



This document is scheduled to be published in the Federal Register on 10/07/2014 and available online at <http://federalregister.gov/a/2014-23456>, and on [FDsys.gov](http://FDsys.gov)

Billing Code 4310–55

## **DEPARTMENT OF THE INTERIOR**

### **Fish and Wildlife Service**

#### **50 CFR Part 17**

**[Docket No. FWS–R8–ES–2014–0041]**

**[4500030113]**

**RIN 1018–BA05**

### **Endangered and Threatened Wildlife and Plants; Threatened Species Status for West Coast Distinct Population Segment of Fisher**

**AGENCY:** Fish and Wildlife Service, Interior.

**ACTION:** Proposed rule.

**SUMMARY:** We, the U.S. Fish and Wildlife Service (Service), propose to list the West Coast Distinct Population Segment of fisher (*Pekania pennanti*), a mustelid species from California, Oregon, and Washington, as a threatened species under the Endangered

Species Act (Act). If we finalize this rule as proposed, it would extend the Act's protections to this species. The effect of this regulation will be to add this species to the List of Endangered and Threatened Wildlife.

**DATES:** *Written Comments:* We will accept comments received or postmarked on or before **[INSERT DATE 90 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER]**. Comments submitted electronically using the Federal eRulemaking Portal (see **ADDRESSES**, below) must be received by 11:59 p.m. Eastern Time on the closing date. We must receive requests for additional public hearings, in writing, at the address shown in **FOR FURTHER INFORMATION CONTACT** by **[INSERT DATE 45 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER]**.

*Public Informational Meetings and Public Hearing:* We will hold one public hearing and seven public informational meetings. The public hearing will be held on:

(1) November 17, 2014, from 6:00 p.m. to 8:00 p.m. in Redding, California.

The seven public informational meetings will be held on:

(2) November 13, 2014, from 5:00 p.m. to 7:00 p.m. in Yreka, California.

(3) November 17, 2014, from 4:30 p.m. to 6:30 p.m. in Medford, Oregon.

(4) November 20, 2014, from 6:00 p.m. to 8:00 p.m. in Arcata, California.

(5) November 20, 2014, from 3:00 p.m. to 5:00 p.m. and another from 6:00 p.m. to 8:00 p.m. in Lacey, Washington.

(6) December 3, 2014, from 1:00 p.m. to 3:00 p.m. in Visalia, California.

(7) December 4, 2014, from 4:00 p.m. to 6:00 p.m. in Turlock, California.

**ADDRESSES:** *Comment Submission:* You may submit comments by one of the following methods:

(1) *Federal eRulemaking Portal:* <http://www.regulations.gov>. In the Search box, enter the Docket Number for this proposed rule, which is FWS–R8–ES–2014–0041. You may submit a comment by clicking on “Comment Now!” Please ensure that you have found the correct rulemaking before submitting your comment.

(2) *U.S. mail or hand delivery:* Public Comments Processing, Attn: Docket No. FWS–R8–ES–2014–0041; U.S. Fish & Wildlife Headquarters, MS: BPHC, 5275 Leesburg Pike, Falls Church, VA 22041–3803.

*Public Informational Meetings and Public Hearing:* We will hold one public hearing and seven public informational meetings at the locations listed below:

(1) Redding, California: Red Lion, 1830 Hilltop Dr., Redding, CA 96002.

(2) Yreka, California: Best Western Miner’s Inn, 122 E. Miner St., Yreka, CA 96097.

(3) Medford, Oregon: Rogue Regency Inn, 2300 Biddle Rd., Medford, OR 97504.

(4) Arcata, California: Arcata Public Library, 500 7th St., Arcata, CA 95521.

(5) Lacey, Washington: Lacey Community Center, Banquet A, 6729 Pacific Ave SE, Lacey, WA 98503.

(6) Visalia, California: Visalia Convention Center, 303 E. Acequia Ave., Visalia, CA 93291.

(7) Turlock, California: California State University, Stanislaus Campus, Faculty Development Center, Room 118, 1 University Circle, Turlock, CA 95382.

People needing reasonable accommodation in order to attend and participate in any of the public informational meetings or the public hearing should contact Erin Williams, Field Supervisor, Yreka Fish and Wildlife Office, as soon as possible (see **FOR FURTHER INFORMATION CONTACT**).

**FOR FURTHER INFORMATION CONTACT:** Erin Williams, Field Supervisor, U.S. Fish and Wildlife Service, Yreka Fish and Wildlife Office, 1829 South Oregon Street, Yreka, CA 96097, by telephone 530-842-5763 or by facsimile 530-842-4517. 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 of 1973, as amended (16 U.S.C. 1531 et seq.) (Act), if a species is determined to be an endangered or threatened species throughout all or a significant portion of its range, we are required to promptly publish a proposal in the **Federal Register** and make a determination on our proposal within 1 year. Under section 3(16) of the Act, we may consider for listing any species, including subspecies, of fish, wildlife, or plants, or any distinct population segment (DPS) of vertebrate fish or wildlife that interbreeds when mature. Critical habitat shall be designated, to the maximum extent prudent and determinable, for any

species determined to be an endangered or threatened species under the Act. Listing a species as an endangered or threatened species and designations and revisions of critical habitat can only be completed by issuing a rule.

*This rule will* propose the listing of the West Coast DPS of fisher (*Pekania pennanti*) as a threatened species. At this time, we have found the designation of critical habitat to be “not determinable” for the West Coast DPS of fisher. The West Coast DPS of fisher is a candidate species for which we have on file sufficient information on biological vulnerability and threats to support preparation of a listing proposal, but for which development of a listing regulation has been precluded by other higher priority listing activities. This rule reassesses all available information regarding status of and threats to the West Coast DPS of fisher. In addition, this rule requests consideration and comments on potential alternative DPSs.

*The basis for our action.* Under the Act, we can determine that a species is an endangered or threatened species based on any of five factors: (A) The present or threatened destruction, modification, or curtailment of its habitat or range; (B) Overutilization for commercial, recreational, scientific, or educational purposes; (C) Disease or predation; (D) The inadequacy of existing regulatory mechanisms; or (E) Other natural or manmade factors affecting its continued existence. We have determined that the main threats to the West Coast DPS of fisher are habitat loss from wildfire and vegetation management; toxicants (including anti-coagulant rodenticides); and the cumulative and synergistic effects of these and other stressors acting on small

populations.

*We will seek peer review.* We will seek comments from independent specialists to ensure that our designation is based on scientifically sound data, assumptions, and analyses. We will invite these peer reviewers to comment on our listing proposal. Because we will consider all comments and information received during the comment period, our final determination may differ from this proposal.

A team of biologists within the Service prepared a draft Species Report for the West Coast DPS of fisher (Service 2014, entire). This draft Species Report represents a compilation of the best scientific and commercial data available through December 2013 concerning the status of the species, including the past, present, and future stressors to this species. The draft Species Report will be peer-reviewed along with this proposed rule during the comment period. The draft Species Report and other materials relating to this proposal can be found on the Yreka Fish and Wildlife Office website at: [www.fws.gov/cno/es/fisher/](http://www.fws.gov/cno/es/fisher/). The draft Species Report can also be found on <http://www.regulations.gov> in this docket for this proposal as a supporting document. Any new information that has become available since December 2013 or received during the public comment period will be incorporated, as appropriate, into the final species report. In addition, if substantial new information since December 2013 is considered, we may open an additional comment period before the final rule.

## **Information Requested**

### *Public Comments*

We intend that any final action resulting from this proposed rule will be based on the best scientific and commercial data available and be as accurate and as effective as possible. Therefore, we request comments or information from the public, other concerned governmental agencies, Native American tribes, the scientific community, industry, or any other interested parties concerning this proposed rule.

Because in this proposed rule we are seeking peer review and public comment of some particularly complex issues with regard to the status of the species and identification of potential distinct population segments, we are providing additional background information in association with several of our questions to aid in understanding the context for the questions posed. Moreover, again due to the complexity of the issues under review, we are requesting information as outlined below to ensure that our final determination is based on the best scientific and commercial information available. We particularly seek comments and information concerning:

(1) The West Coast DPS of fisher's historical and current biology, range, status, distribution, and population size and trends, including:

(a) Biological or ecological requirements of the species, including habitat requirements for feeding, breeding, and sheltering;

- (b) Genetics and taxonomy;
- (c) Historical and current range including distribution patterns;
- (d) Historical and current population levels, and current and projected trends;
- (e) Past and ongoing conservation measures for the species, its habitat, or both;

and

(f) Data regarding the current status and trend for the extant native populations in the proposed DPS.

(2) Factors that may affect the continued existence of the species, which may include habitat modification or destruction, overutilization, disease, predation, the inadequacy of existing regulatory mechanisms, or other natural or manmade factors, including:

- (a) Information regarding the magnitude and overall immediacy of threats; and
- (b) Information and data concerning whether the factors that may affect the continued existence of the species are evenly distributed across the historical range of the species in Washington, Oregon, and California.

(3) Biological, commercial trade, or other relevant data concerning any threats (or lack thereof) to this species and existing regulations that may be addressing those threats, and biological, commercial trade, or other relevant data indicating actions or factors that may benefit fishers (such as fuels treatments that reduce the risk of fires).

(4) Scientific or commercial information on the expansion of populations, especially with respect to verified evidence of reproduction, including the verified locations of any individuals or populations of this species not already documented in the draft Species Report (Service 2014, entire).

(5) Information that may assist the Service in designating habitat as “critical habitat” under section 4 of the Act (16 U.S.C. 1533), including information as to whether the designation of critical habitat is prudent and determinable.

(6) Scientific or commercial information concerning the listable entity defined in this proposed rule, or concerning possible alternative DPS options as outlined below in the **Other DPS Alternatives** section; scientific or commercial information concerning whether a separate DPS would be appropriate that encompasses the areas where the West Coast DPS of fisher are considered to be likely extirpated, although on occasion individual fishers may be detected (Washington and most of Oregon); and whether it is appropriate to include areas within a DPS where native fishers are considered to be likely extirpated (Washington and most of Oregon). The Service is also interested in comments regarding other potential DPS configurations not outlined in the **Other DPS Alternatives** section.

(7) Under section 4(d) of the Act, the Service has discretion to issue regulations that we find necessary and advisable to provide for the conservation of threatened species. We seek data that support various management actions and regulations that

could be utilized to develop a potential section 4(d) rule necessary and advisable to provide for the conservation of fisher, should it be listed as a threatened species.

(8) Any additional genetic information that is important to consider for conservation management of fishers in the proposed DPS or other potential DPS configurations. In particular, we seek public comment on scientific information and perspective regarding potential restoration of connectivity between certain populations of fishers that was not available at the time of the 2004 Finding (described below under **Previous Federal Actions**). We direct the public to the recent publications of Tucker (2013), Tucker *et al.* (2012), Knaus *et al.* (2011), and the earlier publications of Warheit (2004), Wisely *et al.* (2004), and Drew *et al.* (2003), and we particularly seek comment regarding:

(a) Whether and how this information that has become available since the 2004 Finding may result in a different conclusion from that reached in 2004 regarding the DPS determination and the impact of population isolation on the fisher's overall conservation status.

(b) Whether genetics in the Northern California–Southwestern Oregon (NCSO) population should be managed separately from genetics in the Southern Sierra Nevada (SSN) population, including scientific basis, and how these data may be used to evaluate alternative DPS configurations.

(c) Whether genetics of fishers in Oregon and Washington should be managed separately from genetics in NCSO, including scientific basis, and how these data may be used to evaluate alternative DPS configurations.

(d) Whether various reintroduced populations should be managed based on genetic considerations, including scientific basis.

(9) Scientific data indicating whether the Klamath River, the Rogue River, and Interstate 5 may act as filters or barriers to fisher movement between the native NCSO population and the reintroduced Southern Oregon Cascades (SOC) population, and how these data may be used to evaluate alternative DPS configurations.

(10) Information regarding the scope and severity of the potential threat of anti-coagulant rodenticides throughout the proposed DPS as well as data on potential sublethal effects from disease and toxicants and scientific or commercial information regarding whether there is a difference in the scope and severity of rodenticides among NCSO, SSN, the reintroduced populations, and the rest of the historical range.

(11) Scientific or commercial information regarding the scope and severity of the potential threat of other causes of direct mortality (such as vehicle collisions and disease) throughout the proposed DPS and scientific or commercial information regarding differences in the scope and severity of these causes of direct mortality among NCSO, SSN, the reintroduced populations, and the rest of the historical range.

(12) Scientific or commercial information regarding the scope and severity of the potential threat of wildfire throughout the proposed DPS; in particular, we are interested in public comment on whether and how new research that has become available since the

2004 Finding may affect our evaluation of habitat loss from fire as a potential threat to fishers; and information on the potential tradeoff in terms of risk to fishers from habitat loss as a consequence of wildfire and the potential degradation or removal of habitat by removing structural forest components utilized by fishers in the course of fuel treatments. We ask for comment on this issue in the context of information indicating that climate change is expected to further exacerbate the loss of habitat in certain areas of the DPS, particularly in the SSN and NCSO populations, as noted in the draft Species Report. We direct the public to recent studies indicating that certain populations of fishers may experience relatively high vulnerability to habitat loss from wildfires, in turn leading some to recommend evaluating, prioritizing, and implementing fuels treatment to reduce the amount and severity of habitat loss (see Scheller *et al.* 2011, Mallek *et al.* 2013, Thompson *et al.* 2011, Underwood *et al.* 2010, Truex and Zielinski 2013, Zielinski 2013a, Zielinski *et al.* 2013b). In addition, some of these researchers have suggested that carefully applied treatments to reduce fire risk may be consistent with maintaining fisher habitat. In the context of this new information, we are seeking:

- (a) Scientific or commercial information to aid in evaluating the tradeoff between loss of fisher habitat value that may occur when forests are treated to reduce severity of future fires and the loss of fisher habitat that occurs when untreated stands are consumed by wildfire; and
- (b) Scientific or commercial information regarding potential differences in the scope and severity of wildfire among NCSO, SSN, and the rest of the historical range.

(13) Scientific or commercial information regarding the scope and severity of the potential stressor of climate change throughout the proposed DPS and scientific or commercial information regarding differences in the scope and severity of climate change among NCSO, SSN, and the rest of the historical range. We are also seeking scientific or commercial information regarding how the potential direct effects of climate change may manifest in fishers throughout the proposed DPS.

(14) Scientific or commercial information on the scope and severity of vegetation management on Federal land within the range of the fisher, but outside the range of the northern spotted owl in California (we used the northern spotted owl data as a surrogate for fisher data because we do not have fisher-specific information), and scientific or commercial information on the type, scope, and severity of vegetation management (timber harvest, restoration thinning, fuels reduction, etc.; see draft Species Report for details) on non-Federal land in Oregon and Washington. The most useful information would be quantified in terms of acres harvested rather than board-foot volume.

(15) Scientific evaluation of the use of northern spotted owl habitat data as a surrogate for fisher habitat data, and its use as the best available data to determine the scope and severity of vegetation management effects on Federal lands. The Service elected to use northern spotted owl habitat data as a surrogate for habitat data that are lacking for fishers because there is a vast amount of information on northern spotted owl habitat that has been collected, analyzed, and monitored over the past several decades throughout all but the Sierra Nevada portion of the proposed DPS for fisher. Northern

spotted owls use habitat types and structural components similar to what fishers use, but fishers also use some habitat types that are not suitable or are poor-quality habitat for northern spotted owls. Therefore, we are seeking comment on:

- (a) The strengths and weaknesses of using northern spotted owl habitat data as a surrogate for fisher data, and whether or not and why it is an appropriate surrogate; and
- (b) Whether or not and why there is another appropriate surrogate or approach.

(16) Information on the effects of livestock grazing on habitat for fisher prey within the proposed DPS.

(17) Information to assist in evaluating whether or not the existing amount and distribution of habitat may be limiting for fishers within the proposed DPS. We ask for public comment on this issue in the context of information indicating that there are areas of high- and intermediate-quality fisher habitat distributed throughout most of the DPS. At the same time, however, for the most part, existing fisher populations do not appear to have expanded into nearby unoccupied habitat. We are seeking scientific data that will help to elucidate our understanding of the following:

- (a) Whether or not the existing amounts and distribution of habitat are limiting for fishers within the DPS; and
- (b) Whether and how the current type and amount of habitat loss (for example, as a consequence of wildfire, climate change, or various types of vegetation management) may or may not be a threat to the persistence of fishers within all or portions of the DPS.

(18) Information to assist in evaluating the magnitude and overall immediacy of threats to fisher populations within the proposed DPS, or any of the potential alternative DPSs, in light of new information that has become available regarding occupancy or abundance of fishers in specific study areas since the 2004 Finding (Zielinski 2013a; Hamm *et al.* 2012; Hiller 2011; Matthews *et al.* 2011, Hamm *et al.* 2012).

(19) Comments on the methodology for developing stressor scope and severity, adequacy in revealing assumptions and uncertainties, appropriateness of data extrapolations, and applicability and interpretation of quantitative stressor values in the draft Species Report.

(20) Information to assist in quantifying habitat recruitment through ingrowth of intermediate- and high-quality fisher habitat.

Please include sufficient information with your submission (such as scientific journal articles, other publications, or unpublished data sets) to allow us to verify any scientific or commercial information you include.

Please note that submissions merely stating support for or opposition to the action under consideration without providing supporting information may not meet the standard of information required section 4(b)(1)(A) of the Act, which directs that determinations

as to whether any species is a threatened or endangered species must be made “solely on the basis of the best scientific and commercial data available.”

You may submit your comments and materials concerning this proposed rule by one of the methods listed in **ADDRESSES**. We request that you send comments **only** by the methods described in **ADDRESSES**.

If you submit information via *http://www.regulations.gov*, your entire submission—including any personal identifying information—will be posted on the website. If your submission is made via a hard copy that includes personal identifying information, you may request at the top of your document that we withhold this information from public review. However, we cannot guarantee that we will be able to do so. We will post all hard copy submissions on *http://www.regulations.gov*.

Comments and materials we receive, as well as supporting documentation we used in preparing this proposed rule, will be available for public inspection on *http://www.regulations.gov*, or by appointment, during normal business hours, at the U.S. Fish and Wildlife Service, Yreka Fish and Wildlife Office (see **FOR FURTHER INFORMATION CONTACT**).

*Public Hearing*

Section 4(b)(5) of the Act provides for one or more public hearings on this proposal, if requested. Requests must be received within 45 days after the date of publication of this proposed rule in the **Federal Register**. Such requests must be sent to the address shown in **FOR FURTHER INFORMATION CONTACT**. We will schedule public hearings on this proposal, if any are requested, and announce the dates, times, and places of those hearings, as well as how to obtain reasonable accommodations, in the **Federal Register** and local newspapers at least 15 days before the hearing.

#### *Peer Review*

In accordance with our joint policy on peer review published in the **Federal Register** on July 1, 1994 (59 FR 34270), we have sought the expert opinions of a minimum of five appropriate and independent specialists regarding this proposed rule. The purpose of peer review is to ensure that our listing determination and critical habitat designation are based on scientifically sound data, assumptions, and analyses. The peer reviewers will have expertise in such things as fisher biology, ecology, and genetics and are concurrently reviewing the draft Species Report; their review of the proposed rule and draft Species Report will inform our final determination. We invite comment from the peer reviewers during this public comment period.

#### **Previous Federal Actions**

On June 5, 1990, we received a petition from Sierra Biodiversity Project to list the Pacific fisher (*Martes pennanti pacifica*) as endangered in California, Oregon, and Washington. We published a notice in the **Federal Register** (56 FR 1159) on January 11, 1991, stating that, while the petition provided evidence that the Pacific fisher represented a potential listable entity (“a distinct population that interbreeds”—a definition that predates the 1996 policy (61 FR 4722) regarding the recognition of distinct vertebrate populations), it did not present substantial information indicating that the requested action may be warranted.

On December 29, 1994, we received a petition from the Biodiversity Legal Foundation to list two fisher (*Martes pennanti*) populations in the western United States (the Coastal Range population in Washington, Oregon, and California; and the Rocky Mountain population in Idaho, Montana, and Wyoming) as threatened. On March 1, 1996, the Service published a notice in the **Federal Register** (61 FR 8016) finding that the petition did not present substantial information indicating that the two fisher populations at issue constitute distinct vertebrate population segments listable under the Act.

On December 5, 2000, we received from the Center for Biological Diversity and other groups a petition dated November 28, 2000, to list a DPS of the fisher that includes portions of California, Oregon, and Washington as an endangered species pursuant to the Act, and to concurrently designate critical habitat for this distinct population segment. A court order was issued on April 4, 2003, by the U.S. District Court, Northern District of

California, that required us to submit for publication in the **Federal Register** a 90-day finding on the November 2000 petition (*Center for Biological Diversity, et al. v. Norton, et al.*, No. C 01–2950 SC). On July 10, 2003, we published a 90-day petition finding (68 FR 41169) that the petition provided substantial information that listing may be warranted and initiated a 12-month status review. Through a stipulated order, the court set a deadline of April 3, 2004, for the Service to make a 12-month finding under 16 U.S.C. 1533(b)(3)(B). On April 8, 2004, we published a 12-month status review (69 FR 18769) finding (2004 Finding) that the West Coast DPS of fisher was warranted for listing, but was precluded by higher priority actions; through the 2004 Finding, the West Coast DPS of fisher was added to our candidate species list. Candidates are those fish, wildlife, and plants for which we have on file sufficient information on biological vulnerability and threats to support preparation of a listing proposal, but for which development of a listing regulation is precluded by other higher priority listing activities. The West Coast DPS of fisher was included in all of our subsequent annual Candidate Notice of Reviews (CNORs) (78 FR 70103, November 22, 2013; 77 FR 69993, November 21, 2012; 76 FR 66370, October 26, 2011; 75 FR 69222, November 10, 2010; 74 FR 57804, November 9, 2009; 73 FR 75176, December 10, 2008; 72 FR 69034, December 6, 2007; 71 FR 53756, September 12, 2006; 70 FR 24870, May 11, 2005). The West Coast DPS of fisher has a listing priority number of 6, which reflects a species with threats that are high in magnitude and not imminent.

On June 10, 2007, Sierra Forest Products, Inc., challenged the Service's April 8, 2004, Finding of warranted but precluded for the West Coast DPS of the fisher by

asserting that the Service violated the Act and the Administrative Procedure Act by failing to specify whether the West Coast DPS of the fisher is a DPS of a species or a DPS of a subspecies (*Sierra Forest Products, Inc. v. Kempthorne et al.*, No. 2:1007-cv-00060-JAM GGH). On June 6, 2008, the Eastern District Court in California determined the record contained scientific support for the Service's determination that the West Coast DPS of the fisher is a DPS of a species and that the Service's determination in this regard was not arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with law. On appeal, the Ninth Circuit affirmed the District Court finding by memorandum opinion issued January 6, 2010 (*Sierra Forest Products, Inc., v. Kempthorne, et al.* (No. 08-16721)).

On April 8, 2010, the Center for Biological Diversity challenged the Service's alleged lack of expeditious progress on pending listing proposals, and in particular regarding the west coast DPS of fisher, for species for which the Service had found listing to be warranted but precluded (*Center for Biological Diversity v. Salazar* (No. 3:10-cv-01501-JCS)(N.D. California)). This challenge was resolved by stipulated dismissal and approved by the court on October 5, 2011, based on the Service's agreement in the context of a larger multidistrict litigation to submit a proposed rule or a not-warranted finding regarding the West Coast DPS of fisher to the **Federal Register** by the end of Fiscal Year (September 30) 2014 (*In re Endangered Species Act Section 4 Deadline Litig.*, Misc. Action No. 10-377 (EGS), MDL Docket No. 2165 (D.D.C.)).

We published a notice of initiation of status review and solicitation of new information for the West Coast DPS of fisher in the **Federal Register** on March 19, 2013 (78 FR 16828).

## **Background**

### Distinct Population Segment Analysis

Based on the November 28, 2000, petition, we considered whether the potential distinct vertebrate population segment (DPS) of fisher as described by the petitioners meets the definition of a DPS as described in the Service's Policy Regarding the Recognition of Distinct Vertebrate Population Segments under the Endangered Species Act (DPS Policy) (61 FR 4722; February 7, 1996).

Under section 3(16) of the Act, we may consider for listing any species, including subspecies, of fish, wildlife, or plants, or any DPS of vertebrate fish or wildlife that interbreeds when mature (16 U.S.C. 1532(16)). Such entities are considered eligible for listing under the Act (and, therefore, are referred to as listable entities), should we determine that they meet the definition of an endangered or threatened species.

Under the Service's DPS Policy, three elements are considered in the decision concerning the establishment and classification of a possible DPS. These elements include:

(1) The discreteness of a population in relation to the remainder of the species to which it belongs;

(2) The significance of the population segment to the species to which it belongs;  
and

(3) The population segment's conservation status in relation to the Act's standards for listing, delisting, or reclassification (i.e., is the population segment endangered or threatened).

In evaluating the distribution of fisher in the species' West Coast range, we examined information in published range maps, published works that included historical occurrences, unpublished studies related to fisher distribution, and other submitted data. Fisher distribution in the species' West Coast range is discussed in detail in the "Distribution" section of the draft Species Report (Service 2014, pp. 23–46). We made a DPS determination in our initial 2004 Finding (April 8, 2004; 69 FR 18769); below we summarize discreteness and significance for fisher in the species' West Coast range.

### *Discreteness*

Under the DPS policy, a population segment of a vertebrate taxon may be considered discrete if it satisfies either one of the following conditions:

(1) It is markedly separated from other populations of the same taxon as a consequence of physical, physiological, ecological, or behavioral factors. Quantitative measures of genetic or morphological discontinuity may provide evidence of this separation.

(2) It is delimited by international governmental boundaries within which differences in control of exploitation, management of habitat, conservation status, or regulatory mechanisms exist that are significant in light of section 4(a)(1)(D) of the Act.

Under the Service's DPS policy, a population segment of a vertebrate taxon may be considered discrete if it is either markedly separate or delimited by international governmental boundaries. All West Coast populations of fishers are markedly separated from fisher populations to the east by geographical barriers, unsuitable habitat, and urban development. The native fisher populations on the West Coast are separated from native populations to the north by approximately 900 km (560 mi), and it is extremely unlikely that transient individuals could disperse far enough to provide a functional population connection between the native NCSO population and Canadian populations. In addition, the Olympic National Park (ONP) reintroduced population is also physically isolated from known fisher populations in British Columbia by 400 km (250 mi) and by urban development in the greater Seattle/Vancouver area. In summary, fisher populations on the West Coast in Washington, Oregon, and California are geographically isolated from all other populations of the species. Therefore, the marked separation condition for

discreteness is met by geographical filters/barriers, urban development, and distances that are beyond the known dispersal distance of fishers.

Regarding the international governmental boundaries condition for discreteness, we conclude that this condition can also be met due to differences in exploitation, management of habitat, conservation status, and regulatory mechanisms between the United States and Canada that collectively play a role in delimiting the northern boundary of the analysis area along the international border with Canada. These differences include the United States' land management under the National Forest Management Act of 1976, as amended (16 U.S.C. 1600), and the Federal Land and Policy Management Act (43 U.S.C. 1712), which provide for protection of wildlife habitat; many of the associated management plans address fisher as a sensitive species (Service 2014, pp. 117–124). Alternatively, Canada has no overarching forest practice laws governing management of its national lands similar to those in the United States. In addition, the fisher can be legally harvested by licensed trappers under regional regulations in Canada, whereas trapping the species has been prohibited for decades in Washington, Oregon, and California (Service 2014, pp. 106–108). Overall, both the marked separation and international governmental boundary conditions are met, and they each individually satisfy the discreteness element of the DPS policy for the fisher in the species' West Coast range.

### *Significance*

If a population segment is considered discrete under one or more of the conditions described in the Service's DPS policy, its biological and ecological significance will be considered in light of Congressional guidance that the authority to list DPSs be used "sparingly" (see Senate Report 151, 96th Congress, 1st Session). In making this determination, we consider available scientific evidence of the DPS's importance to the taxon to which it belongs. Since precise circumstances are likely to vary considerably from case to case, the DPS policy does not describe all the classes of information that might be used in determining the biological and ecological importance of a discrete population. However, the DPS policy describes four possible classes of information that provide evidence of a population segment's biological and ecological importance to the taxon to which it belongs. As specified in the DPS policy (61 FR 4722, February 7, 1996), this consideration of the population segment's significance may include, but is not limited to, the following:

- (1) Persistence of the DPS in an ecological setting unusual or unique to the taxon;
- (2) Evidence that loss of the DPS would result in a significant gap in the range of a taxon;
- (3) Evidence that the DPS represents the only surviving natural occurrence of a taxon that may be more abundant elsewhere as an introduced population outside its historical range; or

(4) Evidence that the DPS differs markedly from other populations of the species in its genetic characteristics.

To be considered significant, a population segment needs to satisfy only one of these conditions, or other classes of information that might bear on the biological and ecological importance of a discrete population segment, as described in the DPS policy (61 FR 4722, February 7, 1996). Three of these criteria are met for the fisher in the species' West Coast range. We found that loss of the species from its West Coast range in the United States would represent a significant loss of the species from a unique ecological setting because fishers in the West Coast inhabit landscapes dominated by different forest types, climate, and predator–prey relationships compared to fishers in the rest of the range of the taxon. We also found that loss of the West Coast populations of fisher would result in a significant gap in the range because it would significantly impact representation of the species by shifting the southern boundary of the taxon more than 1,600 km (994 mi) to the north and would create a significant gap in the range of the taxon because of its situation at the southern periphery of the species' range. Finally, we found that populations of fisher in the species' West Coast range (NCSO and SSN) differ markedly from other populations of the species in their genetic characteristics because these native fisher populations on the West Coast are genetically distinct from fishers in the remainder of North America (for example, Canada, Rocky Mountains, and Great Lakes) and from each other. As a result, loss of the fisher in the species' West Coast range would result in the reduction in the species' genetic diversity. Overall, the unusual or unique ecological setting, significant gap in the range of the taxon, and marked genetic

differences conditions are met, and they each individually satisfy the significance element of the DPS policy for fisher in the species' West Coast range.

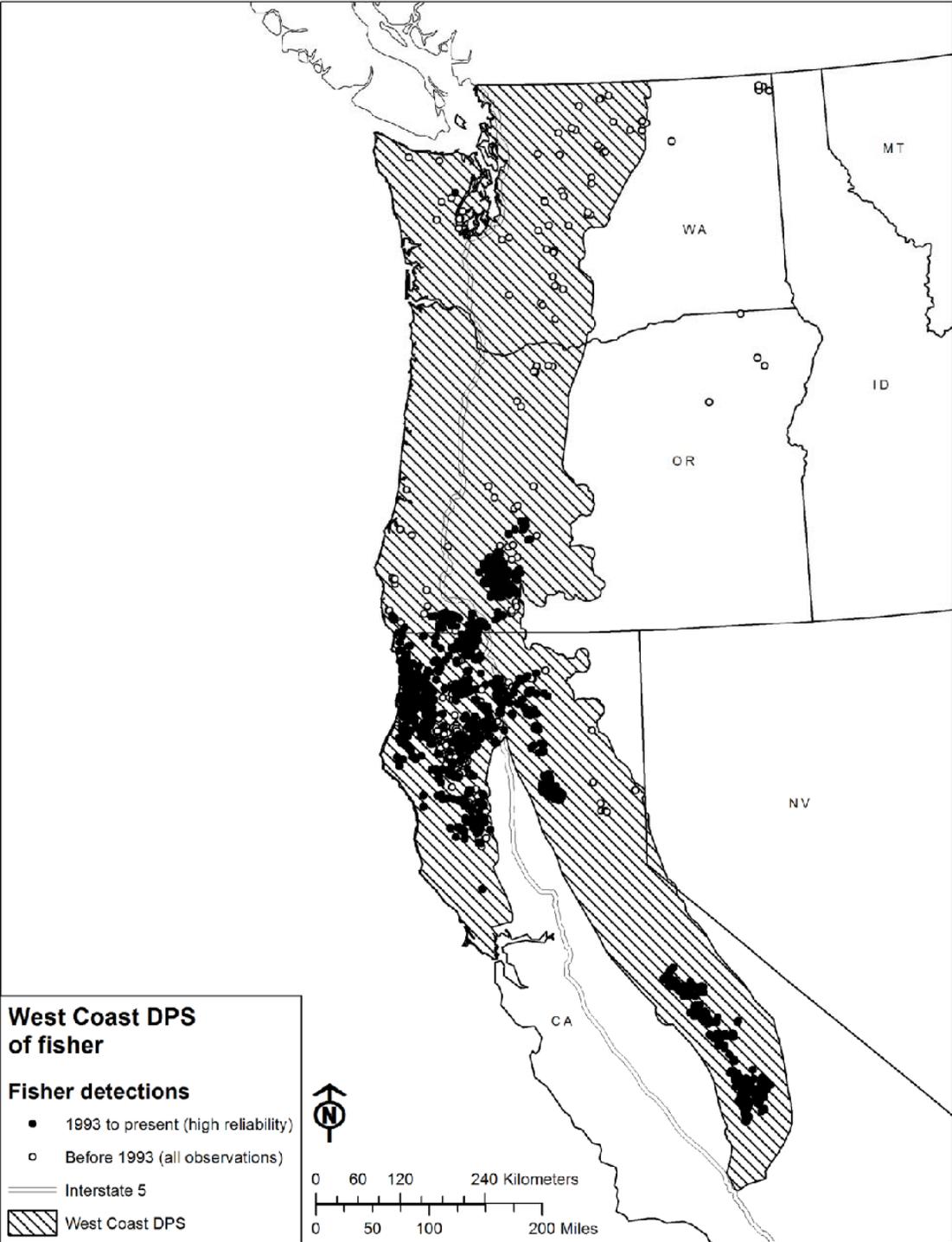
#### Summary of DPS Analysis Regarding Fisher in Its West Coast Range

Given that both the discreteness and the significance elements of the DPS policy are met for fisher in the species' West Coast range, we find that the West Coast DPS of fisher is a valid DPS. Therefore, the West Coast DPS of fisher is a listable entity under the Act, and we now assess this DPS's conservation status in relation to the Act's standards for listing, delisting, or reclassification (i.e., whether this DPS meets the definition of an endangered or threatened species under the Act).

#### Draft Species Report

We found the West Coast DPS of fisher to be warranted for listing in 2004 and each subsequent year in the CNOR. Also, we completed a draft Species Report incorporating new information that has become available since the 2004 Finding, including new genetic and survey information. The analysis area in the draft Species Report covers the range of the 2004 Finding.

Figure 1. West Coast DPS of fisher (historical range and 2004 Finding range boundary). The black dots represent high reliability fisher detections from 1993 to present, and the white circles represent all fisher observations (low, moderate, and high reliability) before 1993. Please note that the ONP population here is represented by a single black dot, and this representation is based on the information we received from the Washington Department of Fish and Wildlife.



A thorough review of the taxonomy, life history, and ecology of the West Coast Distinct Population Segment (DPS) of fisher is presented in the draft Species Report (Service 2014; <http://www.fws.gov/cno/es/fisher/>; <http://www.regulations.gov>). The fisher is a medium-sized light-brown to dark blackish-brown mammal, with the face, neck, and shoulders sometimes being slightly gray; the chest and underside often has irregular white patches. The fisher is classified in the order Carnivora, family Mustelidae, a family that also includes weasels, mink, martens, and otters (Service 2014, pp. 8–9). The occurrence of fishers at regional scales is consistently associated with low- to mid-elevation environments of coniferous and mixed conifer and hardwood forests with characteristics of late-successional forests (large-diameter trees, coarse downed wood, and singular features of large snags, tree cavities, or deformed trees). Historically, fishers were well-distributed throughout the analysis area in the habitats described above. In Washington and Oregon, outside of the existing known populations, fishers are considered likely extirpated (although on occasion individual fishers may be detected). In California, recent survey efforts have not detected fishers in the northern Sierra Nevada, outside of the reintroduced population. Key fisher habitat includes forests with diverse successional stages containing a high proportion of mid- and late-successional characteristics. Throughout their range, fishers are obligate users of tree or snag cavities for denning, and they select resting sites with characteristics of late-successional forests. Late-successional forest characteristics are maintained and recruited in the forest through ecological process such as fire, insect-related tree mortality, disease, and decay (Service 2014, pp. 13–18).

Fishers are found only in North America, and the West Coast DPS encompasses the area where fishers historically occurred throughout western Washington, western Oregon, and California to the Sierra Nevada (Service 2014, p. 26). Currently, the West Coast DPS of fisher occurs in two original native populations (Northern California–Southwestern Oregon Population (NCSO) and the Southern Sierra Nevada Population (SSN)) and three reintroduced populations (Northern Sierra Nevada Reintroduced Population (NSN) in California, Southern Oregon Cascades (SOC) Reintroduced Population in Oregon, and the Olympic Peninsula Reintroduced Population (ONP) in Washington) (Service 2014, p. 34). There have been several approaches used to estimate the NCSO population size in the literature. Based on these various approaches, the NCSO population estimates range from a total population size of 258 to 4,018. For the SSN, population estimates reveal approximately 300 fishers (Service 2014, pp. 37–42). Regarding the reintroduced populations, the SOC has persisted for more than 30 years, despite an apparently small geographic extent, but does not exhibit evidence of broad-scale population expansion. Both the ONP and the NSN have been reintroduced within the past 10 years, and it is too early to determine if the populations will persist. Current indications are encouraging, but it will take time to determine population trend and stability of these two new reintroductions (Service 2014, pp. 43–46).

### **Summary of Biological Status and Threats**

The Act directs us to determine whether any species is an endangered species or a threatened species because of any factors affecting its continued existence, as described

below. We completed a comprehensive assessment of the biological status of the West Coast DPS of fisher, and we prepared a report of the assessment (draft Species Report), which provides a thorough account of the species' biology and stressors. In this section, we summarize the information presented in that assessment (draft Species Report), which can be accessed at Docket FWS–R8–ES–2014–0041 on <http://www.regulations.gov> and at <http://www.fws.gov/cno/es/fisher/>. Section 4 of the Act (16 U.S.C. 1533) and implementing regulations (50 CFR 424) set forth procedures for adding species to, removing species from, and reclassifying species on the Federal Lists of Endangered and Threatened Wildlife and Plants. Under section 4(a)(1) of the Act, a species may be determined to be an endangered or threatened 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; or

(E) Other natural or manmade factors affecting its continued existence.

A species is an endangered species for purposes of the Act if it is in danger of extinction throughout all or a significant portion of its range, and is a threatened species if

it is likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range.

In making this finding, information pertaining to the West Coast DPS of fisher in relation to the five factors provided in section 4(a)(1) of the Act is summarized below, based on the analysis of stressors affecting fisher contained in the draft Species Report. In considering what stressors might constitute threats, we must look beyond the mere exposure of the species to the stressor to determine whether the species responds to the stressor in a way that causes actual negative impacts to the species. If there is exposure to a stressor, but no response, or only a positive response, that stressor is not a threat. If there is exposure and the species responds negatively, the stressor may be a threat and we then attempt to determine the scope, severity, and impact of the potential threat. If the threat is having a significant impact on the species, it may drive or contribute to the risk of extinction of the species such that the species warrants listing as an endangered or threatened species as those terms are defined by the Act. This determination does not necessarily require empirical proof of a threat. The combination of exposure and some corroborating evidence of how the species is likely impacted could suffice. The mere identification of stressors that could impact a species negatively is not sufficient to compel a finding that listing is appropriate; we require evidence that these stressors are operative threats that act on the species to the point that the species meets the definition of an endangered or threatened species under the Act.

The draft Species Report represents a comprehensive review of the West Coast DPS of fisher and provides a thorough account of the species' biology and stressors. In the draft Species Report, we reviewed and evaluated past, current, and potential future stressors that may be affecting fishers in the analysis area. For each stressor, we used the best information available to us to estimate the timing, scope, and severity of the potential stressor, noting where stressors may differ regionally (among sub-regions) (Service 2014, pp. 46–51). The sub-regions analyzed in the draft Species Report include: Coastal Washington, Western Washington Cascades, and Eastern Washington Cascades (in Washington); Coastal Oregon, Western Oregon Cascades, and Eastern Oregon Cascades (in Oregon); Northern California–Southwestern Oregon (in Oregon and California); and Sierra Nevada (in California) (Service 2014, p. 47). For the estimations in these sub-regions, we defined stressors as the activities or processes that have caused, are causing, or may cause in the future the destruction, degradation, or impairment of West Coast fisher populations or their habitat.

The *timing* is the time period that we can be reasonably certain the stressor is acting on fisher populations or their habitats. The *scope* is the proportion of the fisher analysis area sub-region that can reasonably be expected to be affected by a stressor within the appropriate time period of the stressor, given continuation of current circumstances and trends. The *severity* is the level of damage to fisher populations or their habitat (within the scope) that can reasonably be expected from the stressor within the appropriate period for the given stressor assuming continuation of current circumstances and trends. Note that, for the stressors related to habitat, the severity is the

percent of habitat within the scope that is likely to be lost over 40 years, whereas for the stressors related to direct mortality, the severity is the percent of animals within the scope that are estimated to die annually. Therefore, a direct comparison cannot be made between the stressors related to habitat and those related to direct mortality of fishers. Please refer to the draft Species Report for the time period over which we analyzed each stressor. The timing (immediacy) of each stressor was assessed independently based upon the nature of the stressor and time period that we can be reasonably certain the stressor is acting on fisher populations or their habitats. In general, we considered that the trajectories of the stressors acting on fisher populations within the analysis area could be reasonably anticipated over the next 40 years (Service 2014, pp. 46–49).

The values and explanations for the scope and severity for each potential stressor in the draft Species Report reflect our current best estimate, but we acknowledge that other estimates are also possible. Depending on the level of data available for each stressor, we made relative estimates of the impacts of the various stressors discussed above between sub-regions. In some cases we had empirical data that supported our estimates (e.g., mortality estimates for some sub-regions), and in others we extrapolated because we did not have data available for that area or we extrapolated from other areas. Therefore, our estimates have the greatest degree of certainty for estimates of mortality derived from studies in areas with extant populations of fishers. Estimates derived from extrapolations of data from one sub-region to another or applied to areas not currently occupied by fishers have greater uncertainty (for habitat stressors) or are not applicable (for stressors related to direct mortality). We utilized these estimates to help us assess the

gross level of impact of the various stressors, rather than as a precise quantification, and we recognize that we may further refine these estimates upon review of additional information prior to our final listing determination. Please refer to the narrative sections for each stressor in the draft Species Report for important caveats in interpreting scope and severity estimates.

#### *Analysis under Section 4(a)(1) of the Act*

The Act directs us to determine whether any species is an endangered species or a threatened species because of any of the factors outlined in section 4(a)(1) of the Act that may affect its continued existence. In this section, information regarding the status and threats to this species in relation to the five factors is summarized below.

All potential stressors currently acting upon the West Coast DPS of fisher or likely to affect the species in the future are evaluated and addressed in the draft Species Report; below we consider those stressors in light of the statutory factors identified above. The reader is directed to the draft Species Report for a more detailed discussion of the stressors summarized in this document ([http:// www.fws.gov/cno/es/fisher/](http://www.fws.gov/cno/es/fisher/)).

The draft Species Report evaluated the biological status of the species and each of the potential stressors affecting its continued existence (Service 2014, entire). It was based upon the best available scientific and commercial data and the expert opinion of the draft Species Report team members. Based on the analyses and discussion contained

therein, in this document we evaluated potential habitat stressors including wildfire, emergency fire suppression actions, and post-fire management actions; climate change; current vegetation management; and human development (Factor A). We also evaluated potential stressors related to direct mortality of fishers including trapping and incidental capture, research activities, disease or predation, collision with vehicles, and exposure to toxicants (Factors B, C, and E). Finally, we evaluated the inadequacy of existing regulatory mechanisms (Factor D) and other natural or manmade factors affecting its continued existence including direct climate effects and small population size (Factor E).

Factor A. The Present or Threatened Destruction, Modification, or Curtailment of the Species' Habitat or Range.

#### *Wildfire and Fire Suppression*

Our evaluation of the effects of wildfire on fisher habitat included those activities associated with fire suppression that may result in removal of fisher habitat (for example, backburning, fuel breaks, and snag removal). For the wildfire and fire suppression stressor, we found that the naturally occurring fire regimes vary widely across the analysis area, and, therefore, the effects of wildfire are also likely to vary geographically. In general, high-severity fire has the potential to permanently remove suitable fisher habitat, and is very likely to remove habitat for a period of many decades while the forest regrows. Moderate-severity fire may also remove habitat, but likely in smaller patches

and for a shorter length of time. Low-severity fire may reduce some elements of fisher habitat temporarily, but in general is unlikely to remove habitat.

Fishers' behavioral and population responses to fires are unknown within the West Coast range, but it seems likely based on fishers outside of the West Coast range and other related species that large fires, particularly those of higher severity and larger scale, could cause shifts in home ranges and movement patterns, lower the fitness of fishers remaining in the burned area (due to increased predation, for example), or create barriers to dispersal. Fire suppression actions and post-fire management have the potential to exacerbate the effects of wildfire on fisher habitat. Overall, we found that the scope and severity for this stressor were the highest for the Sierra Nevada and northern California–southwestern Oregon areas; these are the two areas where the two remaining original native populations of fishers are found. Because there is evidence of increasing fire severity in yellow pine–mixed-conifer forests, which include the majority of fisher habitat in the Sierra Nevada, the estimate of the severity of stressors related to wildfire is likely to be an underestimate. Also, because fisher habitat in the Sierra Nevada occurs in a narrow band running north to south, fires burning at high severity within fisher habitat have the potential to severely disrupt north–south connectivity of habitat within the Sierra Nevada which, if lost, could prevent population expansion. In addition, forests burned at high severity in this region may be replaced by chaparral or grassland, which may represent a permanent loss of fisher habitat. The fire regime in northern California and southwestern Oregon is historically extremely variable, as is the forest composition within this region. In forests with a large hardwood or redwood component, post-fire

stump-sprouting may speed the recovery of fisher habitat. However, fisher habitat is highly fragmented in many parts of northern California and southwestern Oregon, and even temporary losses of habitat may impede dispersal and increase fragmentation of the resident fisher population. Throughout most of Oregon and Washington, the scope and severity for this stressor were lower than the Sierra Nevada and northern California–southwestern Oregon areas; however, high- severity fires that remove fisher habitat have the potential to further disrupt habitat connectivity and availability (Service 2014, pp. 57–71).

We consider wildfire and fire suppression to be a threat to fisher habitat now and in the future because the frequency and size of wildfires is increasing; we expect this trend to continue into the future; and based on fishers outside of the West Coast range and other related species, we predict that large fires (particularly those of higher severity and larger scale) will cause shifts in home ranges and movement patterns, lower the fitness of fishers remaining in the burned area, and create barriers to dispersal. We consider fire and fire suppression to be particularly problematic in the SSN because of the narrow band of habitat that comprises SSN and the small population size. The degree to which fire-related effects impact NCSO is lower than SSN because the NCSO does not exist in a narrow band of habitat but rather covers a larger area. However, fire and fire suppression will likely have a negative effect on NCSO because fire will decrease connectivity in the highly fragmented habitat of NCSO. It is difficult to fully determine the impact at NCSO because the locations and severities of future fires relative to important habitat components are not known at this time. In Washington and areas of

Oregon outside of NCSO, the effect of fire in scope and severity is lower than the other areas, and much of this area is considered to be unoccupied. Fire in these areas is likely to have a negative impact on existing fisher populations only if they occur within or in proximity to occupied areas; however, as with NCSO, it is difficult to fully determine the potential impact because the locations and severities of future fires relative to important habitat components are not known at this time.

### *Climate Change*

Climate change is ongoing, and its effects on fisher habitat are already occurring in some areas and are likely to increase and become more readily perceptible in the future. Overall, fisher habitat is likely to be affected by climate change, but the severity will vary, potentially greatly, among different regions, with effects to fishers ranging from negative, neutral, or potentially beneficial. Climate change is likely to affect fisher habitat by altering the structure and tree species composition of fisher habitat, and also through the changes to habitat of prey communities and ultimately on prey availability. These effects may cause mortality, decrease reproductive rates, alter behavioral patterns, or lead to range shifts. However, studies of climate change present a range of effects including some that indicate conditions could remain suitable for fisher. Climate throughout the analysis area is projected to become warmer over the next century, and in particular, summers will be hotter and drier, with more frequent heat waves. In the northern portion of the analysis area, winters will likely become wetter, but even these areas will likely experience increased water deficits during the growing season.

Modeling projections are done at a large scale, and effects to species can be complex, unpredictable, and highly influenced by local-level biotic and abiotic factors. Although many climate models generally agree about the changes in temperature and precipitation, the consequent effects on vegetation are more uncertain. Therefore, it is not clear how changes in forest type, species composition, or growth rate will affect the availability of fisher habitat and its ability to support fisher populations (Service 2014, pp. 71–84). Consequently, at this time, climate change is not viewed as a threat to fisher habitat now or in the future, although we will continue to seek additional information concerning how climate change may affect fisher habitat.

### *Vegetation Management*

Vegetation management techniques of the past (primarily timber harvest) have been implicated as one of the two primary causes for fisher declines across the United States. Many fisher researchers have suggested that the magnitude and intensity of past timber harvest is one of the main reasons fishers have not recovered in Washington, Oregon, and portions of California, as compared to the northeastern United States (Service 2014, pp. 54–56). Current vegetation management techniques have, and can, substantially modify the overstory canopy, the numbers and distribution of structural elements, and the ecological processes that create them. There are also areas where habitat may not be the limiting factor for current or potential fisher populations and where habitat is being managed intentionally or incidentally in ways that benefit fisher. For example, the Northwest Forest Plan (NWFP), which was adopted by the U.S. Forest

Service and the Bureau of Land Management (BLM) in 1994 to guide the management of more than 24 million ac (9.7 million ha) of Federal lands in Washington, Oregon, and northwestern California within the range of the northern spotted owl, provides the basis for conservation of the spotted owl and other late-successional and old-growth forest associated species, such as fisher, on Federal lands. The NWFP incorporates seven land allocations (Congressionally Reserved Areas, Late Successional Reserves, Adaptive Management Areas, Managed Late Successional Areas, Administratively Withdrawn Areas, Riparian Reserves, and Matrix). Much of the NWFP area currently provides fisher habitat, which is expected to increase over time. The Matrix, which represents only 16 percent of the Federal land within the NWFP area, is the Federal land outside the other six NWFP land allocations and is the area in which most timber harvest and other silvicultural activities will be conducted. Late Successional Reserves (LSRs), which cover 30 percent of the NWFP area, are expected, in combination with the other allocations and standards and guidelines, to maintain a functional, interactive, late-successional and old-growth forest ecosystem and are designed to serve as habitat for late-successional and old-growth related species including fishers. Scheduled timber harvest is prohibited from LSRs.

In order to evaluate the current vegetation management stressor on Federal land, we used data on harvest of northern spotted owl habitat as a surrogate for the amount of habitat removed or downgraded, which occurs mostly on Matrix lands, by current vegetation management activities. Because of the similarity between fisher and northern spotted owl habitat requirements, we determined this to be one of the best sources of data

to evaluate the potential effects of vegetation management on loss of fisher habitat on Federal lands throughout the analysis area. We used timber harvest acreage data, approved Timber Harvest Plans, and consultations to evaluate the stressor of current vegetation management on fisher habitat.

Our estimates revealed that the total scope of vegetation management (Federal and non-Federal combined) is the highest in the Oregon and Washington Coast Ranges, likely due to the prevalence of non-Federal land ownership in these sub-regions, where timber harvest rates are substantially higher than on Federal lands (where harvest rates have substantially declined over the past two decades); the lowest values for total scope (Federal and non-Federal combined) were in the Western Oregon Cascades and Sierra Nevada. Overall, we note that the scope for non-Federal areas is higher than the scope for Federal areas in all sub-regions. We estimated severity values separately for the Federal and non-Federal portions of the sub-regions. Because we derived the scope of vegetation management by identifying the removal or downgrading of habitat, we ascribed high severity values (60 to 80 percent) for most regions and ownerships within the scope. Data limitations in most sub-regions prevented us from quantifying what proportion of the treatments in the data sets we used may be outside the scope of habitat loss or downgrade (for example, may include vegetation management activities that may still function as fisher habitat post-treatment), so the severity scores represent our best estimate and are a relatively broad range to incorporate this uncertainty. However, additional data for Federal lands in Washington allowed us to ascribe lower severity values for this ownership in these sub-regions. Landscapes with reduced canopy cover

may affect fisher by providing decreased protection from predation, raising the energy costs of traveling between foraging sites, and providing unfavorable microclimate and decreased abundance or vulnerability of preferred prey species (Service 2014, pp. 84–92).

In analyzing stressors related to habitat loss, we only assessed stressors resulting in habitat loss. We did not account for ingrowth of fisher habitat over our 40-year analysis timeframe and, therefore, provide no values for net habitat loss, although we do acknowledge ingrowth is occurring, primarily on Federal lands (Service 2014, pp. 84–92).

We found that vegetation management is a threat because activities that remove or substantially degrade fisher habitat through the removal of large structures and overstory canopy are projected to take place within the analysis area over the next 40 years. For the Sierra Nevada, over half of the sub-region is within Federal ownership with less than 1 percent of fisher habitat expected to be treated by vegetation management that downgrades or removes habitat. Within the Sierra Nevada, 15 percent of fisher habitat is expected to be affected by non-Federal vegetation management that downgrades or removes habitat. For the northwest California–southwest Oregon sub-region, just under half of the sub-region is within Federal ownership with 1 percent of fisher habitat expected to be treated by vegetation management that downgrades or removes habitat. Within the northwest California–southwest Oregon sub-region, 22 percent of fisher habitat is expected to be affected by non-Federal vegetation management that downgrades or removes habitat. In Washington and areas of Oregon outside of NCSO,

vegetation management on Federal lands that downgrades or removes habitat in most sub-regions is less than 2 percent of fisher habitat, although the Western Oregon Cascades and Eastern Oregon Cascades range from 5 to 10 percent of fisher habitat. In Washington and areas of Oregon outside of NCSO, 14 to 37 percent of fisher habitat is expected to be affected by non-Federal vegetation management that downgrades or removes habitat.

The type of vegetation management and where it occurs is important to understanding the impacts to fishers. Vegetation management that removes important habitat elements (such as den sites and canopy cover) has a greater effect on fishers than activities that maintain these elements. Vegetation management in or near occupied habitat (particularly where habitat is fragmented or connectivity is limited) would have a greater effect on fishers than actions outside of occupied habitat. The SSN is particularly sensitive to the location and type of vegetation management because of the narrow band of habitat that comprises SSN and the small population size. Vegetation management will likely have a negative effect on NCSO because vegetation management will decrease connectivity in the highly fragmented habitat of NCSO. In Washington and areas of Oregon where the reintroductions have occurred, the effect of vegetation management is less of a concern because habitat occurs in large contiguous blocks. Outside of these areas, much of the fisher habitat in Washington and Oregon is considered to be unoccupied. Although vegetation management outside of occupied areas is less likely to have a negative impact on the viability of existing fisher populations, the maintenance of fisher habitat in these areas is important for future expansion. Maintenance of fisher

habitat throughout the analysis area is additionally influenced by the differences in regulatory mechanisms among the different ownerships (see factor D below).

### *Development*

The draft Species Report revealed that human population density within the analysis area varies considerably, but all areas appear to be increasing. Human population growth within the analysis area will increase needs for housing, services, transportation, and other infrastructure, placing ever-greater demands on land, water, and other natural resources. Specifically, human infrastructure growth includes recreational opportunities such as ski area developments, vacation cabins, trails, and campgrounds. Besides permanently removing potential fisher habitat, human developments in rural areas are changing land use from forest to other land cover types, which can fragment previously continuous habitat or hamper fisher movements. Overall, human developments associated with population growth will have an increasing impact on fisher habitat into the future, but the severity varies depending on the type and location of development. The scope of the human development stressor is relatively low throughout the analysis area, but the higher severity values were in the Sierra Nevada, Coastal Washington, and Western Washington Cascades. Within much of the analysis area, human development is generally considered to be of relatively low concern for fishers and occurs at relatively small spatial scales in forested landscapes (Service 2014, pp. 92–96). Consequently, we do not consider development to be a threat to fish habitat now or in the future.

Factor B. Overutilization for commercial, recreational, scientific, or educational purposes.

### *Trapping*

Unregulated historical trapping appears to have been the primary initial cause of fisher population losses in the Pacific States. The effects of current trapping, which are limited to incidental capture and an unknown amount of poaching, are significantly reduced compared to the previous effects of widespread unregulated legal trapping of fishers. Overall, we found that the severity of the potential stressor of trapping and incidental capture is extremely low throughout the analysis area (Service 2014, pp. 106–108), and therefore, do not consider trapping to be a threat to the fisher now or in the future.

### *Research*

Although scientific research is necessary to understand the various aspects of a species' life-history needs and population status, some research techniques have potential risks to the individual animal including injury and mortality. Current research and monitoring efforts vary greatly by sub-region within the analysis area. The draft Species Report revealed extremely low to nonexistent scope and severity for the research activity

stressor throughout the analysis area (Service 2014, pp. 109–112). We conclude that research is not a threat to the continued existence of fisher, now or in the future.

#### Factor C. Disease or Predation.

Several viral and bacterial diseases are known to affect mustelids, including fishers, but it is unclear how these diseases affect wild populations of fishers. Potential predators of fishers include mountain lions, bobcats, coyotes, and large raptors. Disease and predation are stressors related to direct mortality of fishers, and, as described above, they cannot be directly compared with the stressors related to habitat (for habitat stressors, the severity is the percent of habitat within the scope that is likely to be lost over 40 years, whereas for the stressors related to direct mortality, the severity is the percent of animals within the scope that are estimated to die annually). The potential stressors of disease and predation occur throughout the analysis area. The draft Species Report reveals that, where data exist to evaluate severity for the group of direct mortality stressors, the severity of predation throughout the analysis area is higher than that of disease (Service 2014, pp. 112–116). Disease and predation are naturally occurring sources of mortality (although the associated mortality rates may be increased by human-caused factors such as climate change or vegetation management; see Synergistic effects section below), and although they are the most prevalent sources of direct mortality among individual fishers within the study areas for which we have information, it is unknown how disease and predation rates influence fisher population trends in general

(Service 2014, pp. 112–116 and 167–169). We do not consider disease or predation to be threats to the fisher, now or in the future.

#### Factor D. The Inadequacy of Existing Regulatory Mechanisms.

In the draft Species Report, we evaluated the potential for an inadequacy of existing regulatory mechanisms, and we found that there are many existing regulatory mechanisms that provide a benefit to fishers and their habitat. For example, trapping regulations have substantially reduced fisher mortality throughout the analysis area. There are places in the analysis area where forest management practices are explicitly applied to benefit fishers or other species with many similar habitat requirements, such as the northern spotted owl. In addition, some habitat conservation plans (HCPs) are in place and are intended to provide a benefit to fishers and their habitat. Also, fisher is a candidate species under the California Endangered Species Act, and take under that law is prohibited, at least until the California Fish and Wildlife Commission makes a final determination on the listing status of fishers.

Take of fishers in Oregon is also prohibited through its designation as a protected nongame species, although the definition of take under Oregon law is different from the definition of take under the Act. The fisher is State-listed as endangered in Washington, where poaching is prohibited and environmental analyses need to occur for projects that may affect fishers. State and Federal regulatory mechanisms have abated the large-scale loss of fishers to trapping and loss of fisher habitat, especially on Federal land (Service

2014, pp. 117–141). Rodenticides are regulated under Federal and State laws. However, it is not clear how well those regulations prevent fishers from exposure to legal uses of these rodenticides. Fishers are also exposed to rodenticides used illegally (as discussed below).

### *Federal regulatory mechanisms*

#### Forest Service and BLM

There are a number of Federal agency regulations that pertain to management of fisher (and other species and habitat). Most Federal activities must comply with the National Environmental Policy Act of 1969, as amended (NEPA) (42 U.S.C. 4321 et seq.). NEPA requires Federal agencies to formally document, consider, and publicly disclose the environmental impacts of major Federal actions and management decisions significantly affecting the human environment. NEPA does not regulate or protect fishers, but requires full evaluation and disclosure of the effects of Federal actions on the environment. Other Federal regulations affecting fishers are the Multiple-Use Sustained-Yield Act of 1960, as amended (16 U.S.C. 528 et seq.) and the National Forest Management Act of 1976, as amended (NFMA) (90 Stat. 2949 et seq.; 16 U.S.C. 1601 et seq.).

NFMA specifies that the Forest Service must have a land and resource management plan to guide and set standards for all natural resource management

activities on each National Forest or National Grassland. In addition, the fisher has been identified as a sensitive species by the Forest Service throughout the analysis area. BLM management is directed by the Federal Land Policy and Management Act of 1976, as amended (43 U.S.C. 1704 et seq.). This legislation provides direction for resource planning and establishes that BLM lands shall be managed under the principles of multiple use and sustained yield. This law directs development and implementation of resource management plans, which guide management of BLM lands at the local level. Fishers are also designated as a sensitive species throughout the analysis area on BLM lands.

In addition, the Northwest Forest Plan (NWFP) was adopted by the Forest Service and BLM in 1994 to guide the management of more than 24 million ac (9.7 million ha) of Federal lands in portions of western Washington and Oregon and northwestern California within the range of the northern spotted owl. The NWFP Record of Decision amends the management plans of National Forests and BLM Districts and is intended to provide the basis for conservation of the spotted owl and other late-successional and old-growth forest associated species on Federal lands. The NWFP is important for fishers because it created a network of late-successional and old-growth forests (late-successional reserves, or LSRs) that currently provide fisher habitat, and the amounts of habitat are expected to increase over time. Also, the National Forest and BLM units with anadromous fish watersheds provide riparian habitat conservation area buffers on either side of a stream, depending on the stream type and size. With limited exceptions, timber harvesting is generally not permitted in riparian habitat conservation areas, and the additional

protection guidelines provided by National Forests and BLM may provide refugia and connectivity among more substantive blocks of fisher habitat.

### Rodenticide Regulatory Mechanisms

The threats posed to fishers from the use of rodenticides are described below, under Factor E. In the draft Species Report, we analyzed whether existing regulatory mechanisms are able to address the threats to fishers posed from both legal and illegal use of rodenticides. As described in the draft Species Report, the use of rodenticides is regulated by several federal and state mechanisms (e.g., Federal Insecticide, Fungicide, and Rodenticide Act of 1947, as amended, (FIFRA) 7 U.S.C. §§136 et seq.; California Final Regulation Designating Brodifacoum, Bromadiolone, Difenacoum, and Difethialone (Second Generation Anticoagulant Rodenticide Products) as Restricted Materials, California Department of Pesticide Regulation, 2014). The primary regulatory issue for fishers with respect to rodenticides is the availability of large quantities of rodenticides that can be purchased under the guise of legal uses, but are then used illegally in marijuana grows within fisher habitat. However, amounts of rodenticides commercially available for legal use are above those that could be expected to kill or harm individual fishers. Both EPA, through its 2008 Risk Mitigation Decision for Ten Rodenticides (EPA 2008, entire) which issued new legal requirements for the labelling, packaging and sale of second generation anticoagulants, and California's Department of Pesticide Regulation, through a new rule effective in July 2014, which restricts access to second generation anticoagulants, are attempting to reduce the risk

posed by second generation anticoagulants. However, at present, it is not clear that these mechanisms have yet been effective in addressing the threat of rodenticide and its effects on fishers.

### National Park Service

Statutory direction for the 1.6 million ha (4 million ac) of National Park Service lands in the analysis area is provided by provisions of the National Park Service Organic Act of 1916, as amended (16 U.S.C. 1 et seq.) and the National Park Service General Authorities Act of 1970 (16 U.S.C. 1a-1). Land management plans for the National Parks within the West Coast analysis area do not contain specific measures to protect fishers, but areas not developed specifically for recreation and camping are managed toward natural processes and species composition and are expected to maintain fisher habitat. In addition, hunting and trapping are generally prohibited in National Parks (16 U.S.C. 127).

### Tribal lands

Several tribes in the analysis area recognize fishers as a culturally significant species, but only a few tribes have fisher-specific guidelines in their forest management plans. Some tribes, while not managing their lands for fishers explicitly, manage for forest conditions conducive to fisher (for example, marbled murrelet habitat, old-forest structure restoration). Trapping is typically allowed on most reservations and tribal lands, and is frequently restricted to tribal members. Whereas a few tribal governments

trap under existing State trapping laws, most have enacted trapping laws under their respective tribal codes. However, trapping is not known to be a common occurrence on any of the tribal lands.

### *State Regulatory Mechanisms*

#### Washington

The fisher is listed as endangered in Washington (Washington Administrative Code 232-12-014, Statutory Authority: RCW 77.12.020 WSR 98-23-013 (Order 98-232), §232-12-014, filed 11/6/98, effective 12/7/98). This designation imposes stringent fines for poaching and establishes a process for environmental analysis of projects that may affect the fisher. The primary regulatory mechanism on non-Federal forest lands in western Washington is the Washington State Forest Practices Rules, title 222 of the Washington Administrative Code. These rules apply to all commercial timber growing, harvesting, or processing activities on non-Federal lands, and they give direction on how to implement the Forest Practices Act (Revised Code of Washington (RCW) 76.09) and Stewardship of Non-Industrial Forests and Woodlands (RCW 76.13). The rules are administered by the Washington Department of Natural Resources. The Washington State Forest Practices Rules do not specifically address fishers and their habitat requirements; however, some habitat components important to fishers, like snags, downed wood, and canopy cover, are likely to be retained in riparian management zones as a result of the rules. Land conversion from forested to non-forested uses is interrelated

to private timber harvest, but is primarily regulated by individual city and county ordinances that are influenced by Washington's Growth Management Act (RCW 36.70a). In some cases, these ordinances result in maintaining forested areas within the range of the fisher.

## Oregon

In Oregon, the fisher is a protected nongame species (Oregon Administrative Rules (OAR) 635-044-0130). In addition, the Oregon Department of Fish and Wildlife does not allow trapping of fishers in Oregon. Although fishers can be injured and/or killed by traps set for other species, known fisher captures are infrequent. State parks in Oregon are managed by the Oregon Parks and Recreation Department, and many State parks in Oregon may provide forested habitats suitable for fisher. The Oregon Forest Practice Administrative Rules (OAR chapter 629, division 600) and Forest Practices Act (Oregon Revised Statutes (ORS) 527.610 to 527.770, 527.990(1) and 527.992) (Oregon Department of Forestry 2010a, entire) apply to all non-Federal and non-Tribal lands in Oregon, regulating activities that are part of the commercial growing and harvesting of trees, including timber harvesting, road construction and maintenance, slash treatment, reforestation, and pesticide and fertilizer use. The OAR provides additional guidelines intended for conserving soils, water, fish and wildlife habitat, and specific wildlife species while engaging in tree growing and harvesting activities, and these rules may retain some structural features (i.e., snags, green trees, downed wood) that contribute to fisher habitat. There are approximately 821,000 ac (332,300 ha) of State forestlands

within the analysis area that are managed by the Oregon Department of Forestry, and management of these State forest lands are guided by forest management plans.

Managing for the structural habitats as described in these plans should increase habitat for fishers on State forests.

## California

Fishers are a Candidate Species in California, and take, under the California Endangered Species Act (CESA) definition, is prohibited during the candidacy period. The California Department of Fish and Wildlife (CDFW) is evaluating the status of the species for possible listing as a threatened or endangered species under the CESA. Thus, protection measures for fishers are in effect in California at this time, but the duration of that protection is uncertain. In addition, it is illegal to intentionally trap fishers in California. The California Environmental Quality Act (CEQA) can provide protections for a species that, although not listed as threatened or endangered, meets one of several criteria for rarity (CEQA 15380). Fishers meet these criteria, and under CEQA a lead agency can require that adverse impacts be avoided, minimized, or mitigated for projects subject to CEQA review that may impact fisher habitat. All non-Federal forests in California are governed by the State's Forest Practice Rules (FPR) under the Z' Berg Nejedly Forest Practice Act of 1973, a set of regulations and policies designed to maintain the economic viability of the State's forest products industry while preventing environmental degradation. FPRs do not contain rules specific to fishers, but they may provide some protection for fishers.

Factor E. Other Natural or Manmade Factors affecting the Continued Existence of the Species.

### *Vehicle Collisions*

Regarding the potential stressor of collision with vehicles, roads are sources of vehicle-collision mortality of fishers and disrupt habitat continuity, particularly in high-use, high-speed areas. Collision with vehicles is a stressor related to direct mortality of fishers. In the draft Species Report, we found that collision with vehicles has the potential to be a stressor to extant fisher populations. Collision with vehicles is not a naturally occurring source of mortality, and where we had data to evaluate this stressor, the severity of this stressor is likely lower than that of the naturally occurring stressors of disease and predation, but higher than the current mortality from human-caused trapping (Service 2014, pp. 144–146). Overall, the scope of the vehicle collision stressor is high within all occupied areas. The severity of this stressor ranges from 1 to 4 percent of the population that dies annually from this stressor. At this time, we conclude that vehicle collisions are not a threat to fisher, although, over time, the impact of this stressor on fishers will likely accumulate and act synergistically with other stressors to impact fishers where they occur.

### *Climate Change*

The draft Species Report describes the potential stressor of direct climate effects to fishers as ongoing and likely to become more pronounced in the future as warming increases. In addition to the climate change effects to fisher habitat discussed above, some researchers have suggested climate change may cause direct effects to fishers potentially including increased mortality, decreased reproductive rates, or alterations in behavioral patterns, in addition to range shifts. Fishers may be especially sensitive, physiologically, to warming summer temperatures. These observations suggest that fishers likely will either alter their use of microhabitats or shift their range northward and upslope, in order to avoid thermal stress associated with increased summer temperatures. However, we do not have sufficient data to reliably predict the effect on fisher populations at this time (Service 2014, pp. 146–148).

#### *Exposure to Toxicants*

The draft Species Report describes the potential stressor of exposure to toxicants. Recent research documenting mortalities from anticoagulant rodenticides (ARs) in California fisher populations has raised concerns regarding both individual and population-level impacts of toxicants within the fisher's range in the Pacific States. Exposure to ARs, resulting in death in some cases, has been documented in fishers. ARs impair the animal's ability to produce several key blood clotting factors, and anticoagulant exposure is manifested by such conditions as bleeding nose and gums, extensive bruises, anemia, fatigue, and difficulty breathing. Anticoagulants also damage the small blood vessels, resulting in spontaneous and widespread hemorrhaging. In

addition, sublethal exposure to ARs likely results in sickness, which may increase the probability of mortality from other sources, and multiple studies have demonstrated that sublethal exposure to ARs or organophosphates may impair an animal's ability to recover from physical injury. A sublethal dose of AR can produce significant clotting abnormalities and hemorrhaging.

Within the Pacific States, AR exposure in fishers appears to be widespread, and has been documented in all extant fisher populations in California. Fishers from the reintroduced ONP population also exhibit AR exposure. Because most of the fishers that were tested were captured and relocated from British Columbia, it is unknown whether these animals were exposed before or after their translocation to the Olympic Peninsula. A comparison of the areas where ARs are reported as being applied under labeled uses in California in relation to areas that are supportive of fisher habitats demonstrates legal applications of ARs are not likely the source for the ARs that have been observed in fishers by researchers. Although all sources of AR exposure in fishers have not been conclusively determined, large quantities of ARs have been found at illegal marijuana cultivation sites within occupied fisher habitat on public, private, and tribal lands in California. The proximity of a large number of marijuana cultivation sites to fisher populations in California and southwestern Oregon and the lack of other probable sources of ARs within occupied fisher habitat have led researchers to implicate marijuana cultivation sites as the source of AR exposure in fishers. In addition, ARs have been detected in a majority of fisher carcasses tested in Washington and California, and ARs have been determined as the direct cause of death for some fisher mortalities in

California. However, it is not known if AR exposure in fisher carcasses represents the proportion of live fishers exposed, especially considering the potential sublethal effects of ARs that may predispose them to mortality.

We found that the scope of the toxicant stressor was best reflected by a range of values and varied by sub-region, due to differences in format of available data or the lack thereof. Where we had data available to evaluate, the severity of the toxicant stressor was comparable to disease throughout the analysis area, although we note that disease is a naturally occurring stressor and toxicants are a human-caused stressor. We based our severity estimates on mortality rates alone, but we acknowledge that these values likely underrepresent the population-level effects when considering research conclusions regarding sublethal levels of rodenticides and other toxicants in a wide variety of animal species (Service 2014, pp. 149–166).

We view toxicants as a newly identified threat because of reported mortalities of fishers from toxicants and a variety of potential sublethal effects. Most fisher carcasses tested in SSN, NCSO, and ONP have ARs in their tissues, but we do not know the exposure rate of live fishers. In addition, the minimum amount of AR required for sublethal or lethal poisoning of fishers is currently unknown; however, we do have evidence of fisher mortality and sublethal effects as a result of ARs. Overall, ARs are likely a threat to fisher populations, although we do not have information about the population-level effects at this point in time.

### *Small Population Size*

A principle of conservation biology is that small, isolated populations are subject to an increased risk of extinction from stochastic (random) environmental, genetic, or demographic events. Fishers appear to have several characteristics related to small population size that increase the species' vulnerability to extinction from stochastic events and other threats on the landscape. Extremely small populations of low-density carnivores, like fishers, are more susceptible to small increases in mortality factors due to their relatively low fecundity and low natural population densities. Fishers may also be prone to instability in population sizes in response to fluctuations in prey availability. Low reproductive rates retard the recovery of populations from declines, further increasing their vulnerability. These factors together imply that fishers are highly prone to localized extirpation, their colonizing ability is somewhat limited, and their populations are slow to recover from deleterious impacts. A scarcity of verifiable sightings in the Western and Eastern Cascades in Washington and Oregon, coastal Oregon, and the north and central sections of the Sierra Nevada indicates that populations of fishers in southwestern Oregon and California are isolated from fishers elsewhere in North America. Fishers in the analysis area are currently restricted to two extant native populations and three reintroduced populations, most of which are known to be small in size. In general, researchers have identified the greatest long-term risk to fishers as the isolation of small populations and the higher risk of extinction due to stochastic events (Service 2014, pp. 147–149). We conclude that small population size constitutes a threat to fisher, now and in the future.

### *Measures To Reduce the Stressors Related to Habitat or Range*

As described in detail in the draft Species Report (Service 2014, pp. 100–105), the fisher is a covered species under the Act in six HCPs within Washington and California (five in Washington and one in California). The species is currently known to occur on lands encompassed by three California HCPs (two that do not cover fisher and one that does) and two Washington HCPs (one that does not cover fisher, and one that does). Should fisher become listed and for purposes of section 10(a)(1)(B), these HCPs include permitted incidental take, and in covering fisher, they are deemed to minimize and mitigate take and not appreciably reduce the likelihood of the survival and recovery of the fisher. Nearly all of the HCPs in California that cover areas of fisher habitat occur in the northwestern portion of the State and are focused on northern spotted owls. Most of the fisher habitat on private lands in California is not currently covered under any HCPs. Several HCPs that do not include fishers as a covered species do provide ancillary benefits because they focus on providing habitat for species such as northern spotted owls and anadromous salmonids that provide some of the habitat conditions beneficial for fisher. These HCPs require maintenance of relatively intact mature forested habitats along streams, where fishers may also be present. By preserving or developing components of habitat structure, these HCPs may benefit fishers above and beyond what would otherwise be required by forest practice regulations in individual States. However, the size and amounts of structural components retained (for example, downed wood, snags, live trees) are less than what are typically found in fisher habitat. Other HCPs

have resulted in the retention of large blocks of habitat that may provide refugia for fishers in areas that may otherwise not be conducive to fisher conservation. The fisher is not a covered species under any HCPs in Oregon (Service 2014, pp. 100–102).

Regarding other conservation measures, a Candidate Conservation Agreement with Assurances is in place for the fisher in the Sierra Nevada for management of fisher denning and resting habitat (Service 2014, p. 102). In addition, a draft Interagency Conservation Strategy was created, but not finalized and, therefore, is not being implemented throughout the analysis area. Components of this strategy are, however, being used by Region 5 of the U.S. Forest Service, as well as the Service, to further fisher conservation (Service 2014, pp. 102–103). A State of Washington Fisher Recovery Plan was completed in 2006 that outlines strategies that seek to restore self-sustaining fisher populations to the three recovery areas identified in Washington: the Olympic Mountains, the South Cascade Mountains, and the North Cascade Mountains (Service 2014, pp. 102–103). The ONP reintroduction occurred within the Olympic Mountains recovery area under this Recovery Plan, and, at this point in time, a second reintroduction is in the planning stages for the North and South Cascade Mountains in Washington.

Finally, on December 4, 2012, the Service designated revised critical habitat for the northern spotted owl (77 FR 71876) in California, Oregon, and Washington, and all of this critical habitat is within the range of the West Coast DPS of fisher. The physical or biological features essential to the conservation of the northern spotted owl likely provide ancillary benefit to fishers and fisher habitat that occur within designated

northern spotted owl critical habitat. Critical habitat receives protection under section 7 of the Act, requiring that Federal agencies consult with the Service to ensure that their actions will not likely result in the destruction or adverse modification of critical habitat. In practice in this area, Federal agencies implement a form of section 7 consultation, “Streamlined Consultation,” where working together the Service and other Federal agencies can develop projects that minimize effects to critical habitat and thereby help to meet the Federal agencies’ responsibilities to conserve species and their critical habitat. Thus, implementation of projects within northern spotted owl designated critical habitat often focuses on retaining many of the forest types and structural elements important to fishers and that constitute fisher habitat (for example, canopy closure, large trees, and vegetation diversity) (Service 2014, pp. 103–105).

### Synergistic Effects

We took into consideration all of the stressors operating within the five disjunct populations of fishers (four small populations and one with population size estimates ranging from 258 to 4,018); these populations are reduced in size due to historical trapping and past loss of late-successional habitat and, therefore, are more vulnerable to extinction from random events and increases in mortality. We evaluated the potential for cumulative and synergistic (combination of) effects of multiple stressors in the draft Species Report, although we were unable to quantify the scope and severity of synergistic effects and the variation of these effects between sub-regions. However, just as stressors are not occurring in equal scope and severity across the analysis area, it is reasonable to

conclude that cumulative and synergistic effects from these stressors are occurring more in some sub-regions than others. Some examples of the synergistic effects of multiple stressors on fisher include:

- alterations to habitat, which may increase fishers' vulnerability to predation (Factors A and C);
- sublethal exposure to anticoagulant rodenticides may increase the death rates from predation, vehicle collisions, disease, or intraspecific conflict (Factors C and E);
- stressors associated with climate change, such as increased risk of fire and forest disease, and environmental impacts of human development that will likely interact to cause large-scale ecotype conversion including shifts away from fisher habitat types, which could impact the viability of populations and reduce the likelihood of reestablishing connectivity (Factors A and E);
- increases in disease caused by climate change (Factors A, C, and E); and
- human development, which is likely to cause increases in vehicle collisions, conflicts with domestic animals, and infections contracted from domestic animals (Factors A, C, and E).

Depending on the scope and severity of each of the stressors and how they combine cumulatively and synergistically, these stressors can be of particular concern where populations are small and isolated. Cumulative and synergistic stressors will be increasingly important in the 21<sup>st</sup> century, particularly in areas not managed for retention and recruitment of fisher habitat attributes, areas sensitive to climate change, and areas where direct mortality of fishers reduces their ability to maintain or expand their populations (Service 2014, pp. 166–169).

We found that several combinations of cumulative and synergistic stressors rose to the level of a threat in most fisher populations, although there is uncertainty surrounding our estimates of the cumulative and synergistic effects of stressors. As noted above, we had varying levels of uncertainty about the severity and scope of those stressors. In the case of anthropogenic mortality stressors, we added each of these together to arrive at a cumulative estimate, and we qualitatively estimated the synergistic impacts.

For the habitat-related stressors, we qualitatively assessed the cumulative and synergistic impacts. While there is uncertainty in these estimates, these estimates are based on the best available information at this point in time. For the habitat-related stressors, the cumulative and synergistic impacts are particularly problematic in the SSN because of the narrow band of habitat that comprises SSN and its small population size. In addition, for the habitat-related stressors, the degree to which cumulative and synergistic impacts affect NCSO is lower than SSN because the NCSO does not exist in a narrow band of habitat but rather covers a larger area. The cumulative and synergistic impacts related to the habitat stressors will have a negative effect on NCSO because the cumulative and synergistic impacts will decrease connectivity in the highly fragmented habitat of NCSO. In Washington and areas of Oregon outside of NCSO, the effect of cumulative and synergistic impacts related to habitat-related stressors is lower than the other areas, and much of this area is considered to be unoccupied. Where extant populations do occur in these areas (SOC and ONP), the cumulative and synergistic

effects are likely relatively greater in SOC compared to ONP, due to the potentially greater effects of fire associated with climate change, although in both cases the cumulative and synergistic effects of stressors remain relatively low.

For the mortality-related stressors, we quantitatively assessed the cumulative impacts where data were available to do so. For fisher populations in SSN and NCSO, where data were available, mortality related to research activities, collisions with vehicles, and anticoagulant rodenticide poisoning add, in aggregate, 3–17 percent annual mortality to naturally occurring mortality from disease and predation (collectively 6–32 percent mortality) and other natural sources such as starvation. These numbers are comparable to studies showing that 10–20 percent reductions within the reasonable range of mortality and reproductive rates would cause fisher populations to shift from growth to population stagnation (lack of expansion) or decline. Therefore, we have concern about cumulative effects related to mortality stressors in these fisher populations. Because we lack specific mortality estimates for reintroduced populations in Washington and Oregon outside of NCSO, we are uncertain whether mortality rates are transferable from the areas with quantitative data. In addition, because the remainder of the area in Washington and Oregon outside of NCSO is considered unoccupied by fishers, estimates of direct mortality do not apply in these areas.

For synergistic effects among mortality stressors, and synergistic effects between mortality and habitat stressors, we qualitatively described, above and in the Species Report (Service 2014, Cumulative and Synergistic Effects section), some of the expected

consequences of these combinations of stressors. While the data lack specificity supporting conclusions about impacts to fisher populations, or comparisons between fisher populations, studies indicate that these synergistic effects may lead to increases in mortality rates in the future, beyond those reflected in the scope and severity calculations drawn from current data.

We found that the cumulative and synergistic effects of both mortality and habitat-related stressors pose a threat based on the information presented above. We recognize that there will likely be differences in how these cumulative and synergistic effects present themselves in the various sub-regions and populations. Considered collectively, cumulative and synergistic effects of habitat and mortality-related stressors are particularly problematic in the SSN and NCSO. In Washington and areas of Oregon outside of NCSO, these effects are lower than the other areas, and much of this area is considered to be unoccupied.

The reader is directed to the draft Species Report for a more detailed discussion of our evaluation of the biology of and threats to the West Coast DPS of fisher and the influences that may affect its continued existence. Our conclusions are based upon the best scientific and commercial data available as reflected in our January 2014 draft Species Report and the expert conclusions of the draft Species Report team members.

## **Determination**

Section 4 of the Act (16 U.S.C. 1533), and its implementing regulations at 50 CFR part 424, set forth the procedures for adding species to the Federal Lists of Endangered and Threatened Wildlife and Plants. Under section 4(a)(1) of the Act, we may list a species based on: (A) The present or threatened destruction, modification, or curtailment of its habitat or range; (B) Overutilization for commercial, recreational, scientific, or educational purposes; (C) Disease or predation; (D) The inadequacy of existing regulatory mechanisms; or (E) Other natural or manmade factors affecting its continued existence. Listing actions may be warranted based on any of the above threat factors, singly or in combination. We have carefully assessed the best scientific and commercial data available regarding the past, present, and future threats to the West Coast DPS of fisher.

The Act defines an endangered species as any species that is “in danger of extinction throughout all or a significant portion of its range” and a threatened species as any species “that is likely to become endangered throughout all or a significant portion of its range within the foreseeable future.” We find that the West Coast DPS of fisher meets the definition of a threatened species (likely to become endangered throughout all or a significant portion of its range within the foreseeable future) based on the scope and severity of threats currently impacting the species.

At the time of the 2004 Finding, the West Coast DPS of fisher was described as having lost much of its historical habitat and range. Specifically, the 2004 Finding stated that the fisher is considered to be extirpated or reduced to scattered individuals in

Washington, extant fisher populations in Oregon are restricted to two genetically distinguishable populations in the southern portion of the State, and extant fisher populations in California consist of two remnant populations located in northwestern California and the southern Sierra Nevada Mountains (69 FR 18771). Regarding population size, the 2004 Finding found that the relative reduction in the range of the fisher on the West Coast, the lack of detections or sightings over much of its historical distribution, and the high degree of genetic relatedness within some populations indicate the likelihood that extant fisher populations are small (69 FR 18772). In addition, threats to the West Coast DPS of fisher were described including habitat loss and fragmentation, incidental capture, removal of important habitat elements such as cover, mortality from vehicle collisions, decrease in the prey base, human disturbance, small population size and isolation, and inadequacy of existing regulatory mechanisms (69 FR 18791). A Listing Priority Number of 6 was given to the West Coast DPS of fisher in the 2004 Finding because the overall magnitude of threats was high and the overall immediacy of threats was not imminent. In addition, the threats were described as occurring across the range of the DPS, resulting in a negative impact on fisher distribution and abundance (69 FR 18792). The 2004 Finding also stated that additional reintroduced populations of fishers will reduce the probability that a stochastic event would result in extirpation of the species, and we would evaluate a completed conservation strategy to determine whether it sufficiently removes threats to the fisher so that it no longer meets the definition of a threatened species under the Act (69 FR 18792). Since the 2004 Finding, reintroductions have occurred in ONP and NSN, but a multi-State conservation strategy has not been finalized and implemented.

Currently, fishers in the West Coast DPS are known to exist in two extant native populations (one small population and one with population size estimates ranging from 258 to 4,018) and three small reintroduced populations (Service 2014, pp. 34–46). The two extant native populations are the SSN population and the NCSO population. The three reintroduced populations are the ONP reintroduced population, SOC reintroduced population, and NSN reintroduced population. The population estimate of the SSN population is approximately 300 individuals, but there is no statistically detectable trend in occupancy. There are no discernible positive or negative total trends in the NCSO population, and studies have suggested both positive and negative population trends at various times and at localized study sites. The status and population estimate of the NCSO population as a whole is unclear. The SOC population has persisted since its establishment more than 30 years ago, but it does not appear to have expanded much beyond the area in which it was reintroduced. Fishers reintroduced into ONP and NSN have successfully bred and produced young, but it is still too early to determine the long-term persistence of these populations. Overall, the West Coast DPS of fisher exists in two separate native populations (one small population and one with population size estimates ranging from 258 to 4,018) that have persisted but do not appear to be expanding, and the West Coast DPS of fisher has been supplemented by one reintroduced population more than 30 years ago and two recent reintroductions for which it is too early to conclude the degree to which they will persist and contribute to future fisher conservation.

Based on our draft Species Report, we find the threat of trapping (Factor B) that was prevalent in the early 1900s is no longer a threat to the West Coast DPS of fisher, but the two extant populations are not expanding geographically even though this threat has been removed. The main threats to the West Coast DPS are habitat loss from wildfire and vegetation management (Factor A), as well as toxicants (Factor E), and the cumulative impact and synergistic effects of these and other stressors in small populations (Factor E). These threats, however, are not evenly distributed across the DPS. In addition, threats such as vegetation management are not evenly distributed in scope and severity across ownerships, for example, with increased harvest rates on non-Federal lands. Furthermore, habitat loss on Federal lands, particularly in the NWFP area, has substantially decreased over the past two decades; this information was not recognized or available for our 2004 Finding.

Fisher populations are fragmented and greatly reduced from their historical range in the West Coast DPS area. Since the 2004 Finding, we have more information on many of the threats. For example, it appears that wildfire is increasing in extent (Factor A), more information on the potential effects of climate change on fishers (Factor A and E) has become available, and toxicant exposure has recently been identified as a threat (Factor E). In addition, data are now available that quantify overall mortality rates for direct causes of fisher mortality within study areas. Overall, fishers are still absent from much of their historical range (the two original extant populations have not expanded), threats at the time of the 2004 Finding are still in place, and some threats since the time

of the 2004 Finding have increased or are new. And it is too early to determine if the reintroduced populations will persist.

Based on our review of the best scientific and commercial data available, we have determined the West Coast DPS of fisher meets the definition of a threatened species under the Act. The main threats to the West Coast DPS of fisher are habitat loss from wildfire and vegetation management, as well as toxicants, and the cumulative impact and synergistic effects of these and other stressors in small populations. We find that the West Coast DPS of fisher is not currently in danger of extinction throughout all of its range because it exists in two separate native populations (one small and one with population size estimates ranging from 258 to 4,018) that have persisted, and it currently exists in three reintroduced populations that provide redundancy, representation, and resiliency for the extant populations. In addition, the threats acting on the West Coast DPS of fisher are not all imminent, and the threats are not evenly distributed across the DPS. However, we do find that the West Coast DPS of fisher is likely to become endangered throughout all of its range in the foreseeable future (estimated as 40 years for the West Coast DPS of fisher) based on multiple threats impacting the remaining two extant native original populations and the cumulative and synergistic effects of the threats on small populations in the West Coast DPS of fisher. In reaching this conclusion, we have considered available conservation measures and regulatory mechanisms that may ameliorate these threats, but even after taking those factors into account, we conclude that the species is likely to become endangered throughout all of its range in the foreseeable future. After studying an array of time periods used in modeling, we estimated 40 years

as the foreseeable future for fisher. For example, climate models pertaining to fisher habitat, HCPs, and timber harvest models generally predict 50 to 100 years into the future, and forest planning documents often predict over shorter timeframes (10 to 20 years). As a result, we considered 40 years to be a reasonable estimate of the foreseeable future for fisher because it falls within the spectrum of predictions into the future and is supported by habitat model and climate model predictability.

Therefore, on the basis of the best available scientific and commercial information, we propose listing the West Coast DPS of fisher as a threatened species in accordance with sections 3(20) and 4(a)(1) of the Act.

#### *Significant Portion of the Range*

Because we have determined that the West Coast DPS of fisher is a threatened species 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 our final policy interpreting the phrase "Significant Portion of its Range" (SPR) (79 FR 37578) for more information.

#### *Available Conservation Measures*

Conservation measures provided to species listed as endangered or threatened species under the Act include recognition, recovery actions, requirements for Federal

protection, and prohibitions against certain practices. Recognition through listing results in public awareness and conservation by Federal, State, Tribal, and local agencies, private organizations, and individuals. The Act encourages cooperation with the States and other countries and calls for recovery actions to be carried out for 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 calls for the Service to develop and implement recovery plans for the conservation of endangered and threatened species. The recovery planning process involves the identification of actions that are necessary to halt or reverse the species' decline by addressing the threats to its survival and recovery. The goal of this process is to restore listed species to a point where they are secure, self-sustaining, and functioning components of their ecosystems.

Recovery planning includes the development of a recovery outline shortly after a species is listed and preparation of a draft and final recovery plan. The recovery outline guides the immediate implementation of urgent recovery actions and describes the process to be used to develop a recovery plan. Revisions of the plan may be done to address continuing or new threats to the species, as new substantive information becomes available. The recovery plan also identifies recovery criteria for review when a species

may be ready for downlisting or delisting, and methods for monitoring recovery progress. Recovery plans also establish a framework for agencies to coordinate their recovery efforts and provide estimates of the cost of implementing recovery tasks. Recovery teams (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 website (<http://www.fws.gov/Endangered>), or from our Yreka Fish and Wildlife Office (see **FOR FURTHER INFORMATION CONTACT**).

Implementation of recovery actions generally requires the participation of a broad range of partners, including other Federal agencies, States, Tribes, nongovernmental organizations, businesses, and private landowners. Examples of recovery actions include habitat restoration (for example, restoration of native vegetation), research, captive propagation and reintroduction, and outreach and education. The recovery of many listed species cannot be accomplished solely on Federal lands because their range may occur primarily or solely on non-Federal lands. To achieve recovery of these species requires cooperative conservation efforts on private, State, and Tribal lands. If this species is listed, funding for recovery actions will be available from a variety of sources, including Federal budgets, State programs, and cost share grants for non-Federal landowners, the academic community, and nongovernmental organizations. In addition, pursuant to section 6 of the Act, the States of California, Oregon, and Washington would be eligible for Federal funds to implement management actions that promote the protection or

recovery of the West Coast DPS of fisher. Information on our grant programs that are available to aid species recovery can be found at: <http://www.fws.gov/grants>.

Although the West Coast DPS of fisher is only proposed for listing under the Act at this time, please let us know if you are interested in participating in recovery efforts for this species. Additionally, we invite you to submit any new information on this species whenever it becomes available and any information you may have for recovery planning purposes (see **FOR FURTHER INFORMATION CONTACT**).

Section 7(a) of the Act requires Federal agencies to evaluate their actions with respect to any species that is proposed or listed as an endangered or threatened species and with respect to its critical habitat, if any is designated. Regulations implementing this interagency cooperation provision of the Act are codified at 50 CFR part 402.

Section 7(a)(4) of the Act requires Federal agencies to confer with the Service on any action that is likely to jeopardize the continued existence of a species proposed for listing or result in destruction or adverse modification of proposed critical habitat. If a species is listed subsequently, section 7(a)(2) of the Act requires Federal agencies to ensure that activities they authorize, fund, or carry out are not likely to jeopardize the continued existence of the species or destroy or adversely modify its critical habitat. If a Federal action may affect a listed species or its critical habitat, the responsible Federal agency must enter into consultation with the Service.

Federal agency actions within the species' habitat that may require conference or consultation or both as described in the preceding paragraph include management and any other landscape-altering activities as well as toxicant use on Federal lands administered by FWS, the U.S. Forest Service, BLM, and National Park Service; issuance of section 404 Clean Water Act permits by the Army Corps of Engineers; and construction and maintenance of roads or highways by the Federal Highway Administration.

*Analysis Under Section 4(d) of the Act*

Under section 4(d) of the Act, the Service has discretion to issue regulations that we find necessary and advisable to provide for the conservation of threatened species. The Act and its implementing regulations set forth a series of general prohibitions and exceptions that apply to threatened wildlife. The prohibitions of section 9(a)(1) of the Act, as applied to threatened wildlife and codified at 50 CFR 17.31, make it illegal for any person subject to the jurisdiction of the United States to take (which includes harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect; or to attempt any of these) threatened wildlife within the United States or on the high seas. In addition, it is unlawful to import; export; deliver, receive, carry, transport, or ship in interstate or foreign commerce in the course of commercial activity; or sell or offer for sale in interstate or foreign commerce any listed species. It is also illegal to possess, sell, deliver, carry, transport, or ship any such wildlife that has been taken illegally. Certain

exceptions apply to employees of the Service, the National Marine Fisheries Service, other Federal land management agencies, and State conservation agencies.

The prohibitions have certain statutory exemptions, which are found in section 10 of the Act. We may issue permits to carry out otherwise prohibited activities involving threatened wildlife under certain circumstances. Regulations governing permits are codified at 50 CFR 17.32. With regard to threatened wildlife, a permit may be issued for the following purposes: for scientific purposes, to enhance the propagation or survival of the species, and for incidental take in connection with otherwise lawful activities.

While we are not proposing a section 4(d) rule concurrent with the proposed listing rule, we are soliciting comments and information regarding the applicability of such a rule for the species. See the **Information Requested** section above for more information.

### **Other DPS Alternatives**

The November 28, 2000, petition we received to list a DPS of the fisher under the Act targeted the portion of the fisher's range that included portions of California, Oregon, and Washington. Because the petitioned action covered the three-State area, and to be responsive to the petition, we began our analysis with this area constituting the DPS boundary. We have found fisher in this area to be a valid DPS warranting listing as a threatened species under the Act (see **Determination** section above). However, the range

of a species may theoretically be divided into any of several potential configurations that may all meet the discreteness and significance criteria of our DPS policy. In the case of the fisher, we have identified smaller areas within the larger DPS boundary that would also potentially constitute a valid DPS, and that may warrant listing under the Act. The historical fisher populations in most of Oregon and Washington are considered to be likely extirpated. Studies of neutral genetic variation revealed that fishers in the West Coast range show a gradient of genetic diversity, decreasing from north to south consistent with a history of colonization from the north, but we do not know the genetic identity of fishers now extirpated from Oregon. New information about genetics and the current distribution of extant fishers led us to consider two other DPS alternatives that more closely reflect the areas where native fishers are known to be currently extant.

Through peer review and public comment we may determine that the proposed DPS as set forth in this document is the most appropriate for fisher conservation. Alternatively, we could determine that one of the alternative DPSs set forth below would be most appropriate for the conservation of the fisher. Therefore, any final listing determination may differ from this proposal.

In conducting our status review of the West Coast DPS of fisher, we evaluated a number of alternative DPSs that may potentially also be valid DPSs (covering a smaller entity or entities). We are considering the appropriateness of two of these alternatives, and we are seeking public and peer review input on potential DPS alternatives. The first alternative (Alternative 1) consists of a single DPS encompassing the extant native

populations (one DPS that includes NCSO (which includes the reintroduced native NSN) and SSN (see Figure 2). The second alternative (Alternative 2) consists of two separate narrowly drawn DPSs around each of the extant native populations (one DPS around NCSO (which includes the reintroduced native NSN) and one DPS around SSN) (see Figure 3). Both of these alternatives would not include the reintroduced nonnative SOC population, and an option for the boundary separating the native populations from the nonnative population may be at the Rogue River and Interstate 5 at the northeast corner of the NCSO population. In addition, both of these alternatives would not include the portion of Oregon north of NCSO and all of Washington because native fishers are considered to be likely extirpated. These alternatives would also not include the reintroduced population in Washington (ONP) or the reintroduced population in Oregon (SOC) because individuals in these areas do not share the unique genetic characteristics found in the California and southern Oregon NCSO (which includes the reintroduced native NSN) and SSN populations. Each of these two DPS alternatives is described below.

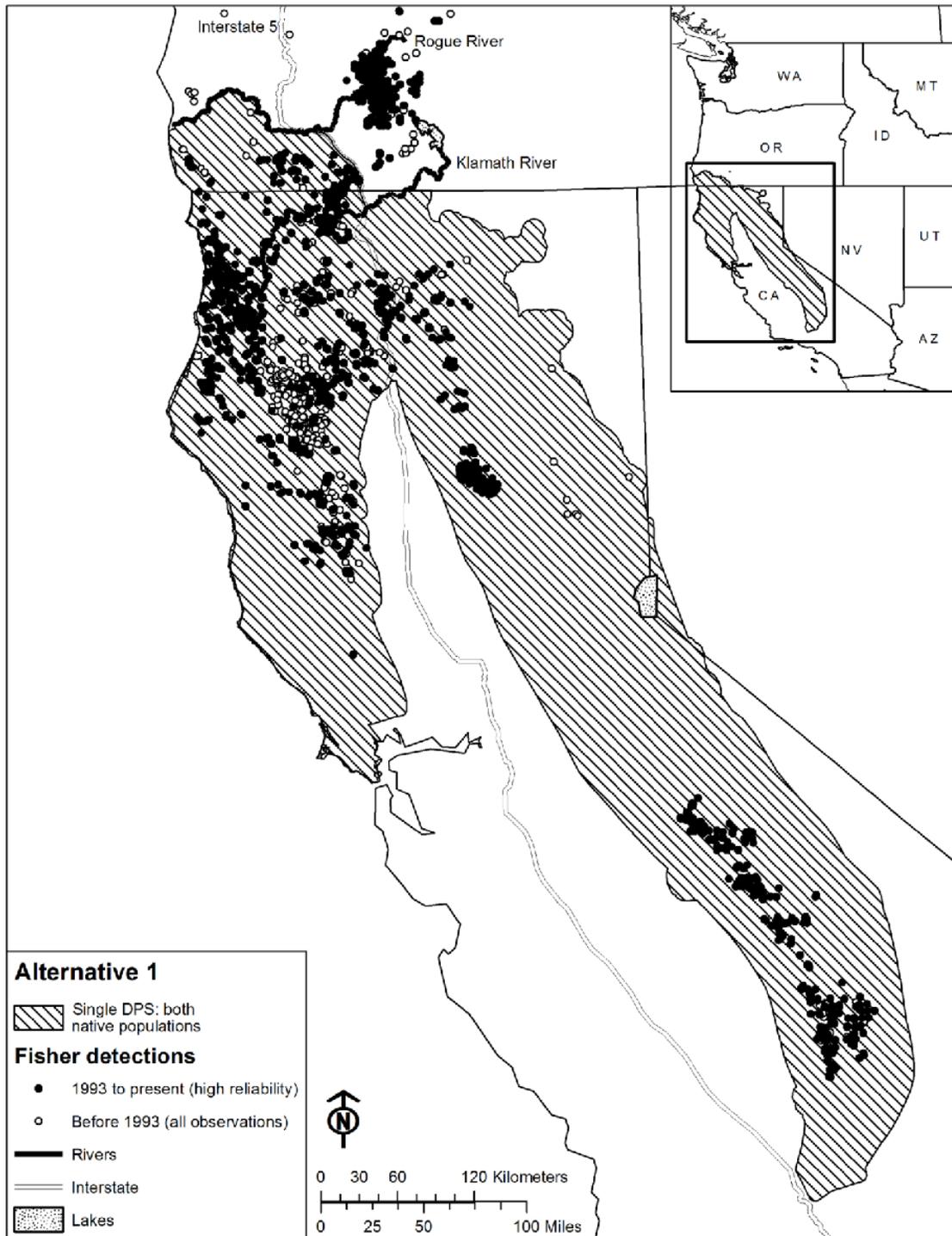
*Alternative 1: Single DPS encompassing the extant populations with unique genetic characteristics in California and southern Oregon.*

Alternative 1 includes a single DPS covering the NCSO (which includes the reintroduced NSN) and SSN populations and the area in between these populations. The northern boundary for this DPS could be described as generally the Rogue River in Oregon (approximately 20 km from the northernmost recent verified fisher location in

NCSO), Interstate 5 (which divides NCSO from SOC), the Klamath River, and the California border. The rest of the boundary would be based on the historical distribution of fishers as described in the 2004 Finding.

Alternative 1 focuses on conservation of known native west coast fishers and excludes all reintroduced populations established with non-California/Oregon fishers. In addition, this alternative excludes the area to the north of NCSO where native fisher populations are considered to be likely extirpated. This alternative does include both the SSN and the NCSO (which includes the reintroduced NSN) populations, which each have unique genetic characteristics, and it would allow management of both these native populations as a single DPS, allowing for recovery efforts throughout the fisher's historical range in California and southern Oregon.

Figure 2. Alternative 1—Single DPS encompassing the extant populations with unique genetic characteristics in California and southern Oregon.



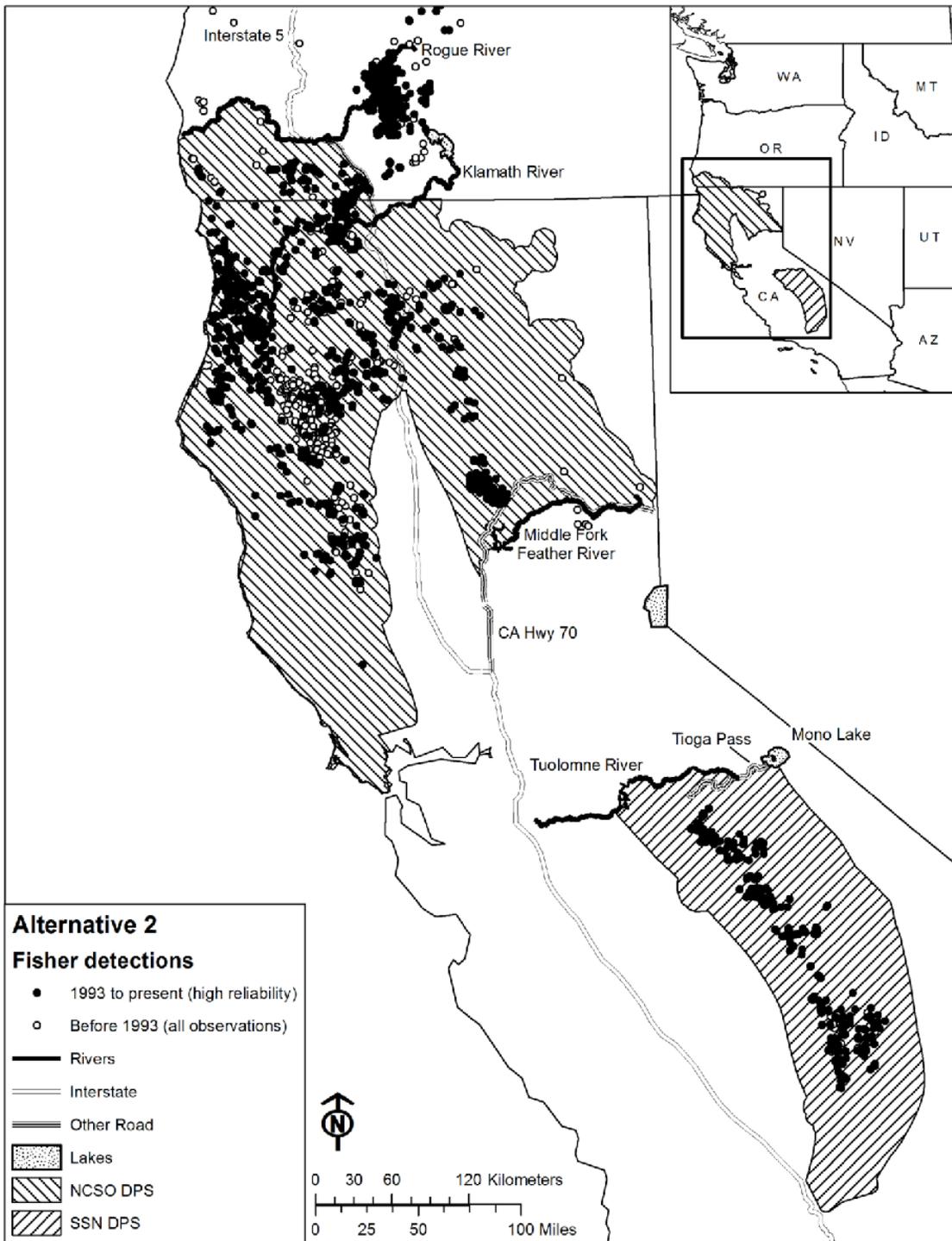
*Alternative 2: Two narrowly drawn DPSs around the extant populations with unique genetic characteristics in California and southern Oregon.*

Alternative 2 encompasses two separate DPSs: one NCSO (which includes the reintroduced NSN) DPS and another SSN DPS. The NCSO (which includes the reintroduced NSN) DPS could be described as the area generally south of the Rogue River in Oregon (approximately 20 km from the northernmost recent verified fisher location in NCSO), Interstate 5 (which divides NCSO from SOC), the Klamath River, and the California border. The NCSO (which includes the reintroduced NSN) DPS southern boundary could be described as running along the Middle Fork Feather River (approximately 20 km south of NSN translocated animals) and California Highway 70. The SSN DPS northern boundary could be described as running along the Tuolumne River (approximately 30 km north of recent verified fisher locations), which corresponds to a break in habitat continuity according to the habitat models described in the draft Species Report (Service 2014, pp. 18–22). The northeastern boundary of the SSN DPS could be described as running along Tioga Pass Road (State Highway 120) to its junction with forested areas west of Highway 395. The rest of the boundary is based on the historical distribution of fishers as described in the 2004 Finding.

Alternative 2 focuses on conservation of extant native populations with unique genetic characteristics in California and southern Oregon and excludes all reintroduced populations established with non-California/Oregon fishers. In addition, this alternative excludes the area to the north of NCSO where fisher populations (excluding SOC) are

considered to be likely extirpated. This alternative does include both the SSN and the NCSO (which includes the reintroduced native NSN) populations, which each have unique genetic characteristics, and this alternative would allow for management of the populations as separate DPSs recognizing the unique genetic characteristics within each population. In addition, if the magnitude of certain threats were found to be different in the two DPSs, this alternative would allow different management for each DPS with regard to recovery.

Figure 3. Alternative 2—Two narrowly drawn DPSs around the extant populations with unique genetic characteristics in California and southern Oregon.



We seek peer review and public comment on the uncertainties associated with the specific topics outlined above in the **Information Requested** section and in this **Other DPS Alternatives** section. We envision that specific information from the peer reviewers and the public on the proposed DPS and the two alternatives will inform our final listing decision.

#### Critical Habitat

Section 3(5)(A) of the Act defines critical habitat as “(i) the specific areas within the geographical area occupied by the species, at the time it is listed...on which are found those physical or biological features (I) Essential to the conservation of the species and (II) which may require special management considerations or protection; and (ii) specific areas outside the geographical area occupied by the species at the time it is listed...upon a determination by the Secretary that such areas are essential for the conservation of the species.” Section 3(3) of the Act (16 U.S.C. 1532(3)) also defines the terms “conserve,” “conserving,” and “conservation” to mean “to use and the use of all methods and procedures which are necessary to bring any endangered species or threatened species to the point at which the measures provided pursuant to this chapter are no longer necessary.”

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

shall designate critical habitat at the time the species is determined to be an endangered or threatened species. Our regulations (50 CFR 424.12(a)(1)) state that the designation of critical habitat is not prudent when one or both of the following situations exist:

(1) The species is threatened by taking or other human activity, and identification of critical habitat can be expected to increase the degree of threat to the species, or

(2) such designation of critical habitat would not be beneficial to the species.

There is currently no imminent threat of take attributed to collection or vandalism under Factor B for this species, and identification and mapping of critical habitat is not expected to initiate any such threat. Therefore, in the absence of finding that the designation of critical habitat would increase threats to a species, if there are any benefits to a critical habitat designation, a finding that designation is prudent 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 it would not otherwise occur because, for example, it is unoccupied; (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.

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 determine that designation of critical habitat is prudent for the West Coast DPS of fisher.

Our regulations (50 CFR 424.12(a)(2)) further state that critical habitat is not determinable when one or both of the following situations exists: (1) Information sufficient to perform required analysis of the impacts of the designation is lacking; or (2) the biological needs of the species are not sufficiently well known to permit identification of an area as critical habitat.

Delineation of critical habitat requires, within the geographical area occupied by the West Coast DPS of fisher, identification of the physical or biological features essential to the conservation of the species. Information regarding the West Coast DPS of fisher life functions and habitats associated with these functions has expanded greatly in recent years. At this point, the information sufficient to perform a required analysis of the impacts of the designation is lacking due to the considered DPS alternatives in this proposed rule and our request to seek public and peer review input on these alternatives. A careful assessment of the habitats that may qualify for designation as critical habitat will require a thorough assessment; we also need more time to analyze the comprehensive data to identify specific areas appropriate for critical habitat designation. Accordingly, we find designation of critical habitat to be “not determinable” at this time.

## **Required Determinations**

### *Clarity of the Rule*

We are required by Executive Orders 12866 and 12988 and by the Presidential Memorandum of June 1, 1998, to write all rules in plain language. This means that each rule we publish must:

- (1) Be logically organized;
- (2) Use the active voice to address readers directly;
- (3) Use clear language rather than jargon;
- (4) Be divided into short sections and sentences; and
- (5) Use lists and tables wherever possible.

If you feel that we have not met these requirements, send us comments by one of the methods listed in **ADDRESSES**. To better help us revise the rule, your comments should be as specific as possible. For example, you should tell us the numbers of the sections or paragraphs that are unclearly written, which sections or sentences are too long, the sections where you feel lists or tables would be useful, etc.

### *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. Specifically, we reached out to Tribes regarding the March 19, 2013, Notice of Initiation of Status Review (78 FR 16828), and in September 2013, we sent a formal request to Tribes for their review of the draft Species Report.

## **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 Yreka Fish and Wildlife Office (see **FOR FURTHER INFORMATION CONTACT**).

## **Authors**

The primary authors of this proposed rule are the staff members of the Pacific Southwest Regional Office, the Yreka Fish and Wildlife Office, and the Pacific Regional Office.

## **List of Subjects in 50 CFR Part 17**

Endangered and threatened species, Exports, Imports, Reporting and recordkeeping requirements, Transportation.

## **Proposed Regulation Promulgation**

Accordingly, we propose to amend part 17, subchapter B of chapter I, title 50 of the Code of Federal Regulations, as set forth below:

**PART 17—[AMENDED]**

1. The authority citation for part 17 continues to read as follows:

Authority: 16 U.S.C. 1361–1407; 1531–1544; and 4201–4245; unless otherwise noted.

2. Amend § 17.11(h) by adding an entry for “Fisher” to the List of Endangered and Threatened Wildlife in alphabetical order under Mammals 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						
Mammals							
* * * * *							
Fisher	<i>Pekania pennanti</i>	Canada (Alberta, British Columbia, Manitoba, New Brunswick, Nova Scotia, Northwest Territories, Ontario, Quebec, Saskatchewan, Yukon); U.S.A. (CA, CT, DC, IA, ID, IL, IN, KY, MA, MD, ME, MI, MN, MT, NC, ND, NH, NJ, NV, NY, OH, OR, PA, RI, TN, UT, VA, VT, WA, WI, WV, WY)	West Coast DPS: CA, OR, and WA	T		NA	NA
* * * * *							

\* \* \* \* \*

Dated: September 9, 2014

Signed: Rowan W. Gould

Acting Director, U.S. Fish and Wildlife Service

~~[Endangered and Threatened Wildlife and Plants; Threatened Species Status for  
West Coast Distinct Population Segment of Fisher]~~

[FR Doc. 2014-23456 Filed 10/06/2014 at 8:45 am; Publication Date: 10/07/2014]