of central and southwestern Colorado, southeastern Utah, northwestern New Mexico, and northeastern Arizona (Schroeder *et al.* 2004, pp. 368, 370). However, only a portion of this historical range would have been occupied at any one time. The species' estimated current range is 1,822 square miles, or 1,166,075 ac, in central and southwestern Colorado, and southeastern Utah (Figure 1) (GSRSC 2005, pp. 32–35, as adapted from Schroeder *et al.* 2004, entire). Based on these figures, the species' current range represents approximately 8.5 percent of its historical range (GSRSC 2005, p. 32). Similarly, Schroeder *et al.* (2004, p. 371) estimated the species' current overall range to be 10 percent of potential presettlement habitat (prior to Euro-American settlement in the 1800s). As estimated in our final rule to designate critical habitat for Gunnison sage-grouse published elsewhere in today's **Federal Register**, the species' current potential range includes an estimated 1,621,008 ac in southwestern Colorado and southeastern Utah, comprised of 923,314 ac (57 percent) of occupied habitat and 697,694 ac (43 percent) of unoccupied habitat. Based on these figures, the current potential range of 1,621,008 ac represents approximately 12 percent of the potential historic range of 13,680,640 ac. The estimates above indicate that approximately 88 to 93 percent of the historical range of Gunnison sage-grouse has been lost since Euro-American settlement. We acknowledge that these estimates are uncertain and imprecise. Nevertheless, the best available information indicates a reduction of Gunnison sage-grouse distribution since Euro-American settlement in the 1800s, with evidence of the loss of peripheral populations and a northward and eastward trend of extirpation (Schroeder *et al.* 2004, pp. 369, 371, and references therein). This contraction in the birds' range indicates the vulnerability of all the populations to extirpation.

In southwestern Colorado, between 1958 and 1993, an estimated 20 percent (155,673 ha (384,676 ac)) of sagebrush was lost, and 37 percent of sagebrush plots examined were fragmented (Oyler-McCance *et al.* 2001, p. 326). Another study estimated that approximately 342,000 ha (845,000 ac) of sagebrush, or 13 percent of the pre-Euro-American settlement sagebrush extent, were lost in Colorado, which included both greater sage-grouse and Gunnison sage-grouse habitat (Boyle and Reeder 2005, p. 3–3).

However, the authors noted that the estimate of historic sagebrush area used in their analyses was conservative, possibly resulting in an underestimate of historic sagebrush losses (Boyle and Reeder 2005, p. 3–4). Within the range of Gunnison sage-grouse, the principal areas of sagebrush loss were in the Gunnison Basin, San Miguel Basin, and areas near Dove Creek, Colorado. The authors point out, however, that the rate of loss in the Gunnison Basin was lower than other areas of sagebrush distribution in Colorado. At that time, the Gunnison Basin contained approximately 250,000 ha (617,000 ac) of sagebrush and areas of riparian aspen forest, mixed-conifer forest, and oakbrush (Boyle and Reeder 2005, p. 3–3). Within the portion of the Gunnison Basin currently occupied by Gunnison sage-grouse, 170,000 ha (420,000 ac) is composed exclusively of sagebrush vegetation types, as derived from Southwest Regional Gap Analysis Project (SWReGAP) landcover data (multi-season satellite imagery acquired 1999–2001) (USGS 2004, entire).

Sagebrush habitats within the range of Gunnison sage-grouse are becoming increasingly fragmented as a result of various changes in land uses and the expansion in the density and distribution of invasive plant species (Oyler-McCance *et al.* 2001, pp. 329–330; Schroeder *et al.* 2004, p. 372). Based on spatial modeling, a variety of human developments including roads, energy development, residential development, and other factors known to cause habitat decline were correlated with historical loss of range and extirpation of Gunnison and greater sage-grouse (Wisdom *et al.* 2011, pp. 465–468). This model indicated that no “strongholds” (secure areas where the risk of extirpation appears low) of occupied range are evident for Gunnison sage-grouse (Wisdom *et al.*, 2011, p. 469). Landscapes containing large and contiguous sagebrush patches and sagebrush patches in close proximity had an increased likelihood of sage-grouse persistence (Wisdom *et al.* 2011, p. 462).

In this final rule, we discuss Wisdom *et al.* (2011, entire) and its conclusions, but do not use the term “stronghold.” Nevertheless, consistent with Wisdom *et al.* (2011, entire) and numerous other studies noted above, we maintain that the persistence of Gunnison sage-grouse is dependent on large and contiguous sagebrush habitats, that human development and disturbance contribute to the decline of this needed habitat, and that such impacts negatively affect the survival and persistence of Gunnison sage-grouse.

The degree to which habitat fragmentation prevents a species' movement across the landscape depends, in part, on that species' ability to move large distances and thereby adjust to changes on the landscape. Sage-grouse are wide-ranging and capable of making large seasonal movements, because they require a diversity of seasonal habitats (Connelly *et al.* 2000a, pp. 968–969, and references therein). Movements of Gunnison sage-grouse as great as 56 km (35 mi) have been documented in the Gunnison Basin (Phillips 2013, p. 4). In contrast, the maximum recorded movement distance of Gunnison sage-grouse in the Monticello population is 8.2 km (5.1 mi), associated with winter movement (Ward 2007, p. 15). Prather (2010, p. 70) noted that such behavior may be due to the presence of large areas of piñon-juniper (i.e., less suitable habitats) which bracket currently occupied habitat in the Monticello population area.

Population dynamics of greater sage-grouse in northwestern Colorado functioned at much smaller scales than expected for a species capable of moving large distances (Thompson 2012, p. 256). The majority of juvenile dispersal was intra-population movement (within one breeding population), with only one inter-population movement (between separate breeding populations) observed during one study (Thompson 2012, p. 169). As a result, juvenile recruitment into home breeding ranges ranged between 98 and 100 percent (Thompson 2012, p. 170). Based on observed bird dispersal in that study, gene flow and connectivity can likely be maintained for populations within 5 to 10 km (most dispersals were less than 10 km) and possibly as far as 20 km (the maximum dispersal distance of one of the subpopulations studied) in greater sage-grouse (Thompson 2012, p. 285–286). The populations of greater sage-grouse studied were within areas where birds are known for moving between populations.

Because individual movement patterns likely vary by population and area, their susceptibility to habitat loss and degradation may also differ. We expect that where habitat is already more limited (quantity and quality) and isolated, such as in the six satellite populations, habitat loss and decline will have more serious consequences in terms of population fitness and survival. Where habitat is already severely limited or degraded, or where sage-grouse populations are small, any loss of habitat may impact those populations. In addition, habitat loss impacts are expected to be greater in important and/

or limiting seasonal habitats, such as areas used during moderate to severe winters, or in lekking, nesting, or brood-rearing habitats (GSRSC 2005, p. 161).

The loss of leks or the decline of nesting or brood-rearing habitats can have serious consequences for sage-grouse population viability by reducing reproductive success and recruitment (survival of young to breeding age). Limitations in the quality and quantity of nesting and early brood-rearing habitats, in particular, are especially important because Gunnison sage-grouse population dynamics are most sensitive during these life-history stages (GSRSC 2005, p. G–15). Juvenile recruitment is one of the most important demographic factors influencing or limiting sage-grouse population growth rates and viability (Connelly *et al.* 2004, p. 3–11, GSRSC 2005, p. 173). In a recent demographic and population viability study of Gunnison sage-grouse, juvenile survival was found to be the most influential vital rate in the Gunnison Basin population, which is currently a relatively stable population (Davis 2012).

Brood-rearing habitat must provide adequate cover adjacent to areas rich in forbs and insects to assure chick survival during this period (Connelly *et al.* 2000a, p. 971; Connelly *et al.* 2004, p. 4–11). Late brood-rearing habitats (also referred to as summer-fall habitats) may include riparian areas, wet meadows, and irrigated fields that provide an abundance of forbs and insects for hens and chicks (Schroeder *et al.* 1999, p. 4; Connelly *et al.* 2000a, p. 980). In northwest Colorado, dispersal, migration, and settlement patterns of juvenile greater sage-grouse—factors important to population persistence—were more influenced by limitations associated with local traditional breeding (lek) and brood-rearing areas than by landscape-level vegetation structure and composition (i.e., the spatial distribution and configuration of vegetation types) (Thompson 2012, pp. 317, 341). The same study recommended restoration, creation, and protection of early and late brood-rearing habitats to increase chick survival rates (Thompson 2012, p. 135). The importance of brood-rearing habitat for juvenile survival, recruitment, and hence, population viability of sage-grouse is evident. These key habitats are particularly susceptible to drought (see Factor E, Drought) and predicted climate change effects (The Nature Conservancy 2011, p. 11) (see Climate Change in this Factor A analysis).

As presented above, habitat decline, including loss, fragmentation, and degradation of quality, has known

adverse effects on Gunnison sage-grouse populations. Gunnison sage-grouse depend on sagebrush for their survival and persistence, and the historical and current distribution of the Gunnison sage-grouse closely matches that of sagebrush (Patterson 1952, p. 9; Braun 1987, p. 1; Schroeder *et al.* 2004, p. 364, and references therein). Approximately 88 to 93 percent of the species' former range has been lost since the 1800s (see discussion above), and much of the remaining habitat is degraded or fragmented (Oyler-McCance *et al.* 2001, p. 326; Oyler-McCance *et al.* 2001, pp. 329–330; Schroeder *et al.* 2004, p. 372; Wisdom *et al.*, 2011, p. 469). Future habitat loss will have greater impacts in seasonally important habitats and in smaller populations where available habitat is already limited (GSRSC 2005, p. 161). As described later in this section, many of the factors that result in habitat decline may be amplified by the effects of climate change, thereby influencing long-term population trends. The following sections examine factors that can result in or contribute to habitat decline to evaluate whether they, individually and cumulatively, threaten Gunnison sage-grouse.

Residential Development

In our proposed rule to list Gunnison sage-grouse as endangered (78 FR 2486, January 11, 2013), we determined habitat loss and fragmentation from residential development to be a principal threat to Gunnison sage-grouse conservation. We received numerous comments and new information from the scientific community, government agencies, and other entities related to residential development in the range of Gunnison sage-grouse. Many of the comments we received suggested that our initial analysis incorrectly applied scientific and other information related to residential development and its effects, likely overestimating its threat to the species, particularly in relation to the Gunnison Basin area.

In light of these comments, in this final rule, we reevaluate the threat of residential development to Gunnison sage-grouse. First, we evaluate scientific information related to effects of residential and infrastructural development on sage-grouse and sagebrush habitats in general, including studies specific to Gunnison sage-grouse where available. Second, we discuss human population growth and residential development trends and projections across the broader Rocky Mountain region. Finally, we assess the impact of current and future human population growth and residential development rangewide and within the

individual Gunnison sage-grouse populations. As in the proposed listing rule, much of our analysis here is focused on the current and potential future effects of residential development and habitat loss in the Gunnison Basin, since it contains the vast majority of occupied habitat and Gunnison sage-grouse.

The level of habitat loss due to residential development varies widely across the seven populations of Gunnison sage-grouse. Federal land ownership of occupied habitat in some populations reduces the potential impact of residential development, which largely occurs on private lands. Conversely, portions of occupied habitat in private ownership may predispose some sage-grouse populations to greater impacts due to higher levels of development (GSRSC 2005, p. 160). As described in the following sections, current and future human population growth rates and patterns also vary widely across the species' range. Concentration of residential growth in or near municipal and other areas outside of occupied or suitable habitat will likely avoid or minimize impacts, while rural and exurban development in occupied habitat will likely increase impacts on the species.

Other factors may also affect the impact of residential development on Gunnison sage-grouse populations or habitat. These factors include, but are not limited to, the extent and density of already developed land and existing infrastructure, changes in future patterns of residential growth, new or additional development of infrastructure (e.g., roads, powerlines, irrigation) associated with human population growth, the site-specific quality or quantity of suitable habitat on affected lands, resiliency or sensitivity of the affected sage-grouse population or group of birds, and indirect effects of development such as functional habitat loss due to weed invasion, noise disturbance, and other anthropogenic stressors. Functional habitat loss results from disturbance that changes a habitat's successional state or reduces or removes one or more habitat functions or values; presents physical barriers that preclude use of otherwise suitable areas; or introduces activities that prevent animals from using suitable habitat due to behavioral avoidance.

In evaluating the impact that residential development has on the species, we acknowledge that enrollment in the Candidate Conservation Agreement with Assurances (CCAA) for Gunnison sage-grouse, local regulatory mechanisms, Federal efforts such as the Gunnison

Basin Candidate Conservation Agreement (CCA), and implementation of future conservation easements and similar conservation efforts will, upon effective implementation, likely reduce, but not necessarily preclude, impacts from residential development. However, as described in more detail in *Conservation Programs and Efforts Related to Habitat Conservation* in this Factor A analysis and in *Local Laws and Regulations* in the Factor D analysis, currently available data and information indicates that these conservation efforts do not fully address this and other threats, or are too uncertain with respect to their implementation and effectiveness for us to forecast or evaluate how all of these efforts will individually or collectively influence future residential development in the species' range, the resultant habitat decline, and related impacts on Gunnison sage-grouse.

We base our analysis of residential development primarily on the following available information: (1) Current and future human population growth rates in and around occupied habitat as an indicator of residential development; (2) total available private land area and conservation easement protection (prohibited or restricted residential development) in the context of total occupied habitat; and (3) the current and potential loss of occupied and unoccupied habitats as a result of residential development, and its direct and indirect effects on Gunnison sage-grouse individuals and populations. Broadly, we consider private lands in occupied habitat without conservation easement as being at higher risk of residential development, relative to those lands currently under conservation easement (see Other Regulatory Mechanisms: Conservation Easements in the Factor D analysis). Applying the best available information, these factors depict the intensity and immediacy of impacts due to residential development, and the exposure and anticipated response of Gunnison sage-grouse to that impact.

Effects of Residential Development

Residential development is likely contributing to habitat decline in parts of the range of Gunnison sage-grouse. It was estimated that 3 to 5 percent of all sage-grouse historical habitat in Colorado has been negatively affected by town and urban development (Braun 1998, p. 7). Habitat fragmentation resulting from human development patterns is especially detrimental to Gunnison sage-grouse because of their dependence on large areas of sagebrush (Patterson 1952, p. 48; Connelly *et al.*

2004, p. 4–1; Connelly *et al.* 2011a, p. 72) and more contiguous sagebrush habitats (Rogers 1964, p. 19; Wisdom *et al.* 2011, pp. 452–453). Greater sage-grouse range retraction was linked to patterns of remaining sagebrush habitat and loss due to factors including human population growth and the peripherality of populations (Aldridge *et al.* 2008). Infrastructure such as roads and power lines associated with residential development (urban and exurban) further contribute to habitat decline and other impacts such as increased risk of predation. Those specific effects are discussed elsewhere in this rule, but we recognize the cumulative effects of development and related infrastructure increase the level of impact on Gunnison sage-grouse.

Aldridge developed a landscape-scale spatial model predicting Gunnison sage-grouse nesting probability based on nesting data from the western portion of the Gunnison Basin (Aldridge *et al.* 2012, entire). The study extrapolated the model to the entire Gunnison Basin to predict the likelihood of Gunnison sage-grouse nesting throughout the area (Aldridge *et al.* 2012, p. 403). Results of the model indicated that Gunnison sage-grouse select nest sites in landscapes with a low density of residential development (<1 percent in a 1.5 km [0.9 mi] radii) (Aldridge *et al.* 2012, p. 400). Nest site selection by Gunnison sage-grouse decreased near residential developments, out to approximately 2.5 km (1.6 mi) from any given residential development (Aldridge *et al.* 2012, p. 400). Since early brood-rearing habitat is often in close proximity to nest sites (Connelly *et al.* 2000a, p. 971), impacts to nesting habitat likely also affect nearby brood-rearing habitat (however, individual females with broods may move large distances (Connelly 1982, as cited in Connelly *et al.* 2000a, p. 971)).

Similar to the above findings (and those referenced in Aldridge *et al.* 2008), based on spatial modeling of anthropogenic factors and nest and brood habitat selection, Aldridge (2005, entire) found that nesting greater-sage grouse and broods also tended to avoid urban development areas and other human developments such as roads or cropland, potentially due to predator avoidance behavior. As discussed elsewhere in this rule, there are numerous other studies indicating that the expansion of roads and other human development in occupied habitat can negatively affect sage-grouse (see, e.g., Roads below.)

The RCP (GSRSC 2005, pp. 160–161) hypothesized that residential density in excess of one housing unit per 1.3 km² (0.5 mi²) could cause declines in

Gunnison sage-grouse populations. However, because the analyses that formed the basis for this hypothesis were preliminary and did not take into account potential lags in the response of Gunnison sage-grouse to development (Wiens and Rotenberry 1985, p. 666), the threshold at which impacts are expected could be higher or lower (GSRSC 2005, p. F-3). The resulting impacts are expected to occur in nearly all seasonal habitats, including moderate to severe winter use areas, nesting and brood-rearing areas, and leks (GSRSC 2005, p. 161).

Based on preliminary analysis of radio telemetry, a CPW researcher reported that Gunnison sage-grouse do not totally avoid residences, and that some farmyards and areas with low housing density are used by individual birds (Phillips 2013, p. 8). Further information about this study was provided during the public comment period by CPW, including preliminary results of the distances for successful and unsuccessful nests to the nearest road in Gunnison and Saguache Counties (CPW 2013b, pp. 8–9). CPW has not provided us with these data, however, or a map of the reported locations. We are also uncertain as to what percentage of roads in the study may have been closed to protect nesting Gunnison sage-grouse, which may influence nest survival. Further, this preliminary analysis of CPW's telemetry data has not been peer reviewed. While this information may suggest that individual Gunnison sage-grouse within the Gunnison Basin vary in their response to development, the preliminary nature of the study doesn't allow us to draw any definite conclusions.

Residential development can cause habitat decline both by the direct loss of occupied habitat and by indirect effects (e.g., off-site or functional habitat loss, habitat degradation, loss of unoccupied habitat). We consider both in the analysis that follows, though we assess direct loss from a quantitative perspective and indirect effects more qualitatively.

Indirect Effects of Residential Development

As stated above, we know that indirect effects of development such as functional habitat loss due to weed invasion, noise disturbance, and other

anthropogenic stressors occur, and that these indirect effects act cumulatively with the direct loss of occupied and unoccupied habitats to fragment native sagebrush habitats and increase threats, for example, through an increase in the number and types of predators (see Factor C, Predation). The impact of residential development is also increased by the additional disturbance footprint and the area of species' avoidance of other associated infrastructure such as roads, powerlines, and fences. Because we have no specific information about the level of these impacts, we have evaluated them qualitatively, but we focus the remainder of our analysis on the direct effects of residential development.

Human Population Growth in the Rocky Mountains

Human population growth in the rural Rocky Mountains is driven by the availability of natural amenities, recreational opportunities, aesthetically desirable settings and views, and perceived remoteness (Riebsame *et al.* 1996, p. 396, 402; Theobald *et al.* 1996, p. 408; Gosnell and Travis 2005, pp. 192–197; Mitchell *et al.* 2002, p. 6; Hansen *et al.* 2005, pp. 1899–1901). The increase in residential and commercial development associated with expanding human populations is different from historical land use patterns in the rural Rocky Mountains (Theobald 2001, p. 548). The allocation of land for resource-based activities such as agriculture and livestock production is decreasing as the relative economic importance of these activities diminishes (Theobald *et al.* 1996, p. 413; Sammons 1998, p. 32; Gosnell and Travis 2005, pp. 191–192). Currently, agribusiness occupations constitute approximately 3 percent of the total job base in Gunnison County (Colorado Department of Local Affairs (CDOLA) 2009b, p. 4). Recent conversion of farm and ranch lands to housing development has been significant in Colorado (Odell and Knight 2001, p. 1144). Many large private ranches in the Rocky Mountains, including the Gunnison Basin, are being subdivided into both high-density subdivisions and larger, scattered ranchettes with lots typically greater than 14 ha (35 ac), which encompass a large, isolated house (Riebsame *et al.* 1996, p. 399; Theobald *et al.* 1996, p. 408).

The resulting pattern of residential development in the rural Rocky Mountains is less associated with existing town sites or existing subdivisions, and is increasingly exurban in nature (Theobald *et al.* 1996, pp. 408, 415; Theobald 2001, p. 546). Exurban development is described as low-density growth outside of urban and suburban areas (Clark *et al.* 2009, p. 178; Theobald 2004, p. 140) with less than one housing unit per 1 ha (2.5 ac) (Theobald 2003, p. 1627; Theobald 2004, p. 139). Also, the pattern is one of increased residential lot size and the diffuse scattering of residential lots in previously rural areas with a premium placed on adjacency to federal lands and isolated open spaces (Riebsame *et al.* 1996, p. 396, 398; Theobald *et al.* 1996, pp. 413, 417; Theobald 2001, p. 546; Brown *et al.* 2005, p. 1858). Residential subdivision associated with exurban development causes landscape fragmentation (Gosnell and Travis 2005, p. 196) primarily through the accumulation of roads, buildings, (Theobald *et al.* 1996, p. 410; Mitchell *et al.* 2002, p. 3) and other infrastructure such as power lines (GSRSC 2005, p. 146).

Human Population Growth Across the Range of Gunnison Sage-Grouse

The GSRSC (2005, p. 146) identified current and potential issues affecting Gunnison sage-grouse populations, based on conservation status information, local working group plans, and similar documents. Residential development, and associated habitat loss or degradation, urban development, roads, utility corridors, and fences were all identified as current or potential issues in each of the seven populations.

Human population growth is occurring throughout much of the range of Gunnison sage-grouse. The human population in all Colorado counties within the range of Gunnison sage-grouse has increased by approximately 57.8 percent in the last several decades, since 1985 (Table 2). During the same period, human population growth in Utah counties in Gunnison sage-grouse range increased by about 24.5 percent (Table 3), less than that of Colorado counties. Residential development in the Gunnison sage-grouse range is expected to increase to meet the demand of growing human populations.

TABLE 2—HUMAN POPULATION GROWTH IN COLORADO COUNTIES IN GUNNISON SAGE-GROUSE RANGE, 1985 TO 2012
[Colorado Department of Local Affairs (CDOLA) 2012, entire]

County	Overlap with Gunnison sage-grouse population ^a	1985 Human population	2012 Human population	Human population growth from 1985 to 2012 (%)
Gunnison	Gunnison Basin	10,390	15,475	48.9
Ouray	Cerro Summit-Cimarron-Sims Mesa	2,130	4,530	112.7
San Miguel	San Miguel—Overlap with unoccupied habitat only			
	Monticello-Dove Creek	3,189	7,580	137.7
Hinsdale	San Miguel			
	Gunnison Basin—Overlap with unoccupied habitat only	472	810	71.6
Saguache	Gunnison Basin	4,400	6,304	43.3
	Poncha Pass			
Mesa	Piñon Mesa	88,0121	147,855	68.0
Montrose	Cerro Summit-Cimarron-Sims Mesa	24,389	40,732	67.0
	San Miguel			
Montezuma	Monticello-Dove Creek—Overlap with unoccupied habitat only	19,283	25,437	31.9
Delta	Crawford	23,466	30,436	29.7
Dolores	Monticello-Dove Creek	1,548	1,994	28.8
Chaffee	Poncha Pass	12,349	18,151	47.0
Total .....	.....	189,637	299,304	57.8

^aBased on county overlap with occupied habitat (GSRSC 2005, pp. 54–102) unless noted otherwise.

TABLE 3—HUMAN POPULATION GROWTH IN UTAH COUNTIES IN GUNNISON SAGE-GROUSE RANGE, 1985 TO 2011
[Demographic and Economic Analysis (DEA) 2011, entire]

County	Overlap with Gunnison sage-grouse population ^a	1985 Human population	2011 Human population	Human population growth from 1985 to 2011 (%)
San Juan	Dove Creek-Monticello	12,300	14,954	21.6
Grand	Piñon Mesa—Overlap with unoccupied habitat only	7,200	9,322	29.5
Total .....	.....	19,500	24,276	24.5

^aBased on county overlap with occupied habitat (GSRSC 2005, pp. 54–102) unless noted otherwise.

These trends are expected to continue into the future (GSRSC 2005, p. 150–153). The year 2050 projected human population for the entire Gunnison River Basin (a watershed area spanning multiple counties), which encompasses the majority of Gunnison sage-grouse occupied habitat across all population areas, is expected to be 2.3 times (233 percent) greater than the 2005 population, with Mesa and Montrose Counties being the most populous in that area (Colorado Water Conservation Board (CWCB) 2009, pp. 15, 53). Across the six satellite populations, the human

population in Colorado is forecasted to grow by about 60 percent, with most of this growth (and total number of persons) occurring in Mesa, Montrose, and Delta Counties (Table 4). Similar to the past, future human population growth in Utah counties in Gunnison sage-grouse range is expected to be low, approximately 14 percent by the year 2040, lower than Colorado counties. In some counties, the population growth is projected to occur mainly in urban areas. For example, in Grand County, Utah, and Mesa County, Colorado, significant growth is expected within

the cities of Moab and Grand Junction, respectively. Also, we recognize that in some counties, what appears to be significant growth from the baseline may actually be minimal in terms of total persons added to the population (for example, see Hinsdale County in Table 4). In response to public comments regarding human population growth figures for Gunnison County provided in our proposed listing rule (78 FR 2486, January 11, 2013), we discuss future human population growth for Gunnison County in detail in the following section.

TABLE 4—HUMAN POPULATION FORECAST IN COLORADO COUNTIES IN GUNNISON SAGE-GROUSE RANGE, 2013 TO 2040
[CDOLA 2011, entire]

County	Overlap with Gunnison sage-grouse population ^a	2013 (current) human population	2040 human population forecast	Human population growth from 2013 to 2040 (%)
Gunnison	Gunnison Basin	15,982	22,107	38.3

TABLE 4—HUMAN POPULATION FORECAST IN COLORADO COUNTIES IN GUNNISON SAGE-GROUSE RANGE, 2013 TO 2040—Continued
[CDOLA 2011, entire]

County	Overlap with Gunnison sage-grouse population ^a	2013 (current) human population	2040 human population forecast	Human population growth from 2013 to 2040 (%)
Ouray	Cerro Summit-Cimarron-Sims Mesa.	4,662	6,108	31.0
San Miguel	Cerro Summit-Cimarron-Sims Mesa	8,148	16,426	101.6
	San Miguel—Overlap with unoccupied habitat only.			
Hinsdale	San Miguel	853	1,378	61.6
Saguache	Monticello-Dove Creek.	6,478	9,133	41.0
	Gunnison Basin—Overlap with unoccupied habitat only			
Mesa	Gunnison Basin	150,123	226,263	50.7
Montrose	Poncha Pass.	41,751	75,048	79.8
	Piñon Mesa			
Montezuma	Cerro Summit-Cimarron-Sims Mesa	26,481	42,947	62.2
	San Miguel.			
Delta	Monticello-Dove Creek-Overlap with unoccupied habitat only.	31,741	59,142	86.3
Dolores	Crawford	2,097	3,313	57.9
Chaffee	Monticello-Dove Creek	18,726	30,282	61.7
	Poncha Pass			
Rangewide Total		307,042	492,147	60.3

^a Based on county overlap with occupied habitat (GSRSC 2005, pp. 54–102) unless noted otherwise.

TABLE 5—HUMAN POPULATION FORECAST IN UTAH COUNTIES IN GUNNISON SAGE-GROUSE RANGE, 2013 TO 2040
[DEA 2012, entire].

County	Overlap with Gunnison sage-grouse population ^a	2010 human population	2040 human population forecast	Human population growth from 2013 to 2040 (%)
San Juan	Dove Creek-Monticello	14,746	15,191	3.0
Grand	Piñon Mesa—Overlap with unoccupied habitat only	9,225	12,147	31.7
Rangewide Total		23,971	27,338	14.0

^a Based on county overlap with occupied habitat (GSRSC 2005, pp. 54–102) unless noted otherwise.

In addition to past and projected human population growth, the impact of residential development on Gunnison sage-grouse depends on total private land area in occupied habitat available for development. Substantial Federal land ownership of occupied habitat in the Crawford, Gunnison Basin, Poncha Pass, and portions of the San Miguel Basin populations helps reduce the threat of residential development in these areas. Conversely, large portions of occupied habitat in the Dove Creek-Monticello, Piñon Mesa, Cerro Summit-Cimarron-Sims Mesa, and some portions of the San Miguel populations are in private ownership, making those areas

more vulnerable to residential development and associated impacts (GSRSC 2005, p. 160). Within all Gunnison sage-grouse populations, the area of private land under conservation easement (which generally prohibits subdivision and restricts other residential or agricultural development to defined areas) will help ameliorate impacts from human population growth and residential development that might otherwise occur (see Factor D discussion, Other Regulatory Mechanisms: Conservation Easements).

Below, Table 6 synthesizes future human population growth rates in Gunnison sage-grouse population areas,

total private land area, and conservation easement protection in occupied habitats. As noted above, we focused our analysis on the potential for direct habitat loss in occupied habitats, where negative impacts are more likely to occur. We qualitatively ranked past and forecasted human population growth for area counties in Colorado (based on Tables 2 and 4) and Utah (based on Tables 3 and 5), considering both percent growth and total number of persons. Below, we apply information from Table 6 to determine the impact of residential development to individual Gunnison sage-grouse populations and to the species rangewide.

TABLE 6—HUMAN POPULATION GROWTH RATES AND CONSERVATION EASEMENTS IN GUNNISON SAGE-GROUSE OCCUPIED HABITAT

Gunnison sage-grouse population	Human population growth rates ^a		Total occupied habitat (acres)	Private land in occupied habitat		Private land in occupied habitat under conservation easement ^b		Private land in occupied habitat not under conservation easement		Percentage of total occupied habitat at higher risk of residential development ^c (%)
	Past: 1985 to 2012	Forecast: 2013 to 2040		Acres	%	Acres	Percentage of private land in occupied habitat (%)	Acres	Percentage of private land in occupied habitat (%)	
San Miguel Basin	M	M	101,750	49,492	49	6,961	14.1	42,531	85.9	41.8
Monticello-Dove Creek	L	L	112,543	100,773	90	5,482	5.4	95,291	84.6	84.7
Piñon Mesa	H	H	44,678	31,313	70	15,317	48.9	15,996	51.1	35.8
Cerro Summit-Cimarron-Sims Mesa ...	H	H	37,161	28,218	76	3,484	12.3	24,734	87.7	66.6
Crawford	L	M	35,015	8,481	24	2,005	23.6	6,476	76.4	18.5
Poncha Pass	L	L	27,747	7,893	28	0	0.0	7,893	100.0	28.4
Gunnison Basin	L	L	592,168	178,855	30	40,769	22.8	138,086	77.2	23.3
Rangewide Total			951,062	405,025	43	74,018	18.3	331,007	81.7	34.8

^a Based on a qualitative assessment of past and forecast human population growth for area counties in Colorado (Tables 2 and 4) and Utah (Tables 3 and 5), considering percent growth and total number of persons: H—High; M—Moderate; L—Low.

^b Lohr and Gray (2013, entire).

^c Calculated by dividing acres of “private land in occupied habitat not under conservation easement” by “total occupied habitat.”

Based on the factors presented in Table 6 above, residential development is likely to have the greatest impact on the San Miguel and Cerro Summit-Cimarron-Sims Mesa populations of Gunnison sage-grouse. In the San Miguel Basin population, moderate human population growth has occurred and is projected through the year 2040; and private land comprises about 49 percent of total occupied habitat, of which 14 percent is under conservation easement. This means that approximately 42 percent of total occupied habitat in the San Miguel population area is at higher risk of residential development (Table 6). The rate of residential development in the San Miguel Basin population area increased between 2005 and 2008 but slowed in 2009 (CDOW 2009b, p. 135). However, a 429-ha (1,057-ac) parcel north of Miramonte Reservoir is currently being developed. The CPW reports that potential impacts to Gunnison sage-grouse resulting from this development may be reduced by placing a portion of the property into a conservation easement and the relocation of a proposed major road to avoid occupied habitat (CDOW 2009b, p. 136). A downward trend in the San Miguel population over the last decade or more (Figure 3) indicates it may not have the resilience (see Small Population Size and Structure) to sustain substantial habitat losses. Therefore, residential development is a current and future threat to Gunnison sage-grouse in the San Miguel Basin population.

Likewise, in the Cerro Summit-Cimarron-Sims Mesa area, considerable human population growth has occurred

and is forecast through the year 2040; and private land comprises about 76 percent of total occupied habitat, of which 12 percent is under conservation easement. This means that approximately 67 percent of total occupied habitat in the Cerro Summit-Cimarron-Sims Mesa population area is at higher risk of residential development (Table 6). Scattered residential development has recently occurred along the periphery of occupied habitat in the Cerro Summit-Cimarron-Sims Mesa population (CDOW 2009b, p. 45). Already limited habitat (Table 6) and low population numbers (Figure 3) indicate the Cerro Summit-Cimarron-Sims Mesa population may not have the resilience (see Small Population Size and Structure) to sustain substantial habitat losses. Therefore, residential development is a current and future threat to Gunnison sage-grouse in the Cerro Summit-Cimarron-Sims Mesa population.

Although past and future human population growth in the Poncha Pass population is estimated to be low, and the proportion of land at higher risk of residential development is low (about 28 percent) (see Table 6), other information indicates that residential development is nevertheless a threat to the Poncha Pass population. Residential subdivision continues to be concentrated in the northern part of the Poncha Pass population area where Gunnison sage-grouse occur most, and CPW considers this to be the highest priority threat to this population (CDOW 2009b, p. 124). As noted earlier, where habitat is already severely limited, or where sage-grouse populations are small, any loss of

habitat may impact those populations (GSRSC 2005, p. 161). Due to the pattern of residential development, already limited sagebrush habitat in the area (about 20,000 acres), and critically low population numbers (zero birds counted in 2013; Figure 3), residential development is a current and future threat to the Poncha Pass population of Gunnison sage-grouse.

For the remaining four Gunnison sage-grouse populations, we find that current residential development may impact individual birds or areas of habitat, but is a threat of low magnitude at the population level at the present time. In these areas, past or projected human population growth rates are very low, indicating that residential development will be limited (Monticello-Dove Creek); or private land available for residential development (considering Federal land ownership and conservation easement protection) is limited (Piñon Mesa and Crawford). For these three populations, we also believe that the threat of residential development will remain low in the future. With respect to the Gunnison Basin population, however, as described in more detail below, over half of the 23.3 percent of total occupied habitat that is at higher risk of residential development (see Table 6) is high priority habitat, because it includes seasonally important habitat for the species. The potential loss or degradation of even relatively smaller portions of habitat due to future residential development is a concern, especially if important seasonal habitats are affected, so we believe that threats related to residential development will be higher in the future in the Gunnison

Basin (see Reevaluation of Residential Development in the Gunnison Basin).

The analysis above is focused on the threat of residential development in occupied habitats for Gunnison sage-grouse. However, it is reasonable to assume that residential development will also occur in important but currently unoccupied habitats. These habitats may now or in the future provide dispersal corridors for birds between occupied habitat, subpopulations, or populations; or provide areas for range migration or expansion. The threat of habitat loss or degradation due to residential development in the San Miguel and Cerro Summit-Cimarron-Sims Mesa populations will likely reduce habitat connectivity between satellite populations and potential connectivity between the Gunnison Basin population and satellite populations to the west. The GSRSC (2005, p. 167) identified habitat areas in the San Miguel population that provide potential linkages with the Dove Creek-Monticello population to the west, Piñon Mesa population to the north, and Cerro Summit-Cimarron-Sims Mesa population to the east. Potential linkages in the Cerro Summit-Cimarron-Sims Mesa population were also identified that may provide connectivity with the San Miguel population to the west, Crawford population to the northeast, and Gunnison Basin population to the east. Genetic evidence indicates maintaining or enhancing habitat connectivity between populations is important for Gunnison sage-grouse survival into the future (See detailed discussion in Factor E analysis, Small Population Size and Structure).

Reevaluation of Residential Development in the Gunnison Basin Population Area

In our proposed rule to list Gunnison sage-grouse as endangered, we concluded that residential development was a principal threat to the species as a whole. That analysis was focused on the potential impacts of residential development in the Gunnison Basin population area, since the vast majority of occupied habitat and birds occur there. As noted above, based on numerous public comments and new information we received on the proposed rule, we have reevaluated the threat of residential development to the species, both in the individual populations and rangewide. In this section, we describe in greater detail the basis for our conclusions regarding the effects of residential development, both at the present time and in the foreseeable future, on individual birds

or areas of habitat in the Gunnison Basin population area.

Current Impacts of Residential Development

Approximately 239,640 ha (592,168 ac) of occupied habitat occur in the Gunnison Basin. Of this, approximately 161,336 ha (398,669 ac) (67 percent) are on Federal lands; 5,906 ha (14,595 ac) (2 percent) are State land; and 72,380 ha (178,855 ac) (30 percent) are private land (Table 1). In this rule, our evaluation of residential development in the Gunnison Basin is based largely on human demographic information for Gunnison County, where nearly three-quarters (approximately 71 percent) of the Gunnison Basin population of Gunnison sage-grouse occurs (the remainder occurs in Saguache County). Based on the available information, we expect that the rate of future residential development in the Saguache County portion of the Gunnison Basin will be similar to that of Gunnison County. Approximately 30 percent of Gunnison sage-grouse occupied habitat in the Gunnison Basin occurs on private lands.

When evaluating Gunnison County overall (including both Gunnison sage-grouse habitat and non-habitat areas), our analysis found that the cumulative number of human developments (including housing, infrastructure, and improvements to existing development) increased considerably since the early 1970s. The number of new developments averaged approximately 70 per year from the late 1800s to 1969, increasing to approximately 450 per year from 1970 to 2008 (USFWS 2010a, pp. 1–5). Furthermore, there has been an increasing trend toward development away from major roadways (primary and secondary paved roads) into areas of occupied Gunnison sage-grouse habitat that had previously undergone very limited development (USFWS 2010b, p. 7). Between 1889 and 1968, approximately 51 human developments were located more than 1.6 km (1 mi) from a major road in currently occupied Gunnison sage-grouse habitat. Between 1969 and 2008, this number increased to approximately 476 developments (USFWS 2010b, p. 7).

However, the majority of residential development in Gunnison County is outside of Gunnison-sage grouse occupied habitat. About 26 percent of housing units in Gunnison County occur within Gunnison sage-grouse occupied habitat (Gunnison County 2013a, Appendix G, p. 9). Although significant development has occurred in the past, residential growth in Gunnison County has been influenced heavily by development in the East River Valley

near Crested Butte, outside of occupied habitat for Gunnison sage-grouse (Gunnison County 2013a, pp. 69–70). Furthermore, the majority of existing development in the lower Gunnison Basin is concentrated near the City of Gunnison, outside of occupied habitat or in more marginalized habitat (Gunnison County 2013c, p. 5). Gunnison County building permit data indicate that since 1980, over 70 percent of all county building permits have been located within subdivisions that are already served by water and sewer services (urban service areas). If building permits for the City of Gunnison are included, over 80 percent of all new development since 1980 has occurred in urban service areas (Gunnison County 2013a, p. 68). Urban service areas (utilities, trash, etc.) in Gunnison County may include small areas of Gunnison sage-grouse habitat, but are generally less suitable than more rural areas; therefore, human development and activities in such areas are likely to have less impact to Gunnison sage-grouse.

Available data nonetheless indicates human developments in occupied Gunnison sage-grouse habitat in Gunnison County occur and have increased over time. We conducted a GIS analysis of parcel ownership data to evaluate the spatial and temporal pattern of past human development (including infrastructure) within occupied Gunnison sage-grouse habitat in the Gunnison Basin population area. Our analyses were limited to the portion of occupied habitat in Gunnison County because parcel data was available only for Gunnison County and not Saguache County. Approximately 18 percent of the land area within the range of Gunnison sage-grouse in Gunnison County has a residential density greater than one housing unit per 1.3 km² (0.5 mi²) (USFWS 2010b, p. 8). The GSRSC (2005, pp. 160–161) hypothesized that residential density in excess of one housing unit per 1.3 km² (0.5 mi²) could cause declines in Gunnison sage-grouse populations, though there are limitations with this assumption (see discussion above). Based on this estimate, current human residential densities in the Gunnison Basin population area are such that they may be having an impact on Gunnison sage-grouse in at least 18 percent of the occupied area.

In our proposed rule to list Gunnison sage-grouse as endangered, we also applied a 1.5 km (.93 mi) “zone of influence” to residential development in Gunnison County (based on Aldridge *et al.* 2012, p. 400), in an effort to evaluate how the current level of

residential development may be impacting habitat and limiting the Gunnison Basin population of sage-grouse (for more details, see 78 FR 2486, January 11, 2013). That analysis led us to conclude that within occupied Gunnison sage-grouse habitat in Gunnison County, 49 percent of the land area within the range of Gunnison sage-grouse had at least one housing unit within a radius of 1.5 km (0.9 mi). We found that this level of residential development strongly decreased the likelihood of Gunnison sage-grouse using these areas as nesting habitat. Based on this analysis, we determined that residential development, particularly in the Gunnison Basin, was currently a principal threat to the species. This conclusion was critical to our proposal to list the species as endangered.

Since the listing proposal, we have received significant comments and new information regarding this conclusion, and particularly our application of the Aldridge *et al.* 2012 study, to find that human development is currently negatively affecting the species' utilization of 49 percent of occupied habitat in Gunnison County. As noted by various commentators, this conclusion is at odds with the current status of the Gunnison Basin population, which, as described above, is and has been relatively stable for the last 19 years, based on lek count data. If residential development was currently negatively impacting such a significant percentage of occupied habitat in the Gunnison Basin population, we would

expect to see some evidence of this in these population trends. This is so even recognizing that, as a consequence of their site fidelity to seasonal habitats (Lyon and Anderson 2003, p. 489), measurable population effects may lag behind negative changes in habitat (Harju *et al.* 2010, entire; Wiens and Rotenberry 1985, p. 666). As a result, we believe that our use of Aldridge *et al.* 2012, as described above, significantly overestimated the impact that current levels of residential development in Gunnison County are having on the species.

Based on this reevaluation, we conclude that current development in the Gunnison Basin population area is a threat of low magnitude to the persistence of this Gunnison sage-grouse population. Despite past residential development in the Gunnison Basin, the Gunnison Basin population of Gunnison sage-grouse has remained relatively stable over the past 19 years, based on lek count data and population estimates (Figure 2). The Gunnison Basin population is currently large and relatively stable and appears to be resilient (see further discussion under Small Population Size and Structure section). Therefore, this population has been able to sustain the negative effects of development at current levels.

Future Impacts of Residential Development

Residential development in occupied habitat in the Gunnison Basin will increase in the future, which means the impacts from such development will

also increase. Based on new information received since the proposed rule, however, we believe that the rate of increase may be less than what we determined in the proposed rule. Projections for human population growth in Gunnison County range from about 0.75 percent to 2.15 percent annually, depending on the source (Table 7). The current (2013) estimated human population of Gunnison County is 15,982 (CDOLA 2011, entire). By 2050, the human population in Gunnison County is projected to be 20,877 to 37,828 people (Table 7). In our proposed rule to list Gunnison sage-grouse as endangered (78 FR 2486, January 11, 2013), we applied the Colorado Water Conservation Board's (CWCB) middle-growth scenario of 1.7 percent annual growth for Gunnison County (CWCB 2009, p. 53). We now recognize this figure may overestimate actual growth in the area due to that study's broader geographic focus (Colorado watersheds) and purpose (to forecast water use and demands). The Colorado State Demographer (CDOLA 2011, entire) estimated an average annual growth rate of 1.2 percent for Gunnison County, with approximately 22,107 people by the year 2040, or approximately 38 percent greater than the 2013 population. Coincidentally, these projections are near the average of the range of projected growth rates from the various sources (Table 7), and represent a reliable estimate of expected future growth in the Gunnison Basin area.

TABLE 7—HUMAN POPULATION PROJECTIONS FOR GUNNISON COUNTY

Source	Average annual growth rate	Population projection	Source/citation
Colorado Water Conservation Board ...	1.06%—low scenario 1.70%—middle scenario 2.15%—high scenario	By the year 2050: 23,314—low scenario 31,086—middle scenario 37,828—high scenario	CWCB 2009, p. 53.
Colorado State Demographer	1.2%	By the year 2040: 22,107	CDOLA 2011, entire.
Gunnison County	1%	By the year 2050: 20,877	Gunnison County 2013a, p. 69.
Gunnison City Council	0.75%	n/a	City of Gunnison 2013, p. 4.

Future population growth in the Saguache County portion of the Gunnison Basin is projected to be 1.5 percent per year, with an estimated population of 9,133 by the year 2040, or approximately 41 percent greater than the 2013 population (Table 4 above).

All population projections from Table 4 and Table 7 above indicate the density and distribution of human residences in the Gunnison Basin will increase in the

future. The precise rate of human population growth in Gunnison or Saguache Counties, however, is not the determinative factor in assessing whether the Gunnison Basin population of Gunnison sage-grouse will persist into the future. As discussed below, future residential development in occupied habitat in the Gunnison Basin is constrained by the relatively limited area of developable private lands. In

addition, if future residential development follows past patterns, much of this future development in Gunnison County will occur outside of Gunnison sage-grouse habitat and within existing urban or otherwise developed areas. Nonetheless, even under this development pattern, approximately 26 percent of future residential development in Gunnison County would occur in occupied

Gunnison sage-grouse habitat (Gunnison County 2013a, Appendix G, p. 9).

Of the 239,640 ha (592,168 ac) of occupied habitat in the Gunnison Basin, approximately 72,380 ha (178,855 ac) (30 percent) are on private lands (Table 6). Approximately 16,499 ha (40,769 ac) (22.8 percent) of these private lands, or 6.9 percent of occupied habitat in the Gunnison Basin population area, are currently under conservation easement where development is prohibited or restricted to protect conservation values, including values for Gunnison sage-grouse on some properties (Gunnison County 2013b, p. 21; Lohr and Gray 2013, p. 54). (Refer to Factor D analysis, Other Regulatory Mechanisms: Conservation Easements for a detailed discussion.) Approximately 55,881 ha (138,086 ac) (77.2 percent) of private lands are not currently under conservation easement and, thus, are at higher risk of residential development. This constitutes 23.3 percent of the entire occupied range in the Gunnison Basin. Therefore, about 23.3 percent of the 239,640 ha (592,168 ac) of total occupied habitat in the Gunnison Basin is at higher risk of residential development (relative to lands not protected under conservation easement).

Over half of this at risk occupied habitat currently consists of high priority habitat for the species. Based on the habitat recommendations in the RCP, the Gunnison Basin Sage-Grouse Strategic Committee developed a Habitat Prioritization Tool (Gunnison County 2013a, Appendix G; see detailed description under Local Laws and Regulations, Gunnison County), which identifies sage-grouse habitat and then discounts the value of the habitat based on distance to structures, roads, and power lines. The Habitat Prioritization Tool determined that, of private lands in occupied habitat in the Gunnison Basin not under conservation easement, over half are Tier 1 habitat, or high value habitat (e.g., lekking, nesting, brood-rearing, or wintering habitat); the remaining habitat is classified as Tier 2, or lower value habitat (Cochran 2013, pers. comm.) that is closer to structures, roads, and power lines. This tool does not quantify or map unoccupied habitats. Based on this figure, of the 55,881 ha (138,086 ac) or 23.3 percent of total occupied habitat in the Gunnison Basin at higher risk of residential development (as discussed below), 28,033 ha (69,270 ac) of those are Tier 1, or priority habitat.

The GSRSC (2005, p. 161) cautioned that, in the Gunnison Basin population, any habitat loss from residential development should be avoided or mitigated because of this population's

high conservation importance. As noted earlier, the GSRSC (2005, p.161) suggested that the greatest impacts from permanent habitat loss are expected in seasonal habitats most important to Gunnison sage-grouse, such as areas used during moderate to severe winters or in lekking, nesting, or brood-rearing habitats. These areas are quantified within the Tier 1 habitats of the Habitat Prioritization Tool described above, and constitute approximately 69,000 acres. Forty-five percent of the leks in the Gunnison Basin population area occur on private lands (see discussion above in the *Current Distribution and Population Estimates and Trends* section), and any impacts within 4 miles of these leks could affect nesting and brood-rearing activities.

Additional residential development in those high value habitats could result in increased impacts on Gunnison sage-grouse in the Gunnison Basin. Lesser impacts would be expected in Tier 2 habitats, and from indirect effects of development in unoccupied habitats. These impacts, particularly to the seasonally important habitats, are a concern, and we expect impacts, and the level of threat posed by residential development, to increase in the future, although at a somewhat lower rate than what we described in the proposed listing rule.

Although exurban development will likely increase as in other parts of the rural west, if past residential growth patterns in Gunnison County continue, we can expect the majority of residential development to occur outside of occupied habitat and near municipalities and existing infrastructure. Nevertheless, under these past residential growth patterns, we would still expect approximately 26 percent of residential growth in the future to occur in occupied habitat.

While we recognize that current conservation efforts, including conservation easements, enforcement of current county land use regulations, and CCAA implementation are likely to help reduce (but not necessarily preclude) the effects of past and future residential development on Gunnison sage-grouse and its habitat in the Gunnison Basin, we find that such efforts will not fully address this and other threats (see Factor A, Conservation Programs and Efforts Related to Habitat Conservation, and Factor D, Regulatory Mechanisms). In addition, future residential development of private lands will likely demand new or additional infrastructure on adjacent properties such as Federally administered lands, which may cause additional impacts to Gunnison sage-grouse habitat (see

Cumulative Effects From Factors A through E). Although we cannot forecast what those impacts might look like, we anticipate that such impacts on Federal lands will be addressed, to some degree, through Federal programs and policies such as the Gunnison Basin CCA (see Conservation Programs and Efforts Related to Habitat Conservation in this Factor A analysis).

In summary, the threat to Gunnison sage-grouse as a result of current residential development is less than we previously thought as discussed above. While individual birds may be affected, current residential development is a threat of low magnitude to Gunnison Basin birds at the population level. Approximately 23.3 percent of the 239,640 ha (592,168 ac) of total occupied habitat in the Gunnison Basin is at higher risk of development (i.e., are not protected by conservation easement) in the future, relative to lands where development is precluded, prohibited, or restricted (under State or Federal ownership or conservation easement). Approximately 50 percent of these developable lands are in priority habitats, and their potential loss or degradation in the future would be a concern for the Gunnison Basin population. In addition, indirect and cumulative effects of infrastructure associated with residential development will increase the impacts of future residential development. Based on these reasons, we find that residential development is currently a threat of low magnitude to the Gunnison Basin population of Gunnison sage-grouse, but that it is an increasing threat in the future.

Summary of Residential Development

Residential development is likely contributing to habitat loss and degradation throughout the range of Gunnison sage-grouse. Habitat fragmentation resulting from human development patterns is especially detrimental to Gunnison sage-grouse because of their dependence on large areas of sagebrush (Patterson 1952, p. 48; Connelly *et al.* 2004, p. 4–1; Connelly *et al.* 2011a, p. 72) and more contiguous sagebrush habitats (Rogers 1964, p. 19; Wisdom *et al.* 2011, pp. 452–453). Infrastructure such as roads and power lines associated with residential development (urban and exurban) likely further contribute to habitat loss and other impacts such as increased risk of predation, particularly in the satellite populations. Residential development, and associated habitat loss or degradation, urban development, roads, utility corridors, and fences have all been identified as current or

potential issues in each of the seven populations (GSRSC 2005, p. 146). Increasing rural and exurban development in sagebrush habitats will continue impacting Gunnison sage-grouse.

Human population growth is occurring throughout much of the range of Gunnison sage-grouse. The human population in all Colorado counties within the range of Gunnison sage-grouse has increased by approximately 57.8 percent in the last several decades, since 1985 (Table 2). During the same period, human population growth in Utah counties in Gunnison sage-grouse range increased by about 24.5 percent (Table 3), much less than that of Colorado counties. Population increases are expected to continue into the future (GSRSC 2005, p. 150–153). Across the six satellite populations, the human population in Colorado is forecasted to grow by about 60 percent, with most of this growth (and total number of persons) occurring in Mesa, Montrose, and Delta Counties (Table 4). Residential development is expected to increase to meet the demand of these growing human populations. Projected human population growth rates in the Gunnison Basin population are considered low relative to other populations. However, residential development in the Gunnison Basin, including development in occupied habitat, is expected to continue into the future and potentially impact the species and its habitat.

Our analysis was focused on the direct loss of occupied habitat due to residential development, in which negative impacts on the species are more quantifiable. Indirect effects (e.g., off-site or functional habitat loss, loss of unoccupied habitat) of habitat decline due to residential development are also expected, however, and are evaluated qualitatively in the above analysis. Residential growth rates and patterns vary widely across the range of Gunnison sage-grouse. Based on these considerations, our framework for assessing the threat of residential development was based primarily on human population growth rates (current and projected), the availability of developable private lands, the ameliorating effects of conservation efforts, and other information (see Table 6 and discussions above). Our evaluation found that residential development is a substantial threat to the San Miguel, Cerro Summit-Cimarron-Sims Mesa, and Poncha Pass populations of Gunnison sage-grouse, both now and in the future. Based on the best available information, current residential development in the

remaining Gunnison sage-grouse populations may impact individual birds or areas of habitat, but is currently a threat of low magnitude at the population level. Residential development will continue into the future in these areas and, as discussed above, such development in areas of important seasonal habitats would be a concern in these populations.

Rangewide, approximately 34.8 percent of occupied Gunnison sage-grouse habitat is at higher risk of residential development (Table 6), relative to lands not under conservation easement or Federal or State ownership. As described above, human population growth is occurring throughout much of the range of Gunnison sage-grouse, although the rate and pattern of residential development varies widely by sage-grouse population. These trends are expected to continue into the future, resulting in further residential development, associated infrastructure, and habitat loss in parts of the species' range.

The threat of habitat loss or degradation due to residential development in the San Miguel and Cerro Summit-Cimarron-Sims Mesa populations will likely reduce habitat connectivity between satellite populations and, potential connectivity between the Gunnison Basin population and satellite populations to the west. The GSRSC (2005, p. 167) identified habitat areas in the San Miguel population that provide potential linkages with the Dove Creek-Monticello population to the west, Piñon Mesa population to the north, and Cerro Summit-Cimarron-Sims Mesa population to the east. Potential linkages in the Cerro Summit-Cimarron-Sims Mesa population were also identified that may provide connectivity with the San Miguel population to the west, Crawford population to the northeast, and Gunnison Basin population to the east. Genetic evidence indicates maintaining or enhancing habitat connectivity between populations is important for Gunnison sage-grouse survival into the future (See discussion in Factor E analysis, Small Population Size and Structure). Based on the above information, we find residential development to be a threat to Gunnison sage-grouse rangewide, both now and into the future.

Roads

Impacts to Gunnison sage-grouse from roads may include direct habitat loss, direct mortality, barriers to migration corridors or seasonal habitats, facilitation of predation and spread of invasive vegetative species, and other

indirect influences such as noise (Forman and Alexander 1998, pp. 207–231). Greater sage-grouse mortality resulting from collisions with vehicles does occur, but mortalities are typically not monitored or recorded (Patterson 1952, p. 81). Therefore, it is difficult to determine the influence of road-related mortalities on sage-grouse populations. We have no information on the frequency or number of mortalities of Gunnison sage-grouse due to roads or vehicles, but because of similarities in their habitat and habitat use, we expect effects to be similar to those observed in greater sage-grouse (described below). Roads have been shown to fragment Gunnison sage-grouse habitat, with road avoidance by birds presumably to limit exposure to human activity and predation (Oyler-McCance *et al.* 2001, p. 330). The probability of Gunnison sage-grouse habitat occupancy (presence based on pellet surveys or sage-grouse observation) was positively correlated with distance from roads and habitat patch size (Oyler-McCance *et al.* 1999, p. 29).

The presence of roads increases human access and resulting disturbance effects in remote areas (Forman and Alexander 1998, p. 221; Forman 2000, p. 35; Connelly *et al.* 2004, pp. 7–6 to 7–25). In addition, roads can provide corridors for predators to move into previously unoccupied areas. Some mammalian species known to prey on sage-grouse, such as red fox (*Vulpes vulpes*), raccoons (*Procyon lotor*), and striped skunks (*Mephitis mephitis*), have greatly increased their distribution by dispersing along roads (Forman and Alexander 1998, p. 212; Forman 2000, p. 33; Frey and Conover 2006, pp. 1114–1115). Corvids (Family Corvidae: Crows, ravens, magpies, etc.) also use linear features such as primary and secondary roads as travel routes (Bui 2009, p. 31), expanding their movements into previously unused regions (Knight and Kawashima 1993, p. 268; Connelly *et al.* 2004, p. 12–3). Corvids are significant sage-grouse nest predators and were responsible for more than 50 percent of nest predations in Nevada (Coates 2007, pp. 26–30). See Factor C below for further discussion of predation.

The expansion of road networks also contributes to exotic plant invasions via introduced road fill, vehicle transport, and road maintenance activities (Forman and Alexander 1998, p. 210; Forman 2000, p. 32; Gelbard and Belnap 2003, p. 426; Knick *et al.* 2003, p. 619; Connelly *et al.* 2004, p. 7–25). Invasive species are not limited to roadsides, but also encroach into surrounding habitats (Forman and Alexander 1998, p. 210; Forman 2000, p. 33; Gelbard and Belnap

2003, p. 427). Upgrading unpaved four-wheel-drive roads to paved roads resulted in increased cover of invasive plant species within the interior of adjacent plant communities (Gelbard and Belnap 2003, p. 426). This effect was associated with road construction and maintenance activities and vehicle traffic, and not with differences in site characteristics. The incursion of invasive and exotic plants into native sagebrush systems can negatively affect Gunnison sage-grouse through habitat losses and conversions (see Invasive Plants).

Gunnison sage-grouse may avoid road areas because of noise, visual disturbance, pollutants, and predators moving along a road, which further reduces the amount of available habitat. An unpublished study by Western State Colorado University and CPW in the Gunnison Basin found that anthropogenic noise was significantly higher at leks closer to roads and human activity centers than leks farther from those sources (Piquette *et al.* 2013, pp. 7–8). Leks with higher noise levels were associated with lower Gunnison sage-grouse male counts and attendance (Piquette *et al.* 2013, pp. 10–11). The landscape-scale spatial model predicting Gunnison sage-grouse nest site selection showed strong avoidance of areas with high road densities of roads classed 1 through 4 (primary paved highways through primitive roads with 2-wheel drive sedan clearance) within 6.4 km (4 mi) of nest sites (Aldridge *et al.* 2012 p. 397). Nest sites also decreased with increased proximity to primary and secondary paved highways (roads classes 1 and 2) (Aldridge *et al.* 2012, p. 401). Male greater sage-grouse lek attendance was shown to decline within 3 km (1.9 mi) of a deep seam natural gas well haul road where traffic volume exceeded one vehicle per day (Holloran 2005, p. 40). Surface coal mining activity and associated vehicle traffic on haul roads in the North Park of Colorado was correlated with a 94 percent reduction in the number of displaying greater sage-grouse males over a 5-year period on leks situated within 2 km (1.24 mi) of roads (Remington and Braun 1991). Peak male greater sage-grouse attendance at leks experimentally treated with noise from natural gas drilling and roads decreased 29 percent and 73 percent, respectively, relative to paired control (no treatment) areas (Blickley *et al.* 2012, p. 467). Male sage-grouse depend on acoustical signals to attract females to leks (Gibson and Bradbury 1985, p. 82; Gratson 1993, p. 692). If noise from roads interferes with

mating displays, and thereby female attendance, younger males will not be drawn to the lek and eventually leks will become inactive (Amstrup and Phillips 1977, p. 26; Braun 1986, pp. 229–230).

In a study on the Pinedale Anticline in Wyoming, greater sage-grouse hens that bred on leks within 3 km (1.9 mi) of roads associated with oil and gas development traveled twice as far to nest as did hens that bred on leks greater than 3 km (1.9 mi) from roads. Nest initiation rates for hens bred on leks close to roads also were lower (65 versus 89 percent), affecting population recruitment (33 versus 44 percent) (Lyon 2000, p. 33; Lyon and Anderson 2003, pp. 489–490). Roads may be the primary impact of oil and gas development to sage-grouse, due to their persistence and continued use even after drilling and production have ceased (Lyon and Anderson 2003, p. 490). Lek abandonment patterns suggested that daily vehicular traffic along road networks for oil wells can impact greater sage-grouse breeding activities (Braun *et al.* 2002, p. 5). Similar data are not available for Gunnison sage-grouse, so we do not know how the species responds to roads and traffic associated with energy development, though we expect effects would be similar to those observed in greater sage-grouse.

One study showed that road density was not an important factor affecting greater sage-grouse persistence or rangewide patterns in sage-grouse extirpation (Aldridge *et al.* 2008, p. 992). However, the authors did not consider the intensity of human use of roads in their modeling efforts. They also indicated that their analyses may have been influenced by inaccuracies in spatial road data sets, particularly for secondary roads (Aldridge *et al.* 2008, p. 992). Spatial modeling of historic range where greater and Gunnison sage-grouse have been extirpated had a 25 percent higher density of roads than occupied range (Wisdom *et al.* 2011, p. 467). Wisdom *et al.*'s (2011, entire) greater and Gunnison sage-grouse rangewide analysis supports the findings of numerous local studies showing that roads can have both direct and indirect impacts on sage-grouse distribution and individual fitness (reproduction and survival) (e.g., Lyon and Anderson 2003 p. 490, Aldridge and Boyce 2007, p. 520).

Recreational activities including off-highway vehicles (OHV), all-terrain vehicles, motorcycles, mountain bikes, and other mechanized methods of travel have also been recognized as a potential direct and indirect threat to Gunnison

sage-grouse and their habitat (BLM 2009a, p. 36). In Colorado, the number of annual off-highway vehicle (OHV) registrations has increased dramatically from 12,000 in 1991 to 131,000 in 2007 (BLM 2009a, p. 37). Four wheel drive, OHV, motorcycle, specialty vehicle, and mountain bike use is expected to increase in the future based on increased human population in Colorado and within the range of Gunnison sage-grouse. Numerous off-road routes and access points to habitat used by Gunnison sage-grouse combined with increasing capabilities for mechanized travel and increased human population further contribute to habitat decline.

Roads in the Gunnison Basin Population Area

Currently, 1,349 km (838 mi) of roads accessible to 2-wheel-drive passenger cars occur in occupied Gunnison sage-grouse habitat in the Gunnison Basin on all land ownerships. Four-wheel-drive vehicle roads, as well as motorcycle, mountain bike, horse, and hiking trails are heavily distributed throughout the range of Gunnison sage-grouse (BLM 2009a, pp. 27, 55, 86), which further increases the overall density of roads and their direct and indirect effects on Gunnison sage-grouse. User-created roads and trails have increased since 2004 (BLM 2009a, p. 33), although we do not know the scope of this increase.

On BLM lands in the Gunnison Basin, approximately 2,050 km (1,274 mi) of roads are currently within 6.4 km (4 mi) of Gunnison sage-grouse leks (BLM 2010a, p. 147). This distance is thought to be important, because eighty-seven percent of all Gunnison sage-grouse nests were located less than 6.4 km (4 mi) from the lek of capture (Apa 2004, p. 21). However, the BLM proposed to reduce the roads on its Gunnison Basin lands from 2,050 km (1,274 mi) to 1,157 km (719 mi) (BLM 2010a, p. 147), including implementation of other conservation measures from the Gunnison Basin Candidate Conservation Agreement (CCA) (BLM 2013b, entire) (see Conservation Programs and Efforts Related to Habitat Conservation below). The NPS completed a Motorized Vehicle Access Plan and Environmental Assessment for the Curecanti National Recreation Area (NPS 2010, 78 FR 72028). As of January 2014, roads open to the public within Gunnison sage-grouse habitat (occupied and unoccupied) were reduced from 91.1 km (56.6 mi) to 39.6 km (24.6 mi) (Stahlnecker 2014, pers. com) (also discussed below).

The U.S. Forest Service (USFS) is implementing their 2010 Travel Management Plan to benefit Gunnison sage-grouse. Approximately 66 km (41 mi) of road have recently been decommissioned on USFS lands in the Gunnison Basin. An additional 40–56 km (25–35 mi) of roads were proposed for decommissioning by the USFS in 2013. The BLM, USFS, CPW, and Gunnison County currently close 36 roads at 47 closure points to all motorized traffic from March 15 to May 15 to minimize impacts to Gunnison sage-grouse during the breeding season. Six USFS closures extend to June 15 to protect nesting Gunnison sage-grouse. These closures limit motorized access to all known leks and adjacent habitats on public lands in the Gunnison Basin (Gunnison County 2013a, pp. 78, 127). The USFS implements winter and spring travel closures for motorized and mechanized activities in the Flat Top Mountain and Almont Triangle areas, which includes a total of more than 11,000 ha (27,000 ac). While road closures may be violated in a small number of situations, we expect these seasonal closures are having a beneficial effect on Gunnison sage-grouse in the majority of the Gunnison Basin area through avoidance or minimization of impacts during sensitive periods.

Using GIS and a spatial dataset of roads in the Gunnison Basin, we evaluated the potential effects of roads to Gunnison sage-grouse and their habitat. To account for secondary effects from invasive weed spread from roads (see discussion below in Invasive Plants), we applied a 0.7-km (0.4-mi) “zone of influence” (Bradley and Mustard 2006, p. 1146) to all roads in the Gunnison Basin. These analyses indicate that approximately 85 percent of occupied habitat in the Gunnison Basin has an increased likelihood of current or future road-related invasive weed invasion, although the extent and severity of weed invasion would vary by road and area. It is likely that all occupied habitat in the Gunnison Basin may be negatively affected in some way by the direct or indirect impacts of roads (see the discussion below). In addition, available information indicates that noise from roads and other human activity centers such as the airport may be negatively impacting Gunnison sage-grouse reproduction in the Gunnison Basin by reducing male sage-grouse attendance at nearby leks (Piquette *et al.* 2013, entire).

The CPW (2013b, pp. 8–9) calculated the distance from roads (highways and county roads) for 185 separate successful and unsuccessful sage-grouse nests in the Gunnison Basin population,

based on telemetry and nesting data collected from 2005 to 2010. Roads included highways and county roads in Gunnison and Saguache counties. The study did not evaluate “primitive” roads as the Aldridge *et al.* 2012 study did, making this analysis more conservative. A GIS analysis of the distance frequencies of the 185 nests did not indicate an avoidance of roads by sage-grouse, in contrast to the findings of other authors cited above (see discussion above). Rather, CPW believes the data showed a correlation between a decline in the number of nests and increasing distance from roads. Approximately 45 percent of studied nests were within 300 m (984 ft) of a road, and 70 percent were within 500 m (1,640 ft). Nest frequency declined around distances greater than 500 m (1,640 ft) from roads. However, road density was not described and the distance to nests may be a reflection of road density rather than site selection. We are also uncertain as to what percentage of these roads may have been closed to protect nesting Gunnison sage-grouse, which may influence nest survival. The CPW acknowledged, moreover, that their analysis was not peer reviewed, and did not account for factors such as age (yearling vs. adult), re-nesting (however, only 3.2 percent of females studied re-nested), or time (i.e., the same female observed across years) (CPW 2013b, pp. 8–9). CPW also recognized that its report of nesting success in relation to roads only addressed one aspect of potential threats to Gunnison sage-grouse from roads, and did not address additional threats from roads such as impacts on suitability of brood-rearing and seasonal habitat components, changes in lekking behavior, noise impacts, depredation risks and chick and adult mortality (CPW 2013b, p.9). While the CPW study may indicate that Gunnison sage-grouse in the Gunnison Basin are not totally avoiding roads, the best available scientific information on the effects of roads on sage-grouse and their habitats nevertheless indicates that roads are likely having a negative impact on Gunnison sage-grouse in the Gunnison Basin population, though the extent and magnitude of those impacts are unknown.

Roads in All Other Population Areas

Approximately 140 km (87 mi), 243 km (151 mi), and 217 km (135 mi) of roads (all road classes) occur on BLM lands within the Cerro Summit-Cimarron-Sims Mesa, Crawford, and San Miguel Basin population areas, respectively, all of which are managed by the BLM (BLM 2009a, p. 71). We do

not have information on the total length of roads within the Monticello-Dove Creek, Piñon Mesa, or Poncha Pass Gunnison sage-grouse populations. However, several maps provided by the BLM show that roads are widespread and common throughout these population areas (BLM 2009a, pp. 27, 55, 86).

In the Crawford population area, Montrose County seasonally closes C77 Road from March 15 through May 15 to protect Gunnison sage-grouse during the breeding season (Gunnison County 2013, App. 1.G.40). Likewise, Saguache County seasonally closes three roads in the Poncha Pass population, and one road in the Gunnison Basin population area (Gunnison County 2013, App. 1.I.49). San Miguel County vacated, reclaimed, and relocated a county road in the San Miguel Basin to protect a lek in the Miramonte area (Gunnison County 2013, App. 1.K.67). San Miguel County also restricts road traffic speed year-round to 10 miles per hour or less on another road in the Miramonte area (Gunnison County 2013, App. 1.K.67.b). An Ouray County resolution (Resolution Number 2013–022, entire), adopted on May 28, 2013, provides that seasonal restrictions (March 15 until May 15) be implemented for roads (not belonging to adjacent property owners or their guests), and appropriate terms and conditions be applied during this same time period at construction sites within 0.6 miles of a lek to minimize and avoid impacts on breeding and brood-rearing habitat. This affects portions of the San Miguel and Cerro Summit-Cimarron-Sims Mesa populations. We expect these seasonal closures and restrictions are benefitting Gunnison sage-grouse in important portions of these populations through avoidance and minimization of impacts during sensitive periods. However, we believe that roads are having negative impacts at some level on all Gunnison sage-grouse populations.

Summary of Roads

As described above in the Residential Development section, the human population is increasing throughout the range of Gunnison sage-grouse (CDOLA 2009a, pp. 2–3; CWCB 2009, p. 15), and data indicates this trend will continue. Gunnison sage-grouse are dependent on large landscapes to meet their life history needs (GSRSC 2005, pp. 26–30) and contiguous sagebrush habitat (Rogers 1964, p. 19; Wisdom *et al.* 2011, pp. 452–453). The collective influences of fragmentation and disturbance from roads reduce the amount of effective habitat to the extent that they are avoided by sage-grouse (Aldridge *et al.*

2012, p. 402; Aldridge and Boyce 2007, p. 520; Knick *et al.* 2011, pp. 212–219 and references therein; CPW 2013, pp. 8–9). Given the current and future human demographic and economic trends discussed above under the Residential Development Section, we conclude that increased road use and increased road construction associated with residential development will continue to increase. Seasonal closures are likely providing benefits to Gunnison sage-grouse in portions of its range and during sensitive periods. Nevertheless, habitat decline associated with roads, as described above, is a current and future threat to Gunnison sage-grouse rangewide.

Powerlines

Depending on the infrastructure design, size, location, and site-specific factors, powerlines can directly affect greater sage-grouse by posing a collision and electrocution hazard (Braun 1998, pp. 145–146; Connelly *et al.* 2000a, p. 974) and can have indirect effects by decreasing lek recruitment (Braun *et al.* 2002, p. 10, Walker *et al.* 2007a, p. 2,644), increasing predation (Connelly *et al.* 2004, p. 13–12), fragmenting habitat (Braun 1998, p. 146), and facilitating the invasion of exotic annual plants (Knick *et al.* 2003, p. 612; Connelly *et al.* 2004, p. 7–25). In 10 years of tracking and studying over 1,000 radio-collared sage-grouse in Colorado, CPW has documented only three powerline strike-related mortalities (two confirmed cases, and one suspected case) of Gunnison sage-grouse; and one powerline strike-related mortality of greater sage-grouse (CPW 2013b, p. 11; Phillips and Griffin 2013, pers. comm.). In contrast, powerline collisions in southeastern Idaho accounted for 33 percent of juvenile mortality of greater sage-grouse in low-elevation areas (Beck *et al.* 2006, p. 1,075). Based on spatial modeling, proximity to powerlines is positively correlated with Gunnison and greater sage-grouse extirpation and loss of range (Wisdom *et al.* 2011, pp. 467–468). Due to the potential spread of invasive species and predators as a result of powerline construction and maintenance, the most substantial impact of powerlines on Gunnison sage-grouse likely comes from indirect effects, rather than from direct mortality. The effects of powerlines to Gunnison sage-grouse are expected to be similar to those observed in greater sage-grouse due to similar life histories and behavior.

In areas where vegetation is low and the terrain relatively flat, power poles provide an attractive hunting, roosting,

and nesting perch for many species of raptors and corvids, known predators of Gunnison sage-grouse (Steenhof *et al.* 1993, p. 27; Connelly *et al.* 2000a, p. 974; Manville 2002, p. 7; Vander Haegen *et al.* 2002, p. 503) (see Factor C, Predation). Power poles increase a raptor's range of vision, allow for greater speed during attacks on prey, and serve as territorial markers (Steenhof *et al.* 1993, p. 275; Manville 2002, p. 7), thereby increasing the likelihood of predation where sage-grouse occur. Raptors may actively seek out power poles where natural perches are limited. For example, within 1 year of construction of a 596-km (370-mi) transmission line in southern Idaho and Oregon, raptors and common ravens began nesting on the supporting poles (Steenhof *et al.* 1993, p. 275). Within 10 years of construction, 133 pairs of raptors and ravens were nesting along this stretch (Steenhof *et al.* 1993, p. 275). Raven counts increased by approximately 200 percent along the Falcon-Gondor transmission line corridor in Nevada within 5 years of construction (Atamian *et al.* 2007, p. 2). Howe *et al.* (2014) found (1) the average distance to a transmission line from selected raven nest sites was approximately 2.5 times closer than from random sites, and (2) areas comprised of nonnative vegetation next to sagebrush were more likely to be used by ravens (p.42), suggesting that ravens selected nest sites (1) closer to transmission lines, and (2) in close proximity to land cover edges and areas where land cover edges adjoined one another. A post hoc analysis revealed that ravens were most likely to nest near edges of adjoining big sagebrush and land cover types that were associated with direct human disturbance or fire (Howe *et al.*, p. 43). It is reasonable to assume an increase in the abundance of corvids within occupied Gunnison sage-grouse habitats can lead to increased predation (see Factor C, Predation, for further discussion).

As with corvids, eagles can also increase following power line installation. Golden eagle (*Aquila chrysaetos*) predation on sage-grouse on leks increased from 26 to 73 percent of the total predation after completion of a transmission line within 200 meters (m) (220 yards (yd)) of an active sage-grouse lek in northeastern Utah (Ellis 1985, p. 10). The lek was eventually abandoned, and Ellis (1985, p. 10) concluded that the presence of the powerline resulted in changes in sage-grouse dispersal patterns and caused fragmentation of the habitat. Golden eagles are found throughout the range of

Gunnison sage-grouse (USGS 2010, p. 1), and golden eagles were found to be the dominant species recorded perching on power poles in Utah in Gunnison sage-grouse habitat (Prather and Messmer 2009, p. 12). An increase in the abundance of golden eagles associated with power lines within occupied Gunnison sage-grouse habitats would be expected to increase predation rates (see Factor C, Predation, for further discussion).

Greater sage-grouse leks within 0.4 km (0.25 mi) of new powerlines constructed for coalbed methane development in the Powder River Basin of Wyoming had significantly lower recruitment compared to leks further from these lines, presumably resulting from increased raptor predation (Braun *et al.* 2002, p. 10). Connelly *et al.* (2004, p. 7–26) assumed a 5- to 6.9-km (3.1- to 4.3-mi) radius buffer around the perches, based on the average foraging distance of these corvids and raptors, and estimated that the area potentially influenced by additional perches provided by powerlines was 672,644 to 837,390 km² (259,641 to 323,317 mi²), or 32 to 40 percent of their assessment area. The impact on a given area would depend on local densities of corvids and raptors (see discussion in Factor C, Predation).

Powerlines may negatively impact sage-grouse habitats even if raptors are not present. The use of otherwise suitable habitat by sage-grouse near powerlines increased as distance from the powerline increased for up to 600 m (660 yd) (Braun 1998, p. 8), indicating sage-grouse avoidance of powerlines. Based on those unpublished data, Braun (1998, p. 8) reported that the presence of powerlines may limit Gunnison and greater sage-grouse use within 1 km (0.6 mi) in otherwise suitable habitat. Greater sage-grouse tended to avoid using brood-rearing habitats within 4.7 km (2.9 mi) of wind energy transmission lines in Wyoming (LeBeau 2012, p. 27).

Electromagnetic fields emitted by power and transmission lines can alter the behavior, physiology, endocrine systems and immune function in birds, with negative consequences on reproduction and development (Fernie and Reynolds 2005, p. 135). Birds are diverse in their sensitivities to electromagnetic field exposures, with domestic chickens being very sensitive. Many raptor species are less affected (Fernie and Reynolds 2005, p. 135). Based on spatial modeling, sage-grouse extirpation appears to be correlated to the presence of powerlines (Wisdom *et al.* 2011, p. 467). However, no studies have been conducted specifically on the effects of electromagnetic fields on sage-

grouse. Therefore, we do not know how electromagnetic fields may impact Gunnison sage-grouse.

In addition, linear corridors through sagebrush habitats can facilitate the spread of invasive species, such as cheatgrass (*Bromus tectorum*) (Gelbard and Belnap 2003, pp. 424–426; Knick *et al.* 2003, p. 620; Connelly *et al.* 2004, p. 1–2). However, we were unable to find any information regarding the amount of invasive species incursion associated with powerlines within Gunnison sage-grouse habitat.

Powerlines in the Gunnison Basin Population Area

On approximately 121,000 ha (300,000 ac) of BLM land in the Gunnison Basin, 36 rights-of-way for power facilities, power lines, and transmission lines have resulted in the direct loss of 350 ha (858 ac) of occupied habitat (Borthwick 2005a, pers. comm.; Borthwick 2005b, pers. comm.). In the Curecanti National Recreation Area, Gunnison County Electric Association has a right of way for 63 km (39 mi) of overhead power lines, and Western Area Power Administration (WAPA) has a 31-km (19 mi) right of way for transmission lines.

As discussed above, the impacts of these lines likely extend beyond their actual footprint. Based on the average foraging distance of corvids and raptors, Connelly *et al.* (2004, p. 7–26) assumed a 5- to 6.9-km (3.1- to 4.3-mi) radius buffer around the perches, and estimated that the area potentially influenced by additional perches provided by powerlines was 672,644 to 837,390 km² (259,641 to 323,317 mi²), or 32 to 40 percent of their assessment area. We performed a similar GIS analysis of large transmission line location in relation to overall habitat area and Gunnison sage-grouse lek locations in the Gunnison Basin population area to obtain an estimate of the potential effects in the Basin. These analyses indicate that 68 percent of the Gunnison Basin population area is within 6.9 km (4.3 mi) of an electrical transmission line and is potentially influenced by avian predators using the additional perches provided by transmission lines. This area within 6.9 km (4.3 mi) of an electrical transmission line contains 65 of 109 active leks (60 percent) in the Gunnison Basin population. While we recognize that powerlines will not entirely preclude the use of adjacent habitats by Gunnison sage-grouse, these results suggest that increased predation risks associated with transmission lines could affect a substantial portion of the Gunnison Basin population. Four sage-grouse

collisions with taller utility lines were documented during a demographic study (Davis 2012, entire) in the Gunnison Basin, but none of those birds were killed as a result (Phillips 2013, p. 4). There have been no documented strike-related mortalities of Gunnison sage-grouse in the Gunnison Basin (Phillips and Griffin 2013, pers. comm.). Conservation measures from the Gunnison Basin CCA (BLM 2013b, entire) are expected to reduce impacts from some future power line projects and activities on Federal lands in the Gunnison Basin (see Conservation Programs and Efforts Related to Habitat Conservation).

Powerlines in All Other Population Areas

A transmission line runs through the Dry Creek Basin group in the San Miguel Basin population, and the Beaver Mesa group has two transmission lines. None of the transmission lines in the San Miguel Basin have raptor proofing, nor do most distribution lines (Ferguson 2005, pers. comm.), so their use by raptors and corvids as perch sites for hunting and use for nest sites is not discouraged. In the winter of 2012, one Gunnison sage-grouse individual in the San Miguel population died due to a powerline strike (Phillips and Griffin 2013, pers. comm.). One major electric transmission line runs east-west in the northern portion of the current range of the Monticello population (San Juan County Gunnison Sage-grouse Working Group 2005, p. 17). There have been no documented strike-related mortalities of Gunnison sage-grouse in the Dove Creek or Piñon Mesa population areas (Phillips and Griffin 2013, pers. comm.), and because of their limited extent in occupied habitat, powerlines do not appear to be a threat to the Piñon Mesa population. One transmission line parallels Highway 92 in the Crawford population and distribution lines run from there to homes on the periphery of the current range (Ferguson 2005, pers. comm.). Several transmission and utility lines intersect occupied habitat in the Poncha Pass area and may be negatively impacting an already small population and limited available habitat. A bird translocated from the Gunnison Basin to the Poncha Pass area in 2013 was found dead under the large transmission line on the west side of Highway 285; necropsy results indicated collision was a likely cause of death (Phillips and Griffin 2013, pers. comm.; Nehring 2013b, pers. comm.). During the same year, one radio collar was found under a powerline, but no bird was observed

(i.e., an unconfirmed mortality) (Phillips and Griffin 2013, pers. comm.).

Summary of Powerlines

Human populations are projected to increase to varying degrees in and near most Gunnison sage-grouse populations (see Residential Development discussion above). As a result, we expect an associated increase in distribution powerlines to meet this demand. Powerlines are likely negatively affecting Gunnison sage-grouse as they contribute to habitat decline and facilitation of predators of Gunnison sage-grouse. Given the current demographic and economic trends described in the Residential Development Section above, we conclude that existing powerlines and anticipated distribution of powerlines associated with residential and other development will continue to increase. Direct and indirect impacts resulting from powerlines are a current and future threat to Gunnison sage-grouse persistence rangewide.

Domestic Grazing and Wild Ungulate Herbivory

At least 87 percent of occupied Gunnison sage-grouse habitat on Federal lands is currently grazed by domestic livestock (USFWS 2010c, entire). We lack information on the proportion of Gunnison sage-grouse habitat on private lands that is currently grazed, but it is reasonable to expect that the proportion of grazed area is similar to that on Federal lands because livestock grazing is the most widespread type of land use across the sagebrush biome (Connelly *et al.* 2004), and almost all sagebrush areas are managed for livestock grazing (Knick *et al.* 2003). Livestock grazing can have negative or positive impacts on sage-grouse, depending on the timing and intensity of grazing and the habitat type or attribute of interest (Crawford *et al.* 2004, p. 2). Excessive grazing by domestic livestock during the late 1800s and early 1900s, along with severe drought, significantly impacted sagebrush ecosystems (Knick *et al.* 2003, p. 616). Overgrazing by livestock was cited as one of several contributing factors in the early loss and deterioration of sagebrush range in the region (Rogers 1964, p. 13). Historical accounts indicate that overgrazing of sagebrush range in Colorado began around 1875. Overgrazing was apparently at its worst in the early 1900's and continued until the BLM was organized in 1934 (Rogers 1964, p. 13). Around 1910, a gradual but marked decline in sage-grouse numbers and distribution in Colorado had begun (Rogers 1964, pp. 20–22). Though there

is no evidence of direct correlation, this information suggests that historical livestock grazing practices and overgrazing were a contributing factor in the early loss and degradation of sagebrush habitats and initial declines in sage-grouse numbers and distribution. Although current livestock stocking rates in the range of Gunnison sage-grouse are lower than historical levels (Laycock *et al.* 1996, p. 3), long-term effects from historical overgrazing, including changes in plant communities and soils, persist today (Knick *et al.* 2003, p. 116).

In addition, widespread use of water developments in connection with livestock grazing across the West has since increased livestock access to sagebrush habitats, and so even reduced numbers of livestock still pose impacts (Connelly *et al.* 2004, pp. 7–33, 7–35, 7–92). However, in some cases, small scale water development may benefit the species. For instance, in the recent past, landowners in San Juan County, Utah, in the range of the Monticello population of Gunnison sage-grouse did not have automatic control valves on water developments for livestock watering. This resulted in overflow creating seasonal wet meadow and mesic habitats often used by Gunnison sage-grouse and broods. The recent use of more advanced watering devices and shutoff valves has resulted in the loss of many of these created wet meadow sites, potentially contributing to sage-grouse declines in the area (Prather 2010, p. 27). Water developments are also a potential source of West Nile virus, a serious risk factor to sage-grouse populations. Unless they are designed and managed specifically to benefit Gunnison sage-grouse, we conclude that the negative effects of water development outweigh the positives (see Factor C discussion, Disease).

Although livestock grazing and associated land treatments have likely altered plant composition, increased topsoil loss, and increased spread of exotic plants, the impacts on Gunnison sage-grouse populations are not clear. Few studies have directly addressed the effect of livestock grazing on sage-grouse (Beck and Mitchell 2000, pp. 998–1000; Wamboldt *et al.* 2002, p. 7; Crawford *et al.* 2004, p. 11), and little direct experimental evidence links grazing practices to Gunnison sage-grouse population levels (Braun 1987, pp. 136–137, Connelly and Braun 1997, p. 7–9). Rowland (2004, pp. 17–18) conducted a literature review and found no experimental research that demonstrates grazing alone is responsible for reduction in sage-grouse numbers.

Despite the obvious impacts of grazing on plant communities within the range of the species, the GSRSC (2005, p. 114) could not find a direct correlation between historical grazing and reduced Gunnison sage-grouse numbers. Impacts from livestock grazing on individual birds and site-specific habitat conditions may have impacts at the population level as well, given the widespread nature of grazing. However, no studies have documented the impacts (positive or negative) of grazing at the population level.

Sage-grouse need significant grass and shrub cover for protection from predators, particularly during nesting season, and females will preferentially choose nesting sites based on these qualities (Hagen *et al.* 2007, p. 46). However, specific recommendations on vegetation characteristics and habitat requirements for sage-grouse vary. Nest success in Gunnison sage-grouse habitat was positively correlated with greater grass and forb heights; and shrub density and cover (Young 1994, p. 38). In contrast, nest site vegetation characteristics did not have a strong influence on nest success between the Gunnison Basin and San Miguel populations, where temporal factors had the greatest influence (Davis 2012, pp. 1, 10). It is thought that, in Colorado, sagebrush canopy cover conceals nests more than grass (GSRSC 2005, p. 73). In Oregon, grass height at greater sage-grouse nests was taller at successful nests than at unsuccessful nests (specific grass species that tend to be taller than others were also positively associated with successful nests) (Gregg 1991, p. 2). Gregg *et al.* (1994, p. 165) speculated that a reduction of grass heights due to livestock grazing in sage-grouse nesting and brood-rearing areas would negatively affect nesting success whenever cover is reduced below the 18 cm (7 in.) needed for predator avoidance. Maintaining average grass height greater than 18 cm (7 in.) was recommended by Connelly *et al.* 2000a, p. 977). However, guideline standards from Connelly *et al.* (2000a, entire) are derived primarily from research and publications from the Great Basin and northwest, where bunch grasses predominate (GSRSC 2005, p. 73).

The RCP (GSRSC 2005, p. H–6) provided structural habitat guidelines for Gunnison sage-grouse and recommends a grass height of 10 to 15 cm (3.9–5.9 in.) in breeding habitats. Lupis (2005, entire) found that despite reduced grass and forb cover, all (100 percent) Gunnison sage-grouse nests monitored in the Monticello population were successful. However, sample size for the study was limited to three nests,

and predator control at the time may have contributed to relatively high nesting success (Lupis 2005, entire); inference from this study is therefore limited. Based on measurements of cattle foraging rates on bunchgrasses both between and under sagebrush canopies, the probability of foraging on under-canopy bunchgrasses depends on sagebrush size and shape. Consequently, the effects of grazing on nesting habitats might be site-specific (France *et al.* 2008, pp. 392–393). Effects of grazing on nesting habitats are dependent on the timing as well as duration and intensity of grazing. Grazing on grasses and forbs during nesting and early brood rearing seasons could impact food sources for young broods, as well as alter the desired herbaceous plant community. Grazing on grasses and forbs in late-fall or winter could reduce residual vegetation important for hiding cover for nesting hens the following spring. In addition, grazing on shrubs, especially sagebrush, during winter months may cause impacts to both hiding/thermal cover as well as the primary food resource for Gunnison sage-grouse.

Livestock grazing can also impact fire return intervals, which in turn can affect Gunnison sage-grouse habitat quality. Fire ecology in the sagebrush steppe ecosystem has changed dramatically with European settlement. In high elevation sagebrush habitat, fire return intervals have increased from 12–24 years to more than 50 years, resulting in the dominance of woody vegetation (typically juniper and/or piñon pine) and the decline of important shrubs and herbaceous understories. At lower elevations, fire return intervals have decreased dramatically from 50–100 years to less than 10 years due to invasion by annual grasses resulting in the loss of native perennial shrubs, forbs, and grasses (Crawford *et al.* 2004, p. 8). By changing vegetative structure and composition, livestock grazing can contribute to either condition (an increase in woody vegetation or invasive annual grasses) (Beck and Mitchell 2000, pp. 995–996, and references therein), increasing the risk of larger, more severe, or more frequent wildfires (also see Piñon-Juniper Encroachment and Invasive Plants sections in this rule). On the other hand, livestock grazing may reduce herbaceous fuel accumulation and continuity and, consequently, the risk of wildfires in sagebrush habitats (Davies *et al.* 2010, p. 662).

We know that livestock grazing influences fire ecology in sage-grouse habitat. However, due to the spatial complexity of fire in sagebrush ecosystems (Crawford *et al.* 2004, p.7),

and the numerous factors determining the effects of grazing on sagebrush habitats (as described above), the effects of grazing on sage-grouse by altering fire ecology likely vary widely across time and space. Grazing by livestock, especially if done in a manner not consistent with local ecological conditions, including soil types, precipitation zones, vegetation composition and drought conditions, can reduce the suitability of breeding and brood-rearing habitat, negatively affecting sage-grouse populations (Braun 1987, p. 137; Dobkin 1995, p. 18; Connelly and Braun 1997, p. 231; Beck and Mitchell 2000, pp. 998–1000; USFWS 2013e, p. 45). Livestock and wild ungulate numbers must be managed at levels that allow native sagebrush vegetative communities to minimally achieve Proper Functioning Conditions for riparian areas or Rangeland Health Standards for uplands (USFWS 2013e, p. 45). Domestic livestock grazing reduces water infiltration rates and the cover of herbaceous plants and litter, compacts the soil, and increases soil erosion (Braun 1998, p. 147; Dobkin *et al.* 1998, p. 213). These impacts change the proportion of shrub, grass, and forb components in the affected area, and facilitate invasion of exotic plant species that do not provide suitable habitat for sage-grouse (Mack and Thompson 1982, p. 761; Miller and Eddleman 2000, p. 19; Knick *et al.* 2011, pp. 228–232).

Cattle feed mostly on grasses, but will make seasonal use of forbs and shrub species like sagebrush (Vallentine 1990, p. 226), the primary source of nutrition for sage-grouse. Within the range of Gunnison sage-grouse, sheep use of sagebrush habitats occurs primarily during the winter and spring months, depending on elevation. Sheep feed primarily on sagebrush and other shrubs. A sage-grouse hen's nutritional condition affects nest initiation rate, clutch size, and subsequent reproductive success (Barnett and Crawford 1994, p. 117; Coggins 1998, p. 30). Grazing management practices that are inconsistent with local ecological conditions in mesic sites result in a reduction of forbs and grasses available to sage-grouse chicks, thereby affecting chick survival (Aldridge and Brigham 2003, p. 30). Chick survival is one of the most important factors in maintaining Gunnison sage-grouse population viability (GSRSC 2005, p. 173). We conclude that livestock utilization of forage resources has the potential to negatively impact Gunnison sage-grouse, though the magnitude of those

effects depends on location, grazing practices, and site-specific factors.

Livestock can trample sage-grouse nests and nesting habitat. Although the effect of trampling at a population level is unknown, outright nest destruction has been documented, and the presence of livestock can cause sage-grouse to abandon their nests (Rasmussen and Griner 1938, p. 863; Patterson 1952, p. 111; Call and Maser 1985, p. 17; Holloran and Anderson 2003, p. 309; Beck and Mitchell 2000, p. 994; Coates 2007, p. 28). Sage-grouse have been documented to abandon nests following partial nest predation by cows (Coates 2007, p. 28). In general, all recorded encounters between livestock and grouse nests resulted in hens flushing from nests, which could expose the eggs to predation. Visual predators like ravens likely use hen movements to locate sage-grouse nests (Coates 2007, p. 33). Livestock also may trample sagebrush seedlings, thereby removing a source of future sage-grouse food and cover (Connelly *et al.* 2004, pp. 7–31, and references therein). Trampling of soil by livestock can reduce or eliminate biological soil crusts making these areas susceptible to cheatgrass invasion (Mack 1981, pp. 148–149; Young and Allen 1997, p. 531).

Livestock grazing may also have positive effects on sage-grouse under some habitat conditions. Sage-grouse use grazed meadows significantly more during late summer than ungrazed meadows because grazing had stimulated the regrowth of forbs (Evans 1986, p. 67). Greater sage-grouse sought out and used openings in meadows created by cattle grazing in northern Nevada (Klebenow 1981, p. 121). Also, both sheep and goats have been used to control invasive weeds (Mosley 1996 in Connelly *et al.* 2004, pp. 7–49; Merritt *et al.* 2001, p. 4; Olsen and Wallander 2001, p. 30) and woody plant encroachment (Riggs and Urness 1989, p. 358) in sage-grouse habitat. Anecdotal reports and opinion papers (Brunner 2006, p. 16; Gunnison County 2013a, p. 95) have suggested that cattle manure attracts and supports insect populations upon which sage-grouse depend for survival, and that sage-grouse “follow” cattle through pastures. However, there is no empirical evidence to support this theory. Further, there are no data to substantiate the idea that in areas not actively grazed by livestock, sage-grouse are limited in some way (Connelly *et al.* 2007, p. 37).

Sagebrush plant communities are not adapted to domestic grazing disturbance. Grazing changed the functioning of systems into less resilient, and in some cases, altered

communities (Knick *et al.* 2011, pp. 229–232). The ability to restore or rehabilitate areas depends on the condition of the area relative to the ability of a site to support a specific plant community (Knick *et al.* 2011, pp. 229–232). For example, if an area has a balanced mix of shrubs and native understory vegetation, a change in grazing management can restore the habitat to its potential historical species composition (Pyke 2011, pp. 536–538). Wambolt and Payne (1986, p. 318) found that resting areas from grazing had a better perennial grass response than other treatments. Active restoration is likely required where native understory vegetation is much reduced (Pyke 2011, pp. 536–540). But, if an area has soil loss or invasive species, returning the site to the native historical plant community may be impossible (Daubenmire 1970, p. 82; Knick *et al.* 2011, pp. 230–231; Pyke 2011, p. 539).

Aldridge *et al.* (2008, p. 990) did not find any relationship between sage-grouse persistence and livestock densities. However, the authors noted that livestock numbers do not necessarily correlate with range condition. They concluded that the intensity, duration, and distribution of livestock grazing are more influential on rangeland condition than the density of livestock (Aldridge *et al.* 2008, p. 990). Currently, little direct evidence links grazing practices to population levels of Gunnison or greater sage-grouse. Although grazing has not been examined at large spatial scales, as discussed above, we do know that grazing that is incompatible with local ecological conditions and that does not allow native sagebrush vegetative communities to minimally achieve Proper Functioning Conditions for riparian areas or Rangeland Health Standards for uplands can have negative impacts to individuals, nests, breeding productivity, and sagebrush and, consequently, to sage-grouse at local scales (USFWS 2013e, p. 44). However, how these impacts operate at large spatial scales and thus on population levels is currently unknown.

Livestock Grazing Allotments and Habitat Monitoring

Our analysis of grazing is focused on BLM lands because nearly all of the information available to us regarding current grazing management within the range of Gunnison sage-grouse was provided by the BLM. Similar information was provided by the USFS, but was more limited since the USFS has less occupied habitat in grazing allotments and has a different habitat monitoring approach than BLM (see

discussion below). A summary of domestic livestock grazing management on BLM and USFS lands in occupied

Gunnison sage-grouse habitat is provided in Table 8.

TABLE 8—SUMMARY OF DOMESTIC LIVESTOCK GRAZING MANAGEMENT AND ALLOTMENT DATA ON BLM^a AND USFS^b LANDS IN OCCUPIED HABITAT FOR EACH OF THE GUNNISON SAGE-GROUSE (GUSG) POPULATIONS

[From BLM (2013b, p. 3–1) and USFWS (2010c), compilation of data provided by BLM and USFS]

Population	USFS	BLM					
	Number of active USFS allotments	Number of active BLM allotments	Active BLM allotments with GUSG ^c objectives		BLM allotments assessed under LHA ^d		Assessed BLM allotments meeting LHA objective (standard 4)
Gunnison	34	62	62	100%	62	100%	20
San Miguel Basin ..	<i>no data</i>	12	11	92%	10	83%	^g 4
Dove Creek	<i>n/a</i> ^e	3	0	0%	3	100%	^h Unknown
Monticello	<i>n/a</i> ^e	6	6	100%	5	83%	4
Piñon Mesa	<i>no data</i>	15	8	53%	4	27%	4
Cerro Summit-Cimarron-Sims Mesa.	<i>n/a</i> ^e	6	1	17%	6	100%	ⁱ 1
Crawford ^f	<i>n/a</i> ^e	8	8	100%	8	100%	^j 7
Poncha Pass	<i>no data</i>	8	8	100%	8	100%	8
Total	34	124	83	67%	101	81%	48

^a Bureau of Land Management.

^b United States Forest Service.

^c Gunnison sage-grouse.

^d Land Health Assessments.

^e No United States Forest land in occupied habitat in this population area.

^f Includes allotments on National Park Service lands but managed by the Bureau of Land Management.

^g BLM did not evaluate land health specific to GUSG Habitat Objectives in 8 of the 12 active allotments in the San Miguel Basin population area.

^h BLM did not evaluate land health specific to GUSG Habitat Objectives in any of the 3 active allotments in the Dove Creek population area.

ⁱ BLM did not evaluate land health specific to GUSG Habitat Objectives in 5 of the 6 active allotments in the Cerro Summit-Cimarron-Sims Mesa population area; however, general land health standards were met on BLM lands in this area.

^j BLM found that 6 allotments (75 percent) were “meeting with problems” for GUSG Habitat Objectives. Generally these allotments were found to be low for some aspect of vegetation characteristics for breeding habitat recommended in GSRSC (2005 H–6).

Some of the available information on domestic livestock grazing and its relationship to habitat conditions on Federal lands is in the form of BLM’s Land Health Assessment (LHA) data. The purpose of LHAs is to determine the status of resource conditions within a specified geographic area at a specific time. The LHA process incorporates land health standards that define minimum resource conditions that must be achieved and maintained. Further discussion on the LHA process is provided in the following section.

The USFS does not apply the LHA process, but monitors allotment trends through a combination of procedures including seasonal inspections, permanent photo points, and inventory and mapping of plant community conditions and changes over time (USFS 2010). The majority of Gunnison sage-grouse occupied habitat in USFS grazing allotments is located in the Gunnison Basin population area (Table 8 of Factor A (Livestock Grazing Allotments and Habitat Monitoring)), and grazing information from USFS as it relates to Gunnison sage-grouse is therefore limited to this area (USFWS 2010c, p2).

Although grazing also occurs on lands owned or managed by other entities, we

have more limited information on the extent of grazing, management, and habitat conditions in those areas. However, substantial portions of sage-grouse habitat on private land in the Gunnison Basin, Crawford, San Miguel, and Piñon Mesa population areas are enrolled in the CCAA (see Conservation Programs and Efforts Related to Habitat Conservation below in this Factor A section). Based on the RCP conservation objective of securing and maintaining 90 percent of seasonally important habitat (severe winter, nesting, and late brood-rearing habitats) for the Gunnison sage-grouse in each population area (GSRSC 2005, pp. 223–224), the CCAA identifies targets for private land protection for each population area, including private lands not already considered as protected under a conservation easement (USFWS 2006, pp. 11–12). Roughly 91 percent of the Gunnison Basin population area target, 95 percent of the Crawford population area target, 46 percent of the San Miguel population area target, and 217 percent of the Piñon Mesa population area target on private lands are enrolled in the CCAA (Table 10). Except for properties recently enrolled in the program, all enrolled private lands have been monitored by

CPW using standardized vegetation transects and rangeland health assessments and, despite recent drought conditions and ongoing land uses, no significant deviations from baseline habitat conditions were observed (CPW 2014a, p. 1). All enrolled properties continue to be in compliance with the terms of their Certificate of Inclusion (CI) (CPW 2014a, p. 1). This information suggests that the current level of livestock grazing and operations on those lands is compatible with Gunnison sage-grouse habitat needs.

Although Federal land and livestock grazing may be more regulated than private lands grazing, we cannot make any generalizations about how habitat conditions in those areas might compare with private lands where livestock grazing occurs. Grazing allotments containing both Federal and private lands are, in some cases, managed to meet land health standards through coordination and cooperation with grazing permittees (BLM 2013c, p. 1–2). Furthermore, many livestock operations within the range of Gunnison sage-grouse are employing innovative grazing strategies and conservation actions (BLM 2012a, pp. 1–2; Gunnison County Stockgrowers 2009, entire) in

collaboration with the BLM and Forest Service.

BLM Land Health Assessment Standards

LHA standards are based on the recognized characteristics of healthy ecosystems and include considerations of upland soils, riparian systems, plant and animal communities, habitat conditions and populations of special status species, and water quality (BLM 1997, pp. 6–7). Each LHA standard, such as the condition and health of soils, riparian areas, or plant communities, has varying degrees of applicability to basic Gunnison sage-grouse habitat needs. The LHA standard most applicable to Gunnison sage-grouse is LHA Standard 4, which is specific to special status species (BLM 1997, p. 7). *Special status species* include Federally threatened, endangered, proposed, and candidate species; recently delisted (5 years or less) species; and BLM sensitive species. *BLM sensitive species* are those that require special management consideration to promote their conservation and reduce the likelihood and need for future listing under the Act; they are designated by the BLM State Director(s) (BLM 2008). Gunnison sage-grouse was designated as a BLM sensitive species in 2000, when it was recognized as a separate species from greater sage-grouse (BLM 2009a, p. 7). Therefore, Gunnison sage-grouse is managed by the BLM as a special status species.

In addition to requiring stable and increasing populations and suitable habitat for special status species, the specific indicators for LHA Standard 4 include the presence of: minimal noxious weeds, sustainably reproducing native plant and animal communities, mixed age classes sufficient to sustain recruitment and mortality fluctuations, habitat connectivity, photosynthetic activity throughout the growing season, diverse and resilient plant and animal communities in balance with habitat potential, plant litter accumulation, and several plant communities in a variety of successional stages and patterns (BLM 1997, p. 7). BLM deems an allotment that meets LHA Standard 4 to meet or exceed a minimum resource condition for those species considered for that area.

If livestock grazing is found to be a causal factor for not meeting LHA standards, including LHA Standard 4, BLM implements changes to grazing management to address those issues and to move toward achieving desired resource conditions. Examples of adjustments include reduction of

stocking rates or utilization, changes in seasons of use, reductions in duration of use, implementation of resting or deferred rotation grazing systems, or change in livestock class. Under BLM Instruction Memoranda WO-IM-2010-071, CO-IM-2010-028 and CO-IM-2013-033 (see further discussion in Factor D on Instruction Memoranda), BLM must consider Gunnison sage-grouse habitat needs and objectives when analyzing grazing management and permit renewals (BLM 2013a, Attachment 1–10).

We recognize that LHAs are largely qualitative and other factors such as impacts from invasive species, drought, OHV use, or the lingering effects of historical overgrazing, may influence the outcome of LHA determinations. Furthermore, BLM's application of LHA standards, methodologies used, and data interpretation varies widely by Field Office and State (Veblen *et al.* 2011, p. 3; BLM 2013c, p. 1–3), and the potentially subjective nature of the methodology is evident in the information on each populations presented below. Therefore, the relationship between LHA determinations and the effects of domestic livestock grazing on Gunnison sage-grouse is very imprecise. We also recognize that if an allotment does not fully meet LHA Standard 4, it does not mean the habitat is degraded or unsuitable for Gunnison sage-grouse; and a “not meeting” ranking is not always attributable to livestock grazing (BLM 2013c, p. 1–2). For instance, some vacant allotments (not grazed by livestock) are not currently meeting LHA Standard 4 (BLM 2013c, p. 1–3), meaning current grazing practices are not a causal factor for that ranking. A “not meeting” determination could also be based primarily on the declining status of a special status species' population, including species other than Gunnison sage-grouse. Finally, LHAs are typically only conducted every 10 years, triggered by changes in management such as grazing permit renewal and similar actions and, therefore, do not directly indicate rangeland trend (BLM 2013c, p. 1–3). However, the fact that some grazing allotments or areas within grazing allotments are not meeting LHA objectives indicates that habitat conditions may be degraded for Gunnison sage-grouse in parts of its range, and that domestic livestock grazing may be contributing to these conditions in some instances. A more thorough examination of each allotment not meeting LHA Standard 4 would be

required to determine to what extent livestock grazing is a causal factor.

Livestock Grazing in the Gunnison Basin Population Area

The BLM manages approximately 51 percent of the area currently occupied by Gunnison sage-grouse in the Gunnison Basin. Nearly all (98 percent) of this area is actively grazed (USFWS 2010c, p. 1). The USFS manages livestock grazing on approximately 14 percent of the occupied portion of the Gunnison Basin population area. Therefore, this information on livestock grazing is pertinent to approximately 65 percent of occupied habitat in the Gunnison Basin.

In 2013, of 62 active BLM grazing allotments in the Gunnison Basin population, all had incorporated Gunnison sage-grouse habitat objectives as described above and completed LHAs. LHA Standard 4 was met in 32 percent of these allotments in 2013 (Table 8 of Factor A (Livestock Grazing Allotments and Habitat Monitoring); BLM 2013c, p. 3–1). In 2012, on actively grazed BLM lands in the Gunnison Basin, approximately 8 percent was “meeting”, 17 percent was “moving towards”, and 63 percent was “not meeting” Standard 4; while 11 percent was of “unknown” status (BLM 2012a, pp. 2–3).

Although 2013 data shows that 68 percent of allotments may not be meeting LHA Standard 4, the data show that 32 percent of allotments were meeting this standard, which is an improvement over the 8 percent indicated by the 2012 data. Nonetheless, recognizing the limitations of LHA methodology and data as discussed above, the information above suggests that there may be reduced habitat conditions on BLM land in the Gunnison Basin. The cause of these conditions may or may not be directly related to grazing management practices that were inconsistent with local ecological conditions, either in the past or at present, but the overall trend is for improving conditions with respect to LHA Standard 4. The BLM has also implemented a CCA for Gunnison Basin (BLM 2013b, entire), which has specific measures for livestock grazing within all occupied habitat in the Gunnison Basin to help improve Gunnison sage-grouse habitat quality (BLM 2013b, Attachment 5–4) (see Conservation Programs and Efforts Related to Habitat Conservation later in this Factor A analysis).

In 2007 and 2008, the BLM Gunnison Field Office conducted Gunnison sage-grouse habitat assessments in two major occupied habitat locations in the Gunnison Basin population, quantifying

vegetation structural characteristics and plant species diversity. Data were collected and compared to Gunnison sage-grouse Structural Habitat Guidelines in the 2005 Rangewide Conservation Plan (RCP) (GSRSC, 2005, Appendix H) during optimal growing conditions in these two major occupied areas. Of 97 transects, guidelines were met in 45 percent for sagebrush cover; 30 percent for grass cover; 25 percent for forb cover; 75 percent for sagebrush height; 81 percent for grass height; and 39 percent for forb height (BLM 2009a, pp. 31–32). This information suggests that habitat conditions in those areas generally fell short of standards for Gunnison sage-grouse, particularly in relation to grass cover, forb cover, and forb height. However, it is not known whether those conditions were attributable to livestock grazing or other factors such as big game forage use or weather patterns.

Livestock grazing has also negatively impacted several Gunnison sage-grouse treatments (projects aimed at improving habitat condition) in the Gunnison Basin (BLM 2009a, p. 34). Although these areas are generally rested from domestic livestock grazing for 2 years after treatment, several have been heavily used by cattle shortly after the treatment and the effectiveness of the treatments decreased (BLM 2009a, p. 34), which reduced the potential benefits of the treatments.

As noted earlier, the USFS does not use the LHA process, but monitors allotment trends through a combination of procedures including seasonal inspections, permanent photo points, and inventory and mapping of plant community conditions and changes over time (USFS 2010, entire). Three (9 percent) of the 34 USFS allotments in Gunnison sage-grouse occupied habitat in the Gunnison Basin population area have incorporated habitat objectives in their grazing plans. However, we have no specific data that evaluate allotment conditions as they relate to these objectives. Overall, the USFS reports that its grazing allotments in the Gunnison Basin population area appear to be improving in forb and grass cover but are declining in sagebrush cover (USFS 2010, entire).

All of this information indicates that grazing management may be a factor in degraded habitat conditions for Gunnison sage-grouse in parts of the Gunnison Basin. Given that there are far more acres of occupied Gunnison sage-grouse habitat in the Gunnison Basin that are actively grazed than in other populations, and over 50 percent of land (295,000 ac) in the Gunnison Basin is under BLM management, most of which

is actively grazed, overall exposure to Federal grazing management is higher in the Gunnison Basin than elsewhere. This raises concerns about the long-term habitat impacts of grazing management on BLM land, and supports the need for BLM to continue to monitor and improve LHA trends and grazing allotment management.

BLM reviews and renews grazing permits at 10 year intervals. Since at least 2010 BLM has modified grazing permit terms and conditions in areas determined to be “not meeting” LHA standards through the permit renewal process. Examples of new permit terms or conditions required by the BLM include implementation of rotational grazing systems, deferment or elimination of grazing in certain pastures, reduced grazing duration, changes in season of use, reduced stocking rates, fencing livestock out of riparian areas, or incorporating specific habitat objectives for Gunnison sage-grouse or other special status species (BLM 2012a, pp. 1–2). It is anticipated that these changes will minimize further impacts to habitat and, if continued in the future through Instruction Memoranda or Resource Management Plan Amendments (see Factor D discussion), improve degraded habitats for Gunnison sage-grouse in the Gunnison Basin. Likewise, conservation measures from the CCA (BLM 2013b, entire) should continue to reduce impacts from livestock grazing and operations on Federal lands in the Gunnison Basin (see Conservation Programs and Efforts Related to Habitat Conservation later in this Factor A analysis for more details).

Some data indicate habitat conditions within a part of occupied habitat in the Gunnison Basin may be favorable to Gunnison sage-grouse (Williams and Hild 2011, entire). Detailed vegetation monitoring was conducted on six study sites, across the Gunnison Basin during 2010 and 2011 in order to determine baseline habitat conditions for a potential future study of the effects of manipulating livestock grazing on Gunnison sage-grouse habitat (Williams and Hild 2011, entire). Transects were conducted on private, BLM, USFS, and CPW land. Despite lower than average precipitation in 2010, and wide variability of habitat conditions across the study area, most vegetation measurements were within the structural habitat guidelines for Gunnison sage-grouse from the 2005 Rangewide Conservation Plan (GSRSC 2005, pp. H–6–H–8). However, measuring livestock grazing effects was not an objective of the study (Phillips 2013, p. 4). The extent of past or current

livestock grazing in these areas was not described, nor did the study compare un-grazed to grazed areas. Further, transect locations were prioritized and selected in important breeding areas used by radio-collared Gunnison sage-grouse, potentially biasing study results. Therefore, the relationship between livestock grazing and habitat conditions is unknown under this study, and there is limited ability to infer conditions in other portions of the Gunnison Basin not prioritized for sampling.

Livestock Grazing in All Other Population Areas

The BLM manages approximately 36 percent of the area currently occupied by Gunnison sage-grouse in the San Miguel Basin, and approximately 79 percent of this area is actively grazed. Grazing also occurs on lands owned or managed by other entities within the San Miguel Basin, but we have no information on the extent of grazing in these areas. Within the occupied range in the San Miguel population, no active BLM grazing allotments have Gunnison sage-grouse habitat objectives incorporated into the allotment management plans or Records of Decision for permit renewals (USFWS 2010c, p. 9). In 2013, 10 (83 percent) of 12 active allotments in the San Miguel population area had LHAs completed in the last 15 years; however, BLM only evaluated land health specific to Gunnison sage-grouse habitat objectives in four (33 percent) of these 12 allotments. Of the four allotments evaluated, all were found to be meeting LHA Standard 4. LHA data are not available for conditions in the remaining 8 allotments where Gunnison sage-grouse habitat objectives were not considered (Table 8 of Factor A (Livestock Grazing Allotments and Habitat Monitoring); BLM 2013c, p. 3–1). Therefore, for the four allotments in the San Miguel population area for which we have information, it appears that grazing is managed in a manner consistent with land health standards and habitat requirements for Gunnison sage-grouse.

More than 81 percent of the area occupied by the Dove Creek group is privately owned. The BLM manages 11 percent of the occupied habitat, and 41 percent of this area is actively grazed. Within the occupied range in the Dove Creek group of the Monticello-Dove Creek population, there are three active BLM grazing allotments, and none of these have Gunnison sage-grouse habitat objectives incorporated into the allotment management plans or Records of Decision for permit renewals (Table 8 of Factor A (Livestock Grazing

Allotments and Habitat Monitoring); USFWS 2010c, p. 3; BLM 2013c, p. 3–1). In 2013, all three active allotments in occupied habitat had completed LHAs. However, because Gunnison sage-grouse habitat objectives were not considered in these assessments, habitat conditions for Gunnison sage-grouse are unknown (BLM 2013c, p. 3–1). Gunnison sage-grouse are not specifically considered in grazing management plans or permits in this area. Due to the lack of data specific to Gunnison sage-grouse, it is unknown how livestock grazing may be influencing the species or its habitat in the Dove Creek population area.

More than 95 percent of the area occupied by the Monticello population is privately owned. The BLM manages 4 percent of the occupied habitat, and 83 percent of this area is grazed. Within the occupied range in the Monticello population, all 6 active BLM grazing allotments have Gunnison sage-grouse habitat objectives incorporated into the allotment management plans or Records of Decision for permit renewals (USFWS 2010c, p. 6). In 2009 (the most recent information received from BLM on this topic), 88 percent of the area of occupied habitat in active allotments had a recently completed LHA. Approximately 60 percent of the area in occupied habitat in active allotments was found by the BLM to meet LHA Standard 4. Given the small amount of land managed by the BLM in this area, most of which is meeting Standard 4, this information suggests that grazing on the majority of the small percentage of lands managed by the BLM in the Monticello population area is likely managed in a manner consistent with land health standards and habitat requirements for Gunnison sage-grouse.

The majority of occupied habitat in the Monticello population is in private ownership and is actively grazed by cattle. Sheep historically grazed this area as well (Messmer 2013, p. 16). A significant portion of the agricultural lands in Monticello population are enrolled in the Conservation Reserve Program (CRP), and much of these lands are used by Gunnison sage-grouse (Lupis *et al.* 2006, pp. 959–960; Ward 2007, p. 15). CRP land has provided a considerable amount of brood-rearing habitat in the Monticello group because of its forb component. Grazing of CRP land in Utah occurred in 2002 under emergency Farm Bill provisions due to drought and removed at least some of the grass and forb habitat component, thus likely negatively affecting Gunnison sage-grouse chick survival (see NRCS and Private Land Conservation Efforts). Radio-collared males and non-brood-rearing females

exhibited temporary avoidance of grazed fields during and after grazing (Lupis *et al.* 2006, pp. 959–960), although one hen with a brood continued to use a grazed CRP field and successfully fledged her brood.

The BLM manages 28 percent of occupied habitat in the Piñon Mesa population area, and approximately 97 percent of this area is grazed. Over 50 percent of occupied habitat in this population area is privately owned, and while grazing certainly occurs on these lands, we have no information on its extent. Within the occupied range in the Piñon Mesa population, 8 of 15 (53 percent) active BLM grazing allotments have Gunnison sage-grouse habitat objectives incorporated into the allotment management plans or Records of Decision for permit renewals (USFWS 2010c, p. 5). In 2013, four of these allotments (27 percent) had completed LHAs. Of the four allotments in which LHAs were completed, all (100 percent) were found to be meeting LHA Standard 4 (Table 8 of Factor A (Livestock Grazing Allotments and Habitat Monitoring); BLM 2013c, p. 3–1). Therefore, for the small portion of the Piñon Mesa population area for which we have information, it appears that grazing is managed in a manner consistent with Gunnison sage-grouse habitat requirements.

Over 76 percent of the area occupied by the Cerro Summit-Cimarron-Sims Mesa population is privately owned. The BLM manages only 13 percent of the occupied habitat, of which 83 percent is grazed. Within the occupied range in the Cerro Summit-Cimarron-Sims Mesa population, 1 of 6 active BLM grazing allotments have Gunnison sage-grouse habitat objectives incorporated into the allotment management plans or Records of Decision for permit renewals (USFWS 2010c, p. 7). In 2013, of six active allotments, all had completed LHAs; however, BLM only evaluated land health specific to Gunnison sage-grouse habitat objectives in one (17 percent) of these six allotments. That single allotment was found to be meeting LHA Standard 4. However, general land health standards (not specific to Gunnison sage-grouse) were met on BLM lands in this area, although such conditions may or may not meet the needs of Gunnison sage-grouse. LHA data specific to Gunnison sage-grouse habitat objectives are not available for the remaining five allotments (Table 8 of Factor A (Livestock Grazing Allotments and Habitat Monitoring); BLM 2013c, p. 3–1). However, for the small portion of the Cerro Summit-Cimarron-Sims Mesa population area for which we have

information, it appears that grazing is being managed in a manner consistent with land health standards and habitat requirements for Gunnison sage-grouse.

Lands administered by the BLM and NPS comprise over 75 percent of occupied habitat in the Crawford population, and 96 percent of this area is actively grazed. Grazing allotments on NPS lands in this area are administered by the BLM. In 2013, of eight active allotments in the Crawford population, all had incorporated Gunnison sage-grouse habitat objectives and completed LHAs. Seven (88 percent) of these eight allotments were found to be meeting LHA Standard 4, however 6 of those allotments were defined as “meeting with problems” (generally these allotments were found to be low for some aspect of vegetation characteristics for breeding habitat recommended in GSRSC) (Table 8 of Factor A (Livestock Grazing Allotments and Habitat Monitoring); BLM 2013c, p. 3–1). Based on this information, it appears that grazing may be managed in a manner consistent with Gunnison sage-grouse conservation in the majority of the Crawford population area.

The BLM manages nearly half of occupied habitat in the Poncha Pass population area, and approximately 98 percent of this area is actively grazed. Within the occupied range in the Poncha Pass population, all eight active BLM grazing allotments have Gunnison sage-grouse habitat objectives incorporated into the allotment management plans or Records of Decision for permit renewals (USFWS 2010c, p. 4). In 2013, all active allotments in occupied habitat had completed LHAs, and all were meeting LHA objectives. Based on this information it appears that grazing is managed in a manner consistent with Gunnison sage-grouse conservation on BLM land in the Poncha Pass population area.

Wild Ungulate Herbivory in All Population Areas

Overgrazing by deer and elk may cause local degradation of habitats by removal of forage and residual hiding and nesting cover. Hobbs *et al.* (1996, pp. 210–213) documented a decline in available perennial grasses as elk densities increased. Such grazing could negatively impact nesting cover for sage-grouse. The winter range of deer and elk overlaps the year-round range of the Gunnison sage-grouse. Excessive but localized deer and elk grazing has been documented in the Gunnison Basin (BLM 2005a, pp. 17–18; Jones 2005, pers. comm.).

Grazing by deer and elk occurs in all Gunnison sage-grouse population areas. Although we have no information indicating that competition for resources is limiting Gunnison sage-grouse in the Gunnison Basin, BLM observed that certain mountain shrubs were being browsed heavily by wild ungulates (BLM 2009a, p. 34). Subsequent results of monitoring in mountain shrub communities indicated that drought and big game were having large impacts on the survivability and size of mountain mahogany (*Cercocarpus utahensis*), bitterbrush (*Purshia tridentata*), and serviceberry (*Amelanchier alnifolia*) in the Gunnison Basin (Japuntich *et al.* 2010, pp. 7–9). The authors speculated that observed reductions in shrub size and vigor will reduce drifting snow accumulation resulting in decreased moisture availability to grasses and forbs during the spring melt. Reduced grass and forb growth could negatively impact Gunnison sage-grouse nesting and early brood-rearing habitat. It is also thought that elk numbers and their seasonal occurrence in the Crawford population may be contributing to habitat impacts and direct disturbance of Gunnison sage-grouse (BLM 2013c, p. 4–9).

Summary of Domestic Grazing and Wild Ungulate Herbivory

Livestock management and domestic grazing have the potential to degrade Gunnison sage-grouse habitat. Grazing incompatible with local ecological conditions, as described above, can adversely impact nesting and brood-rearing habitat by decreasing vegetation available for concealment from predators. Grazing incompatible with local ecological conditions also has been shown to compact soils, decrease herbaceous abundance, increase erosion, and increase the probability of invasion of exotic plant species (GSRSC 2005, p. 173).

The impacts of livestock operations on Gunnison sage-grouse depend upon stocking levels and season of use. We recognize that not all livestock grazing results in habitat degradation, and many livestock operations within the range of Gunnison sage-grouse are employing innovative grazing strategies and conservation actions (BLM 2012a, pp. 1–2; Gunnison County Stockgrowers 2009, entire) in collaboration with the BLM and Forest Service. As discussed above, habitat conditions are likely favorable to Gunnison sage-grouse in part of the Gunnison Basin (Williams and Hild 2011, entire), although the relationship of livestock grazing to habitat conditions in those areas is unknown.

As described above, the relationship between LHA determinations and the effects of domestic livestock grazing on Gunnison sage-grouse is imprecise, and the application of LHA methods varies widely across the species' range. The best available information suggests that LHA objectives important to Gunnison sage-grouse are not being met across parts of the species' range and that livestock grazing is likely contributing to those conditions in some instances. Reduced habitat quality in those areas, as reflected in LHA data, is likely negatively impacting Gunnison sage-grouse in some of the populations, including the Gunnison Basin. In summary, for BLM allotments, 67 percent have Gunnison sage-grouse habitat objectives, and 39 percent are meeting LHA Standard 4 (Table 8 of Factor A (Livestock Grazing Allotments and Habitat Monitoring)).

Numerous public comments on our proposed rule to list Gunnison sage-grouse as endangered (78 FR 2486, January 11, 2013) suggested that because the Gunnison Basin population is large and stable (but see additional discussion regarding this assumption in Factor E (Small Population Size and Structure)), current livestock grazing practices are not having adverse effects on this population. While we agree that, relative to the satellite populations, the Gunnison Basin population is large and lek count data indicate it is currently stable, there are no data to demonstrate whether livestock grazing is limiting the population. The best available data suggests that livestock grazing that is done in a manner inconsistent with local ecological conditions is likely negatively impacting localized areas of habitat and individual birds in the Gunnison Basin and in other populations.

We know that grazing incompatible with local ecological conditions can have negative impacts to sagebrush and consequently to Gunnison sage-grouse at local scales. Impacts to sagebrush plant communities as a result of grazing are occurring on a large portion of the range of the species. As described in more detail below, conservation measures from the Gunnison Basin CCA (BLM 2013b, entire) should continue to reduce impacts from livestock grazing and operations on Federal lands in the Gunnison Basin. Likewise, conservation measures from the CCAA Program have minimized impacts from livestock grazing and operations on private lands across the range of Gunnison sage-grouse (see Conservation Programs and Efforts Related to Habitat Conservation later in this Factor A discussion). We expect livestock grazing to continue

throughout the range of Gunnison sage-grouse for as long as it is economically viable. Since the winter range of deer and elk overlaps the year-round range of Gunnison sage-grouse and there is documentation of isolated localized excessive grazing by deer and elk as discussed above, effects of domestic livestock grazing are likely intensified by browsing of woody species by wild ungulates in portions of the Gunnison Basin and the Crawford area, and potentially other populations. Habitat degradation that can result from grazing in a manner incompatible with local ecological conditions, particularly with the interacting factors of invasive weed expansion and climate change, is a current and future threat to Gunnison sage-grouse persistence.

Fences

Effects of fencing on sage-grouse include direct mortality through collisions, creation of raptor and corvid perch sites, the potential creation of predator corridors along fences (particularly if a road is maintained next to the fence), incursion of exotic species along the fencing corridor, and habitat decline (Call and Maser 1985, p. 22; Braun 1998, p. 145; Connelly *et al.* 2000a, p. 974; Beck *et al.* 2003, p. 211; Knick *et al.* 2003, p. 612; Connelly *et al.* 2004, p. 1–2). However, fences can also benefit Gunnison sage-grouse by facilitating the management of livestock forage use and distribution to achieve desired habitat objectives (GSRSC 2005, pp. 211–213).

Sage-grouse frequently fly low and fast across sagebrush flats, and fences can create a collision hazard resulting in direct mortality (Call and Maser 1985, p. 22; Christiansen 2009, pp. 1–2). Not all fences present the same mortality risk to sage-grouse. Mortality risk appears to be dependent on a combination of factors including design of fencing, landscape topography, and spatial relationship with seasonal habitats (Christiansen 2009, pp. 1–2). This variability in fence mortality rate and the lack of systematic fence monitoring make it difficult to determine the magnitude of direct strike mortality impacts to sage-grouse populations; however, in some cases the level of mortality is likely significant to localized areas within populations. Greater sage-grouse fence collisions during the breeding season in Idaho were found to be relatively common and widespread, with collisions being influenced by the technical attributes of the fences, fence length and density, topography, and distance to nearest active sage-grouse lek (Stevens 2011, pp. 102–107; Stevens *et al.* 2012a, p. 300; Stevens *et al.* 2012b, p. 1377). Stevens

et al. (2012a; p. 299) found 41 of 60 recorded collisions (73 percent) in spring of 2010 were less than 500m from a lek and only 1 collision > 500m from a lek, indicating that fences near leks containing certain topographic properties may pose an increased risk to sage-grouse.

Although we expect the impacts of fences to Gunnison sage-grouse are similar to those observed in greater sage-grouse, studies on fence strike-related mortality in Gunnison sage-grouse are more limited. In 10 years of tracking and studying over 1,000 radio-collared sage-grouse in Colorado, CPW has documented only two strike-related mortalities in Gunnison sage-grouse due to fences (one confirmed case in Poncha Pass attributed to bird release methods; and one unconfirmed case in the Gunnison Basin); and only two strike-related mortalities in greater sage-grouse due to fences (CPW 2013b, p. 11; Phillips and Griffin 2013, pers. comm.). This information suggests that, in Colorado, direct mortality of sage-grouse due to fence strikes is minimal, although without a more thorough study, the anecdotal information may be misleading.

Although the effects of direct strike mortality on populations are not fully analyzed, fences are generally widespread across the landscape. At least 1,540 km (960 mi) of fence are on BLM lands within the Gunnison Basin (Borthwick 2005b, pers. comm.; BLM 2005a, 2005e) and an unquantified amount of fence is located on land owned or managed by other landowners. Many miles of historic fence occurs on NPS lands, some of which may be affecting Gunnison sage-grouse. As of 2013, the NPS has removed 1.6 km (1 mi) of unnecessary fencing, and will continue inventorying efforts for additional removal where fencing is not needed. The NPS is also constructing 8.8 km (5.5 mi) of fence to prevent cattle grazing on a retired portion of an allotment. The fence is built to CPW suggested wildlife-friendly specifications with raptor perch deterrents and marked fence wires. Fences are present within all other Gunnison sage-grouse population areas as well, but we have no quantitative information on the amount or types of fencing in these areas.

Fence posts create perching places for raptors and corvids, which may increase the ability of these birds to prey on sage-grouse (Braun 1998, p. 145; Oyler-McCance *et al.* 2001, p. 330; Connelly *et al.* 2004, p. 13–12). This impact is potentially significant for sage-grouse reproduction because corvids were responsible for more than 50 percent of

greater sage-grouse nest predations in Nevada (Coates 2007, pp. 26–30). Greater sage-grouse avoidance of habitat adjacent to fences, presumably to minimize the risk of predation, effectively results in habitat fragmentation even if the actual habitat is not removed (Braun 1998, p. 145). Because of similarities in behavior and habitat use, the response of Gunnison sage-grouse should be similar to that observed in greater sage-grouse.

Summary of Fences

Fences contribute to habitat decline and increase the potential for loss of individual grouse through collisions or enhanced predation. Fences can also benefit Gunnison sage-grouse by facilitating better management of livestock grazing forage use and distribution in sagebrush habitats. Despite some fence removal, we expect that the majority of existing fences will remain on the landscape indefinitely. In the smaller Gunnison sage-grouse populations, fencing cumulatively affects the ability of the species to persist. We also recognize that fences are located throughout all Gunnison sage-grouse populations and are, therefore, contributing to the decline of remaining habitat and are a potential source of mortality within all populations. For these reasons, fences are likely a contributing factor to the decline of Gunnison sage-grouse populations, both directly and indirectly, and are therefore a current and future threat to the species.

Invasive Plants

For the purposes of this rule, we define invasive plants as those that are not native to an ecosystem and that have a negative impact on Gunnison sage-grouse habitat. Invasive plants alter native plant community structure and composition, productivity, nutrient cycling, and hydrology (Vitousek 1990, p. 7) and may cause declines in native plant populations through competitive exclusion and niche displacement, among other mechanisms (Mooney and Cleland 2001, p. 5446). Invasive plants reduce and can eliminate vegetation that sage-grouse use for food and cover, and generally do not provide quality sage-grouse habitat. Sage-grouse depend on a variety of native forbs and the insects associated with them for chick survival, and on sagebrush, which is used exclusively throughout the winter for food and cover. In eastern Nevada, leks with post-fire invasive grasses showed reduced lek recruitment and reduced annual survival of male greater sage-grouse as compared to leks surrounded by native sagebrush habitats, despite

favorable rainfall and climatic conditions (Blomberg *et al.* 2012). Reduced adult survival, reproduction, and recruitment at the local levels may, in turn, negatively impact sage-grouse populations.

Along with replacing or removing vegetation essential to sage-grouse, invasive plants negatively impact existing sage-grouse habitat. They can create long-term changes in ecosystem processes, such as fire-cycles (see discussion below under Fire in this Factor A analysis) and other disturbance regimes that persist even after an invasive plant is removed (Zouhar *et al.* 2008, p. 33). A variety of nonnative annuals and perennials are invasive to sagebrush ecosystems (Connelly *et al.* 2004, pp. 7–107 and 7–108; Zouhar *et al.* 2008, p. 144). Cheatgrass is considered most invasive in Wyoming big sagebrush communities (Connelly *et al.* 2004, p. 5–9). Other invasive plants found within the range of Gunnison sage-grouse that are reported to take over large areas include: spotted knapweed (*Centaurea maculosa*), Russian knapweed (*Acroptilon repens*), oxeye daisy (*Leucanthemum vulgare*), yellow toadflax (*Linaria vulgaris*), and field bindweed (*Convolvulus arvensis*) (BLM 2009a, p. 28, 36; Gunnison Watershed Weed Commission (GWWC) 2009, pp. 4–6).

Although not yet reported to affect large expanses in the range of Gunnison sage-grouse, the following weeds are also known to occur in the species' range and have successfully invaded large expanses of native wildlife habitats in other parts of western North America: diffuse knapweed (*Centaurea diffusa*), whitetop (*Cardaria draba*), jointed goatgrass (*Aegilops cylindrica*), and yellow starthistle (*Centaurea solstitialis*). Other invasive plant species present within the range of Gunnison sage-grouse that are problematic yet less likely to overtake large areas include: Canada thistle (*Cirsium arvense*), musk thistle (*Carduus nutans*), bull thistle (*Cirsium vulgare*), houndstongue (*Cynoglossum officinale*), black henbane (*Hyoscyamus niger*), common tansy (*Tanacetum vulgare*), and absinth wormwood (*A. biennis*) (BLM 2009a, p. 28, 36; GWWC 2009, pp. 4–6).

Cheatgrass impacts sagebrush ecosystems by potentially shortening fire intervals from several decades, to as low as 3 to 5 years (depending on sagebrush plant community type and site productivity), perpetuating its own persistence and intensifying the role of fire (Whisenant 1990, p. 4). Another study found that cheatgrass presence can shorten fire intervals to less than 10 years resulting in the elimination of

shrub cover and reducing the availability and quality of forb cover (Connelly *et al.* 2004, p. 7–5). Elevated carbon dioxide levels associated with climate change may increase the competitive advantage (via increased growth and reproduction rates) of exotic annual grasses, such as cheatgrass, in higher elevation areas, such as in Gunnison sage-grouse range, where its current distribution is limited (Miller *et al.* 2011, pp. 181–183). Decreased summer precipitation reduces the competitive advantage of summer perennial grasses, reduces sagebrush cover, and subsequently increases the likelihood of cheatgrass invasion (Bradley 2009, pp. 202–204; Prevey *et al.* 2009, p. 11). Future decreased summer precipitation could increase the susceptibility of sagebrush areas in Utah and Colorado to cheatgrass invasion (Bradley 2009, p. 204).

A variety of restoration and rehabilitation techniques are used to treat invasive plants, but they can be costly and are mostly unproven and experimental at a large scale. No broad-scale cheatgrass eradication method has yet been developed. Habitat treatments that either disturb the soil surface or deposit a layer of litter increase cheatgrass establishment in the Gunnison Basin when a cheatgrass seed source is present (Sokolow 2005, p. 51). Rehabilitation and restoration techniques for sagebrush habitats are mostly unproven and experimental, raising further concerns about soil disturbance and removal of any remaining sage-brush habitats. (Pyke 2011, p. 543). Therefore, researchers recommend using habitat treatment tools, such as brush mowers, with caution and suggest that treated sites should be monitored for increases in cheatgrass emergence (Sokolow 2005, p. 49).

Invasive Plants in the Gunnison Basin Population Area

Quantifying the total amount of Gunnison sage-grouse habitat impacted by invasive plants is difficult due to differing sampling methodologies, incomplete sampling, inconsistencies in species sampled, and varying interpretations of what constitutes an infestation (Miller *et al.*, 2011, pp. 155–156). Cheatgrass has invaded areas in the Gunnison sage-grouse range, supplanting sagebrush habitat in some areas (BLM 2009a, p. 60). However, we do not have a reliable estimate of the amount of area occupied by cheatgrass in the range of Gunnison sage-grouse. While not ubiquitous, cheatgrass is found at numerous locations throughout the Gunnison Basin (BLM 2009a, p. 60)

and has been identified as an impact to sage-grouse habitat in that population (GSRSC 2005, p. 78).

Cheatgrass infestation within a particular area can range from a small number of individuals scattered sparsely throughout a site, to complete or near-complete understory domination of a site. Cheatgrass has increased throughout the Gunnison Basin in the last decade and is becoming increasingly detrimental to sagebrush community types (BLM 2009a, p. 7). Currently in the Gunnison Basin, cheatgrass attains site dominance most often along roadways; however, other highly disturbed areas have similar cheatgrass densities. In the Gunnison Basin, cheatgrass is currently present in almost every grazing allotment in Gunnison sage-grouse occupied habitat; and other invasive plant species, such as Canada thistle, black henbane, spotted knapweed, Russian knapweed, kochia (*Kochia scoparia*), bull thistle, musk thistle, oxeye daisy, yellow toadflax and field bindweed, are found in riparian areas and roadsides (BLM 2009a, p. 7).

Weed control efforts in the Gunnison Basin vary by area and agency or organization. NPS weed control efforts have been successful at reducing weeds (undesirable plant species, typically including exotic or introduced species) in targeted areas. Gunnison County, the Gunnison Basin Weed Commission, and other partners aggressively treat and control weeds on all lands in the Gunnison Basin. From 2006 to 2012, a total of 517 ha (1,280 ac) of land was treated for weeds in and near occupied habitat for Gunnison sage-grouse (Gunnison County 2013a, p. 105), however it is unclear what portion of habitat this represents. Gunnison County also recently adopted best management practices for weeds identified in the Gunnison Basin CCA (Gunnison County 2013a, p. 78). Other measures related to weed control by Gunnison County include reclamation standards and inspections (Gunnison County 2013a, p. 106), educational programs and consultations (Gunnison County 2013a, p. 107). While beneficial and necessary, such control efforts are likely inadequate to address the threat of invasive plants, particularly in the face of climate change and drought which are likely to intensify the proliferation of these species in the range of Gunnison sage-grouse.

Although disturbed areas most often contain the highest cheatgrass densities, cheatgrass can readily spread into less disturbed and even undisturbed habitat. A strong indicator for future cheatgrass invasion is the proximity to current

locations (Bradley and Mustard 2006, p. 1146) as well as summer, annual, and spring precipitation, and winter temperature (Bradley 2009, p. 196). Although we lack the information to make a detailed determination on the actual extent or rate of increase, given its invasive nature, it appears that cheatgrass and its negative influence on Gunnison sage-grouse will increase in the Gunnison Basin in the future due to future human disturbances, potential exacerbation from climate change interactions, and the lack of success to date with control efforts at broad scales. Based on experience from other areas in sagebrush ecosystems concerning the rapid spread of cheatgrass and the shortened fire return intervals that can result, the spread of cheatgrass within Gunnison sage-grouse habitat and the negative effects to Gunnison sage-grouse populations will likely increase over time.

Invasive Plants in All Other Population Areas

Cheatgrass is present throughout much of the San Miguel Basin population area (BLM 2005c, p. 6), but is most abundant in the Dry Creek Basin area (CDOW 2005, p. 101), which comprises 62 percent of the San Miguel Basin population. It is also present in the five Gunnison sage-grouse subpopulations east of Dry Creek Basin, although at much lower densities that do not currently pose a serious threat to Gunnison sage-grouse (CDOW 2005, p. 101).

Invasive species are present at low levels in the Monticello group (San Juan County GSGWG 2005, p. 20). However, there is no evidence that they are affecting the population.

Cheatgrass dominates 10–15 percent of the sagebrush understory in the current range of the Piñon Mesa population (Lambeth 2005, pers. comm.). It occurs in the lower elevation areas below Piñon Mesa that were formerly Gunnison sage-grouse range. Cheatgrass invaded two small prescribed burn areas in or near occupied habitat conducted in 1989 and 1998 (BLM 2005d, p. 6), and continues to be a concern with new ground-disturbing projects. Within the Piñon Mesa population, 520 ha (1,284 ac) of BLM lands are currently mapped with cheatgrass as the dominant species (BLM 2009a, p. 3). This is not a comprehensive inventory of cheatgrass occurrence, as it only includes areas where cheatgrass dominates the plant community and does not include areas where the species is present at lower densities.

Invasive plants, especially cheatgrass, occur primarily along roads, other disturbed areas, and isolated areas of untreated vegetation in the Crawford population area. According to BLM (2005c, p.6), in the Crawford population area, the threat of cheatgrass may be greater than all other nonnative species combined and could be a major limiting factor when and if disturbance is used to improve habitat conditions, unless mitigated.

Cheatgrass distribution has not been comprehensively mapped for the Monticello-Dove Creek population area; however, cheatgrass is beginning to be assessed on a site-specific and project-level basis. No significant invasive plant occurrences are currently known in the Poncha Pass population area.

Summary of Invasive Plants

Invasive plants negatively impact Gunnison sage-grouse primarily by reducing or eliminating native vegetation that sage-grouse require for food and cover, resulting in habitat decline. Although invasive plants, especially cheatgrass, have affected some Gunnison sage-grouse habitat, the impacts do not currently appear to be threatening individual populations or the species rangewide. However, invasive plants continue to expand their range, facilitated by ground disturbances such as fire, grazing, and human infrastructure. Climate change will likely alter the range of individual invasive species, accelerating the decline of sagebrush communities. Even with treatments, given the history of invasive plants on the landscape, and our continued inability to control such species, invasive plants will persist and will likely continue to spread throughout the range of the species indefinitely. Although currently not a major threat to the persistence of Gunnison sage-grouse at the species level, we anticipate invasive species to become an increasing threat to the species in the future, particularly when considered in conjunction with future climate projections and potential changes in sagebrush plant community composition and dynamics.

Fire

Mountain big sagebrush, the most important and widespread sagebrush species for Gunnison sage-grouse, is killed by fire and can require decades to recover. In nesting and wintering sites, fire causes direct loss of habitat due to reduced cover and forage (Call and Maser 1985, p. 17), with effects likely lasting 75 years or longer until sagebrush recovers (Baker 2011, p. 16). While there may be limited instances

where burned habitat is beneficial (via prescribed fire or wildfire), these gains are lost if alternative sagebrush habitat is not readily available (Woodward 2006, p. 65). Another study (Baker 2013, p. 8) suggested that prescribed burning in sagebrush habitat may be detrimental, given the already limited range of Gunnison sage-grouse (see above sections, Current Distribution and Population Estimates, and Factor A introduction). Findings from that study indicated that historical fire regimes in Gunnison sage-grouse range resulted in large areas of contiguous sagebrush across the landscape when Gunnison sage-grouse were more widespread and abundant. Fire treatments to thin or reduce sagebrush, with its potential negative effects, would not be as beneficial to the species as efforts made to expand areas of contiguous sagebrush (Baker 2013, pp. 1, 8). Likewise, using fire to remove all trees in sagebrush habitats is likely not appropriate, based on the historical presence of piñon-juniper in these communities. Piñon-juniper abundance likely fluctuated over time in response to fire, at times occupying approximately 20 percent of the sagebrush landscape (Baker 2013, p. 8). Thus, on the whole, we conclude that fire negatively affects Gunnison sage-grouse and its habitat.

The nature of historical fire patterns in sagebrush communities, particularly in Wyoming big sagebrush, is not well understood, and a high degree of variability likely occurred (Miller and Eddleman 2001, p. 16; Zouhar *et al.* 2008, p. 154; Baker 2011, p. 195). In general, mean fire return intervals in low-lying, xeric (dry) big sagebrush communities range from over 100 to 350 years, with return intervals from 50 to over 200 years in more mesic (wet) areas, at higher elevations, during wetter climatic periods, and in locations associated with grasslands (Baker 2006, p. 181; Mensing *et al.* 2006, p. 75; Baker 2011, pp. 194–195; Miller *et al.* 2011, p. 166).

Herbaceous understory vegetation plays a critical role throughout the breeding season as a source of forage and cover for Gunnison sage-grouse females and chicks. The response of herbaceous understory vegetation to fire varies with differences in species composition, pre-burn site condition, fire intensity, and pre- and post-fire patterns of precipitation. Any beneficial flush of perennial grasses and forbs following fire in sagebrush communities is often minimal and lost after only a few years, with little difference in herbaceous vegetation between burned and unburned sites, but reduced sagebrush in burned sites (Cook *et al.*

1994, p. 298; Fischer *et al.* 1996a, p. 196; Crawford 1999, p. 7; Wroblewski 1999, p. 31; Nelle *et al.* 2000, p. 588; Paysen *et al.* 2000, p. 154; Wambolt *et al.* 2001, p. 250).

In addition to altering plant community structure through shrub removal and potential weed invasion, fires can influence invertebrate food sources (Schroeder *et al.* 1999, p. 5). Studies in greater sage-grouse habitats indicate fire indeed influences the abundance of important insect species (Fischer *et al.* 1996a, p. 196; Nelle *et al.* 2000, p. 589; Pyle and Crawford 1996, p. 322). However, the response (positive or negative) and duration of those effects, and subsequent recovery of insect populations, varied widely between studies and areas. Therefore, although the best available information indicates that fire may influence sage-grouse survival by altering the availability of insect prey, the magnitude of those effects is uncertain.

The invasion of the exotic annual grass cheatgrass increases fire frequency within the sagebrush ecosystem (Zouhar *et al.* 2008, p. 41; Miller *et al.* 2011, p. 170). As described in the previous section (Invasive Species), cheatgrass readily invades sagebrush communities, especially disturbed sites, and changes historical fire patterns by providing an abundant and easily ignitable fuel source that facilitates fire spread. While sagebrush is killed by fire and is slow to reestablish, cheatgrass recovers within 1 to 2 years of a fire event (Young and Evans 1978, p. 285). This annual recovery leads to a readily burnable fuel source and ultimately a reoccurring fire cycle that prevents sagebrush reestablishment (Eiswerth *et al.* 2009, p. 1324). The extensive distribution and highly invasive nature of cheatgrass poses increased risk of fire and permanent loss of sagebrush habitat, as areas disturbed by fire are highly susceptible to further invasion and ultimately habitat conversion to an altered community state. For example, Link *et al.* (2006, p. 116) show that risk of fire increases from approximately 46 to 100 percent when ground cover of cheatgrass increases from 12 to 45 percent or more. However, BLM (2013b, p. 1–7) noted that changes in fire frequency due to cheatgrass invasion, such as those observed in the Great Basin region of the western United States, have not been observed on BLM lands in Gunnison sage-grouse range.

As discussed above, there are numerous potential negative effects of fire to sagebrush habitat and, presumably, Gunnison sage-grouse. A clear positive response of Gunnison or greater sage-grouse to fire has not been

demonstrated (Braun 1998, p. 9). The few studies that have suggested fire may be beneficial for greater sage-grouse were primarily conducted in mesic areas used for brood-rearing (Klebenow 1970, p. 399; Pyle and Crawford 1996, p. 323; Gates 1983, in Connelly *et al.* 2000c, p. 90; Sime 1991, in Connelly *et al.* 2000a, p. 972). In this type of habitat, small fires may maintain a suitable habitat mosaic by reducing shrub encroachment and encouraging understory, herbaceous growth. However, without available nearby sagebrush cover, the utility of these sites is questionable. This is especially true within the six small Gunnison sage-grouse populations, where fire could further degrade the remaining habitat. More recent research indicated that, due to the fragmented nature of remaining sagebrush habitat across the species' range, prescribed fire may be inappropriate if the goal is to improve sagebrush conditions and overall habitat quality for the species (Baker 2013, p. 8).

Fire in the Gunnison Basin Population Area

Six prescribed burns have occurred on BLM lands in the Gunnison Basin since 1984, totaling approximately 409 ha (1,010 ac) (BLM 2009a, p. 35). The fires created large sagebrush-free areas that were further degraded by poor post-burn livestock management (BLM 2005a, p. 13). As a result, these areas are less suitable as Gunnison sage-grouse habitat. Approximately 8,470 ha (20,930 ac) of prescribed burns occurred on Forest Service lands in the Gunnison Basin since 1983 (USFS 2009, p. 1). A small wildfire on BLM lands near Hartman Rocks burned 8 ha (20 ac) in 2007 (BLM 2009a, p. 35). The NPS completed a prescribed burn on the north rim of the Black Canyon of the National Park in mixed montane shrub and mountain big sagebrush communities to remove invading juniper trees. Very few mountain big sagebrush were killed as a result of the burn. The total area of occupied Gunnison sage-grouse habitat in the Gunnison Basin burned in recent decades is approximately 8,887 ha (21,960 ac), which constitutes 1.5 percent of the occupied Gunnison sage-grouse habitat area. Cumulatively, this 1.5 percent area equates to a relatively small amount of habitat burned over a period of nearly three decades. This information suggests that there has not been a demonstrated change in fire cycle in the Gunnison Basin population area to date. The Nature Conservancy *et al.* (2011, p. 12) predicts that, due to climate change, wildfire frequency and

severity will increase in the Gunnison Basin (see Climate Change section in this Factor A analysis). However, CPW recently completed a literature review regarding fire in high elevation Intermountain sage-brush basins, such as the Gunnison Basin, and concluded that the probability of catastrophic fire in these areas in the future is low, due to historic fire return intervals, the low number of lightning strikes in the Gunnison Basin, and a low relative risk of cheatgrass invasion after fires (CPW 2014g, Attachment 2).

Fire in All Other Population Areas

Two prescribed burns conducted in 1986 (105 ha (260 ac)) and 1992 (140 ha (350 ac)) on BLM land in the San Miguel Basin on the north side of Dry Creek Basin had localized negative impacts on Gunnison sage-grouse. The burns were conducted for big game forage improvement, but the sagebrush died and was largely replaced with weeds (BLM 2005b, pp. 7–8). The Burn Canyon wildfire in the Dry Creek Basin and Hamilton Mesa areas burned 890 ha (2,200 ac) in 2000. Three wildfires have occurred in Gunnison sage-grouse habitat since 2004 on lands managed by the BLM in the Crawford, Cerro Summit-Cimarron-Sims Mesa, and San Miguel Basin population areas. There have been no fires since 2004 on lands managed by the BLM within the Monticello-Dove Creek population. Because these fires were mostly small in size, we do not believe they resulted in substantial impacts to Gunnison sage-grouse at the species level.

Several wildfires near or within the Piñon Mesa population area have occurred in the past 20 years. One fire burned a small amount of occupied Gunnison sage-grouse habitat in 1995, and several fires burned in potential Gunnison sage-grouse habitat. Individual burned areas in this population ranged from 3.6 ha (9 ac) to 2,160 ha (5,338 ac). A wildfire in 2009 burned 1,053 ha (2,602 ac), predominantly within vacant or unknown Gunnison sage-grouse habitat (suitable habitat for sage-grouse that is separated from occupied habitats that has not been adequately inventoried, or without recent documentation of grouse presence) near the Piñon Mesa population.

Since 2004, a single 2.8-ha (7-ac) wildfire occurred in the Cerro Summit-Cimarron-Sims Mesa population area, and two prescribed fires, both less than 12 ha (30 ac), were implemented in the San Miguel population area. No fire activity is reported within occupied Gunnison sage-grouse habitat in the last two decades in the Poncha Pass

population area (CDOW 2009b, pp. 125–126) or the Monticello-Dove Creek population area (CDOW 2009b, p. 75; UDWR 2009, p. 5). Although fire can have devastating effects on Gunnison sage-grouse habitats, as discussed above, because fires have burned primarily outside of occupied Gunnison sage-grouse habitat in the Piñon Mesa population area and fire has been recently absent or minimal in most other population areas, fire has not resulted in substantial impacts to Gunnison sage-grouse in these population areas.

Summary of Fire

Fires can cause the proliferation of weeds and can degrade suitable sage-grouse habitat, which may not recover to suitable conditions for decades, if at all (Pyke 2011, p. 539). Recent fires in Gunnison sage-grouse habitat were mostly small in size and did not result in substantial impacts to Gunnison sage-grouse, and there has been no obvious change in fire cycle in any Gunnison sage-grouse population area to date. Therefore, we do not consider fire to be a current threat to Gunnison sage-grouse. While the best available scientific information does not currently allow us to predict the extent or location of future fire events, it does indicate that fire frequency may increase in the future as a result of cheatgrass encroachment on the sagebrush habitat and the projected effects of climate change (see Invasive Plants and Climate Change discussions, above and below in this Factor A analysis, respectively). Fire is, therefore, likely to become a threat to Gunnison sage-grouse in the future.

Climate Change

Our analyses under the Act include consideration of ongoing and projected changes in climate and its associated effects. 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; IPCC 2013, p. 1450). 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; IPCC 2013, p. 1450). Various types of changes in climate can have direct or indirect effects on species. These effects

may be positive, neutral, or negative and they may change over time, depending on the species and other relevant considerations, such as the effects of interactions of climate with other variables (e.g., habitat fragmentation) (IPCC 2007, pp. 8–14, 18–19). In our analyses, we use our expert judgment to weigh relevant information, including uncertainty, in our consideration of various aspects of climate change.

According to the IPCC, “Warming of the climate system in recent decades is unequivocal, as is now evident from observations of increases in global average air and ocean temperatures, widespread melting of snow and ice, and rising global sea level” (IPCC 2007, p. 1). Average Northern Hemisphere temperatures during the second half of the 20th century were very likely higher than during any other 50-year period in the last 500 years and likely the highest in at least the past 1,300 years (IPCC 2007, p. 30). Over the past 50 years, cold days, cold nights, and frosts have become less frequent over most land areas, and hot days and hot nights have become more frequent. Heat waves have become more frequent over most land areas, and the frequency of heavy precipitation events has increased over most areas (IPCC 2007, p. 30).

For the southwestern region of the United States, including western Colorado, warming is occurring more rapidly than elsewhere in the country (Karl *et al.* 2009, p. 129). Annual average temperature in west-central Colorado increased about 1.11 °C (2 °F) over the past 30 years, but high variability in annual precipitation precludes the detection of long-term precipitation trends (Ray *et al.* 2008, p. 5). Under high greenhouse gas emission scenarios, future projections for the southwestern United States show increased probability of drought (Karl *et al.* 2009, pp. 129–134), and the number of days over 32 °C (90 °F) could double by the end of the century (Karl *et al.* 2009, p. 34). Climate models predict annual temperature increase of approximately 2.2 °C (4 °F) in the Southwest by 2050, with summers warming more than winters (Ray *et al.* 2008, p. 29). Projections also show declines in snowpack across the West with the most dramatic declines at lower elevations (below 2,500 m (8,200 ft)) (Ray *et al.* 2008, p. 29).

Colorado’s complex, mountainous topography results in a high degree of spatial variability across the State. As a result, predicting localized climate changes is challenging for mountainous areas because current global climate models are unable to capture this variability at local or regional scales

(Ray *et al.* 2008, pp. 7, 20). To obtain climate projections specific to the range of Gunnison sage-grouse, we requested a statistically downscaled model from the National Center for Atmospheric Research for a region covering western Colorado. The resulting projections indicate the highest probability scenario is that average summer (June through September) temperature could increase by 2.8 °C (5.1 °F), and average winter (October through March) temperature could increase by 2.2 °C (4.0 °F) by 2050 (University Corporation for Atmospheric Research (UCAR) 2009, pp. 1–15). Annual mean precipitation projections for Colorado are unclear; however, data indicate a shift towards increased winter precipitation and decreased spring and summer precipitation (Ray *et al.* 2008, p. 34; Karl *et al.* 2009, p. 30). Similarly, there is a high probability of a 5 percent increase in average winter precipitation and a 5 percent decrease in average spring-summer precipitation in 2050 (UCAR 2009, p. 15). These predicted changes in precipitation and temperature will likely alter sagebrush plant community composition and dynamics, but to what degree is uncertain.

For sagebrush, spring and summer precipitation comprises the majority of the moisture available to the species; thus, the interaction between reduced precipitation in the spring-summer growing season and increased summer temperatures will likely decrease growth of mountain big sagebrush. This effect could result in a significant long-term reduction in the distribution of sagebrush communities (Miller *et al.* 2011, pp. 171–174). In the Gunnison Basin, increased summer temperature was strongly correlated with reduced growth of mountain big sagebrush (Poore *et al.* 2009, p. 558). Based on these results and the likelihood of increased winter precipitation falling as rain rather than snow, and the corresponding increase in evaporation and decrease in deep soil water recharge, Poore *et al.* (2009, p. 559) predict decreased growth of mountain big sagebrush, particularly at the lower elevation limit of the species. Because Gunnison sage-grouse are sagebrush obligates, loss of sagebrush would result in a reduction of suitable habitat and negatively impact the species. The interaction of climate change with other stressors likely has impacted and will impact the sagebrush steppe ecosystem where Gunnison sage-grouse occur.

Climate change is likely to alter fire frequency, community assemblages, and the ability of nonnative species to proliferate. Increasing temperature as well as changes in the timing and

amount of precipitation will alter the competitive advantage among plant species (Miller *et al.* 2011, pp. 175–179), and may shift individual species and ecosystem distributions (Bachelet *et al.* 2001, p. 174). Temperature increases may increase the competitive advantage of cheatgrass in higher elevation areas where its current distribution is limited (Miller *et al.* 2011, p. 182). Decreased summer precipitation reduces the competitive advantage of summer perennial grasses, reduces sagebrush cover, and subsequently increases the likelihood of cheatgrass invasion (Prevey *et al.* 2009, p. 11). This impact could increase the susceptibility of areas within Gunnison sage-grouse range to cheatgrass invasion (Bradley 2009, p. 204), which would reduce the overall cover of native vegetation, reduce habitat quality, and potentially decrease fire return intervals, all of which would negatively affect the species. In addition, The Nature Conservancy *et al.* (2011, p. 12) predicted increased fire frequency and severity in the Gunnison Basin associated with climate change.

Under drought conditions, plants generally are less vigorous and less successful in reproduction, and may require several years to recover following drought (Weltzin *et al.* 2003, p. 946). Increased drought and shifts in the magnitude and timing of temperature and precipitation could reduce herbaceous and insect production within Gunnison sage-grouse habitats.

A recent climate change vulnerability index applied to Gunnison sage-grouse ranked the species as “highly vulnerable” to modeled climate change by the year 2050 (The Nature Conservancy 2011, p. 11). The mechanism of this vulnerability was the degradation of high-quality brood-rearing habitat due to the loss of adequate moisture for the maintenance of mesic meadows, springs, seeps, and riparian areas, as well as potential changes in the fire regime and subsequent loss of sagebrush cover. A reduction in the quality and amount of these resources, including brood-rearing habitats in particular, will likely affect key demographic processes such as the productivity of breeding hens and survival of chicks and juveniles, resulting in reduced population viability. A recent analysis indicated juvenile survival was the most influential vital rate affecting population growth rates in the Gunnison Basin (Davis 2012, pp. 89). Drought conditions from 1999 through 2003 were closely associated with reductions in the sizes of all Gunnison sage-grouse populations, including the

Gunnison Basin (CDOW 2009b, entire). While geographic and microclimatic variation in the Gunnison Basin may provide some degree of local variation and, perhaps, local population redundancy to resist environmental pressures, past drought has had widespread impacts on this population, as indicated by negative trends in nearly all lek complexes during that period (see Drought in this Factor A analysis; and Resiliency, Redundancy, and Representation in the Factor E analysis for further discussion on this topic).

Summary of Climate Change

Climate change predictions are based on models with assumptions, and there are uncertainties regarding the magnitude of associated climate change parameters such as the amount and timing of precipitation and seasonal temperature changes. There is also uncertainty as to the magnitude of effects of predicted climate parameters on sagebrush plant community dynamics. These factors make it difficult to predict to what extent climate change will affect Gunnison sage-grouse. We recognize that climate change has the potential to alter Gunnison sage-grouse habitat by facilitating an increase in the distribution of cheatgrass and concurrently increasing the potential for wildfires, and reducing herbaceous vegetation and insect production in drought years, which would have negative effects on Gunnison sage-grouse. We do not consider climate change to be a current threat to Gunnison sage-grouse because of the uncertainties described above. However, based on the best available information on climate change projections over the next 35 years or so, climate change has the potential to alter important seasonal habitats and food resources of Gunnison sage-grouse, the distribution and extent of sagebrush, and the occurrence of invasive weeds and associated fire frequencies. Climate change effects, including increased drought, are also predicted in the Gunnison Basin population. Therefore, we find that climate change is a substantial future threat to Gunnison sage-grouse rangewide.

Mineral Development

Mineral commodity development on Federal lands includes three primary types: Leasable, locatable, and salable minerals. Below, we define each type of mineral development and assess the scope of those activities and their potential impacts across Gunnison sage-grouse range.

Leasable Mineral Development

Leasable minerals are defined and administered under the Mineral Leasing Act of 1920, as amended, and include oil and gas, oil shale, coal, geothermal, potash, sodium, and sulfur. In this section, we first discuss the effects of oil and gas development on sage-grouse and sage-grouse habitats in general. We then evaluate potential and ongoing development of oil and gas, coal and coal-bed methane, and other leasable minerals across the range of Gunnison sage-grouse. Available scientific information on the effects of mineral development to sage-grouse is related primarily to oil and gas development. However, in terms of effects on the species and its habitat, we expect other types of mineral development to have impacts similar to that of oil and gas development, though those impacts may vary in magnitude and scope.

Effects of Oil and Gas Development

Oil and gas, or fluid mineral, development for energy resources on Federal (BLM and USFS) lands is regulated by the BLM (see Factor D analysis below for a more thorough discussion). The BLM (1999, p. 1) has classified the area encompassing all Gunnison sage-grouse habitat for its oil and gas potential. Two population areas, San Miguel Basin and Monticello-Dove Creek, have areas with high potential, and one, the Crawford population area, has medium potential. BLM classifies the oil and gas potential for the remaining populations as low or none. San Miguel County, where much oil and gas activity has occurred in the last few years, ranked 9 out of 39 in Colorado counties producing natural gas in 2009 (Colorado Oil and Gas Conservation Commission 2010a, p. 1) and 29 of 39 in oil production in 2009 (Colorado Oil and Gas Conservation Commission 2010b, p. 2).

Energy development impacts sage-grouse and sagebrush habitats through direct habitat loss from well pad construction, seismic surveys, roads, powerlines and pipeline corridors, and indirectly from noise, gaseous emissions, changes in water availability and quality, and human presence. The interaction and intensity of effects could cumulatively or individually lead to habitat degradation and fragmentation (Suter 1978, pp. 6–13; Aldridge 1998, p. 12; Braun 1998, pp. 144–148; Aldridge and Brigham 2003, p. 31; Knick *et al.* 2003, pp. 612, 619; Lyon and Anderson 2003, pp. 489–490; Connelly *et al.* 2004, pp. 7–40 to 7–41; Holloran 2005, pp. 56–57; Holloran *et al.* 2007, pp. 18–19; Aldridge and Boyce 2007, pp. 521–522;

Walker *et al.* 2007a, pp. 2652–2653; Zou *et al.* 2006, pp. 1039–1040; Doherty *et al.* 2008, p. 193; Leu and Hanser 2011, pp. 270–271). Increased human presence resulting from oil and gas development can also impact sage-grouse either through avoidance of suitable habitat or disruption of breeding activities (Braun *et al.* 2002, pp. 4–5; Aldridge and Brigham 2003, pp. 30–31; Aldridge and Boyce 2007, p. 518; Doherty *et al.* 2008, p. 194). The development of oil and gas resources requires surveys for economically recoverable reserves, construction of well pads and access roads, subsequent drilling and extraction, and transport of oil and gas, typically through pipelines. Ancillary facilities can include compressor stations, pumping stations, electrical generators and powerlines (Connelly *et al.* 2004, p. 7–39; BLM 2007, p. 2–110). Surveys for recoverable resources occur primarily through loud seismic exploration activities. These surveys can result in the crushing of vegetation. Well pads vary in size from 0.10 ha (0.25 ac) for coal-bed natural gas wells in areas of level topography to greater than 7 ha (17.3 ac) for deep gas wells and multi-well pads (Connelly *et al.* 2004, p. 7–39; BLM 2007, p. 2–123). Pads for compressor stations require 5–7 ha (12.4–17.3 ac) (Connelly *et al.* 2004, p. 7–39). Individually, impacts from well pads, infrastructure, and ancillary features may be small; however, the cumulative impact of such development can be significant.

The amount of direct habitat loss within an area of oil and gas development is ultimately determined by well densities and the associated loss from ancillary facilities. Roads associated with oil and gas development were suggested as the primary impact to greater sage-grouse due to their persistence and continued use even after drilling and production ceased (Lyon and Anderson 2003, p. 489). Declines in male greater sage-grouse lek attendance were reported within 3 km (1.9 mi) of a well or haul road with a traffic volume exceeding one vehicle per day (Holloran 2005, p. 40). Because of reasons discussed previously, the effects of oil and gas development to Gunnison sage-grouse are expected to be similar to those observed in greater sage-grouse. Sage-grouse also may be at increased risk for collision with vehicles simply due to the increased traffic associated with oil and gas activities (Aldridge 1998, p. 14; BLM 2003, p. 4–222).

Habitat fragmentation resulting from oil and gas development infrastructure, including access roads, may have greater effects on sage-grouse than habitat loss associated with drill sites.

Energy development and associated infrastructure works cumulatively with other human activity or development to decrease available habitat and increase fragmentation. Greater sage-grouse leks had the lowest probability of persisting (40–50 percent) in a landscape with less than 30 percent sagebrush within 6.4 km (4 mi) of the lek. These probabilities were even less in landscapes where energy development also was a factor (Walker *et al.* 2007a, p. 2652).

Oil and Gas Development Across the Gunnison Sage-Grouse Range—

As noted above, high oil and gas development potential exists in the San Miguel Basin and Monticello-Dove Creek population areas, medium potential exists in the Crawford population area, and low or no potential exists in the remaining population areas. Approximately 33 percent of the Gunnison Basin population area was ranked as having low oil and gas potential with the remainder having no potential for oil and gas development (GSRSC 2005, p. 130). No Federal lands are currently leased for oil and gas development within the Gunnison Basin population area.

Energy development within the range of Gunnison sage-grouse is occurring primarily in the San Miguel Basin and Dove Creek population areas in Colorado. The San Miguel Basin and Monticello-Dove Creek population areas occur in the Paradox Basin, a known oil and gas producing region. The majority of oil and gas development and potential in the Paradox Basin, however, is outside of Gunnison sage-grouse habitat (Industrial Economics, Inc. (IEC) 2014, p. 5–2, and references therein). In addition, to date, low levels of development and production have occurred in this area relative to recent development in other regions within the western U.S. Oil and gas production in San Juan County, Utah, which includes the Monticello portion of occupied range for Gunnison sage-grouse, has declined since the late 1980's (IEC 2014, p. 5–1 to 5–2, and references therein). The entire San Miguel Basin population area has high potential for oil and gas development (GSRSC 2005, p. 130).

Fluid mineral development in the Paradox Basin is currently taking place on 44 active, producing, or permitted wells in occupied habitat in the San Miguel and Monticello-Dove Creek populations. Of these, 38 active or

producing wells occur in the San Miguel population area on BLM land; 5 newly permitted wells occur on non-Federal land in the Dove Creek population in Colorado; and 1 active well occurs on private land in the Monticello population in Utah (IEC 2014, pp. 5–4 to 5–5, and references therein). In the San Miguel population, most wells are in or near the Dry Creek subpopulation area. The exact locations of potential future wells are not known, but because the area is small, they will likely lie within 3 km (2 mi) of one of only three leks in this area (CDOW 2005, p. 108).

In the remainder of the Gunnison sage-grouse range, a total of 10 oil and gas wells occur in occupied habitat. Eight oil and gas wells occur in the Gunnison Basin population area, and one in each of the Crawford and Cerro Summit-Cimarron-Sims Mesa population areas (derived from Colorado Oil and Gas Commission 2010, GIS dataset). We are not aware of any new fluid mineral development in these or other population areas since 2010. No oil and gas wells or Federal leases are within the Piñon Mesa population area (BLM 2009a, p. 1), and no potential for oil or gas exists in this area except for a small area on the eastern edge of the largest habitat block (BLM 1999, p. 1; GSRSC 2005, p. 130). The Crawford population is in an area with medium potential for oil and gas development. A single Federal lease occurs on less than 1 percent of the Crawford population area (GSRSC 2005, p. 130). We are not aware of any information which indicates that oil and gas development is a threat to the Poncha Pass population. Based on the best available information, we conclude that oil and gas development is not a current or future threat to the Piñon Mesa, Crawford, or Poncha Pass populations.

Since 2005, the BLM has deferred (temporarily withheld from lease sales) federal parcels nominated for oil and gas leasing in occupied Gunnison sage-grouse habitat in Colorado (see further discussion in Factor D Federal Laws and Regulations). Even with this temporary deferment, however, we expect energy development on public and private lands in the San Miguel Basin and the Monticello-Dove Creek areas to continue over the next 20 years based on the length of development and production projects described in existing project and management plans. Gas development may be negatively impacting a portion of the Dry Creek subpopulation because this area contains some of the poorest habitat and smallest grouse populations within the San Miguel population ((SMBGSWG)

2009, pp. 28 and 36). Overall, we believe that this stressor is localized and, although it is likely to increase in the future, it is not now, or likely to become a rangewide threat to the species in the future.

Coal and Coal-bed Methane Development in All Population Areas

While coal resources and several active coal fields (Somerset, Crested Butte, Grand Mesa, etc.) exist in the region, there are no active coal operations in Gunnison sage-grouse habitat (Colorado Division of Reclamation, Mining, and Safety (CDRMS) 2013), and recoverable coal resources are limited in Gunnison sage-grouse range. We have reviewed the best available scientific information regarding the potential for development of any coal resources in the Gunnison sage-grouse range, and found that it is unlikely in the near future due to technological, geologic, economic, and other constraints (USFWS 2014a, entire). Therefore, we find that coal and coal-bed methane development are not current or future threats to Gunnison sage-grouse.

Other Leasable Mineral Development

Potash exploration is currently underway in the Monticello-Dove Creek population area, but outside of occupied habitat for Gunnison sage-grouse. During 2009 and 2010, BLM received applications for 22 prospecting permits on approximately 40,000 acres of BLM land in this area (outside of occupied habitat). Recently, BLM prepared an Environmental Analysis for six proof-of-concept drill sites. The company that submitted the application estimates that between 250,000 and two million tons of potash may be recovered per year for at least 20 years. If preliminary explorations determine that extraction is feasible, potash development will likely follow (IEC 2014, p. 5–6). However, because it is unknown where and to what extent development would occur, the degree to which potash development would affect Gunnison sage-grouse and its habitat is unknown at this time.

Summary of Leasable Mineral Development

The San Miguel Basin and Dove Creek populations are the only areas within Gunnison sage-grouse range that currently have a moderate amount of oil and gas production. However, impacts to Gunnison sage-grouse and its habitat in this area are limited in scope relative to other regions of oil and gas development within the western U.S. We recognize that portions of the range, such as the Dry Creek subpopulation of

the San Miguel population, may currently be impacted by fluid mineral development. However, current and potential leasable energy development is limited to a small portion of the species' overall range. To date, the majority of oil and gas development has occurred outside of occupied habitat for Gunnison sage-grouse.

While the San Miguel, Monticello-Dove Creek, and Crawford populations have high or medium potential for future development, the potential for future development is low throughout the remaining population areas, which represent the majority of the species' range. While coal resources and several active coal fields exist in the region, there are no active coal operations in Gunnison sage-grouse habitat, and recoverable coal resources are limited in Gunnison sage-grouse range (USFWS 2014a, entire). In the near future, there is a potential for potash development in the Monticello-Dove Creek population; however, the magnitude of the impacts (if any) of this development on the species are unknown at this time (see above discussion). Because of the localized scale of these impacts, we consider leasable mineral development to be a threat of low magnitude to species as a whole. However, given the small and isolated nature of the populations where oil and gas development is most likely to occur, oil and gas development is a current and future threat to those populations.

Locatable and Salable Mineral Development in All Population Areas

Locatable minerals include both metallic minerals (gold, silver, uranium, vanadium, lead, zinc, copper, etc.) and certain unique, valuable non-metallic minerals (gemstones, fluor spar, mica, gypsum, asbestos, mica, etc.). The Mining Law of 1872 governs the exploration, purchase, and development of locatable minerals on mining claims. This law grants citizens of the United States the opportunity to explore for, discover, develop, and purchase certain valuable mineral deposits on public domain minerals. Unpatented mining claims established under the Mining Law of 1872 give the holder the right to mine locatable minerals on Federal lands. Locating a mining claim requires discovery of a valuable mineral through exploration. The BLM administers mining claims and related notices and approvals on BLM and USFS lands. The BLM reviews and approves a "Plan of Operations" for mining on Federal lands resulting in surface disturbance of more than 5 acres, and, in Colorado, financial warranty (e.g., cash bond) is required for reclamation through the Colorado

Division of Reclamation, Mining and Safety (CDRMS). A mine operator need only file a "Notice of Intent" with BLM before proceeding with locatable mineral exploration or prospecting resulting in surface disturbance of 5 acres or less. Operators are required to provide financial warranty for reclamation costs associated with disturbance from exploration, which is also filed and held by the CDRMS. "Casual use" activities related to locatable minerals on Federal lands that cause negligible disturbance (e.g., no use of earth moving equipment or explosives) have no legal requirements. The quantity and extent of casual use activities, and thus the effects on Gunnison sage-grouse and its habitat, are unknown.

Salable minerals, or mineral materials, include sand, gravel, stone, clay, pumice, cinders, and similar minerals. Salable minerals on Federal lands are subject to mineral material disposal under the Materials Act of 1947, as amended. Mining of these minerals entails a sales contract or a free-use permit from the responsible Federal agency.

The Service accessed CDRMS mine and mine claim data (CDRMS 2013, entire) to evaluate mineral potential and development in Gunnison sage-grouse occupied range in Colorado. The CDRMS's dataset includes both active and terminated or expired mining permits since about 1984 to present, including locatable and salable minerals. Our analysis found that in Gunnison sage-grouse occupied habitat in Colorado, there are 19 active mining permits ("active" means the permits are valid and current, not necessarily that actual mining is occurring), comprising 324.07 acres. Of this number, our analysis found that 247.96 acres (77 percent) are in the Gunnison Basin population, and are associated primarily with sand and gravel operations (USFWS 2014b, p. 1).

Fifty recently expired or terminated mining permits exist in Gunnison sage-grouse occupied range in Colorado, affecting approximately 256.5 acres. Again, the majority of area affected was in the Gunnison Basin, including 194.1 acres (75.6 percent) associated with sand and gravel, borrow material, and gold mining. Some of these mining permit applications were withdrawn, or mining did not occur (USFWS 2014b, p. 2).

Where mining has not yet been permitted or occurred, active (recorded) *mining claims* indicate potential development of those resources in the future, since identifying a claim requires discovery of a valuable mineral.

Currently, in Gunnison sage-grouse occupied habitat in Colorado, there are 694 active mining claims, totaling approximately 9,966 acres, or 1.15 percent of rangewide occupied habitat. Approximately 7.79 percent and 2.10 percent of occupied habitat in the San Miguel Basin and Dove Creek populations, respectively, are under mining claims. For each of the other five Gunnison sage-grouse populations, the area under mining claims is less than 1 percent of total occupied habitat in those populations (USFWS 2014b, p. 3). These data indicate that mining potential and future development is limited in scope in the range of Gunnison sage-grouse. It is uncertain what proportion of these mining claims will be developed in the future, and to what extent they will be developed. Future development depends on economic and market conditions, permitting requirements, and multiple other factors.

Future development of some mining claims, however, could affect individual Gunnison sage-grouse or populations. Future development of uranium mining claims in the San Miguel population area, in particular, could result in impacts on this population of Gunnison sage-grouse and its habitat. This area includes the Uravan Mineral Belt, which has historically been the most productive uranium region in Colorado, and provides an important national reserve of uranium (IEC 2014, pp. 5–1, 5–5 to 5–6). The Department of Energy, which is responsible for managing uranium leasing and development, is currently in the process of evaluating the continuation of existing uranium leases under a Draft Programmatic Environmental Impact statement. In recent years, uranium mining activity in this area has nearly ceased due to a decrease in global uranium prices. One active uranium mine occurs in occupied habitat in the San Miguel population. However, this mine is currently not in production (IEC 2014, p. 5–5 to 5–6). Construction of the first conventional uranium mill in 25 years, the Piñon Ridge Uranium Mill, is proposed near, but outside of, occupied habitat in the San Miguel Basin. However, this mill may not be built until uranium prices increase (IEC 2014, p. 5–5 to 5–6). Such a project may result in indirect impacts on Gunnison sage-grouse, though we cannot predict the scope or magnitude of those impacts.

We were unable to acquire similar data for mining activity in the State of Utah, and as a result we do not know the degree to which mineral claims or mines overlap occupied habitat in the Monticello population area. Published

maps indicate there are four small mines (less than 5 ac of disturbance at any one time) on the periphery of occupied habitat in the Monticello population area. These include two uranium mines and one flagstone mine that are inactive; and one uranium/vanadium mine that was active as of 2008 (UGS 2008a, pp. 4–5, 7). The majority of uranium and vanadium potential and past production in San Juan County is south-southeast of the city of Monticello, Utah, outside of occupied habitat (UGS 2005, entire). Several large mines (more than 5 ac of disturbance at any one time), including uranium and copper (inactive and active) occur northeast of Monticello, Utah (UGS 2008b, pp. 2, 5), outside the species' range. This information indicates that the overall current and potential development of locatable and salable minerals is very limited in Gunnison sage-grouse occupied range in Utah.

Future mineral development, especially in seasonally important habitats or in smaller or declining populations, will likely impact Gunnison sage-grouse populations. Indirect effects such as functional habitat loss associated with mineral operations, as well as impacts from associated infrastructure, are also likely.

Summary of Locatable and Salable Mineral Development

Mining, especially in seasonally important habitats or in smaller or declining populations, will likely impact Gunnison sage-grouse populations. Indirect effects such as functional habitat loss associated with mining operations, as well as impacts from associated infrastructure, are also likely. However, currently active mines and mining claims are limited in geographic scope, and thus are considered a threat of low magnitude to Gunnison sage-grouse rangewide. If uranium prices increase in the future, development in the San Miguel Basin could potentially pose a threat to this already small and vulnerable population of Gunnison sage-grouse.

Renewable Energy Development—Geothermal and Wind

Geothermal energy production is similar to oil and gas development in that it requires surface exploration, exploratory drilling, field development, and plant construction and operation, and likely results in similar degrees of direct and functional habitat loss (see Effects of Oil and Gas Development). Wells are drilled to access the thermal source, and drilling can require 3 weeks to 2 months of continuous activity

(Suter 1978, p. 3), which may cause disturbance to sage-grouse. The ultimate number of wells, and, therefore, potential loss of habitat, depends on the thermal output of the source and expected production of the plant (Suter 1978, p. 3). Pipelines are needed to carry steam or superheated liquids to the generating plant, which is similar in size to a coal- or gas-fired plant, resulting in further habitat destruction and indirect disturbance. Direct habitat loss occurs from well pads, structures, roads, pipelines and transmission lines, and impacts would be similar to those described above for oil and gas development. The development of geothermal energy requires intensive human activity during field development and operation, which could lead to habitat loss. Furthermore, geothermal development could cause toxic gas release. The type and effect of these gases depends on the geological formation in which drilling occurs (Suter 1978, pp. 7–9). The amount of water necessary for drilling and condenser cooling can be high. Local water depletions may be a concern if such use results in the loss or degradation of brood-rearing habitat.

Geothermal Energy in the Gunnison Basin Population Area—

The entire Gunnison Basin, or 87 percent of rangewide occupied habitat, is within a region of known geothermal potential (BLM and USFS 2010, p. 1). Currently, geothermal leases in the Gunnison Basin occur in the same general vicinity on private, BLM, USFS, and Colorado State Land Board lands, near Tomichi Dome and Waunita Hot Springs in southeastern Gunnison County. The cumulative area of geothermal leases in occupied habitat is approximately 3,399 ha (8,400) ac, including 1,861 ha (4,600 ac) on BLM land, and 1,538 ha (3,800 ac) on USFS land. This comprises 1.4 percent of occupied habitat in the Gunnison Basin.

In 2012, all of the leased area described above was acquired by a conservation group that does not intend to develop the resource. Geothermal leases are issued for 10 years and may be extended for two five-year periods (IEC 2014, p. 7–2, and references therein). Therefore, we do not anticipate geothermal development of these leases prior to 2032. If geothermal development occurs on the leases in the future, it would likely negatively impact Gunnison sage-grouse through habitat loss and disturbance of birds. One active lek and two inactive leks are located within the leased parcels. In addition, six active leks and four inactive leks are within 6.4 km (4 mi) of the lease

application parcels indicating that a high degree of seasonal use may occur within the area surrounding these leks (GSRSC 2005, p. J–4). A significant amount of high-quality Gunnison sage-grouse nesting habitat also exists on and near the leased parcels (Aldridge *et al.* 2012, p. 402). Thus, geothermal development is a potential future threat to the Gunnison Basin population.

Geothermal Energy in All Other Population Areas—

Geothermal development potential exists in the San Luis Valley including portions of the Poncha Pass population area. No geothermal leases currently exist in the San Luis Valley or Poncha Pass areas (BLM 2012b, entire; IEC 2014, p. 7–2). Further, the 2013 BLM San Luis Valley Geothermal Amendment to their Resource Management Plan prohibits all geothermal development within Gunnison sage-grouse occupied habitat through a no surface occupancy stipulation (BLM 2012b, entire; BLM 2013e, p. 2–11; BLM 2013f, entire). Therefore, geothermal development does not appear to be a current or future threat to Gunnison sage-grouse in the Poncha Pass population. We found no other information on the presence of existing, pending, or authorized geothermal energy sites, nor any other areas with high potential for geothermal energy development, within any other Gunnison sage-grouse population area. Thus, at this time, geothermal development outside the Gunnison Basin does not appear to be a threat to Gunnison sage-grouse.

Wind Energy Development

Most published reports of the effects of wind development on birds focus on the risks of collision with towers or turbine blades. However, a recent study conducted in south-central Wyoming examined the short-term behavioral response of greater sage-grouse to wind energy development (LeBeau 2012, entire). In the two years following construction, greater sage-grouse were not avoiding habitats near wind turbines, and even selected for habitats closer to turbines during the summer months. Male lek attendance was apparently unaffected by wind energy development in the area. However, the author cautioned that these responses may have been due to typically high site fidelity of sage-grouse despite anthropogenic disturbances, and that impacts may not be realized until two to 10 years following development, similar to oil and gas development in sage-grouse habitats. The study reported that other fitness and vital rates such as nesting and brood survival rates

declined near constructed wind turbines, potentially as a result of increased predation and edge effects created by wind energy infrastructure (LeBeau 2012, entire).

Avoidance of human-made structures such as powerlines and roads by sage-grouse and other prairie grouse is well-documented (Holloran 2005, p. 1; Pruett *et al.* 2009, pp. 1255–1256) (also see Roads and Powerlines sections above). Wind power requires many of the same features for construction and operation as do nonrenewable energy resources. Therefore, we anticipate that potential impacts from habitat decline due to roads and powerlines, noise, and increased human presence (Connelly *et al.* 2004, pp. 7–40 to 7–41) will generally be similar to those discussed above for mineral energy development.

Wind farm development begins with site monitoring and collection of meteorological data to accurately characterize the wind regime. Turbines are installed after the meteorological data indicate the appropriate siting and spacing. Roads are necessary to access the turbine sites for installation and maintenance. Each turbine unit has an estimated footprint of 0.4 to 1.2 ha (1 to 3 ac) (BLM 2005e, pp. 3.1–3.4). One or more substations may be constructed depending on the size of the farm. Substation footprints are 2 ha (5 ac) or less in size (BLM 2005e, p. 3.7).

The average footprint of a turbine unit is relatively small from a landscape perspective. Turbines require careful placement within a field to avoid loss of output from interference with neighboring turbines. Spacing improves efficiency but expands the overall footprint of the field. Sage-grouse populations are impacted by the direct loss of habitat associated with the construction of access roads, as well as indirect loss of habitat and behavioral avoidance of the wind turbines. Sage-grouse could be killed by flying into turbine rotors or towers (Erickson *et al.* 2001, entire), although reported collision mortalities have been few. One sage-grouse was found dead within 45 m (148 ft) of a turbine on the Foote Creek Rim wind facility in south-central Wyoming, presumably from flying into a turbine (Young *et al.* 2003, Appendix C, p. 61). This is the only known sage-grouse mortality at this facility during three years of monitoring. We have no recent reports of sage-grouse mortality due to collisions with wind turbines; however, many facilities may not be monitored. No deaths of gallinaceous birds were reported in a comprehensive review of avian collisions and wind farms in the United States; the authors hypothesized that the average tower

height and flight height of grouse, and diurnal migration habitats of some birds minimized the risk of collision (Johnson *et al.* 2000, pp. ii–iii; Erickson *et al.* 2001, pp. 8, 11, 14, 15).

Noise is produced by wind turbine mechanical operation (gear boxes, cooling fans) and airfoil interaction with the atmosphere. No published studies have focused specifically on the noise effects of wind power to Gunnison or greater sage-grouse. In studies conducted in oil and gas fields, noise may have played a factor in habitat selection and decrease in greater sage-grouse lek attendance (Holloran 2005, pp. 49, 56). However, comparison between wind turbine and oil and gas operations is difficult based on the character of sound. Adjusting for manufacturer type and atmospheric conditions, the audible operating sound of a single wind turbine has been calculated as the same level as conversational speech at 1 m (3 ft) at a distance of 600 m (2,000 ft) from the turbine. This level is typical of background levels of a rural environment (BLM 2005e, p. 5–24). However, commercial wind farms do not have a single turbine, and multiple turbines over a large area would likely have a much larger noise print. Low-frequency vibrations created by rotating blades also produce annoyance responses in humans (Van den Berg 2004, p. 1), but the specific effect on birds is not documented.

Moving blades of turbines cast moving shadows that cause a flickering effect producing a phenomenon called “shadow flicker” (American Wind Energy Association (AWEA) 2008, p. 5–33). Shadow flicker could mimic predator shadows and elicit an avoidance response in birds during daylight hours, but this potential effect has not been investigated. However, greater sage-grouse hens with broods have been observed under turbines at Foote Creek Rim in south-central Wyoming (Young 2004, pers. comm.), suggesting those birds were not disturbed by the motion of turbine blades.

Wind Energy in the Monticello Population Area—

There is increasing interest in wind energy development in the vicinity of the Monticello population in San Juan County, Utah (UDWR 2011, p. 3). Three wind energy projects are proposed in the vicinity of Gunnison sage-grouse habitat (IEc 2014, p. 7–2). The San Juan County Commission recently issued a permit for wind energy development on private land in occupied habitat in the Monticello population area, and

development is currently underway there by Eco-Power Wind Farms, LLC (IEc 2014, p. 7–2). Other landowners have recently been approached to lease their properties for wind development as well (Messmer 2013, p. 14). The two other wind projects are proposed for areas outside of occupied Gunnison sage-grouse habitat (IEc 2014, p. 7–2 to 7–3, and references therein).

In addition, the State of Utah recently completed a statewide screening study to identify geographic areas with a high potential for renewable energy development (UDNR 2009, entire). An area approximately 80,200-ha (198,300-ac) in size northwest of the city of Monticello, UT, was identified, with a high level of confidence, as a wind power production zone with a high potential for utility-scale wind development (production of greater than 500 megawatts) (UDNR 2009, p. 19). The mapped wind power production zone overlaps with nearly all Gunnison sage-grouse occupied habitat in the Monticello population, as well as the large area surrounding the perimeter of occupied habitat. The Monticello population is currently small (approximately 70 individuals), with apparent low resilience (see discussion and analysis in Factor E below), making it particularly sensitive to habitat loss and other impacts. Therefore, we conclude that future wind energy development poses a threat to the Monticello population of Gunnison sage-grouse.

Wind Energy in All Other Population Areas—

We found no additional information on the presence of existing, pending, or authorized wind energy sites, or any other areas with high potential for wind energy development within any other Gunnison sage-grouse population area.

Summary of Renewable Energy Development

Based on the above information, we do not consider renewable energy development to be a current threat to Gunnison sage-grouse range-wide. However, in the Gunnison Basin, geothermal development potential is high; if geothermal energy development were to increase here in the future, it may influence the overall long-term viability of the Gunnison Basin population; thus, it is a potential future threat to that population. Similarly, information suggests wind energy development may increase in the future in the Monticello population, potentially contributing to further population declines in this small and vulnerable population. Therefore, wind

energy development is a future threat to the Monticello population of Gunnison sage-grouse.

Piñon-Juniper Encroachment

Piñon-juniper woodlands are a native habitat type dominated by piñon pine (*Pinus edulis*) and various juniper species (*Juniperus* species) that can encroach upon, infill, and eventually replace sagebrush habitat and other rangelands. Piñon-juniper extent has increased ten-fold in the Intermountain West since Euro-American settlement, causing the loss of many bunchgrass and sagebrush-bunchgrass communities (Miller and Tausch 2001, pp. 15–16). Piñon-juniper woodlands have also been expanding throughout portions of the range of Gunnison sage-grouse (BLM 2009a, pp. 14, 17, 25), although we do not have information that quantifies this expansion. Piñon-juniper expansion has been attributed to the reduced influence of fire, the introduction of livestock grazing, increases in global carbon dioxide concentrations, climate change, and natural recovery from past disturbance (Miller and Rose 1999, pp. 555–556; Miller and Tausch 2001, p. 15; Baker 2011, p. 199). In addition, Gambel oak (*Quercus gambelii*) invasion as a result of fire suppression is a potential threat to Gunnison sage-grouse (CDOW 2002, p. 139) if stands become thick and begin to choke out sagebrush understory. However, some deciduous shrub communities (primarily Gambel oak and serviceberry) are used seasonally by Gunnison sage-grouse (Young *et al.* 2000, p. 451).

Removal of piñon-juniper is a common treatment to improve sage-grouse habitat. Similar to powerlines, trees provide perches for raptors, and as a consequence, Gunnison sage-grouse avoid areas with piñon-juniper (Commons *et al.* 1999, p. 239). In Oregon, greater sage-grouse lek activity ceased when conifer canopy exceeded 4 percent of the land area, suggesting that low levels of piñon-juniper encroachment can lead to population-level impacts (Baruch-Mordo *et al.* 2013, p. 238). The number of male Gunnison sage-grouse observed on leks in the Crawford population doubled after piñon-juniper removal and mechanical treatment of mountain sagebrush and deciduous brush (Commons *et al.* 1999, p. 238). However, removal of all trees in a given area is likely not appropriate, based on the historical presence of piñon-juniper communities when Gunnison sage-grouse were more abundant and widespread. Piñon-juniper abundance likely fluctuated over time in response to fire, at times occupying

approximately 20 percent of the sagebrush landscape (Baker 2013, p. 8).

Piñon-Juniper Encroachment in All Population Areas

The Gunnison Basin population area is not currently undergoing significant piñon-juniper encroachment (Boyle and Reeder 2005, Figure 4–1); however, all other populations have some degree of documented encroachment. A considerable portion of the Piñon Mesa population is experiencing piñon-juniper encroachment. Approximately 9 percent (1,140 ha [3,484 ac]) of occupied habitat in the Piñon Mesa population area has piñon-juniper coverage, while 7 percent (4,414 ha [10,907 ac]) of vacant or unknown (suitable habitat for sage-grouse that is separated from occupied habitats that either (1) has not been adequately inventoried, or (2) has not had documentation of grouse presence in the past 10 years (GSRSC 2005, p. 258) and 13 percent (7,239 ha [17,888 ac]) of potential habitat (unoccupied habitats suitable for occupation of sage-grouse if practical restoration were applied) have encroachment (BLM 2009a, p. 17).

Some areas on lands managed by the BLM within other population areas are undergoing piñon-juniper invasion. However, the extent of the area affected has not been quantified (BLM 2009a, p. 74; BLM 2009a, p. 9). Approximately 9 percent of the 1,300 ha (3,200 ac) of the current range in the Crawford population is dominated by piñon-juniper (GSRSC 2005, p. 264). However, BLM (2005d, p. 8) estimated that as much as 20 percent of the Crawford population area is occupied by piñon-juniper, although much of that has been removed by habitat treatments in recent years. Piñon and juniper trees have also been encroaching in peripheral habitat on Sims Mesa, and to a lesser extent on Cerro Summit, but not to the point where it is a threat to the Cerro Summit-Cimarron-Sims Mesa population area (CDOW 2009b, p. 47). Piñon and juniper trees are reported to be encroaching throughout the current range in the Monticello group, based on a comparison of historical versus current aerial photos, but no quantification or mapping of the encroachment has occurred (San Juan County GSWG 2005, p. 20). A relatively recent invasion of piñon and juniper trees between the Dove Creek and Monticello groups appears to be contributing to their isolation from each other (GSRSC 2005, p. 276).

Within the range of Gunnison sage-grouse, approximately 5,341 ha (13,197 ac) of piñon-juniper have been treated with various methods designed to

remove piñon and juniper trees since 2005, and nearly half of which occurred in the Piñon Mesa population area (CDOW 2009b, pp. 111–113). Mechanical treatment of areas experiencing piñon-juniper encroachment continues to be one of the most successful and economical treatments for the benefit of Gunnison sage-grouse habitat. However, such treatments may have minimal benefit at the population level, since the majority of affected populations have continued to decline since 1996 (Figure 3) despite considerable efforts to remove piñon-juniper in those areas.

Summary of Piñon-Juniper Encroachment

Most Gunnison sage-grouse population areas are experiencing low to moderate levels of piñon-juniper encroachment; however, considerable piñon-juniper encroachment in the Piñon Mesa population has occurred. The encroachment of piñon-juniper into sagebrush habitats can contribute to the decline of Gunnison sage-grouse habitat. However, piñon-juniper treatments, particularly when completed in the early stages of encroachment when the sagebrush and forb understory is still intact, have the potential to benefit sage-grouse (Commons *et al.* 1999, p. 238). Approximately 5,341 ha (13,197 ac) within the range of Gunnison sage-grouse has been treated to address piñon-juniper encroachment. Based on the rate of past treatment efforts (CDOW 2009c, entire), we expect piñon-juniper encroachment and corresponding treatment efforts to continue. Piñon-juniper encroachment is contributing to habitat decline in a limited area, but the level of encroachment is not sufficient to pose a threat to Gunnison sage-grouse at a population or rangewide level at this time. However, in combination with other factors such as those contributing to habitat decline (roads, powerlines, invasive plants, etc.), piñon-juniper encroachment poses a threat to the species. In addition, future conditions due to drought or climate change may intensify the problem such that piñon-juniper encroachment becomes a more serious threat, particularly in the smaller, declining populations.

Conversion to Agriculture

While sage-grouse may forage on agricultural croplands (Commons 1997, pp. 28–35), they tend to avoid landscapes dominated by agriculture (Aldridge *et al.* 2008, p. 991) and do not nest or winter in agricultural lands where shrub cover is lacking. Effects resulting from agricultural activities extend into adjoining sagebrush, and

include increased predation and reduced nest success due to predators associated with agriculture (Connelly *et al.* 2004, p. 7–23). Agricultural lands provide limited benefits for sage-grouse as some crops such as alfalfa (*Medicago sativa*), winter wheat (*Triticum aestivum*), and pinto bean sprouts (*Phaseolus* spp.) are eaten or used seasonally for cover by Gunnison sage-grouse (Braun 1998, pers. comm., Lupis *et al.* 2006, entire). Since lek monitoring began, the Monticello population of Gunnison sage-grouse appears to have been at its highest numbers during the 1970's and 1980's (SJCWG 2003, p. 5). During this time, winter wheat and dryland alfalfa were the primary agricultural crops in the area, and many growers did not use herbicides or insecticides because of the slim profit margin in growing these crops. Also during this period, landowners frequently reported observing flocks of sage-grouse in their fields during harvest and post-harvest periods (Messmer 2013, p. 19). These agricultural fields and their management may have provided a surplus of arthropods and forbs for Gunnison sage-grouse, and for hens with broods, in particular. Despite these seasonal benefits, crop monocultures do not provide adequate year-round food or cover (GSRSC 2005, pp. 22–30).

Current Agriculture in All Gunnison Sage-grouse Population Areas

The following estimates of land area dedicated to agriculture (including grass/forb pasture) were derived primarily from Southwest Regional Gap Analysis Project (SWReGAP) landcover data (USGS 2004, entire). Agricultural parcels are distributed patchily amongst what was recently a sagebrush landscape. These agricultural parcels are likely used briefly by grouse to move between higher quality habitat patches. Habitat conversion to agriculture is most prevalent in the Monticello-Dove Creek population area, where approximately half of Gunnison sage-grouse occupied range is currently in agricultural production (primarily cropland and pastureland). The conversion of sagebrush to agricultural use eliminated suitable vegetation cover at three leks in the Monticello population, and those leks are no longer used by Gunnison sage-grouse (SJCWG 2000, p. 15; GBSC 2005, p. 81). However, habitat loss due to agricultural conversion has been mitigated somewhat by the Conservation Reserve Program (CRP) (see section below, NRCS and Private Land Conservation Efforts, in this Factor A analysis).

In the Gunnison Basin, approximately 9 percent of the occupied range is currently in agricultural production. In Gunnison County, approximately 38,419 ha (94,936 ac) is currently in agricultural production (primarily irrigated hay and pastureland) (Gunnison County 2013a, p. 97, 123; GSRSC 2005, p. 73), though we do not know what proportion of these lands occur in occupied range. Approximately 15 percent of the occupied range in the San Miguel Basin is currently in agricultural production. In the Cerro Summit-Cimarron-Sims Mesa population, approximately 14 percent of the occupied range is currently in agricultural production. Habitat conversion due to agricultural activities is limited in the Crawford, Piñon Mesa, and Poncha Pass populations, with 3 percent or less of the occupied range currently in agricultural production in each of the population areas.

Substantial portions of sage-grouse habitat on private land in the Gunnison Basin, Crawford, San Miguel, and Piñon Mesa population areas are currently enrolled in the CCAA (see Conservation Programs and Efforts Related to Habitat Conservation in this Factor A analysis). Except for properties recently enrolled in the program, all enrolled private lands have been monitored using standardized vegetation transects and rangeland health assessments and, despite recent drought conditions and ongoing land uses, no significant deviations from baseline habitat conditions were observed. CPW reports that all enrolled properties continue to be in compliance with the terms of their Certificates of Inclusion (CIs) (CPW 2014a, p. 1). This information suggests that the current level of livestock grazing and operations on those lands is compatible with Gunnison sage-grouse habitat needs.

Except in Gunnison County, where cropland is relatively limited, total cropland has declined over the past two decades in all counties within the occupied range of Gunnison sage-grouse (USDA NASS 2010, entire). The majority of agricultural land use in Gunnison County is hay production, and this has also declined over the past two decades (USDA NASS 2010, p. 1). We do not have any information to predict changes in the amount of land devoted to agricultural purposes. However, because of this long-term downward trend in land area devoted to agriculture, we do not expect a significant amount of Gunnison sage-grouse habitat to be converted to agricultural purposes in the future.

Summary of Conversion to Agriculture

Throughout the range of Gunnison sage-grouse, the amount of land area devoted to agriculture is declining. Therefore, although we expect most land currently in agricultural production to remain so indefinitely, we do not expect significant additional, future habitat conversion to agriculture within the range of Gunnison sage-grouse. The loss of sagebrush habitat from 1958 to 1993 was estimated to be approximately 20 percent throughout the range of Gunnison sage-grouse (Oyler-McCance *et al.* 2001, p. 326). One exception is the Monticello-Dove Creek population, where more than half of the occupied range is currently in agriculture or other land uses that are generally incompatible with Gunnison sage-grouse conservation. This habitat loss is being mitigated somewhat by the enrollment of lands in CRP. Because of its limited extent, we do not consider future conversion of sagebrush habitats to agriculture to be a current or future threat to the persistence of Gunnison sage-grouse.

However, the extent of historical conversion of sagebrush to agriculture has fragmented the remaining Gunnison sage-grouse habitat to a degree that currently occupied lands are inadequate for the species' conservation, especially in light of other threats discussed throughout this rule. As described above in the introduction to this Factor A analysis, the onset of Euro-American settlement in the 1800s resulted in significant human alterations to sagebrush ecosystems throughout North America, primarily as a result of urbanization, agricultural conversion, and irrigation projects (West and Young 2000, pp. 263–265; Miller *et al.* 2011, p. 147). Areas in Colorado that supported basin big sagebrush were among the first sagebrush community types converted to agriculture because their soils and topography are well-suited for agriculture (Rogers 1964, p. 13). Decreases in the abundance of sage-grouse paralleled the loss of range (Braun 1998, pp. 2–3), and a gradual but marked decrease in sage-grouse distribution and numbers in Colorado had begun around 1910 (Rogers 1964, pp. 20–22). However, due to the long-term downward trend in land area devoted to agriculture, we do not expect agricultural conversion to be a significant cause of further range contraction into the future.

Large-Scale Water Development and Irrigation

Irrigation projects have generally resulted in loss of sage-grouse habitat

(Braun 1998, p. 6). Development of Blue Mesa Reservoir in 1965 in the Gunnison Basin flooded an estimated 3,700 ha (9,200 ac), or 1.5 percent of potential habitat for Gunnison sage-grouse (McCall 2005, pers. comm.), and according to Gunnison County (2013a, p. 124), at least one known lek. Based on the size and location of Blue Mesa Reservoir, we presume that habitat connectivity and dispersal of birds between the Gunnison Basin population and satellite populations to the west were impacted. Three other reservoirs inundated approximately 2 percent of habitat in the San Miguel Basin population area (Garner 2005, pers. comm.).

The demand for water in Gunnison sage-grouse range is expected to increase into the future due to increased temperatures resulting from climate change (see Climate Change in this Factor A analysis), severe drought (see Drought and Extreme Weather in the Factor E analysis), and human population growth (see Residential Development in this Factor A analysis). Water demand from the Upper Colorado River Basin, which encompasses Gunnison sage-grouse occupied range, is expected to increase over the next several decades, and there are likely to be significant shortfalls between projected water supply and demand through 2060 (BOR 2013, entire). However, it is unknown if, when, or where future water projects in the Upper Colorado River Basin would occur.

A small amount of Gunnison sage-grouse habitat has been lost to large-scale water development projects, but in potentially important areas (see discussion above). We expect these existing reservoirs to be maintained indefinitely, thus acting as another source of habitat fragmentation. With increased water demand in the future, we expect that water developments and irrigation practices may further contribute to impacts on Gunnison sage-grouse, though the scope and magnitude of those effects are unknown. Based on this information, we conclude that large-scale water developments and irrigation are a threat of low magnitude to Gunnison sage-grouse rangewide, both now and in the future. Small-scale water developments, such as stock ponds and tanks, are described and evaluated in the Domestic Grazing and Wildlife Herbivory (Factor A analysis), and Disease (Factor C analysis) sections of this rule.

Conservation Programs and Efforts Related to Habitat Conservation

Consideration of Conservation Efforts in This Rulemaking

Multiple partners including private citizens, nongovernmental organizations, Tribal, State, and Federal agencies are engaged in conservation efforts across the range of Gunnison sage-grouse. Numerous conservation actions have already been implemented for Gunnison sage-grouse, and these efforts have provided and will continue to provide conservation benefit to the species. These implemented efforts are considered below.

Additionally, there are recent and planned conservation efforts that are intended to provide conservation benefits to the Gunnison sage-grouse; some of which have not been fully implemented or shown to be effective. The Service's Policy for Evaluation of Conservation Efforts When Making Listing Decisions (PECE; 68 FR 15100, March 28, 2003) describes our procedure for evaluating the certainty of implementation and effectiveness of these recent and future actions. The purpose of PECE is to ensure consistent and adequate evaluation of recently formalized conservation efforts when making listing decisions. The policy provides guidance on how to evaluate formalized conservation efforts that have not yet been implemented or have not yet demonstrated effectiveness. The evaluation focuses on the certainty that the conservation efforts will be implemented and effectiveness of the conservation efforts. The policy defines "formalized conservation efforts" as "specific actions, activities, or programs designed to eliminate or reduce threats or otherwise improve the status of species" that are identified in a conservation agreement, conservation plan or similar document, and presents nine criteria for evaluating the certainty of implementation and six criteria for evaluating the certainty of effectiveness of such conservation efforts. These criteria are not considered comprehensive evaluation criteria. The certainty of implementation and the effectiveness of a formalized conservation effort may also depend on species-specific, habitat-specific, location-specific, and effort-specific factors.

Conservation efforts that are not sufficiently certain to be implemented and effective cannot contribute to a determination that listing is unnecessary or a determination that to list as threatened rather than endangered (PECE, 68 FR 15115). Accordingly, before considering

whether a future formalized conservation effort contributes to forming a basis for not listing a species, or listing a species as threatened rather than endangered, we must find that the conservation effort is sufficiently certain to be implemented, and effective, so as to have contributed to the elimination or adequate reduction of one or more threats to the species identified through the section 4(a)(1) (five-factor) analysis. If a conservation effort meets the criteria described in PECE, we are able to include and rely upon these recent and future efforts in our current threats analysis and status determination.

We completed an evaluation of the recently developed multi-county Conservation Agreement and Memorandum of Understanding (MOU), the 2013 Gunnison Basin CCA and the Ute Mountain Ute Tribe's 2014 Species Management Plan pursuant to PECE; however, only the CCA met the criteria established under PECE and thus may be considered in determining whether the species is warranted for listing or is threatened rather than endangered. Neither the MOU nor the multi-county conservation agreement can contribute to these determinations because they do not include specific conservation efforts as defined in the PECE policy, and the Tribal plan only met 7 of the 15 PECE criteria. Therefore, we did not rely upon these conservation efforts in our current threats analysis and status determination.

The 2006 Colorado Gunnison sage-grouse CCAA, 2013 Gunnison Basin CCA, habitat improvement projects, and other non-regulatory conservation efforts that address habitat-related issues are described and evaluated below in this section. Habitat-related and other conservation efforts provided through Federal, state, tribal, and local laws and regulations, conservation easements, and similar regulatory mechanisms are evaluated under Factor D below. Also, throughout this rule, conservation efforts are described under relevant threat sections.

2006 Colorado Candidate Conservation Agreement with Assurances (CCAA)

In April 2005, the Colorado Division of Wildlife (CDOW, now called Colorado Parks and Wildlife (CPW)) applied to the Service for an Enhancement of Survival Permit for the Gunnison sage-grouse pursuant to section 10(a)(1)(A) of the Act. The permit application included a proposed Candidate Conservation Agreement with Assurances (CCAA) between CPW and the Service. The standard that a CCAA must meet is that the "benefits of the conservation measures implemented by

a property owner under a CCAA, when combined with those benefits that would be achieved if it is assumed that conservation measures were also to be implemented on other necessary properties, would preclude or remove any need to list the species” (64 FR 32726, June 17, 1999). The draft CCAA, the permit application, and the draft environmental assessment were made available for public comment on July 6, 2005 (70 FR 38977). The CCAA and environmental assessment were finalized in October 2006, and the associated permit was issued on October 23, 2006, with a term of 20 years.

The goal of the CCAA is to reduce threats to Gunnison sage-grouse and help provide for secure, self-sustaining local populations by enrolling, protecting, maintaining, and enhancing or restoring non-federally owned Colorado habitats of Gunnison sage-grouse (as described further below). Landowners with eligible property in southwestern Colorado could voluntarily sign up under the CCAA and associated permit through a Certificate of Inclusion (CI) that specifies the land enrolled in the CCAA and the habitat protection or enhancement measures the landowner will implement on these lands. Eligible lands include non-

Federal lands in Colorado within the current range of Gunnison sage-grouse where occupied, vacant/unknown, or potentially suitable habitats occur, as mapped and identified in the RCP. After Gunnison sage-grouse is listed under the Act, the CCAA remains in place and the permit becomes effective. The permit exempts take of Gunnison sage-grouse incidental to otherwise lawful activities specified in the CCAA (e.g., crop cultivation or harvesting, livestock grazing, farm equipment operation, commercial/residential development), when performed in accordance with the terms of the CCAA, provided the participating landowner is implementing conservation measures voluntarily agreed to in the landowner's CI (USFWS 2006, entire). Landowners may only enroll properties in the CCAA and receive these benefits before a species is listed under the Act.

CPW may terminate landowner participation in the CCAA or otherwise revoke the CI if the landowner fails to comply with or implement the terms of the agreement. Further, the Service may suspend or revoke the permit for just cause or if continuation of permitted activities would likely result in jeopardy to Gunnison sage-grouse (USFWS 2006, p. 20). However, except for recently

enrolled properties, all properties have been monitored using standardized vegetation transects and rangeland health assessments and, despite recent drought conditions and ongoing land uses, no significant deviations from baseline habitat conditions have been observed. According to CPW, which is responsible for administering the CCAA with Service oversight, all enrolled properties continue to be in compliance with the terms of their CIs (CPW 2014a, p. 1).

Colorado Parks and Wildlife has made great strides to enroll landowners, protect habitat, and alleviate threats to Gunnison sage-grouse under this voluntary program. We estimate that by December 2014, when this rule becomes effective, 40 CIs will have been completed for private properties, enrolling 94,391 ac, roughly 81,156 ac that are in suitable habitat, in four Gunnison sage-grouse populations. This includes 32 CIs (54,580 ac (roughly 50,410 ac in suitable habitat)) in the Gunnison Basin; 2 CIs (4,231 ac (roughly 3,921 ac in suitable habitat)) in Crawford; 3 CIs (16,820 ac (roughly 13,694 ac in suitable habitat)) in San Miguel; and 3 CIs (18,761 ac (roughly 13,131 ac in suitable habitat)) in Piñon Mesa (Table 9).

TABLE 9—COMPLETED AND IN-PROGRESS CIs UNDER THE GUNNISON SAGE-GROUSE CCAA

[CPW 2014a, entire; CPW 2014g, appendix 3]

Population	Total		
	#	Enrolled acres	Acres * in suitable habitat
Gunnison Basin	32	54,580	50,410
Crawford	2	4,231	3,921
San Miguel	3	16,820	13,694
Piñon Mesa	3	18,761	13,131
Rangewide Totals	40	94,391	81,156

* These are estimates based on Geospatial analyses.

Based on the RCP conservation objective of securing and maintaining 90 percent of seasonally important habitat for the Gunnison sage-grouse in each population area (GSRSC 2005, pp. 223–224), the CCAA identifies targets for private land protection for each population area, including private lands not already considered as protected under a conservation easement (USFWS 2006, pp. 11–12). However, we note that there are lands that are part of the CCAA, and are also protected under a conservation easement. Targeted CCAA

acreages on private lands are intended to complement lands already receiving some protection because they are under Federal ownership.

A habitat protection objective of 75 percent of seasonally important habitat was identified for the Cerro Summit-Cimarron-Sims Mesa population, because this area is thought to function more as a habitat linkage between the San Miguel Basin, Gunnison, and Crawford populations (GSRSC 2005, pp. 223–224; USFWS 2006, p. 10). The CCAA habitat protection target for the Gunnison Basin population was based

on important seasonal habitats since these are mapped in this area. In the remaining populations where important seasonal habitats are not mapped, CCAA targets were based on available occupied habitat (USFWS 2006, pp. 11–12). Roughly 99 percent of the Gunnison Basin population area target, 95 percent of the Crawford population area target, 45 percent of the San Miguel population area target, and 217 percent of the Piñon Mesa population area target on private lands are enrolled in the CCAA (Table 10).

TABLE 10—CCAA HABITAT PROTECTION TARGETS ON PRIVATE LAND AND ENROLLMENT
[CPW 2014a, entire; CPW 2014b, entire]

Population	CCAA Target (ac) on private land	Enrolled Cls (ac) ^a on private land	% of CCAA target on private land
Gunnison basin	55,302	54,580	99
Crawford	4,143	4,231	95
San Miguel	37,690	16,820	45
Piñon Mesa	8,635	18,761	217

^a CI acreage in suitable habitat based on geospatial analyses. Includes some properties also protected by conservation easements.

The CCAA promotes the conservation of Gunnison sage-grouse on portions of private lands in the Gunnison Basin, Crawford, San Miguel, and Piñon Mesa populations. In these areas, threats to Gunnison sage-grouse are reduced and habitats covered by the CCAA are protected, maintained, enhanced, or restored. In particular, private land uses including livestock grazing and agricultural production are managed to be consistent with the needs of Gunnison sage-grouse and the species' conservation. Although enrollment of property in the CCAA is voluntary and not permanent or binding, the program's regulatory assurances and take authority provide an incentive for participating landowners to continue enrollment and compliance with terms of their CI. However, there are instances in which those assurances and incentives would no longer be desirable to the landowner. For instance, a landowner may choose to opt out of the CCAA to sell subject lands, whether for development or other purposes, meaning the benefits to Gunnison sage-grouse provided under the program would cease as well unless the new owner decided to continue the property's enrollment in the CCAA. Thus, although residential development is expected to be very limited on enrolled properties under the terms of the CIs (USFWS 2006, p. 13), the CCAA does not preclude the sale of those properties nor their subsequent development. Such development would likely result in further habitat loss and decline for Gunnison sage-grouse, though we cannot predict the scope or magnitude of those impacts. Therefore, the Service views the CCAA differently from conservation easements in terms of its regulatory certainty (see Other Regulatory Mechanisms: Conservation Easements, Factor D analysis; and Residential Development, in this Factor A analysis). Nevertheless, we consider lands enrolled under the CCAA to be a net gain for Gunnison sage-grouse conservation, particularly in regard to the reduction of habitat-related impacts due to ongoing land uses on private lands.

2013 Gunnison Basin Candidate Conservation Agreement

Candidate Conservation Agreements are formal, voluntary agreements between the Service and one or more parties to address the conservation needs of one or more candidate species or species likely to become candidates in the near future. Participants commit to implement specific actions designed to remove or reduce threats to the covered species, so that listing may not be necessary. Unlike CCAAs, CCAs do not provide assurances that additional conservation measures will not be required if a species is listed or critical habitat is designated.

In January 2010, the BLM, USFS, NPS, and other members of the Gunnison Basin Sage-Grouse Strategic Committee (Strategic Committee) began preparing a Candidate Conservation Agreement (CCA) with the Service to promote the conservation of the Gunnison Basin population of Gunnison sage-grouse (BLM 2013b, entire). The CCA was completed and signed by the Federal land management agencies on August 23, 2012. On April 12, 2013, the Federal land management agencies submitted a joint biological assessment (BA) and letter to the Service requesting an ESA Section 7 formal conference on the CCA. The Service issued its conference opinion on July 29, 2013 (USFWS 2013b, entire) and subsequently signed the CCA. The conference opinion evaluated anticipated effects of the CCA on Gunnison sage-grouse and estimated incidental take over a 20-year period, or through July 29, 2033.

The CCA serves as a project screen and requires implementation of conservation measures associated with specified actions under three Federal land use programs: Development (roads, transmission lines, etc.), recreation (such as trails and special recreation permits, etc.), and livestock grazing (permit renewals and operations). Larger or impact intensive projects (e.g., construction of a new transmission line, energy development) are not covered under the CCA, and any conservation

measures required for these projects on Federal lands in the Gunnison Basin will be addressed separately through ESA section 7 consultation. However, the actions addressed by the CCA, as listed above, comprise the most common land use authorizations where Gunnison sage-grouse occur on Federal lands in the Gunnison Basin. The CCA and conference opinion cover an estimated 160,769 ha (397,267 ac) of occupied habitat on Federal lands in the Gunnison Basin. This constitutes about 67 percent of the estimated 239,953 ha (592,936 ac) of total occupied habitat in the Gunnison Basin; approximately 78 percent of rangewide occupied habitat on Federal lands; and approximately 42 percent of rangewide total occupied habitat for the species.

Conservation measures in the CCA and conference opinion are actions that the signatory agencies agreed to implement to further the recovery of Gunnison sage-grouse. A key component of the CCA's site-specific conservation measures is a requirement for offsetting habitat loss or disturbance to ensure a net increase in priority habitats, and no net loss (maintenance) of secondary habitats for Gunnison sage-grouse. A number of other conservation measures and practices will be implemented pursuant to the CCA by the Federal agencies during the ESA section 7 consultation process to avoid and minimize project impacts on Gunnison sage-grouse.

The Service commends the Federal agencies, and the Gunnison Basin Sage-grouse Strategic Committee for their efforts in the design of the CCA and implementation of conservation measures to benefit Gunnison sage-grouse. In our conference opinion, we found that, despite incidental negative effects on individual birds and potential short-term, localized, and unavoidable effects, implementation of the CCA will provide a long-term, net benefit for Gunnison sage-grouse on a landscape scale. The conservation measures and mitigation scheme are required for the signatory Federal agencies engaging in covered activities, and are based on

current applicable land management plans of the respective agencies. As noted earlier, approximately 87 percent of the rangewide population of Gunnison sage-grouse occurs in the Gunnison Basin population. Implementation of the proposed action and its conservation measures will help reduce several substantial threats known to affect the species on Federal lands in the Gunnison Basin, including habitat decline. Although we analyzed the CCA under our PECE policy and found it satisfies all the criteria for consideration in our listing determination, approximately 22 percent of rangewide occupied habitat on Federal lands—all within the satellite population areas—are not covered under the CCA or a similar agreement. Additional protections on those Federal lands will be necessary to conserve these smaller, declining populations. Therefore, while the CCA is effective in reducing some threats in the Gunnison Basin population, it is not effective at reducing the threats to the species rangewide such that listing is not warranted.

NRCS and Private Lands Conservation Efforts

The NRCS's Sage-Grouse Initiative (SGI) is a rangewide, collaborative, targeted effort to implement conservation practices which alleviate threats that some agricultural activities can pose to greater and Gunnison sage-grouse while improving the sustainability of working ranches. Through SGI, the NRCS and its partners help ranchers proactively conserve and improve sage-grouse habitat. The SGI includes a monitoring and evaluation component for projects to measure the response of sage-grouse populations and vital rates (USFWS 2010d, p. 5).

In 2010, the Service issued the SGI Conference Report (USFWS 2010d, entire) to facilitate the SGI and conservation of Gunnison and greater sage-grouse rangewide. In the Conference Report, the Service provided guidance and conservation recommendations for avoiding and minimizing adverse effects to sage-grouse associated with the SGI, and found that the implementation of the SGI and identified conservation measures would have a net benefit on the species. The report identified primary conservation practices (management, vegetative, and structural) implemented by the NRCS to benefit sage-grouse and its habitat, and specific conservation measures (e.g., avoiding fence construction near leks) for those practices. The report did not provide for exemption of incidental take of sage-

grouse if either species is listed under the Act (USFWS 2010d, entire).

Also under the SGI and related private land programs (e.g., Farm Bill), the NRCS, Farm Service Agency (FSA), U.S. Fish and Wildlife Service Partners for Fish and Wildlife (PFW), CPW, and other partners have implemented numerous habitat improvement projects on private lands to benefit Gunnison sage-grouse. Since 1998, the Service's Colorado PFW has completed 20 habitat improvement or restoration projects in Gunnison sage-grouse habitat including projects on 638.5 ac of wetland habitat; 3,957 ac of upland habitat; and 4.3 mi of riparian habitat in Gunnison, Saguache, and Montrose Counties, with most treated acres in Gunnison County. Project types included restoration, improvement, and management actions such as enhancement of wetland and brood-rearing habitat, treating sagebrush, reseeding of native vegetation, fencing installation, grazing management, and removal of piñon-juniper (USFWS 2014c, entire). Contributing partners for these projects have included CPW, NRCS, and Rocky Mountain Bird Observatory. In addition, in 2006 the NRCS Gunnison Basin Conservation District sponsored a Range Management School to assist ranchers in managing and monitoring their lands to benefit Gunnison sage-grouse and meet the requirements of the CCAA (Gunnison County 2013a, pp. 204–206).

Projects undertaken through SGI and related private land programs, as described above, have benefitted Gunnison sage-grouse and its habitat, but are limited in extent. Therefore, it is unlikely that such actions are able to offset habitat loss and decline across the species' range.

The CRP is another Federally sponsored program that has helped offset the loss of Gunnison sage-grouse habitat. Administered by the FSA, this program provides incentives to landowners to plant more natural vegetation in lands formerly devoted to agricultural production. The NRCS provides technical assistance and planning in the implementation of CRP. The CRP helps address the threat of habitat decline due to agricultural conversion.

Lands within the occupied range of Gunnison sage-grouse currently enrolled in the CRP are limited to Dolores and San Miguel counties in Colorado, and San Juan County in Utah (USDA FSA 2010, entire). From 2000 to 2008, CRP enrollment averaged 10,622 ha (26,247 ac) in Dolores County, 1,350 ha (3,337 ac) in San Miguel County, and 14,698 ha (36,320 ac) in San Juan County (USDA FSA 2010, entire). In 2011,

approximately 9,793 ha (24,200 ac) were enrolled in the CRP program within occupied habitat in the Monticello population (UDWR 2011, p. 7). This area represents approximately 34 percent of the occupied habitat in the Monticello population, and approximately 22 percent of the entire Monticello-Dove Creek population area. By 2011, lands that had dropped out of the CRP program were replaced by newly enrolled properties, and the total acreage of lands enrolled in the CRP program remained at the maximum allowed by the FSA for San Juan County, UT (UDWR 2011, p. 7).

Gunnison sage-grouse are known to regularly use CRP lands in the Monticello population (Lupis *et al.* 2006, pp. 959–960; Ward 2007, p. 15). In San Juan County, Gunnison sage-grouse use CRP lands in proportion to their availability (Lupis *et al.* 2006, p. 959). The CRP areas are used by grouse primarily as foraging and brood-rearing habitat, but these areas vary greatly in plant diversity and forb abundance, generally lack any shrub cover (Lupis *et al.* 2006, pp. 959–960; Prather 2010, p. 32), and thus are less suitable for nesting and wintering habitat.

Except in emergency situations such as drought, CRP-enrolled lands are not hayed or grazed. In response to a severe drought, four CRP parcels totaling 1,487 ha (3,674 ac) in San Juan County, UT, were emergency grazed for a duration of one to two months in the summer of 2002 (Lupis *et al.* 2006, p. 959). Males and broodless females avoided the grazed areas while cattle were present but returned after cattle were removed (Lupis *et al.* 2006, pp. 960–961). Thus, the effects from grazing were likely negative but apparently short in duration.

Largely as a result of agricultural conversion, sagebrush patches in the Monticello-Dove Creek subpopulation area have progressively become smaller and more fragmented, thereby limiting the amount of high quality nesting and winter habitat (GSRSC 2005, pp. 82, 276). Overall, the CRP has provided important foraging habitat and has protected a portion of the Monticello-Dove Creek population from more intensive agricultural use and development. Continued enrollment of lands in CRP and management of those lands are conservation priorities of the local sage-grouse working group (SJCWG 2003, entire). However, the overall value of CRP lands to Gunnison sage-grouse to reduce or remove the threat of habitat loss and fragmentation is currently limited because these lands largely lack sagebrush cover required by the species throughout most of the year.

The value of CRP lands to the species will likely increase over time with the establishment of sagebrush in those areas. The extent to which existing CRP lands will be reenrolled in the future is unknown. However, given the recent enrollment, we expect lands to continue to be enrolled into the future.

Tribal Species Management Plan

Approximately 12,000 ac of occupied habitat on Pinecrest Ranch are owned by the Ute Mountain Ute Tribe (Tribe) under restricted fee status. The Pinecrest Ranch includes a total of 18,749 ac in the Gunnison Basin population area west of Gunnison, Colorado. The Tribe uses the ranch primarily for livestock grazing and for important traditional and cultural purposes. In February 2014, the Tribe completed a Species Management Plan (SMP) to promote the conservation of Gunnison sage-grouse and its habitat on the Pinecrest Ranch while maintaining a sustainable agricultural operation and other traditional uses of the property (Ute Mountain Ute Tribe 2014a, entire). On April 9, 2014, the Tribe approved and adopted the SMP for the Pinecrest Ranch per Resolution No. 2014-059 (Ute Mountain Ute Tribe 2014b, pp. 1-2).

The SMP includes management actions and/or considerations that will benefit Gunnison sage-grouse including, but not limited to, continued predator control, seasonal restrictions for construction and development activities, road restrictions and closures, wildlife-friendly fencing, outreach and education, and sustainable grazing practices which are compatible with maintaining habitat that meets the species' needs (UMUT 2014, pp. 7-15). While we think the SMP provides a benefit to species, we evaluated the species management plan under our PECE policy, but found the plan met only 7 of the 15 criteria.

Other Conservation Efforts

To varying degrees, most counties in Colorado either support or are involved in other conservation efforts for Gunnison sage-grouse, such as local working groups, habitat improvement projects, and research projects (Gunnison County 2013b, Appendix 1 A-K, CPW 2014g, Attachment 3 and Appendix A; Office of the Governor of Colorado 2014, entire). Through CPW, the State of Colorado has also been a leader in sage-grouse research and conservation efforts throughout the species' range (CPW 2014g, entire; Office of the Governor of Colorado 2014, entire). We have considered all such conservation efforts in this listing

determination, and highlight some of the more significant of these efforts below.

Except for the Cerro Summit-Cimarron-Sims Mesa population, each of the Gunnison sage-grouse population areas has a Conservation Plan authored by Local Working Groups with publication dates of 1997 to 2011 (CSGWG 1997; Dove Creek/Monticello Local Working Group 1998; GSRSC 2005; Piñon Mesa Gunnison Sage-grouse Working Group 2000; Poncha Pass Local Working Group 2000; Gunnison Sage-grouse Working Group 2000; SJCWG 2000 and 2003; SMBGSWG 2009; Crawford Area Sage-grouse Working Group 2011). These plans provide guidance and recommendations for management of Gunnison sage-grouse and have been the basis for identifying and prioritizing local conservation efforts. We have reviewed all of the Local Working Group plans and the implementation reporting we received with respect to these plans. While these plans are providing a conservation benefit to the species, the actions in these plans are all voluntary and many of the satellite populations are in a downward trajectory, therefore the actions do not reduce the threats, such as residential development (Factor A), which may require compensatory mitigation to ameliorate, and, to the species to a point where listing is not warranted.

The Gunnison Sage-Grouse Rangewide Conservation Plan (RCP) was developed by the states of Colorado and Utah and 5 Federal agencies, including the Service, in 2005 to supplement the local working group plans and to offer a rangewide perspective for conservation of the species. The RCP includes specific, recommended avoidance and minimization measures, as well as species and habitat conservation targets. However, similar to the local plans, the RCP is a guidance document only, is voluntary, and does not provide regulatory mechanisms for Gunnison sage-grouse conservation (GSRSC 2005, p. 1). Where RCP recommended conservation measures have been implemented, we have evaluated and included them in our analysis. For example, the RCP recommends road closures and the enactment of county regulations to minimize impacts to the species; where appropriate, the existing efforts that implement these recommendations are included in our analysis. Overall, however, there is no requirement to implement the recommendations in the RCP and past implementation of these recommendations has generally been ad hoc and opportunistic. Given this

history, we find that the RCP is not effective at reducing the threats acting on the species to the point where listing the species is not warranted.

Other conservation efforts in the species' range include the North Rim Landscape Strategy developed by Federal and state agencies, partners, and stakeholders to supplement the Crawford Area Conservation Plan. The strategy identifies broad recommendations for resource management and conservation of Gunnison sage-grouse in the Crawford population area, but is not a legal decision document (BLM 2013c, p. 4-5).

Gunnison County has been particularly active in Gunnison sage-grouse conservation activities. In 2005, it hired a Gunnison Sage-grouse Coordinator and organized a Strategic Committee to facilitate implementation of conservation measures in the Gunnison Basin under both the local Conservation Plan (CSGWG 1997, entire) and RCP (GSRSC 2005, entire). An estimated \$30 million has been invested in conservation actions by these groups and partners in the Gunnison Basin (Gunnison County 2013a, p. 147). Gunnison County reports that it alone has contributed more than \$1 million to Gunnison sage-grouse conservation (Gunnison County 2013a, p. 218). In 2009, Gunnison County adopted the Gunnison Basin Sage-grouse Strategic Plan (Gunnison County 2013a, Appendix E) to foster coordination and guide local citizens in the conservation of Gunnison sage-grouse. Also in 2009, the Gunnison County Sage-Grouse Conservation Action Plan (Gunnison County 2013a, Appendix F) was developed to guide and prioritize the implementation of specific conservation actions identified in the Strategic Plan. Gunnison County and the Gunnison Basin Sage-Grouse Strategic Committee (local working group for the Gunnison Basin population area) have also made significant public outreach efforts including holding the Gunnison Sage-Grouse Festival, providing Web site information for the public, and education and communication with area landowners (Gunnison County 2013a, p. 59).

The Crawford Working Group (Delta and Montrose County areas) also hired a Gunnison sage-grouse coordinator in December 2009. Likewise, Saguache County hired a part-time coordinator for the Poncha Pass population in 2013. These efforts facilitate coordination relative to sage-grouse management and reflect positively on these counties' commitment to Gunnison sage-grouse conservation.

Gunnison County and several other counties in the species' range have also enacted regulatory and related measures to benefit Gunnison sage-grouse and its habitat, as discussed under Factor D (Local Laws and Regulation).

The Gunnison Climate Adaptation Pilot Project, led by the Gunnison Climate Change Working Group, implemented several habitat projects in 2012 and 2013 to restore and improve the resiliency of Gunnison sage brood-rearing habitats (riparian areas and wet meadows) to address climate change in the Gunnison Basin (The Nature Conservancy (TNC) 2012, entire). The projected vulnerability of the Gunnison Basin to climate change was the primary impetus for the pilot project (see Climate Change). Long-term monitoring will determine effectiveness of the projects. Additional projects under this initiative are planned for the future (The Nature Conservancy (TNC) 2011, p. 1).

A review of a database compiled by the CPW that included local, State, and Federal ongoing and pending Gunnison sage-grouse conservation actions in Colorado from 2005 to 2009 (CDOW 2009c, entire) revealed a total of 224 individual conservation efforts, most of which were habitat improvement or protection projects. As of 2012, 165 of those efforts were completed, resulting in the treatment (enhancement or restoration) of 9,324 ha (23,041 ac), or approximately 2.5 percent of occupied Gunnison sage-grouse habitat. A monitoring component was included in 45 percent of the completed efforts, although we do not have information on their overall effectiveness. Five habitat improvement or protection projects occurred between January 2011 and September 2012, treating an additional 300 acres (CPW 2012b, p. 7). Further discussions of habitat improvement projects occurred before 2005 and subsequent to the 2012 summary document (CPW 2012b, entire; CPW 2014e, entire; CPW 2014g entire). These are not discussed here but were considered. Individually, these projects are generally all relatively small in scale, in relation to the individual populations where they have occurred. Cumulatively, these conservation efforts are providing a conservation benefit to the species, however, given the general downward trend of many of the satellite populations and the inability of these efforts to reduce threats such as residential development, we find these conservation efforts are not effective at reducing the threats acting on the species to the point where listing the species is not warranted.

Multi-County Rangewide Efforts

In 2013, the "Conservation Agreement for Gunnison Sage-grouse," and a Memorandum of Understanding, was drafted by 11 Colorado and Utah Counties across the range of Gunnison sage-grouse (Gunnison, Saguache, Dolores, Montezuma, Delta, Montrose, Hinsdale, Mesa, San Miguel, and Ouray Counties in Colorado; and San Juan County in Utah) (hereafter, County Coalition). To date, the Governors of the States of Colorado and Utah; and County Commissioners from all nine counties in occupied range from both States have signed the agreement. Hinsdale and Montezuma Counties do not contain occupied range for Gunnison sage-grouse and, therefore, did not sign the agreement. While the agreement itself is not regulatory, signatories of the agreement committed to implementing appropriate resolutions, regulations, and guidelines to enhance the species and its habitat in an effort to increase populations of Gunnison sage-grouse (County Coalition 2013, entire). Specifically, they have formally committed to adopting a Habitat Prioritization Tool, which will better predict preferred habitat for the species, and they have formally committed to updating and adopting an amended Rangewide Conservation Plan. We did evaluate these multi-county efforts under our PECE policy, but found they did not include specific conservation efforts as defined by the PECE policy, and hence cannot contribute to a determination that listing is unnecessary or a determination to list the species as threatened rather than endangered.

Summary of Conservation Programs and Efforts Related to Habitat Protection

Numerous conservation actions have been implemented for Gunnison sage-grouse, and these efforts have provided and will continue to provide conservation benefit to the species. The CCAA and CCA provide significant conservation benefit to the species and its habitat on private lands rangewide and Federal lands in the Gunnison Basin, respectively, reducing the impacts of primarily habitat-related threats in those areas. However, the identified conservation efforts, taken individually and in combination, do not fully address the substantial threats of rangewide habitat decline (Factor A), small population size and structure (Factor E), drought (Factor E), climate change (Factor A), and disease (Factor C). The Gunnison Basin CCA provides some protection for Gunnison sage-grouse on Federal lands in the Gunnison

Basin, but does not cover the remaining, more vulnerable satellite populations. Similarly, the existing CCAA benefits Gunnison sage-grouse, but does not provide sufficient coverage of the species' range to ensure the species' long-term conservation. Based on their voluntary nature and track records, the RCP, local working group plans, and other conservation efforts are not effective at reducing the threats acting on the species to the point where listing the species is not warranted. Thus, although the ongoing conservation efforts are a positive step toward the conservation of the Gunnison sage-grouse and have undoubtedly reduced the severity of certain threats to populations, on the whole we find that current conservation efforts are not sufficient to offset the full scope of threats to Gunnison sage-grouse.

Summary of Factor A

Gunnison sage-grouse require large areas of sagebrush for long-term persistence, and thus are affected by factors that occur at the landscape scale. Broad-scale characteristics within surrounding landscapes influence habitat selection, and adult Gunnison sage-grouse exhibit a high fidelity to all seasonal habitats, resulting in low adaptability to habitat changes. Habitat loss, degradation, and fragmentation of sagebrush habitats are a primary cause of the decline of Gunnison and greater sage-grouse populations (Patterson 1952, pp. 192–193; Connelly and Braun 1997, p. 4; Braun 1998, p. 140; Johnson and Braun 1999, p. 78; Connelly *et al.* 2000a, p. 975; Miller and Eddleman 2000, p. 1; Schroeder and Baydack 2001, p. 29; Johnsgard 2002, p. 108; Aldridge and Brigham 2003, p. 25; Beck *et al.* 2003, p. 203; Pedersen *et al.* 2003, pp. 23–24; Connelly *et al.* 2004, p. 4–15; Schroeder *et al.* 2004, p. 368; Leu *et al.* 2011, p. 267). Documented negative effects of fragmentation include reduced lek persistence, lek attendance, population recruitment, yearling and adult annual survival, female nest site selection, and nest initiation rates, as well as the loss of leks and winter habitat (Holloran 2005, p. 49; Aldridge and Boyce 2007, pp. 517–523; Walker *et al.* 2007a, pp. 2651–2652; Doherty *et al.* 2008, p. 194).

We examined a number of factors that contribute to habitat decline. Habitat loss due to residential and infrastructural development (including roads and powerlines) is a current and future threat to Gunnison sage-grouse range-wide. Due to habitat decline, the seven individual populations are now mostly isolated, with limited migration and gene flow among populations,

increasing the likelihood of population extirpations. Functional habitat loss also contributes to habitat decline as sage-grouse avoid areas due to human activities and noise, even when sagebrush remains intact. The collective disturbance from human activities around residences and infrastructure results in habitat decline that negatively impacts Gunnison sage-grouse survival. Human populations are increasing across the species' range, a trend expected to continue into the future. Resulting habitat decline is diminishing the probability of Gunnison sage-grouse survival and persistence, particularly in the satellite populations.

Other habitat-related threats that are impacting Gunnison sage-grouse include grazing practices inconsistent with local ecological conditions, fences, invasive plants, fire, mineral development, piñon-juniper encroachment, and large-scale water development and irrigation. The cumulative presence of all these features and activities constitutes a threat to Gunnison sage-grouse as they collectively contribute to habitat decline. In particular, the satellite populations are less resilient and more vulnerable to extirpation and environmental pressures including habitat loss and fragmentation (see discussion in Factor A analysis above and in the Factor E analysis below).

Several issues discussed above, such as fire, invasive species, and piñon-juniper encroachment, may not currently have a substantial impact on Gunnison sage-grouse. For example, while it may be impacting individual birds or populations, piñon-juniper encroachment does not currently pose a threat to the species because of its limited distribution throughout the range of Gunnison sage-grouse. However, the documented synergy among these three issues (piñon-juniper encroachment, fire and invasive species), results in a high likelihood that they will pose a threat to the species in the future. Nonnative invasive plants, including cheatgrass and other noxious weeds, continue to expand their range, facilitated by ground disturbances such as fire, grazing incompatible with local ecological conditions, and human infrastructure. Invasive plants negatively impact Gunnison sage-grouse primarily by reducing or eliminating native vegetation that sage-grouse require for food and cover, resulting in habitat decline (both direct and functional). Cheatgrass is present at varying levels in nearly all Gunnison sage-grouse population areas, but there has not yet been a demonstrated change in fire cycle in the range of Gunnison

sage-grouse. However, climate change will likely alter the range of invasive plants, intensifying the proliferation of invasive plants to the point that they become a threat to the species. Even with aggressive treatments, invasive plants will likely persist and continue to spread throughout the range of Gunnison sage-grouse.

Livestock management inconsistent with local ecological conditions has the potential to degrade sage-grouse habitat at local scales by causing the loss of nesting cover and decreases in native vegetation, and by increasing the probability of incursion of invasive plants. Given the widespread nature of grazing within the range of Gunnison sage-grouse, the potential for population-level impacts is probable. Effects of domestic livestock grazing inconsistent with local ecological conditions are likely being exacerbated by intense browsing of woody species by wild ungulates in parts of the Gunnison Basin. We conclude that habitat degradation that can result from grazing practices inconsistent with local ecological conditions is a threat to Gunnison sage-grouse.

We do not consider nonrenewable energy development to be impacting Gunnison sage-grouse habitat to the extent that it is a threat to the long-term persistence of the species at this time, because its current and anticipated extent is limited throughout the range of Gunnison sage-grouse. We do not consider renewable energy development to be a threat to the persistence of Gunnison sage-grouse rangewide at this time. However, geothermal and wind energy development could increase in the Gunnison Basin and Monticello areas, respectively, in the future.

We recognize ongoing and proposed conservation efforts by all entities across the range of the Gunnison sage-grouse, and commend all parties for their vision and participation. Local communities, landowners, agencies, and organizations in Colorado and Utah have dedicated resources to Gunnison sage-grouse conservation and have implemented numerous conservation efforts. We encourage continued implementation of these efforts into the future to promote the conservation of Gunnison sage-grouse. Our review of conservation efforts indicates that the measures identified are not fully addressing the most substantial threats to Gunnison sage-grouse including habitat decline (Factor A), small population size and structure (Factor E), drought (Factor E), climate change (Factor A), and disease (Factor C). All of the conservation efforts are limited in size and the measures provided to us were not

implemented at the scale (even when considered cumulatively) that would be required to effectively reduce the threats to the species and its habitat across its range. The Gunnison Basin CCA, for example, provides some protection for Gunnison sage-grouse on Federal lands in the Gunnison Basin, but does not cover the remaining, more vulnerable satellite populations. Similarly, the existing CCAA benefits Gunnison sage-grouse on participating lands, but does not provide sufficient coverage of the species' range to ensure the species' long-term conservation. Thus, although the ongoing conservation efforts are a positive step toward the conservation of the Gunnison sage-grouse, and some have likely reduced the severity of some threats to the species, on the whole we find that current conservation efforts are not sufficient to offset the full scope of threats to Gunnison sage-grouse.

We have evaluated the best scientific information available on the present or threatened destruction, modification, or curtailment of the Gunnison sage-grouse's habitat or range. Based on the current and anticipated habitat threats identified above and their cumulative effects as they contribute to the overall decline of Gunnison sage-grouse habitat, we have determined that the present or threatened destruction, modification, or curtailment of Gunnison sage-grouse habitat poses a threat to the species throughout its range. This threat is substantial and current, and is projected to continue and increase into the future with additional anthropogenic pressures.

B. Overutilization for Commercial, Recreational, Scientific, or Educational Purposes

Hunting

Hunting for Gunnison sage-grouse is not currently permitted under Colorado and Utah law. Hunting was eliminated in the Gunnison Basin in 2000 due to concerns with meeting Gunnison sage-grouse population objectives (Colorado Sage Grouse Working Group (CSGWG) 1997, p. 66). Hunting has not occurred in the other Colorado populations of Gunnison sage-grouse since 1995 when the Piñon Mesa area was closed (GSRSC 2005, p. 122). Utah has not allowed hunting of Gunnison sage-grouse since 1989 according to GSRSC (2005, p. 82), or as early as the mid-1970's according to SJCWG (2000, p. 11).

Both Colorado and Utah report they will consider hunting of Gunnison sage-grouse only if populations can be sustained (GSRSC 2005, pp. 5, 8, 229). The local Gunnison Basin working group plan calls for a minimum

population of 500 males (based on lek counts) before hunting would occur again (CSGWG 1997, p. 66). The minimum population level in the Gunnison Basin population has been exceeded in all years since 1996, except 2003 and 2004 (CDOW 2009d, pp. 18–19). However, the sensitive State regulatory status and potential political ramifications of hunting the species has precluded the States from opening a hunting season. If hunting does ever occur again, harvest will likely be restricted to only 5 to 10 percent of the fall population, and will be structured to limit harvest of females to the extent possible (GSRSC 2005, p. 229). However, the ability of these measures to be implemented is in question, as adequate means to estimate fall population size have not been developed (Reese and Connelly 2011, pp. 110–111) and limiting female harvest may not be possible (WGFD 2004, p. 4; WGFD 2006, pp. 5, 7).

In 1992, a CPW effort to simplify hunting restrictions inadvertently opened the Poncha Pass area to sage-grouse hunting, and at least 30 grouse were harvested from this population. The area was closed to sage-grouse hunting the following year and has remained closed to hunting since (Nehring and Apa 2000, p. 3). One sage-grouse was known to be illegally harvested in 2001 in the Poncha Pass population (Nehring 2010, pers. comm.), but based on the best available information illegal harvest has not contributed to Gunnison sage-grouse population declines in either Colorado or Utah. We do not anticipate hunting to be opened in the Gunnison Basin or smaller populations for many years, if ever. Consequently, we do not consider hunting to be a threat to the species now or in the future.

Lek Viewing and Counts

The Gunnison sage-grouse was designated as a new species in 2000 (American Ornithologists' Union 2000, pp. 847–858), which has prompted a much increased interest by bird watchers to view the species on their leks (Pfister 2010, pers. comm.). Daily human disturbances on sage-grouse leks could cause a reduction in mating, and some reduction in total production (Call and Maser 1985, p. 19). Human disturbance, particularly if additive to disturbance by predators, could reduce the time a lek is active, as well as reduce its size by lowering male attendance (Boyko *et al.* 2004, in GSRSC 2005, p. 125). Smaller lek sizes have been hypothesized to be less attractive to females, thereby conceivably reducing the numbers of females mating.

Disturbance during the peak of mating also could result in some females not breeding (GSRSC 2005, p. 125). Furthermore, disturbance from lek viewing might affect nesting habitat selection by females (GSRSC 2005, p. 126), as leks are typically close to areas in which females nest. If females move to poorer quality habitat farther away from disturbed leks, nest success could decline. If chronic disturbance causes sage-grouse to move to a new lek site away from preferred and presumably higher quality areas, both survival and nest success could decline. Whether any or all of these have significant population effects would depend on timing and degree of disturbance (GSRSC 2005, p. 126).

Throughout the range of Gunnison sage-grouse, public viewing of leks is limited by a general lack of knowledge of lek locations, seasonal road closures in some areas, and difficulty in accessing many leks. Furthermore, 52 of 109 active Gunnison sage-grouse leks occur on private lands, further limiting public access. The BLM closed a lek in the Gunnison Basin to viewing in the late 1990s due to declining population counts perceived as resulting from recreational viewing, although no scientific studies were conducted (BLM 2005a, p. 13; GSRSC 2005, pp. 124, 126).

The Waunita lek east of Gunnison is the only lek in Colorado designated by the CPW for public viewing (Waunita Watchable Wildlife Area) (CDOW 2009b, p. 86). Since 1998, a comparison of male counts on the Waunita lek versus male counts on other leks in the Doyleville zone show that the Waunita lek's male counts generally follow the same trend as the others (CDOW 2009d, pp. 31–32). In fact, in 2008 and 2009, the Waunita lek increased in the number of males counted along with three other leks, while seven leks decreased in the Doyleville zone (CDOW 2009d, pp. 31–32). These data suggest that lek viewing on the Waunita lek has not impacted Gunnison sage-grouse attendance at leks. Two lek viewing tours per year are organized and led by UDWR on a privately owned lek in the Monticello population. The lek declined in males counted in 2009, but 2007 and 2008 had the highest counts for several years, suggesting that lek viewing is not impacting that lek either. Data collected by CPW on greater sage-grouse viewing leks also indicates that controlled lek visitation has not impacted greater sage-grouse at the viewed leks (GSRSC 2005, p. 124).

A lek viewing protocol has been developed and has largely been followed on the Waunita lek, likely

reducing impacts to sage-grouse (GSRSC 2005, p. 125). During 2004–2009, the percentage of individuals or groups of people in vehicles following the Waunita lek viewing protocol in the Gunnison Basin ranged from 71 to 92 percent (CDOW 2009b, pp. 86, 87; Magee *et al.* 2009, pp. 7, 10). Violations of the protocol, such as showing up after the sage-grouse started to display and creating noise, caused one or more sage-grouse to flush from the lek (CDOW 2009b, pp. 86, 87). Despite the protocol violations, the percentage of days from 2004 to 2009 that grouse were flushed by humans was relatively low, ranging from 2.5 percent to 5.4 percent (Magee *et al.* 2009, p. 10). The current lek viewing protocol includes regulations to avoid and minimize disturbance from photography, research, and education-related viewing; regulations and related information are provided to the public online (CDOW 2009b, p. 86; Gunnison County 2013a, p. 127; CPW 2013, entire). Implementation of this protocol should preclude lek viewing from becoming a threat to this lek.

The CPW and UDWR will continue to coordinate and implement lek counts to determine population levels. We expect annual lek viewing and lek counts to continue into the future. Lek counts may disturb individual birds. However, since the Waunita lek is open to viewers on a daily basis throughout the lekking season, and lek counters only approach an individual lek 2–3 times per season, all leks counted will receive lower disturbance from counters than the Waunita lek receives from public viewing, so we do not consider lek counts a threat to Gunnison sage-grouse populations or the species.

Scientific Research and Related Conservation Efforts

Overall, it is expected that scientific research and related conservation efforts by the States, such as translocation of Gunnison sage-grouse, have a net conservation benefit for the species, because they contribute to improved understanding of the species' conservation needs and may have helped to augment some of the satellite populations, likely contributing to their continued persistence. However, some unintended negative effects are known to occur in the process. Gunnison sage-grouse have been the subject of multiple scientific studies, some of which included capture and handling. Most field research has been conducted in the Gunnison Basin population, San Miguel Basin population, and Monticello portion of the Monticello-Dove Creek population. Between zero and seven percent mortality of handled adults or

juveniles and chicks has occurred during recent Gunnison sage-grouse studies where trapping and radio-tagging was done (Apa 2004, p. 19; Childers 2009, p. 14; Lupis 2005, p. 26; San Miguel Basin Gunnison Sage-grouse Working Group (SMBGSWG) 2009, p.

A–10). For these studies combined, of 688 birds captured, 11 (1.6 percent) died (Table 11). Additionally, one radio-tagged hen was flushed off a nest during subsequent monitoring and did not return after the second day, resulting in the loss of 10 eggs (Ward 2007, p. 52).

The CPW does not feel that these losses or disturbance are having significant impacts on the sage-grouse (CDOW 2009b, p. 29), and we agree with this assessment.

TABLE 11—MORTALITY OF GUNNISON SAGE-GROUSE FROM RECENT STUDIES

Study focus	Total birds handled/captured/studied	Mortality		Source
		Number of individuals	% of total birds	
Habitat use, movement, survival of Gunnison sage-grouse in south-west Colorado.	138	3	2.2	Apa 2004, p. 19.
Gunnison sage-grouse habitat use	^a 336	7	2.1	Childers 2009, p. 14.
Summer ecology of Gunnison sage-grouse	14	1	7.1	Lupis 2005, p. 26.
Summary of CPW research projects in the Gunnison Basin and San Miguel populations from 2004 to 2009.	200	0	0.0	SMBGSWG 2009, p. A–10.
Total	688	11	1.6	n/a.

^a This figure includes 218 adults and 118 chicks captured; of these, 5 adults (2.3%) and 2 chicks (1.7%) died.

Translocation of birds from the Gunnison Basin population has been used to augment some of the satellite populations and may contribute to their persistence. However, related to translocated birds, there are potential genetic and population viability concerns for the satellite (receiving) populations and the Gunnison Basin (source) population (see Small Population Size and Structure in Factor E). Trapping and translocation of Gunnison sage-grouse may also increase mortality rates, either due directly to capturing and handling, or indirectly (later in time) as a result of translocation to areas outside the individuals' natal (home) range.

From the spring of 2000 to the spring 2013, CPW translocated a total of 300 radio-collared Gunnison sage-grouse from the Gunnison Basin population to the following satellite populations: Poncha Pass (41 birds), San Miguel Basin (Dry Creek Basin) (51 birds), Piñon Mesa (93 birds), Dove Creek (42 birds), and Crawford (73 birds). During this time, CPW reported only four bird deaths associated with capture myopathy (muscle damage due to extreme exertion or stress associated with capture and transport), including two deaths in 2007 and two in 2009 (CPW 2014c, entire). Excluding capture myopathy cases, data for birds with unknown fates (i.e., due to dropped or expired radio collars), and some of the more recent (2013) translocated birds, CPW has tracked the survival of 176 Gunnison sage-grouse translocated to date. Survival of all translocated birds to 12 months following translocation was higher in the spring (53.8 percent) than fall (39.6 percent); higher for yearlings

(55.4 percent) and juveniles (61.3 percent) than adults (40.0 percent); and comparable for males (50.0 percent) and females (48.8 percent). By population, survival to 12 months was highest in Dove Creek (60 percent) and Crawford (59.6 percent), followed by Piñon Mesa (40 percent), Dry Creek Basin (35.3 percent), and Poncha Pass (20.0 percent). Overall survival of translocated birds to 12 months was approximately 48 percent (CPW 2013d, entire; Wait 2013, pers. comm.; CPW 2014c, entire). Therefore, about 50 percent of these translocated birds died within the first 12 months following translocation, greater than the average annual mortality rate of non-translocated sage-grouse (approximately 20 percent) (CDOW 2009b, p. 9). However, some birds with an unknown fate (e.g., a dropped radio collar with no sign of death) were assumed dead and, therefore, the data may overestimate actual mortality rates (Wait 2013, pers. comm.).

In the fall of 2013, an additional 17 Gunnison sage-grouse were translocated to the Poncha Pass population from the Gunnison Basin. As of January 2014, 10 of these birds were known to be surviving (Nehring 2014, pers. comm.). In spring of 2014, 10 more birds were translocated to the Poncha Pass population from the Gunnison Basin (CPW 2014e, p. 7). In the fall of 2013 and spring of 2014, CPW translocated 23 birds from the Gunnison Basin to the Miramonte subpopulation of the San Miguel population (CPW 2014e, p. 7). Survival data for these birds were not available upon the drafting of this final rule.

Greater sage-grouse translocations have not fared any better than those of Gunnison sage-grouse. Over 7,200 greater sage-grouse were translocated between 1933 and 1990, but only five percent of the translocation efforts were considered to be successful in producing sustained, resident populations at the translocation sites (Reese and Connelly 1997, pp. 235–238, 240). More recent translocations from 2003 to 2005 into Strawberry Valley, Utah, resulted in a 40 percent annual mortality rate (Baxter *et al.* 2008, p. 182). We believe the lack of success of translocations found in greater sage-grouse is applicable to Gunnison sage-grouse because the two species exhibit similar behavior and life-history traits, and translocations are also managed similarly.

Because the survival rate for translocated sage-grouse has not been as high as desired, the CPW started a captive-rearing program in 2009 to investigate techniques for captive breeding and rearing of chicks, and methods to release chicks into wild, surrogate broods, to potentially increase brood survival and recruitment (CDOW 2009b, pp. 9–12). The GSRSC conducted a review of captive-rearing attempts for both greater sage-grouse and other gallinaceous birds and concluded that survival will be very low, unless innovative strategies are developed and tested (GSRSC 2005, pp. 181–183). However, greater sage-grouse have been reared in captivity, and survival of released chicks was similar to that of wild chicks (CDOW 2009b, p. 10). Consequently, the CPW started a captive-breeding project for Gunnison sage-grouse. After establishing a captive,

breeding flock, 78 domestically-reared chicks were introduced to wild Gunnison sage-grouse broods in 2010 and 2011 at two treatment ages. While survival of successfully-adopted, domestically-reared chicks was slightly lower than that of wild-reared chicks through 14 weeks, across both years none of the domestically-reared chicks were recruited into the breeding population (Wiechman 2014c, pers. comm.). Although introduced chick survival was relatively low, chick survival during captivity increased with improved protocols, and valuable knowledge on Gunnison sage-grouse rearing techniques has been gained (CPW 2011b). In another study, approximately 42 percent of captive-reared chicks introduced to wild females and their broods survived to 30 days of age. Of chicks that did not survive, 26.3 percent of chicks were lost due to predation, and 25.6 percent were lost due to exposure to the elements (Thompson 2012, pp. 29, 93).

As techniques improve, the CPW intends to develop a captive-breeding manual for Gunnison sage-grouse (CDOW 2009b, p. 11). Although adults or juveniles have been captured and moved out of the Gunnison Basin, as well as eggs, the removal of the grouse only accounts for a very small percentage of the total population of the Gunnison Basin sage-grouse population (less than 1 percent per year).

The CPW has a policy regarding trapping, handling, and marking techniques approved by its Animal Use and Care Committee (SMBGSWG 2009, p. A-10, Childers 2009, p. 13). Evaluation of research projects by the Animal Use and Care Committee and improvement of trapping, handling, and marking techniques over the last several years has resulted in fewer mortalities and injuries. In fact, in the San Miguel Basin, researchers have handled more than 200 sage-grouse with no trapping mortalities (SMBGSWG 2009, p. A-10). The CPW has also drafted a sage-grouse trapping and handling protocol, which is required training for people handling Gunnison sage-grouse, to minimize mortality and injury of the birds (CDOW 2002, pp. 1-4 in SMBWG 2009, pp. A-22-A-25). Injury and mortality does occasionally occur from trapping, handling, marking, and flushing off nests. However, research-related mortality is typically below two percent of handled birds (Table 11), indicating there is minimal effect on Gunnison sage-grouse at the population level.

Overall, we find that ongoing and future scientific research and related conservation efforts provide a net conservation benefit for the species.

Primarily due to handling, capture, and translocations, short-term negative effects to individuals occur as does injury and mortality, but these effects do not pose a threat to Gunnison sage-grouse populations or the species. Translocation of birds from the Gunnison Basin population has been used to augment some of the satellite populations and may have contributed to their persistence, albeit with potential genetic and population viability concerns for the receiving populations (see Genetic Risks), and for the Gunnison Basin (source) population (see Small Population Size and Structure in Factor E). Based on the best available information, scientific research and associated activities as described above have a relatively minor impact and are not a threat to the Gunnison sage-grouse.

Summary of Factor B

We have no evidence to suggest that legal hunting resulted in the overutilization of Gunnison sage-grouse. However, Gunnison sage-grouse harvest from an inadvertently opened hunting season resulted in a significant population decrease in the small Poncha Pass population. Nevertheless, we do not expect hunting to be permitted in the near future. Illegal hunting has only been documented once in Colorado and is not a known threat in Colorado or Utah. Lek viewing has not affected the Gunnison sage-grouse, and lek viewing protocols designed to reduce disturbance have generally been followed. CPW is currently revising its lek viewing protocol to make it more stringent and to include considerations for photography, research, and education-related viewing. Mortality from scientific research and capture or handling of wild birds is low, generally less than 2 percent and is not a threat. We know of no overutilization for commercial or educational purposes. Thus, based on the best scientific and commercial data available, we conclude that overutilization for commercial, recreational, scientific, or educational purposes is not a threat to Gunnison sage-grouse.

C. Disease or Predation

Disease

No research focusing on the types or pathology of diseases in Gunnison sage-grouse has been published. However, multiple bacterial and parasitic diseases have been documented in greater sage-grouse (Patterson 1952, pp. 71-72; Schroeder *et al.* 1999, pp. 14, 27). Some early studies have suggested that greater sage-grouse populations are adversely

affected by parasitic infections (Batterson and Morse 1948, p. 22). However, the role of parasites or infectious diseases in population declines of greater sage-grouse is unknown based on the few systematic surveys conducted (Connelly *et al.* 2004, p. 10-3). No parasites have been documented to cause mortality in Gunnison sage-grouse, but the protozoan, *Eimeria* spp., which causes coccidiosis, has been reported to cause death in greater sage-grouse (Connelly *et al.* 2004, p. 10-4). Infections tend to be localized to specific geographic areas, and no cases of greater sage-grouse mortality resulting from coccidiosis have been documented since the early 1960s (Connelly *et al.* 2004, p. 10-4).

Parasites have been implicated in greater sage-grouse mate selection, with potentially subsequent effects on the genetic diversity of this species (Boyce 1990, p. 263; Deibert 1995, p. 38). These relationships may be important to the long-term ecology of greater sage-grouse, but they have not been shown to be significant to the immediate status of populations (Connelly *et al.* 2004, p. 10-6). Although diseases and parasites have been suggested to affect isolated sage-grouse populations (Connelly *et al.* 2004, p. 10-3), we have no evidence indicating that parasitic diseases are a threat to Gunnison sage-grouse populations.

Greater sage-grouse are subject to a variety of bacterial, fungal, and viral pathogens. The bacterium *Salmonella* sp. has caused a single documented mortality in the greater sage-grouse and studies have shown that infection rates in wild birds are low (Connelly *et al.* 2004, p. 10-7). The bacteria are apparently contracted through exposure to contaminated water supplies around livestock stock tanks (Connelly *et al.* 2004, p. 10-7). Other bacteria found in greater sage-grouse include *Escherichia coli*, botulism (*Clostridium* spp.), avian tuberculosis (*Mycobacterium avium*), and avian cholera (*Pasteurella multocida*). These bacteria have never been identified as a cause of mortality in greater sage-grouse and the risk of exposure and hence, population effects, is low (Connelly *et al.* 2004, p. 10-7 to 10-8). In Gunnison sage-grouse, domestically-reared chicks have died due to bacterial infections by *Klebsiella* spp., *E. coli*, and *Salmonella* spp. In one case (CDOW 2009b, p. 11), bacterial growth was encouraged by a wood-based brooder substrate used to raise chicks. However, in a subsequent study (CPW 2011b, pp. 14-15) where the wood-based substrate was not used, similar bacterial infections and chick mortality still occurred. This was likely

a product of warm and potential moist substrates which promoted bacterial growth and spread. After switching to a gravel-based substrate and administering antibiotics, bacteria-related mortalities decreased. While this appears to suggest that Gunnison sage-grouse may be less resistant to bacterial infections than greater sage-grouse, most of the bacteria found can be present at non-lethal levels in wild Gunnison sage-grouse (Wiechman 2014a, pers. comm.). However, we have no information that shows the risk of exposure in the wild is different for Gunnison sage-grouse; therefore, these bacteria do not appear to be a threat to the species.

To limit the risk of disease transmission from introduced avian species, Gunnison County's Land Use Resolution (LUR) Number 07-17 regulates the importation of non-indigenous, gallinaceous game birds. This regulation requires that species only be imported from a source certified by the State of Colorado to be disease free (Gunnison County 2013a, p. 130).

West Nile virus was introduced into the northeastern United States in 1999 and has subsequently spread across North America (Marra *et al.* 2004, p. 394). Greater sage-grouse are highly susceptible to West Nile virus (Clark *et al.* 2006, p. 19; McLean 2006, p. 54) and do not develop a resistance to the disease. Death is almost certain once an individual is infected with the disease (Clark *et al.* 2006, p. 18). Transmission occurs when mosquitoes acquire the virus by biting an infected bird, and then transfer it by feeding on a new host (avian or mammalian). *Culex* species are recognized as the most efficient mosquito vectors for West Nile virus (Turell *et al.* 2005, p. 60), and *Culex tarsalis* is the dominant vector of the virus in sagebrush habitats (Naugle *et al.* 2004, p. 711). West Nile virus transmission is regulated by multiple factors, including temperature, precipitation, biology of the mosquito vector (Turell *et al.* 2005, pp. 59-60), and the presence of anthropogenic water sources, such as stock ponds and tanks, coal bed methane ponds, and irrigated agricultural fields that support mosquito life cycles (Reisen *et al.* 2006, p. 309; Walker and Naugle 2011, pp. 131-132). The peak of West Nile virus activity typically occurs in the summer from July through August, though this varies by region (Walker *et al.* 2004).

In Gunnison sage-grouse range and other parts of the west, water sources are commonly developed to support livestock operations and improve animal distribution and forage use. Some water developments are designed specifically to benefit Gunnison sage-

grouse, although this practice was recommended prior to our knowledge of West Nile virus as a serious risk factor for sage-grouse (Walker and Naugle 2011, p. 29) (see discussion below; also see discussion of the potential benefits of water development to Gunnison sage-grouse in Domestic Grazing and Wildlife Herbivory in Factor A above). The precise quantity and distribution of water developments in Gunnison sage-grouse range is unknown. However, we know that at least 87 percent of occupied Gunnison sage-grouse habitat on Federal lands is currently grazed by domestic livestock (USFWS 2010c, entire), suggesting that water developments are common and widespread across the species range. A similar proportion of area on private lands is likely grazed by domestic livestock as well. It is expected that some of these water sources are contributing to the persistence of mosquito populations and, therefore, to the potential spread of West Nile virus across the range of Gunnison sage-grouse. Management or modification of water developments in sage-grouse habitats is one way to control mosquito vector populations and, therefore, sources of West Nile virus (Walker and Naugle 2011, p. 29, and references therein).

The virus persists largely within a mosquito-bird-mosquito infection cycle (McLean 2006, p. 45). However, direct bird-to-bird transmission of the virus has been documented in several species (McLean 2006, pp. 54, 59), including the greater sage-grouse (Walker and Naugle 2011, p. 132; Cornish 2009, pers. comm.). The frequency of direct transmission has not been determined (McLean 2006, p. 54). Cold ambient temperatures preclude mosquito activity and virus amplification, so transmission to and in sage-grouse is limited to the summer (mid-May to mid-September) (Naugle *et al.* 2005, p. 620; Zou *et al.* 2007, p. 4), with a peak in July and August (Walker and Naugle 2011, p. 131). Reduced and delayed West Nile virus transmission in sage-grouse has occurred in years with lower summer temperatures (Naugle *et al.* 2005, p. 621; Walker *et al.* 2007b, p. 694). In non-sagebrush ecosystems, high temperatures associated with drought conditions increase West Nile virus transmission by allowing for more rapid larval mosquito development and shorter virus incubation periods (Shaman *et al.* 2005, p. 134; Walker and Naugle 2011, p. 131).

Greater sage-grouse congregate in mesic (moist) habitats in the mid-late summer (Connelly *et al.* 2000, p. 971), thereby increasing their risk of exposure

to mosquitoes. Likewise, Gunnison sage-grouse use more mesic habitats in the summer and early fall (GSRSC 2005, p. 30, and references therein), increasing their exposure to mosquitoes. If West Nile virus outbreaks coincide with drought conditions that aggregate birds in habitat near water sources, the risk of exposure to West Nile virus will be elevated (Walker and Naugle 2011, p. 131). Greater sage-grouse inhabiting higher elevation sites in summer (similar to areas of the Gunnison Basin) are likely less vulnerable to contracting West Nile virus than birds at lower elevation (similar to Dry Creek Basin of the San Miguel population) as ambient temperatures are typically cooler at higher elevations (Walker and Naugle 2011, p. 131).

West Nile virus has caused population declines in wild bird populations on the local and regional scale (Walker and Naugle 2011, pp. 128-129) and has reduced the survival rates of greater sage-grouse (Naugle *et al.* 2004, p. 710; Naugle *et al.* 2005, p. 616). Experimental results, combined with field data, suggest that a widespread West Nile virus infection has negatively affected greater sage-grouse (Naugle *et al.* 2004, p. 711; Naugle *et al.* 2005, p. 616). As noted above, the selective use of mesic habitats by sage-grouse during the summer and fall increases their exposure to West Nile virus. Greater sage-grouse are highly susceptible to West Nile virus (Clark *et al.* 2006, p. 19; McLean 2006, p. 54) and do not develop a resistance to the disease. Death is certain once an individual is infected with the disease (Clark *et al.* 2006, p. 18). Furthermore, other gallinaceous bird species such as ruffed grouse (*Bonasa umbellus*), wild turkey (*Meleagris gallopavo*), and chukar partridge (*Alectoris chukar*), have died as a result of West Nile virus infection (CDC 2013, entire).

It is reasonable to assume the Gunnison sage-grouse is susceptible to West Nile virus based on the confirmed cases of infection and mortality in greater sage-grouse and other taxonomically related birds. We are also aware of at least 3 Gunnison sage-grouse dying of West Nile disease, although these birds were growing in captivity in Fort Collins, CO where the virus is more likely to be present (Wiechman 2014b, pers. comm.). To date, however, West Nile virus has not been documented in Gunnison sage-grouse despite the presence of West Nile virus across most of the species' range (see discussion below). This may be the result of the small number of birds marked and studied; limited local abundance of the principle mosquito vector species,

Culex; unsuitable conditions in Gunnison sage-grouse habitat for the virus to become virulent or widespread; or any number of other factors. West Nile virus activity within the range of Gunnison sage-grouse is apparently low compared to other parts of Colorado, Utah, and the western United States. However, West Nile virus surveillance may not occur every year or in every county (USGS 2013, entire), meaning that incidents likely go undetected. Furthermore, rural areas with smaller human populations, such as the majority of lands within Gunnison sage-grouse range, may have decreased detection and reporting rates of avian mortalities, thus potentially biasing the modeled distribution of West Nile virus (Ward *et al.* 2006, p. 102).

To date, across Gunnison sage-grouse occupied range, only San Miguel and Dolores Counties in Colorado have no confirmed avian mortalities associated with West Nile virus, nor has the virus been reported in human or mosquito infection data in those counties. However, adjacent counties have confirmed West Nile virus presence, so the virus is potentially present in San Miguel and Dolores Counties as well. A total of 84 dead wild birds (species other than Gunnison sage-grouse) infected by West Nile virus have been reported from nine counties within the current range of Gunnison sage-grouse since 2002, when reporting began in Colorado and Utah. These include Chaffee, Delta, Gunnison, Mesa, Montrose, Ouray, and Saguache Counties in Colorado; and Grand and San Juan Counties in Utah. Seventy and 14 of these bird deaths were reported in Colorado and Utah, respectively. Fifty-two (62 percent) of reported cases were in Mesa County where the Piñon Mesa population is found. Also, the majority of reported cases were in Colorado counties (USGS 2013, entire; USFWS 2013a, entire). However, as noted above, areas with higher human population densities, such as Mesa County, Colorado, can result in increased detection and reporting rates, thus potentially biasing the modeled distribution of West Nile virus (Ward *et al.* 2006, p. 102). In Utah, 13 (93 percent) avian mortality reports were in Grand County, and 1 (7 percent) was in San Juan County. Sixty-four (76 percent) of the 84 total reported bird mortalities in Colorado and Utah occurred in 2003 and 2004, when summer temperatures were above average and, likely contributing to the spread of West Nile virus (Reisen *et al.* 2006, p. 1). Since that time, reported avian mortalities associated with West Nile virus across

the range of Gunnison sage-grouse have declined, and no avian infections or mortalities were reported from 2008 through 2012 (USGS 2013, entire; USFWS 2013a, entire).

A CPW study with the Colorado Mosquito Control Company in 2004 used mosquito trap monitoring to evaluate the relative risk of West Nile virus on Gunnison sage-grouse in the Gunnison Basin. Trapping resulted in a total of 6,729 mosquitoes throughout the Gunnison Basin from June 1 through August 30. Testing of mosquito samples conducted by the Colorado Department of Public Health observed nine species of mosquito, including *Culex tarsalis*, the primary vector of West Nile virus. However, the relative abundance of *C. tarsalis* was low, comprising about 15.8 percent of all samples collected. No other *Culex* species were observed. The other species observed are not known to be effective transmitters of West Nile virus to avian species. All mosquito samples tested negative for West Nile virus. Sixteen Gunnison sage-grouse were radiomarked by CPW during the same summer, and no mortalities of marked or unmarked birds were observed (Phillips 2013, p. 6). One avian mortality (a species other than Gunnison sage-grouse) due to West Nile infection was reported in Gunnison County in 2003 (USGS 2013, entire; USFWS 2013a, p. 1).

Walker and Naugle (2011, p. 140) predict that West Nile virus outbreaks in small, isolated, and genetically depauperate populations could reduce sage-grouse numbers below a threshold from which recovery is unlikely because of limited or nonexistent demographic and genetic exchange from adjacent populations. If so, a West Nile virus outbreak in any Gunnison sage-grouse population, except perhaps the Gunnison Basin population, assuming it remains large and resilient, would challenge their survival.

As described above, West Nile virus is present throughout most of the range of Gunnison sage-grouse. Although the disease has not yet been documented in any Gunnison sage-grouse, it has caused large mortality events and has also caused the deaths of other gallinaceous birds including greater sage-grouse. Similar to observations in greater sage-grouse (Walker and Naugle 2011, p. 131), higher elevation populations of Gunnison sage-grouse, such as the Gunnison Basin may be at lower risk of West Nile virus infection and outbreaks. Also, the frequency of avian mortalities (species other than sage-grouse) associated with the virus have apparently declined since 2004 across the range of Gunnison sage-grouse.

However, increased temperature and drought conditions are expected to increase in the future due to climate change across the range (see Climate Change in Factor A). Such conditions will contribute to the prevalence and spread of West Nile virus and, therefore, the exposure of Gunnison sage-grouse to this disease. Therefore, due to the known presence of West Nile virus across the majority of Gunnison sage-grouse range, the high risk of mortality and population-level impacts based on the biology of the species, and the immediacy of those potential impacts, we conclude that West Nile virus is a future threat to Gunnison sage-grouse rangewide. The threat of West Nile virus is currently lower in the high elevation areas, such as the Gunnison Basin population, but is expected to increase in the foreseeable future due to increased drought and the predicted effects of climate change. No other diseases or parasitic infections are known to be a threat to Gunnison sage-grouse now or in the future.

Predation

Predation is the most commonly identified cause of direct mortality for sage-grouse during all life stages (Schroeder *et al.* 1999, p. 9; Connelly *et al.* 2000b, p. 228; Connelly *et al.* 2011b, p. 66). However, sage-grouse have co-evolved with a variety of predators, and their cryptic plumage and behavioral adaptations have allowed them to persist despite this mortality factor (Schroeder *et al.* 1999, p. 10; Coates 2008, p. 69; Coates and Delehanty 2008, p. 635; Hagen 2011, p. 96). Until recently, little published information has been available that indicates predation is a limiting factor for the greater sage-grouse (Connelly *et al.* 2004, p. 10–1), particularly where habitat quality has not been compromised (Hagen 2011, p. 96). Although many predators will consume sage-grouse, none specialize on the species (Hagen 2011, p. 97). Generalist predators have the greatest effect on ground-nesting birds because predator numbers are independent of the density of a single prey source since they can switch to other prey sources when a given prey source is not abundant (Coates 2007, p. 4). We presume that the effects of predation observed in greater sage-grouse are similar to those anticipated in Gunnison sage-grouse since overall behavior and life-history traits are similar for the two species. However, as discussed below, those effects may be more substantial and of greater concern for smaller, declining populations, such as the six satellite populations of Gunnison sage-grouse.

Major predators of adult sage-grouse include many species including golden eagles (*Aquila chrysaetos*), red foxes (*Vulpes fulva*), and bobcats (*Felis rufus*) (Hartzler 1974, pp. 532–536; Schroeder *et al.* 1999, pp. 10–11; Schroeder and Baydack 2001, p. 25; Rowland and Wisdom 2002, p. 14; Hagen 2011, p. 97). Juvenile sage-grouse also are killed by many raptors as well as common ravens (*Corvus corax*), badgers (*Taxidea taxus*), red foxes, coyotes (*Canis latrans*), and weasels (*Mustela* spp.) (Braun 1995, entire; Schroeder *et al.* 1999, p. 10). Nest predators include badgers, weasels, coyotes, common ravens, American crows (*Corvus brachyrhynchos*), magpies (*Pica* spp.), elk (*Cervus canadensis*) (Holloran and Anderson 2003, p. 309), and domestic cows (*Bovus* spp.) (Coates *et al.* 2008, pp. 425–426). Ground squirrels (*Spermophilus* spp.) also have been identified as nest predators (Patterson 1952, p. 107; Schroeder *et al.* 1999, p. 10; Schroeder and Baydack 2001, p. 25), but recent data show that they are physically incapable of puncturing eggs (Holloran and Anderson 2003, p. 309; Coates *et al.* 2008, p. 426; Hagen 2011, p. 97). Several other small mammals visited sage-grouse nests in Nevada, but none resulted in predation events (Coates *et al.* 2008, p. 425).

The most common predators of Gunnison sage-grouse eggs are weasels, coyotes, and corvids (Young 1994, p. 37). Most raptor predation of sage-grouse is on juveniles and older age classes (GSRSC 2005, p. 135). Golden eagles were found to be the dominant raptor species recorded perching on power poles in Utah in Gunnison sage-grouse habitat (Prather and Messmer 2009, p. 12), indicating a possible source of predation. In a study conducted from 2000 to 2009 in the western portion of the Gunnison Basin, 22 and 40 percent of 111 adult Gunnison sage-grouse mortalities were the result of avian and mammalian predation, respectively (Childers 2009, p. 7). Twenty-five and 35 percent of 40 chick mortalities were caused by avian and mammalian predation, respectively (Childers 2009, p. 7). A causative agent of mortality was not determined in the remaining mortalities (approximately one-third of all known mortalities) in the western portion of the Gunnison Basin from 2000 to 2009 (Childers 2009, p. 7).

Adult male Gunnison and greater sage-grouse are very susceptible to predation while on the lek (Schroeder *et al.* 1999, p. 10; Schroeder and Baydack 2001, p. 25; Hagen 2011, p. 5), presumably because they are conspicuous while performing their

mating displays. Because leks are attended daily by numerous grouse, predators also may be attracted to these areas during the breeding season (Braun 1995, p. 2). In a study of greater sage-grouse mortality causes in Idaho, it was found that, among males, 83 percent of the mortality was due to predation and 42 percent of those mortalities occurred during the lekking season (March through June) (Connelly *et al.* 2000b, p. 228). In the same study, 52 percent of the mortality of adult females was due to predation and 52 percent of those mortalities occurred between March and August, which includes the nesting and brood-rearing periods (Connelly *et al.* 2000b, p. 228).

Predation of adult sage-grouse is low outside the lekking, nesting, and brood-rearing season (Connelly *et al.* 2000b, p. 230; Naugle *et al.* 2004, p. 711; Moynahan *et al.* 2006, p. 1536; Hagen 2011, p. 97). Adult female greater sage-grouse are susceptible to predators while on the nest but mortality rates are low (Hagen 2011, p. 97). Greater sage-grouse selected nest and brood-rearing sites with lower avian predator densities than nearby random locations (Dinkins *et al.* 2012, p. 605). Hens will abandon their nest when disturbed by predators (Patterson 1952, p. 110), likely reducing this mortality (Hagen 2011, p. 97). Sage-grouse populations are likely more sensitive to predation upon females given the highly negative response of Gunnison sage-grouse population dynamics to adult female reproductive success and chick mortality (GSRSC, 2005, p. 173).

Estimates of predation rates on juvenile sage-grouse are limited and variable due to the difficulties in studying this age class (Aldridge and Boyce 2007, p. 509; Hagen 2011, p. 97). For greater sage-grouse, chick mortality from predation ranged from 10 to 51 percent in 2002 and 2003 on three study sites in Oregon (Gregg *et al.* 2003, p. 15; 2003b, p. 17). Mortality due to predation during the first few weeks after hatching was estimated to be 82 percent (Gregg *et al.* 2007, p. 648). Survival of juveniles to their first breeding season was estimated to be low (10 percent). In northwest Colorado, mortality due to predation was estimated at 26.3 percent in captive reared greater sage-grouse chicks introduced to the wild (Thompson 2012, pp. 29, 93). Given the known sources and rates of adult mortality due to predation, it is reasonable to assume that predation is a contributor to the high juvenile mortality rates as well (Crawford *et al.* 2004, p. 4).

Sage-grouse nests are subject to varying levels of predation. Predation

can be total (all eggs destroyed) or partial (one or more eggs destroyed). However, hens abandon nests in either case (Coates, 2007, p. 26). Over a 3-year period in Oregon, 106 of 124 nests (84 percent) were preyed upon (Gregg *et al.* 1994, p. 164). Nest predation rates of 41 percent were reported in one study in Wyoming (Patterson 1952, p. 104), while another study reported a predation rate of 12 percent in Wyoming (Holloran and Anderson 2003, p. 309). Moynahan *et al.* (2007, p. 1777) attributed 131 of 258 (54 percent) of nest failures to predation in Montana. Re-nesting efforts may partially compensate for the loss of nests due to predation (Schroeder 1997, p. 938), but re-nesting rates for greater sage-grouse are highly variable (Connelly *et al.* 2011b, p. 63). Further, re-nesting rates are low in Gunnison sage-grouse (Young, 1994, p. 44; Childers, 2009, p. 7), indicating that re-nesting may not offset losses caused by predation. Loss of breeding hens and young chicks to predation can influence overall greater and Gunnison sage-grouse population numbers, as these two groups contribute most significantly to population productivity (GSRSC, 2005, p. 29; Baxter *et al.* 2008, p. 185; Connelly *et al.*, 2011, pp. 64–65).

Nesting success of greater sage-grouse is positively correlated with the presence of big sagebrush and grass and forb cover (Connelly *et al.* 2000, p. 971). Females actively select nest sites with these qualities (Schroeder and Baydack 2001, p. 25; Hagen *et al.* 2007, p. 46). Nest predation appears to be related to the amount of herbaceous cover surrounding the nest (Gregg *et al.* 1994, p. 164; Braun 1995, pp. 1–2; DeLong *et al.* 1995, p. 90; Braun 1998; Coggins 1998, p. 30; Connelly *et al.* 2000b, p. 975; Schroeder and Baydack 2001, p. 25; Coates and Delehanty 2008, p. 636). Therefore, loss of nesting cover from any source (e.g., grazing, fire) has the potential to reduce nest success and adult hen survival. Also, habitat alteration that reduces cover for young chicks can increase their rate of predation (Schroeder and Baydack 2001, p. 27). Conversely, Coates (2007, p. 149) found that badger predation was facilitated by nest cover as it attracts small mammals, a badger's primary prey.

In a review of published nesting studies, Connelly *et al.* (2011, pp. 63–64) reported that nesting success was greater in unaltered habitats versus habitats affected by anthropogenic activities. Where habitat has been altered, it has been shown that the associated influx of predators can decrease annual recruitment of greater sage-grouse (Gregg *et al.* 1994, p. 164;

DeLong *et al.* 1995, p. 91; Coates 2007, p. 2); and the same cause-effect relationship has been speculated in other cases as well (Schroeder and Baydack 2001, p. 28; Braun 1995, pp. 1–2; Braun 1998; Hagen 2011, pp. 97–98). Agricultural development, landscape fragmentation, and human populations can increase predation pressure on all life stages of greater sage-grouse by forcing birds to nest in less suitable or marginal habitats, increasing travel time through altered habitats where they are vulnerable to predation, and increasing the diversity and density of predators (see further discussion below) (Ritchie *et al.* 1994, p. 125; Schroeder and Baydack 2001, p. 25; Connelly *et al.* 2004, p. 7–23; and Summers *et al.* 2004, p. 523; GSRSC 2005, p. 135). We believe the above information for greater sage-grouse is also applicable to Gunnison sage-grouse since overall behavior and life-history traits are similar between the two species (Young 1994, p. 4).

In the Strawberry Valley of Utah, a high density of red fox contributed to historically low survival rates of female (30 percent) and male (29.7 percent) greater sage-grouse. The authors speculated that the high density of red foxes were attracted to the area by Strawberry Reservoir and associated anthropogenic activities (Bambrough *et al.* 2000, p. 1). The red fox population has apparently increased within the Gunnison Basin (BLM, 2009, p. 37), and the species was only recently observed in habitat within the Monticello, Utah, population area (UDWR 2011, p. 4). In addition to wild predators, domestic species including dogs (*Canis domesticus*) and cats (*Felis domesticus*) have been introduced by ranches, farms, and housing developments into greater sage-grouse habitats (Connelly *et al.* 2004, p. 12–2).

Raven abundance has increased as much as 1,500 percent in some areas of western North America since the 1960s (Coates 2007, p. 5). Breeding bird survey trends from 1966 to 2007 indicate increases throughout Colorado and Utah (USGS, 2009, pp. 1–2). The presence of ravens was negatively associated with greater sage-grouse nest and brood success in western Wyoming (Bui 2009, p. 27). It was suggested that raven numbers have increased in the Piñon Mesa population, though data have not been collected to verify this (CDOW 2009b, p. 110). Raven numbers in the Monticello population area remain high (UDWR 2011, p. 4).

Local attraction of ravens to nesting hens may be facilitated by loss and fragmentation of native shrublands, which increases the exposure of nests to predators (Aldridge and Boyce 2007, p.

522; Bui 2009, p. 32; Howe *et al.* 2014, p. 41–44). Human-made structures in the environment increase the effect of raven predation, particularly in low canopy cover areas, by providing ravens with perches (Braun 1998, pp. 145–146; Coates 2007, p. 155; Bui 2009, p. 2; Howe *et al.* 2014, p. 41–44) (also see discussion under Factor A above). Reduction in patch size and diversity of sagebrush habitat, as well as the construction of fences, powerlines, and other infrastructure, also are likely to encourage the presence of the common raven (Coates *et al.* 2008, p. 426; Bui 2009, p. 4; Howe *et al.* 2014, p. 44). For example, raven counts have increased by approximately 200 percent along the Falcon-Gondor transmission line corridor in Nevada (Atamian *et al.* 2007, p. 2). Ravens contributed to lek disturbance events in the areas surrounding the transmission line (Atamian *et al.* 2007, p. 2), but as a cause of decline in surrounding sage-grouse population numbers, this could not be separated from other potential impacts, such as West Nile virus. Holloran (2005, p. 58) attributed increased sage-grouse nest predation to high corvid abundance, which resulted from anthropogenic food and perching subsidies in areas of natural gas development in western Wyoming. Bui (2009, p. 31) also found that ravens used road networks associated with oil fields in the same Wyoming location for foraging activities. Holmes (2009, pp. 2–4) also found that common raven abundance increased in association with oil and gas development in southwestern Wyoming.

Raven abundance was strongly associated with sage-grouse nest failure in northeastern Nevada, with resultant negative effects on sage-grouse reproduction (Coates 2007, p. 130). The presence of high numbers of predators within a sage-grouse nesting area may negatively affect sage-grouse productivity without causing direct mortality. Increased raven abundance was associated with a reduction in the time spent off the nest by female sage-grouse, thereby potentially compromising their ability to secure sufficient nutrition to complete the incubation period (Coates 2007, pp. 85–98). Another model utilized known raven nest locations and found a 31 percent decrease in the odds of nesting by ravens for every 1-km increase in distance from a transmission line (Howe *et al.* 2014), indicating that the presence of transmission lines may increase the presence of and risk of predation by ravens in sage-grouse habitat.

As more suitable grouse habitat is converted to exurban development,

agriculture, or other non-sagebrush habitat types, grouse nesting and brood-rearing become increasingly spatially restricted (Bui 2009, p. 32). Future human population growth and associated development and infrastructure will likely further restrict nesting habitat within the species' range. Additionally, Gunnison sage-grouse have been shown to avoid residential development and infrastructure in some areas, resulting in functional habitat loss (Aldridge *et al.* 2012, p. 402). Of 99 nest sites studied in the western portion of the Gunnison Basin population, 69 (approximately 70 percent) occurred within 13 percent of the available habitat (Aldridge *et al.* 2012, p. 400). Unnaturally high nest densities, which result from habitat fragmentation or disturbance associated with the presence of edges, fencerows, or trails, may increase predation rates by making foraging easier for predators (Holloran 2005, p. C37). Increased nest density could negatively influence the probability of a successful hatch (Holloran and Anderson, 2005, p. 748).

The influence of the human footprint in sagebrush ecosystems may be underestimated (Leu and Hanser 2011, pp. 270–271) since it is uncertain how much more habitat sage-grouse (a large landscape-scale species) need for persistence in increasingly fragmented landscapes (Connelly *et al.* 2011a, pp. 80–82). Therefore, the influence of ravens and other predators associated with human activities may be underestimated. In addition, nest predation may be higher, more variable, and have a greater impact on the small, fragmented Gunnison sage-grouse populations, particularly the six smallest populations (GSRSC 2005, p. 134).

Except for the few studies presented here, data that link Gunnison sage-grouse population numbers and predator abundance are limited. Still, in at least the six smaller populations, the best available information suggests that predation may be limiting Gunnison sage-grouse survival and persistence. The lack of recruitment in the San Miguel population may be associated with predation (CDOW 2009b, p. 31; Davis 2012, p. 162). In this area, six of 12 observed nests were destroyed by predation. None of the chicks from the remaining successful nests survived beyond two weeks. Those observations are in contrast to the Gunnison Basin where approximately 20 percent of radio-marked chicks survived their first year during that period. Further, trends in lek count and other data indicate there has been no recruitment of young into the San Miguel population since

around 2005. The CPW suspects these trends are most likely due to predation (CDOW 2009b, p. 30–31; Davis 2012, pp. 37, 79). The other five satellite populations are smaller than the San Miguel population; therefore, it is reasonable to expect that predation may be limiting those populations as well.

Actions To Address Predation

Due to low population numbers and the potential impact of predation, a predator control program initiated by CPW occurred between March 2011 and June 2012 in the Miramonte subpopulation area of the San Miguel population to evaluate the effects of predator removal on Gunnison sage-grouse juvenile recruitment in the subpopulation (CPW 2012b, pp. 8–10). Over the two-year period, the United States Department of Agriculture Animal and Plant Health Inspection Service removed 155 coyotes, 101 corvids, two bobcats, eight badgers, two raccoons, and three red foxes. Radio-marked hens, nest success, and chick survival were monitored during this time, and results were compared to baseline data collected for the same area from 2007 to 2010. Prior to predator control, of eight marked chicks, no individuals survived to 3 months. From 2011 through August of 2012, during which predator control occurred, of 10 marked chicks, four (40 percent) chicks survived to three months, and two (20 percent) survived at least one year. The study did not compare chick survival rates to non-predator removal areas, so it is unknown whether the apparent increase in chick survival was due to predator control or other environmental factors (e.g., weather, habitat conditions, etc.).

Predator removal efforts have sometimes shown short-term gains that may benefit fall populations, but not breeding population sizes (Cote and Sutherland 1997, p. 402; Hagen 2011, pp. 98–99; Leu and Hanser 2011, p. 270). Predator removal may have greater benefits in areas with low habitat quality, but predator numbers quickly rebound without continual control (Hagen 2011, p. 99). Red fox removal in Utah appeared to increase adult greater sage-grouse survival and productivity, but the study did not compare these rates against other nonremoval areas, so inferences are limited (Hagen 2011, p. 98).

Coyote control efforts failed to have an effect on greater sage-grouse nesting success in southwestern Wyoming (Slater 2003, p. 133). However, coyotes may not be an important predator of sage-grouse. In a coyote prey base analysis, sage-grouse and bird egg shells

made up a very small percentage (0.4–2.4 percent) of analyzed scat samples (Johnson and Hansen 1979, p. 954). Additionally, coyote removal can have unintended consequences resulting in the release of smaller predators, like the red fox, many of which may have more negative impacts on sage-grouse (Mezquida *et al.* 2006, p. 752).

Removal of ravens from an area in northeastern Nevada caused only short-term reductions in raven populations (less than 1 year), as apparently transient birds from neighboring sites repopulated the removal area (Coates 2007, p. 151). Additionally, badger predation appeared to partially compensate for decreases due to raven removal (Coates 2007, p. 152). In their review of literature regarding predation, Connelly *et al.* (2004, p. 10–1) noted that only two of nine studies examining survival and nest success indicated that predation had limited a sage-grouse population by decreasing nest success, and both studies indicated low nest success due to predation was ultimately related to poor nesting habitat. It has been suggested that removal of anthropogenic “subsidies” (e.g., landfills, tall structures) may be an important step to reducing the presence of sage-grouse predators (Bui 2009, pp. 36–37). Leu and Hanser (2011, p. 270) also argue that reducing the effects of predation on sage-grouse can only be effectively addressed by precluding these features.

In 1999, property was transferred from the BLM to Gunnison County for the purposes of the Gunnison County Landfill. This conveyance required implementation of a mitigation plan for potential impacts to Gunnison sage-grouse, including establishment of a mitigation fund known as the Gunnison Sage-grouse Conservation Trust. To date, over \$250,000 has been allocated from the trust fund for Gunnison sage-grouse projects in occupied habitat in Gunnison County. Projects include, but are not limited to, habitat improvements, conservation easements, road closures, and outreach and education (Gunnison County 2013a, pp. 147–150). Gunnison County has actively controlled ravens at the Gunnison County Landfill since 2003. Between 200 and 250 ravens are removed annually within the landfill boundaries. Further efforts to control ravens in the Gunnison Basin are under consideration by the county and the Gunnison Basin Sage-grouse Strategic Committee (Gunnison County 2013a, p. 132). The effects of these control efforts on Gunnison sage-grouse survival have not been studied.

Gunnison County and CPW have jointly funded an ongoing study (Magee 2013, pers. comm.) of the distribution and abundance of ravens and crows (corvids), which may help inform managers of the potential influence of these species in the Gunnison Basin. Of twelve survey sites in the Gunnison Basin, the site most used by ravens was the Gunnison County Landfill. Preliminary distribution and abundance data indicate that a large number of ravens are utilizing the landfill as their primary food source (Magee 2013, pers. comm.). Additional information from surveys during spring and early summer of 2014 may provide information on raven use of sagebrush habitats during the sage-grouse breeding and nesting season when Gunnison sage-grouse are more vulnerable to predation. Evaluating raven predation on Gunnison sage-grouse was not an objective of this study. However, preliminary data on raven abundance, spatial and temporal distribution, and movements suggest that ravens are not preying on Gunnison sage-grouse as primary food source in the Gunnison Basin. Planned spring and early summer surveys may indicate otherwise, but the results of these surveys were not available at the time of drafting of this final rule.

Summary of Predation

Due to the extent of human influence and alteration of habitat across its range, Gunnison sage-grouse may be increasingly subject to levels and impacts of predation that would not normally occur in the historically contiguous, intact sagebrush habitats, or in larger, more resilient populations. Gunnison sage-grouse are adapted to minimize predation through cryptic plumage and behavior, however predation is strongly influenced by anthropogenic factors on the landscape, and human presence on the landscape will continue to increase. The impacts of predation on greater sage-grouse can increase where habitat quality has been compromised by anthropogenic activities (exurban development, road development, powerlines, etc.) (e.g., Coates 2007, pp. 154, 155; Bui 2009, p. 16; Hagen 2011, p. 100; Howe *et al.* 2014, p. 41–44). Landscape fragmentation and habitat decline associated with human populations have the potential to increase predator populations through increasing the ease of securing prey and subsidizing food sources and nest or den substrate for predators. Consequently, otherwise suitable habitat may change into a habitat sink (habitat in which reproduction is insufficient to balance

mortality) for grouse populations (Aldridge and Boyce 2007, p. 517).

Anthropogenic influences on sagebrush habitats that increase suitability for ravens may also limit sage-grouse populations (Bui 2009, p. 32). Current land-use practices in the Intermountain West favor high predator (in particular, raven) abundance relative to historical numbers (Coates *et al.* 2008, p. 426). The interaction between changes in habitat and predation may have substantial effects to sage-grouse at the landscape level (Coates 2007, pp. 3–5; Howe *et al.* 2014, p. 41–44).

Research and data linking predation to Gunnison sage-grouse abundance and viability are limited. However, the studies presented above suggest that, particularly in areas of intensive habitat alteration and fragmentation and in smaller less resilient populations, sage-grouse productivity and, potentially, population viability could be negatively affected by predation. Since the Gunnison and greater sage-grouse have similar behavior and life-history traits, it is reasonable to assume that predator impacts on Gunnison sage-grouse are similar to those documented in greater sage-grouse. As more habitats are altered or lost due to human development, including dispersed development, we expect predators to spread and increase in numbers into the future, thereby increasing the risk of predation. Ongoing effects from predation are likely greater in the smaller satellite populations, and will likely increase if these populations continue declining in abundance. Therefore, the best available information indicates that, as we stated in our proposed rule, predation is a current and future threat to the species, particularly in the satellite populations. While predation likely acts as a threat in localized areas across the range of the species, the stability of the Gunnison Basin population over the last 19 years indicates that predation is not having a significant impact on that population. We believe, however, that the effects of predation are more pronounced in the satellite populations. Given the stability of the Gunnison Basin population, we do not believe that the magnitude of this threat is significant at the rangewide level.

Summary of Factor C

We have reviewed the available information on the effects of disease and predation on the long-term persistence of the Gunnison sage-grouse. The only disease that is known to be a threat to the survival of the Gunnison sage-grouse is West Nile virus. This virus is distributed throughout most of the species' range. However, despite its near

100 percent lethality, disease occurrence is sporadic in other taxa across the species' range and has not yet been detected in Gunnison sage-grouse. While we have no evidence of West Nile virus acting on Gunnison sage-grouse individuals or populations, because of its presence within the species' range, its lethality to sage-grouse, and the continued development of anthropogenic water sources in the area that support mosquito vector populations, the virus is a future threat to the species. We anticipate that West Nile virus will persist within the range of Gunnison sage-grouse indefinitely and that the threat it presents will be exacerbated by any factor (e.g., drought, climate change) that increases ambient temperatures and the presence of the vector on the landscape.

The best available information shows that existing and future habitat decline, and fragmentation in particular, will increase the effects of predation on this species, particularly in the six smaller populations, resulting in a reduction in sage-grouse productivity and abundance in the future.

We evaluated the best available scientific information regarding disease and predation and their effects on the Gunnison sage-grouse. Based on the information available, we have determined that predation and disease are threats to the species throughout its range at the present time and are likely to increase in the future. In particular, West Nile virus poses a substantial threat to Gunnison sage-grouse rangewide in the foreseeable future.

D. The Inadequacy of Existing Regulatory Mechanisms

Under this factor, we examine whether threats to the Gunnison sage-grouse are adequately addressed by existing regulatory mechanisms. Existing regulatory mechanisms that can provide some protection for Gunnison sage-grouse include: (1) Local land use laws, regulations and ordinances; (2) State laws and regulations; and (3) Federal laws and regulations. Regulatory mechanisms, if they exist, may preclude the need for listing if such mechanisms adequately address the threat to the species such that listing is not warranted. Conversely, threats to a species may be exacerbated when not addressed at all by existing regulatory mechanisms, or if the existing mechanisms are not adequately implemented or enforced.

Multiple partners, including private citizens, nongovernmental organizations, Tribes, Counties, States, and Federal agencies, are engaged in conservation efforts across the range of

Gunnison sage-grouse. Conservation efforts by these parties that are voluntary or are not enforceable, however, including conservation strategies and guidance, are typically not regulatory mechanisms. Non-regulatory conservation efforts that address habitat related issues, such as the Rangewide Conservation Plan, the Colorado CCAA and the Gunnison Basin CCA, are described and evaluated under Factor A, and other non-regulatory conservation efforts are described and assessed under relevant threat sections. In this section, pursuant to Factor D, we review and evaluate only regulatory mechanisms undertaken by local, State, and Federal entities designed to reduce or remove threats to Gunnison sage-grouse and its habitat.

Local Laws and Regulations

Approximately 43 percent of Gunnison sage-grouse rangewide occupied habitat is privately owned (Table 1), and local laws and regulations are most applicable in those areas. Local laws and regulations vary widely by county across Gunnison sage-grouse range. Below we first broadly address general county regulations that have the potential to affect Gunnison sage-grouse and its habitat and then move on to local laws and regulations that specifically address Gunnison sage-grouse.

Under state law, all county governments have general authority to regulate land use development in their jurisdictions through the implementation of comprehensive or master plans, zoning, and subdivision planning (Colo. Rev. Stat. § 30–28–101 *et seq.*; Utah 2011, entire), and to protect wildlife habitat through enforcement of wildlife-related regulations or requirements (Colo. Rev. Stat. § 24–65.1–104; Utah Code § 17–27a–403). Local laws and regulations enacted pursuant to this authority may benefit Gunnison sage-grouse depending on the regulations adopted in a particular county and the degree to which threats to Gunnison sage-grouse and its habitat are considered and addressed in these local regulations.

By statute, the State of Colorado grants Colorado counties broad authority for planning and regulation of land use and development in their respective jurisdictions (Colo. Rev. Stat. § 30–28–101 *et seq.*). This law provides that whenever local land use regulations impose higher standards than other statutes, the provisions of the regulations made under local authority (i.e., county planning) shall apply (Colo. Rev. Stat. § 30–28–123). Furthermore, Colorado law authorizes local

governments to plan for and regulate land uses in order to protect significant wildlife habitat and species (Colo. Rev. Stat. § 30–29–104).

In our proposed rule, we reported that Colorado law exempts parcels of land that are 35 acres or larger from county land use regulations (78 FR 2523). This is only partially correct. Under Colorado law, a county does not have authority to regulate the subdivision of land that creates parcels that are each 35 acres or larger (“plus-35 acre parcels”) (Colo. Rev. Stat. § 30–28–101(10)(b)). However, Colorado counties retain authority to regulate the actual use and development of plus-35 acre parcels (for example, home, road, or infrastructure development). All Colorado counties in the occupied range of Gunnison sage-grouse have land use regulations that apply to development of plus-35 acre parcels (Delta County 2013–R–025; Dolores County policy on subdivisions exemptions; Gunnison County 95–34; Mesa County 31; Montrose County 45–2012, 02–2013, 24–2013, 14–2006; Ouray County 2013–022; Saguache County 2013–LU–11; San Juan County Utah Statute Summary; San Miguel Article 1). Similarly, the State of Utah grants County governments, including San Juan County, which encompasses the Monticello population of Gunnison sage-grouse, authority to regulate and control property (i.e., zoning) and development (Utah 2011, entire).

County or city ordinances in San Juan County, Utah, that address agricultural lands, transportation, and zoning for various types of land uses have the potential to affect sage-grouse habitat, behavior, and abundance. Similarly, general, non-sage-grouse specific local land use codes and permitting requirements in the Colorado portion of the species’ range can affect development in occupied habitat and thus have implications for the species and its habitat. We do not, however, have sufficient information about implementation of general local land use laws and regulations to determine what uses, if any, have been modified pursuant to these general authorities to avoid or lessen impacts to Gunnison sage-grouse. Therefore, we are unable to conclude that such general county land use codes and regulations within Gunnison sage-grouse occupied habitat constitute adequate regulatory mechanisms to reduce the threats to the species. (Local land use regulations specific to Gunnison sage-grouse are discussed individually and separately below.)

Many Colorado counties within Gunnison sage-grouse range have requirements for County review of

development proposals, which may include generic “1041” wildlife habitat regulations, requiring review and/or coordination with CPW/UDWR for new subdivision and development requests in sensitive wildlife habitat (Delta County 2011–R–054, 2012–R–044, 2013–R–025; Delta County 2011–R–054; Dolores County land use regulations; Mesa County 7.6.4; Ouray County 6, 25, and site development permit; Saguache County Article XX). However, we do not have sufficient information to determine whether and how these general wildlife habitat regulations have been applied to Gunnison sage-grouse habitat, what recommendations may have been made by CPW/UDWR regarding the avoidance of impacts to Gunnison sage-grouse under these non-sage-grouse specific regulations, and how or if the counties incorporated any such recommendations in their land use authorization. Therefore, we cannot conclude that the generic county requirements to consult with state wildlife agencies for actions that occur within sensitive wildlife habitat constitute adequate regulatory mechanisms to reduce the threats to the species. (Again, wildlife habitat regulations specific to Gunnison sage-grouse are discussed separately below.)

Several counties without specific land use regulations directed at Gunnison sage-grouse habitat conservation do have regulations that contain restrictions that may benefit the species. These measures may include control of dogs, seasonal road closures, or requirements for clustering housing units within subdivisions. Specifically, San Juan County, Utah, and Gunnison, San Miguel, Mesa, and Montrose Counties, Colorado include regulations to control dogs from roaming freely and Dolores, Gunnison, Mesa, San Juan, and San Miguel Counties have regulations that apply to road closures (CPW 2014g; Appendix A).

Counties within Gunnison sage-grouse range with regulations or policies that include conservation measures or considerations specifically targeted at Gunnison sage-grouse and its habitat include Dolores, Gunnison, Montrose, Ouray, and San Miguel Counties, Colorado (Dolores County 05–13–04; Gunnison County 2013a, pp. 33–57; Gunnison County 2013b, p. 11; Gunnison County 11–106, 07–17 and 2013–23; Gunnison County 2014–24; Montrose County 2013, entire; Montrose County 39–2013; Ouray County 2013–022; San Miguel County land use code, 2–16, 5–407, 5–26; San Miguel County Wright’s Mesa Zone Districts), as described below. We anticipate that land use regulations designed

specifically for Gunnison sage-grouse will typically be more effective in conserving the species and its habitat than the standard regulations described above that do not address the species specifically.

Gunnison County Sage-Grouse Regulations (Gunnison Basin Population)

The Gunnison Basin population is located in Gunnison and Saguache County, Colorado. Gunnison County has adopted specific regulations to further the conservation of the Gunnison sage-grouse and its habitat (Gunnison County Land Use Resolution (LUR) § 11.106 including amendments 07–17 and 2013–23). Approximately 79 percent of private lands in occupied habitat in the Gunnison Basin population is in Gunnison County, and is thereby subject to those regulations. The remaining 21 percent of private lands in the Gunnison Basin population is in Saguache County, which does not currently have similar species-specific regulations in place, although Saguache County is working to develop species-specific criteria (CPW 2014g, Attachment 3, Appendix A).

Gunnison County’s Land Use Resolution (LUR) 11.106 was adopted in 1977 and broadly provides for the regulation of land uses in sensitive wildlife habitat areas. In 2007, Gunnison County Board of County Commissioners approved Resolution Number 07–17, which amended LUR 11.106, to create a review process and protective standards specific to Gunnison sage-grouse. In 2013, Gunnison County further amended LUR § 11.106 to incorporate use of the Gunnison Basin Sage Grouse Habitat Prioritization Tool, a GIS model developed by the Gunnison Basin Sage-grouse Strategic Committee in 2012 that first stratifies or values Gunnison sage-grouse habitat (largely based on distances to leks) and then discounts the value of the habitat based on soils, and on distance to developed areas including structures, roads, and power lines. This process stratifies occupied habitat in the Gunnison Basin into three types (Gunnison County 2013a, Appendix G; see detailed description under Local Laws and Regulations, Gunnison County). *Tier 1* habitat includes important seasonal habitats and is considered the highest value for the species; *Tier 2* habitat includes the remainder of occupied habitat in the Gunnison Basin that is closer to structures, roads, and power lines, and is generally of lower value to the species. Occupied habitat that does not stratify into Tier 1 or Tier 2 is not considered Gunnison sage-grouse

habitat under Gunnison County's sage-grouse regulations. CPW telemetry data from 2004 to 2010 for approximately 500 collared Gunnison sage-grouse in the Gunnison Basin showed that, of 10,140 radio locations in Saguache and Gunnison County, approximately 79.63 percent (8,074) and 15.65 percent (1,587) points occurred in Tier 1 habitat and Tier 2 habitats, respectively (including all occupied habitat in the Gunnison Basin regardless of ownership) (Gunnison County 2013b, p. 25; Gunnison County 2013d, p. 1). This indicates a preference for modeled Tier 1 habitats by the Gunnison Basin birds and supports the model's reliability.

As amended, Gunnison County LUR § 11.106 requires the County to review applications for land use change permits, building permits, individual sewage disposal system permits, Gunnison County access permits, and Gunnison County Reclamation permits (Gunnison County Public Works Department 2014a, 2014b; subject to some exceptions) specifically for potential impacts to Gunnison sage-grouse and occupied habitat. If the activity to be permitted is located wholly or partially in Gunnison sage-grouse habitat identified pursuant to the Habitat Prioritization Tool, then the County performs a site-specific analysis and works with the applicant to ensure that the project meets the County's sage-grouse specific and other wildlife protective standards for such development (LUR § 11.106.G–11.106.J). In general, these standards direct that covered land use activities and projects be designed to avoid, minimize, and/or mitigate impacts on the species and its habitat. According to Gunnison County, standard avoidance and minimization measures included in permits subject to LUR § 11.106 include restrictions on pets and animals and on the siting and timing of construction, adjustment of building envelopes, and other recommendations (Gunnison County 2013a, pp. 24–31). Mitigation techniques as defined and used by Gunnison County include visual and sound buffers, limitation of human activities during sensitive time periods, and controls on the location of development. Gunnison County's use of the term "mitigation" thus differs from the Service's definition of this term, which is the full suite of activities to avoid, minimize, and compensate for adverse impacts to sage-grouse and sage-grouse habitat.

From July 2006 through September 2014, Gunnison County reviewed 461 projects under § 11.106 for impacts to Gunnison sage-grouse. Gunnison County reports that, to date, the majority

of development projects have been located within existing areas of development, including outbuildings or additions to buildings. According to the County seventy-one (15.4 percent) of the projects reviewed involved development within 1 km (0.6 mi) of a lek (CPW 2014g, Attachment 3, p. 27). Implementation of the County regulations likely reduced impacts from these projects, but did not fully compensate for disturbance or lost habitat.

Pursuant to Gunnison County Resolution No. 95–34, adopted on June 6, 1995, "individual parcels of land greater than 35 acres in size are subject to the same county review and regulatory processes as individual parcels less than 35 acres in size except, as is generally provided in current state statute, for the act of subdividing such parcels into resultant parcels all of which are 35 acres or greater in size" (Gunnison County 2013a, pp. 34–35). As a result, development on parcels that are 35 acres or larger requires one or more of the County permits identified above and are subject to review and regulation under LUR § 11.106.

Gunnison County reports that five separate developments involving 35-acre or greater parcels ("plus-35 acre") have occurred in the County since 2003. This included a total of about 2,700 acres divided into 75 parcels, with portions occurring in occupied habitat for Gunnison sage-grouse. Two of the five projects were reviewed by Gunnison County under LUR § 11.106 for Gunnison sage-grouse concerns and included permit conditions to avoid and minimize potential impacts from their development. The County reports that the other three projects did not occur in Gunnison sage-grouse habitats. The Ohio Creek area, which has experienced the greatest concentration of plus-35 acre development in the county since lek counts were standardized in 1996, has had increasing numbers of Gunnison sage-grouse since that time (based on increased high male counts at the Ohio Creek lek) (Gunnison County 2013a, pp. 35–37).

Recently, Gunnison County has started requiring monetary compensation for reclamation of habitats disturbed in Tier 1 and Tier 2 Gunnison sage-grouse habitat (Gunnison County Public Works Department 2014a, 2014b; subject to some exceptions). This is a recently enacted regulation for which we have little more information that what is presented here. Additional regulatory measures implemented by Gunnison County in coordination with State and Federal agencies include: closing of shed antler

collection in the Gunnison Basin by the Colorado Wildlife Commission due to its disturbance of Gunnison sage-grouse during the early breeding season, and a BLM/USFS/Gunnison County/CPW collective effort to implement and enforce road closures during the early breeding season (March 15 to May 15) (see Roads for more details). These regulatory efforts have provided a benefit to Gunnison sage-grouse during the breeding period.

We commend Gunnison County for the regulatory measures (and other actions it has taken, as described in the Factor A discussion above and elsewhere in this final rule), to conserve Gunnison sage-grouse and its habitat. The County regulations have helped to reduce some of the negative effects of human development and infrastructure on the species and its habitat. However, Gunnison County's current Gunnison sage-grouse related regulations do not prevent human development in Gunnison sage-grouse habitat nor do they prevent additional habitat loss and fragmentation that occurs as a result. Further, they do not address or require offsetting or mitigation for the habitat loss and fragmentation that cannot be avoided and that occurs as a result of permitted development in the species' habitat. Gunnison County's sage-grouse regulations have not, therefore, sufficiently or adequately reduced this threat, which is the primary concern related to human development (see Factor A, Residential Development).

San Miguel County Gunnison Sage-Grouse Regulations (San Miguel Population)

In 2005, San Miguel County amended its Land Use Codes to require consideration and implementation, to the extent possible, of conservation measures recommended in the 2005 RCP (GSRSC 2005, entire) for the Gunnison sage-grouse when considering land use activities and development located within its habitat (San Miguel County 2005). More specifically, under its Land Use Code, the County has specific requirements that apply when there is a request for a special use permit (such as for oil and gas facilities or wind turbines) in occupied habitat. Special use permits are not, however, typically required for residential development projects, which limits the County's involvement in review of projects adversely affecting Gunnison sage-grouse and their habitat. In addition, when the County receives an application for a special use permit for activities in sage-grouse habitat, it only solicits recommended conservation measures from the CPW and a local

Gunnison sage-grouse working group, and does not require implementation of the recommended conservation measures. As a result, implementation of recommended conservation measures is dependent on negotiations between the County and the applicant.

Some positive measures (e.g., locating a special use activity outside grouse habitat, establishing a 324-ha (800-ac) conservation easement; implementing speed limits to reduce likelihood of bird/vehicle collisions) have been implemented as a result of this process. Most measures that result from discussions with applicants, however, result in measures that may minimize, but do not prevent, or mitigate for impacts (Henderson 2010, pers. comm.). In addition, as noted above, residential development proposals typically do not require a special use permit so are not subject to this review and negotiation process. San Miguel County also has regulations relating to the Wrights Mesa Zone Districts that restrict fence building, sagebrush removal, powerlines, housing, and roads within 0.6 miles of a lek (San Miguel County 2010, entire). In addition, San Miguel County hired a Gunnison Sage-grouse Coordinator for the San Miguel Basin population in March 2006 to implement the regulatory process.

The San Miguel County Land Use Codes provide some conservation benefit to the species by encouraging landowners to voluntarily minimize impacts of residential development in grouse habitat where the County has authority to do so (with special use permits). The County's regulations do not prevent human disturbance in occupied habitat or address or require offsetting or mitigation for habitat loss and fragmentation resulting from such disturbance. As a result, we find that San Miguel County's regulations do not adequately address the threat of habitat loss, degradation and fragmentation which is the primary concern related to human development (see Factor A, Residential Development).

Dolores, Ouray, and Montrose County Sage-Grouse Regulations (San Miguel and Cerro Summit-Cimarron-Sims Mesa Populations)

Ouray County adopted a resolution (Resolution Number 2013–022) on May 28, 2013, directed at protecting Gunnison sage-grouse breeding and brood-rearing habitat from land use activities including construction and motor vehicle use. The resolution provides that seasonal restrictions (March 15 until May 15) be implemented for roads (not belonging to adjacent property owners or their

guests) and appropriate terms and conditions be applied during this same time period at construction sites within 0.6 miles of a lek to minimize and avoid impacts on breeding and brood-rearing habitat (Ouray County 2013, entire). The restrictions do not specify what avoidance or minimization will occur with development permits in these areas.

On November 4, 2013, Montrose County adopted special regulations (“1041 regulations” 39–2013) that are intended to avoid and minimize impacts from land use activities on Gunnison sage-grouse and occupied habitat, similar to the approach adopted by Gunnison County. Building permits are required for construction within 0.6 miles of an active lek, and land use projects or permitting in occupied habitat will require conservation actions to avoid or minimize impacts on Gunnison sage-grouse (Montrose County 2013, entire).

On May 20, 2013 Dolores County clarified what planning and regulatory means are available for local efforts in preservation of Gunnison sage-grouse (Dolores County Resolution 05–13–04). The resolution highlights coordination with CPW (and other agencies) to review the impacts to wildlife from any change of use application submitted to the County. It also highlights regular coordination with both the BLM and the U.S. Forest Service.

While these three recently enacted county regulations likely provide some conservation benefits to the species, none of them provide the requisite certainty that they will be effective in ameliorating the threat human development poses to the species and its habitat. For example, the Ouray County regulations do not specify what terms or conditions will be required for construction in occupied habitat, and neither the Montrose nor Dolores County regulations specify how mitigation will occur where effects cannot be avoided. None of these county regulations prevent human development in occupied habitat and the additional habitat loss and fragmentation that occurs as a result, or address or require offsetting or mitigation of habitat loss for the species, which is the primary concern related to human development (see Factor A, Residential Development). As a result, none of these local land regulations eliminate or adequately reduce the impact of human development on Gunnison sage-grouse and their habitat.

Summary of Local Laws and Regulations

We commend the efforts that local governments have made to date (those regulations not yet completed are not included) to enact and strengthen local regulatory protections for Gunnison sage-grouse. Existing local laws and regulations are helping and will continue to help to reduce the negative effects of human development and infrastructure on the species. Continuation, enhancement, and expansion of these efforts across the species' range will likely be necessary for conservation of the species. Nevertheless, current local laws and regulations do not fully address the full scope of threats to the species (Factors A through C and E), including habitat loss due to residential and human development (see Residential Development). The permanent loss, and associated fragmentation and degradation, of sagebrush habitat are considered the greatest threat to Gunnison sage-grouse (GSRSC 2005, p. 2). Residential development is likely contributing to habitat loss and degradation throughout the range of Gunnison sage-grouse. Future development, especially in areas of important seasonal habitats, is a concern throughout the range, including in the Gunnison Basin, where we believe that the level of impact from residential development will increase in the future (Factor A). For the reasons described above, existing local regulations and laws do not fully address this threat. Likewise, existing local regulations and laws do not address other substantial threats to the species, including small population size and structure (Factor E), drought (Factor E); or disease (Factor C).

State Laws and Regulations

Colorado and Utah State laws and regulations may influence Gunnison sage-grouse conservation by providing specific authority for sage-grouse conservation over lands that are directly owned by the States. As described in more detail below, the States also have broad authority to regulate and protect wildlife on all lands within their borders, and State laws provide mechanisms for indirect conservation through regulation of threats to the species (e.g., noxious weeds). In the previous section, we described the authorities granted by Colorado and Utah to local and county governments in regulating land use development within their respective jurisdictions to conserve wildlife, including the Gunnison sage-grouse.

Colorado Revised Statutes (C.R.S.) section 33–1–104 gives the CPW Board responsibility for the management and conservation of wildlife resources within State borders. The CPW, which operates under the direction of the CPW Board, is required by statute to provide counties with information on “significant wildlife habitat,” and provide technical assistance in establishing guidelines for designating and administering such areas, if asked (C.R.S. § 24–65.1–302). The CPW Board also has authority to regulate possession of the Gunnison sage-grouse, set hunting seasons, and issue citations for poaching (C.R.S. § 33–1–106). These authorities, as implemented by the CPW Board, provide individual Gunnison sage-grouse with protection from direct mortality from hunting, as described below.

The Wildlife Resources Code of Utah (Utah Code Annotated Title 23) provides UDWR with the powers, duties, rights, and responsibilities to protect, propagate, manage, conserve, and distribute wildlife throughout the State (Utah Code Ann. § 23–14–1). Section 23–13–3 of the Code declares that wildlife existing within the State, not held by private ownership and legally acquired, is property of the State. Section 23–14–18 authorizes the Utah Wildlife Board to prescribe rules and regulations for the taking and/or possession of protected wildlife, including Gunnison sage-grouse. These authorities provide adequate protection to individual Gunnison sage-grouse from direct mortality from hunting, as described below.

Gunnison sage-grouse are managed by CPW and UDWR on all lands within each State as resident native game birds. In both States this classification allows the direct human taking of the bird during hunting seasons authorized and conducted under State laws and regulations. In 2000, CPW closed the hunting season for Gunnison sage-grouse in the Gunnison Basin, the only area then open to hunting for the species. The hunting season for Gunnison sage-grouse in Utah has been closed since 1989 according to GSRSC (2005, p. 82), or as early as the mid-1970’s according to SJCWG (2000, p. 11). The Gunnison sage-grouse is listed as a species of special concern in Colorado, as a sensitive species in Utah, and as a Tier I species under the Utah Wildlife Action Plan, providing heightened priority for management (CDOW 2009b, p. 40; UDWR 2009, p. 9). Hunting and other State regulations that deal with issues such as harassment provide adequate protection for individual birds (see discussion under

Factor B), but do not protect the habitat or address other substantial threats such as drought, climate change, or disease.

In 2009, the Colorado Oil and Gas Conservation Commission (COGCC), which is the entity responsible for permitting oil and gas well development in Colorado, adopted new rules addressing the impact of oil and gas development on wildlife resources (COGCC as amended 2014, entire). These COGCC rules require that permittees and operators on all lands within the state of Colorado determine whether their proposed development location overlaps with “sensitive wildlife habitat,” or is within a restricted surface occupancy (RSO) area. If it does, the COGCC rules require that the Commission consult with CPW, the operator and the surface owner to allow it to determine whether conditions of approval are necessary to “minimize adverse impacts” from the proposed oil and gas operations in the identified sensitive wildlife habitat or RSO area (COGCC 2014). For purposes of this rule, “minimize adverse impacts” means, “wherever reasonably practicable, to (i) avoid adverse impacts from oil and gas operations on wildlife resources, (ii) minimize the extent and severity of those impacts that cannot be avoided, (iii) mitigate the effects of unavoidable remaining impacts, and (iv) take into consideration cost-effectiveness and technical feasibility with regard to actions taken and decisions made to minimize adverse impacts to wildlife resources, consistent with the other provisions of the Act.” (*Id.*) Consultation with CPW is not required under certain circumstances, however, such as when the Director of the COGCC issues a variance, a previously CPW-approved wildlife mitigation plan exists, and others (COGCC 2014).

All oil and gas operations in sensitive wildlife habitat or RSO areas authorized since implementation of the regulations in 2009 are also required to comply with specified general operating requirements, including (1) educating employees and contractors on conservation practices, (2) consolidating new facilities to minimize disturbance, (3) controlling road access and limiting traffic, where approved by the surface owner and appropriate authorities, and (4) monitoring wells remotely when possible (COGCC 2014). The COGCC Director may waive these requirements, however (COGCC 2014). With respect to RSO areas, operators are also required to avoid these areas in planning and conducting new oil and gas operations “to the maximum extent technically and

economically feasible,” again subject to various exceptions (COGCC 2014).

The 2009 COGCC rules identified certain areas as “sensitive wildlife habitat” and RSO areas for Gunnison sage-grouse (COGCC 2009). In September 2013, COGCC amended its rules to, among other things, update and expand the definitions and maps of sensitive wildlife habitat and RSO areas for Gunnison sage-grouse (COGCC 2013). The COGCC rules as amended define sensitive wildlife habitat for the Gunnison sage-grouse lek based on 4 mile buffers around lek sites and RSO areas for the species as areas within 0.6 miles of a lek (COGCC 2014; COGCC 2013).

We find that while COGCC’s rules provide for greater consideration of Gunnison sage-grouse needs, the rules only apply to oil and gas development, and they do not adequately address the threats to Gunnison sage-grouse. Oil and gas operations that were approved before the COGCC’s 2009 adoption of the wildlife protection rules are not subject to Rule 1202’s wildlife consultation and conditions of approval requirements, for example, even if operations have not yet begun (COGCC 2014). The limitations on new oil and gas development operations in RSO areas also do not apply to applications that were approved before May 1, 2009 on federal land or April 1, 2009 on all other land (COGCC 2014). Unless operations change in a manner that requires additional COGCC authorization, drilling operations that are already on the landscape may continue to operate without further restriction into the future. In addition, the COGCC regulations qualify implementation of many of its conservation measures to “wherever reasonably practicable” and like terms, which can limit the effectiveness of these measures in avoiding or minimizing impacts to the species. We also are not aware of any situations where RSOs have been effectively applied or where conservation measures have been implemented for potential oil and gas development impacts to Gunnison sage-grouse on private lands underlain with privately owned minerals.

Colorado and Utah have laws that directly address the priorities for use of State school section lands, which require that management of these properties be based on maximizing financial returns. We have no information on any conservation measures that will be implemented under statutes or regulations for Gunnison sage-grouse on State school section lands.

In 2007, the Colorado State Land Board (SLB) purchased the Miramonte Meadows property (approximately 809 ha (2,300 ac) next to the Dan Noble State Wildlife Area (SWA)). Roughly 526 ha (1,300 ac) of this property is considered prime Gunnison sage-grouse habitat (Garner 2010, pers. comm.). Discussions with the SLB have indicated a willingness to implement habitat improvements (juniper removal) on the property. They have also accepted an application to designate the tract as a “Stewardship Trust” parcel. The Stewardship Trust program is capped at 119,383 to 121,406 ha (295,000 to 300,000 ac), and no more property can be added until another tract is removed from the program. Because of this cap, it is unknown if or when the designation of the tract as a Stewardship Trust parcel may occur. The scattered nature of State school sections (generally single sections of land) across the landscape and the requirement to conduct activities to maximize financial returns minimize the likelihood of implementation of measures that will benefit Gunnison sage-grouse. Thus, no regulatory mechanisms are present on State trust lands to minimize habitat decline and thus help ensure conservation of the species. However, State school section lands account for only 1 percent of occupied habitat in Colorado and 1 percent in Utah, so impacts from development and relevant laws or regulation pertaining to State lands may be negligible in terms of effects on Gunnison sage-grouse.

Some States require landowners to control noxious weeds, which are a potential habitat threat to sage-grouse (as discussed in Factor A, Invasive Plants). The types of plants considered to be noxious weeds vary by State. Cheatgrass, which is a particular threat to sage-grouse, is listed as a Class C species in Colorado (Colorado Department of Agriculture 2010, p. 3). The Class C designation delegates to local governments the choice of whether or not to implement activities for the control of cheatgrass. Gunnison, Saguache, and Hinsdale Counties target cheatgrass with herbicide applications (GWWC 2009, pp. 2–3). The CPW annually sprays for weeds on SWAs (CDOW 2009b, p. 106). The State of Utah, however, does not consider cheatgrass as noxious within the State (Utah Department of Agriculture 2010a, p. 1) nor in San Juan County, Utah (Utah Department of Agriculture 2010b, p. 1). The laws dealing with other noxious and invasive weeds may provide some protection for sage-grouse in local areas by requiring some control of the

invasive plants, although large-scale control of the most problematic invasive plants is not occurring. Rehabilitation and restoration techniques for sagebrush habitats are mostly unproven and experimental (Pyke 2011, p. 543). Neither Colorado nor Utah’s regulatory mechanisms have been demonstrated to be effective in addressing the overall impacts of invasive plants on the decline of sagebrush habitat within the species’ range.

Federal Laws and Regulations

Gunnison sage-grouse are not covered or managed under the provisions of the Migratory Bird Treaty Act (16 U.S.C. 703–712) because they are considered resident game species. Federal agencies are responsible for managing 54 percent of the total Gunnison sage-grouse habitat. The Federal agencies with the most sagebrush habitat are BLM, an agency of the Department of the Interior, and USFS, an agency of the Department of Agriculture. The NPS in the Department of the Interior also has responsibility for lands that contain Gunnison sage-grouse habitat.

BLM

About 42 percent of Gunnison sage-grouse occupied habitat is on BLM-administered land (see Table 1). The Federal Land Policy and Management Act of 1976 (FLPMA) (43 U.S.C. 1701 et seq.) is the primary Federal law governing most land uses on BLM-administered lands. Section 102(a)(8) of FLPMA specifically recognizes wildlife and fish resources as being among the uses for which these lands are to be managed. Regulations pursuant to FLPMA (30 U.S.C. 181 et seq.) and other statutory authorities that address wildlife habitat protection on BLM-administered land include 43 CFR 3162.3–1 and 43 CFR 3162.5–1 (oil and gas); 43 CFR 4120 et seq. (grazing); and 43 CFR 4180 et seq. (grazing).

Gunnison sage-grouse has been designated as a BLM Sensitive Species since they were first identified and described as a species in 2000 (BLM 2009a, p. 7). The management guidance afforded sensitive species under BLM Manual 6840—Special Status Species Management (BLM 2008, entire) states that “Bureau sensitive species will be managed consistent with species and habitat management objectives in land use and implementation plans to promote their conservation and to minimize the likelihood and need for listing” under the Act (BLM 2008, p. 05V). BLM Manual 6840 further requires that Resource Management Plans (RMPs) should address sensitive species, and that implementation

“should consider all site-specific methods and procedures needed to bring species and their habitats to the condition under which management under the Bureau sensitive species policies would no longer be necessary” (BLM 2008, p. 2A1). As a designated sensitive species under BLM Manual 6840, sage-grouse conservation must be addressed in the development and implementation of RMPs on BLM lands.

RMPs are the basis for all actions and authorizations involving BLM-administered lands and resources. They establish allowable resource uses, resource condition goals and objectives to be attained, program constraints and general management practices needed to attain the goals and objectives, general implementation sequences, and intervals and standards for monitoring and evaluating the plan to determine its effectiveness and the need for amendment or revision (43 CFR 1601 et seq.).

The RMPs also provide a framework and programmatic guidance for activity plans, which are site-specific plans written to implement decisions made in an RMP. Examples include Allotment Management Plans that address livestock grazing, oil and gas field development, travel management (motorized and mechanized road and trail use), and wildlife habitat management. Activity plan decisions normally require additional planning and National Environmental Policy Act (NEPA) analysis. If an RMP contains specific direction regarding Gunnison sage-grouse habitat, conservation, or management, the specific direction for the species is an enforceable regulatory mechanism to ensure that the species and its habitats are considered during permitting and other decision making for activities that occur on BLM lands.

The BLM in Colorado manages Gunnison sage-grouse habitat under six existing RMPs. These include the Gunnison Field Office (1993), Uncompahgre Field Office (1989), Gunnison Gorge National Conservation Area (NCA) (2004), Tres Rios Field Office (1985), Grand Junction Field Office (1987), and San Luis Valley Field Office (1991) RMPs. A new RMP for the BLM Dominguez-Escalante NCA, designated in 2009 and encompassing Gunnison sage-grouse habitat in the vicinity of the Piñon Mesa population, is also under development.

In Utah, Gunnison sage-grouse habitat falls under the Monticello Field Office (2008) and Moab Field Office (2008) RMPs. All six of the existing Colorado RMPs contain broad objectives for Gunnison sage-grouse conservation, but lack specific land use allocation

decisions, stipulations, and enforceable measures to achieve those objectives. Three of these RMPs were under revision as of the drafting of this rule, including the Tres Rios, Grand Junction, and Uncompahgre Field Offices, covering all or portions of the San Miguel, Piñon Mesa, Crawford, Cerro Summit-Cimarron-Sims Mesa, and Dove Creek populations.

All ongoing RMP revisions include in their range of alternatives or preferred alternative various stipulations and measures, such as spatial buffers, seasonal limitations, and other site-specific restrictions and best management practices, for land use activities in important Gunnison sage-grouse habitat (leks, nesting habitat, brood-rearing habitat, winter habitat). Many of these recommendations are derived or adapted from the RCP (GSRSC 2005, entire) or local Gunnison sage-grouse working group plans (see Multi-County and Rangewide Efforts in Factor A above) and should provide conservation benefits to the species and its habitat, if adopted into Final RMP Plan Revisions and Records of Decision (BLM 2009a, p.6).

In May of 2014, BLM Headquarters issued guidance and direction to BLM Colorado and Utah to undertake a landscape-level, targeted RMP Amendment for the conservation of Gunnison sage-grouse on BLM-administered public lands in Colorado and Utah (BLM 2014a). This process is expected to be completed within 18–24 months, and will evaluate the adequacy of all current RMPs, including those which may be revised during the current plan amendment review process. It is unknown what conservation measures will be included in the planned RMP Amendments or in the three BLM Colorado RMPs that are currently under revision rangewide.

All existing Colorado BLM RMPs date from 1985 to 1993 and, as described above, contain broad objectives for Gunnison sage-grouse conservation, but generally lack specific land use allocation decisions, stipulations, and enforceable measures to ensure that those objectives are achieved. This may be attributed, in part, to the broader view and approach in land use planning and resource decisions typical of older RMPs.

More recent (i.e., 2000 and later) RMPs or revisions typically contain more detailed and resource-specific decisions and protections than their predecessors. The Gunnison Gorge NCA RMP (BLM 2004) contains management decisions adequate to conserve Gunnison sage-grouse and its habitat in the Crawford population. This RMP

designates an ACEC in habitat occupied by Gunnison sage-grouse where management and protection of the Gunnison sage-grouse and its habitat will be emphasized. Within this area, the plan contains specific protections to maintain or increase Gunnison sage-grouse numbers and its distribution, improve the quality of sage-grouse habitat, and to prevent, minimize and mitigate fragmentation and loss of habitat. The RMP adopts and incorporates the Gunnison sage-grouse conservation plan, Crawford Area, Colorado (Crawford Area Gunnison Sage-Grouse Working Group 2011), as part of the direction and management objectives of the ACEC.

Current BLM RMPs in Utah and Colorado do provide limited regulatory protection for Gunnison sage-grouse as they are implemented through project-level planning. These protections include conservation measures to be implemented during travel management (the management of the motorized and non-motorized use of public lands), energy development, and grazing permit renewals.

The 2008 Final RMP for the BLM Monticello Field Office in Utah incorporates the recommendations of the 2005 RCP, which provides a level of benefit for Gunnison sage-grouse. For example, this RMP precludes oil and gas development, roads, power lines, fences, and other aboveground structures within 0.6 mile of a Gunnison sage-grouse lek. It also prohibits grazing in allotments containing Gunnison sage-grouse during the breeding season. It does not, however, specifically limit oil and gas development and the construction of other infrastructure in Gunnison sage-grouse habitat beyond 0.6 mile, which includes nesting, brood rearing, and wintering habitat.

In general, other than the Gunnison Gorge NCA RMP, the remaining RMPs provide only partial protection for Gunnison sage-grouse in terms of land use allocation decisions specific to the species and its habitat and, therefore, are considered inadequate to protect the species.

In addition to land use planning through its RMPs, BLM uses Instruction Memoranda (IM) to provide instruction to district and field offices regarding specific resource issues. Instruction Memoranda provide policy guidance or directives, but do not contain binding legal decisions such as those promulgated under an RMP. IMs are temporary directives, generally of short duration (1 to 2 years), intended to address urgent resource concerns by providing interim direction to staff until a threat passes or until the resource

issue can be addressed through revisions or updates to manuals or RMPs.

BLM has issued a number of IMs addressing Gunnison sage-grouse. On July 12, 2005 BLM Colorado issued IM Number CO–2005–038, stating BLM's intent and commitment to assist with and participate in the implementation of the 2005 RCP. This guidance has been used for BLM-administered lands in the State of Colorado to provide conservation benefit for Gunnison sage-grouse (BLM 2009a, p. 6). On August 17, 2010, BLM Colorado issued IM number CO–2010–028 on Gunnison sage-grouse and greater sage-grouse habitat management policy, which provides direction regarding implementation of National BLM sage-grouse guidance, ensures continued coordination with CPW and other agency partners regarding sage-grouse conservation planning, and calls for fluid mineral leasing deferrals in core Greater sage-grouse habitats until Field Office plan revisions have been completed (BLM 2010b, entire).

On July 15, 2013, BLM Colorado issued IM Number CO–2013–033 to provide policy guidance to Colorado Field Offices on Gunnison sage-grouse habitat management, land uses, and resource management planning (BLM 2013d, p. 1). This IM updated and superseded the 2010 IM, Number CO–2010–028. The 2013 IM was developed in coordination with the Service and provided direction regarding management and ongoing land use planning in Gunnison sage-grouse occupied habitat, including the application of specific conservation measures for the species (BLM 2013d, p. 2).

On May 30, 2014, BLM HQ issued a new IM, 2014–100, which applies to all Gunnison sage-grouse proposed occupied critical habitat in both Colorado and Utah (BLM 2014b entire). In order to protect important habitat across the range of the species, BLM will continue to apply conservation measures and focus any type of development in non-habitat areas. All disturbances will be focused outside of a 4-mile buffer around leks, except where there are valid existing rights or where benefits to Gunnison sage-grouse may be greater than under other alternatives (BLM 2014b, p.1). The Policy identifies conservation measures for activities including Land Use Planning, Proper Livestock Grazing, Wildland Fire and Fuels Management, Processing Fluid Mineral Leases and Solid Mineral Leases (BOM 2014b pp. 2–5). This IM is expected to remain in effect until the RMP Amendment

process is complete in 2016. While this IM is of short duration, we anticipate that its implementation will reduce threats to the Gunnison sage-grouse on BLM lands from the covered activities.

Fluid Minerals

The BLM has regulatory authority for oil and gas leasing on Federal lands and on private lands with a severed Federal mineral estate, as provided at 43 CFR 3100 et seq., and they are authorized to require stipulations as a condition of issuing a lease. The BLM's Land Use Planning Handbook describes program-specific guidance for fluid minerals (which include oil and gas) and the handbook specifies that RMP decisions will identify restrictions on areas subject to leasing, including closures, as well as lease stipulations (BLM 2005e, Appendix C, pp. 23–24). The handbook also specifies that all stipulations must have waiver, exception, or modification criteria documented in the plan, and notes that the least restrictive constraint to meet the resource protection objective should be used (BLM 2005e, Appendix C, pp. 23–24).

To our knowledge, BLM Field Offices are deferring the sale of new drilling leases, which was first implemented in the 2010 IM, in habitats they have identified as “priority” or “core” habitats for Gunnison sage-grouse until RMP revisions are complete and/or adequate protective lease stipulations are in place. However, there is currently no regulatory mechanism in effect which assures that future lease sales in occupied habitat on BLM administered lands will not occur or that operations on federal leases are conducted in a manner consistent with protection of the Gunnison sage-grouse.

In addition, oil and gas leases already exist in 17 percent of the Piñon Mesa population area, and 49 percent of the San Miguel Basin population. For existing oil and gas leases on BLM land in occupied Gunnison sage-grouse habitat, oil and gas companies may conduct drilling operations subject to BLM-imposed permit conditions. Specifically, the BLM has regulatory authority to condition “Application for Permit to Drill” authorizations that are conducted under a lease that does not contain specific Gunnison sage-grouse conservation stipulations, consistent with lease rights, but utilization of these conditions is discretionary and we are uncertain at this time how widely such authority has or will be applied to avoid or minimize impacts to Gunnison sage-grouse.

We also note that onshore federal oil and gas leases include a provision (also known as a standard lease term) that

allows movement of the drilling area or facilities by 200m (650ft) to avoid sensitive resources (43 CFR 3101.1(c)). However, in most cases this small amount of movement would have little to no conservation benefit to Gunnison sage-grouse because sage-grouse respond to nonrenewable energy development at much further distances (Holloran *et al.* 2007, p. 12; Walker *et al.* 2007, p. 10). Pursuant to its permitting authority as described above, our experience is that many of the BLM field offices work with the operators to move a proposed drilling site farther from sensitive resources and justify such a move through a site-specific NEPA process.

Given the already small and fragmented nature of the populations where future oil and gas leases are likely to occur, additional development within occupied habitat would negatively impact those populations by contributing to further habitat decline. Since we have no information on what minimization and mitigation measures might be applied to future leases at this time, we cannot assess the conservation benefit of potential BLM regulations to those populations.

Salable and Locatable Minerals

As discussed under Factor A (Locatable and Salable Mineral Development), currently active mines and mining claims are limited in geographic scope and mining is expected to have limited impacts on Gunnison sage-grouse populations. As a result, we found current locatable and salable mineral development to be a threat of low magnitude to Gunnison sage-grouse. We have no information indicating that any regulatory mechanisms currently exist to reduce impacts of mines.

Grazing

As stated previously, Gunnison sage-grouse are a BLM Sensitive Species and therefore receive Special Status Species management considerations. The BLM regulatory authority for grazing management is provided at 43 CFR part 4100 (Regulations on Grazing Administration Exclusive of Alaska). Livestock grazing permits and leases contain terms and conditions determined by BLM to be appropriate to achieve management and resource condition objectives on the public lands and other lands administered by BLM, and to ensure that habitats are, or are making significant progress toward being, restored or maintained for BLM special status species (43 CFR 4180.1(d)). BLM's State or regional standards for grazing administration

must address habitat for endangered, threatened, proposed, candidate, or special status species, and habitat quality for native plant and animal populations and communities (43 CFR 4180.2(d)(4) and (5)). BLM's guidelines for ensuring that grazing standards are met similarly must address restoring, maintaining, or enhancing habitats of BLM special status species to promote their conservation, as well as maintaining or promoting the physical and biological conditions to sustain native populations and communities (43 CFR 4180.2(e)(9) and (10)); BLM 2009b, p. 8). The BLM is required to take appropriate action no later than the start of the next grazing year upon determining that existing grazing practices or levels of grazing use are significant factors in failing to achieve the standards and conform with the guidelines (43 CFR 4180.2(c)).

The BLM is required to consult with their Resource Advisory Councils (RACs) to expand the rangeland health standards required under 43 CFR part 4180 so that there are public land health standards relevant to all ecosystems, not just rangelands, and that these standards apply to all BLM programs and actions across public lands, not just livestock grazing (BLM Land Health Manual 4180 (BLM 2009b, p. 8)). Both southwest Colorado and southeast Utah have RACs established by the BLM.

A detailed analysis of grazing on BLM-administered lands and its impacts on the Gunnison sage-grouse is included above in Factor A. As of 2012, all active BLM grazing permits in occupied Gunnison sage-grouse habitat managed by the BLM Gunnison Field Office have vegetation structure guidelines specific to Gunnison sage-grouse incorporated into Allotment Management Plans or Records of Decision for permit renewals as habitat objectives (BLM 2012a, pp. 3–4). These Gunnison sage-grouse habitat objectives are designed to provide good habitat for the species. Similar objectives are also incorporated into Allotment Management Plans in portions of some of the smaller population areas (see section, Public Lands Grazing in other Population Areas under Factor A). However, as noted earlier (see Domestic Grazing and Wild Ungulate Herbivory under Factor A), available information suggests that LHA objectives important to Gunnison sage-grouse are not being met across parts of the species' range. Reduced habitat quality in those areas, as reflected in unmet LHA objectives, may be negatively impacting Gunnison sage-grouse. However, the relationship between LHA determinations and the effects of domestic livestock grazing on

Gunnison sage-grouse is difficult to quantify.

Specific Gunnison sage-grouse habitat objectives from the 2005 RCP are incorporated into some Federal grazing permits and are an effective means of ensuring that the needs of Gunnison sage-grouse are met on grazed lands. Certain grazing permits also contain standard terms and conditions, such as forage utilization standards, that may indirectly help achieve habitat objectives for Gunnison sage-grouse. However, terms and conditions applied within BLM's existing livestock grazing permits and leases are currently inadequate in parts of the range of Gunnison sage-grouse. As discussed under Factor A (Summary of Domestic Grazing and Wild Ungulate Herbivory), the best available information suggests that Land Health Assessment objectives important to Gunnison sage-grouse are not being met across localized parts of the species' range and that livestock grazing is likely contributing to those conditions in some instances. Reduced habitat quality in those areas, as reflected in LHA data, is likely negatively impacting Gunnison sage-grouse in some of the populations. While it is anticipated that future terms and conditions in BLM grazing permits will minimize further grazing impacts to habitat on BLM-administered lands, it is currently unknown what terms and conditions might be incorporated into grazing permits and how such terms and conditions may improve degraded habitats for Gunnison sage-grouse.

USFS

The USFS manages 10 percent of the occupied Gunnison sage-grouse habitat (Table 1). Management of National Forest System lands is guided principally by the National Forest Management Act (NFMA) (16 U.S.C. 1600–1614, August 17, 1974, as amended). The NFMA specifies that all National Forests must have a Land and Resource Management Plan (LRMP) (16 U.S.C. 1600) to guide and set standards for all natural resource management activities on each National Forest or National Grassland. The NFMA requires USFS to incorporate standards and guidelines into LRMPs (16 U.S.C. 1600), which include provisions to manage plant and animal communities for diversity, based on the suitability and capability of the specific land area in order to meet overall multiple-use objectives.

The Gunnison sage-grouse is a USFS sensitive species in both Region 2 (Colorado) and Region 4 (Utah). USFS policy provides direction to USFS Forests to analyze potential impacts of

programs and activities to endangered, threatened, proposed, or sensitive species in a biological evaluation. The National Forests within the range of sage-grouse provide important seasonal habitats for the species, particularly the Grand Mesa, Uncompahgre, and Gunnison (collectively known as GMUG) National Forests. The 1991 Amended Land and Resource Management Plan for the GMUG National Forests has not incorporated Gunnison sage-grouse conservation measures or habitat objectives. Similarly, the 1996 the Forest Plan for the Rio Grande National Forest does not contain Gunnison sage-grouse specific conservation measures. The newer 2013 Forest Plan for the San Juan National Forest does contain measures to protect Gunnison sage-grouse, although there is very little Gunnison sage-grouse habitat on this national forest. The Regional Forester signed the 2005 RCP, agreeing to follow and implement the recommendations in the plan. Nonetheless, only three of the 34 grazing allotments in occupied grouse habitat on National Forest lands have incorporated Gunnison sage-grouse habitat objectives from the RCP, indicating that USFS regulations and the USFS agreement to implement the RCP are currently inadequate to protect the species.

The only Gunnison sage-grouse population within USFS lands that is in an area of high or even medium potential for oil and gas reserves is the San Miguel Basin, and USFS lands only make up 1.4 percent of that population (GSRSC 2005, D–8). Although the 2014 BLM IM does not specifically apply to USFS lands, USFS considers the IM in evaluating leasing decisions. The BLM, which regulates oil and gas leases on USFS lands, has the authority to defer leases and would make a leasing decision consistent with their 2014 IM in coordination with USFS (McDonald 2014, pers. com).

While USFS consideration of Gunnison sage-grouse as a sensitive species and commitment to follow the recommendations contained in the 2005 RCP (GSRSC 2005, entire) can provide some conservation benefits to the species, both of these actions are primarily voluntary in nature and thus are not treated as regulatory mechanisms in our evaluation process. Considering the above information, the USFS has implemented some regulatory mechanisms and policies to provide for the long-term conservation of Gunnison sage-grouse and is a signatory to the CCA for the Gunnison Basin (see Factors A and E). However, we find that USFS regulations are not fully addressing the

conservation of Gunnison sage-grouse because the GMUG and Rio Grande National Forests, which cover the vast majority of Gunnison sage-grouse habitats on national forest lands, are governed by older Forest Plans that do not contain detailed conservation standards for this species.

NPS

The NPS manages 2 percent of occupied Gunnison sage-grouse habitat (Table 1), which means that there is little opportunity for the agency to affect range-wide conservation of the species. The NPS Organic Act (16 U.S.C. § 1) states that NPS will administer areas under their jurisdiction “by such means and measures as conform to the fundamental purpose of said parks, monuments, and reservations, which purpose is to conserve the scenery and the natural and historical objects and the wildlife therein and to provide for the enjoyment of the same in such manner and by such means as will leave them unimpaired for the enjoyment of future generations.” Lands in the Black Canyon of the Gunnison National Park and the Curecanti National Recreation Area include portions of occupied habitat in the Crawford and Gunnison Basin populations and are managed under NPS's General Management Plan for these Park units (NPS 1997, entire). Under this plan, resource objectives related to Gunnison sage-grouse include protection of the species and its habitat, protection of threatened and endangered species, and minimization of the causes and impacts of habitat fragmentation (NPS 1997, pp. 18–19). In addition, the NPS has nearly completed an area Resource Stewardship Strategy, a plan that identifies more specific conservation measures and actions, including an emphasis on Gunnison sage-grouse conservation, for implementation of the General Management Plan (Stahlnecker 2014, pers. comm.). In the meantime, NPS's ability to actively manage for Gunnison sage-grouse is not limited by the scope of their management plans, as discussed below.

The NPS completed a Fire Management Plan in 2006 that covers both of the areas mentioned above (NPS 2006, entire). Both prescribed fire and fire use (allowing wildfires to burn) are identified as a suitable use in Gunnison sage-grouse habitat. However, Gunnison sage-grouse habitat is identified as a Category C area, meaning that, while fire is a desirable component of the ecosystem, ecological constraints must be observed. For Gunnison sage-grouse, constraints in the plan include limitation of acreage burned per year

and limitation of percent of project polygons burned. Moreover, the NPS is currently following the fire-related conservation measures in the local conservation plans as described in Multi-County and Rangewide Conservation Efforts above under Factor A, and the 2005 RCP fire recommendations (Stahlnecker 2010, pers. comm.). In most cases, implementation of NPS fire management policies should result in minimal adverse effects since emphasis is placed on activities that will minimize impacts to Gunnison sage-grouse habitat. Overall, implementation of NPS plans should reduce impacts to Gunnison sage-grouse because they include conservation measures to protect Gunnison sage-grouse habitat.

Recreational activities are generally managed more intensively on NPS land than on other Federal lands. Nevertheless, recreational activities within occupied habitat on NPS land may have adverse effects on Gunnison sage-grouse individuals (see Factor E discussion). However, given the limited amount of occupied habitat on NPS land (2 percent of the Gunnison Basin population area), recreation on those lands is likely having negligible impacts on Gunnison sage-grouse at the population or species level.

Grazing management activities on NPS lands are governed by BLM regulations, and their implementation and the results of these regulations are likely similar to those discussed for the BLM, because they occur under the same management criteria and guidance. In 2013, all of the active allotments in the Crawford population, including NPS allotments, had incorporated Gunnison sage-grouse habitat objectives and completed LHAs (see Grazing section in Factor A). Grazing management plans on NPS lands appear to be provide conservation measures for the species. Overall, NPS regulations reduce threats to Gunnison sage-grouse on the 2 percent of occupied habitat in the Gunnison Basin population under NPS jurisdiction. However, they do not significantly reduce threats on a rangewide basis.

Environmental Protection Agency

On December 15, 2009, the EPA published in the **Federal Register** (74 FR 66496) a rule titled, "Endangerment and Cause or Contribute Findings for Greenhouse Gases under Section 202(a) of the Clean Air Act." In this rule, the EPA Administrator found that the current and projected concentrations of

the six long-lived and directly emitted greenhouse gases—carbon dioxide, methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride—in the atmosphere threaten the public health and welfare of current and future generations; and that the combined emissions of these greenhouse gases from new motor vehicles and new motor vehicle engines contribute to the greenhouse gas pollution that threatens public health and welfare. In effect, the EPA has concluded that the greenhouse gases linked to climate change are pollutants, whose emissions can now be subject to the Clean Air Act (42 U.S.C. 7401 et seq.; see 74 FR 66496, December 15, 2009). On October 15, 2012, EPA and the National Highway Transportation Safety Administration (NHTSA) issued a joint Final Rulemaking to extend the National Program of harmonized greenhouse gas and fuel economy standards to model year 2017 through 2025 passenger vehicles (77 FR 62624). On June 17, 2013, EPA and NHTSA implemented standards for medium- and heavy-duty vehicles (model years 2014 through 2018) (78 FR 36370). These regulations are relatively new, and at present, we have no basis to conclude that implementation of the Clean Air Act in the near future (40 years, based on global climate projections) will substantially reduce the current rate of global climate change through regulation of greenhouse gas emissions. Thus, we conclude that while the Clean Air Act may reduce greenhouse gas emissions, it does not address the primary threats to the Gunnison sage-grouse, such as drought, nonnatives, fire frequency, and decrease of sagebrush.

Other Regulatory Mechanisms: Conservation Easements

Conservation easements are voluntary legal agreements between a landowner and a land trust, nongovernmental organization, or government agency that permanently limit or restrict land uses for identified conservation values and purposes and are binding regulatory mechanisms once established. With very few exceptions, conservation easements require that individual parcels be owned and conveyed as single units in perpetuity, thereby ensuring they are not subdivided for development in the future. Conservation easements also restrict land uses by defining specific areas for residential or agricultural development, including roads and driveways, and may include

other parameters for land management practices to achieve conservation values (Lohr and Gray 2013, p. 2). Therefore, we generally consider conservation easements to be an effective regulatory tool to prevent long-term or permanent habitat loss. Conservation easements across Gunnison sage-grouse range are held by nongovernmental organizations and land trusts (The Nature Conservancy, Colorado Cattlemen's Agricultural Land Trust, and others), state agencies (CPW, UDWR), and Federal agencies (Natural Resources Conservation Service (NRCS), NPS, and BLM). Some conservation easements include conservation measures specific to Gunnison sage-grouse, while many are directed at other species, such as big game (GSRSC 2005, pp. 59–103).

Following is a summary of the estimated amount of lands under conservation easement for occupied and unoccupied Gunnison sage-grouse habitat in Colorado and Utah, based on Lohr and Gray (2013, entire) (Table 12). This report also included lands not under conservation easement, but which are owned by entities that manage the property for Gunnison sage-grouse and other conservation values (e.g., The Nature Conservancy properties), or which carry covenants that restrict subdivision and development in perpetuity (e.g., Eagle Ridge Ranch in the Gunnison Basin). Rangewide, approximately 35,195 ha (86,968 ac), or 22.6 percent, of private lands in occupied Gunnison sage-grouse habitat were under conservation easement as of 2013 (Lohr and Gray 2013, entire). Another 51,040 ac, or 11 percent, of private lands in mapped unoccupied habitat are also under conservation easement (Lohr and Gray 2013, entire). Combined, conservation easements include approximately 138,008 ac, or 16 percent, of all occupied and unoccupied habitat on private land (840,346 ac) across the species' range.

Of all the Gunnison sage-grouse populations, the Gunnison Basin contains the most acres under conservation easement (102,986 ac total in occupied and unoccupied habitat). In proportion to total occupied habitat, conservation easements in the Piñon Mesa and Crawford population areas are significant (74 and 41 percent, respectively). Approximately 30 percent of private land in unoccupied habitat is also protected under conservation easement in the Gunnison Basin and Crawford population areas (Table 12).

TABLE 12—CONSERVATION EASEMENTS IN GUNNISON SAGE-GROUSE OCCUPIED ^a AND UNOCCUPIED ^a HABITATS
[Lohr and Gray 2013, entire; Gunnison County 2013b, p. 21]

Population	Private land in occupied habitat (ac)	Private land in occupied habitat under CE		Private land in unoccupied habitat (ac)	Private land in unoccupied habitat under CE	
		Acres	% of total		Acres	% of total
Monticello-Dove Creek	100,702	6,117	5	200,318	0	0
Piñon Mesa	27,283	20,076	74	64,275	20,246	31
San Miguel Basin	49,492	6,938	14	45,843	1,486	3
Cerro Summit-Cimarron-Sims Mesa	28,218	3,995	14	20,117	3,774	19
Crawford	8,481	3,470	41	44,552	8,665	20
Gunnison Basin	178,531	46,372	26	56,614	16,348	29
Poncha Pass	4,792	0	0	11,128	521	5
Rangewide Totals	397,499	86,968	22	442,847	51,040	12

^a Occupied and unoccupied habitat acres and conservation easements provided in Lohr and Gray (2013) were based on the Service's proposed critical habitat designation for Gunnison sage-grouse (78 FR 2540, January 11, 2013).

In the context of potential threats to Gunnison sage-grouse, conservation easements and the protections they afford are most relevant to the threat of residential and human development. Therefore, in the Residential Development section of this rule (Factor A), we further analyzed existing conservation easements by Gunnison sage-grouse population and across the species' range. Therein, Table 6 summarizes conservation easement acres in occupied habitat for each Gunnison sage-grouse population, and also provides estimates for those portions of occupied habitat not under conservation easement, for the purposes of evaluating the threat of residential development.

Total conservation easements recorded to date cover about 18.3 percent of private lands in rangewide occupied habitat for Gunnison sage-grouse. The Service has analyzed the conservation and regulatory benefit of existing conservation easements throughout the range of the species. However, conservation easements are offered and held by numerous entities and happen opportunistically with willing sellers across the range of the species.

Summary of Factor D

Gunnison sage-grouse conservation has been addressed in some local, State, and Federal, laws, regulations, and land management plans. We commend Gunnison, San Miguel, Ouray, and Montrose Counties for enacting special regulations for Gunnison sage-grouse for land uses within their jurisdictions. Existing local laws and regulations will help to reduce some of the negative effects of human development and infrastructure on Gunnison sage-grouse. Continuation and enhancement of these efforts across the species' range will be necessary for conservation of the

species. Past residential and exurban development throughout the species range is a primary cause of habitat decline. Future human development will further contribute to habitat loss (see Factor A, Residential Development, Roads, and Powerlines). As described above, existing local laws and regulations do not fully address this threat to the species. Local regulatory mechanisms also do not fully address other substantial threats to the species, including small population size (Factor E), invasive plants (Factor A), disease (Factor B), and climate change (Factor A).

Implementation of Federal agency regulations specifically for Gunnison sage-grouse conservation provides obvious benefits to the species, considering that approximately 54 percent of rangewide occupied habitat occurs on Federal lands (Table 1). Protections afforded to Gunnison sage-grouse vary by agency and field office or unit, but many of these protections are discretionary or undertaken on a voluntary basis rather than required by a regulatory mechanism. BLM's land use management plans are regulatory mechanisms, but for the most part do not currently include requirements directed at sage-grouse conservation. This will likely change in the future, as a result of the ongoing revision process for some RMPs in the species' range and the planned rangewide RMP Amendment to address sage-grouse threats. Nonetheless, we do not know at this time what conservation measures will be included in these future RMPs or the degree to which they may address threats to the species. As a result, we do not consider or rely on these future planning efforts in this rule. BLM's 2014 IM for Gunnison sage-grouse in Colorado provides a more consistent foundation for the management and conservation of the species on BLM land

in Colorado, but it is a temporary measure and is not a binding regulatory mechanism. Based on this analysis, and our more detailed evaluation of BLM and other possible Federal regulatory mechanisms, we find that existing Federal laws and regulations are not fully addressing the full scope of threats to the species (Factors A through C, and E).

The CPW, UDWR, and other entities have acquired and continue to pursue conservation easements in Colorado and Utah, respectively, to conserve Gunnison sage-grouse habitat and meet the species' needs. We determined that perpetual conservation easements offer protection from habitat loss, but that conservation values and objectives for those properties vary according to the terms of the easement. Existing conservation easements provide a level of protection from future development on these lands, but are limited in geographic scope such that they do not adequately address the threat of habitat loss across the species' range. State wildlife regulations provide protection for individual Gunnison sage-grouse from direct mortality due to hunting but do not address habitat loss and other threats such as drought, climate change, or disease. While the COGCC regulations discussed above provide some protection and mitigation (as defined by COGCC, not the Service) for loss of Gunnison sage-grouse habitat, they do not prevent ongoing habitat loss and fragmentation (Factor A).

We evaluated the best available information related to existing regulatory mechanisms that address threats (Factors A through C, and E) to Gunnison sage-grouse and its habitats. Based on our analysis, we find that some existing regulatory mechanisms are in place to conserve Gunnison sage-grouse, but individually or collectively they do not fully address the substantial

threats faced by Gunnison sage-grouse across their range. Further, while these existing regulatory mechanisms may help reduce current threats to the species, they are insufficient to fully reduce or eliminate the increase in threats that may act on the species in the future.

E. Other Natural or Manmade Factors Affecting Its Continued Existence

Other factors potentially affecting the Gunnison sage-grouse's continued existence include small population size and structure; drought, recreational activities, pesticides and herbicides, and contaminants.

Small Population Size and Structure

Negative effects on population viability, such as reduced reproductive success or loss of genetic variation and diversity, become more evident as populations decline or become more isolated. In this section, we evaluate the issue of small and declining population size and structure in Gunnison sage-grouse, and associated genetic risks and other effects. We also evaluate existing population viability analyses for the species. Finally, we synthesize this information to assess resiliency, redundancy, and representation of the individual Gunnison sage-grouse populations and the species as a whole.

Relevant Species Information

In general, while various natural factors would not limit sage-grouse populations across large geographic scales under historical conditions or in larger populations, they may contribute to local population declines or extirpations when populations are small, isolated, or when weather patterns, habitats, or mortality rates are altered. When coupled with mortality stressors related to human activity and significant fluctuations in annual population size, long-term persistence of small populations (in general) is unlikely (Traill *et al.* 2010, entire). Sage-grouse have low reproductive rates and high annual survival rates (Schroeder *et al.* 1999, pp. 11, 14; Connelly *et al.* 2000a, pp. 969–970), resulting in a long recovery period from disturbances due to slower potential or intrinsic population growth rates than is typical of other game birds. Also, as a consequence of their site fidelity to seasonal habitats (Lyon and Anderson 2003, p. 489), measurable population effects may lag behind negative changes in habitat (Harju *et al.* 2010, entire; Wiens and Rotenberry 1985, p. 666).

As described in the Current Distribution and Population Estimates and Trends subsection in the

Background section above, the Gunnison Basin is the largest population of Gunnison sage-grouse (3978 individuals in 2014) and, while showing variation over the period of record, has been relatively stable since 1996, based on lek count data (Figure 2). However, as discussed later in this section, demographic data indicate this population may not be quite as stable as suggested by lek count data (Davis 2012, p. 38). The Gunnison Basin population declined during the period 2005–2010, as shown by rates of growth estimated from demographic parameter estimates measured during that time period (Davis 2012, entire), and from lek count indices (CPW 2014e, entire). In addition to this, an integrated population model that used this short term demographic data in conjunction with the longer time series of lek count data estimated a rate of growth slightly less than 1.0 ($\lambda = 0.984$) with confidence intervals that overlapped 1.0 (0.879–1.179) for the period 1996–2012 (Davis *et al.* *in press*). This 1996–2012 estimate was not statistically significantly different from a λ of 1.0, suggesting the population is currently largely stable. The Gunnison Basin population comprises about 84 percent of the rangewide population of Gunnison sage-grouse and includes 63 percent of rangewide occupied habitat.

In contrast, the remaining six populations, also referred to in this final rule as satellite populations, were generally in decline from 1996 until 2010; however, increases in several populations have been observed recently (Figure 3) and could be a product of numerous factors including but not limited to population cycles, translocation efforts, and increased access to leks. The San Miguel and Piñon Mesa populations are currently the largest of the satellite populations, with 206 and 182 birds, respectively, in 2014. The Monticello-Dove Creek and Crawford populations currently have less than 160 birds. Population estimates in 2014 for the two smallest populations, Cerro Summit-Cimarron-Sims Mesa and Poncha Pass, were 74 and 16, respectively (CPW 2014, p. 6). The 16 radio-telemetered birds known at Poncha Pass in summer 2014 are the remainder of 27 birds translocated from Gunnison Basin in fall of 2013 and spring of 2014.

Based on lek count-based population estimates, some satellite populations have increased slightly over the last several years, or intermittently over time. However, the last 19 years (1996 to 2014) of lek count data as a whole indicate that the satellite populations are in decline, with the possible

exception of the Cerro Summit-Cimarron-Sims Mesa population which appears to be relatively stable to increasing, and Piñon Mesa, which is at its highest over the 19 year period (Figure 3). However, some of the recent increases in population sizes may be attributable to translocation and survey efforts, rather than an actual increase in the population, which may be the case with Piñon Mesa. For example, the 2014 estimated population for Piñon Mesa was 182 birds (CPW 2014, p. 6), much greater than the 2012 estimate of 54 birds. This increase could be, in part, a product of the 93 birds translocated to Piñon Mesa population between the spring of 2010 and spring of 2013 (CPW 2014c, entire) and the discovery of two new leks in 2012 (CPW 2012a, pp. 2–3). For all six satellite populations, population estimates from 1996 to 2014 are below population targets (based on a 10-year average), as set forth by the RCP (CPW 2013, p. 11; GSRSC 2005, pp. 255–302) (see Current Distribution and Population Estimates and Trends in the Background section for more details). The RCP identified population targets as attainable population sizes sufficient to conserve Gunnison sage-grouse in those population areas (GSRSC 2005, p. 255). This constitutes the current and best available information on population targets for Gunnison sage-grouse.

Combined, the satellite populations comprise about 16 percent of the rangewide population of Gunnison sage-grouse and include approximately 37 percent of rangewide occupied habitat. Small population size and population structure occur in all of the six satellite populations, or across approximately 37 percent of occupied range for the species. The small sizes of the satellite populations of Gunnison sage-grouse make them particularly sensitive to stochastic and demographic fluctuations, and this vulnerability is exacerbated by other threats such as drought (GSRSC 2005, p. G–22). Small population size, declining population trends, and apparent isolation indicate long-term population persistence and evolutionary potential are compromised in the satellite populations (see Genetic Risks).

Genetic Risks

Small populations face three primary genetic risks: Inbreeding depression; loss of genetic variation; and accumulation of new mutations. In general, these negative genetic consequences influence a species' fitness, or ability to reproduce and survive in the face of environmental pressures. Inbreeding can have individual and population level

consequences by either increasing the phenotypic expression of recessive, deleterious alleles (the expression of harmful genes through the physical appearance) or by reducing the overall fitness of individuals in the population (GSRSC 2005, p. 109 and references therein).

Gunnison sage-grouse have low levels of genetic diversity, particularly in comparison to greater sage-grouse (Oyler-McCance *et al.* 2005, p. 635). There is no consensus regarding how large a population must be in order to prevent inbreeding depression. However, the San Miguel Basin satellite population has an effective population size (the number of individuals in a population that contribute their genes to the next generation) that is below the level at which inbreeding depression has been observed to occur (Stiver *et al.* 2008, p. 479). Since the remaining Gunnison sage-grouse satellite populations are smaller than the San Miguel population, they are likely small enough to induce inbreeding depression, and thus could be losing adaptive potential (Stiver *et al.* 2008, p. 479).

Population structure of Gunnison sage-grouse was investigated using mitochondrial DNA sequence (mtDNA, maternally-inherited DNA located in cellular organelles called mitochondria) and nuclear microsatellite data from six geographic areas (Crawford, Gunnison Basin, Curecanti area of the Gunnison Basin, Monticello-Dove Creek, Piñon Mesa, and San Miguel Basin) (Oyler-McCance *et al.* 2005, entire). The Cerro Summit-Cimarron-Sims Mesa population was not included in the analysis due to inadequate sample sizes. The Poncha Pass population also was not included as it is composed of individuals translocated from Gunnison Basin. Levels of genetic diversity were highest in the Gunnison Basin, which had more alleles and many but not all of the alleles present in other populations. All other populations had much lower levels of diversity. The lower diversity levels were thought to be the result of small population sizes and a high degree of geographic isolation (Oyler-McCance *et al.* 2005, entire).

Collectively, the smaller populations contained 24 percent of the genetic diversity of the species. Individually, each of the satellite populations may not be crucially important genetically to the survival of the species, but collectively it is reasonable to assume that 24 percent of the genetic diversity is important to the future rangewide survival and adaptability of the species. Some of the genetic makeup contained

within the satellite populations (with the potential exception of the Poncha Pass population since it consists of birds from the Gunnison Basin) may be critical to maintaining adaptability in the face of issues such as climate change or other environmental change. All populations sampled were found to be genetically discrete units (Oyler-McCance *et al.* 2005, p. 635), so the loss of any of them would result in a decrease in genetic diversity of the species. In addition, having multiple populations across a broad geographic area (population redundancy) provides insurance against catastrophic events, such as prolonged drought, and the aggregate number of individuals across all populations increases the probability of demographic persistence and preservation of overall genetic diversity by providing an important genetic reservoir (GSRSC 2005, p. 179). The satellite populations are important to the long-term viability of Gunnison sage-grouse because they: (1) Increase species abundance rangewide; (2) minimize the threat of catastrophic events to the species since the populations are widely distributed across the landscape; and (3) provide additional genetic diversity not found in the Gunnison Basin (GSRSC 2005, p. 199).

Habitat loss and decline can lead to range contraction and population extinction (see Factor A). As a species' range contracts and distances between populations increase, opportunities for gene flow are reduced. Historically, the Monticello-Dove Creek, San Miguel, Crawford, and Piñon Mesa populations were larger and were connected through more contiguous areas of sagebrush habitat. The loss and fragmentation of sagebrush habitat between the late 1950s and the early 1990s led to the current isolation of these populations, which is reflected in low amounts of gene flow and isolation by distance (Oyler-McCance *et al.* 2005, p. 635). However, Oyler-McCance *et al.* (2005, p. 636) noted that a few individuals in their analysis appeared to have the genetic characteristics of a population other than their own, suggesting they were dispersers from a different population. Two probable dispersers were individuals moving from the San Miguel Basin population into Monticello-Dove Creek and Crawford. The San Miguel population itself appeared to have a mixture of individuals with differing probabilities of belonging to different clusters. This information suggests that the San Miguel population may act as a conduit of gene flow among the satellite

populations surrounding the larger Gunnison Basin population. Additionally, another potential disperser into Crawford was found from the Gunnison Basin (Oyler-McCance *et al.* 2005, p. 636). This result is not surprising given their close geographic proximity. The genetic makeup of the outlying Monticello-Dove Creek and Piñon Mesa populations were consistently distant from all other populations and from each other. This and other tests indicated that geographic distances (or separation) are correlated with the genetic distance between populations of Gunnison sage-grouse (Oyler-McCance *et al.* 2005, p. 635).

Movement of local (not translocated) birds between the Monticello and Dove Creek populations has not been documented. In 2011, five translocated and radio-collared hens released in Dove Creek during the spring were recorded in Utah during the breeding season (Messmer 2013, p. 4). These movements may not be representative of typical behavior of local birds, however, since translocated birds have been known to make erratic or irregular movements following translocation.

While we acknowledge there are likely benefits from translocating Gunnison sage-grouse from the Gunnison Basin to satellite populations (see Scientific Research and Related Conservation Efforts in Factor B), such efforts may have diluted the genetic makeup and potentially unique characteristics of some of the receiving populations (e.g., Piñon Mesa, which is thought to be more unique genetically). However, more research is needed to determine the success of translocations, what the effect is on genetic make-up within populations, and whether translocations should continue in all satellite populations.

In northwestern Colorado, dispersal of juvenile male greater sage-grouse had more influence on genetic diversity in populations than dispersal of females (Thompson 2012, p. 256). Based on observed bird dispersal, gene flow and connectivity in greater sage-grouse can likely be maintained for populations 5 to 10 km apart (most dispersals were less than 10 km) and possibly as far as 20 km (the maximum dispersal distance of birds studied) (Thompson 2012, p. 285–286). If genetic diversity and dispersal mechanisms operate similarly in Gunnison sage-grouse populations (typical dispersals less than 10 km), it is unlikely that gene flow and genetic diversity is currently being maintained due to the distance between these populations. The seven Gunnison sage-grouse populations are generally more than 10 km apart from each other (based

on mapped occupied habitat), and most are 20 km apart or more (Figure 1).

Lowered hatching success is a well-documented indicator of inbreeding in wild bird populations. In one study, it was suggested that the low hatching success rates observed in Gunnison sage-grouse may have been due to inbreeding depression (Stiver *et al.* 2008, p. 479, and references therein). Other bird species that had undergone genetic bottlenecks have had similar hatchability rates. Independent of genetic pressures or differences in a given population, some eggs fail to hatch because they are infertile or simply do not develop fully. Based on a review of sage-grouse research in Colorado, an estimated 10 percent of eggs produced will likely fail to hatch, even in healthy populations (CPW 2013b, p. 12). However, we expect that hatch failure rates would likely increase above that level in smaller populations where inbreeding is more likely to occur.

Effective Population Size and Population Viability Analyses

Effective population size (N_e) is an important parameter in conservation biology. It is defined as the number of individuals contributing their genes to the next generation. In technical terms, effective population size is an idealized population size of breeding adults that would experience the same rate of (1) loss of heterozygosity (the amount and number of different genes within individuals in a population), (2) change in the average inbreeding coefficient (a calculation of the amount of breeding by closely related individuals), or (3) change in variance in allele (one member of a pair or series of genes occupying a specific position in a specific chromosome) frequency through genetic drift (the fluctuation in gene frequency occurring in an isolated population) as the actual population (Wright 1930, entire).

The effective size of a population is often much less than its actual size or number of individuals. As effective population size decreases, the rate of loss of allelic diversity via genetic drift increases. Two consequences of this loss of genetic diversity, reduced fitness through inbreeding depression and reduced response to sustained directional selection ("adaptive potential"), are thought to elevate extinction risk (Stiver *et al.*, 2008, p. 472 and references therein). While no consensus exists on the population size needed to retain a level of genetic diversity that maximizes evolutionary potential (i.e., the ability to adapt to local changes) for a given species, up to

5,000 greater sage-grouse may be necessary to maintain an effective population size of 500 birds (Aldridge and Brigham, 2003, p. 30). Other recent recommendations also suggest populations of at least 5,000 individuals to deal with evolutionary and demographic constraints (Traill *et al.* 2009, p. 3, and references therein). While the persistence of wild populations is usually influenced more by ecological rather than by genetic effects, once populations are reduced in size, genetic factors become increasingly important (Lande 1995, p. 318).

Population viability analysis (PVA) is a risk assessment tool used to predict the relative probability of extinction for a species, population, or various population sizes under different management scenarios to aid in decision-making for conservation and management. Fundamentally, population viability and persistence depends on a population's growth rate (births and deaths) and the recruitment of individuals through immigration and emigration. PVA does not predict the real or absolute risk of extinction for a species or population, only their relative extinction risk under various scenarios, and thus should be interpreted and applied with caution. To date, three population viability analyses or studies have been conducted for Gunnison sage-grouse: (1) A PVA developed as part of the RCP in 2005 by Dr. Phil Miller through CPW (GSRSC 2005, Appendix G); (2) a PVA developed for the Service in 2005 by Dr. Edward Garton (Garton 2005, entire); and (3) a demographic study and PVA developed by Dr. Amy Davis at Colorado State University (Davis 2012, entire). Each of these studies and their results are described in detail below.

RCP Population Viability Analysis

Dr. Phillip Miller prepared a population viability analysis (PVA) for the Gunnison sage-grouse for CPW as part of the RCP (GSRSC 2005, Appendix G). The purpose of this PVA was to assist the CPW in evaluating the relative risk of extinction for each population under the conditions at that time (i.e., the risk of extinction if nothing changed), to estimate relative extinction probabilities and loss of genetic diversity over time for various population sizes, and to determine the sensitivity of Gunnison sage-grouse population growth rates to various demographic parameters (GSRSC 2005, p. 169). The PVA was used by the RCP as a tool to predict the relative, not absolute or precise, probability of extinction for the different populations under various management scenarios

based on information available at that time. The model did not incorporate certain factors including habitat loss and fragmentation, density-dependent reproduction, effects of disease, or inbreeding depression, all of which may affect the demographic rates and, therefore, status of a given population (GSRSC 2005, p. 170). Furthermore, while Gunnison sage-grouse demographic data were used where available, the PVA also applied greater sage-grouse demographic data, as needed (GSRSC 2005, p. 169). We believe it is appropriate to apply greater sage-grouse data where Gunnison sage-grouse data are not available or limited. However, this may weaken inferences in assessing the viability of Gunnison sage-grouse due to the species' unique behavioral and genetic characteristics (Young *et al.* 2000b, entire) and potentially different vital rates, such as annual survival (Davis 2012, p. 63) and nesting success rates (Davis 2012, p. 11). In contrast, another more recent PVA applied only Gunnison sage-grouse demographic data (Davis 2012, entire) (see Davis Population Viability Analysis), and thus it is likely more reliable in terms of assessing the viability of the species.

This 2005 PVA indicated that, in the absence of additional habitat loss and fragmentation and the factors noted above, stable populations in excess of 500 birds had an extinction risk of less than 5 percent within the next 50 years following the study (that is, through 2055) and may be considered "secure" (GSRSC 2005, p. 170; GSRSC 2005, p. G-21). The PVA found that the probability of the Gunnison Basin population going extinct within the next 50 years was less than approximately 1 percent (GSRSC 2005, p. G-21). The Gunnison Basin population was approximately 3,000 individuals around the time the PVA was developed (2005). If the model were re-run, with approximately 3,978 birds as of 2014, the predicted risk of extinction would be even lower due to this population increase (Phillips 2013, p. 2). This view does not take into account, however, other new information that could be incorporated into an updated model re-run, such as the Gunnison sage-grouse demographic data collected by Davis (2012, entire). The model concluded that the Gunnison Basin population, and therefore the species, is likely to survive over the long term (GSRSC 2005, p. 179), barring catastrophic events such as disease or prolonged drought (assuming a degree of consistency of environmental influences on sage-grouse demography) or a

significant reduction in carrying capacity through habitat loss.

In contrast, the analysis found that small populations (<25 to 50 birds) are at high risk of extinction within the next 50 years (through the year 2055) (assuming some degree of consistency of environmental influences on sage-grouse demography), even if these populations are expected to increase over the long-term (GSRSC 2005, pp. 170 and G-27). A stable population of 50 birds had an extinction probability of 59 percent within the next 50 years; a stable population of 25 birds had an extinction probability of 86 percent within the next 50 years. The analysis also found that the probability of extinction was higher yet for declining populations of this size (GSRSC 2005, p. G-27). However, the model found that augmentation of birds (approximately 10 birds every five years) would considerably reduce the probability of extinction (to near zero) for these smaller populations (GSRSC 2005, pp. 176–179).

Based on the RCP PVA (GSRSC 2005, Appendix G), in the absence of intervention such as translocating of birds, the Cerro Summit-Cimarron-Sims Mesa (74 birds) and Dove Creek (24 birds) populations are currently at high risk of extirpation (GSRSC 2005, pp. 168–179). Likewise, the Poncha Pass population has remained below 50 birds since 1999, and has generally declined over this period (Figure 3), indicating this population is also at high risk of extirpation, based on this PVA. Zero birds were counted at leks in the spring of 2013 for the Poncha Pass population. However, 17 birds were translocated into the population in the fall of 2013, with 16 surviving in the spring of 2014 and 10 more birds were translocated in the spring of 2014 (see Scientific Research and Related Conservation Efforts in Factor B). Considerable translocation efforts from 2010 to 2013 have likely contributed to increased population estimates in the Crawford and Piñon Mesa populations (see Current Distribution and Population Estimates and Trends; and Scientific Research and Related Conservation Efforts). Without the recent increases in bird numbers, Crawford and Piñon Mesa population would also likely be at serious risk of population extinction (i.e., around 50 birds and a 59 percent or greater probability of extinction), based on this PVA.

Garton Population Viability Analysis

To estimate population viability, Garton (2005, entire) analyzed trends in abundance for Gunnison sage-grouse populations and the species rangewide

using male lek count data from the preceding 50 years from CPW and the UDWR. Due to inconsistencies in data collection over time, the analysis was conducted for two time periods—long-term lek data collected since 1957 for CPW, and since 1976 for UDWR, through 2005; and short-term lek data from 1995–2005 when sampling methodologies were standardized and became more consistent. Relative population size from past years was calculated by setting the most recent population estimate at the time (in 2005) to 100 and calculating the previous years' population size relative to that, so that it could be viewed as a percentage of the 2005 population level.

Garton's (2005, pp. 3–4) analysis indicated that the rangewide population varied between a low of 40 percent of the 2005 lek count in 1991 and 1993; to a high of 140 percent of the 2005 lek count in 1969. He suggested that unusual counts, which represented at least a 50 percent change in abundance, were preceded or followed by more typical count indices, and that these outlier data probably reflect measurement errors rather than actual changes population size. For instance, lek count data collected for 2005 show a considerable increase in the number of males attending leks, with an approximate 50 percent increase from 2004 estimates of rangewide abundance. This aberration is thought to be the result of unusual weather conditions during that period and, consequently, possible double- or triple-counting of males across multiple lek sites at various elevations (Garton 2005, pp. 2–3, and references therein). Because of this, the analyses were conducted both with and without 2005 data. Including the 2005 data in the long-term analysis (since 1957) resulted in a slightly increasing population trend; without the 2005 count data, the analysis showed a slightly decreasing population trend, which Garton (2005, p. 4) suggested was a better descriptor of observed trends in population estimates. Statistical analyses of the Cerro Summit-Cimarron-Sims Mesa and Dove Creek populations could not be completed due to low lek counts and inconsistencies in sampling over time. Likewise, the small Poncha Pass population was not analyzed because it had been surveyed for only 6 years and the population was augmented with birds from Gunnison Basin during that time.

The long-term analysis (1957–2005) by Garton (2005, entire) found that the rangewide population of Gunnison sage-grouse was stable, neither increasing nor decreasing, during that time period. Annual rates of change were highly

variable, with some of that variability likely attributed to different sampling methods rather than actual population change. The shorter analysis period (1995–2005) yielded the same results, although the variability was reduced, likely due to more consistent data collection methods. Individual populations reflected the trends in the rangewide analysis, in that some populations were slightly increasing and some were slightly decreasing.

As observed in similar analyses conducted for the greater sage-grouse (Connelly *et al.* 2004, entire), density-dependent models appeared to more accurately describe observed population trends in Gunnison sage-grouse. Garton's study suggested an apparent inverse density-dependent pattern of population change in Gunnison sage-grouse, resulting in a low probability (less than 1 percent) that the population will decline to low abundances (below 25 percent of the 2005 population index), provided environmental factors (e.g., catastrophic drought, disease, continuing habitat loss) do not reduce equilibrium population size or increase the variability in population change (Garton 2005, pp. 4–5).

Of the populations studied, Gunnison Basin and Piñon Mesa showed slightly increasing trends in abundance of Gunnison sage-grouse; San Miguel Basin, Crawford, and Monticello showed slightly decreasing trends in abundance from 1995 to 2005 (Table 13 below). The short-term analysis (1995–2005) indicated that the San Miguel Basin population was declining rapidly, as much as a 10 percent decline per year, though there was uncertainty in this prediction due to possible sampling errors. Declines were also evident in the Monticello population.

TABLE 13—SUMMARY OF POPULATION TRENDS FOR THE GUNNISON SAGE-GROUSE FROM 1995 TO 2005 (GARTON 2005, ENTIRE)

[Values are the finite rate of change in the population, where 1 is no change, numbers less than 1 indicate a decline, and numbers greater than 1 indicate an increase]

Population	Finite rate of change 1995–2005
Gunnison Basin	1.05
Piñon Mesa	1.09
San Miguel Basin	0.902
Crawford	0.999
Monticello	0.99
Rangewide	1.049

Six peer reviewers evaluated the report by Garton (2005, entire). We received comments from five of the

reviewers, three generally favorable towards the report and its conclusions and two expressing concerns regarding limitations in the data sets, assumptions, and/or analyses. For example, one would have to assume that habitat availability over time would remain stable in order to conclude that Gunnison sage-grouse numbers are unlikely to experience a decline in the future. Also, while the conclusions showed that the number of males per lek remained relatively stable over time, the proportion of leks on which males were counted appeared to have declined, which could be indicative of population declines. Peer reviewers also recommended that more appropriate statistical tests would need to be applied to come to any conclusion about potential population trends and that emphasis should be on an independent analysis of each geographically isolated population because each population exhibits independent population dynamics. Population trend analyses were conducted on a population basis as well as rangewide. There was concern expressed that habitat loss over time was not accounted for, that population declines would go unnoticed, and that population trends would appear far too optimistic.

Davis Demographic Study and Population Viability Analysis

The Davis PVA (2012, entire) utilized demographic data specific to Gunnison sage-grouse populations and incorporated other variables such as extreme weather, fire, disease, and predation known to affect survival and reproduction rates in Gunnison sage-grouse. This is in contrast to the RCP PVA (GSRSC 2005, Appendix G) which combined greater and Gunnison sage-grouse demographic data and did not account for environmental variation (fire, disease, predation) other than simulating a 3-year drought resulting in increased mortality; and the Garton PVA (Garton 2005, entire) which only examined lek count-based population estimates and trends to estimate viability. To estimate and project Gunnison sage-grouse population trends, Davis (2012, pp. 1, 18) conducted a demographic study of the Gunnison Basin and San Miguel populations, the two largest populations. CPW acknowledged that this study represents the most current and longest set of demographic data collected for Gunnison sage-grouse (Phillips 2013, p. 2). Demographic parameters (survival and reproduction rates) from both populations collected from 2005 to 2010 were used to estimate population size and viability over the

next 30 years (Davis 2012, p. 79). These demographic data were combined with longer-term lek count data from 1996 to 2011 (lek count protocols were standardized in 1996 (GSRSC 2005, p. 46)) in the Gunnison Basin to model that population. The purpose of the model (i.e., an integrated model that combined the two datasets) was to reduce potential weaknesses and biases in both datasets—high variability and uncertainty with the lek count data, and the small sample size of the shorter-term demographic data—thereby statistically improving estimates and predictions (Davis 2012, pp. 125–126). Key methods and findings of this study are summarized below.

The demographic component of the study found no apparent difference in nest success rates or adult survival between the San Miguel and Gunnison Basin populations (Davis 2012, p. 37). However, the results may be due in part to the limited duration and small sample size of the study, especially in the San Miguel population (Davis 2012, p. 92). Nest success from 2005 to 2011 varied widely between 21 and 60 percent, with an average of 39 percent (Davis 2012, p. 9). Contrary to expectations, nest site vegetation characteristics did not have a strong influence on nest success in the Gunnison Basin and San Miguel populations (Davis 2012, p. 10). Temporal factors appeared to have the greatest influence on nesting success, as earlier season nesting tended to be more successful than later season nesting, and the longer that incubation occurred, the greater the risk of nest failure (Davis 2012, p. 1). No yearlings were observed in the San Miguel population during the study (Davis 2012, p. 12).

Juvenile recruitment was also evaluated within and between the two populations (Davis 2012, p. 27). Chick survival (hatching to 30 days of age) was higher in the Gunnison Basin than the San Miguel population (Davis 2012, p. 44). Although sample size in the San Miguel Basin was small (eight chicks were studied), none survived to 30 days of age, meaning no recruitment (survival of bird from hatching to breeding age) occurred over a 4-year period (Davis 2012, p. 37). Of 282 chicks studied in the Gunnison Basin, 124 (44 percent) survived to 30 days of age (Davis 2012, pp. 37–38). A slight negative trend in chick survival and stronger negative trend in juvenile survival in the Gunnison Basin population occurred from 2005 to 2010 (Davis 2012, p. 27). Juvenile recruitment declined from 26 percent in 2005 to 5 percent in 2010. These results indicate that lower juvenile recruitment may be

contributing to the study's observed population declines in the Gunnison Basin (birds from the San Miguel population were not included in the juvenile survival analysis, as none survived to 31 days), and that the population may not be as stable as has been suggested. However, study results may be due to the limited sample size (duration) of the study, and a longer study may indicate that declines observed are fluctuations within a larger cyclical time series (Davis 2012, p. 38).

Adult and yearling survival rates were also analyzed within and between the two populations. The effect of harsh winter conditions on these demographic rates was also studied. Male survival rates were lower during the lekking season (March–April), and female survival rates were lower during the nesting and chick rearing season (May–August) (Davis 2012, p. 55). Harsh winters (as indicated by above normal snow depth), which occurred during 2007 and 2008 in the Gunnison Basin, and during 2009 and 2010 in the San Miguel Basin, had minimal effect on Gunnison sage-grouse survival (Davis 2012, pp. 55, 65). The study found no differences in adult and yearling survival between the San Miguel and Gunnison Basin populations. This was surprising, given the apparent decline in bird numbers in the San Miguel population based on lek count estimates, suggesting declines are likely due to reduced recruitment and juvenile survival rates rather than reduced adult survival (Davis 2012, p. 66).

The Davis PVA applied the derived baseline demographic data for survival and reproduction rates to estimate population growth of Gunnison sage-grouse, including an analysis of viability and extinction risk. The study also evaluated the effects of bird translocation efforts on the survival of the San Miguel (destination) population and the Gunnison Basin (source) population (Davis 2012, p. 79, 87). Based on the six years of demographic data collected from 2005 to 2010 in the Gunnison Basin, and four years of demographic data collected from 2007 to 2010 in the San Miguel population, deterministic population models indicated that both the Gunnison Basin and San Miguel populations were declining during those time periods, with more pronounced declines in the latter (Davis 2012, p. 87). For the four years when data was collected in both populations (2007–2010), population growth rates (λ) ranged from 0.65 to 0.91 in the Gunnison Basin, and 0.52 to 0.68 in the San Miguel population (Davis 2012, pp. 87–88). A λ value of 1.0 indicates a stable population; values

less than 1.0 indicate a declining population; and values greater than 1.0 indicate an increasing population. Of the six years of study (2005–2010) in the two populations combined, population growth rates ranged from 0.65 in 2010, to 1.14 in 2006 (Davis 2012, p. 134). Of the six years of study in the Gunnison Basin alone (from 2005 to 2010), four of these years indicated population declines and two years indicated population growth (Davis 2012, p. 87).

Incorporating environmental stochasticity (variability in population growth rates due to external factors such as weather, fire, disease, and predation) and demographic stochasticity (variability in population growth rates due to survival and reproduction rates), model simulations also predicted population declines in the future (Davis 2012, pp. 105–106). Combining the six years of demographic data (2005 to 2010) from both populations, environmental stochastic simulations resulted in a minimum extinction time of 31 years for both populations.

Minimum extinction time is the earliest time at which population extinction occurred among the various modeled simulations in this study. This is in contrast to the *mean extinction time*, the average time of all modeled simulations at which population extinction occurred. Mean or expected extinction time in this PVA for the Gunnison Basin population is 58 years (Davis 2012, p. 137). Davis also (2012, p. 92) noted, however that if the study had been conducted just a few years earlier or later, a different trend across time could have resulted, because it was based on a 6-year period of time when the population was experiencing a slight decline.

Assuming and incorporating an additional year of increasing, constant, or declining population growth into these simulations to model demographic stochasticity resulted in minimum extinction times of 41, 29, and 20 years, respectively for both populations combined (Davis 2012, p. 88). Additionally, the extinction risk (i.e., proportion of simulations that went extinct within 30 years) was substantially larger for San Miguel than for Gunnison Basin (0.53 for San Miguel, 0 for Gunnison Basin) (Davis 2012, p. 88). Demographic stochastic simulations for the Gunnison Basin population approached extinction, but none went extinct over the 30-year period. Therefore, the estimated extinction risk was 0.00 for the Gunnison Basin population over this period, indicating a low probability of extinction over the next 30 years due to demographic stochasticity alone (Davis

2012, pp. 88, 106). However, looking further out, demographic stochastic simulations resulted in mean extinction time of 58 years for the Gunnison Basin population, without removing any birds for translocation efforts (removal of birds decreased the mean extinction time) (Davis 2012, pp. 111, 137). These demographic projections indicate the Gunnison Basin population is relatively stable, but may be in decline (Davis 2012, p. 137–138). However, see discussion involving the integrated model below. Additionally, Davis also (2012, p. 92) noted that if the study had been conducted just a few years earlier or later, a different trend across time could have resulted, because it was based on a 6-year period of time when the population was experiencing a slight decline.

Davis (2012, p. 96) also examined the periodic removal of birds from the Gunnison Basin and whether a long-term translocation effort would be sustainable since it could negatively affect the viability of that population depending upon the number of birds translocated each time and the frequency of translocations. Results indicated that, in general, more frequent removal of birds from the source population had a greater effect than removing a larger number less frequently.

If trends observed during the study continue into the future, declines in both the San Miguel and Gunnison Basin populations are expected to occur over the next 30 years (i.e., by 2042). However, the results may be due in part to the limited duration and small sample size of the study (Davis 2012, p. 92) (see also discussion involving the integrated model below.) Davis (2012, pp. 89, 93) indicated that adult survival may be the most important vital rate for steeply declining populations, such as the San Miguel population, while juvenile survival is most important for increasing or slightly declining populations, such as the Gunnison Basin population.

An evaluation of translocation efforts indicated that more frequent translocations would increase population persistence in the San Miguel population, but with negative effects on the Gunnison Basin, or source, population (decreased mean and minimum extinction times) (Davis 2012, p. 91). Frequent translocations would avoid extinction of the San Miguel population, based on the population models, although this would mean maintaining a population of translocated birds (Davis 2012, p. 96). Furthermore, juvenile recruitment in that population would need to be

improved for the population to persist on its own (Davis 2012, p. 97).

To further evaluate population viability, Davis (2012, pp. 125–126) combined baseline demographic data and lek count data from the Gunnison Basin in a separate, integrated population model. Short-term demographic data were combined with long-term lek count data from 1996 to 2011 (16 years) to reduce potential weaknesses in both datasets—high variability and uncertainty with the lek count data and small sample size of the demographic data—with the goal of statistically improving estimates and predictions (Davis 2012, pp. 125–126). Lek count protocols were standardized in 1996 (GSRSC 2005, p. 46); prior to that time, data showed high variability and uncertainty and, therefore, were not included in the analysis (Davis 2012, pp. 139, 143). The analysis indicated that the Gunnison Basin population has declined slightly over the past 16 years, with a mean annual population growth rate of 0.94, with a 95 percent confidence interval of 0.83 to 1.04. This growth range was found to be narrower (more accurate) than growth estimates based on lek count data alone (0.79–1.92, with a mean of 1.04) or demographic data alone (0.65–1.14, with a mean of 0.89) (Davis 2012, p. 134). On average, the population appeared to be relatively stable over the 16-year period, but the end of the time series showed a slight decline (Davis 2012, p. 138). However, it was noted that results of the study are preliminary, and further testing is needed to validate the model (Davis 2012, p. 140).

More recently, incorporating an additional year of lek count data into their integrated model (1996–2012), Davis *et al.* (*in press*) states that the Gunnison Basin population is “slightly declining” and the growth rate of this population has been variable, but is “near stable.” The updated growth rate was calculated to be 0.988, with the 95 percent confidence interval also including stable and slightly increasing growth rates (0.893 to 1.079).

Davis (2012, p. 139) cautioned against making conclusions and population estimates based on lek count data collected prior to 1996, due to the data’s high variability and uncertainty. The number of lek areas surveyed in Colorado increased beginning in 1996, when lek count protocols were standardized (GSRSC 2005, p. 46), indicating increases in abundance that may not be accurate (Davis 2012, p. 143). Even standardized lek counts show high variability and uncertainty and, therefore, should not be used alone to estimate or project Gunnison sage-

grouse populations (Davis 2012, p. 165). Demographic data showed consistently lower population growth rates than indicated by standardized lek count data, suggesting an imperfect relationship between the two data types. Lek count data sometimes resulted in extremely high values of population growth that were not realistic based on demographic analyses (Davis 2012, pp. 134, 136).

Discussion of All Population Viability Analyses

The most current and comprehensive demographic study and population viability analysis for Gunnison sage-grouse (Davis PVA) indicated that the San Miguel population is showing a decline, and the Gunnison Basin population has been relatively stable over the past 16 years (up to 2011), with a slight decline towards the end of the study period (Davis 2012, entire). Incorporating environmental and demographic stochasticity into the models also predicted declines in both of these populations in the future (Davis 2012, pp. 105–106). Combining demographic data from both populations, environmental stochastic simulations resulted in a minimum extinction time of 31 years (i.e., 2043) for the two populations combined (Davis 2012, p. 88). For the San Miguel population, demographic stochastic simulations indicated a high probability (0.53) of extinction over the next 30 years (2042) (Davis 2012, p. 88). Demographic stochastic simulations for the Gunnison Basin population approached extinction over this period, but none went extinct over the 30-year period (extinction risk of 0.00) (Davis 2012, pp. 88, 106). However, looking further out, demographic simulations resulted in a mean extinction time of 58 years for the Gunnison Basin population (without removing any birds for translocation efforts) (Davis 2012, pp. 111, 137), or by about 2070. Davis (2012, p. 92) noted, however, that if the study had been conducted just a few years earlier or later, a different trend across time could have resulted, because it was based on a 6-year period of time when the population was experiencing a slight decline.

The Davis PVA also suggested that the Gunnison Basin population may not be as stable as previously thought (Davis 2012, p. 38). Based on an integrated analysis of 16 years of lek count and demographic data, the Gunnison Basin population may be declining slightly (Davis 2012, p. 137). Further, based on Davis's findings, we infer that the Gunnison Basin population may not be as large as lek count-based estimates

suggest. Davis (2012, pp. 134, 136) found that lek count data resulted in extremely high values of population growth that were not realistic based on demographic data for the Gunnison Basin population. Davis 2012 (p. 138) and Davis *et al. in press* state, however, that the Gunnison Basin population has shown only a slight decline since 1996, which they also describe as currently being “relatively stable” and “near-stable.”

In contrast, the earliest population viability analysis for Gunnison sage-grouse from the RCP (GSRSC 2005, Appendix G) indicated a low probability of extinction (less than 1 percent) for the Gunnison Basin population (with approximately 3,000 birds at the time); and a low extinction risk (less than 5 percent) for smaller populations (more than 500 birds) over the next 50 years (i.e., to 2055) (GSRSC 2005, p. G–21). This model concluded that the Gunnison Basin population, and therefore the species, is likely to survive over the long term (GSRSC 2005, p. 179). We are concerned, however, with the reliability of the estimated extinction probabilities and conclusions from this study, for reasons noted above and as follows. Applying the extinction probabilities from this study, some satellite populations would have been considered relatively secure in recent years based on estimated abundance. For example, the San Miguel and Monticello populations, with approximately 200 to 400 birds or more in recent years (see Figure 3), would have had a relatively low risk of extinction over the 50 years ending in 2055 according to the RCP PVA. However, these populations have declined since 2005 (Figure 3; also see Relevant Species Information in this section) to a point that their survival and long-term viability is currently at risk. This suggests that the extinction risk for individual Gunnison sage-grouse populations, including the Gunnison Basin, and the entire species is higher than was estimated in this study (i.e., the study may have overestimated the viability of Gunnison sage-grouse). This PVA combined greater and Gunnison sage-grouse demographic data and did not account for environmental variation (such as fire, disease, and predation), in contrast to the Davis PVA.

Long-term (1957–2005) and short-term analyses (1996–2005) from Garton (2005, entire) found that the rangewide population of Gunnison sage-grouse was generally stable, neither increasing nor decreasing during that time period. Accordingly, some populations were declining and some were increasing.

The study did not estimate extinction probabilities. We are concerned with the current relevance of the Garton (2005, entire) study, however, as nine additional years of lek count data have become available since the study was conducted. These new lek count data, combined with other data from 1996 to 2010 (per Davis 2012, entire), provide a more precise estimate of population levels and trends than from information that was available in 2005. As discussed earlier, lek count protocols were first standardized in 1996 (GSRSC 2005, p. 46), and lek count data collected prior to that year were prone to high variability and uncertainty (Davis 2012, p. 139). Based on lek count population estimates, relatively stable trends in the Gunnison Basin population 1996 to 2014 match that of the findings in Garton (2005, entire). However, a relatively stable rangewide population, as indicated by Garton (2005, entire), is not supported by recent declines in several of the satellite populations from 1996 to 2014 (Figure 3; also see Relevant Species Information above). The apparent rangewide stability of Gunnison sage-grouse under the 2005 Garton PVA is influenced primarily by the largest population (the Gunnison Basin—about 63 percent of the species' range) (Figure 2). However, based on overall declining trends in several of the satellite populations (encompassing about 37 percent of the species' occupied range; and 16 percent of the known birds), as well as the questions raised by the Davis PVA regarding the long-term stability of the Gunnison Basin population, we do not agree that the species is stable rangewide. Finally, in contrast to the Davis PVA, the Garton PVA only examined lek count-based population estimates and trends to estimate viability, and did not consider demographic or environmental factors or stochasticity.

Each of these population viability models has its own limitations and weaknesses, as described above. Again, a PVA does not predict the real or absolute risk of extinction for a species or population, only their relative extinction risk under various scenarios, and thus should be interpreted and applied with caution. Further, the available PVAs for Gunnison sage-grouse have resulted in somewhat disparate findings. The two earlier PVAs (GSRSC 2005, entire; Garton 2005, entire) collectively suggest most Gunnison sage-grouse populations are relatively stable and that the species is likely to persist into the future, attributable primarily to the large size and apparently stable trend of the

Gunnison Basin population. On the other hand, the Davis model (2012, entire) showed that the second largest population, the San Miguel population, is at risk of extinction, with 53 percent of model simulations reaching extinction in the next 30 years (by 2042) (Davis 2012, p. 88), and that even the largest Gunnison Basin population is declining with a mean extinction time of 58 years from now, or by about 2070, due to demographic stochasticity alone (Davis 2012, pp. 111, 137). Davis (2012, p. 92) noted, however, that if the study had been conducted just a few years earlier or later, a different trend across time could have resulted, because it was based on a 6-year period of time when the population was experiencing a slight decline. Based on recent population trend data and related information, we identified concerns with the two earliest PVAs and their current relevance and reliability for assessing the status of Gunnison sage-grouse now and in the future.

For the reasons stated above and here, we find that Davis (2012, entire) and Davis *et al.* (*in press*) represent the most current and best available scientific information regarding the viability of Gunnison sage-grouse. We recognize that absolute extinction probabilities provided in the Davis PVA are uncertain. However, based on that study (Davis 2012, entire), the survival and persistence of the San Miguel population appears to be at risk, with a 53 percent chance of extinction by about 2042. Based on this finding, it is reasonable to assume that the viability of the remaining satellite populations is also at similar risk due to their small size, though we recognize that environmental, demographic, genetic, and other factors likely vary between populations, and that these differences will influence survival and viability rates. Due to demographic fluctuations alone, the Davis PVA also indicated that the Gunnison Basin population's viability is at risk in the future, with a mean extinction time of 58 years, or by about 2070.

Resiliency, Redundancy, and Representation

In this section, we synthesize the information above to evaluate resiliency, redundancy, and representation as they relate to the viability of Gunnison sage-grouse. *Resiliency* refers to the capacity of an ecosystem, population, or organism to recover quickly from disturbance by tolerating or adapting to changes or effects caused by a disturbance or a combination of disturbances. *Redundancy*, in this context, refers to

the ability of a species to compensate for fluctuations in or loss of populations across the species' range such that the loss of a single population has little or no lasting effect on the structure and functioning of the species as a whole. *Representation* refers to the conservation of the diversity of a species, including genetic makeup.

Small population sizes, declining population trends, low genetic diversity, geographic isolation, and overall low viability (see preceding discussions in this section) indicate that long-term persistence and evolutionary or adaptive potential are compromised in the six satellite populations. This, in turn, suggests that resiliency is very low in the satellite populations, meaning they are less likely to tolerate or adapt to the changes and effects from current and future threats (see discussions in Factors A through C, and E). For example, drought conditions from 1999 through about 2003 (with residual effects lasting through about 2005) were closely associated with reductions in the sizes of all Gunnison sage-grouse populations (CDOW 2009b, entire; CPW 2013c, p. 9) (Figures 2 and 3) and lower nest success (CPW 2013c, p. 2). To date, most of the smaller satellite populations have not rebounded from declines around that time (Figure 3) (see Drought and Extreme Weather in this Factor E discussion below).

In contrast, resiliency currently appears to be relatively high in the Gunnison Basin population, likely due to a large effective population. For instance, drought has coincided with declines in the Gunnison Basin population (CDOW 2009b, entire; Figure 2), including declines at many of the lek complex areas (USFWS 2013c, pp. 1–2), but the population has since rebounded to pre-drought levels (see Drought and Extreme Weather in this section below for a detailed discussion). However, as the effects from drought, climate change, disease, and other substantial threats increase in the future, it is uncertain whether resiliency in this population will be sufficient to offset declines (see Drought and Extreme Weather (Factor E discussion below), Climate Change (Factor A), and Disease (Factor C)). As discussed earlier, model simulations of environmental and demographic stochasticity (natural fluctuations) resulted in extinction of the Gunnison Basin population in 31 years (minimum extinction time) and 58 years (mean extinction time), respectively. This analysis suggested the Gunnison Basin population may not be as stable (i.e., resilient) as previously thought (Davis 2012, entire) (see Davis Population Viability Analysis in this

Factor E analysis). Davis also (2012, p. 92) noted, however, that if the study had been conducted just a few years earlier or later, a different trend across time could have resulted, because it was based on a 6-year period of time when the population was experiencing a slight decline.

While population redundancy currently exists across the species' range, the best available information indicates the six satellite populations are at risk of extirpation in approximately 30 years (see preceding discussions in this section). Maintaining multiple satellite populations is important to the long-term viability of Gunnison sage-grouse because they: (1) Increase species abundance rangewide; (2) minimize the threat of catastrophic events to the species since the populations are widely distributed across the landscape; and (3) provide additional genetic diversity not found in the Gunnison Basin (GSRSC 2005, p. 199). With the loss of any population, population redundancy will be lowered, thereby decreasing the species' chances of survival in the face of environmental, demographic, and genetic stochastic factors and catastrophic events (extreme drought, fire, disease, etc.). Therefore, multiple populations across a broad geographic area are required to provide insurance against catastrophic events, and the aggregate number of individuals across multiple populations increases the probability of demographic persistence and preservation of overall genetic diversity by providing an important genetic reservoir (representation) (GSRSC 2005, p. 179).

Five physiographic zones or divisions are recognized in the Gunnison Basin population area for the purposes of monitoring and management actions (CSGWG 1997, pp. 6–7). It has been suggested that these zones represent subpopulations, or relatively discrete breeding populations, and that they provide adequate population redundancy and insurance against environmental disturbances such as drought (CPW 2013c, pp. 2, 9–10; Gunnison County 2013a, pp. 137–138; 169–170; Gunnison County 2013b, p. 43). In this rule (see Drought and Extreme Weather in this Factor E analysis), we present information which indicates that, while some local redundancy may exist in the Gunnison Basin population, it is not at a large enough scale to withstand environmental pressures. While geographic and microclimatic variation in the Gunnison Basin likely provide some degree of local variation and, perhaps, local population redundancy to resist environmental pressures, past

drought has had apparently extensive impacts on this population, as indicated by concurrent negative trends in the majority of lek complexes (see Drought and Extreme Weather in this Factor E analysis). This information suggests that population redundancy in the Gunnison Basin is limited, and is inadequate at the landscape scale necessary to withstand more environmental pressures than those experienced to date, such as prolonged drought, climate change effects, disease, or any combination of those threats.

As discussed above, representation across the species' range is currently low due to apparently isolated populations and limited gene flow. Genetic diversity is highest in the Gunnison Basin population, but low in the studied satellite populations (Oyler-McCance *et al.* 2005, entire). If population sizes continue declining, genetic diversity will likely decrease as well (see Genetic Risks above in this Factor E analysis).

Based on the information above, we find that resiliency, redundancy, and representation in Gunnison sage-grouse are inadequate overall to ensure the species' long-term viability. In particular, the best available information indicates population redundancy will be more limited in the near future, due to the extirpation of one or more satellite populations, thereby decreasing the species' chances of survival in the face of limiting factors. Current and future threats to the Gunnison Basin population (in particular, see Drought and Extreme Weather (Factor E discussion below), Climate Change (Factor A), and Disease (Factor C)) combined with the probable loss of one or more satellite populations and overall reduction of range indicate the long-term persistence of Gunnison sage-grouse is at risk.

Summary of Small Population Size and Structure

Negative effects on population viability, such as reduced reproductive success or loss of genetic variation and diversity are a concern as populations decline and become smaller or more isolated. Small population size and population structure occur in all of the six satellite populations, or across approximately 37 percent of occupied range for the species (see Relevant Species Information in this section). Lek count data for the last 19 years (1996 to 2014) as a whole indicate that several satellite populations are in decline (despite increases in numbers in some populations in the last several years Figure 3). Integrating lek count data and demographic data, the Gunnison Basin

population, the largest population, may be declining slightly and may not be quite as stable as previously thought (Davis *et al. in press*; Davis 2012, pp. 134, 38). Furthermore, because lek count data tend to overestimate populations (Davis 2012, pp. 134, 136) the Gunnison Basin population may not be large as has been estimated.

Based on small effective population sizes, the satellite populations are at risk of inbreeding depression and could be losing evolutionary or adaptive potential (Stiver *et al.* 2008, p. 479). Lower levels of genetic diversity were apparent in studied satellite populations of Gunnison sage-grouse, thought to be the result of small population sizes and a high degree of geographic isolation (Oyler-McCance *et al.* 2005, entire). All satellite populations sampled were found to be genetically discrete units (Oyler-McCance *et al.* 2005, p. 635), so their loss would result in a decrease in genetic diversity of the species. The only population currently providing individuals for translocation is the Gunnison Basin population; however, we believe care should be taken to ensure that this population can sustain the loss of individuals required by a long-term translocation program to other populations.

Historically, the satellite populations were larger and better connected through more contiguous areas of sagebrush habitat. The loss and fragmentation of sagebrush habitat between the late 1950's and the early 1990's led to the current isolation of these populations, as indicated by the low amounts of gene flow and isolation by distance (Oyler-McCance *et al.* 2005, p. 635). Genetic information suggests gene flow is limited between all populations (Oyler-McCance *et al.* 2005, entire) (see Genetics discussion above in this section).

Available PVAs for Gunnison sage-grouse have resulted in somewhat disparate findings, each with their own limitations or weaknesses. We found that Davis (2012, entire) represents the best available scientific information regarding the viability of Gunnison sage-grouse. This represents the longest and most current demographic study and population viability analysis for Gunnison sage-grouse. Based on that study, the Gunnison Basin and San Miguel populations, the two largest populations, are declining, with more pronounced declines in the latter (Davis 2012, p. 87). The survival and persistence of the San Miguel population, and likely the smaller satellite populations as well, appear to be at risk in the near future. Though we expect the Gunnison Basin population

will persist longer than the satellite populations, Davis (2012, entire) indicated that its future viability is also at risk due to natural environmental and demographic fluctuations.

Small population size, declining population trends, and apparent isolation indicate long-term population persistence and evolutionary potential (i.e., resiliency) are compromised in the satellite populations. In general, while various natural factors would not limit sage-grouse populations across large geographic scales under historical conditions or in larger populations, they may contribute to local population declines or extirpations when populations are small or when weather patterns, habitats, or mortality rates are altered. Multiple populations across a broad geographic area provide insurance against catastrophic events (population redundancy), such as prolonged drought, and the aggregate number of individuals across all populations increases the probability of demographic persistence and preservation of overall genetic diversity by providing an important genetic reservoir (representation) (GSRSC 2005, p. 179). As discussed above, the best available information indicates the viability of the six satellite populations is currently at risk due to small population size and structure, and those cover 37 percent of the species occupied range. Loss of as much as 37 percent of the species' occupied range would impact the species' overall viability. The cumulative effects of ongoing and future threats, such as habitat loss (Factor A) and drought (discussed below), will further contribute to declining and increasingly isolated populations and, ultimately, smaller population size and structure.

Based on the best available information, we determined that resiliency, redundancy, and representation in Gunnison sage-grouse are inadequate, or will be inadequate in the near term, to ensure the species' long-term viability. The best available information indicates population redundancy, in particular, will be limited or compromised in the near term, due to the probable extirpation of one or more satellite populations, thereby decreasing the species' chances of survival in the face of limiting factors. The rangewide cumulative effects of ongoing and future threats (Factors A through C, and E) will further compromise resiliency, redundancy, and representation of the species. Current and future threats to the Gunnison Basin population (in particular, see Drought (Factor E discussion below), Climate Change

(Factor A), and Disease (Factor C)) combined with the probable loss of satellite populations and overall reduction of range indicate the long-term persistence of Gunnison sage-grouse is at risk.

Drought and Extreme Weather

Drought and extreme weather such as severe winters have the potential to impact the survival and, therefore, persistence of Gunnison sage-grouse. Drought is a common occurrence throughout the range of the Gunnison and greater sage-grouse (Braun 1998, p. 148) and is considered a universal ecological driver across the Great Plains region (Knopf 1996, p. 147). Infrequent, severe drought may cause local extinctions of annual forbs and grasses that have invaded stands of perennial species, and recolonization of these areas by native species may be slow (Tilman and El Haddi 1992, p. 263). Drought reduces vegetation cover (Milton *et al.* 1994, p. 75; Connelly *et al.* 2004, p. 7–18), potentially resulting in increased soil erosion and subsequent reduced soil depths, decreased water infiltration, and reduced water storage capacity. Drought also can exacerbate other natural events such as defoliation of sagebrush by insects. For example, approximately 2,544 km² (982 mi²) of sagebrush shrublands died in Utah in 2003 as a result of drought and infestations with the *Aroga* (webworm) moth (Connelly *et al.* 2004, p. 5–11). Sage-grouse are affected by drought through the loss of vegetative habitat components, reduced insect production (Connelly and Braun 1997, p. 9), and increased risk of West Nile virus infections as described in the Factor C discussion above. These habitat component losses can result in declining sage-grouse populations due to increased nest predation and early brood mortality associated with decreased nest cover and food availability (Braun 1998, p. 149; Moynahan *et al.* 2007, p. 1781).

Greater sage-grouse populations declined during the 1930s period of drought (Patterson 1952, p. 68; Braun 1998, p. 148). Drought conditions in the late 1980s and early 1990s also coincided with a period when sage-grouse populations were at historically low levels (Connelly and Braun 1997, p. 8). Although drought has been a consistent and natural part of the sagebrush-steppe ecosystem, drought impacts on sage-grouse can be exacerbated when combined with other habitat impacts, such as human developments, that reduce cover and food (Braun 1998).

Aldridge *et al.* (2008, p. 992) found that the number of severe droughts from 1950 to 2003 had a weak negative effect on patterns of greater sage-grouse persistence. However, they cautioned that drought may have a greater influence on future sage-grouse populations as temperatures rise over the next 50 years, and synergistic effects of other threats affect habitat quality (Aldridge *et al.* 2008, p. 992). Drought has also been shown to have a negative effect on chick survival rates in greater sage-grouse (Aldridge 2005, entire), a key factor in sage-grouse population reproduction, survival, and persistence (GSRSC 2005, p. 173). Populations on the periphery of the range may suffer extirpation during a severe and prolonged drought (Wisdom *et al.* 2011, pp. 468–469). In eastern Nevada, annual recruitment of greater sage-grouse was higher in years with higher precipitation, based on annual precipitation, annual rainfall, and average winter snow depth. Likewise, greater sage-grouse population growth was positively correlated with annual rainfall and mean monthly winter snowpack in the study area. Annual survival of adult male greater sage-grouse was negatively affected by high summertime temperatures (i.e., higher survival rates occurred in years with relatively low maximum temperatures) (Blomberg *et al.* 2012, pp. 7, 9). In contrast, adult survival rates of Gunnison sage-grouse in the Gunnison Basin were not apparently influenced by drought conditions in 2005 (CPW 2013c, p. 9; Davis 2012, p. 55).

Drought conditions from 1999 through about 2003 (with residual effects lasting through about 2005) were closely associated with reductions in the sizes of all populations of Gunnison sage-grouse (CDOW 2009b, entire; CPW 2013c, p. 9) (Figures 2 and 3) and lower nest success (CPW 2013c, p. 2). The driest summer on record in the Gunnison Basin occurred in 2002 (Gunnison County 2013a, pp. 112, 141). Based on population trends from lek count data, the Gunnison Basin population declined by about 30 percent from 2001 to 2003, but has since rebounded to pre-drought numbers (USFWS 2013c, p. 1; Figure 2). Therefore, larger populations of Gunnison sage-grouse may be capable of enduring moderate or severe, but relatively short-term, drought. However, to date, most of the smaller satellite populations have not rebounded from declines around that time (Figure 3). This information highlights the potential significance of drought and its influence on Gunnison sage-grouse

populations. It also indicates that resiliency is currently limited in the satellite populations (see Resiliency, Redundancy, and Representation). The small sizes of the satellite populations of Gunnison sage-grouse make them particularly sensitive to stochastic and demographic fluctuations, and this vulnerability is intensified by drought (GSRSC 2005, p. G–22).

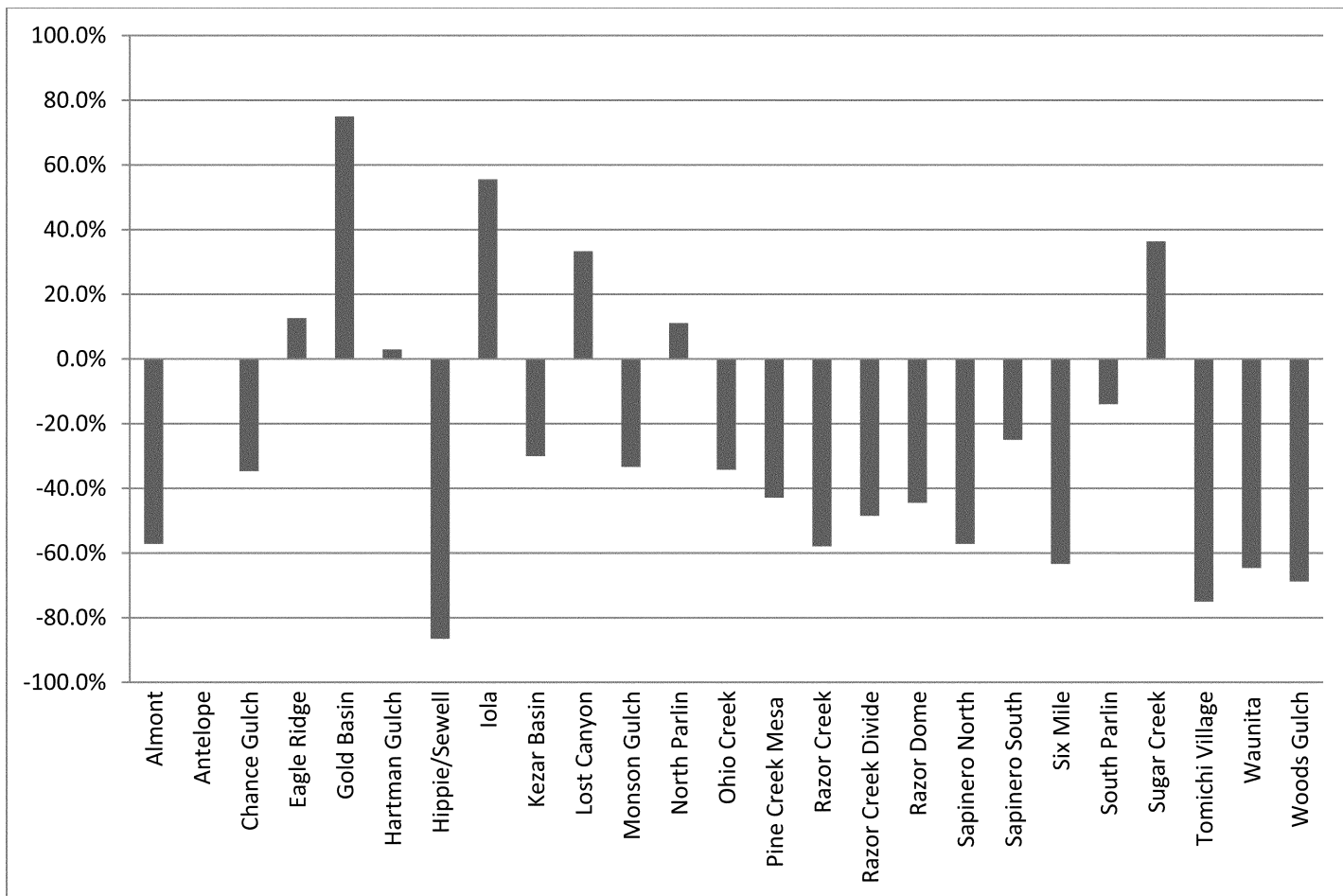
Overall, habitat appeared to be negatively affected by drought conditions across a broad area of the Gunnison sage-grouse's range from 1999 through about 2003, though those effects varied by population area (see our April 18, 2006, finding (71 FR 19954) for a detailed discussion). Defoliation and mortality of sagebrush plants, and the loss of grass and forb understories, was reported in 2003 across the range of Gunnison sage-grouse (GSRSC 2005, p. 143, and references therein), and in 2013 in the Gunnison Basin and Dry Creek Basin area of the San Miguel population (CPW 2013c, p. 10, and references therein). However, the reduction of sagebrush density, allowing for greater herbaceous growth and stimulating the onset of sagebrush seed crops, may have been beneficial to sagebrush habitats in certain areas over the long term (GSRSC 2005, p. 143; CPW 2013c, p. 10). Nonetheless, as indicated by declining Gunnison sage-grouse populations during and following drought periods, the negative impacts of drought appear to outweigh any positive effects.

The above information indicates that regional drought has operated at large enough scales to impact all populations of Gunnison sage-grouse. Furthermore, it appears that past drought has had broad-scale, measurable impacts on even the Gunnison Basin population, despite its larger geographic area and population size. Figure 4 below shows changes in high male sage-grouse counts at lek complexes in the Gunnison Basin from 2001 to 2003. Based on lek count data, the largest declines in the Gunnison Basin occurred during this time (Figure 2). Of 25 total lek complexes in the Gunnison Basin (not including leks where no birds were observed or where counts did not occur), approximately 68 percent declined from 2001 to 2003, including many of the larger complex areas with typically more birds. The largest lek complex in the Gunnison Basin, Ohio Creek, declined by about 34 percent, from 530 birds in 2001 to 348 birds in 2003 (USFWS 2013c, pp. 1–2). The eight lek complexes that remained stable or increased during this period (32 percent of total lek complexes) were typically smaller lek complexes with fewer birds

(Lost Canyon, Gold Basin, Iola, North Parlin, and Sugar Creek); or, if larger,

only minor increases in bird numbers were observed (Antelope, Hartman

Gulch, Eagle Ridge) (USFWS 2013c, p. 3).



^a Lek complex, or lek areas, are comprised of several geographically grouped or proximate leks.

^b Graph does not include lek complexes where no counts occurred or where zero birds were observed from 2001 to 2003. These include Cochetopa Dome, McCabe Lane, Needle Creek, Ninemile, and Willow Creek lek areas.

Figure 4. Change in High Male Counts at Lek Complexes^a in the Gunnison Basin From 2001 to 2003 (USFWS 2013c, pp. 1–2)^b

While geographic and microclimatic variation in the Gunnison Basin likely provides a degree of local variation and, perhaps, local population redundancy to resist environmental pressures, past drought had apparent widespread impacts on this population, as indicated by negative trends in the majority of lek complexes during that time. This suggests that population redundancy in the Gunnison Basin is limited, and is inadequate at the landscape scale necessary to withstand more substantial environmental pressures such as prolonged drought, climate change effects, disease, or a combination of those threats. The drought from 2001 to 2003 was severe but relatively short in duration. More severe, prolonged, or frequent drought would likely have more serious impacts. The species' apparent sensitivity to drought effects in all populations, including the Gunnison Basin and across most lek complexes in that population, suggests the species would have limited capacity to withstand or adapt to more significant drought and the interacting effects of climate change, disease, and other threats. Drought is also discussed under the Climate Change (Factor A); and Resiliency, Redundancy, and Representation (Factor E) sections.

Harsh or severe winters appear to have minimal influence on Gunnison sage-grouse survival. Davis (2012, p. 55) evaluated the effect of harsh winter conditions (as indicated by above normal snow depth) on adult and yearling survival rates in the Gunnison Basin and San Miguel populations. The winter of 2007 to 2008 was one of the most severe winters on record in the Gunnison Basin, with snow depths that exceeded records for all but 2 winters in the last 50 years (CPW 2013c, p. 2; Gunnison County 2013a, p. 112). Severe winter conditions during 2007 and 2008 in the Gunnison Basin, and during 2009 and 2010 in the San Miguel Basin, had minimal effect on Gunnison sage-grouse survival in both populations; and, in the Gunnison Basin, the highest nesting success during the study was observed the following spring (Davis (2012, p. 55; CPW 2013c, p. 2).

Data are not available to evaluate whether the observed population declines are due to drought alone. Drought likely intensifies other stressors such as predation (Factor C), invasive plants (Factor A), and fire (Factor A). However, based on the best available information, drought has contributed to substantial declines in all Gunnison sage-grouse populations. Therefore, we conclude that drought is a substantial threat to Gunnison sage-grouse

rangewide, both now and into the future.

Recreation

Nonconsumptive recreational activities can degrade wildlife resources, water, and the land by distributing refuse, disturbing and displacing wildlife, increasing animal mortality, and simplifying plant communities (Boyle and Samson 1985, pp. 110–112). Sage-grouse response to disturbance may be influenced by the type of activity, recreationist behavior, predictability of activity, frequency and magnitude, timing, and activity location (Knight and Cole 1995, p. 71). We do not have any published literature concerning measured direct effects of recreational activities on Gunnison or greater sage-grouse, but can infer potential impacts on Gunnison sage-grouse from studies on related species and from research on nonrecreational activities. Displacement of male sharp-tailed grouse has been reported at leks due to human presence, resulting in loss of reproductive opportunity during the time of disturbance (Baydack and Hein 1987, p. 537). Female sharp-tailed grouse were observed at undisturbed leks while absent from disturbed leks during the same time period (Baydack and Hein 1987, p. 537). Disturbance of incubating female sage-grouse could cause displacement from nests, increased predator risk, or loss of nests. Disruption of sage-grouse during vulnerable periods at leks, or during nesting or early brood-rearing could affect reproduction or survival (Baydack and Hein 1987, pp. 537–538).

Recreational use of off-highway vehicles (OHVs) is one of the fastest-growing outdoor activities. In the western United States, greater than 27 percent of the human population used OHVs for recreational activities between 1999 and 2004 (Knick *et al.* 2011, p. 217). Knick *et al.* (2011, p. 219) reported that widespread motorized access for recreation facilitated the spread of predators adapted to humans and the spread of invasive plants. Any high-frequency human activity along established corridors can affect wildlife through habitat loss and fragmentation (Knick *et al.* 2011, p. 219). The effects of OHV use on sagebrush and sage-grouse have not been directly studied (Knick *et al.* 2011, p. 216). However, Gunnison sage-grouse local working groups and conservation plans considered recreational uses, such as off-road vehicle use and biking, to be a risk factor in many areas (see Factor D discussion, Multi-County and Rangewide Efforts).

Recreation from OHVs, hikers, mountain bikes, campers, snowmobiles, bird watchers, and other sources has affected many parts of the range, especially portions of the Gunnison Basin and Piñon Mesa population areas (BLM 2005a, p. 14; BLM 2005d, p. 4; BLM 2009a, p. 36). These activities can result in abandonment of lekking activities and nest sites by Gunnison sage-grouse, energy expenditure reducing survival, and greater exposure to predators (GSRSC 2005).

Recreation is a significant use on lands managed by BLM (Connelly *et al.* 2004, p. 7–26). For example, recreational activities within the Gunnison Basin are widespread, occur during all seasons of the year, and have expanded as more people move to the area or travel there to recreate (BLM 2009a, pp. 36–37). Four wheel drive, OHV, motorcycle, and other mechanized travel has been increasing rapidly. The number of annual OHV registrations in Colorado increased from 12,000 in 1991 to 131,000 in 2007 (BLM 2009a, p. 37). Recreational activities can have direct and indirect impacts to the Gunnison sage-grouse and their habitat (BLM 2009a, p. 36). The Grand Mesa, Uncompaghere, and Gunnison (GMUG) National Forest is the fourth most visited National Forest in the Rocky Mountain Region of the USFS (Region 2), and is the second most heavily visited National Forest on the western slope of Colorado (DEIS Gunnison Basin Federal Lands Travel Management 2009, p. 137). However, it is unknown what percentage of the visits occurs within Gunnison sage-grouse habitat on the Gunnison Ranger District (DEIS Gunnison Basin Federal Lands Travel Management 2009, p. 137). With human populations expected to increase in towns and cities within and adjacent to the Gunnison Basin and nearby populations (see Factor A analysis), the impacts to Gunnison sage-grouse from recreational use will continue to increase.

The BLM, USFS, CPW, and Gunnison County currently close 36 roads at 47 closure points in the Gunnison Basin to all motorized traffic from March 15 to May 15 to minimize impacts during the breeding season. Six road closures by the USFS extend to June 15 to protect nesting Gunnison sage-grouse. These closures limit motorized access to all known leks and adjacent habitats on public lands in the Gunnison Basin (Gunnison County 2013a, pp. 78, 127). While road closures may be violated in a small number of situations, road closures are having a beneficial effect on Gunnison sage-grouse through avoidance or minimization of impacts

during the breeding season.

Conservation measures from the CCA (BLM 2013b, entire), including road closure and reclamation, seasonal road closures, and over-snow travel area closures during severe winters, are expected to ameliorate impacts from some recreational activities on Federal lands in the Gunnison Basin (see Conservation Programs and Efforts Related to Habitat Conservation section in Factor A for more details).

Dispersed camping occurs at a low level on public lands in all of the population areas, particularly during the hunting seasons for other species. However, we have no information indicating that these camping activities are impacting Gunnison sage-grouse.

Domestic dogs accompanying recreationists or associated with residences can disturb, harass, displace, or kill Gunnison sage-grouse. Dogs, whether under control, on leash, or loose, have been shown to result in significant disturbance responses by various wildlife species (Sime 1999, entire, and references therein). The primary consequence of dogs being off leash is harassment, which can lead to physiological stress as well as the separation of adult and young birds, or flushing incubating birds from their nest. However, we have no data indicating that this activity is impacting Gunnison sage-grouse populations.

Recreational activities as discussed above do not singularly pose a threat to Gunnison sage-grouse. However, there may be certain situations where recreational activities are impacting local concentrations of Gunnison sage-grouse, especially in areas where habitat is already fragmented such as in the six satellite populations and in certain areas within the Gunnison Basin.

Pesticides and Herbicides

Insects are an important component of sage-grouse chick and juvenile diets (GSRSC 2005, p. 132 and references therein). Insects, especially ants (Hymenoptera) and beetles (Coleoptera), can comprise a major proportion of the diet of juvenile sage-grouse and are important components of early brood-rearing habitats (GSRSC 2005, p. 132 and references therein). Most pesticide applications are not directed at control of ants and beetles. Insecticides are used primarily to control insects causing damage to cultivated crops on private lands and to control grasshoppers (Orthoptera) and Mormon crickets (*Mormonius sp.*) on public lands.

Form studies have examined the effects of pesticides to sage-grouse, but at least two pesticides have caused direct mortality of greater sage-grouse as a

result of ingestion of alfalfa sprayed with organophosphorus insecticides (Blus *et al.* 1989, p. 1142; Blus and Connelly 1998, p. 23). In one case, a field of alfalfa was sprayed with methamidophos and dimethoate when approximately 200 greater sage-grouse were present; 63 of these sage-grouse were later found dead, presumably as a result of insecticide exposure (Blus *et al.* 1989, p. 1142, Blus and Connelly 1998, p. 23). Both methamidophos and dimethoate remain registered for use in the United States (Christiansen and Tate 2011, p. 125), but we found no further records of sage-grouse mortalities from their use. In another case in 1950, rangelands treated with toxaphene and chlordane bait to control grasshoppers in Wyoming resulted in game bird mortality of 23.4 percent (Christiansen and Tate 2011, p. 125). Forty-five greater sage-grouse deaths were recorded, 11 of which were most likely related to the insecticide (Christiansen and Tate 2011, p. 125, and references therein). Greater sage-grouse who succumbed to vehicle collisions and mowing machines in the same area also were likely compromised from insecticide ingestion (Christiansen and Tate 2011, p. 125). Neither toxaphene nor chlordane has been registered for grasshopper control since the early 1980's (Christiansen and Tate 2011, p. 125, and references therein) and thus they are not a threat to Gunnison sage-grouse.

Infestations of Russian wheat aphids (*Diuraphis noxia*) have occurred in Gunnison sage-grouse occupied range in Colorado and Utah (GSRSC 2005, p. 132). Disulfoton, a systemic organophosphate that is extremely toxic to wildlife, was routinely applied to over a million acres of winter wheat crops to control the aphids during the late 1980s. We have no data indicating there were any adverse effects to Gunnison sage-grouse (GSRSC 2005, p. 132). More recently, an infestation of army cutworms (*Euxoa auxiliaris*) occurred in Gunnison sage-grouse habitat along the Utah-Colorado State line. Thousands of acres of winter wheat and alfalfa fields were sprayed with insecticides such as permethrin, a chemical that is toxic to wildlife, by private landowners to control them (GSRSC 2005, p. 132), but again, we have no data indicating any adverse effects to Gunnison sage-grouse.

Game birds that ingested sublethal levels of insecticides have been observed exhibiting abnormal behavior that may lead to a greater risk of predation (Dahlen and Haugen 1954, p. 477; McEwen and Brown 1966, p. 609; Blus *et al.* 1989, p. 1141). Wild sharp-tailed grouse poisoned by malathion

and dieldrin exhibited depression, dullness, slowed reactions, irregular flight, and uncoordinated walking (McEwen and Brown 1966, p. 689). Although no research has explicitly studied the indirect levels of mortality from sublethal doses of insecticides (e.g., predation of impaired birds), it was inferred to be the cause of mortality among some study birds (McEwen and Brown 1966 p. 609; Blus *et al.* 1989, p. 1142; Connelly and Blus 1991, p. 4). Both Post (1951, p. 383) and Blus *et al.* (1989, p. 1142) located depredated sage-grouse carcasses in areas that had been treated with insecticides. Exposure to these insecticides may have predisposed sage-grouse to predation. Sage-grouse mortalities also were documented in a study where they were exposed to strychnine bait used to control small mammals (Ward *et al.* 1942 as cited in Schroeder *et al.* 1999, p. 16). While we do not have specific information on these effects occurring in Gunnison sage-grouse, the effects observed in greater sage-grouse can be expected if similar situations arise within Gunnison sage-grouse habitat.

Cropland spraying may affect populations that are not adjacent to agricultural areas, given the distances traveled by females with broods from nesting areas to late brood-rearing areas (Knick *et al.* 2011, p. 211). The actual footprint of this effect cannot be estimated, because the distances sage-grouse travel to get to irrigated and sprayed fields is unknown (Knick *et al.* 2011, p. 211). Similarly, actual mortalities from insecticides may be underestimated if sage-grouse disperse from agricultural areas after exposure.

Much of the research related to pesticides that had either lethal or sublethal effects on greater sage-grouse was conducted on pesticides that have been banned or have had their use restricted for more than 20 years due to their toxic effects on the environment (e.g., dieldrin). We currently do not have any information to show that the banned pesticides are having negative impacts to sage-grouse populations through either illegal use or residues in the environment. For example, sage-grouse mortalities were documented in a study where they were exposed to strychnine bait used to control small mammals (Ward *et al.* 1942 as cited in Schroeder *et al.* 1999, p. 16). According to the U.S. Environmental Protection Agency (EPA), above-ground uses of the rodenticide strychnine were prohibited in 1988 and those uses remain temporarily cancelled today. We do not know when, or if, above-ground uses will be permitted to resume. Currently, strychnine is registered for use only

below-ground as a bait application to control pocket gophers (*Thomomys* sp.; EPA 1996, p. 4). Therefore, the current legal use of strychnine baits is unlikely to present much of an exposure risk to sage-grouse. No information on illegal use, if it occurs, is available. We have no other information regarding mortalities or sublethal effects of strychnine or other banned pesticides on sage-grouse.

Although a reduction in insect population levels resulting from insecticide application can potentially affect nesting sage-grouse females and chicks (Willis *et al.* 1993, p. 40; Schroeder *et al.* 1999, p. 16), there is no information as to whether insecticides are impacting survivorship or productivity of the Gunnison sage-grouse.

Use of insecticides to control mosquitoes is infrequent and probably does not have detrimental effects on sage-grouse. Available insecticides that kill adult mosquitoes include synthetic pyrethroids such as permethrin, which are applied at very low concentrations and have very low vertebrate toxicity (Rose 2004). Organophosphates such as malathion have been used at very low rates to kill adult mosquitoes for decades, and are judged relatively safe for vertebrates (Rose 2004).

Herbicide applications can kill sagebrush and forbs important as food sources for sage-grouse (Carr 1968 *in* Call and Maser 1985, p. 14). The greatest impact resulting from a reduction of either forbs or insect populations is to nesting females and chicks due to the loss of potential protein sources that are critical for successful egg production and chick nutrition (Johnson and Boyce 1991, p. 90; Schroeder *et al.* 1999, p. 16). A comparison of applied levels of herbicides with toxicity studies of grouse, chickens, and other gamebirds (Carr 1968, *in* Call and Maser 1985, p. 15) concluded that herbicides applied at recommended rates should not result in sage-grouse poisonings.

In summary, historically insecticides have been shown to result in direct mortality of individuals, and also can reduce the availability of food sources, which in turn could contribute to mortality of sage-grouse. Despite the potential effects of pesticides, we could find no information to indicate that the use of these chemicals, at current levels, negatively affects Gunnison sage-grouse population numbers. Schroeder *et al.*'s (1999, p. 16) literature review found that the loss of insects can have significant impacts on nesting females and chicks, but those impacts were not detailed. Many of the pesticides that have been shown to have an effect on sage-grouse

have been banned in the United States for more than 20 years. We currently do not have any information to show that either the illegal use of banned pesticides or residues in the environment are presently having negative impacts to Gunnison sage-grouse populations. While the reduction in insect availability via insecticide application has not been documented to affect overall population numbers in sage-grouse, it appears that insect reduction, because of its importance to chick production and survival, could be having as yet undetected negative impacts in populations with low population numbers. At present, however, there is no information available to indicate that either herbicide or insecticide applications pose a threat to the species.

Contaminants

Gunnison sage-grouse exposure to various types of environmental contaminants may potentially occur as a result of agricultural and rangeland management practices, mining, energy development and pipeline operations, and transportation of materials along highways and railroads.

We expect that the number of sage-grouse occurring in the immediate vicinity of wastewater pits associated with energy development would be small due to the small amount of energy development within the species' range, the typically intense human activity in these areas, the lack of cover around the pits, and the fact that sage-grouse do not require free standing water. Most bird mortalities recorded in association with wastewater pits are water-dependent species (e.g., waterfowl), whereas dead ground-dwelling birds (such as the sage-grouse) are rarely found at such sites (Domenici 2008, pers. comm.). However, if the wastewater pits are not appropriately screened, sage-grouse may have access to them and could ingest water and/or become oiled while pursuing insects. If these birds then return to sagebrush cover and die, their carcasses are unlikely to be found as only the pits are surveyed.

A few gas and oil pipelines occur within the San Miguel population. Exposure to oil or gas from pipeline spills or leaks could cause mortalities or morbidity to Gunnison sage-grouse. Similarly, given the network of highways and railroad lines that occur throughout the range of the Gunnison sage-grouse, there is some potential for exposure to contaminants resulting from spills or leaks of hazardous materials being conveyed along these transportation corridors. We found no documented occurrences of impacts to

Gunnison sage-grouse from such spills, and we do not expect they are a significant source of mortality or threat to the species because these types of spills occur infrequently and may involve only a small area within the occupied range of the species.

Summary of Factor E: Other Natural or Manmade Factors

Based on the information above, we find that small population size and structure is a threat to the six satellite populations of Gunnison sage-grouse, both now and into the future. Although genetic consequences of low Gunnison sage-grouse population numbers have not been definitively detected to date, the results from Stiver *et al.* (2008, p. 479) suggest that six of the seven populations may have effective sizes low enough to induce genetic deterioration, and that all seven could be losing adaptive potential. While some of these consequences may be ameliorated by translocations, information indicates the long-term viability of Gunnison sage-grouse is compromised by this situation, particularly when combined with threats discussed in other Factors. Therefore, we have determined that genetics risks related to the small population size of Gunnison sage-grouse are a threat to the species.

Available PVAs for Gunnison sage-grouse have resulted in somewhat disparate findings, each with their own limitations or weaknesses. We found that Davis (2012, entire) represents the best available scientific information regarding the viability of Gunnison sage-grouse. This represents the longest and most current demographic study and population viability analysis for Gunnison sage-grouse. Based on that study, the Gunnison Basin and San Miguel populations, the two largest populations, are declining, with more pronounced declines in the latter (Davis 2012, p. 87). The survival and persistence of the San Miguel population, and likely the smaller satellite populations as well, appear to be at risk in the near future. Though we expect the Gunnison Basin population will persist longer than the satellite populations, Davis (2012, entire) indicated that its future viability is also at risk due to natural environmental and demographic fluctuations.

Small population size, declining population trends, and apparent isolation indicate long-term population persistence and evolutionary potential (i.e., resiliency) are compromised in the satellite populations. In general, while various natural factors would not limit sage-grouse populations across large

geographic scales under historical conditions or in larger populations, they may contribute to local population declines or extirpations when populations are small or when weather patterns, habitats, or mortality rates are altered. Multiple populations across a broad geographic area (population redundancy) provide insurance against catastrophic events, such as prolonged drought, and the aggregate number of individuals across all populations increases the probability of demographic persistence and preservation of overall genetic diversity by providing an important genetic reservoir (representation) (GSRSC 2005, p. 179). As discussed, viability of the six satellite populations is currently at risk, and those cover 37 percent of the species occupied range. Loss of as much as 37 percent of the species' occupied range would impact the species' overall viability. The cumulative effects of ongoing and future threats, such as habitat loss (Factor A) and drought (discussed above), will further contribute to declining and increasingly isolated populations and, ultimately, smaller population size and structure.

Based on the best available information, we determined that resiliency, redundancy, and representation in Gunnison sage-grouse are inadequate, or will be inadequate in the future, to ensure the species' long-term viability. The best available information indicates population redundancy, in particular, will be limited or compromised in the future, due to the probable extirpation of one or more satellite populations, thereby decreasing the species' chances of survival in the face of limiting factors. The rangewide cumulative effects of ongoing and future threats (see discussions in Factors A through C, and E) will further compromise resiliency, redundancy, and representation of the species. Current and future threats to the Gunnison Basin population (in particular, see Drought, Climate Change, and Disease sections) combined with the probable loss of one or more satellite populations and overall reduction of range indicate the long-term persistence of Gunnison sage-grouse is at risk.

While sage-grouse have evolved with drought, population trends suggest that drought is at least correlated with, and likely an underlying cause of, observed declines. We found that drought is a current and future threat to Gunnison sage-grouse. Based on the best available information, pesticides are being used infrequently enough and in accordance with manufacturer labeling such that they are not adversely affecting populations of the Gunnison sage-

grouse. The most likely impact of insecticides on Gunnison sage-grouse is the reduction of insect prey items. However, we could find no information to indicate that use of insecticides, in accordance with their label instructions, is a threat to Gunnison sage-grouse. We similarly do not have information indicating that contaminants, as described above, are a threat to the species.

Cumulative Effects From Factors A through E

Many of the threats described in this finding may cumulatively or synergistically impact Gunnison sage-grouse beyond the scope of each individual threat. For example, grazing practices inconsistent with local ecological conditions alone may only affect portions of Gunnison sage-grouse habitat. However, grazing practices inconsistent with local ecological conditions, combined with invasive plants, drought, and recreational activities may collectively result in substantial habitat decline across large portions of the species' range. In turn, climate change may exacerbate those effects, further diminishing habitat and increasing the isolation of already declining populations, making them more susceptible to genetic deterioration, disease, or catastrophic events such as drought and fire. Drought, a substantial threat to Gunnison sage-grouse rangewide, likely intensifies other threats such as predation, invasive plants, habitat loss, and fire. The impact of residential development is increased by the additional disturbance footprint and area of species' avoidance of other infrastructure such as roads, powerlines, and fences. Further, predation on Gunnison sage-grouse may increase as a result of the increase in human disturbance and development. The impact of residential development can be increased by other anthropogenic stressors resulting in habitat loss and decline, such as powerlines, roads, and other infrastructure. Numerous threats are likely acting cumulatively to further increase the likelihood that the species will become extinct in the future. The cumulative effects of ongoing and future threats (Factors A through E), and small and declining population size and structure, in particular, are likely to further reduce resiliency, redundancy, and representation of the species.

Determination

We have carefully assessed the best scientific and commercial information available regarding the past, present, and future threats to the Gunnison sage-

grouse. We consider the five factors identified in section 4(a)(1) of the Act in determining whether the Gunnison sage-grouse meets the Act's definition of an endangered species (section 3(6)) or a threatened species (section 3(20)).

Section 3 of the Act defines an "endangered species" as "any species which is in danger of extinction throughout all or a significant portion of its range," and defines a "threatened species" as "any species which is likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range." Although these statutory definitions are similar, there is a crucial temporal distinction between them. The statutory definition of an "endangered species," a species that "is in danger of extinction," connotes an established, present condition. The statutory definition of a "threatened species," a species that is "likely to become an endangered species within the foreseeable future," connotes a predicted or expected future condition. Thus, a key statutory difference between a threatened and endangered species is the time of when a species may be in danger of extinction, either now (endangered) or in the foreseeable future (threatened).

As a result of new information and comments received on the proposed rule, we have reconsidered our prior determination that the Gunnison sage-grouse is currently in danger of extinction and therefore meets the definition of an "endangered species" under the Act. This reconsideration focuses on the principal threat relied upon in the proposed rule, the threat to the species posed by current residential development and associated infrastructure, especially in the critical Gunnison Basin population area.

In the proposed rule, we reported that the results of a GIS analysis of parcel ownership and development in occupied habitat in Gunnison County indicated that the current level of residential development in this habitat was strongly decreasing the likelihood of Gunnison sage-grouse using 49 percent of this land area as nesting habitat. This analysis was based on a model indicating Gunnison sage-grouse tend to select nest sites in larger landscapes (1.5 km [0.9 mi] radii) with a low density of residential development (Aldridge 2012, p. 10). We considered the results of applying this modeling to the current level of residential development to be particularly concerning given the close link of nesting habitat to early brood rearing habitat and the sensitivity of the species population dynamics during these life history stages. In assessing the

risk posed by current levels of residential development, we also noted that the GSRSC (2005, pp. 160–61) hypothesized that residential density in excess of one housing unit per 1.3 km² (0.5 mi²) could cause declines in Gunnison sage-grouse populations, and that under this hypothesis residential development is limiting the species in approximately 18 percent of its habitat in Gunnison County.

Since our proposed listing rule, we reevaluated residential development and found it to be a current threat to the species as a whole, but that it is a lower magnitude threat to the Gunnison Basin population than we previously thought. Our reevaluation of residential development in the Gunnison Basin (Factor A above) found that human developments in occupied Gunnison sage-grouse habitat in Gunnison County occur and have increased over time. Our overall conclusion, however, was that current development in the Gunnison Basin population area is a threat of low magnitude to the persistence of this Gunnison sage-grouse population. The Gunnison Basin population is currently relatively stable, based on population trends since 1996. It is also the most important population for the species' survival with approximately 63 percent of occupied habitat, approximately 60 percent of the leks, and 84 percent of the rangewide population occurring in Gunnison Basin. Thus the current level of threat of residential development in the Gunnison Basin is not causing the rangewide population to trend towards extinction.

Based on the factors presented in the Residential Development Section above (Factor A), outside of the Gunnison Basin, residential development is likely to have the greatest impact on the San Miguel, Cerro Summit-Cimarron-Sims Mesa, and Poncha Pass populations of Gunnison sage-grouse. For the remaining three Gunnison sage-grouse populations, we found that current residential development may impact individual birds or areas of habitat, but is a threat of low magnitude at the population level at the present time. Although residential development is a current and future threat to the San Miguel, Cerro Summit-Cimarron-Sims Mesa, and Poncha Pass populations, we do not believe that it is a significant threat to the species rangewide such that it meets the definition of an endangered species.

We find that the other factors that we identified as threats in the proposed rule (inadequate regulatory mechanisms, genetic issues and small population sizes, predation, improper grazing management, and the

interaction among climate change, invasive plants and drought/weather) are still current threats to the species, but when considered individually and cumulatively with other current threats (including the lower level of the threat of development to the Gunnison Basin population), they do not support a finding that the species is currently in danger of extinction. Based on the preceding analysis, we have determined that Gunnison sage-grouse is not an endangered species as defined in the Act.

However, considering both our analysis of the species' status here and in the proposed listing rule, and new information and comments received following publication of the proposed rule, we find that Gunnison sage-grouse qualifies as a threatened species under the Act because it is likely to become in danger of extinction throughout all of its range in the foreseeable future.

The Act does not define the term "foreseeable future." In a general sense, the foreseeable future is the period of time over which events can reasonably be anticipated. In the context of the definition of "threatened species," the Service interprets the foreseeable future as the extent of time over which the Secretary can reasonably rely on predictions about the future in making determinations about the future conservation status of the species. It is important to note that references to "reliable predictions" are not meant to refer to reliability in a statistical sense of confidence or significance; rather the words "rely" and "reliable" are intended to be used according to their common, non-technical meanings in ordinary usage. In other words, we consider a prediction to be reliable if it is reasonable to depend upon it in making decisions, and if that prediction does not extend past the support of scientific data or reason so as to venture into the realm of speculation.

In considering threats to the species and whether they rise to the level such that listing the species as a threatened or endangered species is warranted, we assess factors such as the imminence of the threat (is it currently affecting the species or, if not, when do we expect the effect from the threat to commence, and whether it is reasonable to expect the threat to continue into the future), the scope or extent of the threat, the severity of the threat, and the synergistic effects of all threats combined. If we determine that the species is not currently in danger of extinction, then we must determine whether, based upon the nature of the threats, it is reasonable to anticipate that the species may become in danger of extinction

within the foreseeable future. As noted in the 2009 Department of the Interior Solicitor's opinion on foreseeable future, "in some cases, quantifying the foreseeable future in terms of years may add rigor and transparency to the Secretary's analysis if such information is available. Such definitive quantification, however, is rarely possible and not required for a foreseeable future analysis" (M-37021, January 16, 2009; p. 9). In some specific cases where extensive data are available to allow for the modeling of extinction probability over various time periods (e.g., the PVAs performed on the Gunnison sage-grouse), the Service has provided quantitative estimates of what may be considered to constitute the foreseeable future.

We consider foreseeable future in this final rule to be 40–60 years based on the following:

(1) The most current and comprehensive demographic study and population viability analysis (Davis 2012). In contrast to the RCP PVA described below, this study exclusively used demographic information from Gunnison sage-grouse and included environmental stochastic factors such as fire, disease, and drought. This analysis was done for the Gunnison Basin (2005–2010) and the San Miguel populations (2007–2010), the two largest populations (Davis 2012, entire). The study concluded that the small San Miguel Basin population had a high probability (53 percent chance) of going extinct in the next 30 years. For the Gunnison Basin population, the model found a minimum extinction time of 31 years and a mean extinction time of 58 years, based on a six-year data set during a period with a slightly declining population. However, because the study occurred during a drought period and the overall population declined during this period, which is inconsistent with the long-term record of stability for this population, we are also utilizing the RCP PVA in our consideration of the foreseeable future.

(2) A second population viability analysis done in conjunction with the RCP. This PVA found that small populations of birds (< 25 and 25 to 50 birds) are at a high risk of extinction within the next 50 years (2055) with an 86 percent and 59 percent chance of extinction respectively (GSRSC 2005, pp. 170 and G-27). For the Gunnison Basin population, this PVA found the probability of extinction in the next 50 years was less than 1 percent (GSRSC 2005, p. G-21).

(3) The Gunnison Basin Climate Change Vulnerability Assessment (The Nature Conservancy (TNC) *et al.* 2011,

p. 4), which uses a timeframe of 50 years to project the likely effects of climate change in the Gunnison Basin.

As noted in the proposed listing rule, we anticipate that current threats to the species will increase over time throughout the species' range. Based on the analysis of the listing Factors A–E described above, we now find that the Gunnison sage-grouse is “likely to become endangered throughout all or a significant portion of its range within the foreseeable future” based on the following continuing, new, and increasing threats, which are acting on the species individually and cumulatively, contributing to the challenges faced by Gunnison sage-grouse in the foreseeable future:

(1) Small population size and population structure (Factor E) occur in all of the six satellite populations, or across approximately 37 percent of occupied range for the species. Without concerted management effort, one or more of the satellite populations are likely to go extinct in the next 50 years. Satellite populations are isolated and small, with generally declining trends, low resilience, and low genetic diversity. The small sizes of the satellite populations of Gunnison sage-grouse make them particularly sensitive to stochastic and demographic fluctuations, and this vulnerability is exacerbated by other threats such as drought. Having multiple populations across a broad geographic area (population redundancy) is needed to provide insurance against such catastrophic events.

(2) Gunnison sage-grouse require large areas of sagebrush for long-term persistence, and thus are affected by factors that occur at the landscape scale. Habitat decline, including habitat loss, degradation, and fragmentation of sagebrush habitats (Factor A), is a primary cause of the decline of Gunnison sage-grouse populations. Habitat loss due to residential and infrastructural development (including roads, powerlines, and fences) is a significant threat to Gunnison sage-grouse across its range. Due to habitat decline, the seven individual populations are now mostly isolated, with limited migration and gene flow among populations, increasing the likelihood of population extirpations.

a. Thirty-two percent of occupied Gunnison sage-grouse habitat rangewide is at risk of residential development (Factor A). Residential development is a substantial risk to the San Miguel, Poncha Pass, and Cerro-Cimarron-Sims populations, and the effects of residential development will likely reduce connectivity among satellite

populations and potential connectivity between the Gunnison Basin and satellite populations to the west.

Although our reevaluation found the threat of current residential development in the Gunnison Basin to be of a lower magnitude than previously thought, we believe that the level of impact and threat from residential development will increase in the Gunnison Basin population in the future.

The collective influences of fragmentation and disturbance from roads (Factor A) reduce the amount of effective habitat, as roads are largely avoided by sage-grouse. Powerlines and fences (Factor A) also fragment habitat and are avoided by sage-grouse. They are also sources of direct mortality through strikes, electrocution, and by attracting and increasing the predator population.

(3) Drought (Factor E) has contributed to substantial declines in all Gunnison sage-grouse populations. Drought likely intensifies other stressors such as predation, invasive plants, and fire. Based on the best available information, we concluded that drought is a substantial threat to Gunnison sage-grouse rangewide, both now and into the future.

(4) Warming is occurring more rapidly in the southwestern region of the United States, including western Colorado, than elsewhere in the country. Based on the best available information on climate change projections over the next 35 years or so, climate change (Factor A) has the potential to alter important seasonal habitats and food resources of Gunnison sage-grouse, the distribution and extent of sagebrush, and the occurrence of invasive weeds and associated fire frequencies. Climate change effects, including increased drought, are predicted in all populations.

(5) West Nile virus (Factor C) is present throughout most of the range of Gunnison sage-grouse. Although the disease has not yet been documented in any Gunnison sage-grouse, it has caused large mortality events and has also caused the deaths of other gallinaceous birds including greater sage-grouse. The effects of drought and increased temperatures will contribute to the prevalence and spread of West Nile virus and, therefore, the exposure of Gunnison sage-grouse to this disease. We concluded that West Nile virus is a future threat to Gunnison sage-grouse rangewide.

(6) The Davis PVA (2012) is the most current and comprehensive demographic study and population viability analysis. This study

exclusively used demographic information from Gunnison sage-grouse and incorporated environmental stochasticity (variability in population growth rates due to external factors such as weather, fire, disease, and predation) and demographic stochasticity (variability in population growth rates due to survival and reproduction rates). Model simulations predicted population declines in the future (Davis 2012, pp. 105–106). Combining the six years of demographic data (2005 to 2010) from both populations, environmental stochastic simulations resulted in a minimum extinction time of 31 years and a mean or expected extinction time in this PVA of 58 years. Although this model shows that the extinction probability for the Gunnison Basin population is farther into the future, it still supports a determination that the species is likely to become endangered in the foreseeable future.

(7) We have found the above-listed factors to be significant threats that are acting on Gunnison sage-grouse populations rangewide and collectively are likely to increase over time. We further examined whether these threats to the Gunnison sage-grouse are adequately addressed by existing regulatory mechanisms (Factor D). We evaluated the adequacy of existing local, State, and Federal plans, laws, and regulations currently in place across the range of the species and determined that while they will help to reduce the negative effects of human development and infrastructure on Gunnison sage-grouse in some respects, and that continuation of these efforts across the species' range will be necessary for conservation of the species, cumulatively the existing regulatory mechanisms are not being appropriately implemented such that land-use practices result in habitat conditions that adequately support the life-history needs of the species. Existing plans, laws, and regulations are not effective at ameliorating the threats resulting from small population size and structure, habitat decline, drought, climate change, and disease as discussed above. Further, while these regulatory mechanisms may help reduce current threats to the species, they are insufficient to fully reduce or eliminate the increase in threats that may act on the species in the future.

(8) Other current and future threats to the species identified in this final rule, including grazing management inconsistent with local ecological conditions, fences, invasive plants, fire, mineral development, piñon-juniper encroachment, large scale water development (all in Factor A); predation

(primarily associated with anthropogenic disturbance and habitat decline)(Factor C); and recreation (Factor E) are acting at a more localized level, and while individually may affect some populations more than others, they do not individually or cumulatively rise to the level of a significant rangewide threat. However, the current impacts of these threats do contribute to the overall status of the species as “likely to become endangered in the foreseeable future”. As discussed under the Threat Factors sections above, we also expect that many of these threats will increase in the future.

Summary of the Threatened Determination

In summary, multiple threats affecting Gunnison sage-grouse and its habitat are occurring and interacting synergistically, resulting in increasingly fragmented habitat and other threats. We expect all of these threats to increase in the future. The components of human infrastructure, once present on the landscape, become virtually permanent features, fragmenting sagebrush habitats, and resulting in the reduction or elimination of proactive and effective management alternatives. We anticipate other threats such as drought, climate change, invasive species, and fire frequency to increase in the future and to act synergistically to become greater threats to Gunnison sage-grouse. We anticipate renewable energy development, particularly geothermal and wind energy development, to increase in some population areas. Taken cumulatively, the ongoing and future habitat-based impacts in all populations will likely act to fragment and further isolate populations of the Gunnison sage-grouse. As these threats increase, one or more of the satellite populations are likely to go extinct due to small population size, genetic factors, and stochastic environmental events and the remaining populations will become in danger of extinction.

Therefore, we find that Gunnison sage-grouse is likely to become endangered throughout all of its range in the foreseeable future, and thus is a threatened species as defined by the Act.

As noted above, in determining that Gunnison sage-grouse is a threatened species, we also considered ongoing conservation efforts and existing regulatory mechanisms. Based on the best available information (Factor A and Factor D), such conservation efforts are not currently adequate to address the full scope of threats to Gunnison sage-grouse, particularly habitat loss and decline, small population size and

structure, drought, climate change, and disease. While some efforts have provided conservation benefits at the rangewide scale, such as the CCAA and CEs, these and other conservation efforts are limited in scope and therefore limited in their ability to effectively reduce or remove the threats to the species and its habitat across its range. Thus, although ongoing conservation efforts are a positive step toward conserving Gunnison sage-grouse, and some have undoubtedly reduced the severity of certain threats to the species, on the whole we find that current conservation efforts are not sufficient to offset the full scope of threats to Gunnison sage-grouse or prevent the increase in threats that result in the species likely becoming in danger of extinction in the foreseeable future. Therefore, we cannot conclude that the species is not warranted for listing.

Therefore, on the basis of the best available scientific and commercial information, we are listing Gunnison sage-grouse as threatened in accordance with sections 3(20) and 4(a)(1) of the Act.

The Gunnison sage grouse is restricted in its range and the threats occur throughout its range. Therefore, we assessed the status of the species throughout its entire 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. Because we have determined that Gunnison sage-grouse is threatened throughout all of its range, no portion of its range can be “significant” for purposes of the definitions of “endangered species” and “threatened species.” See the Final Policy on Interpretation of the Phrase “Significant Portion of Its Range” in the Endangered Species Act’s Definitions of “Endangered Species” and “Threatened Species” (79 FR 37577).

Available Conservation Measures

Conservation measures provided to species listed as endangered or threatened under the Act include recognition, recovery actions, requirements for Federal protection, and prohibitions against certain practices. Recognition through listing results in public awareness and conservation by Federal, State, Tribal, and local agencies, private organizations, and individuals. The Act encourages cooperation with the States and requires that recovery actions be carried out for all listed species. The protection required by Federal agencies and the prohibitions against certain activities are discussed, in part, below.

The primary purpose of the Act is the conservation of endangered and threatened species and the ecosystems upon which they depend. The ultimate goal of such conservation efforts is the recovery of these listed species, so that they no longer need the protective measures of the Act. Subsection 4(f) of the Act requires the Service to develop and implement recovery plans for the conservation of endangered and threatened species. The recovery planning process involves the identification of actions that are necessary to halt or reverse the species’ decline by addressing the threats to its survival and recovery. The goal of this process is to restore listed species to a point where they are secure, self-sustaining, and functioning components of their ecosystems.

Recovery planning includes the development of a recovery outline shortly after a species is listed, and preparation of a draft and final recovery plan. The recovery outline guides the immediate implementation of urgent recovery actions and describes the process to be used to develop a recovery plan. The recovery plan identifies site-specific management actions that set a trigger for a review of the five factors that control whether a species remains endangered or threatened or may be downlisted or delisted, and methods for monitoring recovery progress. Revisions of the plan may be made to address continuing or new threats to the species, as new substantive information becomes available. Incorporating or adapting components of the Gunnison sage-grouse RCP for a recovery outline will be considered. Recovery plans also establish a framework for agencies to coordinate their recovery efforts and provide estimates of the cost of implementing recovery tasks. Recovery teams (composed of species experts, Federal and State agencies, nongovernmental organizations, and stakeholders) are often established to develop recovery plans. When completed, the recovery outline, draft recovery plan, and the final recovery plan will be available on our Web site (<http://www.fws.gov/endangered>), or from our Western Colorado Field Office (see **FOR FURTHER INFORMATION CONTACT**).

Implementation of recovery actions generally requires the participation of a broad range of partners, including other Federal agencies, States, Tribes, nongovernmental organizations, businesses, and private landowners. Examples of recovery actions include habitat restoration (e.g., restoration of native vegetation), research, captive propagation and reintroduction, and outreach and education. The recovery of

many listed species cannot be accomplished solely on Federal lands because their range may occur primarily or solely on non-Federal lands. To achieve recovery of these species requires cooperative conservation efforts on private, State, and Tribal lands.

Funding for recovery actions may be available from a variety of sources, including Federal budgets, State programs, and cost share grants for non-Federal landowners, the academic community, and nongovernmental organizations. In addition, pursuant to section 6 of the Act, the States of Colorado and Utah will be eligible for Federal funds to implement management actions that promote the protection and recovery of the Gunnison sage-grouse. 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 this species. Additionally, we invite you to submit any new information on this species whenever it becomes available and any information you may have for recovery planning purposes (see **FOR FURTHER INFORMATION CONTACT**).

Section 7(a) of the Act requires Federal agencies to evaluate their actions with respect to any species that is proposed or listed as endangered or threatened and with respect to its critical habitat, if any is designated. Regulations implementing this interagency cooperation provision of the Act are codified at 50 CFR part 402. When a species is listed, section 7(a)(2) of the Act requires Federal agencies to ensure that activities they authorize, fund, or carry out are not likely to jeopardize the continued existence of the species or destroy or adversely modify its critical habitat. If a Federal action may affect a listed species or its critical habitat, the responsible Federal agency must enter into consultation with the Service.

Federal agency actions within the species' habitat that may require consultation as described in the preceding paragraph include management and any other landscape-altering activities on Federal lands administered by the Bureau of Land Management, U.S. Forest Service, and National Park Service; issuance of section 404 Clean Water Act permits by the Army Corps of Engineers; construction and management of gas pipeline and power line rights-of-way by the Federal Energy Regulatory Commission; and construction and

maintenance of roads or highways by the Federal Highway Administration.

The Act and its implementing regulations set forth a series of general prohibitions and exceptions that apply to all endangered and threatened wildlife. The prohibitions of section 9(a)(2) of the Act, codified at 50 CFR 17.21 for endangered wildlife, in part, make it illegal for any person subject to the jurisdiction of the United States to take (includes harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect; or to attempt any of these), import, export, ship in interstate commerce in the course of commercial activity, or sell or offer for sale in interstate or foreign commerce any listed species. Under the Lacey Act (18 U.S.C. 42–43; 16 U.S.C. 3371–3378), it is also illegal to possess, sell, deliver, carry, transport, or ship any such wildlife that has been taken illegally. Certain exceptions apply to agents of the Service and State conservation agencies.

We may issue permits to carry out otherwise prohibited activities involving endangered and threatened wildlife species under certain circumstances. Regulations governing permits are codified at 50 CFR 17.22 for endangered species, and at 17.32 for threatened species. With regard to endangered wildlife, a permit must be issued for the following purposes: for scientific purposes, to enhance the propagation or survival of the species, and for incidental take in connection with otherwise lawful activities.

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 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) Actions that would result in the loss of sagebrush overstory plant cover or height. Such activities could include, but are not limited to, the removal of native shrub vegetation by any means for any infrastructure construction project; direct conversion of sagebrush

habitat to agricultural land use; habitat improvement or restoration projects involving mowing, brush-beating, Dixie harrowing, disking, plowing, Tebuthiuron (Spike) and other herbicide applications, or prescribed burning; and fire suppression activities.

(3) Actions that would result in the loss or reduction in native herbaceous understory plant cover or height, and a reduction or loss of associated arthropod communities. Such activities could include, but are not limited to, livestock grazing, the application of herbicides or insecticides, prescribed burning and fire suppression activities; and seeding of nonnative plant species that would compete with native species for water, nutrients, and space.

(4) Actions that would result in Gunnison sage-grouse avoidance of an area during one or more seasonal periods. Such activities could include, but are not limited to, the construction of vertical structures such as power lines, fences, communication towers, buildings; motorized and non-motorized recreational use; and activities such as well drilling, operation, and maintenance, which would entail significant human presence, noise, and infrastructure.

Questions regarding whether specific activities would constitute a violation of section 9 of the Act should be directed to the Western Colorado Field Office (see **FOR FURTHER INFORMATION CONTACT**). Requests for copies of the regulations concerning listed animals and general inquiries regarding prohibitions and permits may be addressed to the U.S. Fish and Wildlife Service, Endangered Species Permits, Denver Federal Center, P.O. Box 25486, Denver, Colorado, 80225–0489 (telephone (303) 236–4256; facsimile (303) 236–0027).

Under section 4(d) of the ESA, the Secretary has discretion to issue such regulations as he deems necessary and advisable to provide for the conservation of threatened species. Our implementing regulations (50 CFR 17.31) for threatened wildlife generally incorporate the prohibitions of section 9 of the Act for endangered wildlife, except when a “special rule” promulgated pursuant to section 4(d) of the Act has been issued with respect to a particular threatened species. In such a case, the general prohibitions in 50 CFR 17.31 would not apply to that species, and instead, the special rule would define the specific take prohibitions and exceptions that would apply for that particular threatened species, which we consider necessary and advisable to conserve the species. The Secretary also has the discretion to prohibit by regulation with respect to a

threatened species any act prohibited by section 9(a)(1) of the ESA. Exercising this discretion, which has been delegated to the Service by the Secretary, the Service has developed general prohibitions that are appropriate for most threatened species in 50 CFR 17.31 and exceptions to those prohibitions in 50 CFR 17.32. We continue to evaluate the appropriateness of issuing a special rule for the Gunnison sage-grouse in the future.

Conservation Measures for Gunnison Sage-Grouse Recovery

We want to work cooperatively with and to support the ongoing conservation efforts of the many public and private partners across the range. Our desire is to build on the important existing conservation efforts of many partners to bring the species to a point where listing will no longer be necessary.

In 2005, the Gunnison sage-grouse Range-wide Conservation Plan (RCP) (Gunnison Sage-grouse Rangewide Steering Committee 2005) identified conservation actions for the Gunnison sage-grouse. In 2013, the counties belonging to the County Coalition for Gunnison sage-grouse indicated that they would work with Colorado Parks & Wildlife (CPW) to update and revise the RCP in the near future to better reflect best available science and conservation progress made to date. Our partners, the counties, and the public asked the Service for our perspective on what conservation actions would be necessary to conserve the Gunnison sage-grouse. In advance of the revision of the RCP, and in advance of recovery planning for the species, the Service gathered the best available information and conferred with our partners to outline conservation recommendations that, if achieved, would improve the Service's confidence in the conservation of Gunnison sage-grouse. The conservation recommendations identified here are intended to update, modify, and build on the conservation strategies in the 2005 RCP and to be discussed in the context of an upcoming revision to the RCP. The approach and actions identified in this section, if completed, would help increase the satellite populations' redundancy to the Gunnison Basin population, thereby increasing the resiliency of the species. The Service further recommends that a recovery strategy include population and habitat targets for the Gunnison Basin and the satellite populations using a scientifically defensible, peer-reviewed approach.

Targeting Satellite Populations for Conservation Efforts

The Gunnison Basin is the largest population (approximately 3,978 birds in 2014) and, while showing variation from 1996 to 2014, has been relatively stable. However, redundancy to the Gunnison Basin population is a necessary element to have confidence in the conservation of the Gunnison sage-grouse. Confidence in redundancy provided by a satellite population is based on whether the satellite population is able to withstand perturbations and recover and persist. We recommend developing a recovery strategy that will be built around the resilience of multiple satellite populations to provide redundancy to the Gunnison Basin population.

The total abundance of Gunnison sage-grouse is an important indicator of species-level resiliency. Of the six satellite populations, Poncha Pass and Cerro Summit-Cimarron-Sims Mesa have very low population numbers to the extent that their potential to provide redundancy would be very limited without extraordinary conservation actions taking place over a long period of time. Therefore, to maximize the potential to achieve resilience in the satellite populations that would provide redundancy to the Gunnison Basin population, our initial recommendations for conservation measures focus on the Piñon Mesa, Crawford, San Miguel, and Dove Creek-Monticello satellite populations. In addition, the Service agrees with the RCP assertion that the Cerro Summit-Cimarron-Sims Mesa area is needed for the conservation of Gunnison sage-grouse, as it has and should continue to provide an important habitat linkage to the other satellite populations. However, the Service recommends focusing limited conservation resources on the four larger satellite populations while still protecting the Cerro Summit-Cimarron-Sims Mesa area. This approach should yield the quickest conservation results and improve the resilience of the species as a whole.

Summary of Service Recommendations

As soon as possible, we want to work with CPW and UDWR to convene science experts to identify targets for population numbers, habitat acreage, sagebrush cover, and limiting factors for the above-identified satellite populations. Development of the targets will guide recovery efforts and improve confidence in the conservation of the species as they are achieved.

Overarching Conservation Objectives

We recommend protections that should apply rangewide and could be achieved on Federal and non-Federal lands.

Protection of Gunnison Sage-Grouse Habitat That Is Currently Occupied, or That Becomes Occupied Through Future Expansion

Any further loss of habitat quality or quantity of habitat will decrease the long-term viability of Gunnison sage-grouse. In addition, current occupied habitat is not of sufficient quality or quantity to provide confidence in conservation of the Gunnison sage-grouse. Therefore the goal should be to protect all habitat that is occupied or that becomes occupied through future expansion from future loss and/or degradation, including temporary degradation related to indirect impacts of surface occupancy and/or disruptive activities.

A 4-mile restriction on surface disturbance (e.g. No Surface Occupancy) for all surface-disturbing activities around a lek should be enforced. If there are circumstances that preclude No Surface Occupancy within 4 miles around a lek, such as existing disturbances, disruptive activities, or valid existing fluid or locatable mineral rights in occupied habitat, permitted activities should follow the mitigation hierarchy of avoiding impact to the degree possible, minimizing impact, and providing compensatory mitigation to offset any unavoidable impacts. In addition, for those areas where No Surface Occupancy is precluded, the following recommendations apply:

- Limit permitted surface disturbances to 1 per section with no more than 3 percent surface disturbance, factoring in existing and new impacts, in that section.

Protect breeding habitat and leks from future loss and/or degradation, including temporary degradation related to indirect impacts of surface occupancy and/or disruptive activities.

- Leks and the area within 0.6 miles must be avoided and protected from surface occupancy and disruptive activities.

- If avoidance and/or disturbance is not possible due to pre-existing valid rights, adjacent development, or split estate issues, development and/or disruptive activities should only be allowed in non-habitat areas with an adequate buffer to preclude impacts to sage-grouse habitat from noise and other human activities.

Protect nesting habitat from any future loss and/or degradation,

including temporary degradation related to indirect impacts of surface occupancy and/or disruptive activities.

- The area from 1 to 6.5 km (0.6 to 4.0 mi) around a lek must be protected between March 1st and July 15th. Outside of this period, some disturbance may occur, but only if the disturbance does not exceed the disturbance cap, all feasible measures are taken to minimize impacts, and it is determined that the cumulative impact does not negatively affect reproductive success or reduce an individual's physiological ability to cope with environmental stress, and will not in the future.

Protect winter habitat from any future loss and/or degradation, including temporary degradation related to indirect impacts of surface occupancy and/or disruptive activities.

- Winter habitats need to be identified by CPW or UDWR and protected from October 1st to March 1st. If winter habitat and winter refuge areas are not identified, all potential winter habitat must be protected from October 1st to March 1st. Outside of this period, some disturbance may occur, but only if the disturbance does not exceed the disturbance cap, all feasible measures are taken to minimize impacts, and if it is determined that the cumulative impact does not remove or negatively impact the stands of sage-brush necessary for Gunnison sage-grouse winter survival.

Maintain summer brood-rearing habitat. In grazed areas, require grazing management appropriate to local ecological conditions to promote and achieve habitat characteristics representative of healthy sagebrush ecosystems and sage-grouse habitat.

- Areas within 0.4 km (0.25 mi) of known late summer/brood-rearing habitat must be maintained or enhanced to represent habitat characteristics representative of brood-rearing habitats described in the RCP.

Prevent noise disturbance during the breeding season.

- Do not allow any disruptive activities or surface occupancy that will increase noise levels 10 dBA above ambient noise level measured at sunrise at the perimeter of leks during the breeding season (March 1st to May 31st).

Increase Occupied Habitat

Reclaim and restore degraded habitat to meet characteristics of functional, seasonal sage-grouse habitats.

- Existing disturbances should meet reclamation standards that are aimed at restoring disturbances to functional sage-grouse habitat as described in the

RCP and are representative of the pre-disturbance habitat type.

Range-Wide Mitigation Strategy

In the Gunnison Basin and the satellite populations, any development and/or disruptive activities in occupied habitat will impact Gunnison sage-grouse. We recommend the development of land-use regulations that prescribe the following mitigation hierarchy of avoid, minimize, and compensate for unavoidable impacts, at the State or local level.

If avoidance of surface disturbance and disruptive activities around leks cannot be achieved, efforts to minimize and compensate for impacts will not offset impacts. Avoidance of direct and/or indirect disturbance of the area within 0.6 miles of existing leks is critical, due to sage-grouse site fidelity (Connelly 2000).

If land use regulations quantify the negative impacts of surface disturbance and disruptive activities on Gunnison sage-grouse and then require an offset that provides a net conservation benefit, that would help ensure that negative impacts do not overshadow conservation efforts. To be effective, mitigation policy must require avoidance of impacts as the highest priority, then minimization of impacts and finally offset of unavoidable impacts through conservation actions.

The San Miguel and Dove Creek-Monticello satellite populations may be impacted by oil and gas development. To manage the potential impact of oil and gas development, mitigation policy should specify best management practices and conservation measures to minimize impacts of oil and gas development to Gunnison sage-grouse and their habitat.

Conservation Actions Recommended for San Miguel, Dove Creek-Monticello, Crawford, and Piñon Mesa Satellite Populations

The following are near-term high-priority recommendations for four of the satellite populations.

Assess Existing Habitat Availability and Quality

Habitat loss and degradation are recognized as causes of the decline in abundance and distribution of Gunnison sage-grouse. The Service agrees with the 2005 RCP recommendation that Gunnison sage-grouse seasonal habitat should be identified, habitat quality assessed, and changes in habitat monitored over time. If CPW and UDWR identify seasonal habitat types and assess habitat quality, it will improve their ability to identify potential

limiting habitat types and prioritize habitat restoration efforts. The Gunnison Basin Sage-Grouse Habitat Prioritization Tool (HPT) identifies sage-grouse habitat and then discounts the value of the habitat based on distance to structures, roads, and power lines. However, the HPT covers only the Gunnison Basin and does not possess the functionality to determine habitat quality. A tool should be developed for all of the populations to monitor and detect changes to habitat quality and seasonal habitat availability. A habitat mapping tool could help identify where and how to improve habitat quality, prioritize habitat improvement projects, evaluate development threats and protection needs, and adaptively manage Gunnison sage-grouse for the satellite populations.

Reduce Pinyon-Juniper Encroachment

Pinyon-juniper encroachment degrades and, if untreated, eliminates sage-grouse habitat. Treatment of phase I and phase II encroachment levels of pinyon-juniper adjacent to occupied habitat is often the quickest and least expensive method to restore sagebrush habitat for sage-grouse. Under the Natural Resource Conservation Service (NRCS) Sage-Grouse Initiative (SGI), a geo-spatial analysis of potential pinyon-juniper removal is being completed for each of the Western Association of Fish & Wildlife Association (WAFWA) sage-grouse Management Zones (MZ). The range of the Gunnison sage-grouse is in MZ VII. Once the analysis is completed for MZ VII, phase I and II encroaching pinyon-juniper should be removed, starting within 6.5 km (4 mi) of occupied habitat and expanding out by 6.5 km (4 mi) as restored habitat is occupied until habitat targets are achieved for each satellite population.

Road Closures

Disturbance from roads and vehicular traffic near leks during the breeding season must be reduced and/or minimized. Road closures, seasonal timing restrictions, and proper siting of new roads should be used to eliminate or minimize disturbance. In the Piñon Mesa population, a seasonal closure and time of day restrictions for the section of MS County Road that is directly adjacent to one of the leks will remove a significant source of potential disturbance to that population.

Grazing Management Appropriate to Ecological Conditions

Overgrazing that is not appropriate for ecological conditions on the range can lead to habitat degradation. Continued enrollment of ranchers into the NRCS

SGI will improve grazing management. Landowners and land managers who manage cattle on both private and public lands should be encouraged to manage across ownerships for sage-grouse conservation. The Service will consider lands already enrolled in the Candidate Conservation Agreement with Assurances, implementation of NRCS practices on private rangelands that follow Conference Opinion guidance, and lands subject to other programs that require signed commitments to manage grazing appropriate to ecological conditions when assessing the acreage being grazed in a manner appropriate to ecological conditions in a satellite population.

Prioritize Translocations

The small population size and structure of the six satellite populations of Gunnison sage-grouse raises concerns about the probability of extirpation of the satellite populations and extinction of the species due to demographic and/or environmental stochasticity. Colorado Parks & Wildlife has indicated that recent translocations have had a positive influence on the population counts seen in 2012–2013. In order to maximize the population augmentation benefits of translocation, the Colorado Parks & Wildlife Trap and Transplant Committee should revise the translocation strategy to allow for prioritization of the Piñon Mesa, Crawford, San Miguel, and Dove Creek–Monticello satellite populations. The revision should address how timing (spring and/or fall), age class (adult or yearling), gender, and quantity of transplants can increase the resilience of the Piñon Mesa, Crawford, San Miguel, and Dove Creek–Monticello satellite populations. CPW should also continue to evaluate the effectiveness of translocation strategies to maximize their effectiveness.

Protection of Targeted Occupied Habitat

The Service agrees with the RCP recommendation that 90 percent of habitats currently occupied, or that become occupied through future expansion should be protected through a combination of voluntary agreements, land use planning, conservation easements, fee-title acquisition, or land trades. We would consider a variety of conservation efforts as providing protection of occupied habitat. For example:

BLM Lands With an RMP That Protects Gunnison Sage-Grouse

BLM lands that will be managed under the new range-wide Resource Management Plan (RMP) amendment for

Gunnison sage-grouse with sufficient protections can be considered as providing habitat protection.

Candidate Conservation Agreement With Assurances (CCAA)

Private lands already enrolled under the Candidate Conservation Agreement for Gunnison sage-grouse that is administered by Colorado Parks & Wildlife will be considered as providing habitat protection.

Enrollment in the Sage-Grouse Initiative (SGI)

Private lands managed under Conservation Plans that follow the guidance of the Natural Resource Conservation Service's Sage-Grouse Initiative (SGI) will be considered as providing habitat protection.

Enrollment in the Conservation Reserve Program (CRP)

The Service will consider private lands enrolled in the Farm Service Agency's Conservation Reserve Program (CRP) within the Dove Creek–Monticello satellite population as providing habitat protection based on its assessment of the quality of habitat provided by CRP practices.

The CRP State Acres for Wildlife Enhancement (SAFE) program allows continuous sign-up and is designed to address State and regional high-priority wildlife objectives. Producers within a SAFE area can submit offers to voluntarily enroll acres in CRP contracts for 10–15 years. In exchange, producers receive annual CRP rental payments, incentives, and cost-share assistance to establish, improve, connect, or create higher quality habitat. In Colorado, the goal of the Colorado Western Slope Grouse CRP SAFE project is to restore and enhance habitat for the Columbian sharp-tailed grouse, greater sage-grouse, and Gunnison sage-grouse. The project seeks to enroll 12,600 acres in CRP.

Enrollment in CRP is limited by FSA to 25 percent of cropland in a county, unless a waiver is granted. The enrollment caps for the Dove Creek–Monticello satellite population counties are: San Juan County, Utah 33,550 acres; Dolores County, Colorado, 22,152 acres; and San Miguel County, Colorado, 5,404 acres.

Current enrollment in San Juan County is 33,654 acres. Three additions could be made in San Juan County, Utah, to increase the Gunnison sage-grouse conservation value of the CRP program: (1) The addition of a CRP SAFE program targeting Gunnison sage-grouse would make continuous sign-up available and could also provide additional incentives for landowners;

(2) A waiver to exceed the 25 percent cropland limit to allow increased CRP enrollment and incentive to create Gunnison sage-grouse habitat; and (3) The addition of sagebrush and more forbs to the CRP seed mix would improve Gunnison sage-grouse habitat more quickly than relying on natural reestablishment.

In Dolores County, Colorado, 6,431 acres of occupied habitat and 10,869 acres of potentially suitable habitat are currently enrolled in CRP. In San Miguel County, Colorado, 303 acres of occupied habitat and 4,742 acres of potentially suitable habitat are currently enrolled in CRP. The 2005 RCP identified the lack of sagebrush as an issue and recommends that CRP target establishment of 5,000 acres of sagebrush within 3 miles of leks in Utah and 3,000 acres of sagebrush within 6.5 km (4 mi) of leks in Colorado.

Protection Under Conservation Easements

Conservation easements with provisions that protect Gunnison sage-grouse habitat will be considered as providing habitat protection on private lands. The Service recommends that efforts to increase acreage under conservation easements first prioritize areas closest to active leks.

In San Miguel County and Montrose County, new conservation easements should focus on the Miramonte Basin, Iron Mesa, and Gurley Basin.

In the Dove Creek–Monticello population, the majority of occupied habitat is privately owned (87 percent in Dove Creek; 95 percent in Monticello). Conservation easements in the Dove Creek–Monticello population should prioritize landowners participating in the Conservation Reserve Program (CRP), if the habitat is recognized as already providing a high conservation value for the population.

Targeted opportunities under the NRCS Agricultural Conservation Easement Program (ACEP) could play a major role in restoring sagebrush and understory grasses and forbs to provide the protection levels needed for the population persistence.

Summary

An updated conservation strategy for the Gunnison sage-grouse should reflect the complexity of the species' biology, the distribution of the species across the landscape, and the diverse stakeholders who are critical to success. The Service will assess not only population and habitat status and trends, but also the degree to which current and projected threats are addressed when determining the confidence in the long-term

conservation of Gunnison sage-grouse. The status and trend of the total population size of Gunnison sage-grouse as well as the status and trend of the Gunnison Basin and satellite populations influence confidence in the resilience and redundancy evaluation. The Service also needs to know that sage-grouse habitat for the satellite populations are of sufficient quality and quantity to support populations with a high likelihood of persistence. Sufficient habitat quality and quantity combined with resilient population levels could provide confidence that the relative extinction risk in the future for the satellite populations is sufficiently low. Finally, an assessment of habitat quality and quantity for all the populations will highlight potential limiting habitat factors and target conservation to efforts that should yield the highest and most expedient impact on Gunnison sage-grouse populations.

Required Determinations

National Environmental Policy Act (42 U.S.C. 4321 et seq.)

We have determined that environmental assessments and environmental impact statements, as defined under the authority of the National Environmental Policy Act (NEPA; 42 U.S.C. 4321 et seq.), need not be prepared in connection with listing a species as an endangered or threatened species under the Endangered Species Act. We published a notice outlining our reasons for this determination in the **Federal Register** on October 25, 1983 (48 FR 49244).

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.

The Service consulted with the Ute Mountain Ute Tribe (Tribe) on March 26, 2014, regarding the proposed listing of Gunnison sage-grouse and proposed critical habitat designation, and potential impacts to Tribal activities on Pinecrest Ranch (USFWS 2014d, entire). Owned by the Tribe under restricted fee status, Pinecrest Ranch includes 18,749 ac of land in the Gunnison Basin population area west of Gunnison, Colorado, including approximately 12,000 ac of occupied habitat for Gunnison sage-grouse. The consultation was focused primarily on potential exemptions from take of Gunnison sage-grouse on the ranch and exclusion of the ranch from critical habitat designation. In consideration of the information provided by the Tribe and Tribal conservation efforts for Gunnison sage-grouse (see discussion in Factor D), the Service is excluding the ranch from the

critical habitat designation (published elsewhere in today's **Federal Register**).

References Cited

A complete list of references cited in this rulemaking is available on the Internet at <http://www.regulations.gov> and upon request from the Western Colorado Field Office (see **FOR FURTHER INFORMATION CONTACT**).

Authors

The primary authors of this package are the staff members of the Western Colorado Field Office.

List of Subjects in 50 CFR Part 17

Endangered and threatened species, Exports, Imports, Reporting and recordkeeping requirements, Transportation.

Final Regulation Promulgation

Accordingly, we amend part 17, subchapter B of chapter I, title 50 of the Code of Federal Regulations, as follows:

PART 17—[AMENDED]

■ 1. The authority citation for part 17 continues to read as follows:

Authority: 16 U.S.C. 1361–1407; 1531–1544; 4201–4245; unless otherwise noted.

■ 2. Amend § 17.11(h) by adding an entry for “Sage-grouse, Gunnison” to the List of Endangered and Threatened Wildlife in alphabetical order under “Birds” to read as follows:

§ 17.11 Endangered and threatened wildlife.

* * * * *

(h) * * *

Species		Historic range	Vertebrate population where endangered or threatened	Status	When listed	Critical habitat	Special rules
Common name	Scientific name						
* * * * *							
BIRDS							
* * * * *							
Sage-grouse, Gunnison.	<i>Centrocercus minimus</i> .	U.S.A. (AZ, CO, NM, UT).	Entire	T	854	17.95(b)	NA
* * * * *							

* * * * *

Dated: November 7, 2014.

Daniel M. Ashe,

Director, U.S. Fish and Wildlife Service.

[FR Doc. 2014–27109 Filed 11–19–14; 8:45 am]

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Part III

Department of the Interior

Fish and Wildlife Service

50 CFR Part 17

Endangered and Threatened Wildlife and Plants; Designation of Critical
Habitat for Gunnison Sage-Grouse; Final Rule

DEPARTMENT OF THE INTERIOR

Fish and Wildlife Service

50 CFR Part 17

[Docket No. FWS-R6-ES-2011-0111;
4500030114]

RIN 1018-AX71

Endangered and Threatened Wildlife and Plants; Designation of Critical Habitat for Gunnison Sage-Grouse

AGENCY: Fish and Wildlife Service, Interior.

ACTION: Final rule.

SUMMARY: We, the U.S. Fish and Wildlife Service (Service), designate critical habitat for the Gunnison sage-grouse (*Centrocercus minimus*) under the Endangered Species Act (Act). In total, approximately 1,429,551 acres (ac) (578,515 hectares (ha)) are designated as critical habitat in Delta, Dolores, Gunnison, Hinsdale, Mesa, Montrose, Ouray, Saguache, and San Miguel Counties in Colorado; and in Grand and San Juan Counties in Utah. The effect of this regulation is to conserve Gunnison sage-grouse habitat under the Act.

DATES: This rule becomes effective on December 22, 2014.

ADDRESSES: This final rule is available on the internet at <http://www.regulations.gov> and at the Service's species Web site for Gunnison sage-grouse, at <http://www.fws.gov/mountain-prairie/species/birds/gunnisonsagegrouse/>. Comments and materials we received, as well as supporting documentation used in preparing this final rule, are available for public inspection at <http://www.regulations.gov>. All of the comments, materials, and documentation that we considered in this rulemaking will be made available by appointment, during normal business hours at the U.S. Fish and Wildlife Service, Western Colorado Field Office, 445 West Gunnison Ave., Suite 240, Grand Junction, CO 81501; telephone 970-243-2778.

The coordinates from which the critical habitat maps are generated are included in the administrative record for this rulemaking and are available at <http://www.regulations.gov> at Docket No. FWS-R6-ES-2011-0111, at <http://www.fws.gov/mountain-prairie/species/birds/gunnisonsagegrouse/>, and at the Western Colorado Field Office (see **FOR FURTHER INFORMATION CONTACT**). Any additional tools or supporting information that we developed for this critical habitat designation will also be available at the Fish and Wildlife

Service Web site and Field Office set out above, and may also be included in the preamble and at <http://www.regulations.gov>.

FOR FURTHER INFORMATION CONTACT:

Susan Linner, Western Colorado Supervisor, U.S. Fish and Wildlife Service, Western Colorado Field Office, 445 West Gunnison Ave., Suite 240, Grand Junction, CO 81501; telephone 970-243-2778; facsimile 970-245-6933. If you use a telecommunications device for the deaf (TDD), 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 designate critical habitat for the Gunnison sage-grouse. Under the Endangered Species Act of 1973, as amended (16 U.S.C. 1531 *et seq.*) (Act), any species that is determined to be an endangered or threatened species requires critical habitat to be designated, to the maximum extent prudent and determinable. Designations and revisions of critical habitat can only be completed by issuing a rule.

Elsewhere in today's **Federal Register**, we, the U.S. Fish and Wildlife Service (Service), publish a final rule to list the Gunnison sage-grouse as a threatened species under the Act. On January 11, 2013, we published in the **Federal Register** a proposed rule to designate critical habitat for the species (78 FR 2540). Section 4(b)(2) of the Act states that the Secretary shall designate critical habitat on the basis of the best available scientific data after taking into consideration the economic impact, national security impact, and any other relevant impact of specifying any particular area as critical habitat.

The critical habitat areas we are designating in this rule constitute our current best assessment of the areas that meet the definition of critical habitat for Gunnison sage-grouse. Here we are designating approximately 1,429,551 acres (ac) (578,515 hectares (ha)) in six units in Delta, Dolores, Gunnison, Hinsdale, Mesa, Montrose, Ouray, Saguache, and San Miguel Counties in Colorado, and in Grand and San Juan Counties in Utah.

This rule consists of: A final rule designating critical habitat for the Gunnison sage-grouse. The Gunnison sage-grouse is concurrently being listed as threatened under the Act, in a separate rule elsewhere in today's **Federal Register**. This rule designates critical habitat necessary for the conservation of the species.

We have prepared an economic analysis of the designation of critical habitat. In order to consider economic impacts, we prepared an analysis of the economic impacts of the critical habitat designations and related factors. We announced the availability of the draft economic analysis (DEA) in the **Federal Register** on September 19, 2013 (78 FR 57604), allowing the public to provide comments on our analysis. We have incorporated the comments into our analysis and have completed the final economic analysis (FEA) concurrently with this final determination.

Peer review and public comment. We sought comments on our proposed critical habitat rule (as well as our proposal to list the species) from independent and appropriate specialists to ensure that our designation is based on scientifically sound data and analyses. We obtained opinions from five knowledgeable individuals with relevant scientific expertise to review our technical assumptions, analysis, and whether or not we had used the best available information. One peer reviewer concluded that our proposals included a thorough and accurate review of the available scientific and commercial data on Gunnison sage-grouse, but did not provide substantive comments. The remaining four letters provided additional relevant information on biology, threats, and scientific research for the species. Two peer review letters were generally in opposition to the proposals and questioned our rationale and determinations. Information we received from peer review is considered and incorporated as appropriate in this final revised designation. We also considered all comments and information received from the public during each comment period.

Previous Federal Actions

Please see the proposed (78 FR 2486, January 11, 2013) and final listing rules (published elsewhere in today's **Federal Register**) for a history of previous Federal actions related to Gunnison sage-grouse prior to January 11, 2013.

On January 11, 2013, we published in the **Federal Register** a proposed rule to list Gunnison sage-grouse as endangered (78 FR 2486), and a proposed rule to designate critical habitat for the species (78 FR 2540). We proposed to designate as critical habitat approximately 1,704,227 acres (689,675 hectares) in seven units located in Chaffee, Delta, Dolores, Gunnison, Hinsdale, Mesa, Montrose, Ouray, Saguache, and San Miguel Counties in Colorado, and in Grand and San Juan Counties in Utah. Those proposals initially had a 60-day

comment period, ending March 12, 2013, but we extended the comment period by an additional 21 days, through April 2, 2013 (78 FR 15925, March 13, 2013).

On July 19, 2013, we extended the timeline for making final determinations on both proposed rules by 6 months due to scientific disagreement regarding the sufficiency and accuracy of the available data relevant to the proposals, and we reopened the public comment period to seek additional information to clarify the issues in question (78 FR 43123). In accordance with that July 19, 2013, publication, we indicated our intent to submit a final listing determination and a final critical habitat designation for Gunnison sage-grouse to the **Federal Register** on or before March 31, 2014.

On September 19, 2013, we announced in the **Federal Register** the availability of the draft economic analysis and a draft environmental assessment prepared pursuant to the National Environmental Policy Act (NEPA) for the proposed critical habitat designation, and reopened the public comment period until October 19, 2013 (78 FR 57604). The draft economic analysis (IEC 2013, entire) was prepared to identify and evaluate the economic impacts of the proposed critical habitat designation. We also reopened the public comment period from November 4, 2013, through December 2, 2013, and announced the rescheduling of three public hearings on the proposed listing and critical habitat rules due to delays caused by the lapse in government appropriations in October 2013 (78 FR 65936, November 4, 2013). All substantive information received during all public comment periods related to the critical habitat designation, economic analysis, and environmental assessment have been incorporated directly into the final versions of those documents, or addressed below (see Peer Review and Public Comments).

On February 11, 2014, we announced a 6-week extension to May 12, 2014, for our final decision on our proposed listing and critical habitat rules (USFWS 2014e). This extension was granted by the Court due to delays caused by the lapse in government appropriations in October 2013, and the resulting need to reopen a public comment period and

reschedule public hearings. On May 6, 2014, we announced a 6-month extension to November 12, 2014, as approved by the Court, to make our final listing and critical habitat decisions (USFWS 2014f).

Summary of Changes From Proposed Rule

- We refined some critical habitat boundaries based the most recent occupied habitat spatial layers by Colorado Parks and Wildlife (CPW). We also modified the unoccupied habitat in the Sanborn Park/Iron Springs area to better match CPW's mapping. We also deleted one unoccupied polygon (Bostwick Park) in the Cerro Summit area based on the low likelihood of this area supporting birds.
- Although we previously proposed designating a critical habitat unit in Poncha Pass, information received since the publication of the proposed rule has caused us to reevaluate the appropriateness of including the unit. Poncha Pass is thought to have been part of the historical distribution of Gunnison sage-grouse. There were no grouse there, however, when a population was established via transplant from 30 Gunnison Basin birds in 1971 and 1972. In 1992, hunters harvested at least 30 grouse from the population when CPW inadvertently opened the area to hunting. We have no information on the population's trends until 1999 when the population was estimated at roughly 25 birds. In one year, the population declined to less than 5 grouse, when more grouse were brought in, again from the Gunnison Basin, in 2000 and 2001. In 2002, the population rose to just over 40 grouse, but starting in 2006, the population again started declining until no grouse were detected in lek surveys in the spring of 2013 (after publication of the proposed critical habitat rule). Grouse were again brought in in the fall of 2013 and 2014 and six grouse were counted in the Poncha Pass population during the spring 2014 lek count (CPW 2014d, p. 2); however, no subsequent evidence of reproduction was found. We now conclude that the Poncha Pass area, for reasons unknown, is not a landscape capable of supporting a population of Gunnison sage-grouse and therefore

does not meet primary constituent element (PCE) 1. As a result, we have determined that the Poncha Pass area should not be designated as critical habitat, and have therefore removed this proposed critical habitat unit from the final critical habitat designation.

- Based on peer review and public comments and our analysis, this final rule excludes specific properties from the critical habitat designation under section 4(b)(2) of the Act, namely private lands enrolled in the Gunnison Sage-grouse Candidate Conservation Agreement with Assurances (CCAA) as of the effective date of this rule, private lands under permanent conservation easement (CE) as of August 28, 2013 as identified by Lohr and Gray (2013), and private land owned by the Ute Mountain Ute Tribe under restricted fee status that is subject to a species conservation plan as of the effective date of this final rule (see Exclusions). These private land exclusions reduced the total critical habitat designation from 1,621,008 ac (655,957 ha) to 1,429,551 ac (578,515 ha) (see Table 1).

- We modified the boundaries of this critical habitat designation around the City of Gunnison. We refined the boundary to leave out areas of medium- to high-intensity development, airport runways, and golf courses. In all other areas, lands covered by buildings, pavement, and other manmade structures, as of the effective date of this rule, are not included in this designation, even if they occur inside the boundaries of a critical habitat unit, because such lands lack physical and biological features essential to the conservation of Gunnison sage-grouse, and hence do not constitute critical habitat as defined in section 3(5)(A)(i) of the Act.

- Based on comments and recommendations received by peer reviewers and the public, in this final rule, we refined our description of the PCEs (see Primary Constituent Elements for Gunnison Sage-grouse) and have provided more detailed background and rationale for the criteria and methods used to identify and map critical habitat (see Criteria and Methods Used to Identify and Map Critical Habitat).

Peer Review and Public Comments

In our January 11, 2013, proposed rules for Gunnison sage-grouse (proposed listing, 78 FR 2486; and proposed critical habitat designation, 78 FR 2540), we requested written public comments on the proposals. We requested written comments from the public on the proposed designation of critical habitat for the Gunnison sage-grouse during four comment periods, spanning from January 11, 2013, to December 2, 2013 (see Previous Federal Actions). We also requested comments on the associated draft economic analysis and environmental assessment during two of those comment periods (see Previous Federal Actions). We contacted appropriate State and Federal agencies, county governments, elected officials, scientific organizations, and other interested parties and invited them to comment. We also published notices inviting general public comment in local newspapers throughout the species' range. From January 11, 2013, to December 2, 2013, we received a total of 36,171 comment letters on both proposals. Of those letters, approximately 445 were substantive comment letters; 35,535 were substantive form letters; and 191 were non-substantive comment letters.

Substantive letters generally contained comments pertinent to both proposed rules, although the vast majority of comments were related to the proposed listing rule. Responses to comments related to the listing rule are provided in the final rule to list Gunnison sage-grouse as threatened, published elsewhere in today's **Federal Register**. Also, three public hearings were held November 19–21, 2013, in response to requests from local and State agencies and governments; oral comments were received during that time (see Previous Federal Actions). All substantive information related to critical habitat provided during the comment periods has been incorporated directly into this final rule or addressed below. For the readers' convenience, we combined similar 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 and received expert opinion from five appropriate and independent individuals with scientific expertise on Gunnison sage-grouse biology and conservation. The purpose of the peer review is to ensure that our decisions are based on scientifically sound data, assumptions, and analyses, based on the

input of appropriate experts and specialists. We received written responses from all five peer reviewers. We reviewed all comments received from the peer reviewers for substantive issues and new information regarding critical habitat for the Gunnison sage-grouse. One peer reviewer concluded that our proposals included a thorough and accurate review of the available scientific and commercial data on Gunnison sage-grouse, but did not provide substantive comments. The remaining four letters provided additional relevant information on biology, threats, and scientific research for the species. Two peer review letters were generally in opposition to the proposed listing and critical habitat designation and questioned our rationale and determinations. All substantive comments from peer reviewers related to critical habitat are incorporated directly into this final rule or addressed in the summary of comments below. For the readers' convenience, similar comments and responses are combined.

Comments From Peer Reviewers

(1) *Comment:* One peer reviewer commented that we should consider including measures of residual grass cover and height in the assessment of breeding habitat within the PCEs for Gunnison sage-grouse critical habitat.

Our response: As described in this final rule, habitat structural values for breeding habitat (PCE 2) are based on the Gunnison Sage-grouse Rangewide Conservation Plan (RCP) and are considered average values over a given project or area (Gunnison Sage-grouse Rangewide Steering Committee (GSRSC) 2005, p. H-6). This comprises the best available information for breeding habitat requirements of Gunnison sage-grouse. The RCP does not specifically define minimum residual grass cover or height (remaining seasonal vegetation following livestock grazing) or grazing management for breeding habitats. However, the PCE 2 includes habitat structural guidelines that require appropriate and cognizant management (i.e., related to livestock grazing and forage utilization levels) to ensure that adequate residual grass cover and height are achieved and maintained. Thus, we conclude that the PCEs indirectly address residual grass cover and height requirements for Gunnison sage-grouse. This topic is discussed further in the Primary Constituent Elements for Gunnison Sage-grouse section of this final rule.

(2) *Comment:* A peer reviewer stated that the sagebrush canopy cover and height requirements establishing winter

habitat seem high, as compared to greater sage-grouse needs, and given that sagebrush exposed above the snow is the overriding consideration for wintering habitat, and this exposure often occurs in wind-blown areas where sagebrush cover and height are much less than the numbers presented here.

Our response: Winter habitat for Gunnison sage-grouse either has sufficient shrub height to be above average snow depths, or is exposed due to topographic features (e.g., windswept ridges, south-facing slopes) (GSRSC 2005, p. H-3). As described in this final rule, habitat structural values for winter habitat (PCE 4) are specific to Gunnison sage-grouse and its habitat and are based on the RCP and studies that quantified vegetation attributes of winter habitat used by Gunnison sage-grouse (Hupp 1987, entire; GSRSC 2005, pp. H-2 to H-3). These are considered average values over a given project or area (GSRSC 2005, p. H-8). This comprises the best available information for the winter habitat requirements specific to Gunnison sage-grouse. This topic is discussed further in the Primary Constituent Elements for Gunnison Sage-grouse section of this final rule.

(3) *Comment:* A peer reviewer stated that it is not clear in the proposed rule what methods and criteria were used to identify and map critical habitat, or why.

Our response: In this final rule, we expand our description of the criteria and methods used to identify and map critical habitat and provide detailed rationale for our analysis and approach (see Criteria and Methods Used to Identify and Map Critical Habitat).

(4) *Comment:* A peer reviewer noted that habitat in Utah at brood location sites did not meet the rangewide structural habitat guidelines (and by extension, do not contain the proposed PCEs), yet brood production, based on small samples sizes, exceeded what was previously reported for Colorado (Young 1994, Apa 2004). The peer reviewer suggested that these habitat differences were an artifact of the hens with broods selecting for Conservation Reserve Program (CRP) fields where sagebrush cover was limited to small patches.

Our response: As indicated in the peer reviewer's information, brood production in the subject study area (areas with lower vegetation structural values than identified by the RCP and our PCEs) was based on a very small sample size—the broods of just three hens were monitored during this study (Lupis 2005, p. 28). Therefore, we cannot conclude from this study that brood production of Gunnison sage-grouse in Utah is higher than observed

in Colorado, despite lower habitat structural values in the study area.

As described in this final rule, habitat structural values for breeding habitat (PCE 2) are based on the RCP and are considered average values over a given project or area (GSRSC 2005, p. H–6). This comprises the best available information for breeding habitat requirements of Gunnison sage-grouse. Agricultural fields, which include CRP lands, are also included in both PCE 2 and PCE 3, because the best available science indicates that these lands are sometimes used by the species as early brood-rearing and summer-late fall habitat when they are part of a landscape that otherwise encompasses the species' seasonal habitats. We therefore acknowledge the benefits of CRP lands to Gunnison sage-grouse, as habitat provided under this program is generally more beneficial to the species than lands under more intensive agricultural uses such as crop production. Gunnison sage-grouse are known, for example, to regularly use CRP lands in the Monticello population (Lupis *et al.* 2006, pp. 959–960; Ward 2007, p. 15). In San Juan County, Gunnison sage-grouse use CRP lands in proportion to their availability (Lupis *et al.* 2006, p. 959). However, CRP lands are generally lacking in the sagebrush and shrub components typically critical to the survival and reproduction of Gunnison sage-grouse and vary greatly in plant diversity and forb abundance (Lupis *et al.* 2006, pp. 959–960; Prather 2010, p. 32). As such, while these CRP lands are considered critical habitat, they are generally of lower value or quality than native sagebrush habitats. Future section 7(a)(2) consultations regarding the potential effect of a Federal project on critical habitat would take into consideration the value or quality of the affected habitat.

The CRP program is evaluated in our final rule to list Gunnison sage-grouse as threatened, published elsewhere in today's **Federal Register**.

(5) *Comment:* A peer reviewer noted that the total area summarized as unoccupied habitat in Table 4 of the proposed critical habitat rule approximates estimates provided by the Utah Division of Wildlife for Utah based on sagebrush cover. The peer reviewer further noted that unoccupied areas north of Highway 491 in Utah approximate rangewide habitat guidelines. However within this area, approximately 30,000 acres would be considered non-habitat (Table 3, San Juan County Working Group 2000) because they are largely dominated by piñon-juniper (*Pinus edulis-Juniperus* spp.). Therefore, the peer reviewer

suggested that many of the areas included in the critical habitat designation may not contain suitable habitat.

Our response: Unoccupied habitat does not need to contain the PCEs, the standard is instead “essential for the conservation of the species.” For occupied habitat at the landscape scale, we consider all areas designated as occupied critical habitat here to meet the landscape specific PCE (1) and one or more of the seasonally specific PCEs (2–5). Although in our final listing rule, published elsewhere in today's **Federal Register**, we found that using a 1.5-km radius (window) analysis was not appropriate for evaluating the effects of residential development, for our habitat suitability analysis, we found that, at the 1.5-km radius scale (or window) (based on Aldridge *et al.* 2012, p. 400), areas where at least 25 percent of the land is dominated by sagebrush cover (based on Wisdom *et al.* 2011, pp. 465–467; and Aldridge *et al.* 2008b, pp. 989–990) provided the best estimation of our current knowledge of Gunnison sage-grouse occupied range and suitable habitat. It is important to note that 25 percent of a 1.5-km radius area being dominated by sagebrush cover (as classified by Southwest Regional Gap Analysis Project (SWReGAP) 30 x 30 meter pixels) is very different from an area having 25 percent canopy cover of sagebrush. At the landscape scale, there will still be areas (up to 75 percent) that are not dominated by sagebrush within the larger matrix of Gunnison sage-grouse occupied habitat. For example, there will be areas within this landscape that are dominated by piñon-juniper or mixed shrub communities that will still be occupied critical habitat, because at the landscape scale considered here, these areas are still part of the larger Gunnison sage-grouse habitat. In a critical habitat determination, the Service determines what scale is most meaningful to identifying specific areas that meet the definition of “critical habitat” under the Act. For example, for a wide-ranging, landscape species covering a large area of occupied and potential habitat across several States (such as the Gunnison sage-grouse), a relatively coarse-scale analysis is appropriate and sufficient to designate critical habitat as defined by the Act, while for a narrow endemic species, with specialized habitat requirements and relatively few discrete occurrences, it might be appropriate to engage in a relatively fine-scale analysis for the designation of critical habitat.

(6) *Comment:* A peer reviewer noted that the answer to “how much is enough” in terms of the minimum size

landscape needed to support a sage-grouse population remains uncertain. This peer reviewer felt that the Monticello population area proposed critical habitat should include only the Conservation Study Area (CSA), and that additional areas include some sites dominated by piñon-juniper and deep draws and canyons that may never provide suitable Gunnison sage-grouse habitat. Thus, the peer reviewer recommended refining the proposed critical habitat boundaries to include only the CSA and appropriate buffer areas as defined by Prather (2010).

Our response: The Act directs us to designate critical habitat in areas outside the geographic area occupied by the species at the time it is listed (such as the CSA), upon a determination that such areas are essential for the conservation of the species. For the Gunnison sage-grouse, we evaluated the ability of unoccupied habitat to potentially provide for the landscape scale habitat needs of the species by identifying areas of large size with large areas dominated by sagebrush. A minimum of 500 birds may be necessary to support a viable population (Shaffer 1981, p. 133; GSRSC 2005, pp. 2 and 170). Approximately 100,000 ac (40,500 ha) likely would be needed to support 500 birds (GSRSC 2005, p. 197). Currently occupied habitat is less than this amount for three of the six Gunnison sage-grouse populations included in this final designation—Piñon Mesa, Cerro Summit-Cimarron-Sims Mesa, and Crawford. Two other populations—Monticello-Dove Creek and San Miguel Basin—slightly exceeds this amount. This suggests that currently occupied habitat alone may not be sufficient to maintain long-term viability for at least three and possibly five of the six populations included in this final designation. Declining trends in the abundance of Gunnison sage-grouse outside of the Gunnison Basin further indicate that currently occupied habitat for the five satellite populations included in this final designation may be less than the minimum amount of habitat necessary for their long-term viability. Therefore, we consider the designation of unoccupied critical habitat, including areas outside the CSA in the Monticello population area, essential for conservation of the species.

As we discuss in detail below, our delineation of unoccupied critical habitat areas was based on specific criteria, scientific data, and mapping methods on a landscape scale. These parameters were consistently applied across the range of Gunnison sage-grouse to ensure the integrity and reliability of the maps on a broad scale,

as opposed to applying varying sources and scales of data or information on habitat conditions. This topic is discussed further under Criteria and Methods Used to Identify and Map Critical Habitat in this final rule.

In a critical habitat determination, the Service determines what scale is most meaningful to identifying specific areas that meet the definition of “critical habitat” under the Act. For example, for a wide-ranging, landscape species covering a large area of occupied and potential habitat across several States (such as the Gunnison sage-grouse), a relatively coarse-scale analysis is appropriate and sufficient to designate critical habitat as defined by the Act. While for a narrow endemic species, with specialized habitat requirements and relatively few discrete occurrences, it might be appropriate to engage in a relatively fine-scale analysis for the designation of critical habitat.

Comments From States

Comments received from the States regarding the proposal to designate critical habitat for the Gunnison sage-grouse are incorporated directly into this final rule or are addressed below.

(1) *Comment:* Arizona Game and Fish Department stated that any designation of Gunnison sage-grouse critical habitat should occur within the current distribution for the species, in Colorado and Utah.

Our Response: Critical habitat has been designated only in Colorado and Utah, within the current range of the species.

(2) *Comment:* Colorado Parks and Wildlife (CPW) requested justification for our use of the Dolores County line as the southern boundary for critical habitat designation, and not including areas of habitat within Montezuma County.

Our Response: Our identification of lands that contain the features essential to conservation of the Gunnison sage-grouse was based on a habitat mapping project by the Gunnison Sage-grouse Rangewide Steering Committee in 2005 (78 FR 2547, January 11, 2013). The Gunnison Sage-grouse Rangewide Conservation Plan notes that the local conservation plan for Dove Creek was limited to Dolores County (GSRSC 2005, p. 70). The RCP potential habitat polygon that extended into Montezuma County was very large. The portion of the potential polygon that fell within Montezuma County had little suitable habitat (less than 20 percent of the almost 95,000 ac) and the suitable habitat was almost all more than 18.5 km away from occupied habitat. The Dove Creek Conservation Plan (1998, p.

7) states that the species is not known to currently occur in Montezuma County. Further, vegetation data indicate that areas in Montezuma County are generally unsuitable for the species. For these reasons, we modified this very large potential polygon so it no longer included Montezuma County. Criteria for identifying and mapping critical habitat are described in further detail in this final rule (see Criteria and Methods Used to Identify and Map Critical Habitat).

(3) *Comment:* CPW and one other commenter questioned the use of 18 kilometers (km) (11 miles (mi)) as a distance for seasonal movement and for critical habitat designation. CPW stated that this distance is for extreme movements and results in large areas of non-habitat being included in the critical habitat designation.

Our Response: Gunnison sage-grouse make relatively large movements on an annual basis (GSRSC 2005, p. J–3). The movement distances of Gunnison sage-grouse as a criterion for identifying unoccupied critical habitat areas are discussed in this final rule (see Proximity and Potential Connectivity (Criterion 3)). To account for proximity to and potential connectivity with occupied Gunnison sage-grouse habitat, we only considered unoccupied areas meeting our other criteria to be critical habitat if they occur within approximately 18.5 km (11.5 mi) of occupied habitat (using “shortest distance”). This distance represents the rangewide maximum measured seasonal movement of Gunnison sage-grouse across all seasons, as presented in the RCP (GSRSC 2005, p. J–3). Therefore, outside of occupied habitat, we conclude that unoccupied areas within 18.5 km (11.5 mi) of occupied areas have the highest likelihood of Gunnison sage-grouse use and occupation.

Other scientific information further supports our use of 18.5 km to account for habitat connectivity. Connelly *et al.* (2000a, p. 978) recommended protection of breeding habitats within 18 km of active leks in migratory sage-grouse populations. The maximum dispersal distance of greater sage-grouse in northwestern Colorado was greater than 20.0 km (12.4 mi) and, therefore, it was suggested that populations within this distance could maintain gene flow and connectivity (Thompson 2012, pp. 285–286). It was hypothesized that isolated patches of suitable habitats within 18 km (11.2 mi) provide for connectivity between sage-grouse populations; however, information on how sage-grouse actually move through landscapes is lacking (Knick and Hanser 2011, pp. 402, 404).

We recognize that Gunnison sage-grouse movement behavior and distances likely vary widely by population and area, potentially as a function of population dynamics, limited or degraded habitats, and similar factors. Movements have been documented as being much greater (up to 56 km (35 mi)) or less than 18.5 km in some cases (see our final rule to list Gunnison sage-grouse elsewhere in today’s **Federal Register** for more discussion). However, the best available information indicates 18.5 km is a reasonable estimate of the distance required between habitats and populations to ensure connectivity for Gunnison sage-grouse, or facilitate future expansion of the species range—hence, we used this measure in our evaluation of areas as potential critical habitat. This topic is discussed further under Criteria and Methods Used to Identify and Map Critical Habitat in this final rule.

(4) *Comment:* CPW recommended that the following areas of proposed critical habitat be reevaluated: Pine forests along the eastern boundary of Gunnison Basin, Sanborn Park north of Iron Springs, Bostwick Park and Poverty Mesa in the Cerro Summit-Cimarron-Sims Mesa Unit, Black Mesa between Crawford and Gunnison Basin (they requested that we exclude the north side and include the south side), southern Dove Creek, Hinsdale County, and the southeastern portion of Sims Mesa. CPW recommended that these areas be reevaluated for a variety of reasons, including updated mapping, severely degraded or converted habitats, and inappropriate habitats (such as forested areas).

Our Response: We have modified our critical habitat designation to address several of CPW’s concerns as follows: (1) We modified several occupied polygons to reflect the latest mapping from CPW (CPW 2013e, spatial data); (2) we used CPW’s mapping for unoccupied habitat in the Sanborn Park/Iron Springs area; and (3) we removed the unoccupied habitat in the Bostwick Park area (part of the Cerro Summit-Cimarron-Sims Mesa population) from our critical habitat designation because the habitat has been converted to a point where restoration to Gunnison sage-grouse habitat would be highly unlikely and because it did not meet our suitability criterion (see Criteria and Methods Used to Identify and Map Critical Habitat below). Other areas have remained the same based on our sagebrush habitat suitability analysis as further described here.

For occupied habitat, we based our identification of lands that contain the

PCEs for Gunnison sage-grouse on polygons delineated, defined, and updated by Colorado Parks and Wildlife (CPW) and the Utah Division of Wildlife Resources (UDWR) as part of the 2005 RCP Habitat Mapping project (GSRSC 2005, p. 54; CPW 2013e, spatial data). We consider all areas designated as occupied critical habitat here to meet the landscape specific PCE 1 and one or more of the seasonally specific PCEs (2–5). In general, for PCE 1, this includes areas with vegetation composed of sagebrush plant communities (at least 25 percent of the land is dominated by sagebrush within a 0.9-mi (1.5-km) radius of any given location) (see Habitat Suitability), of sufficient size and configuration to encompass all seasonal habitats for a given population of Gunnison sage-grouse, and facilitate movements within and among populations.

We based our identification of unoccupied critical habitat for Gunnison sage-grouse on four criteria: (1) The overall distribution or range of the species; (2) potential occupancy of the species; (3) proximity and potential connectivity to occupied habitats; and (4) suitability of the habitat for the species. Our delineation of unoccupied critical habitat areas was based on these criteria, scientific data, and mapping methods on a landscape scale. These parameters were consistently applied across the range of Gunnison sage-grouse to ensure the integrity and reliability of the maps on a broad scale, as opposed to applying varying sources and scales of data or information on habitat conditions.

In this designation, as described in Criteria and Methods Used to identify and map Critical Habitat, we utilized the best available information to identify areas for critical habitat at a landscape level scale. At a smaller scale, there are local areas that do not meet these landscape criteria, and for occupied habitat, the PCEs. All occupied areas have the PCEs on a landscape scale, and unoccupied areas meet the landscape criteria at a landscape scale as well, therefore these areas are designated as critical habitat.

Gunnison and greater sage-grouse occupancy, survival, and persistence are dependent on the availability of sufficient sagebrush habitat on a landscape scale (Patterson 1952, p. 9; Braun 1987, p. 1; Schroeder *et al.* 2004, p. 364; Knick and Connelly 2011, entire; Aldridge *et al.* 2012, entire; Wisdom *et al.* 2011, entire). Aldridge *et al.* (2008b, pp. 989–990) reported that at least 25 percent of the land needed to be dominated by sagebrush cover within a 30 km (18.6 mi) radius scale for long-

term persistence of sage-grouse populations. Wisdom *et al.* (2011, pp. 465–467) indicated that at least 27 percent of the land needed to be dominated by sagebrush cover within an 18-km (11.2-mi) radius scale for a higher probability of sage-grouse population persistence. Although in our final listing rule, published elsewhere in today's **Federal Register**, we found that using a 1.5-km radius (window) analysis was not appropriate for evaluating the effects of residential development, for our habitat suitability analysis, we found that, at the 1.5-km radius scale (or window) (based on Aldridge *et al.* 2012, p. 400), areas where at least 25 percent of the land is dominated by sagebrush cover (based on Wisdom *et al.* 2011, pp. 465–467; and Aldridge *et al.* 2008, pp. 989–990) provided the best estimation of our current knowledge of Gunnison sage-grouse occupied range and suitable habitat. It is important to note that 25 percent of a 1.5-km radius area being dominated by sagebrush cover (as classified by SWReGAP 30 x 30 meter pixels) is very different from an area having 25 percent canopy cover of sagebrush. At the landscape scale, there will still be areas (up to 75 percent) that are not dominated by sagebrush within the larger matrix of Gunnison sage-grouse occupied habitat. For example, there are areas within this landscape that are dominated by piñon-juniper or mixed shrub communities that are still occupied critical habitat, because at the landscape scale considered here, these areas are still part of the larger Gunnison sage-grouse habitat. In a critical habitat determination, the Service determines what scale is most meaningful to identifying specific areas that meet the definition of “critical habitat” under the Act. For example, for a wide-ranging, landscape species covering a large area of occupied and potential habitat across several States (such as the Gunnison sage-grouse), a relatively coarse-scale analysis is appropriate and sufficient to designate critical habitat as defined by the Act. While for a narrow endemic species, with specialized habitat requirements and relatively few discrete occurrences, it might be appropriate to engage in a relatively fine-scale analysis for the designation of critical habitat.

Although in our final listing rule, published elsewhere in today's **Federal Register**, we found that using a 1.5-km radius (window) analysis was not appropriate for evaluating the effects of residential development, we found that, at the 1.5-km radius scale (or window) (based on Aldridge *et al.* 2012, p. 400), mapping areas where at least 25 percent

of the land is dominated by sagebrush cover (based on Wisdom *et al.* 2011, pp. 465–467; and Aldridge *et al.* 2008, pp. 989–990) provided the best estimation of our current knowledge of Gunnison sage-grouse occupied range and suitable habitat. Specifically, we found that modeling at the finer 1.5-km scale was necessary to identify or “capture” all areas of known occupied range, particularly in the smaller satellite populations where sagebrush habitat is generally limited in extent. Larger scales failed to capture areas that we know to contain occupied and suitable habitats (e.g., at the 54-km scale, only the Gunnison Basin area contained areas where 25 percent or more of the land is dominated by sagebrush cover) (USFWS 2013d, p. 3).

The scale of the maps provided in the final rule to designate critical habitat does not allow for delineation of some developed areas such as buildings, paved areas, and other manmade structures within critical habitat that do not contain the required PCEs; nonetheless, lands covered by buildings, pavement and other manmade structures on the effective date of this rule are not included in critical habitat, and text has been included in the final regulation to make this point clear. This topic is discussed further under Criteria and Methods Used to Identify and Map Critical Habitat in this final rule.

(5) *Comment:* The Colorado Department of Agriculture, the State of Utah Office of the Governor, and several other commenters expressed concern that critical habitat designation would impact the local economy, with income losses due to restrictions to agriculture, energy development, mineral extraction, or hunting.

Our Response: We expect some economic impacts as a result of designating critical habitat for the Gunnison sage-grouse. The Final Economic Analysis (FEA) forecasted incremental impacts from the critical habitat designation alone (not including baseline impacts due to listing of the species) of \$6.9 million (present value over 20 years), assuming a seven percent discount rate. Assuming a social rate of time preference of three percent, incremental impacts were \$8.8 million (present value over 20 years). Annualized incremental impacts of the critical habitat designation were forecast to be \$610,000 at a seven percent discount rate, or \$580,000 at a three percent discount rate (Industrial Economics, Inc. 2014, p. ES–2). Estimated economic impacts for a 20-year period regarding livestock grazing, agriculture and water management, mineral and fossil fuel extraction,

residential development, renewable energy development, recreation, and transportation are described in the FEA (Industrial Economics, Inc. 2014). Actions carried out, authorized by or funded by a Federal agency that might affect the species or its critical habitat would require section 7 consultations under the Act.

(6) Comment: The State of Utah Office of the Governor asserted that voluntary cooperation of private landowners will be much more effective in improving habitat for Gunnison sage-grouse than protections afforded by listing and designation of critical habitat.

Our Response: We agree that voluntary cooperation of private landowners will be key in improving habitat for Gunnison sage-grouse. However, under the Act, we must list a species that meets the definition of a threatened or endangered species, and we have determined that the Gunnison sage-grouse meets this definition. We believe that the best opportunity to conserve and ultimately recover the species will require both the protections afforded by listing and the critical habitat designation as well as voluntary conservation measures undertaken by private landowners, with support from the State in accomplishing these measures.

(7) Comment: The State of Utah Office of the Governor asserted that the critical habitat designation for Utah is too broad and erroneously includes sagebrush (*Artemisia* spp.) areas that likely never supported Gunnison sage-grouse, but are based on habitat definitions from the Gunnison Sage-grouse Rangewide Conservation Plan. Similarly, a Federal agency asserted that approximately one-third of unoccupied habitat proposed for designation as critical habitat does not contain at least 25 percent sagebrush cover and suggested that we clearly identify the criteria (such as soil type) that indicate sagebrush communities once occurred.

Our Response: See our responses to comments 3 and 4 above, which explain the methodology we used to delineate critical habitat areas.

(8) Comment: CPW commented that, within proposed unoccupied critical habitat, mapped “vacant/unknown habitat” should be considered more important than “potentially suitable habitat” because restoration would not be required in vacant/unknown habitat. Additionally, CPW recommended that old-growth piñon-juniper, exurban lands, and agricultural lands be removed from the category of potentially suitable habitat.

Our Response: We consider both categories of unoccupied critical habitat

(vacant/unknown and potentially suitable habitat, as defined by the RCP) to be essential to conservation of the Gunnison sage-grouse. However, habitat conditions and suitability across these areas vary, and we recognize that certain areas may require restoration to meet the needs of Gunnison sage-grouse. With respect to exurban lands, lands covered by buildings, pavement and other manmade structures on the effective date of this rule are not included in this critical habitat designation, either by mapping or by text in this final rule. With respect to unoccupied agricultural lands, these areas can be important for various seasonal uses by grouse and can, because of scale, meet the landscape level habitat suitability criteria. These topics are discussed further under the Criteria and Methods Used to Identify and Map Critical Habitat section in this final rule.

Comments From Federal Agencies

Comments received from Federal agencies regarding the proposal to designate critical habitat for the Gunnison sage-grouse are incorporated directly into this final rule or are addressed below.

(9) Comment: Two Federal agencies noted that the proposed rule to designate critical habitat included areas outside of currently occupied habitat that are deemed essential for the conservation of the Gunnison sage-grouse and questioned how a section 7 adverse modification analysis will be conducted in unoccupied critical habitat that does not contain the PCEs.

Our Response: Our memorandum of December 9, 2004, provides our most current guidance on critical habitat and adverse modification (USFWS 2004). This memorandum describes an analytical framework for adverse modification determinations addressing how critical habitat will be addressed in different sections of the Section 7(a)(2) consultation or Section 7(a)(4) conference. Unoccupied habitat does not need to have the PCEs, the standard is instead “essential to the conservation of the species.” Instead of considering the PCEs, in the section 7 consultation addressing unoccupied habitat, we would expect a discussion of whether critical habitat, through the implementation of the proposed Federal action, would remain functional (or retain the current ability for the PCEs to be functionally established) to serve the intended conservation role for the species (USFWS 2004, p. 3).

We also note that the Service has proposed to amend the definition of “destruction or adverse modification of

critical habitat” to (1) more explicitly tie the definition to the stated purpose of the Act; and (2) more clearly contrast the definitions of “destruction or adverse modification” of critical habitat and “jeopardize the continued existence of” any listed species (79FR 27060).

(10) Comment: A Federal agency recommended that critical habitat boundaries and edges should be made contiguous at the Utah and Colorado state line for the Piñon Mesa population and for the Monticello-Dove Creek population.

Our Response: We based our identification of occupied and unoccupied habitats for Gunnison sage-grouse on maps and polygons delineated and defined by the CPW and UDWR. Habitat maps were completed by the CPW and UDWR in support of the 2005 RCP (GSRSC 2005, pp. 54–102) and are updated periodically (CPW 2013e, spatial data). The habitat maps were derived from a combination of telemetry locations, sightings of sage-grouse or sage-grouse sign, local biological expertise, GIS analysis, and other data sources (GSRSC 2005, p. 54; CDOW 2009e, p. 1). These sources, as compiled in the RCP and updated, combined with recent lek count data, collectively constitute the best available information on the species’ current distribution and occupancy in Colorado and Utah. In general, we considered areas classified as “occupied habitat” (GSRSC 2005, pp. 38, 54) to be currently occupied by Gunnison sage-grouse. All RCP mapped occupied habitat for Gunnison sage-grouse, except Poncha Pass (which does not meet PCE 1), is included in this critical habitat designation. Unoccupied habitat is included in this designation only when designated by the RCP (including both potential and vacant/unknown habitats), where potential connectivity to occupied habitat exists, and where vegetation cover provides suitable habitat, as described below. This topic is discussed further under the Criteria and Methods Used to Identify and Map Critical Habitat section in this final rule.

According to the RCP information, in the Piñon Mesa population area in Utah, the center polygon is of vacant or unknown status; and the northern and southern polygons are potential habitat. As pointed out, the polygons do not match between Colorado and Utah. For instance, mapped occupied habitat in Colorado terminates at the State line, although adjacent habitat in Utah is shown as unoccupied. In that case, while Gunnison sage-grouse from the Piñon Mesa population are known to seasonally use adjacent habitat in Utah, the area was not classified as occupied

by the RCP (GSRSC 2005, p. 86). In the Monticello-Dove Creek population, part of the state line transition is due to a change to cropland on the Utah side of the border (GSRSC 2005, p. 38). The RCP has identified resolving these mapping issues as an objective, but this resolution has not been completed to date (GSRSC 2005, p. 221). A Federal agency recently suggested that all critical habitat near Monticello, Utah should be considered occupied. This change in designation has not been vetted through the RCP process, which we have determined provides the best available science regarding habitat occupied by the species. Critical habitat designations can also be revised by a future rulemaking, if appropriate. In the meantime, section 7 consultations can incorporate updated information in the analysis of designated critical habitats.

(11) *Comment:* A Federal agency stated that the following information from statements in the proposed rule to designate critical habitat conflict and need clarification. The first statement was that critical habitat designated at a particular point in time may not include all of the habitat areas that we may later determine are necessary for the recovery of the species. The second statement was that critical habitat units are depicted for Grand and San Juan Counties, Utah, and Chaffee, Delta, Dolores, Gunnison, Hinsdale, Mesa, Montrose, Ouray, Saguache, and San Miguel Counties, Colorado (78 FR 2542 and 2562, January 11, 2013).

Our Response: The first statement acknowledges that with new information we may in the future identify other areas outside of designated critical habitat that are needed for recovery of the species. Consequently, conservation actions for the species can occur outside of critical habitat, section 7 consultations can occur outside of critical habitat if the species is present, and section 9 prohibitions regarding take apply anywhere. The second statement proposes critical habitat, based on the best available information, in portions of the aforementioned counties (note, however, that lands in Chaffee County are no longer included in this final designation). This results in requirements for section 7 consultations within critical habitat, even if the habitat is not currently occupied by the species.

(12) *Comment:* Several agencies requested that research be cited regarding the justification for the landscape specific PCE 1, and more specifically the generally corresponding habitat suitability analysis (areas with vegetation composed primarily of

sagebrush plant communities [at least 25 percent of the area is dominated by sagebrush cover within a 1.5-km (0.9-mi) radius of any given location], of sufficient size and configuration to encompass all seasonal habitats for a given population of Gunnison sage-grouse, and facilitate movements within and among populations). The commenters noted that no on-the-ground assessment was completed to verify the choice of 1.5 km (0.9 mi) as a tool to delineate critical habitat.

Our Response: See our response to comment 4 above. The Act does not require us to collect additional information or do assessments on the ground; instead it requires us to base our decisions on the best available information.

(13) *Comment:* A Federal agency requested clarification regarding whether each PCE must be met for designation as critical habitat.

Our Response: We consider all areas designated as occupied critical habitat here to meet the landscape specific PCE 1 and one or more of the seasonally specific PCEs (2–5). This topic is discussed under the Primary Constituent Elements for Gunnison Sage-grouse section of this final rule. However, see our response to comment 9 above for a discussion of unoccupied critical habitat and section 7 consultation. Unoccupied critical habitat does not need to contain the PCEs, but rather is designated because it is considered essential to the conservation of the species.

(14) *Comment:* A Federal agency requested clarification regarding the “non-sagebrush canopy cover component” of PCEs 2–3, and asked whether this component includes trees or just non-sagebrush shrubs.

Our Response: Habitat structural values for the seasonally specific PCEs 2 and 3 (breeding habitat and summer-fall habitat, respectively) are based on the RCP (GSRSC 2005, pp. H–6 and H–7). The non-sagebrush canopy cover component (5 to 15 percent) does not include tree canopy cover, but may include other shrub species such as horsebrush (*Tetradymia* spp.), rabbitbrush (*Chrysothamnus* spp.), bitterbrush (*Purshia* spp.), snakeweed (*Gutierrezia sarothrae*), greasewood (*Sarcobatus* spp.), winterfat (*Eurotia lanata*), Gambel’s oak (*Quercus gambelii*), snowberry (*Symphoricarpos oreophilus*), serviceberry (*Amelanchier* spp.), and chokecherry (*Prunus virginiana*). We clarify this in the Seasonally Specific Primary Constituent Elements section of this final rule.

(15) *Comment:* A Federal agency suggested that wording in the proposed

rule to designate critical habitat (78 FR 2547, January 11, 2013) be changed from implying that wildfire suppression would be a new management consideration to noting that it is an ongoing management action. The agency also requested that the North Rim Landscape Strategy be explicitly recognized as an ongoing conservation effort.

Our Response: In this final rule, we provide a list of management considerations or protections (including wildfire suppression) that may be applied in the future within critical habitat, each of which has been implemented to some extent in the past. We clarify this in the Special Management Considerations section of this final rule. The North Rim Landscape Strategy is discussed in the final rule to list Gunnison sage-grouse as threatened, published elsewhere in today’s **Federal Register**. To the extent the commenter is inquiring about whether certain activities might be “actions” under section 7 of the ESA, this determination is made on a case-by-case basis as an agency investigates whether a particular action is subject to consultation.

(16) *Comment:* A Federal agency recommended that results from the ESRI “Neighborhood Analysis” tool be provided within the final rule to designate critical habitat.

Our Response: The full results of our modeling and analysis, including the ESRI “Neighborhood Analysis”, are not in a format that can be provided in the **Federal Register**. However, the data and methods used to perform our analyses are described in greater detail in this final rule (see Criteria and Methods Used to Identify and Map Critical Habitat); and background and supporting data are available by appointment, during normal business hours at the U.S. Fish and Wildlife Service, Western Colorado Field Office (see **ADDRESSES**).

(17) *Comment:* A Federal agency stated that the proposed rule to designate critical habitat and the proposed rule to list present conflicting viewpoints regarding whether or not fire regimes are altered and whether or not altered fire regimes are a threat.

Our Response: In the proposed and final critical habitat rules for Gunnison sage-grouse, we identified “threats to the physical and biological features” of critical habitat units, including altered fire regimes. These are stressors potentially affecting the conservation and management of critical habitat. This is in contrast to identified threats to the species’ continued persistence, as evaluated in the final rule to list

Gunnison sage-grouse (published elsewhere in today's **Federal Register**). In this final rule, we clarify this point by identifying these stressors as "factors potentially affecting the physical and biological features" of given critical habitat units (see Unit Descriptions).

(18) *Comment:* A Federal agency recommended adding areas to the critical habitat unit proposed for Piñon Mesa, provided GIS data, and noted that more information is available.

Our Response: We have added and expanded occupied areas in the Piñon Mesa critical habitat unit based on updated mapping provided by CPW. CPW does recognize that the boundaries of Piñon Mesa need to be changed, but those changes were not completed prior to the publication of this rule. CPW modifies their unit boundaries in a group setting with input from numerous individuals and sources. Since a group (that would include the Federal agency) has not been convened by CPW to officially change the Piñon Mesa boundaries, we choose here to rely on the older information provided by CPW as the best currently available information.

(19) *Comment:* A Federal agency noted that in the proposed rule to designate critical habitat, the text describes "potential" and "vacant or unknown" habitat categories, whereas the maps refer to "occupied" and "unoccupied" habitat.

Our Response: We used RCP "occupied habitat" to define areas currently occupied by Gunnison sage-grouse (GSRSC 2005, pp. 38, 54) (see Criteria and Methods Used to Identify and Map Critical Habitat). We also use the RCP mapped "potential" and "vacant or unknown" habitat polygons (GSRSC 2005, pp. 54–102) to evaluate unoccupied areas as potential critical habitat for Gunnison sage-grouse. We combined and classified these two types as unoccupied habitat for consideration in our analysis and identification of critical habitat (see Potential Occupancy of the Species).

(20) *Comment:* A Federal agency recommended deleting a portion of unoccupied habitat in the southern part of Gunnison Basin that is forested, and provided shapefiles.

Our Response: We did look at the shapefiles provided. In general, we have relied on the most recent habitat mapping done by CPW (GSRSC 2005, spatial data; CPW 2013e, spatial data) as the best available data. Some critical habitat unit boundaries have been refined based on the mapping by CPW. Our habitat suitability analysis looked at areas that generally correlated with PCE 1 where the dominant species is

sagebrush 25 percent of the time within a 1.5 km radius. Given this, there could be up to 75 percent of the time where a different species, such as treed areas, is dominant. See our responses to comments 3 and 4 above.

(21) A Federal agency stated it does not support inclusion of isolated Federal lands polygons of unoccupied habitat within a matrix of private lands that are also unoccupied, unless the Service can demonstrate that those Federal land polygons—if restoration were applied and successful—are valuable in and of themselves for sage-grouse habitat.

Our Response: Unoccupied lands are designated here because they are "essential for the conservation of the species" and these areas do not stop at land ownership boundaries. We recognize that in areas with a high proportion of private ownership and with more intensive land uses (such as agriculture), the conservation of these populations will be more difficult than in less developed areas. In these developed areas, the importance of Federal lands can be greater than less developed areas because there may be fewer conservation options available on private lands (especially those that are already developed). The conservation of the grouse in these more developed areas will be more likely with the cooperation of private landowners and there are numerous tools available to private landowners to work on conservation of the grouse. The comment to exclude Federal lands assumes that restoration is not possible on these private lands.

Our landscape level approach used in this critical habitat designation generally does not consider land ownership. With the exception of exemptions for economic reasons or for Department of Defense lands and exclusions under section 4(b)(2) of the Act (where the benefits of such exclusions outweigh the benefits of inclusion), all lands that contain the PCEs (for occupied areas) or are essential to the conservation of the species (for unoccupied areas) are included in a critical habitat designation. On Federal lands where agencies are required to conserve endangered species (section 7(a)(1) of the Act) and consult on projects that may adversely affect species (section 7(a)(2) of the Act), it is difficult to show how an exclusion outweighs inclusion. In contrast, on private lands where conservation is largely voluntary, rewarding landowners for their conservation efforts by excluding their lands in a critical habitat designation

can outweigh the benefits of including those lands.

(22) *Comment:* The U.S. Forest Service (USFS) recommended several additions and deletions to critical habitat on USFS lands at Crawford, Gunnison Basin, Piñon Mesa, and San Miguel Basin, with a net reduction of 12,781 ha (31,557 ac), and noted the following information:

- Most of the areas proposed for removal at Crawford are forested areas directly north of Blue Mesa Reservoir.
- Waunita Park in Gunnison Basin was considered unoccupied critical habitat in the proposed rule, but Gunnison sage-grouse have been observed in that area by USFS personnel for at least the past 20 years.
- Forested areas in Gunnison Basin should be deleted.
- At Piñon Mesa, sagebrush areas in portions of the Dominguez Creek watershed and in portions of Calamity Basin should be added.
- Forested areas at San Miguel Basin should be removed from critical habitat designation.

Our Response: Waunita Park was changed to occupied habitat, consistent with CPWs updates (CPW 2013e, spatial data). Although in our final listing rule, published elsewhere in today's **Federal Register**, we found that using a 1.5-km radius (window) analysis was not appropriate for evaluating the effects of residential development, for our habitat suitability analysis, we found that, at the 1.5-km radius scale (or window) (based on Aldridge *et al.* 2012, p. 400), areas where at least 25 percent of the land is dominated by sagebrush cover (based on Wisdom *et al.* 2011, pp. 465–467; and Aldridge *et al.* 2008, pp. 989–990) provided the best estimation of our current knowledge of Gunnison sage-grouse occupied range and suitable habitat. Given this, there could be up to 75 percent of the time where a different vegetation type is dominant, such as treed areas. CPW does recognize that changes are needed to the boundaries of Piñon Mesa, but those changes were not completed by CPW prior to the publication of this rule. CPW modifies their unit boundaries in a group setting with input from numerous individuals and sources. Since a group (that would include the USFS) has not been convened by CPW to change the Piñon Mesa boundaries, we choose here to rely on the older information provided by CPW as the best currently available information. See our responses to comments 3, 4, 18, and 20 above.

(23) *Comment:* The USFS provided a list of grazing allotments containing critical habitat, dates of permit renewal for those allotments, and information on

whether or not they are covered by the Gunnison Basin Candidate Conservation Agreement (CCA).

Our Response: We considered this information for the final critical habitat (and listing) rules.

(24) *Comment:* The USFS asked if the proposed designation of critical habitat at the Dolores and Montezuma County line was intended to include any portion of Montezuma County; a close inspection of the map in the proposed rule indicates that a small portion of Montezuma County is included.

Our Response: Montezuma County is not included in this critical habitat designation. Please see our response to comment 2 above; and the map for Critical Habitat Unit 1: Monticello-Dove Creek, at the end of this rule. Any observed overlap of this critical habitat unit with Montezuma County may be due to GIS application and/or projection errors.

(25) *Comment:* We received several comments about our proposed critical habitat designation at Poncha Pass. One Federal agency recommended revising the delineation of critical habitat at Poncha Pass based on the Natural Resources Conservation Service (NRCS) Level III Soil classification survey and vegetation potential and provided GIS files. A Federal agency also asserted that most of the unoccupied habitat and a small section of occupied habitat do not have the potential to support sagebrush due to alkaline soils and low precipitation, or do not have the potential to support brood-rearing habitat because of minimal water availability. The USFS recommended that any land in the Rio Grande National Forest on the east side of the Valley at Poncha Pass that is designated as critical habitat be considered unoccupied due to a lack of documented presence. The agency noted that small parcels of USFS land on the west side of the Valley within critical habitat contain sagebrush that might eventually be used by Gunnison sage-grouse. The USFS stated that proposed critical habitat extends too far up the slopes of the Sangre de Cristo Range into mixed-conifer forests and offered to work with the Service in defining critical habitat on the east side of the Valley.

Our Response: Although we previously proposed designating a critical habitat unit in Poncha Pass, information received since the publication of the proposed rule (CPW 2013e, p. 1; CPW 2014d, p. 2; CPW 2014e, p. 2; CPW 2014f, p. 2) has caused us to reevaluate this proposal and to determine that it should not be included in this designation. See Reasons for

Removing Poncha Pass as a Critical Habitat Unit below.

Comments From the Public

Comments received from the general public including local governments, organizations, associations, and individuals regarding the proposal to designate critical habitat for the Gunnison sage-grouse are incorporated directly into this final rule or are addressed below.

(26) *Comment:* Several commenters indicated that National Environmental Policy Act (NEPA) and economic analyses should be completed and made available for review prior to designating critical habitat.

Our Response: Both a Draft Environmental Assessment, as required by NEPA, and a Draft Economic Analysis were completed and made available for public review on September 19, 2013 (78 FR 57604), prior to this final designation of critical habitat. Comments have been addressed for both the Environmental Assessment and Economic Analysis, and final versions of these documents have been completed and posted to the Service's Web site at <http://www.fws.gov/mountain-prairie/species/birds/gunnisonsagegrouse/> and at <http://www.regulations.gov>.

(27) *Comment:* Several commenters expressed differing opinions on whether private lands should be excluded from critical habitat designation.

Our Response: Private lands are essential to the conservation of the species and, therefore, qualify as critical habitat. Federal agencies manage 55 percent of critical habitat designated in this rule. Approximately 43 percent of critical habitat is on private lands. Although there are public lands within the current range of the Gunnison sage-grouse, they are not sufficient to ensure conservation of the species for the reasons discussed in Rationale and Other Considerations below. The language of the Act does not restrict the designation of critical habitat to specific land ownerships such as Federal lands. Consequently, lands of all ownerships are considered if they meet the definition of critical habitat. Designation of private or other non-Federal lands as critical habitat has no regulatory impact on the use of that land unless there is Federal action that is subject to consultation. Identifying non-Federal lands that are essential to the conservation of a species alerts State and local government agencies and private landowners to the value of habitat on their lands, and may promote conservation partnerships. We have, however, excluded from our critical

habitat designation 191,460 ac (77,481 ha) of private land where the CCAA, CEs, and a Tribal land management plan provide protection for Gunnison sage-grouse (see Exclusions below).

(28) *Comment:* Several commenters stated that agricultural lands and other habitat without sagebrush should be excluded from critical habitat designation.

Our Response: The best available information supports the consideration and inclusion of certain agricultural lands and other lands without sagebrush in this critical habitat designation. The PCEs for this species include those habitat components essential for meeting the biological needs of reproducing, rearing of young, foraging, sheltering, dispersing, and exchanging genetic material. Gunnison sage-grouse are sagebrush obligates, requiring large, interconnected expanses of sagebrush plant communities that contain a healthy understory of native, herbaceous vegetation. The species may also use riparian habitat, agricultural lands, and grasslands that are in close proximity to sagebrush habitat. Primary constituent elements 2, 3, and 5 include agricultural lands, and PCE 5 (alternative, mesic habitats) also includes wet meadows, and other habitats that may not contain sagebrush but which occur near sagebrush communities. This topic is discussed further under the Seasonally Specific Primary Constituent Elements section of this final rule.

(29) *Comment:* Several commenters stated that critical habitat should not include unoccupied habitat.

Our Response: The Service has found that areas outside the geographical area currently occupied by the species are essential for the conservation of the species. Data indicate that the currently occupied habitat area for four populations in this designation is insufficient for the conservation of the species, and may be minimally adequate for one other population (see our response to peer review comment 6). Declining trends in the abundance of Gunnison sage-grouse outside of the Gunnison Basin further indicate that currently occupied habitat for the five satellite populations included in this final designation may be less than the minimum amount of habitat necessary for the conservation of the species. Unoccupied habitat in the Gunnison Basin population is also needed for movement and migration of birds to outlying areas and satellite populations and for potential range expansion. Consequently, we do not believe that occupied habitat alone is sufficient to ensure conservation of the species. We

designated occupied and unoccupied habitat that is essential for conservation of Gunnison sage-grouse. This topic is discussed further under the Rationale and Other Considerations section in this final rule.

(30) Comment: Several commenters stated that critical habitat should include all PCEs throughout the designated area.

Our Response: We consider all areas designated as occupied critical habitat here to meet the landscape specific PCE 1 and one or more of the seasonally specific PCEs (2–5). See our responses to comments 9 and 13. Each of the seasonally specific PCEs represents a unique seasonal habitat important for Gunnison sage-grouse survival and reproduction. Therefore, few areas would contain all seasonally specific PCEs. For instance, alternative, mesic habitats (PCE 5) may contain little to none of the sagebrush component generally required for the breeding, summer-fall, and winter habitats (PCEs 2–4).

(31) Comment: Several commenters asserted that a specific county (i.e., Dolores, Hinsdale, Ouray, or Saguache Counties in Colorado, or San Juan County in Utah) should be excluded from critical habitat designation.

Our Response: See our responses to comments 27 and 28. The five smaller populations included in this final designation outside of Gunnison Basin provide redundancy in the event of perturbations such as an outbreak of West Nile virus or the occurrence of drought, either of which could result in severe impacts to the Gunnison sage-grouse. The loss of one or more of the populations outside of Gunnison Basin could reduce the geographical distribution and total range of the Gunnison sage-grouse and increase the species' vulnerability to stochastic events and natural catastrophes, although the Poncha Pass population less so because it provides no unique genetic characteristics (since it is composed entirely of Gunnison Basin birds). These topics are discussed in detail in our final rule to list Gunnison sage-grouse as threatened, published elsewhere in today's **Federal Register**. The specific counties mentioned include portions of critical habitat designated for the Monticello-Dove Creek, San Miguel Basin, Cerro Summit-Cimarron-Sims Mesa, and Gunnison Basin populations and are essential for conservation of the species.

(32) Comment: Several commenters recommended that lands with an existing conservation plan, CEs, Certificates of Inclusion (CIs), or other protections for Gunnison sage-grouse

either should or should not be excluded from critical habitat designation.

Our Response: Multiple partners including private citizens, nongovernmental organizations, a Tribe, and Tribal, State, and Federal agencies are engaged in conservation efforts across the range of Gunnison sage-grouse. Numerous conservation actions have been implemented for Gunnison sage-grouse, and these efforts have provided and will continue to provide conservation benefit to the species. In this final rule, as provided by section 4(b)(2) of the Act, we evaluate the benefits of including versus excluding lands covered under an existing conservation plan. Based on that evaluation, lands covered under the CCAA or CEs have been excluded from this final critical habitat designation. That evaluation also supported our decision to exclude the Ute Mountain Ute Tribe's Pinecrest Ranch in the Gunnison Basin area from the critical habitat designation, based on the Tribe's conservation plan for the ranch (see Exclusions). We are excluding 191,460 ac (77,481 ha) of proposed critical habitat on these conserved areas from the final designation.

(33) Comment: Several commenters presented differing opinions on whether or not energy and mineral exploration and production should be prohibited on critical habitat.

Our Response: Critical habitat does not in and of itself prohibit or permit certain activities or development. Critical habitat designation will only affect projects that are subject to a Federal action. The Monticello-Dove Creek and San Miguel Basin populations support numerous mineral and fossil fuel extraction activities. Additionally, one wind project and one potash mine are under development in the Monticello-Dove Creek unit. There are no active uranium mines in proposed critical habitat. Oil and gas extraction occurs on both Federal and private lands within proposed critical habitat. Mineral and fossil fuel extraction activities on private lands without Federal mineral rights are less likely to have a Federal action that would require section 7 consultations under the Act.

(34) Comment: Several commenters noted that critical habitat sometimes follows political boundaries rather than ecological boundaries.

Our Response: In some cases, political boundaries may also be ecological boundaries due to differences in land management practices between counties or States. Also, in some cases non-ecological boundaries such as roads or county lines provide recognizable

boundaries to help provide clarity to the public on where critical habitat begins and ends. In other cases, land cover types actually differ across political boundaries due to different land uses (e.g., the Monticello-Dove Creek population area along the Colorado-Utah State line).

(35) Comment: One commenter stated that routes within critical habitat to recreational areas outside of critical habitat should not have access restricted.

Our Response: Critical habitat does not in and of itself prohibit or restrict certain activities or development. Critical habitat designation will only affect actions that have a Federal action that are subject to consultation under section 7 of the ESA. Through section 7 consultation with Federal land management agencies, conservation measures may be implemented to avoid or minimize impacts on critical habitat or the species.

(36) Comment: Some commenters recommended that the proposed Poncha Pass critical habitat unit be excluded from critical habitat designation due to impacts to private property.

Our Response: We are no longer including the Poncha Pass population area in our critical habitat designation as described above in our response to comment 25 and below in Reasons for Removing Poncha Pass as a Critical Habitat Unit. Private properties, while important to the conservation of the species, did not factor into the decision not to include this population in critical habitat.

(37) Comment: One commenter noted that some critical habitat units are less than the 100,000-ac (40,500-ha) criteria needed to support 500 birds.

Our Response: Two units of the critical habitat designation are less than 100,000 ac (40,500 ha): Cerro Summit-Cimarron-Sims Mesa at 52,544 ac (21,264 ha) and Crawford at 83,671 ac (33,860 ha). These two populations likely do not have enough contiguous habitat remaining to independently support 500 birds—the theoretical minimum number needed to maintain long-term viability, as previously described in our response to peer review comment 6. However, as populations grow and recover, we expect occupied habitat to expand and the distance between populations to decrease, thereby facilitating migration and interchange between populations. Furthermore, the Cerro Summit-Cimarron-Sims Mesa population likely serves, and should continue to serve in the future, as an important linkage area between the Crawford, Gunnison Basin, and San Miguel populations.

(38) *Comment:* Several commenters stated that the listing and proposed critical habitat designation for the Gunnison sage-grouse will have economic impacts on energy and mineral development. Several commenters stated that oil and gas companies may cease operations if critical habitat is designated for the Gunnison sage-grouse. Some commenters asserted that they have been unable to lease their mineral rights as a result of the anticipated listing and designation of proposed critical habitat. Several commenters also noted that a large percentage of county revenues in Dolores and Montezuma Counties are from oil and gas.

Our Response: Four of the critical habitat units included in this final designation currently have little or no energy or mineral development. Habitat in the San Miguel Basin and Monticello-Dove Creek populations has a high oil and gas development potential; habitat for the Crawford population has a medium oil and gas development potential. Approximately 54,000 ac (22,000 ha) of Bureau of Land Management (BLM) lands within proposed critical habitat are leased in Colorado, with 38 percent currently in production; approximately 2,700 ac (1,100 ha) are leased in Utah, with none currently in production (Industrial Economics, Inc. 2014, p. 5–4). Most costs of critical habitat designation would be borne by Federal and State agencies, and would include species monitoring and section 7 consultation. Energy and mineral development and extraction on privately owned lands without Federal mineral rights are unlikely to have a Federal action that would require section 7 consultations. We estimate annual baseline costs (costs due to listing) associated with mineral and energy development on Federal lands of approximately \$15,000 for Monticello-Dove Creek and \$23,000 for San Miguel Basin Units (Industrial Economics, Inc. 2014 p. 5–12). We estimate additional annual incremental costs on Federal lands due to proposed critical habitat designation of approximately \$93,000 for Monticello-Dove Creek and \$7,600 for San Miguel Basin (Industrial Economics, Inc. 2014 p. 5–17). More detailed information is available in the Final Economic Analysis of Critical Habitat Designation for the Gunnison Sage-grouse (Industrial Economics, Inc. 2014).

Montezuma County is not part of Gunnison sage-grouse occupied habitat or unoccupied critical habitat; therefore, oil and gas activities should not be impacted in that county. Oil and gas activities on privately owned lands

without Federal mineral rights are unlikely to require section 7 consultation. The Colorado Oil and Gas Conservation Commission implements several environmental regulations on both Federal and private lands that provide protection to the Gunnison sage-grouse and occupied habitat. The BLM also requires conservation measures on leases it issues.

(39) *Comment:* Several commenters stated that the listing and proposed critical habitat designation for the Gunnison sage-grouse will have economic impacts on farming and ranching.

Our Response: Ranching activities occur throughout most of the species' range on Federal and private lands. Farming occurs on private lands. Activities on private lands that do not have a Federal action associated with the particular activity will not be subject to section 7 consultations or be required to implement recommended conservation practices. However, more than 300 Federal grazing allotments cover nearly 1,000,000 ac (405,000 ha) within the proposed designation for critical habitat (Industrial Economics, Inc. 2013, p. 3–1), as well as numerous farms that have a Federal action associated with the activity due to participation in Federal programs (typically through NRCS or the Farm Service Agency). Impacts to ranching could include potential reductions in stocking rates, which would impact ranchers, and administrative costs due to section 7 consultations, which would impact BLM or USFS. Rangewide economic impacts to grazing activities due to listing the species are estimated at \$110,000 annually, with an additional annual cost of \$100,000 due to designation of proposed critical habitat (Industrial Economics, Inc. 2014, pp. 3–11–3–12). Economic impacts to other agricultural activities due to listing the species are estimated at \$6,100 annually, with an additional annual cost of \$2,000 due to designation of proposed critical habitat (Industrial Economics, Inc. 2014, p. 4–8). More detailed information is available in the Final Economic Analysis of Critical Habitat Designation for the Gunnison Sage-grouse (Industrial Economics, Inc. 2014).

(40) *Comment:* Several commenters stated that the listing and critical habitat designation for the Gunnison sage-grouse will impact the regional economy, reduce the tax base, or affect property values.

Our Response: Activities on private lands that do not require Federal approval or action will not be subject to section 7 consultations or restrictions

related to this critical habitat designation. Impacts may occur on Federal lands or on other lands where landowners are participating in Federal programs. The Economic Analysis forecasts an annual economic impact from listing of \$4.3 million and an additional annual impact of \$610,000 from designation of proposed critical habitat (Industrial Economics, Inc. 2014, p. ES–2). These cost estimates are rangewide totals and address potential economic impacts to livestock grazing, agriculture and water management, mineral and fossil fuel extraction, renewable energy, residential and related development, recreation, and transportation activities. Most costs would be borne by Federal and State agencies, which include species monitoring and section 7 consultation. However, the majority of costs associated with residential development would be to developers or landowners for potential land set-asides to offset impacts to the species, and costs associated with livestock grazing would consist primarily of potential restrictions on grazing activities that would be borne largely by private ranchers. There may also be perceived negative impacts on jobs and the general economy due to concerns about additional regulatory requirements. More detailed information is available in the Final Economic Analysis of Critical Habitat Designation for the Gunnison Sage-grouse (Industrial Economics, Inc. 2014).

(41) *Comment:* Some commenters expressed concern that listing and proposed critical habitat designation for the Gunnison sage-grouse will have economic impacts on recreation, including activities such as hunting, wildlife watching, and tourism.

Our Response: We anticipate that, due to listing the species and the proposed designation of critical habitat, there may be additional monitoring and management requirements and additional costs associated with section 7 consultations on public lands. These costs will largely be borne by the BLM, USFS, and the National Park Service (NPS). The Economic Analysis forecasts annual rangewide economic impacts to recreation from listing of \$140,000 and an additional annual impact of \$2,400 from designation of proposed critical habitat (Industrial Economics, Inc. 2014, pp. 8–10–8–11). More detailed information is available in the Economic Analysis of Critical Habitat Designation for the Gunnison Sage-grouse (Industrial Economics, Inc. 2014).

(42) *Comment:* Some commenters suggested that critical habitat boundaries be moved to avoid

encompassing their personal property, thereby reducing economic impacts to those individuals.

Our Response: See our response to comment 27. We did exclude certain private lands covered under the CCAA or with a CE. Our economic analysis did not identify any costs that are concentrated in any geographic area or sector likely to result from the designation, since activities on private lands that do not require Federal approval or action will not be subject to section 7 consultations or restrictions related to critical habitat designation (Industrial Economics, Inc. 2014, Appendix A). Therefore, we did not exclude any area from designation as critical habitat based on economic reasons.

(43) *Comment:* Some commenters stated that listing and proposed critical habitat designation for the Gunnison sage-grouse will impact the economics of water development.

Our Response: Water projects may be affected by the designation of critical habitat if they involve a Federal action under section 7 of the Act (e.g., if a permit is required from the U.S. Army Corps of Engineers to dam or divert streams). The estimated costs associated with water development projects are included in the costs for agricultural activities other than ranching, as described in our response to comment 39.

(44) *Comment:* Some commenters stated that listing and proposed critical habitat designation for the Gunnison sage-grouse will impact the economics of airport properties.

Our Response: The scale of the maps used for publication in the **Federal Register** cannot delineate small areas within critical habitat that are developed. To address this, the final rule includes text specifying that lands covered by buildings, pavement or other manmade structures on the effective date of this rule, such as existing airports, are not included in critical habitat. As a result, Federal actions affecting such lands would not require section 7 consultation. We do not anticipate the critical habitat designation will result in an economic impact to airports.

(45) *Comment:* Two commenters suggested that travel corridors linking critical habitat units should be protected or created. Other commenters recommended that travel corridors not be included as critical habitat because: (1) Connectivity is already addressed through translocation efforts, (2) travel corridors could facilitate disease transmission, and (3) travel corridors have not been proven to work.

Our Response: We have not designated specific corridors linking critical habitat units in this final rule. As noted in our response to comment 3, Gunnison sage-grouse make relatively large movements on an annual basis. Movement distances up to 27.9 km (17.3 mi) within a given year have been reported, and winter migration distances as great as 56.3 km (35 mi) have been documented. Gunnison sage-grouse commonly travel from lek sites to summer-use areas, from summer-use areas to fall/winter-use areas, and back to lek sites (Commons 1997, entire). This critical habitat designation will facilitate intrapopulation (within a single population) bird movement and the protection and availability of seasonal habitats necessary for the survival of Gunnison sage-grouse. With the designation of unoccupied habitat and the Cerro Summit-Cimarron-Sims Mesa Unit, we hope to facilitate some natural migration and interpopulation (between two or more populations) exchange of birds. However, further understanding and research of bird movements across the landscape is needed to better identify travel corridors and assess their utility. We recognize that natural migration and interpopulation movement is the desired condition to restore self-sustaining populations. The translocation of birds is a less sustainable (since it requires constant human intervention) and less desirable method for interpopulation movement.

(46) *Comment:* Some commenters noted specific sites within proposed critical habitat that are forested and should, therefore, not be included in critical habitat designation.

Our Response: Our habitat suitability analysis, which generally correlates with PCE 1, looked at sagebrush on a landscape, not a small scale. Although in our final listing rule, published elsewhere in today's **Federal Register**, we found that using a 1.5-km radius (window) analysis was not appropriate for evaluating the effects of residential development, for our habitat suitability analysis, we found that, at the 1.5-km radius scale (or window) (based on Aldridge *et al.* 2012, p. 400), areas where at least 25 percent of the land is dominated by sagebrush cover (based on Wisdom *et al.* 2011, pp. 465–467; and Aldridge *et al.* 2008, pp. 989–990) provided the best estimation of our current knowledge of Gunnison sage-grouse occupied range and suitable habitat. Given this, there could be up to 75 percent of the area where a different species, such as a tree, is dominant. We evaluated the information provided by these commenters and other entities, but

have retained the original critical habitat boundaries in these areas (with exclusions) based on our methodology, as described above in our responses to comments 3 and 4. We have refined the boundaries of a few units where better mapping data from CPW became available.

(47) *Comment:* Some commenters expressed concern that potash mining in Gunnison sage-grouse habitat may cease operations if the species is listed or critical habitat designated. RM Potash expressed concerns that listing may delay their project (Thorson 2013).

Our Response: Potash exploration is planned on BLM lands within Gunnison sage-grouse unoccupied critical habitat in San Miguel and Dolores Counties. As a result of the listing and designation of critical habitat, section 7 consultation will be required for such projects if they may affect Gunnison sage-grouse or designated critical habitat for the species. The amount of time necessary to complete a section 7 consultation will vary depending on the complexity of the project and the anticipated level of impacts. More detailed information on the economic impacts of the critical habitat designation on potash mining is available in the Final Economic Analysis of Critical Habitat Designation for the Gunnison Sage-grouse (Industrial Economics, Inc. 2014).

(48) *Comment:* Several commenters stated that the proposed rule to designate critical habitat relies too much on the use of linguistically uncertain or vague wording to support its conclusions.

Our Response: Natural sciences, including wildlife biology, typically does not allow for absolute conclusions. Studies can seldom evaluate all members of a species or address all possible variables. Under the Act, we base our decision on the best and most current available scientific information, even if that information includes some uncertainty, but we have attempted to explicitly characterize that uncertainty where applicable.

(49) *Comment:* Several commenters stated that voluntary conservation efforts by landowners such as CEs and CCAAs either should or should not be encouraged in lieu of critical habitat designation.

Our Response: The Service strongly supports voluntary conservation efforts by landowners, and we have excluded some lands covered by specific conservation measures from the final critical habitat designation, as described in our response to comment 32 and Exclusions below.

(50) *Comment:* Several commenters noted that without critical habitat

designation, a proposed 81-ha (200-ac) gravel pit on Sims Mesa in Montrose County will likely be developed.

Our Response: We appreciate this new information and considered it in finalizing our critical habitat designation and our final rule to list Gunnison sage-grouse, published elsewhere in today's **Federal Register**. However, as stated above, critical habitat designation does not automatically preclude or otherwise restrict land uses or development. Consultation under section 7 is only required if there is a Federal action associated with a project that may affect a listed species or its critical habitat.

(51) *Comment:* One commenter asked if road exclusions in critical habitat include power lines in road rights-of-way.

Our Response: Lands covered by paved roads, buildings or other manmade structures on the effective date of this rule are not included in critical habitat designated under this rule. A right-of-way that is not paved would be considered critical habitat. Within designated critical habitat, the value or quality of the critical habitat will vary in terms of conserving Gunnison sage-grouse. This habitat value or quality will be considered and evaluated through our section 7(a)(2) consultation process.

(52) *Comment:* Some commenters suggested that critical habitat designation should be deferred for one year to enable areas outside of Gunnison Basin to achieve positive results from conservation efforts that are currently underway.

Our Response: We acknowledge past and ongoing conservation efforts by the affected State, local, and Federal agencies, and private landowners, which have improved the status of the Gunnison sage-grouse. We are required by the Act, however, to designate critical habitat at the time of listing to the extent prudent and determinable, and are required by court order to make this determination no later than November 12, 2014. We have determined that designation is prudent and critical habitat is determinable (see Background section).

(53) *Comment:* One commenter requested explanation of the terms "protected habitat," "approximate quantity," and "spatial arrangement" as used in describing the PCEs.

Our Response: The term "protected habitat" is noted as a feature essential to conservation of the species and refers to the species' natural environment not subject to disturbance that could interfere with the species' life-history processes. The term "approximate

quantity" is not used in the context of PCEs. However, the term "appropriate quantity" was used in the proposed rule regarding the need for a sufficient number of physical or biological features to provide for a species' life-history processes essential to the conservation of the species. Similarly, the term "spatial arrangement" was used in the proposed rule regarding the need for an adequate geographical placement of physical or biological features within typical dispersal distances throughout a species' range to provide for life-history processes essential to the conservation of the species. We have simplified this language in this final rule.

(54) *Comment:* One commenter noted that, within proposed critical habitat, soils differ between occupied and unoccupied habitat.

Our Response: We recognize that there is variation in soil types, and other physical, biological, and chemical characteristics, across the species' range and throughout designated critical habitat. In the context of our analysis, soil type is most directly related to its capacity to support sagebrush communities upon which Gunnison sage-grouse depend. To identify and map critical habitat for the species, we relied on land cover data from SWReGAP (USGS 2004, entire), including three prominent sagebrush land cover types in Gunnison sage-grouse range: Intermountain Basin big sagebrush shrubland, Intermountain Basin montane sagebrush steppe, and Colorado Plateau mixed low sagebrush. For the purposes and scope of our analysis, we determined broader land cover data (vegetation type) to be more appropriate than fine-scale or site-specific information such as soils data. This topic is discussed further under the Criteria and Methods Used to Identify and Map Critical Habitat section of this final rule.

(55) *Comment:* One commenter recommended that all areas excluded from critical habitat be identified on maps, rather than just by text.

Our Response: When determining critical habitat boundaries, we make every effort to avoid including developed areas, e.g., lands covered by buildings, pavement, and other manmade structures on the effective date of this rule, because such lands lack the physical and biological features essential for Gunnison sage-grouse conservation. However, the broad scale of critical habitat maps prepared for publication in the **Federal Register** typically cannot depict all such developed areas or small exclusions under section 4(b)(2) of the Act. As a

result, the text of the rule specifies that lands covered by buildings, pavement and other manmade structures on the effective date of this rule are not included in critical habitat.

(56) *Comment:* One commenter noted that the proposed rule to designate critical habitat stated that the City of Gunnison and Gunnison County only own 52 ac (21 ha) within the Gunnison Basin critical habitat unit. However, the City owns 744 ac (301 ha), and the County owns 1,849 ac (749 ha) within this unit.

Our Response: This discrepancy may be attributed to differences in how acreages are calculated using GIS. Our GIS analysis, using version 9 of COMaP (the most comprehensive and up-to-date ownership layer for the State of Colorado), showed that, in the Gunnison Basin critical habitat unit, the City of Gunnison owns 5 ac (2 ha) of occupied habitat. Combined, land owned by the City of Gunnison and Gunnison County constitutes less than one percent of the entire Gunnison Basin unit. When we use the Gunnison County ownership layer, we show that approximately 1,200 ac (486 ha) of City and County lands fall within the final critical habitat designation. The figures provided in the comment above, with a combined total of 2,593 ac, are not all included in the final critical habitat boundaries (in other words, many of the acres fall within the City of Gunnison boundary that is not part of this critical habitat designation), and this area still constitutes less than 0.1 percent of the entire Gunnison Basin unit. Therefore, we consider this a minor discrepancy. Also note that we expect land ownership in critical habitat to change over time, due to land conveyance and exchange; consequently, estimated acres by land owner or entity as provided in this final rule are not static.

(57) *Comment:* We received a comment from the City of Gunnison that an area left out of the critical habitat designation in the Gunnison Basin did not follow the City of Gunnison's boundary.

Our Response: We looked at the most up-to-date boundary for the City of Gunnison, which has changed significantly through the last several years, and found it contained areas of suitable habitat for Gunnison sage-grouse. Based on these comments, we modified the critical habitat area according to the City of Gunnison's boundaries where, based on satellite imagery and land cover data, these boundaries reflected the edge of moderate to high density development. We also adjusted the critical habitat boundary to leave out all of the runway

areas at the airport and the golf course south and west of town since these areas do not contain the PCEs for Gunnison sage-grouse. We retained lands within the city boundary that contain the PCEs for Gunnison sage-grouse.

(58) *Comment:* One commenter stated that critical habitat designation is difficult, uncertain, inefficient, costly, and a low priority; therefore, it shouldn't be done. Another commenter asserted that critical habitat designation is not prudent or determinable.

Our Response: Under the Act, the Service is required to designate critical habitat, to the maximum extent prudent and determinable, for any species determined to be an endangered or threatened species under the Act. We have determined that designation is prudent and critical habitat is determinable (see Background section); therefore, we must designate critical habitat for this species.

(59) *Comment:* One commenter recommended that a Small Government Agency plan be required.

Our Response: Our economic analysis forecasted incremental impacts on five county governments associated with transportation and administrative costs. However, incremental costs were estimated to be less than 0.7 percent of annual revenues for those entities (Industrial Economics, Inc. 2014, p. A-9). Therefore, we do not expect that this rule will significantly or uniquely affect small governments because it will not produce a Federal mandate of \$100 million or greater in any year, that is, it is not a "significant regulatory action" under the Unfunded Mandates Reform Act. Consequently, we do not believe that the critical habitat designation would significantly or uniquely affect small government entities. As such, a Small Government Agency Plan is not required.

(60) *Comment:* Some commenters noted that critical habitat designation may affect other wildlife species.

Our Response: We believe the overall effects on other wildlife species will be positive, as described in sections 5.2.2 and 5.2.3 of our Environmental Assessment.

(61) *Comment:* One commenter asserted that critical habitat mapping was a closed process that should have involved other land managers.

Our Response: We have carefully considered input from Federal, State, and county land managers and have incorporated this information, as appropriate, in our identification and mapping of critical habitat, both in the proposed as well as the final rule.

(62) *Comment:* One commenter noted that critical habitat polygons are

delineated with straight lines; habitat boundaries are seldom straight lines; therefore, the critical habitat maps are not accurate.

Our Response: See our responses to comments 10 and 24 above.

(63) *Comment:* One commenter asked if landowners will be able to withdraw lands enrolled in the Conservation Reserve Program that are designated as critical habitat and resume farming.

Our Response: Any landowner will have the option of managing their lands as they choose unless "take" (defined as to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct) of Gunnison sage-grouse will occur. The ESA provides various mechanisms for authorizing take, depending on the circumstances.

(64) *Comment:* One commenter requested that the city of Gunnison, including wastewater treatment facilities and the Gunnison River channel from Highway 135 to Tomichi Riverway Park, be excluded from critical habitat designation.

Our Response: When determining critical habitat boundaries within this final rule, we made every effort to avoid including developed areas, e.g. lands covered by buildings, pavement, and other manmade structures on the effective date of this rule, because such lands lack physical and biological features essential for Gunnison sage-grouse conservation. For example, we did not include moderately to highly developed lands around the City of Gunnison and Dove Creek within the mapped critical habitat boundaries. We have also not included lands around the Gunnison wastewater treatment facility and the Gunnison River channel extending through the Dos Rios Golf Club to Highway 135, because these areas fell within the moderately to highly developed lands.

(65) *Comment:* Some commenters requested that hang gliding be allowed within critical habitat.

Our Response: Critical habitat designation does not automatically preclude or otherwise restrict land uses, including recreation.

(66) *Comment:* Two commenters suggested that a Flexibility Analysis Report should be completed due to the large number of small businesses that will be impacted.

Our Response: The Regulatory Flexibility Act as amended by the Small Business Regulatory Enforcement Fairness Act requires a determination of whether the critical habitat designation will have a significant economic impact on a substantial number of small entities (i.e., small businesses, small

organizations, and small governmental jurisdictions). In this final rule, we are certifying that the critical habitat designation for Gunnison sage-grouse will not have a significant economic impact on a substantial number of small entities. As described in more detail in Required Determinations below, we believe that, based on our interpretation of directly regulated entities under the RFA and relevant case law, this designation of critical habitat will only directly regulate Federal agencies which are not by definition small business entities. And as such, we certify in this final rule that this designation of critical habitat will not have a significant economic impact on a substantial number of small business entities. Therefore, an initial regulatory flexibility analysis is not required. However, though not necessarily required by the RFA, in our final economic analysis for this rule we considered and evaluated the potential effects to third parties that may be involved with consultations with Federal action agencies related to this action (Industrial Economics, Inc. 2014, Appendix A).

(67) *Comment:* One commenter requested a definition of "crucial seasonal habitat."

Our Response: This term is used in our description of the six critical habitat units, in reference to the need for special management actions to address threats from development to these habitats. Crucial seasonal habitat refers to areas important to the life history and survival of Gunnison sage-grouse including breeding, nesting, brood rearing, and wintering habitats, as defined by seasonally specific PCEs 2 through 5 in this rule (see Seasonally Specific Primary Constituent Elements).

(68) *Comment:* Several commenters requested that an environmental impact statement (EIS) be prepared for the critical habitat designation for Gunnison sage-grouse.

Our Response: As described in the National Environmental Policy Act section of this rule, we found, based on our final environmental assessment, that no significant environmental impact would occur as a result of critical habitat designation for Gunnison sage-grouse. Therefore, an environmental impact statement is not necessary for the designation of critical habitat for Gunnison sage-grouse.

Critical Habitat

Background

It is our intent to discuss below only those topics directly relevant to the designation of critical habitat for

Gunnison sage-grouse in this section of the final rule. For more information on Gunnison sage-grouse taxonomy, life history, habitat, population descriptions, and threats to the species, refer to the 12-month finding published September 28, 2010 (75 FR 59804) and the final listing rule published elsewhere in today's **Federal Register**.

Critical habitat is defined in section 3 of the Act as:

(1) The specific areas within the geographical area occupied by the species, at the time it is listed in accordance with the Act, on which are found those physical or biological features:

(a) Essential to the conservation of the species; and

(b) Which may require special management considerations or protection; and

(2) Specific areas outside the geographical area occupied by the species at the time it is listed, upon a determination that such areas are essential for the conservation of the species.

Conservation, as defined under section 3 of the Act, means to use and the use of all methods and procedures that are necessary to bring an endangered or threatened species to the point at which the measures provided pursuant to the Act are no longer necessary. Such methods and procedures include, but are not limited to, all activities associated with scientific resources management such as research, census, law enforcement, habitat acquisition and maintenance, propagation, live trapping, and transplantation, and, in the extraordinary case where population pressures within a given ecosystem cannot be otherwise relieved, may include regulated taking.

Critical habitat receives protection under section 7 of the Act through the requirement that Federal agencies ensure, in consultation with the Service, that any action they authorize, fund, or carry out is not likely to result in the destruction or adverse modification of critical habitat. The designation of critical habitat does not affect land ownership or establish a refuge, wilderness, reserve, preserve, or other conservation area. Such designation does not allow the government or public to access private lands. Such designation does not require implementation of restoration, recovery, or enhancement measures by non-Federal landowners. Where a landowner seeks or requests Federal agency funding or authorization for an action that may affect a listed species or critical habitat, the consultation

requirements of section 7(a)(2) apply, but even in the event of a destruction or adverse modification finding, the obligation of the Federal action agency and the landowner is not to restore or recover the species, but to implement reasonable and prudent alternatives to avoid destruction or adverse modification of critical habitat.

Under the first prong of the Act's definition of critical habitat, areas within the geographic area occupied by the species at the time it was listed are included in a critical habitat designation if they contain physical or biological features (1) which are essential to the conservation of the species and (2) which may require special management considerations or protection. For these areas, critical habitat designations identify, to the extent known using the best scientific and commercial data available, those physical or biological features that are essential to the conservation of the species (such as space, food, cover, and protected habitat). In identifying those physical and biological features within an area, we focus on the principal biological or physical constituent elements (primary constituent elements such as roost sites, nesting grounds, seasonal wetlands, water quality, tide, soil type) that are essential to the conservation of the species. Primary constituent elements are the elements of physical or biological features that provide for a species' life-history processes and are essential to the conservation of the species.

Under the second prong of the Act's definition of critical habitat, we can designate critical habitat in areas outside the geographic area occupied by the species at the time it is listed, upon a determination that such areas are essential for the conservation of the species. For example, an area formerly occupied by the species but that was not occupied at the time of listing may be essential to the conservation of the species and may be included in the critical habitat designation. We designate critical habitat in areas outside the geographic area occupied by a species only when a designation limited to its current range would be inadequate to ensure the conservation of the species.

Section 4 of the Act requires that we designate critical habitat on the basis of the best scientific 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 determine which areas should be designated as critical habitat, our primary source of information is generally the information developed during the listing process for the species. Additional information sources may include 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 dynamic, and species may move from one area to another over time. We recognize that critical habitat designated at a particular point in time may not include all of the habitat areas that we may later determine are necessary for the recovery of the species. For these reasons, a critical habitat designation does not signal that habitat outside the designated area is unimportant or may not be needed for recovery of the species. Areas that are important to the conservation of the species, both inside and outside the critical habitat designation, will continue to be subject to: (1) Conservation actions implemented under section 7(a)(1) of the Act; (2) regulatory protections afforded by the requirement in section 7(a)(2) of the Act for Federal agencies to insure their actions are not likely to jeopardize the continued existence of any endangered or threatened species; and (3) the prohibitions of section 9 of the Act if actions occurring in these areas may result in take of the species. Federally funded or permitted projects affecting listed species outside their designated critical habitat areas may still result in jeopardy findings in some cases. These protections and conservation tools will continue to contribute to recovery of this species. Similarly, critical habitat designations made on the basis of the best available information at the time of designation will not control the direction and substance of future recovery plans, habitat conservation plans (HCPs), or other species conservation planning efforts if new information available at the time of

these planning efforts calls for a different outcome.

Prudency Determination

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 the species is determined to be endangered or threatened. Our regulations (50 CFR 424.12(a)(1)) state that the designation of critical habitat is not prudent when one or both of the following situations exist: (1) The species is threatened by taking or other human activity, and identification of critical habitat can be expected to increase the degree of threat to the species, or (2) such designation of critical habitat would not be beneficial to the species.

There is currently no imminent threat of take attributed to collection or vandalism for this species (see Factor B discussion in the final listing rule elsewhere in today's **Federal Register**), and identification and mapping of critical habitat is not expected to initiate any such threat. In the absence of finding that the designation of critical habitat would increase threats to a species, if there are any benefits to a critical habitat designation, then a prudent finding is warranted. Here, the potential benefits of designation include: (1) Triggering consultation under section 7 of the Act, in new areas for actions in which there may be a Federal nexus where consultation would not otherwise occur because, for example, the area is or has become unoccupied or the occupancy is in question; (2) focusing conservation activities on the most essential features and areas; (3) providing educational benefits to State or county governments or private entities; and (4) preventing people from causing inadvertent harm to the species. Therefore, because we have determined that the designation of critical habitat 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 Gunnison sage-grouse.

Critical Habitat Determinability

Having determined that designation is prudent, under section 4(a)(3) of the Act we must find whether critical habitat for the species is determinable. Our regulations at 50 CFR 424.12(a)(2) state that critical habitat is not determinable when one or both of the following situations exist:

- (i) Information sufficient to perform required analyses of the impacts of the designation is lacking, or
- (ii) The biological needs of the species are not sufficiently well known to permit identification of an area as critical habitat. When critical habitat is not determinable, the Act allows the Service an additional year to publish a critical habitat designation (16 U.S.C. 1533(b)(6)(C)(ii)).

We reviewed the available information pertaining to the biological needs of the species and habitat characteristics where the species is located. This and other information represent the best scientific data available and led us to conclude that the designation of critical habitat is determinable for the Gunnison sage-grouse.

Physical and Biological Features

In accordance with section 3(5)(A)(i) and 4(b)(1)(A) of the Act and regulations at 50 CFR 424.12, in determining which areas within the geographical area occupied by the species at the time of listing to designate as critical habitat, we consider the physical and biological features essential to the conservation of the species and which may require special management considerations or protection. These include, but are not limited to:

- (1) Space for individual and population growth and for normal behavior;
- (2) Food, water, air, light, minerals, or other nutritional or physiological requirements;
- (3) Cover or shelter;
- (4) Sites for breeding, reproduction, or rearing (or development) of offspring; and
- (5) Habitats that are protected from disturbance or are representative of the historical, geographical, and ecological distributions of a species.

We derive the specific physical and biological features required for Gunnison sage-grouse from studies of this species' habitat, ecology, and life history as described in the proposed and final listing rules and in greater detail in the 12-month finding published September 28, 2010 (75 FR 59804), and in the information presented below. As in the cited rules and 12-month finding, the information below uses scientific information specific to the Gunnison sage-grouse where available but also applies scientific management principles and scientific information for greater sage-grouse, a closely related species with similar life histories and habitat requirements (Young 1994, p. 44), that are relevant to our determinations—a practice followed by

the wildlife and land management agencies that have responsibility for management of both species and their habitat. We use *sage-grouse* below in reference to both Gunnison and greater sage-grouse whenever the scientific data and information is relevant to both species.

We have determined that the Gunnison sage-grouse requires the following physical and biological features:

Space for Individual and Population Growth and for Normal Behavior

Gunnison sage-grouse require large, interconnected expanses of sagebrush plant communities that contain healthy understory composed primarily of native, herbaceous vegetation (Patterson 1952, p. 9; Rogers 1964, p. 19; Knick *et al.* 2003, p. 623; Connelly *et al.* 2004, p. 4–15; Knick and Connelly 2011, entire; Pyke 2011, p. 532; Wisdom *et al.* 2011, entire). Gunnison sage-grouse may use a variety of habitats throughout their life cycle, such as riparian meadows, riparian areas with a shrub component, agricultural lands, and steppe dominated by native grasses and forbs. However, Gunnison sage-grouse are considered sagebrush obligates (Patterson 1952, pp. 9, 42; Braun *et al.* 1976, p. 168; Schroeder *et al.* 1999, pp. 4–5; Connelly *et al.* 2000a, pp. 970–972; Connelly *et al.* 2004, p. 4–1), and the use of non-sagebrush habitats by sage-grouse is dependent on the presence of sagebrush habitats in close proximity (Connelly *et al.* 2004, p. 4–18 and references therein). In fact, the historical and current distribution of the Gunnison sage-grouse closely matches that of sagebrush (Patterson 1952, p. 9; Braun 1987, p. 1; Schroeder *et al.* 2004, p. 364, and references therein) (see the final listing rule published elsewhere in today's **Federal Register**).

Gunnison sage-grouse move seasonally among various habitat types driven by breeding activities, nest and brood-rearing site requirements, seasonal changes in the availability of food resources, and response to weather conditions. In the 2005 Gunnison Sage-grouse Rangewide Conservation Plan (RCP) (GSRSC 2005, entire), annual Gunnison sage-grouse habitat use was categorized into three seasons: (1) Breeding (2) summer–late fall and (3) winter (GSRSC 2005, pp. 27–31). Sage-grouse exhibit strong site fidelity (loyalty to a particular area) to seasonal habitats, including breeding, nesting, brood-rearing, and wintering areas, even when a particular area may no longer be of value (Connelly *et al.* 2004, p. 3–1). Adult sage-grouse rarely switch inter-annual use among these seasonal

habitats once they have been selected (Berry and Eng 1985, pp. 238–240; Fischer *et al.* 1993, p. 1039; Young 1994, pp. 42–43; Root 2002, p. 12; Holloran and Anderson 2005, p. 749), limiting the species' adaptability to habitat changes. Consequently, there may be lags in the response of Gunnison sage-grouse to development or habitat changes, similar to those observed in other sagebrush obligate birds (Wiens and Rotenberry 1985, p. 666).

The pattern and scale of Gunnison sage-grouse annual movements, and the degree to which a given habitat patch can fulfill the species' annual habitat needs, are dependent on the arrangement and quality of habitats across the landscape. Habitat structure and quality vary spatially over the landscape; therefore, some areas may provide habitat for a single season, while other areas may provide habitat for one or more seasons (GSRSC 2005, pp. 25–26). In addition, plant community dynamics and disturbance also influence habitat changes and variability over time. Rangewide, fine-scale habitat structure data on which to delineate seasonal habitats currently does not exist. A spatially explicit nest site selection model developed for the Gunnison Basin by Aldridge *et al.* (2012, entire) predicted the location of the best Gunnison sage-grouse nesting habitat. The total area of the predicted best nesting habitat (containing greater than 90 percent of an independent sample of nest locations) amounted to approximately 50 percent of the study area. However, this model does not predict other life-history requirements of Gunnison sage-grouse such as seasonal habitat needs outside of the nesting season (Aldridge *et al.* 2012, p. 403).

Gunnison sage-grouse make relatively large movements on an annual basis due to the need for a diverse range of seasonal habitat types (Connelly *et al.* 2000a, pp. 968–969). Maximum Gunnison sage-grouse annual movements in relation to lek capture have been reported as 18.5 km (11.5 mi) (GSRSC 2005, p. J–3), and 17.3 km (10.7 mi) (Saher 2011, pers. comm.), and individual Gunnison sage-grouse location points can be up to 27.9 km (17.3 mi) apart within a given year (Root 2002, pp. 14–15). Individual Gunnison sage-grouse have been documented to move more than 56.3 km (35 mi) to wintering areas in the Gunnison Basin (Phillips 2011, pers. comm.; Phillips 2013, p. 4). In contrast, the maximum recorded movement distance of Gunnison sage-grouse in the Monticello population is 8.2 km (5.1 mi) (Ward 2007), demonstrating that movement

distances of sage-grouse likely vary by population and area. While it is likely that some areas encompassed within these movement boundaries are used only briefly as movement areas, the extent of these movements demonstrate the large scale annual habitat requirements of the species.

Therefore, based on the species' year-round reliance on sagebrush and the various seasonal habitat requirements discussed above, we identify sagebrush plant communities of sufficient size and configuration to encompass all seasonal habitats, including areas used to move between seasonal habitats, for a given population of Gunnison sage-grouse to be a physical or biological feature essential to the conservation of this species.

Food, Water, Air, Light, Minerals, or Other Nutritional or Physiological Requirements

Food resources used by Gunnison sage-grouse vary throughout the year because of seasonal changes in food availability and specific dietary requirements of breeding hens and chicks. The diet of Gunnison sage-grouse is composed of nearly 100 percent sagebrush in the winter, while forbs, insects, and sagebrush are important dietary components during the remainder of the year (Wallestad *et al.* 1975, p. 21; Barnett and Crawford 1994, p. 117; Schroeder *et al.* 1999, p. 5; Young *et al.* 2000, p. 452).

Pre-laying hens are particularly dependent on forbs and the insects supported by native herbaceous understories (Drut *et al.* 1994, pp. 173–175). The Gunnison sage-grouse hen pre-laying period is from approximately late-March to early April. Pre-laying habitats for sage-grouse hens need to provide a diversity of vegetation including forbs that are rich in calcium, phosphorous, and protein to meet the nutritional needs of females during the egg development period (Barnett and Crawford 1994, p. 117; Connelly *et al.* 2000a, p. 970). During the pre-laying period, female sage-grouse select forbs that generally have higher amounts of calcium and crude protein than sagebrush (Barnett and Crawford 1994, p. 117).

Forbs and insects are essential nutritional components for sage-grouse chicks (Klebenow and Gray 1968, pp. 81–83; Peterson 1970, pp. 149–151; Johnson and Boyce 1991, p. 90; Connelly *et al.* 2004, p. 3–3). During the first 3 weeks after hatching, insects are the primary food of chicks (Patterson 1952, p. 201; Klebenow and Gray 1968, p. 81; Peterson 1970, pp. 150–151; Johnson and Boyce 1990, pp. 90–91;

Johnson and Boyce 1991, p. 92; Drut *et al.* 1994, p. 93; Pyle and Crawford 1996, p. 320; Fischer *et al.* 1996a, p. 194). Diets of 4- to 8-week-old greater sage-grouse chicks were found to have more plant material as the chicks matured (Peterson 1970, p. 151). Succulent forbs are predominant in the diet until chicks exceed 3 months of age, at which time sagebrush becomes a major dietary component (Klebenow 1969, pp. 665–666; Connelly and Markham 1983, pp. 171–173; Fischer *et al.* 1996b, p. 871; Schroeder *et al.* 1999, p. 5).

Decreased availability of forbs corresponded to a decrease in the number of chicks per hen and brood size (Barnett and Crawford 1994, p. 117). Gunnison sage-grouse population dynamics appear to be linked closely to female reproductive success and chick survival (GSRSC 2005, p. G–13). In a recent demographic and population viability study of Gunnison sage-grouse, juvenile survival was found to be the most influential vital rate in the Gunnison Basin population. In northwest Colorado, dispersal, migration, and settlement patterns of juvenile greater sage-grouse—factors important to population persistence—were more influenced by limitations associated with local traditional breeding (lek) and brood-rearing areas than by landscape-level vegetation structure and composition (i.e., the spatial distribution and configuration of vegetation types) (Thompson 2012, pp. 317, 341). The same study recommended restoration, creation, and protection of early and late brood-rearing habitats to increase chick survival rates (Thompson 2012, p. 135). The importance of brood-rearing habitat for juvenile survival, recruitment, and hence, population viability of sage-grouse is clear. Habitats that support healthy sagebrush communities including herbaceous understories of native grasses and forbs provide such brood-rearing habitat essential to the persistence of Gunnison sage-grouse populations.

Brood-rearing habitat for females with chicks must provide adequate cover adjacent to areas rich in forbs and insects to assure chick survival during this period (Connelly *et al.* 2000a, p. 971; Connelly *et al.* 2004, p. 4–11). In most areas within the range of Gunnison sage-grouse, the herbaceous understory component of sagebrush plant communities typically dries out as summer progresses into fall. Habitats used by Gunnison sage-grouse in summer through late-fall are typically more mesic than surrounding habitats during this time of year (GSRSC 2005, p. 30). These areas are used primarily

for foraging because they provide reliable sources of vigorous, herbaceous vegetation and an abundance of forbs and insects when these resources are otherwise limited on the landscape. Such areas include riparian communities, springs, seeps, mesic meadows, or irrigated hay meadows and alfalfa fields (GSRSC 2005, p. 30; Schroeder *et al.* 1999, p. 4; Connelly *et al.* 2000a, p. 980). However, seasonal foraging habitats typically receive use by Gunnison sage-grouse only if they are within 50 m (165 ft.) of surrounding sagebrush plant communities (Colorado Sage Grouse Working Group (CSGWG) 1997, p. 13).

In winter, greater and Gunnison sage-grouse diet is almost exclusively sagebrush (Rasmussen and Griner 1938, p. 855; Batterson and Morse 1948, p. 20; Patterson 1952, pp. 197–198; Wallestad *et al.* 1975, pp. 628–629; Young *et al.* 2000, p. 452). Various species of sagebrush can be consumed by sage-grouse (Remington and Braun 1985, pp. 1056–1057; Welch *et al.* 1988, p. 276, 1991; Myers 1992, p. 55). Habitats used by Gunnison sage-grouse during winter typically consist of 15 to 30 percent sagebrush canopy cover, similar to those used by greater sage-grouse (Connelly *et al.* 2000a, p. 972; Young *et al.* 2000, p. 451). However, Gunnison sage-grouse also seasonally use some deciduous shrub communities (e.g., Gambel oak and serviceberry) (Young *et al.* 2000, p. 451). Sagebrush exposure and height must be sufficient to provide birds access to food during snowy conditions and severe winters (GSRSC 2005, pp. 30–31) (see Cover or Shelter).

Based on the information above, we identify sagebrush plant communities that contain herbaceous vegetation consisting of a diversity and abundance of forbs, insects, and grasses, that fulfill all Gunnison sage-grouse seasonal dietary requirements, to be a physical or biological feature essential to the conservation of this species. We also identify as such features non-sagebrush habitats located adjacent to sagebrush plant communities that are used by Gunnison sage-grouse for foraging during seasonally dry periods, such as summer-late fall. These habitats are generally more mesic than surrounding habitat, and include wet meadows, riparian areas, and irrigated pastures.

Cover or Shelter

Predation is the most commonly identified cause of direct mortality for sage-grouse during all life stages, and Gunnison sage-grouse require sagebrush and herbaceous vegetation year-round for escape and hiding cover (Schroeder *et al.* 1999, p. 9; Connelly *et al.* 2000b,

p. 228; GSGRC 2005, p. 138; Connelly *et al.* 2011b, p. 66). Major predators of adult sage-grouse include many species including golden eagles (*Aquila chrysaetos*), red foxes (*Vulpes fulva*), and bobcats (*Felis rufus*) (Hartzler 1974, pp. 532–536; Schroeder *et al.* 1999, pp. 10–11; Schroeder and Baydack 2001, p. 25; Rowland and Wisdom 2002, p. 14; Hagen 2011, p. 97). Most raptor predation of sage-grouse is on juveniles and older age classes (GSRSC 2005, p. 135). Juvenile sage-grouse also are killed by common ravens (*Corvus corax*), badgers (*Taxidea taxus*), red foxes, coyotes (*Canis latrans*) and weasels (*Mustela* spp.) (Braun 1995, entire; Schroeder *et al.* 1999, p. 10). Nest predators include badgers, weasels, coyotes, common ravens, American crows (*Corvus brachyrhynchos*) and magpies (*Pica* spp.), elk (*Cervus canadensis*) (Holloran and Anderson 2003, p. 309), and domestic cows (*Bovus* spp.) (Coates *et al.* 2008, pp. 425–426). Ground squirrels (*Spermophilus* spp.) also have been identified as nest predators (Patterson 1952, p. 107; Schroeder *et al.* 1999, p. 10; Schroeder and Baydack 2001, p. 25), but recent data show that they are physically incapable of puncturing eggs (Holloran and Anderson 2003, p. 309; Coates *et al.* 2008, p. 426; Hagen 2011, p. 97). Young (1994, p. 37) found the most common predators of Gunnison sage-grouse eggs were weasels, coyotes, and corvids.

Nest predation appears to be related to the amount of herbaceous cover surrounding the nest (Gregg *et al.* 1994, p. 164; Braun 1995, pp. 1–2; DeLong *et al.* 1995, p. 90; Braun 1998; Coggins 1998, p. 30; Connelly *et al.* 2000b, p. 975; Schroeder and Baydack 2001, p. 25; Coates and Delehanty 2008, p. 636). Females actively select nest sites with the presence of big sagebrush and grass and forb cover (Connelly *et al.* 2000a, p. 971), and nesting success of greater sage-grouse is positively correlated with these qualities (Schroeder and Baydack 2001, p. 25; Hagen *et al.* 2007, p. 46). Likewise, reduced herbaceous cover for young chicks can increase their rate of predation (Schroeder and Baydack 2001, p. 27), and high shrub canopy cover at nest sites was related to lower levels of predation by visual predators, such as the common raven (Coates 2007, p. 148). However, herbaceous cover may not be effective in deterring olfactory predators such as badgers (Coates 2007, p. 149).

Gunnison sage-grouse nearly exclusively use sagebrush plant communities during the winter season for thermal cover and to meet nutritional needs. Sagebrush stand selection in winter is influenced by snow depth (Patterson 1952, p. 188–

189; Connelly 1982 as cited in Connelly *et al.* 2000a, p. 980) and in some areas, topography (Beck 1977, p. 22; Crawford *et al.* 2004, p. 5). Winter sagebrush use areas are associated with drainages, ridges, or southwest aspects with slopes less than 15 percent (Beck 1977, p. 22). Lower flat areas and shorter sagebrush along ridge tops provide roosting areas. In extreme winter conditions, greater sage-grouse will spend nights and portions of the day burrowed into “snow burrows” (Back *et al.* 1987, p. 488), and we expect Gunnison sage-grouse to exhibit the same behavior. Hupp and Braun (1989, p. 825) found that most Gunnison sage-grouse feeding activity in the winter occurred in drainages and on slopes with south or west aspects in the Gunnison Basin. During a severe winter in the Gunnison Basin in 1984, less than 10 percent of the sagebrush was exposed above the snow and available to sage-grouse (Hupp, 1987, pp. 45–46). In these conditions, the tall and vigorous sagebrush typical in drainages was an especially important food source (GSRSC 2005, p. 31).

Therefore, based on the information above, we identify sagebrush plant communities consisting of adequate shrub and herbaceous structure to provide year-round escape and hiding cover, as well as areas that provide concealment of nests and broods during the breeding season, and winter season thermal cover, to be a physical or biological feature essential to the conservation of this species. Quantitative information on cover can be found in the Primary Constituent Elements for Gunnison Sage-grouse section below.

Sites for Breeding, Reproduction, or Rearing (or Development) of Offspring

Lek Sites—Lek sites can be located on areas of bare soil, wind-swept ridges, exposed knolls, low sagebrush, meadows, and other relatively open sites with good visibility and low vegetation structure (Connelly *et al.* 1981, pp. 153–154; Gates 1985, pp. 219–221; Klott and Lindzey 1989, pp. 276–277; Connelly *et al.* 2004, pp. 3–7 and references therein). In addition, leks are usually located on flat to gently sloping areas of less than 15 percent grade (Patterson 1952, p. 83; Giezentanner and Clark 1974, p. 218; Wallestad 1975, p. 17; Autenrieth 1981, p. 13). Leks are often surrounded by denser shrub-steppe cover, which is used for escape, and thermal and feeding cover. Leks can be formed opportunistically at any appropriate site within or adjacent to nesting habitat (Connelly *et al.* 2000a, p. 970). Lek habitat availability is not

considered to be a limiting factor for sage-grouse (Schroeder 1997, p. 939). However, adult male sage-grouse demonstrate strong yearly fidelity to lek sites (Patterson 1952, p. 91; Dalke 1963 *et al.*, pp. 817–818; Lyon and Anderson 2003, p. 489), and some Gunnison sage-grouse leks have been used since the 1950s (Rogers 1964, pp. 35–40).

Nesting Habitat—Gunnison sage-grouse typically select nest sites under sagebrush cover with some forb and grass cover (Young 1994, p. 38), and successful nests were found in higher shrub density and greater forb and grass cover than unsuccessful nests (Young 1994, p. 39). The understory of productive sage-grouse nesting areas contains native grasses and forbs, with horizontal and vertical structural diversity that provides an insect prey base, herbaceous forage for pre-laying and nesting hens, and cover for the hen while she is incubating (Schroeder *et al.* 1999, p. 11; Connelly *et al.* 2000a, p. 971; Connelly *et al.* 2004, pp. 4–5–4–8). Shrub canopy and grass cover provide concealment for sage-grouse nests and young and are critical for reproductive success (Barnett and Crawford 1994, pp. 116–117; Gregg *et al.* 1994, pp. 164–165; DeLong *et al.* 1995, pp. 90–91; Connelly *et al.* 2004, p. 4–4). Few herbaceous plants are growing in April when nesting begins, so residual herbaceous cover from the previous growing season is critical for nest concealment in most areas (Connelly *et al.* 2000a, p. 977).

Nesting success for Gunnison sage-grouse is highest in areas where forb and grass covers are found beneath a sagebrush canopy cover of 15 to 30 percent (Young *et al.* 2000, p. 451). These numbers are comparable to those reported for greater sage-grouse (Connelly *et al.* 2000a, p. 971). Nest success for greater sage-grouse was greatest where grass cover is present (Connelly *et al.* 2000a, p. 971). Because of the similarities between these two species, we infer that increased nest success in Gunnison sage-grouse also depends on sufficient herbaceous understories beneath sagebrush cover. However, in a recent demographic study of Gunnison sage-grouse, nest site vegetation characteristics did not have a strong influence on nest success in the Gunnison Basin and San Miguel populations (Davis 2012, p. 10). Temporal factors appeared to have the greatest influence on nesting success, as earlier season nesting tended to be more successful than later season nesting; the longer incubation occurred, the greater the risk of nest failure (Davis 2012, p. 1). Nevertheless, the best available scientific information overall indicates a

link between habitat and vegetation characteristics and nest site selection and success in sage-grouse. Therefore, we maintain that vegetation characteristics are important physical and biological features of breeding and reproduction habitats for Gunnison sage-grouse.

Female Gunnison sage-grouse exhibit strong fidelity to nesting locations (Young 1994, p. 42; Lyon 2000, p. 20, Connelly *et al.* 2004, pp. 4–5; Holloran and Anderson 2005, p. 747). The degree of fidelity to a specific nesting area appears to diminish if the female's first nest attempt in that area was unsuccessful (Young 1994, p. 42). However, movement to new nesting areas does not necessarily result in increased nesting success (Connelly *et al.* 2004, pp. 3–6; Holloran and Anderson 2005, p. 748). As a consequence of their site fidelity to seasonal habitats, measurable population effects may lag behind negative changes in habitat, similar to other sagebrush obligate birds (Wiens and Rotenberry 1985, p. 666).

Brood-Rearing Habitat—Early brood-rearing habitat is found close to nest sites (Connelly *et al.* 2000a, p. 971), although individual females with broods may move large distances (Connelly 1982, as cited in Connelly *et al.* 2000a, p. 971). Gunnison sage-grouse with broods used areas with lower slopes than nesting areas, high grass and forb cover, and relatively low sagebrush cover and density (Young 1994, pp. 41–42). Broods frequently used the edges of hay meadows, but were often flushed from areas found in interfaces of wet meadows and habitats providing more cover, such as sagebrush or willow-alder (*Salix-Alnus*). By late summer and into the early fall, the birds move from riparian areas to mesic sagebrush plant communities that continue to provide green forbs. During this period, Gunnison sage-grouse can be observed in atypical habitat such as agricultural fields (Commons 1997, pp. 79–81). However, broods in the Gunnison Basin typically do not use hay meadows further away than 50 m (165 ft) from the edge of adjacent sagebrush stands (CSGWG 1997, p. 13). In the Monticello area, broods have been documented using CRP lands (Lupis 2005, p. 28).

Therefore, based on the information above, we identify sagebrush plant communities with the appropriate shrub and herbaceous vegetation structure to meet all the needs for all Gunnison sage-grouse reproductive activities (including lekking, nesting, and brood-rearing) to be a physical or biological feature essential to the conservation of this species.

Habitats Protected From Disturbance or Representative of the Historical, Geographical, and Ecological Distributions of the Species

Based on historical records, museum specimens, and potential historical sagebrush habitat distribution, Gunnison sage-grouse potential historical range included parts of central and southwestern Colorado, northwestern New Mexico, northeastern Arizona, and southeastern Utah (Schroeder *et al.* 2004, pp. 370–371). The potential historical range of Gunnison sage-grouse was estimated to have been 21,376 square miles, or 13,680,590 ac (GSRSC 2005, pp. 32–35, as adapted from Schroeder *et al.* 2004, entire). However, only a portion of this historical range would have been occupied at any one time.

According to the RCP, the species' estimated current range is 1,822 square miles, or 1,166,075 ac, in central and southwestern Colorado, and southeastern Utah (GSRSC 2005, pp. 32–35, as adapted from Schroeder *et al.* 2004, entire). Based on these figures, the species' current range would represent about 8.5 percent of its historical range (GSRSC 2005, p. 32). Similarly, Schroeder *et al.* (2004, p. 371) estimated the species' current overall range to be 10 percent of potential presettlement habitat (prior to Euro-American settlement in the 1800s). As estimated here, the species' current potential range includes an estimated 1,621,008 acres (ac) (655,957 hectares (ha)) in southwestern Colorado and southeastern Utah (Index Map), comprising 923,314 ac (349,238 ha) (57 percent) of occupied habitat and 697,694 ac (306,719 ha) (43 percent) of unoccupied habitat (Table 1). Based on these figures, the current potential range of 1,621,008 ac represents approximately 12 percent and occupied habitat represents approximately 7 percent of the potential historical range of 13,680,640 ac.

The estimates above indicate that approximately 88 to 93 percent of the historical range of Gunnison sage-grouse has been lost. We acknowledge that these estimates are uncertain and imprecise. We also recognize that only a portion of historical range would have been occupied at any one time, and that the distribution of sage-grouse habitat across the landscape is naturally disconnected due to the presence of unsuitable habitat such as forests, deserts, and canyons across the landscape (Rogers 1964, p. 19). Nevertheless, the best available information indicates a substantial reduction of Gunnison sage-grouse

distribution since Euro-American settlement in the 1800s, with evidence of the loss of peripheral populations (Schroeder *et al.* 2004, p. 371, and references therein) and a northward trend of extirpation (Schroeder *et al.* 2004, p. 369). This significant loss in habitat supports our determination that occupied habitat alone, or a subset of those lands (e.g., Federal land), are insufficient to ensure the species' persistence.

The occupied sagebrush plant communities included in this designation contain the physical and biological features representative of the historical and geographical distribution of the Gunnison sage-grouse. The unoccupied sagebrush plant communities included in this designation were all likely historically occupied (GSRSC 2005, pp. 32–33; Schroeder *et al.* 2004, entire) and allow for the expansion of the current geographic distribution of the species and potentially facilitate movements among populations. As discussed further under Rationale and Other Considerations, the extremely limited extent of sagebrush habitat throughout the current range of the species, particularly in the satellite populations, is a factor in our decision to include areas beyond currently occupied habitat in this critical habitat designation.

Primary Constituent Elements for Gunnison Sage-Grouse

Under the Act and its implementing regulations, we are required to identify the physical and biological features essential to the conservation of Gunnison sage-grouse in areas occupied at the time of listing, focusing on the features' primary constituent elements (PCEs). Primary constituent elements are those specific elements of physical and biological features that provide for a species' life-history processes and are essential to the conservation of the species.

We consider all areas designated as occupied critical habitat here to meet the landscape specific PCE 1 and one or more of the seasonally specific PCEs (2–5).

For the “seasonally specific PCEs (2–5), we generally adopt the values from the 2005 RCP (GSRSC 2005, Appendix H, and references therein). The 2005 RCP provides structural habitat values developed using only Gunnison sage-grouse habitat use data from various Gunnison sage-grouse populations in all seasonal habitats (GSRSC 2005, p. H–2). Source data includes structural vegetation data collected in the breeding season (Young 1994, entire; Apa 2004, entire), summer-fall (Young 1994,

entire; Woods and Braun 1995, entire; Commons 1997, entire; Apa 2004, entire), and winter (Hupp 1987, entire). In addition, these structural habitat values are specific to the Colorado Plateau floristic province and reflect the understory structure and composition specific to the range of Gunnison sage-grouse (GSRSC 2005, p. H–2). As such, these values are based on the most current and comprehensive, rangewide assessment of Gunnison sage-grouse habitat structure.

We also note, however, that some lands, especially agricultural fields and CRP lands, meet one or more of the seasonally specific PCEs even without meeting the RCP's structural habitat guidelines. This is so because in some of these areas there is little sagebrush habitat available for the birds, oftentimes critical seasonal habitats have been converted to agricultural fields, and when sagebrush communities are drying out and forbs are waning on the landscape, resources can still be available in these agricultural areas. Still, these agricultural fields are less desirable for the species than intact sagebrush communities.

As presented in the RCP (GSRSC 2005, pp. H6–H8), habitat structural values are known to vary between arid and mesic areas in sage-grouse habitat. Therefore, in the following descriptions and Tables 2 and 3, we provide the full range of these structural values to account for this variation. We have also included agricultural fields in the seasonally specific PCEs.

Based on our current knowledge of the physical or biological features and habitat characteristics required to support the species' life-history requirements, we identify the following primary constituent elements specific to Gunnison sage-grouse. The basis for selected metrics of landscape specific and seasonally specific PCEs is discussed in detail below (see Criteria and Methodology Used to Identify Critical Habitat).

Landscape Specific Primary Constituent Element

Primary Constituent Element 1—Extensive sagebrush landscapes capable of supporting a population of Gunnison sage-grouse. In general, this includes areas with vegetation composed primarily of sagebrush plant communities (at least 25 percent of the land is dominated by sagebrush cover within a 0.9-mi (1.5-km) radius of any given location), of sufficient size and configuration to encompass all seasonal habitats for a given population of Gunnison sage-grouse, and facilitate

movements within and among populations. These areas also occur wholly within the potential historical range of Gunnison sage-grouse (GSRSC 2005, pp. 32–35, as adapted from Schroeder *et al.* 2004, entire).

Seasonally Specific Primary Constituent Elements

Primary Constituent Element 2—Breeding habitat composed of sagebrush plant communities that, in general, have the structural characteristics within the ranges described in the following table. Habitat structure values are average values over a project area. Breeding habitat includes lek, nesting, and early brood-rearing habitats used typically March 15 through July 15 (GSRSC 2005, p. H–3). Early brood-rearing habitat may include agricultural fields.

TABLE 2—BREEDING HABITAT STRUCTURAL GUIDELINES FOR GUNNISON SAGE-GROUSE^a

Vegetation variable	Amount in habitat
Sagebrush Canopy Cover	10–25 percent.
Non-sagebrush Canopy Cover ^b	5–15 percent.
Total Shrub Canopy Cover	15–40 percent.
Sagebrush Height	9.8–19.7 in (25–50 cm).
Grass Cover	10–40 percent.
Forb Cover	5–40 percent.
Grass Height	3.9–5.9 in (10–15 cm).
Forb Height	2.0–5.9 in (5–15 cm).

^aDerived from GSRSC 2005, p. H–6, which depicts structural values for both arid and mesic areas in Gunnison sage-grouse habitat. Here we provide the full range of these structural values to account for this variation.

^bIncludes shrubs such as horsebrush (*Tetradymia* spp.), rabbitbrush (*Chrysothamnus* spp.), bitterbrush (*Purshia* spp.), snakeweed (*Gutierrezia sarothrae*), greasewood (*Sarcobatus* spp.), winterfat (*Eurotia lanata*), Gambel's oak (*Quercus gambelii*), snowberry (*Symphoricarpos oreophilus*), serviceberry (*Amelanchier* spp.), and chokecherry (*Prunus virginiana*).

Primary Constituent Element 3—Summer-late fall habitat composed of sagebrush plant communities that, in general, have the structural characteristics within the ranges described in the following table. Habitat structure values are average values over a project area. Summer-fall habitat includes sagebrush communities having the referenced habitat structure values, as well as agricultural fields and wet meadow or riparian habitat types. Wet meadows and riparian habitats are also included qualitatively under PCE 5 below.

TABLE 3—SUMMER-LATE FALL HABITAT STRUCTURAL GUIDELINES FOR GUNNISON SAGE-GROUSE ^{a b}

Vegetation variable	Amount in habitat
Sagebrush Canopy Cover Non-sagebrush Canopy Cover ^c	5–20 percent. 5–15 percent.
Total Shrub Canopy Cover Sagebrush Height	10–35 percent. 9.8–19.7 in (25–50 cm).
Grass Cover	10–35 percent.
Forb Cover	5–35 percent.
Grass Height	3.9–5.9 in (10–15 cm).
Forb Height	1.2–3.9 in (3–10 cm).

^aStructural habitat values provided in this table do not include wet meadow or riparian habitats. Therefore, we address these habitat types under Primary Constituent Element 5 below.

^bDerived from GSRSC 2005, p. H–7, which depicts structural values for both arid and mesic areas in Gunnison sage-grouse habitat. Here we provide the full range of these structural values to account for this variation.

^cIncludes shrubs such as horsebrush (*Tetradymia* spp.), rabbitbrush (*Chrysothamnus* spp.), bitterbrush (*Purshia* spp.), snakeweed (*Gutierrezia sarothrae*), greasewood (*Sarcobatus* spp.), winterfat (*Eurotia lanata*), Gambel's oak (*Quercus gambelii*), snowberry (*Symphoricarpos oreophilus*), serviceberry (*Amelanchier* spp.), and chokecherry (*Prunus virginiana*).

Primary Constituent Element 4—Winter habitat composed of sagebrush plant communities that, in general, have sagebrush canopy cover between 30 to 40 percent and sagebrush height of 15.8 to 21.7 in (40 to 55 cm). These habitat structure values are average values over a project area. Winter habitat includes sagebrush areas within currently occupied habitat that are available (i.e., not covered by snow) to Gunnison sage-grouse during average winters (GSRSC 2005, p. H–3).

Primary Constituent Element 5—Alternative, mesic habitats used primarily in the summer-late fall season, such as riparian communities, springs, seeps, and mesic meadows (GSRSC 2005, pp. 30, H–7; Schroeder *et al.* 1999, p. 4; Connelly *et al.* 2000a, p. 980).

Special Management Considerations or Protection

When designating critical habitat, we assess whether the specific areas within the geographical area occupied by the species at the time of listing contain features that are essential to the conservation of the species and which may require special management considerations or protection. All areas being designated as critical habitat as described below may require some level of management to address the current and future threats to the physical and

biological features essential to the conservation of Gunnison sage-grouse. In all of the described units, special management may be required to ensure that the habitat is able to provide for the biological needs of the species.

A detailed discussion of the current and foreseeable threats to Gunnison sage-grouse can be found in the final listing rule, published elsewhere in today's **Federal Register**, in the section titled *Summary of Factors Affecting the Species*. In general, the features essential to the conservation of Gunnison sage-grouse may require special management considerations or protection to address or ameliorate the following significant threats and their interactions: The small population size and structure of most Gunnison sage-grouse populations; habitat decline, including habitat loss, degradation, and fragmentation of sagebrush habitats; drought and climate change; and disease. The special management considerations needed for each critical habitat unit that is being designated are described below.

Special management considerations or protection may be required to address these threats in designated critical habitat. Based on our analysis of threats to Gunnison sage-grouse, continued or future management activities that could ameliorate these threats include, but are not limited to: Comprehensive land-use planning and implementation that prevents a net decrease in the extent and quality of Gunnison sage-grouse habitat through the prioritization and protection of habitats and monitoring; protection of lands by fee title acquisition or the establishment of permanent CEs; management of recreational use to minimize direct disturbance and habitat loss; activities to control invasive weed and invasive native plant species; management of domestic and wild ungulate use so that overall habitat meets or exceeds Gunnison sage-grouse structural habitat guidelines; monitoring of predator communities and management as appropriate; coordinated and monitored habitat restoration or improvement projects; and wildfire suppression, particularly in Wyoming big sagebrush communities. In some cases, continuing current land management practices may be appropriate and beneficial for Gunnison sage-grouse. For instance, continued irrigation and maintenance of hay and alfalfa fields on private lands near sagebrush habitats may help provide or enhance mesic, brood-rearing habitats for Gunnison sage-grouse. While this is a list of special management considerations or protections that are needed, the Service

acknowledges the ongoing and pending conservation efforts of all entities across the range of the Gunnison sage-grouse, such as the Sage Grouse Initiative led by the Natural Resources Conservation Service and its many partners. Conservation efforts by those entities on private lands are described in detail under Factor A in our final listing rule for Gunnison sage-grouse elsewhere in today's **Federal Register**.

Additionally, management of critical habitat lands can increase the amount of suitable habitat and enhance connectivity among Gunnison sage-grouse populations through the restoration of areas that were once dominated by sagebrush plant communities. The limited extent of sagebrush habitats throughout the species' current range emphasizes the need for additional habitat for the species to be able to expand into, allowing for species' conservation. Furthermore, additional sagebrush habitat will also allow the grouse to adjust to changes in habitat availability that may result from climate change.

Criteria and Methods Used To Identify and Map Critical Habitat

As required by section 4(b)(2) of the Act, we use the best scientific data available to designate critical habitat. In accordance with the Act and our implementing regulations at 50 CFR 424.12(b), we review available information pertaining to the habitat requirements of the species and identify occupied areas at the time of listing that contain the features essential to the conservation of the species. If, after identifying currently occupied areas, we determine that those areas are inadequate to ensure conservation of the species, in accordance with the Act and our implementing regulations at 50 CFR 424.12(e), we then consider whether designating additional areas—outside those currently occupied—are essential to the conservation of the species. Based on this analysis, we are designating critical habitat in areas within the geographical area occupied by the species at the time of listing (currently occupied). We also are designating specific areas outside the geographical area currently occupied by the species, including areas that were historically occupied but are presently unoccupied, because we find that such areas are essential for the conservation of the species (see Rationale and Other Considerations). In an attempt to better explain our criteria in response to public comments, we are providing a new format for our criteria. Therefore, this section looks different from our proposed critical habitat rule. Although

the explanation presented here is different in format, our criteria and the designation resulting from these criteria is the same. We have also expanded our description of the criteria to add additional clarity.

For occupied habitat, we based our identification of lands that contain the PCEs for Gunnison sage-grouse on polygons delineated and defined by Colorado Parks and Wildlife (CPW) and the Utah Division of Wildlife Resources (UDWR) as part of the 2005 RCP Habitat Mapping project (GSRSC 2005, p. 54), and as updated by subsequent CPW mapping (CPW 2013e, spatial data). Gunnison sage-grouse polygons mapped in the 2005 RCP were derived from a combination of telemetry locations, sightings of sage-grouse or sage-grouse sign, local biological expertise, GIS analysis, or other data sources (GSRSC 2005, p. 54; CDOW 2009e, p. 1). We consider polygons designated as “occupied habitat” (GSRSC 2005, p. 54; CPW 2013e, spatial data) to be the area occupied by Gunnison sage-grouse at the time of the listing. These occupied polygons, lek locations, and the habitat guidelines laid out in the RCP, allowed us to determine where the PCEs for Gunnison sage-grouse existed (see Primary Constituent Elements for Gunnison Sage-grouse). Unfortunately, maps of where seasonally specific PCEs exist on the landscape are not available. Therefore, we additionally looked at the Gunnison Basin habitat prioritization tool (BLM 2013b, Appendix F), and 0.6 and 4 mile buffers around lek locations (as described in the RCPs disturbance guidelines (GSRSC 2005, Appendix I) in our evaluation to better consider the seasonally specific PCEs. Further, we utilized this occupied habitat to develop our habitat suitability analysis (used for unoccupied habitat below in criterion 4) and generally, this habitat suitability criterion analysis correlates with PCE 1.

We based our model and identification of unoccupied critical habitat for Gunnison sage-grouse on four criteria: (1) The distribution and range of the species; (2) potential occupancy of the species; (3) proximity and potential connectivity between occupied habitats; and (4) suitability of the habitat for the species.

Distribution and Range of the Species (Criterion 1)

We first limited our consideration and analysis of unoccupied critical habitat to the species’ potential historical range (GSRSC 2005, pp. 32–35, as adapted from Schroeder *et al.* 2004, entire) (potential historical range is described in detail in our final rule to list Gunnison sage-grouse elsewhere in

today’s **Federal Register**). In other words, the entirety of designated unoccupied critical habitat (and occupied critical habitat) in this final rule occurs within the boundaries of the species’ historical range. However, we further narrowed our consideration of unoccupied critical habitat within the historical range by evaluating potential occupancy of the species, habitat connectivity, and habitat suitability.

Potential Occupancy of the Species (Criterion 2)

We based our identification of unoccupied habitats for Gunnison sage-grouse on maps and polygons of “potential” and “vacant/unknown” habitat delineated and defined by the CPW and UDWR. Habitat maps were completed in support of the 2005 RCP (GSRSC 2005, pp. 54–102). The 2005 RCP defined two unoccupied habitat categories, “potential habitat,” and “vacant or unknown habitat” (GSRSC 2005, p. 54). The RCP defined potential habitat as “unoccupied habitats that could be suitable for occupation of sage-grouse if practical restoration were applied,” and is most commonly former sagebrush areas overtaken by piñon-juniper woodlands. The RCP defines vacant or unknown habitat category as “suitable habitat for sage-grouse that is separated (not contiguous) from occupied habitats that either has not been adequately inventoried, or has not had documentation of sage-grouse presence in the past 10 years.”

We used the “potential” and “vacant or unknown” habitat polygons (GSRSC 2005, pp. 54–102) to evaluate unoccupied areas as potential critical habitat for Gunnison sage-grouse. Due to limited information available for these areas, we assumed that both types are equal in value and importance to the species (i.e., one was not ranked or weighted as being more important than the other). We then combined and classified these two types as unoccupied habitat for consideration in our analysis and in this critical habitat designation. As described in more detail below, we further evaluated these areas as potential critical habitat based on their adjacency or proximity to currently occupied habitat (potential connectivity between and within populations, criterion 3); and suitability, defined by large areas with dominated by sufficient sagebrush cover at the landscape scale (criterion 4).

Unoccupied habitat in this critical habitat designation differs from the RCP mapped unoccupied habitats (GSRSC 2005, pp. 54–102), in some instances adding or omitting certain areas of unoccupied habitat, based on our

adopted criteria and methodology. Some RCP-identified areas were not included in the designation due to distance of the locations from occupied range (i.e., failed criterion 3), where movement of sage-grouse is either not known or anticipated (e.g., peripheral unoccupied habitat north and northeast of the Crawford population of Gunnison sage-grouse). There were areas where only a part of the potential or vacant/unknown habitat met our suitability criterion (4). In these cases, the entire polygon was still included in the designation, with one exception. One RCP potential polygon was very large and extended into Montezuma County. The portion of the polygon that fell within Montezuma County had little suitability (less than 20 percent of the almost 95,000 ac) and the suitable habitat was almost all more than 18.5 km away from occupied habitat. For these reasons, we modified this very large polygon so it no longer included Montezuma County.

Proximity and Potential Connectivity (Criterion 3)

To account for proximity to and potential connectivity with occupied Gunnison sage-grouse habitat, we only considered unoccupied areas as critical habitat if they occur within approximately 18.5 km (11.5 mi) of occupied habitat (using “shortest distance”) as presented in the RCP (GSRSC 2005, pp. J–3). Therefore, outside of occupied habitat, we conclude these areas have the highest likelihood of Gunnison sage-grouse use and occupation. Other studies have suggested similar maximum seasonal (not dispersal) movement distances, supporting our use of 18.5 km for connectivity. For example, Connelly *et al.* (2000a, p. 978) recommended protection of breeding habitats within 18 km of active leks in migratory sage-grouse populations.

The maximum dispersal distance of greater sage-grouse in northwest Colorado is about 20.0 km (12.4 mi) and, therefore, it was suggested that populations within this distance could maintain gene flow and connectivity (Thompson 2012, pp. 285–286). It was hypothesized that isolated patches of suitable habitats within 18 km (11.2 mi) provide for connectivity between sage-grouse populations; however, information on how sage-grouse actually disperse and move through landscapes is lacking (Knick and Hanser 2011, pp. 402, 404). Gunnison sage-grouse birds have been measured moving up to 35 mi (56 km), but these dispersal events appear to be less frequent.

We recognize that Gunnison sage-grouse movement behavior and

distances likely vary widely by population and area, potentially as a function of population dynamics, limited or degraded habitats, and similar factors; and that movements have been documented as being much greater or less than 18.5 km in some cases (see our final rule to list Gunnison sage-grouse elsewhere in today's **Federal Register** for more discussion). However, the best available information indicates 18.5 km is a reasonable estimate of the maximum distance required between habitats and populations to ensure connectivity for Gunnison sage-grouse, or facilitate future expansion of the species range—hence, our selection of this metric in our evaluation of areas as potential critical habitat.

Habitat Suitability (Criterion 4)

Gunnison and greater sage-grouse occupancy, survival, and persistence are dependent on the availability of sufficient sagebrush habitat on a landscape scale (Patterson 1952, p. 9; Braun 1987, p. 1; Schroeder *et al.* 2004, p. 364; Knick and Connelly 2011, entire; Aldridge *et al.* 2012, entire; Wisdom *et al.* 2011, entire). Aldridge *et al.* (2008b, pp. 989–990) reported that at least 25 percent of the landscape needed to be dominated by sagebrush cover within a 30-km (18.6-mi) radius for long-term persistence of sage-grouse populations. Wisdom *et al.* (2011, pp. 465–467) indicated that areas where at least 27 percent of the landscape was dominated by sagebrush cover within an 18-km (11.2-mi) radius scale sage-grouse populations had a higher probability of persistence. Combined these studies indicate that approximately 25 percent of the landscape needs to be dominated by sagebrush cover to ensure sage-grouse persistence. On a finer scale, spatial modeling by Aldridge *et al.* (2012, p. 400) indicated that Gunnison sage-grouse in the Gunnison Basin selected for nesting areas with adequate sagebrush cover (5 percent or more was dominated by sagebrush cover) at landscape scales (defined as 1.5-km radius areas).

As discussed above, we have a basic understanding of the species' needs for connectivity of habitat and populations (18.5 km or less separation between occupied habitats or populations) (see Proximity and Potential Connectivity (Criterion 3)). The scientific literature also indicates that habitat suitability is dependent on large landscapes (18- to 30-km radius area) where 25 percent or greater of the area is dominated by sagebrush cover (Wisdom *et al.* 2011, pp. 465–467; Aldridge *et al.* 2008b, pp. 989–990). At finer scales (1.5-km radius

area) and during the breeding season, at least 5 percent of the landscape needs to be dominated by sagebrush to be preferred by nesting sage-grouse (Aldridge *et al.* 2012, p. 400). These studies and figures demonstrate the uncertainty in how large landscapes must be to support Gunnison sage-grouse populations, at what scale habitat selection occurs and, therefore, at what scale habitat should be evaluated and mapped.

To address this uncertainty, we used GIS to evaluate Gunnison sage-grouse habitats at multiple spatial scales and compared the results to our current knowledge of the species' range and habitat. We applied a moving windows analysis (ESRI "Neighborhood Analysis" Tool) to three prominent sagebrush landcover types in Gunnison sage-grouse range (Intermountain Basin big sagebrush shrubland, Intermountain Basin montane sagebrush steppe, and Colorado Plateau mixed low sagebrush shrubland) isolated (reclassified) from the SWReGAP land cover raster dataset (30-meter resolution) (USGS 2004, entire). Several other regional sagebrush land cover types were not included in our analysis either because they occur outside of Gunnison sage-grouse range or are limited in extent or land cover types and are generally considered less important to the species. We then quantified the land cover of these sagebrush habitat types at 54 km, 18 km, 5 km, and 1.5 km radii scales (33.6 mi, 11.2 mi, 3.1 mi, and 0.9 mi radii, respectively) to identify and map areas where at least 25 percent of the landscape is dominated by sagebrush cover (based on Wisdom *et al.* 2011, pp. 465–467; and Aldridge *et al.* 2008b, pp. 989–990).

To determine which scale was most applicable for unoccupied habitats, we overlaid the various scale (54 km, 18 km, 5 km, and 1.5 km radii) analyses with occupied habitat. We found that modeling at the finer 1.5-km scale was necessary to identify or "capture" all areas of known occupied range, particularly in the smaller satellite populations where sagebrush habitat is generally limited in extent. Larger scales failed to capture areas we know to contain occupied and suitable habitats (e.g., at the 54-km scale, only the Gunnison Basin area contained areas where at least 25 percent of the landscape is dominated by sagebrush cover) (USFWS 2013d, p. 3). Although in our final listing rule, published elsewhere in today's **Federal Register**, we found that using a 1.5-km radius (window) analysis was not appropriate for evaluating the effects of residential development, for our habitat suitability

analysis, we found that, at the 1.5-km radius scale (or window) (based on Aldridge *et al.* 2012, p. 400), mapping areas where at least 25 percent of the landscape is dominated by sagebrush cover (based on Wisdom *et al.* 2011, pp. 465–467; and Aldridge *et al.* 2008b, pp. 989–990) provided the best estimation of our current knowledge of Gunnison sage-grouse occupied range and suitable habitat.

Based on the information and results above, to evaluate habitat suitability for unoccupied Gunnison sage-grouse habitat, we applied the 1.5-km scale and 25 percent dominant sagebrush land cover attributes. This means that areas found to be suitable as unoccupied critical habitat contain large portions where at least 25 percent of the landscape is dominated by sagebrush cover within a 1.5-km (0.9-mi) radius.

Rationale and Other Considerations

The best available information suggests that currently occupied habitat is inadequate for the conservation of the species. The RCP evaluated the linear relationship between the mean high count of males on leks and the amount of available habitat of "average quality" in each Gunnison sage-grouse population, and predicted a habitat area in excess of 100,000 acres is needed to support a population of 500 birds (GSRSC 2005, p. 197). In the absence of habitat loss, inbreeding depression, and disease, population viability modeling for Gunnison sage-grouse predicted that individual populations greater than 500 birds may be viable (have a low probability of extinction) over a 50-year time period (GSRSC 2005, p. 170). These data suggest that an individual habitat patch, or the cumulative area of two or more smaller habitat patches in close proximity, may need to be in excess of 100,000 ac (40,500 ha) to support a viable population of Gunnison sage-grouse. This model did not take into account the inherent variance in habitat structure and quality over the landscape, however, and detailed habitat structure and quality data are lacking. Therefore, we consider the modeled minimum habitat area to be an approximation.

The currently occupied habitat areas, for the Piñon Mesa, Cerro Summit-Cimarron-Sims Mesa and Crawford populations, which range in size from 35,015 ac (14,170 ha) to 44,678 ac (18,080 ha) are smaller than the RCP model's predicted minimum required area (Table 1). The currently occupied habitat areas in the Monticello-Dove Creek and the San Miguel Basin populations population are 112,543 ac (45,544 ha) and 101,750 ac (16,805 ha),

respectively (Table 1). These areas only slightly exceed the model's predicted minimum required area. While correlative in nature, together these data suggest that the currently occupied habitat area for at least three populations included in this final designation is insufficient for long-term population viability, and may be minimally adequate for two populations. Declining trends in the abundance of Gunnison sage-grouse outside of the Gunnison Basin further indicate that currently occupied habitat for the five satellite populations areas included in this final designation may be less than the minimum amount of habitat necessary for these populations' long-term viability.

Occupied habitat within the Gunnison Basin population is much larger (592,168 ac (239,600 ha)) than the RCP model's predicted minimum required area. However, extensive sagebrush landscapes capable of supporting a wide array of seasonal habitats and annual migratory patterns for Gunnison sage-grouse are rare across the species' range. The Gunnison Basin population is extremely important for the species' survival, because it contains approximately 63 percent of the occupied habitat and 84 percent of the birds rangewide (see our final rule to list Gunnison sage-grouse as threatened, published elsewhere in today's **Federal Register**). Therefore, based on the best available data, we determined that currently unoccupied areas in this population are essential for the persistence and conservation of the Gunnison sage-grouse. With the satellite populations declining, providing more stability for the Gunnison Basin population through additional expanses of sagebrush landscapes is essential for the conservation of the species. Further, these unoccupied areas of sagebrush expanses also provide potential connectivity to the Crawford and Cerro Summit-Cimarron-Sims Mesa populations to the west. The small piece of unoccupied habitat to the east of the Gunnison Basin provides a link between those birds in occupied habitat to the north and west.

With the exception of the Gunnison Basin critical habitat unit (CHU), CHUs for Gunnison sage-grouse collectively contain relatively small, and in some cases, isolated, populations of the species. Thus, we determined that all currently occupied areas, (except the Poncha Pass population area, which does not meet PCE 1), as well as some currently unoccupied areas, are essential for the persistence and conservation of the Gunnison sage-grouse and help to meet the landscape

specific habitat criteria set forth above. The best available information indicates that, with implementation of special management considerations, the CHUs, including the designated unoccupied areas, are sufficient to provide for the conservation of the species. Designated unoccupied critical habitat in the Gunnison Basin provides for dispersal of birds from this larger population to outlying areas and satellite populations. We believe that the Cerro Summit-Cimarron-Sims Mesa unit is particularly important as a linkage area between the Gunnison Basin and the Crawford and San Miguel population, and contains both occupied and unoccupied critical habitat. Furthermore, unoccupied critical habitat across the range of the species offers the potential for range expansion and migration, whether associated with environmental (e.g., climate change), demographic (e.g., population growth), or catastrophic (e.g., large fires) factors.

When determining critical habitat boundaries within this final rule, we made every effort to avoid including lands covered by buildings, pavement, and other manmade structures because such lands lack physical and biological features essential to the conservation of Gunnison sage-grouse. Therefore, we have determined that lands covered by existing manmade structures on the effective date of this rule do not meet the definition of critical habitat in Section 3(5)(a) of the Act, and should not be included in the final designation. For this reason, we did not include moderately to highly developed lands around the City of Gunnison and Dove Creek in the final designation.

The scale of the maps we prepared under the parameters for publication within the Code of Federal Regulations may not reflect that developed lands are not included in the final critical habitat designation. Any lands covered by buildings, pavement, and other manmade structures on the effective date of this rule left inside critical habitat boundaries shown on the maps of this final rule have been removed by text in the final rule, and are not designated as critical habitat. Therefore, a Federal action involving the lands that are removed by text will not trigger section 7 consultation with respect to critical habitat and the requirement of no adverse modification, unless the specific action would affect the essential physical and biological features in the adjacent critical habitat.

We are designating as critical habitat lands that we have determined are occupied at the time of listing (with the exception of the Poncha Pass area), and contain the physical or biological

features to support life-history processes essential to the conservation of the species. Because we conclude that the designation of lands occupied at the time of listing, standing alone, is not adequate to conserve the species, we are also designating lands outside of the geographical area occupied at the time of listing that we have determined are essential for the conservation of Gunnison sage-grouse.

Units were designated based on the physical and biological features being present to support Gunnison sage-grouse life-history processes. All units individually contain all of the identified elements of physical and biological features, and each unit as a whole supports multiple life-history processes. In a critical habitat determination, the Service determines what scale is most meaningful to identifying specific areas that meet the definition of "critical habitat" under the Act. For example, for a wide-ranging, landscape species covering a large area of occupied and potential habitat across several States (such as the Gunnison sage-grouse), a relatively coarse-scale analysis is appropriate and sufficient to designate critical habitat as defined by the Act, while for a narrow endemic species, with specialized habitat requirements and relatively few discrete occurrences, it might be appropriate to engage in a relatively fine-scale analysis for the designation of critical habitat.

The critical habitat designation is defined by the maps, as modified by any accompanying regulatory text, presented at the end of this final rule. We include more detailed information on the boundaries of the critical habitat designation in this preamble to the rule. We will make the coordinates on which each map is based available to the public on <http://www.regulations.gov> at Docket No. FWS-R6-ES-2011-0111, on our Internet site at <http://www.fws.gov/mountain-prairie/species/birds/gunnisonsagegrouse/>, and at the field office responsible for the designation (see **FOR FURTHER INFORMATION CONTACT** above).

Reasons for Removing Poncha Pass as a Critical Habitat Unit

Although we previously proposed designating a critical habitat unit in Poncha Pass, information received since the publication of the proposed rule (CPW 2013e, p. 1; CPW 2014d, p. 2; CPW 2014e, p. 2; CPW 2014 f, p. 2) has caused us to reevaluate the appropriateness of including the unit. Poncha Pass is thought to have been part of the historical distribution of Gunnison sage-grouse. There were no grouse there, however, when a

population was established via transplant from 30 Gunnison Basin birds in 1971 and 1972. In 1992, hunters harvested at least 30 grouse from the population when CPW inadvertently opened the area to hunting. We have no information on the population's trends until 1999, when the population was estimated at roughly 25 birds. In one year the population declined to less than 5 grouse, after which more grouse were brought in, again from the Gunnison Basin, in 2000 and 2001. In 2002, the population rose to just over 40 grouse, but starting in 2006, the population again started declining until no grouse were detected in lek surveys in the spring of 2013 (after publication of the proposed critical habitat rule). Grouse were again brought in in the fall of 2013 and 2014 (CPW 2014e, p. 1), and six grouse were counted in the Poncha Pass population during the spring 2014 lek count (CPW 2014d, p.2); however, no subsequent evidence of reproduction was found (CPW 2014f, p. 2).

We now conclude that the Poncha Pass area, for reasons unknown, is not a landscape capable of supporting a population of Gunnison sage-grouse and therefore does not meet PCE 1. Because the population has repeatedly declined to the point of extirpation and is not self-sustaining, something in the unit is not providing the wide array of habitats that support seasonal movement patterns and provide for all the life history needs of the Gunnison sage-grouse. While we do not consider

currently stable populations as being a litmus test for designation, we carefully considered the unique history of the grouse's repeated extirpation from this particular area, as well as the lack of evidence of the landscape functions described by PCE 1, in reaching our conclusion that this area does not meet PCE 1 and should not be designated as critical habitat.

We have reached this conclusion for the following reasons: (1) The population was extirpated before 1971, declined to fewer than 5 birds by 2000, and was again extirpated in 2013 (had more grouse not been reintroduced in 2013 and 2014, there would be no grouse currently in the Poncha Pass area), (2) to the extent that any of the reintroduced birds or their offspring currently survive, the population has demonstrated (through the need for repeated transplant efforts) that it is not self-sustaining or viable (always with fewer than 50 birds since counts began), and (3) we expect that this population will require repeated augmentations to avoid yet another extirpation.

Because this unit is not meeting PCE 1, and therefore does not have the necessary physical and biological features essential to the conservation of the grouse, we conclude that the Poncha Pass unit does not meet the ESA's definition of "critical habitat." Therefore, we are removing the entire unit from the final critical habitat designation.

Final Critical Habitat Designation

The critical habitat areas described below constitute our current best assessment of areas that meet the definition of critical habitat for Gunnison sage-grouse. We are designating approximately 1,429,551 ac (578,515 ha) of critical habitat across six units for Gunnison sage-grouse (Table 1). These six units correspond to six of the seven Gunnison sage-grouse populations, including: (1) Monticello-Dove Creek, (2) Piñon Mesa, (3) San Miguel Basin, (4) Cerro Summit-Cimarron-Sims Mesa, (5) Crawford, and (6) Gunnison Basin. We consider approximately 55 percent of all critical habitat to be currently occupied and 45 percent to be currently unoccupied by Gunnison sage-grouse (Table 4). Of this critical habitat designation, approximately 55 percent occurs on Federal land; 43 percent occurs on private land; 2 percent occurs on State land; and less than 0.1 percent occurs on city and county land (Table 5). Table 4 provides the size and occupancy status of Gunnison sage-grouse for each critical habitat unit; Table 5 provides land ownership and occupancy status of Gunnison sage-grouse for each critical habitat unit. Calculated acres reflect exclusions from this final critical habitat designation, including private lands under CE, properties with a CI under the CCAA as of the effective date of this rule, and the Ute Mountain Ute Tribe's Pinecrest Ranch (see Exclusions below).

TABLE 4—SIZE AND CURRENT OCCUPANCY STATUS OF GUNNISON SAGE-GROUSE IN DESIGNATED CRITICAL HABITAT UNITS ^{a b}

[Area estimates reflect all land within critical habitat unit boundaries.]

Critical habitat unit	Acres	Hectares	Unit percent of total acres	Occupied?	Acres	Hectares	Percent of individual unit	Percent of all units
Monticello-Dove Creek	343,000	138,807	24.0	Yes	107,061	43,326	31.2	7.5
				No	235,940	95,481	68.8	16.5
Piñon Mesa	207,792	84,087	14.5	Yes	28,820	11,663	13.9	2.0
				No	178,972	72,424	86.1	12.5
San Miguel Basin	121,929	49,343	8.5	Yes	81,514	32,988	66.9	5.7
				No	40,414	16,355	33.1	2.8
Cerro Summit-Cimarron-Sims Mesa	52,544	21,264	3.7	Yes	33,675	13,628	64.1	2.4
				No	18,869	7,636	35.9	1.3
Crawford	83,671	33,860	5.9	Yes	32,632	13,206	39.0	2.3
				No	51,039	20,655	61.0	3.6
Gunnison Basin	620,616	251,154	43.4	Yes	500,909	202,711	80.7	35.0
				No	119,707	48,444	19.3	8.4
All Units	1,429,551	578,515	100	Yes	784,611	317,521	54.9	54.9
				No	644,940	260,994	45.1	45.1

^a Area sizes may not sum precisely due to rounding.

^b Area sizes reflect lands excluded in this final critical habitat designation including private lands under CE, CCAA properties, and the Ute Mountain Ute Tribe's Pinecrest Ranch.

TABLE 5—LAND OWNERSHIP AND OCCUPANCY STATUS OF GUNNISON SAGE-GROUSE IN DESIGNATED CRITICAL HABITAT UNITS ^{a b}

Critical habitat unit	Occupied?	Federal		State		City and county		Private	
		Percent of subunit	Percent of unit	Percent of subunit	Percent of unit	Percent of subunit	Percent of unit	Percent of subunit	Percent of unit
Monticello-Dove Creek	Yes	7.9	13.0	3.1	1.0	.....	.....	89.0	86.0
	No	15.3	.....	0.0	.....	.....	.....	84.7	.....
Piñon Mesa	Yes	44.9	73.3	0.0	0.0	.....	.....	55.1	26.6
	No	77.9	.....	0.0	.....	.....	.....	22.0	.....
San Miguel Basin	Yes	45.5	40.6	18.4	12.3	.....	.....	36.1	47.1
	No	30.7	.....	0.0	.....	.....	.....	69.3	.....
Cerro Summit-Cimarron-Sims Mesa.	Yes	14.5	18.8	12.1	7.7	.....	.....	73.5	73.5
	No	26.5	.....	0.0	.....	.....	.....	73.5	.....
Crawford	Yes	81.3	52.6	0.0	0.0	.....	.....	18.7	47.4
	No	34.3	.....	0.0	.....	.....	.....	65.7	.....
Gunnison Basin	Yes	79.2	77.5	2.8	2.3	0.0	0.0	18.0	20.2
	No	70.3	.....	0.3	.....	.....	.....	29.3	.....
All Units	Yes	62.0	54.6	4.6	2.6	0.0	0.0	33.4	42.8
	No	45.7	.....	0.1	.....	.....	.....	54.2	.....
Total .....	.....	54.6	54.6	2.6	2.6	0.0	0.0	42.8	42.8

^a Percentages may not sum precisely due to rounding.

^b Percentages reflect lands excluded in this final critical habitat designation including private lands under CE, CCAA properties, and the Ute Mountain Ute Tribe's Pinecrest Ranch (see Exclusions).

We present below a general description for all critical habitat units, followed by brief descriptions of each individual unit, and reasons why they meet the definition of critical habitat for Gunnison sage-grouse. Various protection efforts on lands within these units are described in our final rule to list Gunnison sage-grouse as threatened, published elsewhere in today's **Federal Register**; in that publication, see the following sections: Other Regulatory Mechanisms: Conservation Easements; and Related Conservation Programs and Efforts.

Unit Descriptions

All units were likely historically occupied by Gunnison sage-grouse (GSRSC 2005, pp. 32–35, as adapted from Schroeder *et al.* 2004, entire), but we recognize that only portions of these units would have been occupied at any one time. As discussed above, we found that all lands identified as critical habitat are essential to the conservation of the Gunnison sage-grouse for the following reasons:

(1) The loss of sagebrush habitats within the potential presettlement range of Gunnison sage-grouse is associated with a substantial reduction in the species range (88 to 93 percent). The best available information indicates a substantial reduction of Gunnison sage-grouse distribution since Euro-American settlement in the 1800s, with evidence of the loss of peripheral populations (Schroeder *et al.* 2004, p. 371, and references therein) and a northward

trend of extirpation (Schroeder *et al.* 2004, p. 369).

(2) The Gunnison Basin population is the most important population for the species' survival with approximately 63 percent of occupied habitat, approximately 60 percent of the leks, and 84 percent of the rangewide population. It has been relatively stable based on the last 19 years of lek counts (but see Effective Population Size and Population Viability Analyses in the Factor E discussion in the final listing rule published elsewhere in today's **Federal Register**).

(3) In contrast to the Gunnison Basin population, the remaining five populations included in this final designation are much smaller and all but two have declined substantially from 1996 to 2014, despite transplant efforts in most of these areas since 2000 (CPW 2014c, entire); also see Current Distribution and Population Estimates and Trends in our final rule to list Gunnison sage-grouse, published elsewhere in today's **Federal Register**. These five populations are currently geographically isolated and are genetically at risk. The San Miguel Basin Gunnison sage-grouse effective population size is below the level at which inbreeding depression has been observed to occur. Because the remaining Gunnison sage-grouse satellite populations are smaller than the San Miguel population, they are likely small enough to induce inbreeding depression, and could be losing adaptive potential (Stiver *et al.* 2008, p. 479). The majority of the

satellite populations are still rebounding from declines that coincided with a drought cycle from 1999 to 2003 (CPW 2014c, entire). Our analysis in our final rule to list the Gunnison sage-grouse suggests that resiliency is limited in the satellite populations (for more discussion, see Small Population Size and Structure section in the final listing rule published elsewhere in today's **Federal Register**).

(4) Existing small populations are at higher risk of extirpation due to stochastic events. The smaller populations are important to the long-term viability of Gunnison sage-grouse because they: (1) Increase species abundance rangewide; (2) minimize the threat of catastrophic events to the species since the populations are widely distributed across the landscape; and (3) likely provide additional genetic diversity not found in the Gunnison Basin (with the exception of the Poncha Pass population) (GSRSC 2005, p. 199). Thus, multiple populations are needed to provide population redundancy, and to increase the species' chances of survival in the face of environmental, demographic, and genetic stochastic factors and random catastrophic events (extreme drought, fire, disease, etc.). Multiple populations across a broad geographic area provide insurance against catastrophic events, and the aggregate number of individuals across all populations increases the probability of demographic persistence and preservation of overall genetic diversity (with the exception of the Poncha Pass population) by providing an important

genetic reservoir (representation) (GSRSC 2005, p. 179) (see the Small Population Size and Structure section in the final listing rule, published elsewhere in today's **Federal Register**).

(5) Currently occupied habitat area for five of the six populations included in this final designation (with the exception of the Gunnison Basin population) may be less than the minimum amount of habitat necessary for the long-term viability of each population.

Designation of critical habitat limited to the Gunnison sage-grouse's present occupied range would be inadequate to ensure the conservation of the species. Therefore, we are designating areas of potential historical habitat that are not known to be currently occupied, for the following reasons:

(1) Current population sizes of the five smaller Gunnison sage-grouse populations included in this final designation are at such low levels that they must increase in order to ensure long-term survival (GSRSC 2005, p. G-22). While the occupied portions of the critical habitat units provide habitat for current populations, currently unoccupied areas will provide habitat for population expansion either through natural means, or by reintroduction, thus reducing threats due to naturally occurring events.

(2) Occupied habitat within the Gunnison Basin population is much larger (592,168 ac (239,600 ha)) than the RCP model's predicted minimum required area. However, extensive sagebrush landscapes capable of supporting a wide array of seasonal habitats and annual migratory patterns for Gunnison sage-grouse are rare across the species' range. The Gunnison Basin population is the largest population, and the population is extremely important for the species' survival. With the satellite populations declining, providing more stability for the Gunnison Basin population through additional expanses of sagebrush landscapes is essential for the conservation of the species. Further, these unoccupied areas of sagebrush expanses also provide potential connectivity to the Crawford and Cerro Summit-Cimarron-Sims Mesa populations to the west. The small piece of unoccupied habitat to the east of the Gunnison Basin provides a link between those birds in occupied habitat to the north and west.

(3) Population expansion either through natural means or by reintroduction into the five small CHUs is necessary to increase the long-term viability and decrease the risk of extirpation of the populations in these

units through stochastic events, such as fires or drought, as the current, isolated populations are each at high risk of extirpation from such stochastic events (GSRSC 2005, p. G-22), particularly because of their small sizes and restricted ranges.

(4) Unoccupied portions of all six CHUs decrease the geographic isolation of the current geographic distribution of the Gunnison sage-grouse by increasing the connectivity between occupied habitats and populations.

(5) Unoccupied portions of units are in areas that were occupied in the past and are located within the historical range of the species such that they will serve as corridors, or movement areas, between currently occupied areas. All unoccupied subunits lie within 18.5 km of an occupied area. We considered unoccupied areas as critical habitat if they, among other things, are located within approximately 18.5 km (11.5 mi) of occupied habitat based on typical sage-grouse movement distances (Connelly 2000a, p. 978; GSRSC 2005, p. J-5) because these areas have the highest likelihood of receiving Gunnison sage-grouse use and potential for occupied habitat expansion.

Unit 1: Monticello-Dove Creek

Unit 1 consists of 343,000 ac (138,807 ha) of Federal, State, and private lands in San Juan County, Utah; and Montrose, San Miguel, and Dolores Counties, Colorado. Approximately 13 percent of the land area within the unit is managed by Federal agencies, 1 percent is owned by the State of Colorado and the State of Utah, and the remaining 86 percent comprises private lands. We consider 33 percent of this unit to be currently occupied by Gunnison sage-grouse, based on mapping developed for the 2005 RCP, as updated (GSRSC 2005, p. 54; CPW 2013e, spatial data). Tables 4 and 5 provide detailed acreage estimates for all critical habitat units.

The occupied portion of the Monticello-Dove Creek Unit contains the physical and biological features essential to the conservation of the Gunnison sage-grouse, but these areas are interspersed within lands in agricultural production. Within the occupied portion of this Unit, approximately 23,220 ha (57,377 ac) or 51 percent of the area is currently in agricultural production (USGS 2004, entire). However, a significant portion of the agricultural lands within the Unit are enrolled in the USDA Farm Service Agency's Conservation Reserve Program (CRP), which is a land conservation program where farmers agree to remove environmentally sensitive lands from

agricultural production in exchange for a yearly rental payment. Many CRP lands are used by Gunnison sage-grouse (Lupis *et al.* 2006, pp. 959-960; Ward 2007, p. 15).

Factors potentially affecting the physical and biological features of the Monticello-Dove Creek Unit include, but are not limited to: Habitat loss, degradation, and fragmentation resulting from conversion to agriculture; climate change, drought-related effects; oil and gas production and associated infrastructure; the proliferation of predators of Gunnison sage-grouse; the spread of invasive plant species and associated changes in sagebrush plant community structure and dynamics; and past and present grazing management that degrades or eliminates vegetation structure; all of which can result in the loss, degradation, or fragmentation of sagebrush plant communities. Special management actions that may be needed to address these threats include, but are not limited to: The rangewide prioritization and protection of crucial seasonal habitats from development and agricultural conversion; the control of invasive plant species and restoration of historic plant community structure and dynamics, including altered fire regimes and other natural disturbance factors; and the implementation of grazing regimes that result in proper vegetation structure for Gunnison sage-grouse life-history needs in areas used for domestic and wild ungulate grazing and browsing.

Limiting the designation of critical habitat in this unit only to currently occupied areas would be inadequate to ensure the conservation of the species. Accordingly, we are designating currently unoccupied areas that we conclude are essential for the conservation of the species. Designated unoccupied habitat comprises approximately 69 percent of the unit, including lands defined in the 2005 RCP as potential habitat or vacant or unknown habitat (GSRSC 2005, p. 54) and other unoccupied areas that met our criteria for critical habitat (see Criteria and Methods Used to Identify and Map Critical Habitat). We acknowledge, however, that portions of these unoccupied lands are locally unsuitable as habitat for Gunnison sage-grouse. For instance, some areas within the critical habitat unit are dominated by piñon-juniper communities (Messmer 2013, p. 17). As described earlier, critical habitat was identified on a landscape scale, and includes areas with varying amounts of overall sagebrush cover, plus habitat types that may facilitate bird movements and dispersal. These areas are also located adjacent to occupied

habitat or are located immediately between surrounding populations. In addition to contributing to the fulfillment of the landscape scale habitat needs of Gunnison sage-grouse, these areas provide habitat for future population growth and reestablishment of portions of presettlement range, and facilitate movement between other units and within the unit.

Some unoccupied habitat areas within this unit consist of lands that recently supported sagebrush-dominant plant communities but are currently in agricultural production or are currently subject to encroachment by coniferous trees or shrubs, most commonly piñon-juniper or mountain shrub plant communities. These areas require management to reestablish or enhance sagebrush communities to support the primary constituent elements of Gunnison sage-grouse nesting or brood-rearing habitats. However, in their current state, these areas provide essential habitat for inter-population movements and thus may reduce population isolation and increase genetic exchange among populations.

Unit 2: Piñon Mesa

Unit 2, the Piñon Mesa Unit, consists of 207,792 ac (84,087 ha) of Federal, State, and private lands in Grand County, Utah, and Mesa County, Colorado. Approximately 73 percent of the land area within the unit is managed by Federal agencies, less than 1 percent is owned by the State of Utah, and 27 percent comprises private lands. We consider 14 percent of this unit to be currently occupied by Gunnison sage-grouse, based on mapping developed for the 2005 RCP and subsequently (GSRSC 2005, p. 54; CPW 2013e, spatial data). Tables 4 and 5 provide detailed estimates for all critical habitat units. The occupied portion of the Piñon Mesa Unit contains the physical and biological features essential to the conservation of Gunnison sage-grouse.

Factors potentially affecting the physical and biological features of the Piñon Mesa Unit include, but are not limited to: Residential and commercial development including associated land-clearing activities for the construction of access roads, utilities, and fences; increased recreational use of roads and trails; the proliferation of predators of Gunnison sage-grouse; climate change, drought-related effects; the spread of invasive plant species and associated changes in sagebrush plant community structure and dynamics; and past and present grazing management that degrades or eliminates vegetation structure; all of which can result in the loss, degradation, or fragmentation of

sagebrush plant communities. Special management actions that may be needed to address these threats include, but are not limited to: The rangewide prioritization and protection of crucial seasonal habitats subject to future residential and commercial development and increasing recreational use of roads and trails; the control of invasive plant species and restoration of historical plant community structure and dynamics, including altered fire regimes and other natural disturbance factors; and the implementation of grazing regimes that result in proper vegetation structure for Gunnison sage-grouse life-history needs in areas used for domestic and wild ungulate grazing and browsing.

Limiting the designation of critical habitat in this unit only to currently occupied areas would be inadequate to ensure the conservation of the species. Accordingly, we are designating currently unoccupied areas that we conclude are essential for the conservation of the species. Designated unoccupied habitat comprises approximately 86 percent of the unit, including lands defined in the 2005 RCP as potential habitat or vacant or unknown habitat (GSRSC 2005, p. 54) and other unoccupied areas that met our criteria for critical habitat (see Criteria and Methods Used to Identify and Map Critical Habitat). These areas consist of lands with varying amounts of overall sagebrush cover, or have habitat types suitable for movements and dispersal. These areas are also located adjacent to occupied habitat or are located immediately between surrounding populations. In addition to contributing to the fulfillment of the landscape specific habitat needs of Gunnison sage-grouse, these areas provide habitat for future population growth and reestablishment of portions of presettlement range, and facilitate or allow movement between other units and within the unit. Some unoccupied habitat areas within this unit consist of lands that recently supported sagebrush-dominant plant communities but are currently in agricultural production or are currently subject to encroachment by coniferous trees or shrubs, most commonly piñon-juniper or mountain shrub plant communities. These areas require management to reestablish or enhance sagebrush communities to support the primary constituent elements of Gunnison sage-grouse nesting or brood-rearing habitat. However, in their current state, these areas provide essential habitat for inter-population movements and thus may reduce population isolation and

increase genetic exchange among populations.

Unit 3: San Miguel Basin

Unit 3, the San Miguel Basin Unit, consists of 121,929 ac (49,343 ha) of Federal, State, and private lands in Montrose, San Miguel, and Ouray counties, Colorado. Approximately 41 percent of the land area within the unit is managed by Federal agencies, 12 percent is owned by the State of Colorado, and 47 percent comprises private lands. We consider 67 percent of this unit to be currently occupied by Gunnison sage-grouse, based on mapping developed for the 2005 RCP and subsequently (GSRSC 2005, p. 54; CPW 2013e, spatial data). Tables 4 and 5 provide detailed estimates for all critical habitat units. The occupied portion of the San Miguel Basin Unit contains the physical and biological features essential to the conservation of the Gunnison sage-grouse.

Factors potentially affecting the physical and biological features within the San Miguel Basin Unit include, but are not limited to: Residential and commercial development including associated land-clearing activities for the construction of access roads, utilities, and fences; increased recreational use of roads and trails; the proliferation of predators of Gunnison sage-grouse; climate change, drought-related effects; the spread of invasive plant species and associated changes in sagebrush plant community structure and dynamics; past and present grazing management that degrades or eliminates vegetation structure; and oil and gas development and associated infrastructure, all of which can result in the loss, degradation, or fragmentation of sagebrush plant communities. Special management actions that may be needed to address these threats include, but are not limited to: The rangewide prioritization and protection of crucial seasonal habitats subject to future residential and commercial development (including oil and gas development) and increasing recreational use of roads and trails; the control of invasive plant species and restoration of historical plant community structure and dynamics, including altered fire regimes and other natural disturbance factors; and the implementation of grazing regimes that result in proper vegetation structure for Gunnison sage-grouse life-history needs in areas used for domestic and wild ungulate grazing and browsing.

Limiting the designation of critical habitat in this unit only to currently occupied areas would be inadequate to ensure the conservation of the species.

Accordingly, we are designating currently unoccupied areas that we conclude are essential for the conservation of the species. Designated unoccupied habitat comprises approximately 33 percent of the unit including lands defined in the 2005 RCP as potential habitat or vacant or unknown habitat (GSRSC 2005, p. 54) and other unoccupied areas that met our criteria for critical habitat (see Criteria and Methods Used to Identify and Map Critical Habitat). These areas consist of lands with varying amounts of overall sagebrush cover, or have habitat types suitable for movements and dispersal. These areas are also located adjacent to occupied habitat or are located immediately between surrounding populations. In addition to contributing to the fulfillment of the landscape scale habitat needs of Gunnison sage-grouse, these areas provide habitat for future population growth and reestablishment of portions of presettlement range, and facilitate or allow movement between other units and within the unit.

Some unoccupied habitat areas within this unit consist of lands that recently supported sagebrush-dominant plant communities but are currently in agricultural production or are currently subject to encroachment by coniferous trees or shrubs, most commonly piñon-juniper or mountain shrub plant communities. These areas require management to reestablish or enhance sagebrush communities to support the primary constituent elements of Gunnison sage-grouse nesting or brood-rearing habitat. However, in their current state, these areas provide essential habitat for inter-population movements and thus may reduce population isolation and increase genetic exchange among populations.

Unit 4: Cerro Summit-Cimarron-Sims Mesa

Unit 4, Cerro Summit-Cimarron-Sims Mesa Unit, consists of 52,544 ac (21,264 ha) of Federal, State, and private lands in Montrose, Ouray, and Gunnison Counties, Colorado. Approximately 19 percent of the land area within the unit is managed by Federal agencies, 8 percent is owned by the State of Colorado, and 74 percent comprises private lands. We consider 64 percent of this unit to be currently occupied by Gunnison sage-grouse, based on mapping developed for the 2005 RCP and subsequently (GSRSC 2005, p. 54; CPW 2013e, spatial data). Tables 4 and 5 provide detailed estimates for all critical habitat units. The occupied portion of the Cerro Summit-Cimarron-Sims Mesa Unit contains the physical and biological features essential to the

conservation of the Gunnison sage-grouse.

Due to the amount of private land within this population, and the small size and scattered nature of the individual populations, we do not consider that having a viable population in this area to be necessary for the conservation of the species. However, we conclude that this population area currently provides a key linkage area between the Gunnison Basin and the Crawford and San Miguel populations. Data indicates that current gene flow between populations is very low (Oyler-McCance *et al.* 2005, p. 635), but if potentially suitable habitat is restored in these population areas, then the Cerro Summit-Cimarron-Sims Mesa population area could provide connectivity for gene flow between these populations. Therefore, we are finalizing critical habitat in this unit primarily for the purpose of facilitating connectivity between Gunnison Basin and the two smaller populations.

Factors potentially affecting the physical and biological features of the Cerro Summit-Cimarron-Sims Mesa Unit include, but are not limited to: Residential and commercial development including associated land-clearing activities for the construction of access roads, utilities, and fences; increased recreational use of roads and trails; the proliferation of predators of Gunnison sage-grouse; the spread of invasive plant species and associated changes in sagebrush plant community structure and dynamics; climate change, drought-related effects; and past and present grazing management that degrades or eliminates vegetation structure; all of which can result in the loss, degradation, or fragmentation of sagebrush plant communities. Special management actions that may be needed to address these threats include, but are not limited to: The rangewide prioritization and protection of crucial seasonal habitats subject to future residential and commercial development and increasing recreational use of roads and trails; the control of invasive plant species and restoration of historical plant community structure and dynamics, including altered fire regimes and other natural disturbance factors; and the implementation of grazing regimes that result in proper vegetation structure for Gunnison sage-grouse life-history needs in areas used for domestic and wild ungulate grazing and browsing.

Limiting the designation of critical habitat in this unit only to currently occupied areas would be inadequate to ensure the conservation of the species. Accordingly, we are designating

currently unoccupied areas that we conclude are essential for the conservation of the species. Designated unoccupied habitat comprises approximately 36 percent of the unit including lands defined in the 2005 RCP as potential habitat or vacant or unknown habitat (GSRSC 2005, p. 54) and other unoccupied areas that met our criteria as critical habitat (see Criteria and Methods Used to Identify and Map Critical Habitat). These areas consist of lands with varying amounts of overall sagebrush cover, or have habitat types suitable for movements and dispersal. These areas are also located adjacent to occupied habitat or are located immediately between surrounding populations. In addition to contributing to the fulfillment of the landscape scale habitat needs of Gunnison sage-grouse, these areas provide an important linkage area between populations.

Some unoccupied habitat areas within this unit consist of lands that recently supported sagebrush-dominant plant communities but are currently in agricultural production or are currently subject to encroachment by coniferous trees or shrubs, most commonly piñon-juniper or mountain shrub plant communities. These areas require management to reestablish or enhance sagebrush communities to support the primary constituent elements of Gunnison sage-grouse nesting or brood-rearing habitat. However, in their current state, these areas provide essential habitat for inter-population movements and thus may reduce population isolation and increase genetic exchange among populations.

Unit 5: Crawford

Unit 5, the Crawford Unit, consists of 83,671 ac (33,860 ha) of Federal and private lands in Delta, Montrose, and Gunnison Counties, Colorado. Approximately 53 percent of the land area within the unit is managed by Federal agencies, and 47 percent comprises private lands. We consider 39 percent of this unit to be currently occupied by Gunnison sage-grouse, based on mapping developed for the 2005 RCP and subsequently (GSRSC 2005, p. 54; CPW 2013e, spatial data). Tables 4 and 5 provide detailed estimates for all critical habitat units. The occupied portion of the Crawford Unit contains the physical and biological features essential to the conservation of the Gunnison sage-grouse.

Factors potentially affecting the physical and biological features of the Crawford Unit include, but are not limited to: Residential and commercial development including associated land-

clearing activities for the construction of access roads, utilities, and fences; increased recreational use of roads and trails; the proliferation of predators of Gunnison sage-grouse; climate change, drought-related effects; the spread of invasive plant species and associated changes in sagebrush plant community structure and dynamics; and past and present grazing management that degrades or eliminates vegetation structure; all of which can result in the loss, degradation, or fragmentation of sagebrush plant communities. Special management actions that may be needed to address these threats include, but are not limited to: The rangewide prioritization and protection of crucial seasonal habitats subject to future residential and commercial development and increasing recreational use of roads and trails; the control of invasive plant species and restoration of historical plant community structure and dynamics, including altered fire regimes and other natural disturbance factors; and the implementation of grazing regimes that result in proper vegetation structure for Gunnison sage-grouse life-history needs in areas used for domestic and wild ungulate grazing and browsing.

Limiting the designation of critical habitat in this unit only to currently occupied areas would be inadequate to ensure the conservation of the species. Accordingly, we are designating currently unoccupied areas that we conclude are essential for the conservation of the species. Designated unoccupied habitat comprises approximately 61 percent of the unit including lands defined in the 2005 RCP as potential habitat or vacant or unknown habitat (GSRSC 2005, p. 54) and other unoccupied areas that met our criteria for critical habitat (see Criteria and Methods Used to Identify and Map Critical Habitat). These areas consist of lands with varying amounts of overall sagebrush cover, or have habitat types suitable for movements and dispersal. These areas are also located adjacent to occupied habitat or are located immediately between surrounding populations. In addition to contributing to the fulfillment of the landscape scale habitat needs of Gunnison sage-grouse, these areas provide habitat for future population growth and reestablishment of portions of presettlement range, and facilitate or allow movement between other units and within the unit.

Some unoccupied habitat areas within this unit consist of lands that recently supported sagebrush-dominant plant communities but are currently in agricultural production or are currently subject to encroachment by coniferous

trees or shrubs, most commonly piñon-juniper or mountain shrub plant communities. These areas require management to reestablish or enhance sagebrush communities to support the primary constituent elements of Gunnison sage-grouse nesting or brood-rearing habitat. However, in their current state, these areas provide essential habitat for inter-population movements and thus may reduce population isolation and increase genetic exchange among populations.

Unit 6: Gunnison Basin

Unit 6, the Gunnison Basin Unit, consists of 620,616 ac (251,154 ha) of Federal, State, local government, and private lands in Gunnison, Hinsdale, Montrose, and Saguache Counties, Colorado. Approximately 78 percent of the land area within the unit is managed by Federal agencies, 2 percent is owned by the State of Colorado, less than 0.1 percent is owned by Gunnison County and the City of Gunnison, and 20 percent comprises private lands. We consider 81 percent of this unit to be currently occupied, based on mapping developed for the 2005 RCP and subsequently (GSRSC 2005, p. 54; CPW 2013e, spatial data). Tables 4 and 5 provide detailed estimates for all critical habitat units. The Gunnison Basin contains the largest remaining expanse of sagebrush plant communities within the occupied range of Gunnison sage-grouse. The occupied portion of the Gunnison Basin Unit contains the physical and biological features essential to the conservation of the Gunnison sage-grouse.

Factors potentially affecting the physical and biological features of the Gunnison Basin Unit include, but are not limited to: Residential and commercial development including associated land-clearing activities for the construction of access roads, utilities, and fences; increased recreational use of roads and trails; climate change, drought-related effects; the proliferation of predators of Gunnison sage-grouse; the spread of invasive plant species and associated changes in sagebrush plant community structure and dynamics; and past and present grazing management that degrades or eliminates vegetation structure; all of which can result in the loss, degradation, or fragmentation of sagebrush plant communities. Special management actions that may be needed to address these threats include, but are not limited to: The rangewide prioritization and protection of crucial seasonal habitats subject to future residential and commercial development and increasing

recreational use of roads and trails; the control of invasive plant species and restoration of historical plant community structure and dynamics, including altered fire regimes and other natural disturbance factors; and the implementation of grazing regimes that result in proper vegetation structure for Gunnison sage-grouse life-history needs in areas used for domestic and wild ungulate grazing and browsing.

Limiting the designation of critical habitat in this unit only to currently occupied areas would be inadequate to ensure the conservation of the species. Accordingly, we are designating currently unoccupied areas that we conclude are essential for the conservation of the species. Designated unoccupied habitat comprises approximately 19 percent of the unit including lands defined in the 2005 RCP as potential habitat or vacant or unknown habitat (GSRSC 2005, p. 54; CPW 2013e, spatial data) and other unoccupied areas that met our criteria for critical habitat (see Criteria and Methods Used to Identify and Map Critical Habitat). These areas consist of lands with varying amounts of overall sagebrush cover, or have habitat types suitable for movements and dispersal. These areas are also located adjacent to occupied habitat or are located immediately between surrounding populations.

Occupied habitat within the Gunnison Basin population is much larger (592,168 ac (239,600 ha)) than the RCP model's predicted minimum required area. However, extensive sagebrush landscapes capable of supporting a wide array of seasonal habitats and annual migratory patterns for Gunnison sage-grouse are rare across the species' range. The Gunnison Basin population is the largest population, and the population is extremely important for the species' survival. With the satellite populations declining, providing more stability for the Gunnison Basin population through additional expanses of sagebrush landscapes is essential for the conservation of the species. Further, these unoccupied areas of sagebrush expanses also provide potential connectivity to the Crawford and Cerro Summit-Cimarron-Sims Mesa populations to the west. The small piece of unoccupied habitat to the east of the Gunnison Basin provides a link between those birds in occupied habitat to the north and west.

Some unoccupied habitat areas within this unit consist of lands that recently supported sagebrush-dominant plant communities but are currently in agricultural production or are currently

subject to encroachment by coniferous trees or shrubs, most commonly piñon-juniper or mountain shrub plant communities. These areas require management to reestablish or enhance sagebrush communities to support the primary constituent elements of Gunnison sage-grouse nesting or brood-rearing habitat. However, in their current state, these areas provide essential habitat for inter-population movements and thus may reduce population isolation and increase genetic exchange among populations. The maintenance and enhancement of inter-population connectivity is particularly important for the Gunnison Basin because it is the largest population in the species' range and is, therefore, the most likely source of dispersal of Gunnison sage-grouse to other populations.

Effects of Critical Habitat Designation

Section 7 Consultation

Section 7(a)(2) of the Act requires Federal agencies, including the Service, to ensure that any action they fund, authorize, or carry out is not likely to jeopardize the continued existence of any endangered species or threatened species or result in the destruction or adverse modification of designated critical habitat of such species. In addition, section 7(a)(4) of the Act requires Federal agencies to confer with the Service on any agency action that is likely to jeopardize the continued existence of any species proposed to be listed under the Act or result in the destruction or adverse modification of proposed critical habitat.

Decisions by the 5th and 9th Circuit Courts of Appeals have invalidated our previous regulatory definition of "destruction or adverse modification" (50 CFR 402.02) (see *Gifford Pinchot Task Force v. U.S. Fish and Wildlife Service*, 378 F. 3d 1059 (9th Cir. 2004) and *Sierra Club v. U.S. Fish and Wildlife Service*, 245 F.3d 434, 442 (5th Cir. 2001)), and we do not rely on this regulatory definition when analyzing whether an action is likely to destroy or adversely modify critical habitat. Under the statutory provisions of the Act, we determine destruction or adverse modification on the basis of whether, with implementation of the proposed Federal action, the affected critical habitat would continue to serve its intended conservation role for the species. We note that the Service has proposed to amend the definition of "destruction or adverse modification of critical habitat" to (1) more explicitly tie the definition to the stated purpose of the Act; and, (2) more clearly contrast

the definitions of "destruction or adverse modification" and "jeopardize the continued existence of" (79 FR 27060).

If a Federal action may affect a listed species or its critical habitat, the responsible Federal agency (action agency) must enter into consultation with us. Examples of actions that are subject to the section 7 consultation process are actions on State, tribal, local, or private lands that require a Federal permit (such as a permit from the U.S. Army Corps of Engineers under section 404 of the Clean Water Act (33 U.S.C. 1251 *et seq.*) or a permit from the Service under section 10 of the Act) or that involve some other Federal action (such as funding from the Federal Highway Administration, Federal Aviation Administration, or the Federal Emergency Management Agency). Federal actions not affecting listed species or critical habitat, and actions on State, tribal, local, or private lands that are not federally funded or authorized, do not require section 7 consultation.

As noted earlier, when determining the critical habitat boundaries for this rule, we made every effort to avoid including lands covered by buildings, pavement, and other manmade structures (as of the effective date of this rule), based on our determination that such lands lack physical and biological features essential to the conservation of Gunnison sage-grouse and therefore do not meet the definition of critical habitat in Section 3(5)(a) of the Act. The scale of the maps we prepared under the parameters for publication within the Code of Federal Regulations, however, may not reflect our determination that such lands are not included in the final designation. As a result, we have included text in the final rule to make this point clear. A Federal action involving these lands would not trigger section 7 consultation with respect to critical habitat and the requirement of no adverse modification unless the specific action would affect the physical and biological features in the adjacent critical habitat, or otherwise affect the species.

As a result of section 7 consultation, we document compliance with the requirements of section 7(a)(2) through our issuance of:

- (1) A concurrence letter for Federal actions that may affect, but are not likely to adversely affect, listed species or critical habitat; or
- (2) A biological opinion for Federal actions that may affect, or are likely to adversely affect, listed species or critical habitat.

When we issue a biological opinion concluding that a project is likely to jeopardize the continued existence of a listed species and/or destroy or adversely modify critical habitat, we provide reasonable and prudent alternatives to the project, if any are identifiable, that would avoid the likelihood of jeopardy and/or destruction or adverse modification of critical habitat. We define "reasonable and prudent alternatives" (at 50 CFR 402.02) as alternative actions identified during consultation that:

- (1) Can be implemented in a manner consistent with the intended purpose of the action,
- (2) Can be implemented consistent with the scope of the Federal agency's legal authority and jurisdiction,
- (3) Are economically and technologically feasible, and
- (4) Would, in the Director's opinion, avoid the likelihood of jeopardizing the continued existence of the listed species and/or avoid the likelihood of destroying or adversely modifying critical habitat.

Reasonable and prudent alternatives can vary from slight project modifications to extensive redesign or relocation of the project. Costs associated with implementing a reasonable and prudent alternative are similarly variable.

Regulations at 50 CFR 402.16 require Federal agencies to reinitiate consultation on previously reviewed actions in certain circumstances, including where we have listed a new species or designated critical habitat that may be affected, if the Federal agency has retained discretionary involvement or control over the action (or the agency's discretionary involvement or control is authorized by law). Consequently, Federal agencies sometimes may need to request reinitiation of consultation with us on actions for which formal consultation has been completed, if those actions with discretionary involvement or control may affect subsequently listed species or designated critical habitat.

On April 21, 2014, the Service received a request from NRCS for conferencing under authority of Section 7 of the Act on the NRCS's Farm Bill program activities, including the Sage-Grouse Initiative and associated procedures, conservation practices, and conservation measures. The focus of the resulting conference opinion (which will be converted to a biological opinion once the Gunnison sage-grouse is listed) will be on the effects of NRCS programs on the Gunnison sage-grouse and the areas to be designated as critical habitat for this species. The Service continues

to work closely with NRCS on developing the conference opinion and anticipates that it will be issued as a final opinion prior to the effective date of the final listing determination for Gunnison sage-grouse. The resulting opinion will provide Endangered Species Act compliance for both NRCS and current and future participating landowners enrolled in conservation programs and implementing conservation practices affecting Gunnison sage-grouse or its designated critical habitat, as analyzed within the conference opinion.

Application of the "Adverse Modification" Standard

The key factor related to the adverse modification determination is whether, with implementation of the proposed Federal action, the affected critical habitat would continue to serve its intended conservation role for the species. Activities that may destroy or adversely modify occupied critical habitat are those that alter the physical and biological features to an extent that appreciably reduces the conservation value of critical habitat for Gunnison sage-grouse. As discussed above, the role of critical habitat is to support life-history needs of the species and provide for the conservation of the species.

Section 4(b)(8) of the Act requires us to briefly evaluate and describe, in any proposed or final regulation that designates critical habitat, activities involving a Federal action that may destroy or adversely modify such habitat, or that may be affected by such designation.

Activities that may affect critical habitat, when carried out, funded, or authorized by a Federal agency, should result in consultation for the Gunnison sage-grouse. These activities include, but are not limited to:

(1) Actions carried out, funded or authorized by a Federal agency that would result in the loss of sagebrush overstory plant cover or height. Such activities could include, but are not limited to, the removal of native shrub vegetation by any means for any infrastructure construction project; direct conversion to agricultural land use; habitat improvement or restoration projects involving mowing, brush-beating, Dixie harrowing, disking, plowing, herbicide applications such as Tebuthiuron (Spike), or prescribed burning; and fire suppression activities. These activities could eliminate or reduce the habitat necessary for the production and survival of Gunnison sage-grouse.

(2) Actions carried out, funded or authorized by a Federal agency that

would result in the loss or reduction in native herbaceous understory plant cover or height, and a reduction or loss of associated arthropod communities. Such activities could include, but are not limited to, livestock grazing, the application of herbicides or insecticides, prescribed burning and fire suppression activities, and seeding of nonnative plant species that would compete with native species for water, nutrients, and space. These activities could eliminate or reduce the quantity and quality of habitat necessary for Gunnison sage-grouse nesting and production through a reduction in food quality and quantity, and increased exposure to predation.

(3) Actions carried out, funded or authorized by a Federal agency that would result in Gunnison sage-grouse avoidance of an area during one or more seasonal periods. Such activities could include, but are not limited to, the construction of vertical structures such as power lines, fences, communication towers, and buildings; management of motorized and nonmotorized recreational use; and activities such as well drilling, operation, and maintenance, which would entail significant human presence, noise, and infrastructure. These activities could result in the direct or functional loss of habitat if they result in Gunnison sage-grouse avoidance or more limited use of otherwise suitable habitat in the vicinity.

Exemptions

Application of Section 4(a)(3) of the Act

Section 4(a)(3)(B)(i) of the Act (16 U.S.C. 1533(a)(3)(B)(i)) provides that: "The Secretary shall not designate as critical habitat any lands or other geographic areas owned or controlled by the Department of Defense, or designated for its use, that are subject to an integrated natural resources management plan [INRMP] prepared under section 101 of the Sikes Act (16 U.S.C. 670a), if the Secretary determines in writing that such plan provides a benefit to the species for which critical habitat is proposed for designation." There are no Department of Defense lands with a completed INRMP within this critical habitat designation.

Exclusions

Application of Section 4(b)(2) of the Act

On August 24, 2012 (77 FR 51503) the Services published a proposed rule to revise 50 CFR 424.19. In that rule the Services proposed to elaborate on the process and standards for implementing section 4(b)(2) of the Act. The final rule was published on August 28, 2013 (78 FR 53058). The revisions to 50 CFR

424.19 provide the framework for how the Services intend to implement section 4(b)(2) of the Act. A proposed policy meant to complement those revisions and provide further clarification as to how we will implement section 4(b)(2) when designating critical habitat was published on May 12, 2014 (79 FR 27052). This draft policy further details the discretion available to the Services (acting for the Secretaries) and provides detailed examples of how we consider partnerships and conservation plans, conservation plans permitted under section 10 of the Act, tribal lands, national security and homeland security impacts and military lands, Federal lands, and economic impacts in the exclusion process when we undertake a discretionary exclusion analysis. The draft policy tracks prior and current Service practices regarding the consideration of exclusions under section 4(b)(2) of the Act. While the Service is not formally following the draft policy, the Service continues to follow past practices when considering exclusions and excluding areas under section 4(b)(2) of the Act.

Section 4(b)(2) of the Act states that the Secretary shall designate and make revisions to critical habitat on the basis of the best available scientific data after taking into consideration the economic impact, national security impact, and any other relevant impact of specifying any particular area as critical habitat. The Secretary may exclude an area from critical habitat if she determines that the benefits of such exclusion outweigh the benefits of specifying such area as part of the critical habitat, unless she determines, based on the best scientific data available, that the failure to designate such area as critical habitat will result in the extinction of the species. The statute on its face, as well as the legislative history, are clear that the Secretary has broad discretion regarding which factor(s) to use in making an exclusion determination and how much weight to give to any factor.

In considering whether to exclude a particular area from the designation, we identify the benefits of including the area in the designation, identify the benefits of excluding the area from the designation, and evaluate whether the benefits of exclusion outweigh the benefits of inclusion. If the analysis indicates that the benefits of exclusion outweigh the benefits of inclusion, the Secretary may exercise her discretion to exclude the area only if such exclusion would not result in the extinction of the species.

When identifying the benefits of inclusion for an area, we consider,

among other things, the additional regulatory benefits that area would receive from the protection from adverse modification or destruction as a result of actions with a Federal nexus; the educational benefits of mapping essential habitat for recovery of the listed species; and any benefits that may result from a designation due to State or Federal laws that may apply to critical habitat.

When identifying the benefits of exclusion, we consider, among other things, whether exclusion of a specific area is likely to result in conservation; the continuation, strengthening, or encouragement of partnerships; or implementation of a management plan that provides equal to or more conservation than a critical habitat designation would provide.

In the case of Gunnison sage-grouse, the benefits of critical habitat include public awareness of Gunnison sage-grouse presence and the importance of habitat protection, and in cases where a Federal nexus exists, increased habitat protection for Gunnison sage-grouse due to the protection from adverse modification or destruction of critical habitat. Approximately 55 percent of the critical habitat designation for Gunnison sage-grouse occurs on Federal land; 43 percent occurs on private land; 3 percent occurs on State land; and less

than 0.1 percent occurs on city and county land. We anticipate that consultations under section 7 of the Act for activities on these Federal lands and for activities with a Federal nexus on other lands will help avoid and minimize impacts on critical habitat and Gunnison sage-grouse, thereby promoting the species' recovery. Because this designation provides specific areas on maps that are available to the public, the critical habitat designation on non-Federal lands (45 percent) will also increase public awareness and promote conservation of the species and its habitat.

After identifying the benefits of inclusion and the benefits of exclusion, we carefully weigh the two sides to evaluate whether the benefits of exclusion outweigh those of inclusion. If our analysis indicates that the benefits of exclusion outweigh the benefits of inclusion, we then determine whether exclusion would result in extinction. If exclusion of an area from critical habitat will result in extinction, we will not exclude it from the designation.

Based on the information provided by entities seeking exclusion, as well as any additional public comments received, we evaluated whether certain lands in each unit of the critical habitat designation (1,621,008 ac (655,957 ha)) were appropriate for exclusion from this

final designation pursuant to section 4(b)(2) of the Act. For the reasons discussed below, we are excluding a total of 191,460 ac (77,481 ha) of private land from the critical habitat designation for Gunnison sage-grouse, including 122,037 ac (49,387 ha) of land under permanent CE as of August 28, 2013 according to Lohr and Gray (2013); 81,156 ac (32,843 ha) of lands with completed Certificates of Inclusion (CIs) under the Gunnison sage-grouse CCAA (of which 24,464 ac (9,900 ha) overlaps with CEs) as of the effective date of this rule; and 12,727 ac (5,150 ha) of land owned by the Ute Mountain Ute Tribe that is subject to a species' conservation plan. Tables 6 and 7 below provide approximate areas of lands that meet the definition of critical habitat but are being excluded under section 4(b)(2) of the Act from the final critical habitat rule. Exclusions are depicted in the critical habitat maps. Private land boundaries may not be exact due to mapping inconsistencies between land survey data, Geographic Information System (GIS) coordinates, and differing mapping layers provided. The private lands subject to the identified conservation agreements or easements are intended for exclusions and adjacent lands are not.

TABLE 6—AREAS EXCLUDED FROM CRITICAL HABITAT DESIGNATION BY CRITICAL HABITAT UNIT *

Critical habitat unit	Occupied?	Certificates of inclusion (CI) under CCAA ^a		Conservation easement (CE) ^b		CCAA and CE overlap		Tribal ^c		Total exclusions	
		Acres	Hec-tares	Acres	Hec-tares	Acres	Hec-tares	Acres	Hec-tares	Acres	Hec-tares
Monticello-Dove Creek	Yes .....	.....	.....	5,482	2,218	.....	.....	.....	.....	5,482	2,218
	No .....	.....	.....	469	190	.....	.....	.....	.....	469	190
Piñon Mesa	Yes	8,512	3,445	15,317	6,199	7,971	3,226	.....	.....	15,858	6,417
	No	4,619	1,869	21,876	8,853	4,218	1,707	.....	.....	22,277	9,015
San Miguel Basin	Yes	13,694	5,542	6,961	2,817	420	170	.....	.....	20,235	8,189
	No .....	.....	.....	1,110	449	.....	.....	.....	.....	1,111	450
Cerro Summit-Cimaron-Sims Mesa	Yes .....	.....	.....	3,484	1,410	.....	.....	.....	.....	3,485	1,410
	No .....	.....	.....	511	207	.....	.....	.....	.....	511	207
Crawford	Yes	1,316	533	2,005	811	938	380	.....	.....	2,383	964
	No	2,605	1,054	8,514	3,445	50	20	.....	.....	11,070	4,480
Gunnison Basin	Yes	49,087	19,865	40,769	16,499	10,564	4,275	11,966	4,842	91,258	36,931
	No	1,323	535	15,539	6,288	303	123	761	308	17,320	7,009
All Units	Yes	72,609	29,384	74,018	29,954	19,894	8,051	11,966	4,842	138,702	56,131
	No	8,547	3,459	48,019	19,433	4,570	1,850	761	308	52,758	21,350
Total .....	.....	81,156	32,843	122,037	49,387	24,464	9,900	12,727	5,150	191,460	77,481

* Numbers may not sum due to rounding and mapping artifacts

^a CCAA: Completed Certificates of Inclusion (CIs) under the Candidate Conservation Agreement with Assurances; excluded acres are reflected in the final critical habitat designation acreage (see Final Critical Habitat Designation)

^b CE: perpetual conservation easements; excluded acres are reflected in the final critical habitat designation acreage (see Final Critical Habitat Designation)

^c Tribal SMP: Ute Mountain Ute Tribe's Species Management Plan for Pinecrest Ranch; excluded acres are reflected in the final critical habitat designation acreage (see Final Critical Habitat Designation)

TABLE 7—CRITICAL HABITAT BEFORE AND AFTER EXCLUSIONS *

Critical habitat unit	Occupied?	Critical habitat before exclusions		Exclusions		Critical habitat after exclusions	
		Acres	Hectares	Acres	Hectares	Acres	Hectares
Monticello-Dove Creek	Yes	112,543	45,544	5,482	2,218	107,061	43,326

TABLE 7—CRITICAL HABITAT BEFORE AND AFTER EXCLUSIONS*—Continued

Critical habitat unit	Occupied?	Critical habitat before exclusions		Exclusions		Critical habitat after exclusions	
		Acres	Hectares	Acres	Hectares	Acres	Hectares
Piñon Mesa	No	236,409	95,671	469	190	235,940	95,481
	Yes	44,678	18,081	15,858	6,417	28,820	11,663
San Miguel Basin	No	201,249	81,443	22,277	9,015	178,972	72,424
	Yes	101,750	16,805	20,235	8,189	81,514	32,988
Cerro Summit-Cimarron-Sims Mesa	No	41,526	41,177	1,111	450	40,414	16,355
	Yes	37,161	15,039	3,485	1,410	33,675	13,628
Crawford	No	19,380	7,843	511	207	18,869	7,636
	Yes	35,015	14,170	2,383	964	32,632	13,206
Gunnison Basin	No	62,109	25,134	11,070	4,480	51,039	20,655
	Yes	592,168	239,600	91,258	36,931	500,909	202,711
All Units	No	137,027	55,453	17,320	7,009	119,707	48,444
	Yes	923,314	373,610	138,702	56,131	784,611	317,521
Totals	No	697,700	282,349	52,758	21,350	644,940	260,994
	.....	1,621,014	655,959	191,460	77,481	1,429,551	578,515

* Numbers may not sum due to rounding and mapping artifacts.

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 proposed critical habitat designation and related factors (Industrial Economics, Inc. (IEC) 2013, entire). The draft analysis, dated August 27, 2013, was made available for public review from September 19, 2013, through October 19, 2013 (78 FR 57604), and from November 4, 2013, through December 2, 2013 (78 FR 65936). Following the close of the comment periods, a final analysis (dated November 7, 2014) of the potential economic effects of the designation was developed taking into consideration the public comments and any new information received (Industrial Economics, Inc. (IEC) 2014, entire).

The intent of the final economic analysis (FEA) is to quantify the economic impacts of all potential conservation efforts for Gunnison sage-grouse; 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 incurred due to the listing of the species, and forecasts both baseline and incremental impacts likely to occur with the designation of critical habitat. We note that on August 28, 2013 the Service finalized revisions to its regulations for impact analyses of critical habitat (78 FR 53058) to clarify that it is appropriate to consider the impacts of designation on an incremental basis notwithstanding the Tenth Circuit’s decision in *New Mexico Cattle Growers Ass’n v. FWS*, 248 F.3d 1277 (10th Cir. 2001) (See 78 FR 57604, 57607 (September 19, 2013) for additional discussion regarding this subject). As the economic analysis process for this critical habitat rule was underway prior to the revision of the regulation, our FEA analyzes both incremental and baseline costs, however, we are only required to consider incremental costs based on the revised regulation.

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 livestock grazing, agriculture and water

management, mineral and fossil fuel extraction, residential and related development, including power infrastructure; renewable energy development; recreation; and transportation. Decisionmakers can use this information to assess whether the effects of the designation might unduly burden a particular group or economic sector. Finally, the FEA considers those costs that may occur in the 20 years following the designation of critical habitat, which was determined to be the appropriate period for analysis because limited planning information was available for most activities to forecast activity levels for projects beyond a 20-year timeframe. The FEA quantifies economic impacts of Gunnison sage-grouse conservation efforts associated with the above economic activities.

The FEA forecasted baseline impacts of \$48 million (present value over 20 years), discounted at seven percent, or \$65 million (present value over 20 years), discounted at three percent. Annualized baseline impacts were forecast to be \$4.3 million at a seven percent rate, or \$4.2 million at a three percent discount rate. Quantified incremental impacts from the critical habitat designation alone were \$6.9 million (present value over 20 years), assuming a seven percent discount rate. Assuming a social rate of time preference of three percent, incremental impacts were \$8.8 million (present value over 20 years). Annualized incremental impacts of the critical habitat designation were forecast to be \$610,000 at a seven percent discount rate, or \$580,000 at a three percent discount rate (Industrial Economics, Inc. 2014, p. ES–2). Forecast baseline impacts were greatest in the Gunnison

Basin unit. Forecast incremental impacts were greatest in the Monticello-Dove Creek unit, followed by the Gunnison Basin unit. Forecast baseline and incremental impacts on specific economic activities were greatest in the electric power infrastructure category, followed by transportation (Industrial Economics, Inc. 2014, pp. ES-5 to ES-7). The economic analysis was completed before our removal of the Poncha Pass unit from our final designation and before our removal of the CCAA, CE, and Tribal exclusions included here. Since the designation is now 274,676 ac (111,160 ha) smaller, the overall economic impact would likely be an even smaller amount than listed above.

Our economic analysis did not identify any costs that are concentrated in any geographic area or sector likely to result from the designation. Consequently, the Secretary is not exercising her discretion to exclude any areas from this designation of critical habitat for the Gunnison sage-grouse based on economic impacts.

A copy of the FEA with supporting documents may be obtained by contacting the Western Colorado Field Office (see **ADDRESSES**) or by downloading from the Internet at <http://www.regulations.gov> or at <http://www.fws.gov/mountain-prairie/species/birds/gunnisonsagegrouse/>.

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 where a national security impact might exist. In preparing this final rule, we have determined that no lands within the critical habitat designation for Gunnison sage-grouse are owned or managed by the Department of Defense or Department of Homeland Security, and, therefore, we anticipate no impact on national security. Consequently, the Secretary is not exercising her discretion to exclude any areas from this final designation based on impacts on national security.

Exclusions Based on Other Relevant Impacts

Under section 4(b)(2) of the Act, we consider any other relevant impacts, in addition to economic impacts and impacts on national security. We consider a number of factors, including whether the landowners have developed any HCPs or other management plans for the area, or whether there are conservation partnerships that would be encouraged by designation of, or exclusion from, critical habitat. In

addition, we look at tribal interests and issues, and consider the government-to-government relationship of the United States with tribal entities. We also consider any social impacts that might occur because of the designation.

Land and Resource Management Plans, Conservation Plans, or Agreements Based on Conservation Partnerships

We acknowledge and commend landowners who have made significant commitments to manage their lands in a manner that is compatible with the conservation of Gunnison sage-grouse. Multiple partners including private citizens, nongovernmental organizations, Tribes, and Tribal, State, and Federal agencies are engaged in conservation efforts across the range of Gunnison sage-grouse. Numerous conservation actions have been implemented for Gunnison sage-grouse, and these efforts have provided and will continue to provide conservation benefit to the species (see a full description of conservation efforts in the final listing rule published elsewhere in today's **Federal Register**). In the proposed rule to designate critical habitat for Gunnison sage-grouse (78 FR 2540), we requested input from the public, especially private landowners, as to whether or not the Secretary should exclude from the designation under section 4(b)(2) of the Act lands protected, at varying levels, under the Gunnison sage-grouse CCAA, CEs, or other management with conservation measures applicable to Gunnison sage-grouse.

We generally consider a current land management or conservation plan (HCPs as well as other types) to provide adequate management or protection if it meets the following criteria:

- (1) The plan is complete and provides a conservation benefit for the species and its habitat;
- (2) There is a reasonable expectation that the conservation management strategies and actions will be implemented for the foreseeable future, based on past practices, written guidance, or regulations; and
- (3) The plan provides conservation strategies and measures consistent with currently accepted principles of conservation biology.

Based on the following evaluation of conservation plans and agreements, we are excluding a total of 191,460 ac (77,481 ha) of private land from the critical habitat designation for Gunnison sage-grouse, including 122,037 ac (49,387 ha) of land under permanent CE; 81,156 ac (32,843 ha) of lands with completed CIs under the CCAA (of which 24,464 ac (9,900 ha) overlaps

with CEs); and 12,727 ac (5,150 ha) of private lands owned by the Ute Mountain Ute Tribe under restricted fee status that are subject to a species' conservation plan (refer to our final rule to list Gunnison sage-grouse, published elsewhere in today's **Federal Register**, for a detailed account of these programs). We hereby exclude such properties from the critical habitat designation. The take prohibitions of section 9(a)(2) of the Act (i.e., related to the take of listed species) still apply to projects and activities on lands excluded from critical habitat designation, unless they are specifically excepted under section 4(d) of the Act.

Gunnison Sage-Grouse CCAA

In April 2005, the Colorado Division of Wildlife (CDOW, now called Colorado Parks and Wildlife (CPW)) applied to the Service for an Enhancement of Survival Permit for the Gunnison sage-grouse pursuant to section 10(a)(1)(A) of the Act. The permit application included a proposed Candidate Conservation Agreement with Assurances (CCAA) between CPW and the Service. The standard that a CCAA must meet is that the "benefits of the conservation measures implemented by a property owner under a CCAA, when combined with those benefits that would be achieved if it is assumed that conservation measures were also to be implemented on other necessary properties, would preclude or remove any need to list the species" (64 FR 32726, June 17, 1999). A detailed account of the CCAA is provided in our final rule to list Gunnison sage-grouse, published elsewhere in today's **Federal Register** (see Related Conservation Programs and Efforts in that document).

The goal of the CCAA is to reduce threats to the Gunnison sage-grouse and help provide for secure, self-sustaining local populations by enrolling, protecting, maintaining, and enhancing or restoring necessary non-federally owned Colorado habitats of Gunnison sage-grouse. Landowners with eligible property in southwestern Colorado who wish to participate can voluntarily sign up under the CCAA and associated permit through a CI in which they agree to implement habitat protection or enhancement measures on their lands. Eligible lands include non-Federal lands in Colorado within the current range of Gunnison sage-grouse where occupied, vacant/unknown, or potentially suitable habitats occur, as mapped and identified in the RCP. Except for properties recently enrolled, all properties have been monitored since enrollment using standardized vegetation transects and rangeland

health assessments and, despite recent drought conditions and existing land uses, no significant deviations from baseline habitat conditions have been observed. All CI properties were found to have Gunnison sage-grouse habitat, and in all cases, baseline habitat conditions on CI properties met the tier 1 standard, indicating no habitat manipulations were needed to support Gunnison sage-grouse. All enrolled properties continue to be in compliance with the terms of their CI's (CPW 2014a, p. 1).

The CCAA promotes the conservation of Gunnison sage-grouse on significant portions of private lands in the Gunnison Basin, Crawford, San Miguel, and Piñon Mesa populations (Table 5). In these areas, threats to Gunnison sage-grouse are reduced and habitats are protected, maintained, enhanced or restored as a result of participation in the CCAA. In particular, private land uses including livestock grazing and agricultural production are managed to be consistent with the needs of Gunnison sage-grouse and the species' conservation, using conservation strategies and measures consistent with currently accepted principles of conservation biology. As described in our final listing rule for Gunnison sage-grouse (published elsewhere in today's **Federal Register**), the agreement is complete and provides a conservation benefit for the species and its habitat, particularly in regard to its reduction of habitat-related impacts due to existing land uses on private lands.

Although property enrollment in the CCAA can be withdrawn by the current or a future owner at any time, we expect that properties will remain enrolled in the CCAA for the term of the agreement for the following reasons: (1) Since CPW began issuing CI's to landowners in 2009, no property has been withdrawn from the CCAA; (2) now that the species has been listed, there is more incentive for landowners to continue to participate in the CCAA, in order to receive the assurances provided in the CCAA; (3) the majority of the participating landowners have owned their ranches for generations, and we have no reason to believe they intend to do anything other than maintain the land in ranching or agriculture in the future.

Lands enrolled in the CCAA meet the definition of critical habitat and, thus, their designation would benefit Gunnison sage-grouse. The benefits of critical habitat include public awareness of Gunnison sage-grouse presence and the importance of habitat protection, and in cases where a Federal nexus exists, increased habitat protection for

Gunnison sage-grouse due to the protection from adverse modification or destruction of critical habitat. Since the lands enrolled in the CCAA are private lands, the regulatory benefit from the protection from adverse modification or destruction would likely be minimal due to the lack of a Federal nexus for many land uses. Landowners voluntarily enrolled and are working with CPW to manage their lands in a manner consistent with sage-grouse conservation. Because of this, they are already aware of sage-grouse presence and the importance of habitat protection, so any additional educational benefits provided by designation of critical habitat, if any, are also very minimal.

The benefits of excluding lands with CCAAs that have been permitted under section 10 of the Act from critical habitat designation include relieving landowners, communities, and counties of any potential additional regulatory burden that might be imposed as a result of the critical habitat designation. A related benefit of exclusion is the unhindered, continued ability to maintain existing partnerships and seek new partnerships with potential plan participants, including States, counties, local jurisdictions, conservation organizations, and private landowners. Together, these entities can implement conservation actions that the Services would be unable to accomplish without private landowners. These partnerships can lead to additional CCAAs in the future.

We find that the benefits of excluding these lands from the critical habitat designation outweigh the benefits of their inclusion. Exclusion of these properties continues and strengthens existing partnerships, particularly the important relationship between the Service and CPW. The CCAA incentivizes the conservation of Gunnison sage-grouse and important seasonal habitats on private lands that might otherwise not be managed consistent with the needs of the species. We recognize the value of working lands in rural areas and the open spaces they provide Gunnison sage-grouse and other species. Exclusion of these properties from critical habitat designation will encourage continued participation in the CCAA and its partnership and contribute to the sustainability of working lands managed for the benefit of Gunnison sage-grouse. Exclusion of these properties will not result in the extinction of Gunnison sage-grouse because they are managed in a manner compatible with Gunnison sage-grouse conservation. Therefore, we are excluding 81,156 ac (32,843 ha) of lands

with completed CIs under the CCAA on or before the effective date of this rule (Table 6).

Conservation Easement Lands

Since the time of our proposed rule, we have received new information on conservation easements across the range of Gunnison sage-grouse (Lohr and Gray 2013, entire). In particular, all the conservation easements across the range of Gunnison sage-grouse have been identified and we better understand that these permanent conservation easements cannot be subdivided (Lohr and Gray 2013, p. 1 and spatial data). This information has led us to believe that these permanent conservation easements should be considered complete and they provide a conservation benefit to the species and its habitat.

Conservation easements (CEs) are voluntary legal agreements between a landowner and a land trust or government agency that permanently limit or restrict land uses on identified parcels for conservation values and purposes. CEs require that individual parcels be owned and conveyed as single units in perpetuity, thereby ensuring that there is a reasonable expectation that the conservation management strategies and actions will be implemented for the foreseeable future and they will not be subdivided for development in the future. Conservation easements also restrict land uses by defining specific areas for residential or agricultural development, including roads and driveways, and may include other parameters for land management practices to achieve conservation values (Lohr and Gray 2013, p. 2). The parameters for these restrictions allow for limited development while still conserving open space and managing private development in a way that provides benefits for the conservation of Gunnison sage-grouse habitat. Therefore, we consider CEs as an effective regulatory tool to prevent long-term or permanent habitat loss. In the context of potential threats to Gunnison sage-grouse, CEs and the protections they afford are most relevant to the threat of residential and human development. Protecting lands under permanent conservation easements provides conservation strategies and measures consistent with the needs of Gunnison sage-grouse. Lands that are able to be subdivided indefinitely fragment the open landscapes needed by the species. Lands under easement managed to achieve conservation values will provide more suitable habitat for the life history processes of Gunnison

sage-grouse, including connectivity and seasonal habitat matrices.

Since our publication of the proposed critical habitat rule, we have received a summary of the estimated amount of lands under conservation easement for occupied and unoccupied Gunnison sage-grouse habitat in Colorado and Utah (Lohr and Gray 2013, entire). Permanent conservation easements across Gunnison sage-grouse range are held by nongovernmental organizations and land trusts (The Nature Conservancy, Colorado Cattlemen's Agricultural Land Trust, and others), State agencies (CPW, UDWR), and Federal agencies (NRCS, NPS, and BLM). Some CEs include conservation measures specific to Gunnison sage-grouse, while many are directed at other species, such as big game (GSRSC 2005, pp. 59–103), but still indirectly provide benefits to Gunnison sage-grouse by preventing habitat loss and fragmentation. Some of these properties are also enrolled in other programs to benefit sage-grouse conservation, including the CCAA and NRCS's Sage Grouse Initiative. For additional information on CEs across the range of Gunnison sage-grouse, please see our final rule to list the species, published elsewhere in today's **Federal Register** (see Other Regulatory Mechanisms: Conservation Easements in that document).

We are aware of approximately 122,037 ac (49,387 ha) under permanent CE in Gunnison sage-grouse habitat (Table 6) as of August 28, 2013, according to Lohr and Gray (2013). Conservation easements occur in all six critical habitat units. These lands meet the definition of critical habitat and, thus, their designation would benefit Gunnison sage-grouse. The benefits of critical habitat include public awareness of Gunnison sage-grouse presence and the importance of habitat protection, and in cases where a Federal nexus exists, increased habitat protection for Gunnison sage-grouse due to the protection from adverse modification or destruction of critical habitat. Since the lands enrolled in the CEs are private lands, the regulatory benefit from the protection from adverse modification or destruction would likely be minimal due to the lack of a Federal nexus for many land uses. Educational and public awareness benefits would also be very minimal, as it is expected that a landowner who has put their property under permanent easement is already aware of the importance of habitat protection for Gunnison sage-grouse.

Permanent conservation easements provide substantial benefit to Gunnison sage-grouse and its habitat by

preventing long-term or permanent habitat loss and fragmentation due to subdivision and development. Exclusion of these properties from critical habitat designation will strengthen our partnership with the organizations currently holding conservation easements and those advocating for additional conservation easements in the species' range. Exclusion of these properties will also contribute to the protection of Gunnison sage-grouse habitat by reducing habitat fragmentation and development that is not consistent with the species' conservation. Exclusion of these properties from critical habitat designation acknowledges the value of these lands and fosters conservation efforts and partnerships. We find that the benefits of excluding these lands from the critical habitat designation outweigh the benefits of their inclusion. Exclusion of these properties will not result in the extinction of Gunnison sage-grouse because they are managed in a manner compatible with Gunnison sage-grouse conservation. Lands that are able to be subdivided indefinitely fragment the open landscapes needed by the species. Lands not subdivided will provide more suitable habitat for the life history processes of Gunnison sage-grouse, including connectivity and seasonal habitat matrices. Therefore, we are excluding 122,037 ac (49,387 ha) of lands under CE as of August 28, 2013 across the range of Gunnison sage-grouse (Table 6).

Ute Mountain Ute Tribe Pinecrest Ranch Species Management Plan

Approximately 12,727 ac (5,150 ha) of Gunnison sage-grouse habitat on Pinecrest Ranch are owned by the Ute Mountain Ute Tribe (Tribe or UMUT) under restricted fee status (classified in this rule as private land). The Pinecrest Ranch includes a total of 18,749 ac in the Gunnison Basin population area west of Gunnison, Colorado. The Tribe uses the ranch primarily for livestock grazing and for important traditional and cultural purposes. In March 2014, the Tribe finalized a Species Management Plan (SMP) to promote the conservation of Gunnison sage-grouse and its habitat on the Pinecrest Ranch while maintaining a sustainable agricultural operation and other traditional uses of the property (UMUT 2014, entire). See our September 19, 2013 **Federal Register** notice discussing the SMP (78 FR 57611). The plan is complete and provides a conservation benefit for the species and its habitat. The SMP includes management actions and considerations that will benefit Gunnison sage-grouse including, but not

limited to, continued predator control, seasonal restrictions for construction and development activities, road restrictions and closures, wildlife-friendly fencing, outreach and education, and sustainable grazing practices (UMUT 2014, pp. 4–11). The NRCS assisted with the SMP by evaluating Pinecrest Ranch and developing a conservation plan (NRCS 2014, entire) to ensure that the plan provides conservation strategies and measures consistent with currently accepted principles of conservation biology. The NRCS's evaluation indicated that past and ongoing management of Pinecrest Ranch by the Tribe has provided good habitat for Gunnison sage-grouse (based on vegetation measurements) and a variety of other wildlife species (NRCS 2014, pp. 4–5). This suggests a reasonable expectation that the conservation management strategies and actions will be implemented for the foreseeable future, based on past practices, and the formalized plan. The NRCS also noted that overall limited human activity at the ranch has likely been beneficial to wildlife in general (NRCS 2014, p. 5). The above information indicates that current and future Tribal management of the Pinecrest Ranch is consistent with the needs and conservation of Gunnison sage-grouse (UMUT 2014, entire). The Service also met with the Tribe regarding the development of the plan (UMUT 2014, p. 2). This plan is also evaluated in our final rule to list Gunnison sage-grouse, published elsewhere in today's **Federal Register** (see Tribal Laws and Management).

The lands subject to the SMP meet the definition of critical habitat and, thus, their designation would provide some benefit to Gunnison sage-grouse. The benefits of critical habitat include public awareness of Gunnison sage-grouse presence and the importance of habitat protection, and in cases where a Federal nexus exists, increased habitat protection for Gunnison sage-grouse due to the protection from adverse modification or destruction of critical habitat. Since the lands owned by the tribe are classified as private lands, the regulatory benefit from the protection from adverse modification or destruction would likely be minimal due to the lack of a Federal nexus for many land uses. The Tribe finalized a SMP to promote the conservation of Gunnison sage-grouse and its habitat on the Pinecrest Ranch. Because of this, they are already aware of sage-grouse presence and the importance of habitat protection, so any additional educational benefits provided by

designation of critical habitat, if any, are also very minimal.

We find that the benefits of excluding these lands from the critical habitat designation outweigh the benefits of their inclusion. The SMP will promote the conservation of Gunnison sage-grouse and its habitat. We recognize the value of working lands in rural areas and the open spaces they provide Gunnison sage-grouse and other species. Exclusion of these properties from critical habitat designation contributes to the sustainability of working lands managed for the benefit of Gunnison sage-grouse. Exclusion of these properties from critical habitat designation acknowledges the government-to-government relationship between the United States and Tribes, acknowledges the value of Pinecrest Ranch to Gunnison sage-grouse, and fosters conservation efforts and partnerships. Exclusion of these lands will not result in the extinction of Gunnison sage-grouse. Therefore, we are excluding 12,727 ac (5,150 ha) of the Ute Mountain Ute Pinecrest Ranch from the critical habitat designation.

Required Determinations

Regulatory Planning and Review (Executive Orders 12866 and 13563)

Executive Order 12866 provides that the Office of Information and Regulatory Affairs (OIRA) in the Office of Management and Budget will review all significant rules. OIRA has determined that this rule is significant.

Executive Order 13563 reaffirms the principles of E.O. 12866 while calling for improvements in the nation's regulatory system to promote predictability, to reduce uncertainty, and to use the best, most innovative, and least burdensome tools for achieving regulatory ends. The executive order directs agencies to consider regulatory approaches that reduce burdens and maintain flexibility and freedom of choice for the public where these approaches are relevant, feasible, and consistent with regulatory objectives. E.O. 13563 emphasizes further that regulations must be based on the best available science and that the rulemaking process must allow for public participation and an open exchange of ideas. We have developed this rule in a manner consistent with these requirements.

Regulatory Flexibility Act (5 U.S.C. 601 et seq.)

Under the Regulatory Flexibility Act (RFA; 5 U.S.C. 601 *et seq.*) as amended by the Small Business Regulatory Enforcement Fairness Act (SBREFA) of

1996 (5 U.S.C. 801 *et seq.*), whenever an agency must publish a notice of rulemaking for any proposed or final rule, it must prepare and make available for public comment a regulatory flexibility analysis that describes the effects of the rule on small entities (small businesses, small organizations, and small government jurisdictions). However, no regulatory flexibility analysis is required if the head of 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. In this final rule, we are certifying that the critical habitat designation for Gunnison sage-grouse will not have a significant economic impact on a substantial number of small entities. The following discussion explains our rationale.

According to the Small Business Administration, small entities include small organizations such as independent nonprofit organizations; small governmental jurisdictions, including school boards and city and town governments that serve fewer than 50,000 residents; as well as small businesses (13 CFR 121.201). Small businesses include such businesses as manufacturing and mining concerns with fewer than 500 employees, wholesale trade entities with fewer than 100 employees, retail and service businesses with less than \$5 million in annual sales, general and heavy construction businesses with less than \$27.5 million in annual business, special trade contractors doing less than \$11.5 million in annual business, and agricultural businesses with annual sales less than \$750,000. To determine if potential economic impacts on these small entities are significant, we consider the types of activities that might trigger regulatory impacts under this designation as well as types of project modifications that may result. In general, the term "significant economic impact" is meant to apply to a typical small business firm's business operations.

Importantly, the incremental impacts of a rule must be *both* significant and substantial to prevent certification of the rule under the RFA and to require the preparation of an initial regulatory flexibility analysis. If a substantial number of small entities are affected by the proposed critical habitat designation, but the per-entity economic impact is not significant, the Service

may certify. Likewise, if the per-entity economic impact is likely to be significant, but the number of affected entities is not substantial, the Service may also certify.

The Service's current understanding of recent case law is that Federal agencies are only required to evaluate the potential impacts of rulemaking on those entities directly regulated by the rulemaking; therefore, they are not required to evaluate the potential impacts to those entities not directly regulated. The designation of critical habitat for an endangered or threatened species only has a regulatory effect where a Federal action agency is involved in a particular action that may affect the designated critical habitat. Under these circumstances, only the Federal action agency is directly regulated by the designation, and, therefore, consistent with the Service's current interpretation of RFA and recent case law, the Service may limit its evaluation of the potential impacts to those identified for Federal action agencies. Under this interpretation, there is no requirement under the RFA to evaluate the potential impacts to entities not directly regulated, such as small businesses. However, Executive Orders 12866 and 13563 direct Federal agencies to assess costs and benefits of available regulatory alternatives in quantitative (to the extent feasible) and qualitative terms. Consequently, it is the current practice of the Service to assess to the extent practicable these potential impacts if sufficient data are available, whether or not this analysis is considered by the Service to be strictly required by the RFA. In other words, while the effects analysis required under the RFA is limited to entities directly regulated by the rulemaking, the effects analysis under the Act, consistent with the EO regulatory analysis requirements, can take into consideration impacts to both directly and indirectly impacted entities, where practicable and reasonable.

In conclusion, we believe that, based on our interpretation of directly regulated entities under the RFA and relevant case law, this designation of critical habitat will only directly regulate Federal agencies, which are not by definition small business entities. And as such, we certify that this designation of critical habitat will not have a significant economic impact on a substantial number of small business entities. Therefore, an initial regulatory flexibility analysis is not required. However, though not necessarily required by the RFA, in our final economic analysis for this rule we considered and evaluated the potential

effects to third parties that may be involved with consultations with Federal action agencies related to this action.

Designation of critical habitat only affects activities authorized, funded, or carried out by Federal agencies. Some kinds of activities are unlikely to have any Federal involvement and so will not be affected by critical habitat designation. In areas where the species is present, Federal agencies already are required to consult with us under section 7 of the Act on activities they authorize, fund, or carry out that may affect the Gunnison sage-grouse. Federal agencies also must consult with us if their activities may affect critical habitat. Designation of critical habitat could result in an additional economic impact on small entities due to the potential requirement for Federal agencies to consult on certain Federal actions (see *Application of the "Adverse Modification Standard"* section).

In our final economic analysis of the critical habitat designation, we evaluated the potential economic effects on small business entities resulting from conservation actions related to the listing of the Gunnison sage-grouse and the designation of critical habitat. The analysis is based on the estimated impacts associated with the rulemaking as described in Chapters 3 through 8 and Appendix A of the analysis, and evaluates the potential for economic impacts related to: (1) Livestock grazing; (2) agriculture and water management; (3) mineral and fossil fuel extraction; (4) residential and related development; (5) electric power infrastructure; (6) renewable energy development; (7) recreation; (8) and transportation projects. The analysis considered each activity for which third parties may incur incremental costs associated with section 7 consultation. Incremental costs due to project modification and administrative impacts are forecast for small business entities in livestock grazing (63 entities), water management (1 entity), mineral and fossil fuel extraction (10 entities), residential and related development (3 entities), electric power infrastructure (unknown number of entities), transportation (5 entities), and renewable energy (1 entity). Incremental costs forecast in each of these categories were under 2 percent of annual revenues for respective business entities; in most categories, incremental costs were less than 1 percent of annual revenues for respective business entities (Industrial Economics, Inc. 2014, p. A-12).

In summary, we considered whether this designation would result in a significant economic effect on a

substantial number of small entities. Based on the above reasoning and currently available information, we concluded that this rule would 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 Gunnison sage-grouse will not have a significant economic impact on a substantial number of small entities, and a regulatory flexibility analysis is not required.

Energy Supply, Distribution, or Use—Executive Order 13211

Executive Order 13211 (Actions Concerning Regulations That Significantly Affect Energy Supply, Distribution, or Use) requires agencies to prepare Statements of Energy Effects when undertaking certain actions. OMB has provided guidance for implementing this Executive Order that outlines nine outcomes that may constitute “a significant adverse effect” when compared to not taking the regulatory action under consideration.

In our final economic analysis, incremental effects of the critical habitat designation were assumed to occur for energy projects in unoccupied sage-grouse habitat. Approximately 31 producing or newly permitted oil and gas wells are located within unoccupied portions of the critical habitat designation. Approximately 28,000 wells in the State of Colorado produced 1.3 billion Mcf-equivalents in 2005 (an Mcf-equivalent is the total heat value of natural gas and oil expressed as a volume of natural gas). The number of wells within the critical habitat designation, therefore, represents less than one percent of wells in the State. We do not anticipate that the designation of critical habitat will result in significant incremental impacts to the energy industry on a national scale (Industrial Economics, Inc. 2014, p. A-15). As such, the designation of critical habitat is not expected to significantly affect energy supplies, distribution, or use. Therefore, this action is not a significant energy action, and no Statement of Energy Effects is required.

Unfunded Mandates Reform Act (2 U.S.C. 1501 et seq.)

In accordance with the Unfunded Mandates Reform Act (2 U.S.C. 1501 et seq.), we make the following findings:

(1) This rule will not produce a Federal mandate. In general, a Federal mandate is a provision in legislation, statute, or regulation that would impose an enforceable duty upon State, local, or tribal governments, or the private sector,

and includes both “Federal intergovernmental mandates” and “Federal private sector mandates.” These terms are defined in 2 U.S.C. 658(5)–(7). “Federal intergovernmental mandate” includes a regulation that “would impose an enforceable duty upon State, local, or tribal governments” with two exceptions. It excludes “a condition of Federal assistance.” It also excludes “a duty arising from participation in a voluntary Federal program,” unless the regulation “relates to a then-existing Federal program under which \$500,000,000 or more is provided annually to State, local, and tribal governments under entitlement authority,” if the provision would “increase the stringency of conditions of assistance” or “place caps upon, or otherwise decrease, the Federal Government’s responsibility to provide funding,” and the State, local, or tribal governments “lack authority” to adjust accordingly. At the time of enactment, these entitlement programs were: Medicaid; Aid to Families with Dependent Children work programs; Child Nutrition; Food Stamps; Social Services Block Grants; Vocational Rehabilitation State Grants; Foster Care, Adoption Assistance, and Independent Living; Family Support Welfare Services; and Child Support Enforcement. “Federal private sector mandate” includes a regulation that “would impose an enforceable duty upon the private sector, except (i) a condition of Federal assistance or (ii) a duty arising from participation in a voluntary Federal program.”

The designation of critical habitat does not impose a legally binding duty on non-Federal Government entities or private parties. Under the Act, the only regulatory effect is that Federal agencies must ensure that their actions do not destroy or adversely modify critical habitat under section 7. While non-Federal entities that receive Federal funding, assistance, or permits, or that otherwise require approval or authorization from a Federal agency for an action, may be indirectly impacted by the designation of critical habitat, the legally binding duty to avoid destruction or adverse modification of critical habitat rests squarely on the Federal agency. Furthermore, to the extent that non-Federal entities are indirectly impacted because they receive Federal assistance or participate in a voluntary Federal aid program, the Unfunded Mandates Reform Act would not apply, nor would critical habitat shift the costs of the large entitlement programs listed above onto State governments.

(2) We do not believe that this rule would significantly or uniquely affect small governments because only a small percentage of the total land ownership falls on small government lands such as those owned by the City of Gunnison and Gunnison County. Our economic analysis forecasted incremental impacts on five county governments associated with transportation and administrative costs. However, incremental costs were estimated to be less than 0.7 percent of annual revenues for those entities (Industrial Economics, Inc. 2014, p. A–9). Therefore, we do not expect that this rule would significantly or uniquely affect small governments because it would not produce a Federal mandate of \$100 million or greater in any year, that is, it is not a “significant regulatory action” under the Unfunded Mandates Reform Act. Consequently, we do not believe that the critical habitat designation would significantly or uniquely affect small government entities. As such, a Small Government Agency Plan is not required.

Takings—Executive Order 12630

In accordance with Executive Order 12630 (Government Actions and Interference with Constitutionally Protected Private Property Rights), we have analyzed the potential takings implications of designating critical habitat for Gunnison sage-grouse in a takings implications assessment. Critical habitat designation does not affect landowner actions that do not require Federal funding or permits, and the designation of critical habitat does not preclude the issuance of section 10(a)(1)(B) permits to private landowners should incidental take be anticipated from a particular action by a landowner. Based on the best available information, the takings implications assessment concludes that this designation of critical habitat for Gunnison sage-grouse does not pose significant takings implications.

Federalism—Executive Order 13132

In accordance with Executive Order 13132 (Federalism), this rule does not have significant Federalism effects. A Federalism assessment 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 Colorado and Utah. We received comments from Colorado Parks and Wildlife and the Utah Division of Wildlife Resources and have addressed them in the Peer Review and Public Comments section of this rule, and

throughout the rule as appropriate. From a federalism perspective, the designation of critical habitat directly affects only the responsibilities of Federal agencies. The Act imposes no other duties with respect to critical habitat, either for States and local governments, or for anyone else. As a result, the rule does not have substantial direct effects either on the States, or on the relationship between the national government and the States, or on the distribution of powers and responsibilities among the various levels of government. The designation 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 physical and biological features of the habitat necessary to the conservation of the species are specifically identified. This information does not alter where and what federally sponsored activities may occur. However, critical habitat may assist local governments in long-range planning because the designation highlights important habitat areas for a species.

Where State and local governments require approval or authorization from a Federal agency for actions that may affect critical habitat, the Federal agency will be required to consult under section 7(a)(2). As a result, while non-Federal entities that receive Federal funding, assistance, or permits, or that otherwise require approval or authorization from a Federal agency for an action, may be indirectly impacted by the designation of critical habitat, the legally binding duty to avoid destruction or adverse modification of critical habitat rests squarely on the Federal agency.

Civil Justice Reform—Executive Order 12988

In accordance with Executive Order 12988 (Civil Justice Reform), the Office of the Solicitor has determined that the rule does not unduly burden the judicial system and that it meets the requirements of sections 3(a) and 3(b)(2) of the Order. We are designating critical habitat in accordance with the provisions of the Act. To assist the public in understanding the habitat needs of the species, the rule identifies the elements of physical or biological features essential to the conservation of the Gunnison sage-grouse. The designated areas of critical habitat are presented on maps, and the rule provides several options for the interested public to obtain more detailed location information, if desired.

Paperwork Reduction Act of 1995 (44 U.S.C. 3501 et seq.)

This rule does not contain any new collections of information that require approval by OMB under the Paperwork Reduction Act of 1995 (44 U.S.C. 3501 et seq.). This rule will not impose recordkeeping or reporting requirements on State or local governments, individuals, businesses, or organizations. An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB control number.

National Environmental Policy Act (42 U.S.C. 4321 et seq.)

It is our position that, outside the jurisdiction of the U.S. Court of Appeals for the Tenth Circuit, we do not need to prepare environmental analyses pursuant to the National Environmental Policy Act (NEPA; 42 U.S.C. 4321 et seq.) in connection with designating critical habitat under the Act. We published a notice outlining our reasons for this determination in the **Federal Register** on October 25, 1983 (48 FR 49244). This position was upheld by the U.S. Court of Appeals for the Ninth Circuit (*Douglas County v. Babbitt*, 48 F.3d 1495 (9th Cir. 1995), cert. denied 516 U.S. 1042 (1996)). However, when the range of the species includes States within the Tenth Circuit, such as that of Gunnison sage-grouse, under the Tenth Circuit ruling in *Catron County Board of Commissioners v. U.S. Fish and Wildlife Service*, 75 F.3d 1429 (10th Cir. 1996), we undertake a NEPA analysis for critical habitat designation and notify the public of the availability of the draft environmental assessment for a proposal when it is finished.

We conducted the NEPA analysis, and a draft of the environmental assessment was made available for public comment from September 19, 2013, through October 19, 2013 (78 FR 57604), and from November 4, 2013, through December 2, 2013 (78 FR 65936). The final environmental assessment has been completed and is available for review with the publication of this final rule. The environmental assessment evaluated the effects of the No Action Alternative (no designation of critical habitat) and Proposed Action Alternative (designation of critical habitat) on the physical, biological, and human environment. Based on the environmental assessment, the Service found that no significant environmental impact would occur as a result of critical habitat designation for Gunnison sage-grouse. Therefore, an environmental impact statement is not

necessary for the designation of critical habitat for Gunnison sage-grouse. You may obtain a copy of the final environmental assessment and the Service's Finding of No Significant Impact (FONSI) online at <http://www.regulations.gov>, by mail from the Western Colorado Field Office (see ADDRESSES), or by visiting our Web site at <http://www.fws.gov/mountain-prairie/species/birds/gunnisonsagegrouse/>.

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.

Our proposed critical habitat rule for Gunnison sage-grouse included approximately 5,150 ha (12,725 ac) of Gunnison sage-grouse habitat on Pinecrest Ranch owned by the Ute Mountain Ute Tribe (Tribe) under restricted fee status (classified in this rule as private land). As described above (see Exclusions based on Other Relevant Impacts), we have excluded this area from the final critical habitat designation because the benefits of exclusion outweigh the benefits of exclusion, and the exclusion will not result in extinction of the species.

References Cited

A complete list of references cited in this rulemaking is available on the Internet at <http://www.regulations.gov> and upon request from the Western Colorado Field Office (see FOR FURTHER INFORMATION CONTACT).

Authors

The primary authors of this package are the staff members of the Western Colorado Field Office.

List of Subjects in 50 CFR Part 17

Endangered and threatened species, Exports, Imports, Reporting and recordkeeping requirements, Transportation.

Regulation Promulgation

Accordingly, we amend part 17, subchapter B of chapter I, title 50 of the Code of Federal Regulations, as set forth below:

PART 17—[AMENDED]

- 1. The authority citation for part 17 continues to read as follows:
Authority: 16 U.S.C. 1361–1407; 1531–1544; 4201–4245; unless otherwise noted.
- 2. In § 17.95, amend paragraph (b) by adding an entry for “Gunnison Sage-Grouse (*Centrocercus minimus*)” after the entry for “Western Snowy Plover (*Charadrius nivosus nivosus*)—Pacific Coast Population”, to read as follows:

§ 17.95 Critical habitat—fish and wildlife.

- * * * * *
- (b) *Birds.*
- * * * * *

Gunnison Sage-grouse (*Centrocercus minimus*)

(1) Critical habitat units are depicted for Grand and San Juan Counties, Utah, and Delta, Dolores, Gunnison, Hinsdale, Mesa, Montrose, Ouray, Saguache, and San Miguel Counties, Colorado, on the maps below.

(2) Within these areas, the primary constituent elements (PCEs) of the physical and biological features essential to the conservation of Gunnison sage-grouse consist of five components:

(i) *Landscape Specific Primary Constituent Element.* Primary Constituent Element 1—Extensive sagebrush landscapes capable of supporting a population of Gunnison sage-grouse. In general, this includes areas with vegetation composed primarily of sagebrush plant communities (at least 25 percent of the land is dominated by sagebrush cover within a 0.9-mi (1.5-km) radius of any given location), of sufficient size and configuration to encompass all seasonal habitats for a given population of Gunnison sage-grouse, and facilitate movements within and among populations. These areas also occur wholly within the potential historical range of Gunnison sage-grouse.

(ii) *Seasonally Specific Primary Constituent Elements.* (A) Primary Constituent Element 2—Breeding habitat composed of sagebrush plant communities that, in general, have the structural characteristics within the

ranges described in the following table. Habitat structure values are average values over a project area. Breeding habitat includes lek, nesting, and early brood-rearing habitats used typically March 15 through July 15. Early brood-rearing habitat may include agricultural fields.

Vegetation variable	Amount in habitat
Sagebrush Canopy	10–25 percent.
Non-sagebrush Canopy * ...	5–15 percent.
Total Shrub Canopy	15–40 percent.
Sagebrush Height	9.8–19.7 in (25–50 cm).
Grass Cover	10–40 percent.
Forb Cover	5–40 percent.
Grass Height	3.9–5.9 in (10–15 cm).
Forb Height	2.0–5.9 in (5–15 cm).

*Includes shrubs such as horsebrush (*Tetradymia* spp.), rabbitbrush (*Chrysothamnus* spp.), bitterbrush (*Purshia* spp.), snakeweed (*Gutierrezia sarothrae*), greasewood (*Sarcobatus* spp.), winterfat (*Eurotia lanata*), Gambel's oak (*Quercus gambelii*), snowberry (*Symphoricarpos oreophilus*), serviceberry (*Amelanchier* spp.), and chokecherry (*Prunus virginiana*).

(B) Primary Constituent Element 3—Summer-late fall habitat composed of sagebrush plant communities that, in general, have the structural characteristics within the ranges described in the following table. Habitat structure values are average values over a project area. Summer-fall habitat includes sagebrush communities having the referenced habitat structure values, as well as agricultural fields and wet meadow or riparian habitat types. Wet meadows and riparian habitats are also included qualitatively under PCE 5 at paragraph (2)(ii)(D) of this entry.

Vegetation variable	Amount in habitat
Sagebrush Canopy	5–20 percent.
Non-sagebrush Canopy * ...	5–15 percent.
Total Shrub Canopy	10–35 percent.
Sagebrush Height	9.8–19.7 in (25–50 cm).
Grass Cover	10–35 percent.
Forb Cover	5–35 percent.
Grass Height	3.9–5.9 in (10–15 cm).
Forb Height	1.2–3.9 in (3–10 cm).

*Includes shrubs such as horsebrush (*Tetradymia* spp.), rabbitbrush (*Chrysothamnus* spp.), bitterbrush (*Purshia* spp.), snakeweed (*Gutierrezia sarothrae*), greasewood (*Sarcobatus* spp.), winterfat (*Eurotia lanata*), Gambel's oak (*Quercus gambelii*), snowberry (*Symphoricarpos oreophilus*), serviceberry (*Amelanchier* spp.), and chokecherry (*Prunus virginiana*).

(C) Primary Constituent Element 4—Winter habitat composed of sagebrush

plant communities that, in general, have sagebrush canopy cover between 30 to 40 percent and sagebrush height of 15.8 to 21.7 in (40 to 55 cm). These habitat structure values are average values over a project area. Winter habitat includes sagebrush areas within currently occupied habitat that are available (i.e., not covered by snow) to Gunnison sage-grouse during average winters.

(D) Primary Constituent Element 5—Alternative, mesic habitats used primarily in the summer-late fall season, such as riparian communities, springs, seeps, and mesic meadows.

(3) Critical habitat for the Gunnison sage-grouse does not include manmade structures (such as buildings, airport runways, roads, and other paved areas) and the land on which they are located existing within the boundaries of designated critical habitat on December 22, 2014.

(4) *Critical habitat map units.* Data layers defining map units were created

from a number of geospatial data, including: Polygons generated as part of the Gunnison sage-grouse Rangewide Conservation Plan, Southwest Regional Gap Analysis Project (SWReGAP) land cover data, National Agriculture Imagery Program (NAIP) aerial images, and USGS 7.5 minute quadrangle maps. Critical habitat units were then mapped as shapefiles using Universal Transverse Mercator (UTM) Zone 13N coordinates.

(i) The maps in this entry, as modified by any accompanying regulatory text, establish the boundaries of the critical habitat designation. Private land boundaries may not be exact due to mapping inconsistencies between land survey data, Geographic Information System (GIS) coordinates, and differing mapping layers provided.

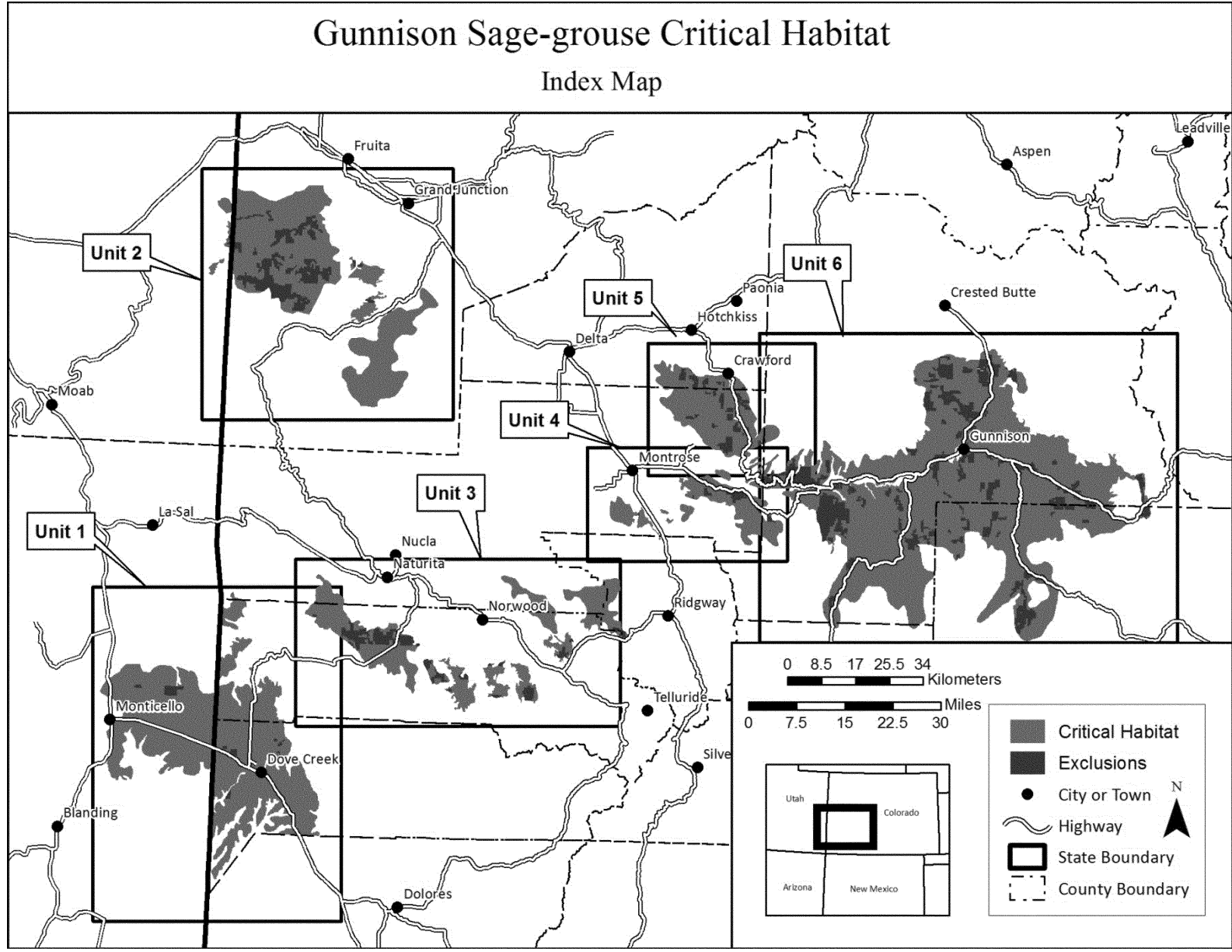
(ii) Private lands enrolled in the Gunnison Sage-Grouse Conservation Agreement with Assurances as of December 22, 2014, and those subject to

a permanent conservation easement as of August 28, 2013, or subject to the Ute Mountain Ute Tribe's Species Management Plan for Pinecrest Ranch on December 22, 2014, are excluded from designation pursuant to section 4(b)(2) of the Act, but adjacent lands are not.

(iii) 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/mountain-prairie/species/birds/gunnisonsagegrouse/>), <http://www.regulations.gov> at Docket No. FWS-R6-ES-2011-0111, and at the field office responsible for this designation. You may obtain field office location information by contacting one of the Service regional offices, the addresses of which are listed at 50 CFR 2.2.

(5) **Note:** Index map follows:

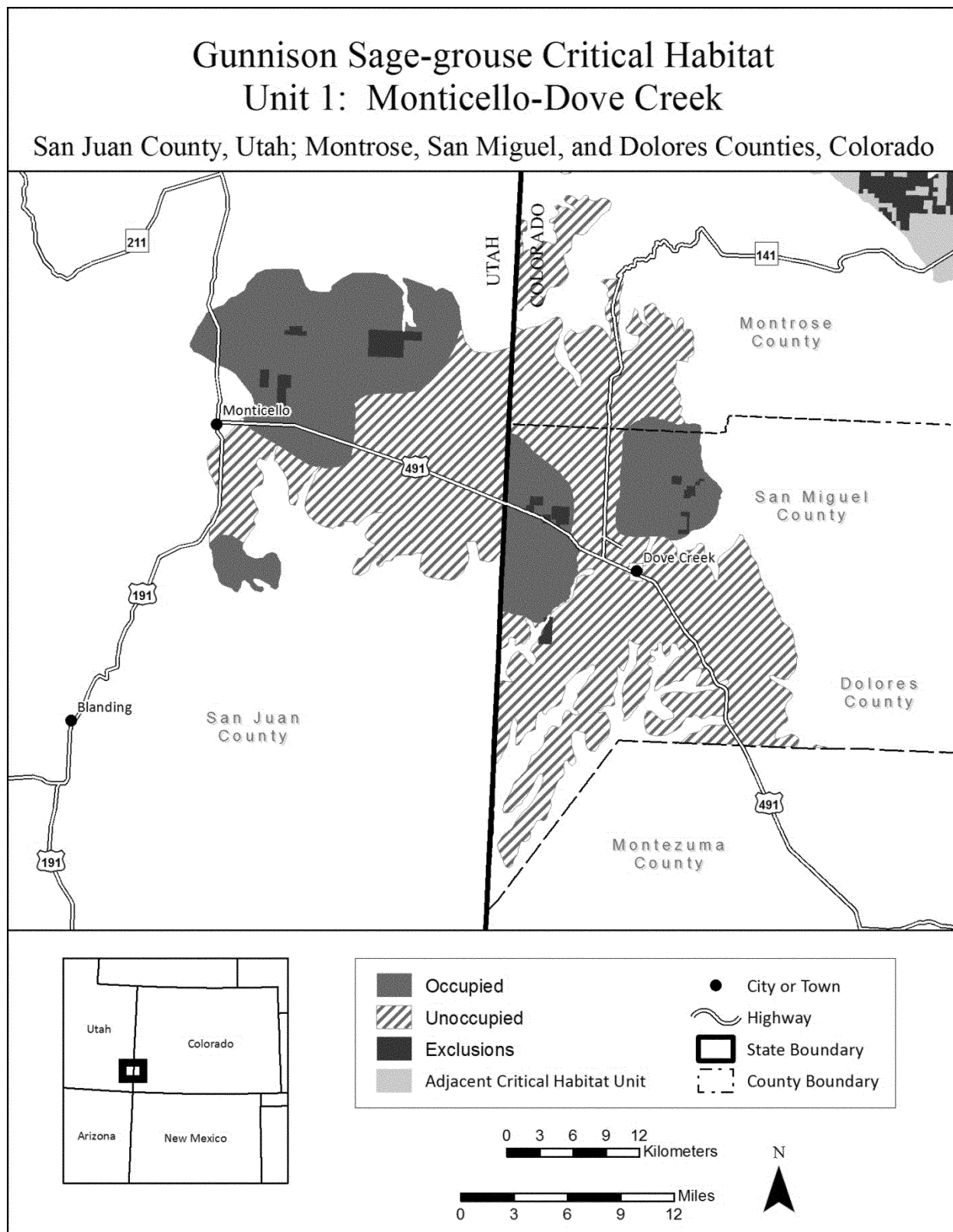
BILLING CODE 4310-55-P



(6) Unit 1: Monticello-Dove Creek: San Juan County, Utah, and Montrose, San Miguel, and Dolores Counties, Colorado.

(i) *General Description:* 343,000 ac (138,807 ha); 24.0 percent of all critical habitat.

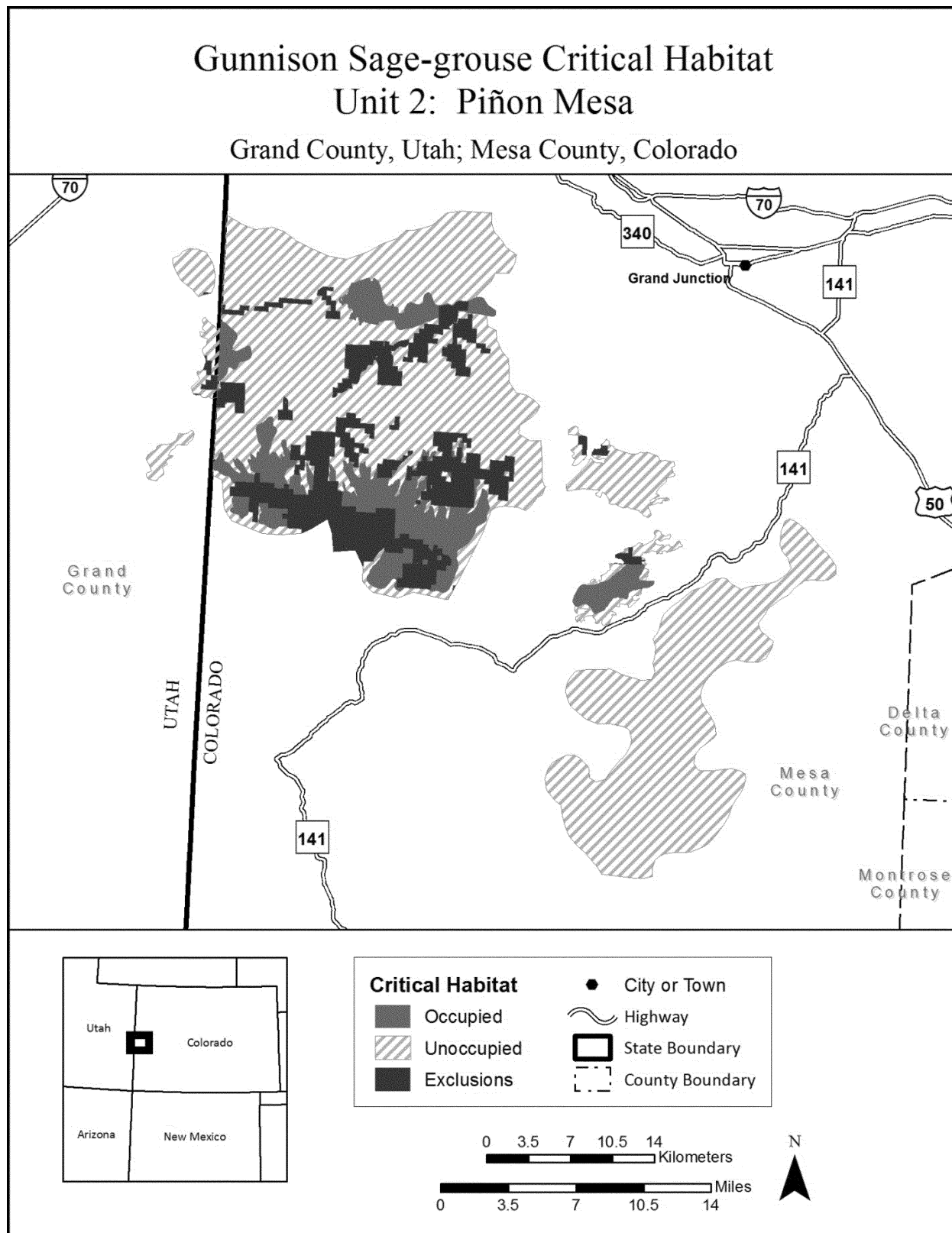
(ii) Map of Unit 1, Monticello-Dove Creek: San Juan County, Utah, and Montrose, San Miguel, and Dolores Counties, Colorado, follows:



(7) Unit 2: Piñon Mesa: Grand County, Utah, and Mesa County, Colorado.

(i) *General Description:* 207,792 ac (84,087 ha); 14.5 percent of all critical habitat.

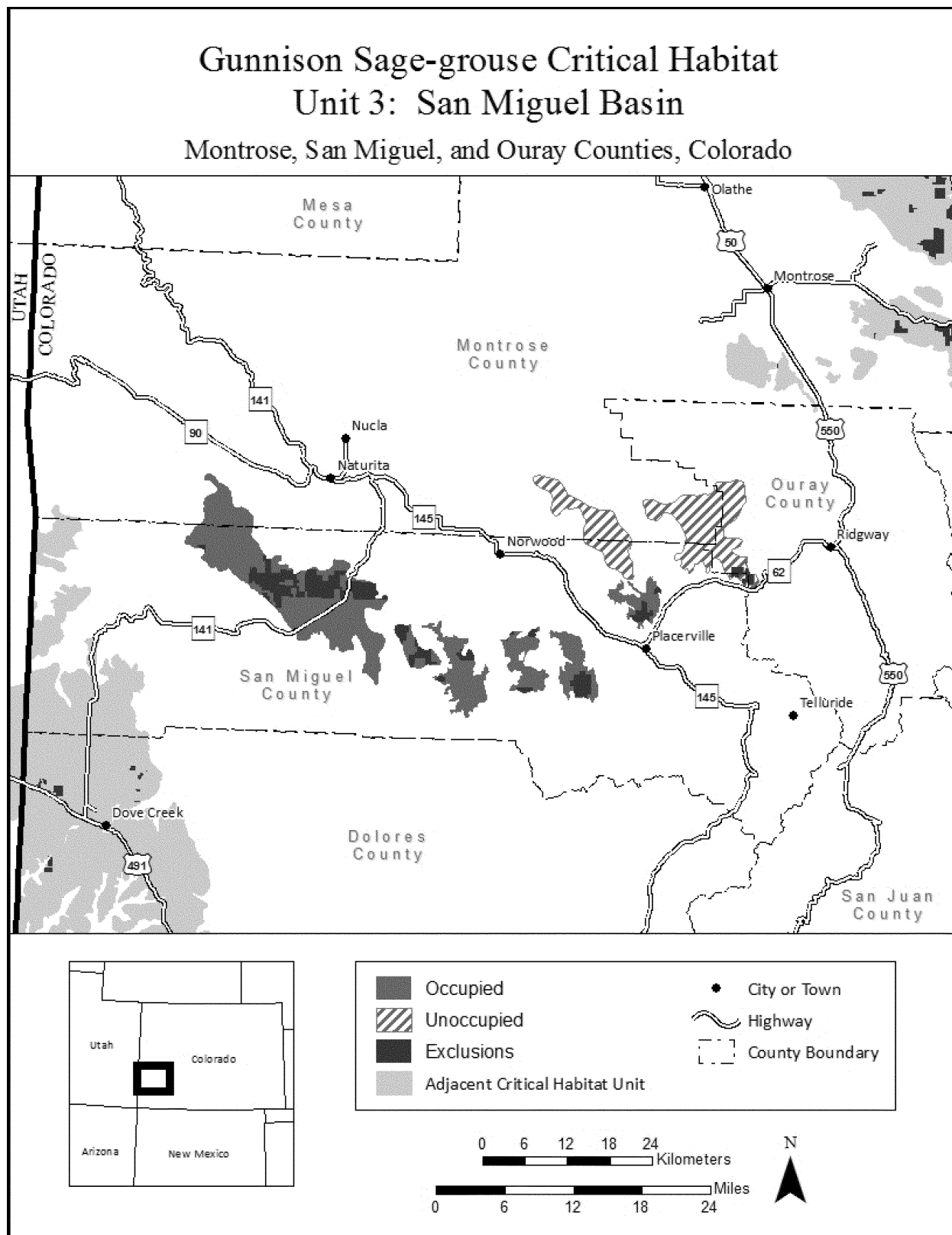
(ii) Map of Unit 2, Piñon Mesa: Grand County, Utah, and Mesa County, Colorado, follows:



(8) Unit 3: San Miguel Basin:
Montrose, San Miguel, and Ouray
Counties, Colorado.

(i) *General Description:* 121,929 ac
(49,343 ha); 8.5 percent of all critical
habitat.

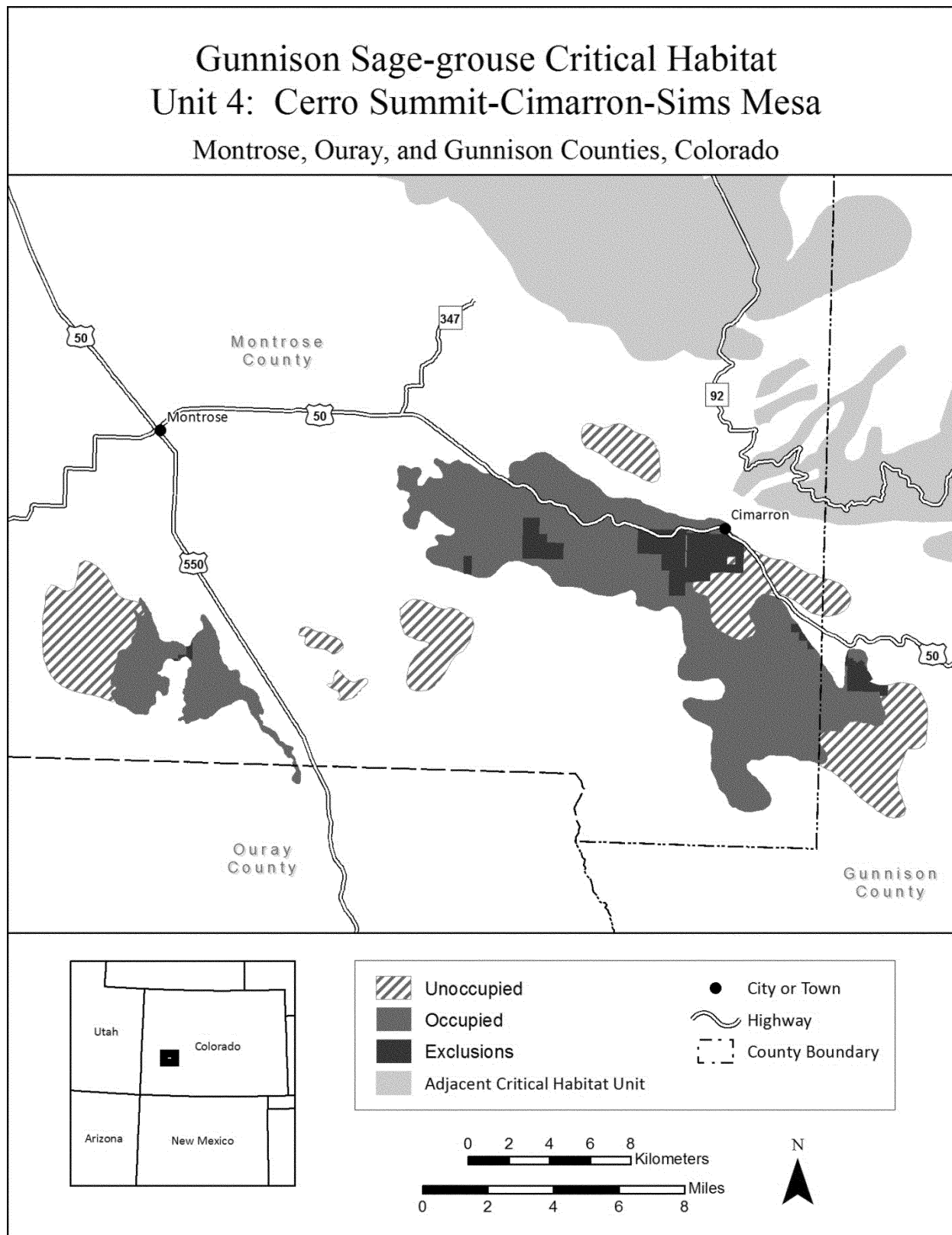
(ii) Map of Unit 3, San Miguel Basin:
Montrose, San Miguel, and Ouray
Counties, Colorado, follows:



(9) Unit 4: Cerro Summit-Cimarron-Sims Mesa: Montrose, Ouray, and Gunnison Counties, Colorado.

(i) *General Description:* 52,544 ac (21,264 ha); 3.7 percent of all critical habitat.

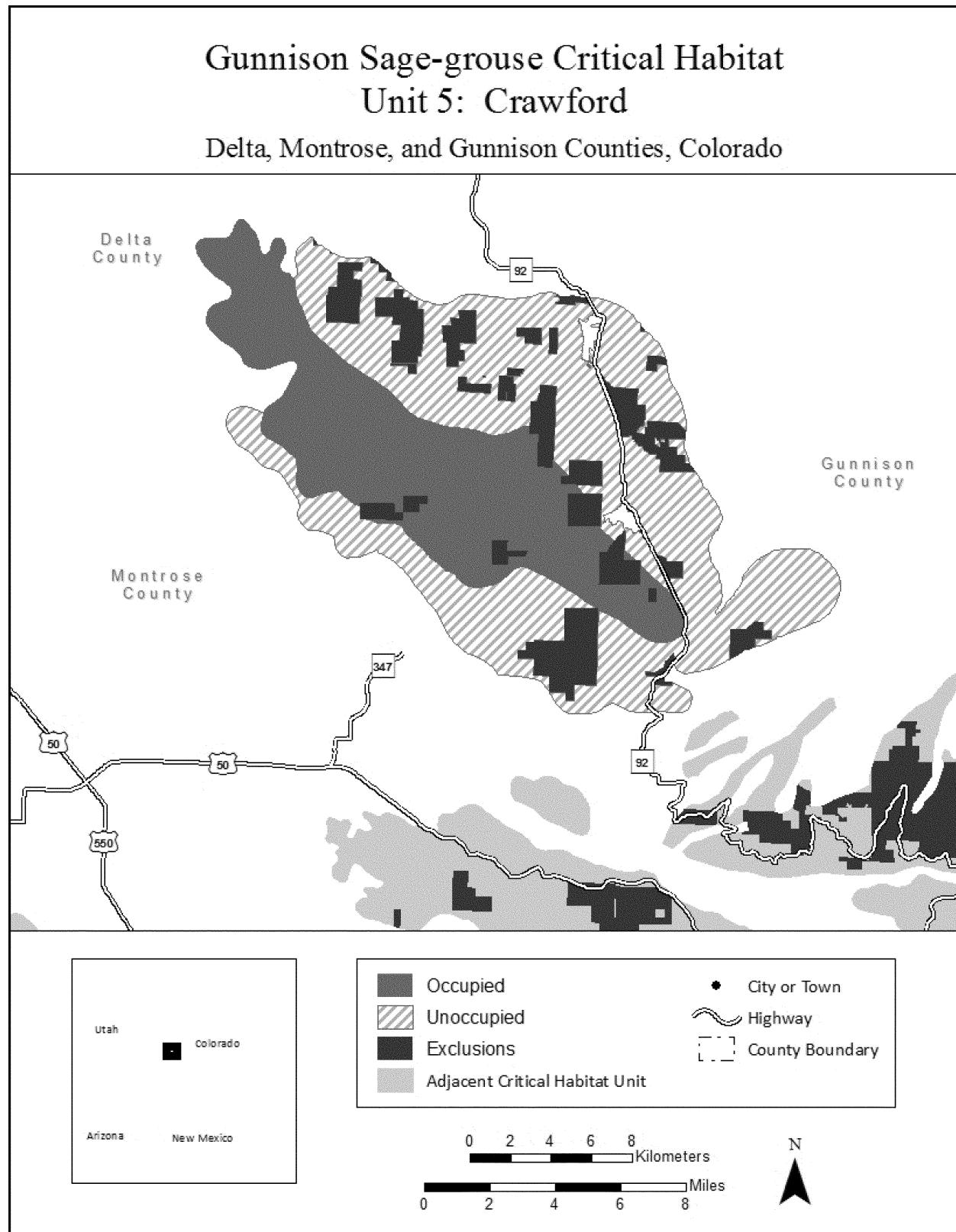
(ii) Map of Unit 4, Cerro Summit-Cimarron-Sims Mesa: Montrose, Ouray, and Gunnison Counties, Colorado, follows:



(10) Unit 5: Crawford: Delta, Montrose, and Gunnison Counties, Colorado.

(i) *General Description:* 83,671 ac (33,860 ha); 5.9 percent of all critical habitat.

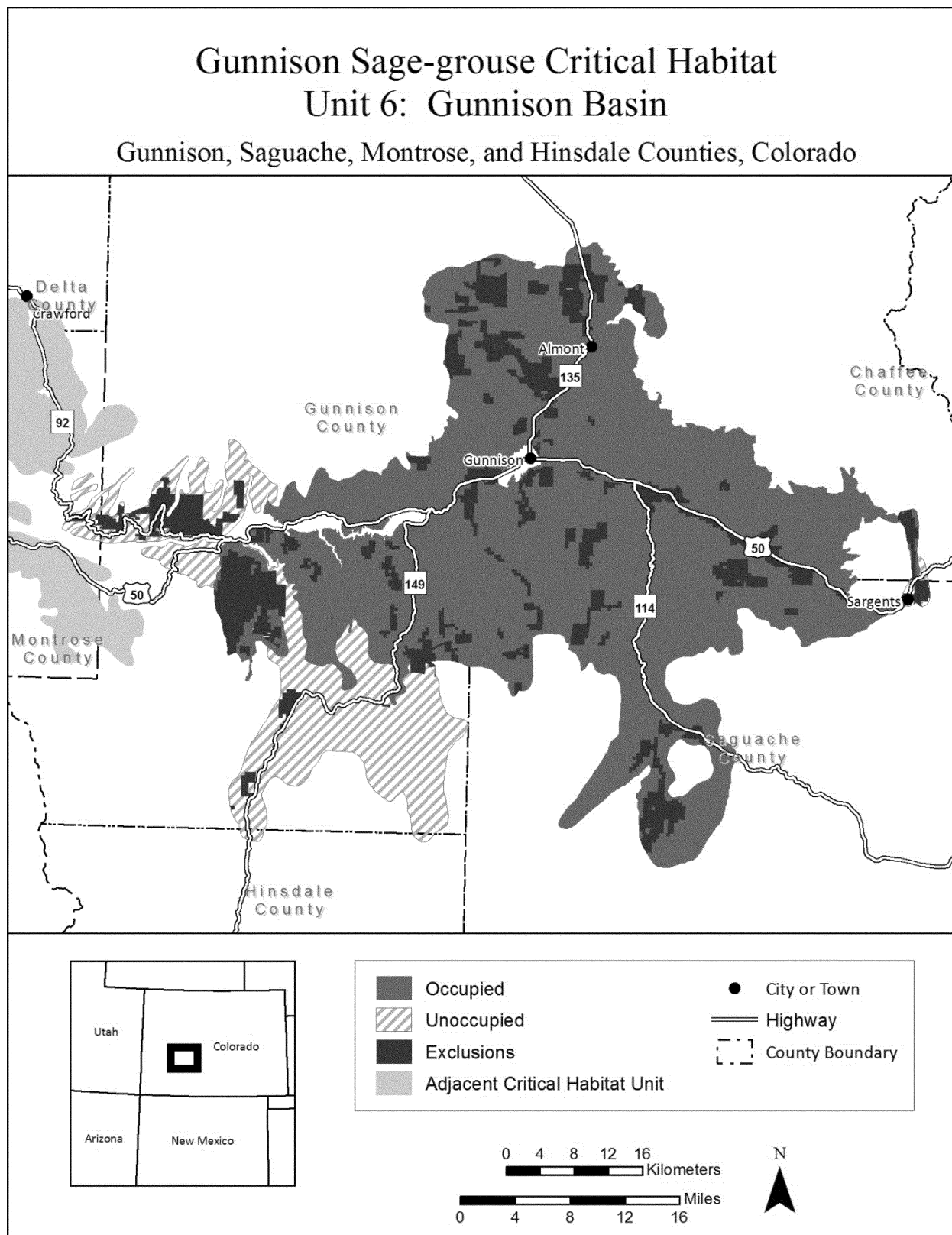
(ii) Map of Unit 5, Crawford: Delta, Montrose, and Gunnison Counties, Colorado, follows:



(11) Unit 6: Gunnison Basin:
Gunnison, Saguache, Montrose, and
Hinsdale Counties, Colorado.

(i) *General Description:* 620,616 ac
(251,154 ha); 43.4 percent of all critical
habitat.

(ii) Map of Unit 6, Gunnison Basin:
Gunnison, Saguache, Montrose, and
Hinsdale Counties, Colorado, follows:



* * * * *

Dated: October 21, 2014.

Michael J. Bean,

*Principal Deputy Assistant Secretary for Fish
and Wildlife and Parks.*

[FR Doc. 2014-27113 Filed 11-19-14; 8:45 am]

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