

DEPARTMENT OF THE INTERIOR**Fish and Wildlife Service****50 CFR Part 17**

[FWS-R6-ES-2008-0026]

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RIN 1018-AV78

Endangered and Threatened Wildlife and Plants; Revised Critical Habitat for the Contiguous United States Distinct Population Segment of the Canada Lynx (*Lynx canadensis*)**AGENCY:** Fish and Wildlife Service, Interior.**ACTION:** Proposed rule.

SUMMARY: We, the U.S. Fish and Wildlife Service (Service), propose to revise designated critical habitat for the contiguous United States distinct population segment of the Canada lynx (*Lynx canadensis*) (lynx) under the Endangered Species Act of 1973, as amended (Act). In the contiguous United States, the lynx generally inhabits cold, moist boreal forests. Approximately 42,753 square miles (mi²) (110,727 square kilometers (km²)) fall within the boundaries of the proposed revised critical habitat designation. The proposed revised designation would add an additional 40,913 mi² (105,959 km²) to the existing critical habitat designation of 1,841 mi² (4,768 km²). The proposed revised critical habitat is located in Boundary County, Idaho; Aroostook, Franklin, Penobscot, Piscataquis, and Somerset Counties in Maine; Cook, Koochiching, Lake, and St. Louis Counties in Minnesota; Flathead, Glacier, Granite, Lake, Lewis and Clark, Lincoln, Missoula, Pondera, Powell, Teton, Gallatin, Park, Sweetgrass, Stillwater, and Carbon Counties in Montana; Chelan and Okanogan Counties in Washington; and Park, Teton, Fremont, Sublette, and Lincoln Counties in Wyoming.

DATES: We will accept comments received or postmarked on or before April 28, 2008. We must receive requests for public hearings, in writing, at the address shown in the **ADDRESSES** section by April 14, 2008.

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

- Federal eRulemaking Portal: <http://www.regulations.gov>. Follow the instructions for submitting comments.
- U.S. mail or hand-delivery: Public Comments Processing, Attn: [FWS-R6-ES-2008-0026]; Division of Policy and Directives Management; U.S. Fish and

Wildlife Service; 4401 N. Fairfax Drive, Suite 222; Arlington, VA 22203.

We will not accept e-mail or faxed comments. We will post all comments on <http://www.regulations.gov>. This generally means that we will post any personal information you provide us (see the Public Comments section below for more information).

FOR FURTHER INFORMATION CONTACT:

Mark Wilson, Field Supervisor, Montana Ecological Services Office, 585 Shepard Way, Helena, MT, 59601; telephone 406-449-5225. If you use a telecommunications device for the deaf (TDD), call the Federal Information Relay Service (FIRS) at 800-877-8339.

SUPPLEMENTARY INFORMATION:**Public Comments**

We intend that any final action resulting from this proposal will be as accurate and as effective as possible. Therefore, we request comments or suggestions on this proposed rule. We particularly seek comments concerning:

(1) The reasons why we should or should not designate specific habitat as "critical habitat" under section 4 of the Act (16 U.S.C. 1531 *et seq.*).

(2) Specific information on:

- The amount and distribution of lynx habitat,
- What areas occupied at the time of listing and that contain features essential for the conservation of the species we should include in the designation and why that might be so, and
- What areas not occupied at the time of listing are essential to the conservation of the species and why that might be so.

(3) Comments or information that may assist us with identifying or clarifying the primary constituent element.

(4) Land use designations and current or planned activities in the areas proposed as critical habitat and their possible impacts on proposed revised critical habitat.

(5) Whether Tribal lands in the Northern Rockies, Maine, and Minnesota units need to be included as critical habitat pursuant to Secretarial Order Number 3206.

(6) Whether lands the Southern Rocky Mountains contain the physical and biological features that are essential for the conservation of the species and the basis for why that might be so

(7) Whether lands in any unoccupied areas, such as the "Kettle Range" in Ferry County, Washington, are essential to the conservation of lynx and the basis for why that might be so.

(8) How the proposed boundaries of the revised critical habitat could be

refined to more closely circumscribe the boreal forest landscapes occupied by lynx. Refined maps that accurately depict the specific vegetation types on all land ownerships are not readily available. We are especially interested in this information for the Greater Yellowstone Area unit.

(9) Whether our proposed revised critical habitat for the lynx should be altered in any way to account for climate change.

(10) Whether the proposed revised critical habitat designation for the lynx should include private lands, or whether the proposed Federal lands are sufficient to conserve lynx.

(11) Whether U.S. Forest Service (USFS) lands that occur in the wildland-urban-interface (WUI) should be excluded from critical habitat under section 4(b)(2) of the Act so that fuels-reduction projects designed to protect human life and property from wildfire would not be impeded in any way in these areas.

(12) Whether the Greater Yellowstone Area is essential to the conservation of lynx. Lynx in this proposed unit occur at lower densities than in other proposed units, and the population is not connected to Canada, which is an important source of lynx in the United States.

(13) Any foreseeable economic, national security, or other potential impacts resulting from the proposed designation and, in particular, any impacts on small entities, and the benefits of including or excluding areas that exhibit these impacts.

(14) Whether we could improve or modify our approach to designating critical habitat in any way to provide for greater public participation and understanding, or to better accommodate public concerns and comments.

The size of the individual Indian reservation lands in the Northern Rockies, Maine, and Minnesota units is relatively small. As a result, we believe conservation of the lynx can be achieved by limiting the designation to the other lands in the proposal without including Tribal lands (see "Relationship of Critical Habitat to Tribal Lands" below).

The southern Rocky Mountains in Colorado, Utah, and southern Wyoming are disjunct from other lynx habitats in the United States and Canada. The nearest lynx population occurs in the Greater Yellowstone Area (GYA), which is a small, low density population also disjunct from other lynx populations and is unlikely to regularly supply dispersing lynx to the Southern Rockies. Native lynx were functionally extirpated

from their historic range in Colorado and southern Wyoming by the time the lynx was listed as a threatened species under the Act in 2000. In 1999, the State of Colorado began an intensive effort to reintroduce lynx. Although it is too early to determine whether the introduction will result in a self-sustaining population, the reintroduced lynx have produced kittens and now are distributed throughout the lynx habitat in Colorado and southern Wyoming. These animals are not designated as an experimental population under section 10(j) of the Act. Although Colorado's reintroduction effort is an important step toward the recovery of lynx, we are not proposing revised critical habitat in the Southern Rockies because of the current uncertainty that a self-sustaining lynx population will become established.

The Kettle Range in Washington historically supported lynx populations (Stinson 2001). However, although boreal forest habitat within the Kettle Range appears of high quality for lynx, there is no evidence that the Kettle Range is currently occupied by a lynx population nor has there been evidence of reproducing lynx in the Kettle Range in the past two decades (Koehler 2008).

Fuels-reduction projects in the WUI may degrade lynx habitat by reducing its ability to support snowshoe hares. For this reason, if WUI areas were designated as revised critical habitat, fuels-reduction projects may be impaired or delayed as a result of requirements under section 7(a)(2) of the Act, which could lead to reduced effectiveness of the fuels-reduction, and increased risk to human life and property. Mapped WUI areas can be viewed on the Internet at: ftp://ftp2.fs.fed.us/incoming/r1/FWS/wui_1mile_buffer_oct06.pdf.

In addition to public comments received on this proposed rule, between the proposed and final rules, the Service will analyze the following for its relevance in revising critical habitat for lynx: (1) Comments received in response to our initiation of a 5-year review for lynx; (2) a new study addressing effects of snowmobile trails on coyote movements within lynx home ranges (Kolbe *et al.* 2007, pp. 1409–1418); (3) a study on lynx prey selection (Squires and Ruggiero 2007, pp. 310–315); (4) new reports we have received on the numbers and distribution of lynx in some locations; (5) a newly released study on the effects of climate change on snowpack in western mountains and how that may affect lynx, snowshoe hares, and their habitats (Gonzalez *et al.* 2007); and (6) additional new studies (*e.g.*, Knowles *et al.* 2006 and Danby and

Hick 2007) that may provide insight on changes to lynx habitat. If necessary and appropriate, revisions to this proposed rule will be made to address this information. We will also be revising the economic analysis and environmental assessment prepared for the previous designation and providing drafts of the new economic analysis and environmental assessment to the public before finalizing this proposal.

On the basis of public comment, during the development of the revised final rule we may find, among other things, that areas proposed are not essential to the conservation of the species, are appropriate for exclusion under section 4(b)(2) of the Act, or are not appropriate for exclusion. In all of these cases, this information will be incorporated into the revised final designation. Further, we may find as a result of public comments that areas not proposed should also be designated as critical habitat. Final management plans that address the conservation of the lynx must be submitted to us during the public comment period so that we can take them into consideration when making our final critical habitat determination.

You may submit your comments and materials concerning this proposed rule by one of the methods listed in the **ADDRESSES** section. We will not accept comments sent by e-mail or fax or to an address not listed in the **ADDRESSES** section. We will not accept anonymous comments; your comment must include your first and last name, city, State, country, and postal (zip) code. Finally, we will not consider hand-delivered comments that we do not receive, or mailed comments that are not postmarked, by the date specified in the **DATES** section.

We will post your entire comment—including your personal identifying information—on <http://www.regulations.gov>. If you provide personal identifying information in addition to the required items specified in the previous paragraph, such as your street address, phone number, or e-mail address, 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.

Comments and materials we receive, as well as supporting documentation we used in preparing this revised 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, Montana Ecological Services Office (*see* **FOR FURTHER INFORMATION**

CONTACT). Maps of the proposed revised critical habitat are also available on the Internet at <http://mountain-prairie.fws.gov/species/mammals/lynx/>.

Background

It is our intent to discuss only those topics directly relevant to the designation of critical habitat in this proposed rule. For more information on the lynx refer to the final listing rule published in the **Federal Register** on March 24, 2000 (65 FR 16052), and the clarification of findings published in the **Federal Register** on July 3, 2003 (68 FR 40076).

Canada lynx are medium-sized cats, generally measuring 30 to 35 inches (in) (75 to 90 centimeters (cm)) long and weighing 18 to 23 pounds (8 to 10.5 kilograms) (Quinn and Parker 1987, Table 1). They have large, well-furred feet and long legs for traversing snow; tufts on the ears; and short, black-tipped tails.

Lynx are highly specialized predators of snowshoe hare (*Lepus americanus*) (McCord and Cardoza 1982, p. 744; Quinn and Parker 1987, pp. 684–685; Aubry *et al.* 2000, pp. 375–378). Lynx and snowshoe hares are strongly associated with what is broadly described as boreal forest (Bittner and Rongstad 1982, p. 154; McCord and Cardoza 1982, p. 743; Quinn and Parker 1987, p. 684; Agee 2000, p. 39; Aubry *et al.* 2000, pp. 378–382; Hodges 2000a, pp. 136–140 and 2000b, pp. 183–191; McKelvey *et al.* 2000b, pp. 211–232). The predominant vegetation of boreal forest is conifer trees, primarily species of spruce (*Picea* spp.) and fir (*Abies* spp.) (Elliot-Fisk 1988, pp. 34–35, 37–42). In the contiguous United States, the boreal forest types transition to deciduous temperate forest in the Northeast and Great Lakes and to subalpine forest in the west (Agee 2000, pp. 40–41). Lynx habitat can generally be described as moist boreal forests that have cold, snowy winters and a snowshoe hare prey base (Quinn and Parker 1987, p. 684–685; Agee 2000, pp. 39–47; Aubry *et al.* 2000, pp. 373–375; Buskirk *et al.* 2000b, pp. 397–405; Ruggiero *et al.* 2000, pp. 445–447). In mountainous areas, the boreal forests that lynx use are characterized by scattered moist forest types with high hare densities in a matrix of other habitats (*e.g.*, hardwoods, dry forest, non-forest) with low hare densities. In these areas, lynx incorporate the matrix habitat (non-boreal forest habitat elements) into their home ranges and use it for traveling between patches of boreal forest that support high hare densities where most foraging occurs.

Snow conditions also determine the distribution of lynx (Ruggiero *et al.* 2000, pp. 445–449). Lynx are morphologically and physiologically adapted for hunting snowshoe hares and surviving in areas that have cold winters with deep, fluffy snow for extended periods. These adaptations provide lynx a competitive advantage over potential competitors, such as bobcats (*Lynx rufus*) or coyotes (*Canis latrans*) (McCord and Cardoza 1982, p. 748; Buskirk *et al.* 2000a, pp. 86–95; Ruediger *et al.* 2000, p. 1–11; Ruggiero *et al.* 2000, pp. 445, 450). Bobcats and coyotes have a higher foot load (more weight per surface area of foot), which causes them to sink into the snow more than lynx. Therefore, bobcats and coyotes cannot efficiently hunt in fluffy or deep snow and are at a competitive disadvantage to lynx. Long-term snow conditions presumably limit the winter distribution of potential lynx competitors such as bobcats (McCord and Cardoza 1982, p. 748) or coyotes.

Lynx Habitat Requirements

Because of the patchiness and temporal nature of high quality snowshoe hare habitat, lynx populations require large boreal forest landscapes to ensure that sufficient high quality snowshoe hare habitat is available and to ensure that lynx may move freely among patches of suitable habitat and among subpopulations of lynx. Populations that are composed of a number of discrete subpopulations, connected by dispersal, are called metapopulations (McKelvey *et al.* 2000c, p. 25). Individual lynx maintain large home ranges (reported as generally ranging between 12 to 83 mi² (31 to 216 km²)) (Koehler 1990, p. 847; Aubry *et al.* 2000, pp. 382–386; Squires and Laurion 2000, pp. 342–347; Squires *et al.* 2004b, pp. 13–16, Table 6; Vashon *et al.* 2005a, pp. 7–11). The size of lynx home ranges varies depending on abundance of prey, the animal's gender and age, the season, and the density of lynx populations (Koehler 1990, p. 849; Poole 1994, pp. 612–616; Slough and Mowat 1996, pp. 951, 956; Aubry *et al.* 2000, pp. 382–386; Mowat *et al.* 2000, pp. 276–280; Vashon *et al.* 2005a, pp. 9–10). When densities of snowshoe hares decline, for example, lynx enlarge their home ranges to obtain sufficient amounts of food to survive and reproduce.

In the contiguous United States, the boreal forest landscape is naturally patchy and transitional because it is the southern edge of the boreal forest range. This generally limits snowshoe hare populations in the contiguous United States from achieving densities similar to those of the expansive northern

boreal forest in Canada (Wolff 1980, pp. 123–128; Buehler and Keith 1982, pp. 24, 28; Koehler 1990, p. 849; Koehler and Aubry 1994, p. 84). Additionally, the presence of more snowshoe hare predators and competitors at southern latitudes may inhibit the potential for high-density hare populations (Wolff 1980, p. 128). As a result, lynx generally occur at relatively low densities in the contiguous United States compared to the high lynx densities that occur in the northern boreal forest of Canada (Aubry *et al.* 2000, pp. 375, 393–394) or the densities of species such as the bobcat, which is a habitat and prey generalist.

Lynx are highly mobile and generally move long distances (greater than 60 mi (100 km)) (Aubry *et al.* 2000, pp. 386–387; Mowat *et al.* 2000, pp. 290–294). Lynx disperse primarily when snowshoe hare populations decline (Ward and Krebs 1985, pp. 2821–2823; O'Donoghue *et al.* 1997, pp. 156, 159; Poole 1997, pp. 499–503). Subadult lynx disperse even when prey is abundant (Poole 1997, pp. 502–503), presumably to establish new home ranges. Lynx also make exploratory movements outside their home ranges (Aubry *et al.* 2000, p. 386; Squires *et al.* 2001, pp. 18–26).

The boreal forest landscape is naturally dynamic. Forest stands within the landscape change as they undergo succession after natural or human-caused disturbances such as fire, insect epidemics, wind, ice, disease, and forest management (Elliot-Fisk 1988, pp. 47–48; Agee 2000, pp. 47–69). As a result, lynx habitat within the boreal forest landscape is typically patchy because the boreal forest contains stands of differing ages and conditions, some of which are suitable as lynx foraging or denning habitat (or will become suitable in the future due to forest succession) and some of which serve as travel routes for lynx moving between foraging and denning habitat (McKelvey *et al.* 2000a, pp. 427–434; Hoving *et al.* 2004, pp. 290–292).

Snowshoe hares comprise a majority of the lynx diet (Nellis *et al.* 1972, pp. 323–325; Brand *et al.* 1976, pp. 422–425; Koehler 1990, p. 848; Apps 2000, pp. 358–359, 363; Aubry *et al.* 2000, pp. 375–378; Mowat *et al.* 2000, pp. 267–268; von Kienast 2003, pp. 37–38; Squires *et al.* 2004b, p. 15, Table 8). When snowshoe hare populations are low, female lynx produce few or no kittens that survive to independence (Nellis *et al.* 1972, pp. 326–328; Brand *et al.* 1976, pp. 420, 427; Brand and Keith 1979, pp. 837–838, 847; Poole 1994, pp. 612–616; Slough and Mowat 1996, pp. 953–958; O'Donoghue *et al.* 1997, pp. 158–159; Aubry *et al.* 2000, pp. 388–389; Mowat *et al.* 2000, pp.

285–287). Lynx prey opportunistically on other small mammals and birds, particularly during lows in snowshoe hare populations, but alternate prey species may not sufficiently compensate for low availability of snowshoe hares, resulting in reduced lynx populations (Brand *et al.* 1976, pp. 422–425; Brand and Keith 1979, pp. 833–834; Koehler 1990, pp. 848–849; Mowat *et al.* 2000, pp. 267–268).

In northern Canada, lynx populations fluctuate in response to the cycling of snowshoe hare populations (Hodges 2000a, pp. 118–123; Mowat *et al.* 2000, pp. 270–272). Although snowshoe hare populations in the northern portion of their range show strong, regular population cycles, these fluctuations are generally much less pronounced in the southern portion of their range in the contiguous United States (Hodges 2000b, pp. 165–173). In the contiguous United States, the degree to which regional local lynx population fluctuations are influenced by local snowshoe hare population dynamics is unclear. However, it is anticipated that because of natural fluctuations in snowshoe hare populations, there will be periods when lynx densities are extremely low.

Because lynx population dynamics, survival, and reproduction are closely tied to snowshoe hare availability, snowshoe hare habitat is a component of lynx habitat. Lynx generally concentrate their foraging and hunting activities in areas where snowshoe hare populations are high (Koehler *et al.* 1979, p. 442; Ward and Krebs 1985, pp. 2821–2823; Murray *et al.* 1994, p. 1450; O'Donoghue *et al.* 1997, pp. 155, 159–160 and 1998, pp. 178–181). Snowshoe hares are most abundant in forests with dense understories that provide forage, cover to escape from predators, and protection during extreme weather (Wolfe *et al.* 1982, pp. 665–669; Litvaitis *et al.* 1985, pp. 869–872; Hodges 2000a, pp. 136–140 and 2000b, pp. 183–195). Generally, hare densities are higher in regenerating, earlier successional forest stages because they have greater understory structure than mature forests (Buehler and Keith 1982, p. 24; Wolfe *et al.* 1982, pp. 665–669; Koehler 1990, pp. 847–848; Hodges 2000b, pp. 183–195; Homyack 2003, p. 63, 141; Griffin 2004, pp. 84–88). However, snowshoe hares can be abundant in mature forests with dense understories (Griffin 2004, pp. 53–54).

Within the boreal forest, lynx den sites are located where coarse woody debris, such as downed logs and windfalls, provides security and thermal cover for lynx kittens (McCord and Cardoza 1982, pp. 743–744; Koehler

1990, pp. 847–849; Slough 1999, p. 607; Squires and Laurion 2000, pp. 346–347; Organ 2001). The amount of structure (e.g., downed, large, woody debris) appears to be more important than the age of the forest stand for lynx denning habitat (Mowat *et al.* 2000, pp. 10–11).

Future of Lynx Habitat

In 2003, we determined that climate change was not a threat to lynx because the best available science we had at that time (Hoving 2001) was too uncertain in nature (68 FR 40083). Since that time, new information on regional climate changes and potential effects to lynx habitat has been developed (e.g., Gonzalez *et al.* 2007, entire; Knowles *et al.* 2006, pp. 4545–4559; Danby and Hick 2007, pp. 358–359) that suggests that climate change may be an issue of concern for the future conservation of lynx. This information, combined with the information in Hoving 2001, still needs to be evaluated further to determine how climate change might affect lynx and lynx habitat. We are evaluating this information in the 5-year review we are conducting for lynx.

At this time, we find it appropriate to propose revised critical habitat in areas that are occupied and currently contain the physical and biological features essential to the conservation of the lynx. Revisions to the critical habitat designation may be necessary in the future to accommodate shifts in the occupied range of the lynx. To the extent lynx distribution and habitat is likely to shift upward in elevation within its currently occupied range as the temperatures increase (Gonzalez *et al.* 2007, pp. 7, 13–14, 19), the proposed revised critical habitat units include the highest-elevation habitats that lynx would be able to use in that event.

Previous Federal Actions

For more information on previous Federal actions concerning the lynx, refer to the final listing rule published in the **Federal Register** on March 24, 2000 (65 FR 16052), the clarification of findings published in the **Federal Register** on July 3, 2003 (68 FR 40076), and the final rule designating critical habitat for lynx published in the **Federal Register** on November 9, 2006 (71 FR 66007). On July 20, 2007, the Service announced that we would review the November 9, 2006 final rule after questions were raised about the integrity of scientific information used and whether the decision made was consistent with the appropriate legal standards. Based on our review of the previous final critical habitat designation, we have determined that it is necessary to revise critical habitat,

and this rule proposes those revisions. On January 15, 2008, the U.S. District Court for the District of Columbia issued an order stating the Service's deadlines for a proposed rule for revised critical habitat by February 15, 2008, and a final rule for revised critical habitat by February 15, 2009.

Critical Habitat

Critical habitat is defined in section 3 of the Act as:

(1) The specific areas within the geographical area occupied by a species, at the time it is listed in accordance with the Act, on which are found those physical or biological features

(a) Essential to the conservation of the species and

(b) That may require special management considerations or protection; and

(2) Specific areas outside the geographical area occupied by a species at the time it is listed, upon a determination that such areas are essential for the conservation of the species.

Conservation, as defined under section 3 of the Act, means the use of all methods and procedures that are necessary to bring any endangered species or threatened species to the point at which the measures provided under the Act are no longer necessary.

Critical habitat receives protection under section 7 of the Act through the prohibition against Federal agencies carrying out, funding, or authorizing activities that result in the destruction or adverse modification of critical habitat. Section 7 of the Act requires consultation on Federal actions that may affect critical habitat. The designation of critical habitat does not affect land ownership or establish a refuge, wilderness, reserve, preserve, or other conservation area. Such designation does not allow the government or public to access private lands. Such designation does not require implementation of restoration, recovery, or enhancement measures by the landowner. Where the landowner seeks or requests Federal agency funding or authorization of an activity that may affect a listed species or critical habitat, the consultation requirements of section 7 would apply. Nonetheless, even in the event a project with a Federal nexus may result in the destruction or adverse modification of critical habitat, the landowner's obligation is not to restore or recover the species, but to implement reasonable and prudent alternatives to avoid destruction or adverse modification of critical habitat.

For inclusion in a critical habitat designation, habitat within the geographical area occupied by the species at the time it was listed must contain physical and biological features that are essential to the conservation of the species. Consistent with this requirement, the Service identifies, to the extent known using the best scientific data available, habitat areas on which are found the physical and biological features essential, as defined at 50 CFR 424.12(b), and identifies the quantity and spatial arrangement of such areas to ensure that the areas designated as critical habitat are essential for the conservation of the species. Occupied habitat that contains the physical and biological features essential to the conservation of the species meets the definition of critical habitat only if those features may require special management considerations or protection.

Under the Act, we can designate unoccupied areas as critical habitat only when we determine that the best available scientific data demonstrate that the designation of that area is essential to the conservation of the species.

Section 4 of the Act requires that we designate critical habitat on the basis of the best scientific and commercial data available. Further, our Policy on Information Standards Under the Endangered Species Act (published in the **Federal Register** on July 1, 1994 (59 FR 34271)), the Information Quality Act (section 515 of the Treasury and General Government Appropriations Act for Fiscal Year 2001 (Pub. L. 106–554; H.R. 5658)), and our associated Information Quality Guidelines provide criteria, establish procedures, and provide guidance to ensure that our decisions are based on the best scientific data available. These documents require our biologists, to the extent consistent with the Act and with the use of the best scientific data available, to use primary and original sources of information as the basis for recommendations to designate critical habitat.

When we are determining which areas should be proposed as critical habitat, our primary source of information is generally the information developed during the listing process for the species. Additional information sources may include the recovery plan for the species, articles in peer-reviewed journals, conservation plans developed by States and counties, scientific status surveys and studies, biological assessments, or other unpublished materials and expert opinion or personal knowledge.

Habitat is often dynamic, and species may move from one area to another over time. Furthermore, we recognize that designation of critical habitat may not include all of the habitat areas that we may eventually determine, based on scientific data not now available to the Service, are necessary for the recovery of the species. For these reasons, a critical habitat designation does not signal that habitat outside the designated area is unimportant or may not be required for recovery of the species.

Areas that support populations, but are outside the critical habitat designation, may continue to be subject to conservation actions we implement under section 7(a)(1) of the Act. They are also subject to the regulatory protections afforded by the section 7(a)(2) jeopardy standard, as determined on the basis of the best available scientific information at the time of the agency action. Federally funded or permitted projects affecting listed species outside their designated critical habitat areas may still result in jeopardy findings in some cases. Similarly, critical habitat designations made on the basis of the best available information at the time of designation will not control the direction and substance of future recovery plans, habitat conservation plans (HCPs), section 7 consultation, or other species conservation planning efforts if new information calls for a different outcome.

Methods

As required by section 4(b)(2) of the Act, we use the best scientific data available to determine areas occupied at the time of listing that contain the features essential to the conservation of the lynx. We have reviewed the approach to the conservation of the lynx provided in its recovery outline (Service 2005, entire) and information from State, Federal, and Tribal agencies, and from academia and private organizations that have collected scientific data on lynx. The Service also obtained information about critical habitat for lynx in 2005 and 2006 during development of rules for lynx critical habitat. The Service also initiated a 5-year review for the lynx on April 18, 2007 (72 FR 19549). Information gathered for that purpose will be used in completing our final designation.

We have used information we reviewed for the prior designation of critical habitat, including data in reports submitted by researchers holding recovery permits under section 10(a)(1)(A) of the Act, research published in peer-reviewed articles and presented in academic theses, agency

reports, unpublished data, and various Geographic Information System (GIS) data layers (e.g., land cover type information, land ownership information, snow depth information, topographic information, locations of lynx obtained from radio- or Global Positioning System (GPS) collars, and locations of lynx confirmed via deoxyribonucleic acid (DNA) analysis or other verified records).

Primary Constituent Elements

In accordance with section 3(5)(A)(i) of the Act and the regulations at 50 CFR 424.12(b), in determining which areas occupied at the time of listing to propose as critical habitat, we consider the physical and biological features that are essential to the conservation of the species to be the primary constituent elements (PCEs) laid out in the appropriate quantity and spatial arrangement for conservation of the species. In general, PCEs include, but are not limited to:

- (1) Space for individual and population growth and for normal behavior;
- (2) Food, water, air, light, minerals, or other nutritional or physiological requirements;
- (3) Cover or shelter;
- (4) Sites for breeding, reproduction, or rearing (or development) of offspring; and
- (5) Habitats that are protected from disturbance or are representative of the historic, geographical, and ecological distributions of a species.

When considering the designation of critical habitat, we must focus on the principal biological or physical constituent elements within the defined area that are essential to the conservation of the species. As previously stated, we consider the physical and biological features that are essential to the conservation of the species to be the primary constituent elements (PCEs) laid out in the appropriate quantity and spatial arrangement for conservation of the species. As such, we derive the PCEs required for lynx from its biological needs. The area proposed for designation as revised critical habitat provides boreal forest habitat for breeding, non-breeding, and dispersing lynx in metapopulations across their range in the contiguous United States. We are not proposing any areas solely because they provide habitat for dispersing animals because the areas we are proposing serve a variety of functions that include acting as a source of dispersing animals and providing habitat that serves as travel corridors to facilitate dispersal and exploratory

movements. The primary constituent elements and therefore the resulting physical and biological features essential for the conservation of the species were determined from studies of lynx and snowshoe hare ecology.

Space for Individual and Population Growth and Normal Behavior—Boreal Forest Landscapes

Lynx populations respond to biotic and abiotic factors at different scales. At the regional scale, snow conditions, boreal forest, and competitors (especially bobcat) influence the species' range (Aubry *et al.* 2000, pp. 378–380; McKelvey *et al.* 2000b, pp. 242–253; Hoving *et al.* 2005, p. 749). At the landscape scale within each region, natural and human-caused disturbance processes (e.g., fire, wind, insect infestations, and forest management) influence the spatial and temporal distribution of lynx populations by affecting the distribution of good habitat for snowshoe hares (Agee 2000, pp. 47–73; Ruediger *et al.* 2000, pp. 1–3, 2–2, 2–6, 7–3). At the stand-level scale, quality, quantity, and juxtaposition of habitats influence home range size, productivity, and survival (Aubry *et al.* 2000, pp. 380–390; Vashon *et al.* 2005a, pp. 9–11). At the substand scale, spatial distribution, abundance of prey, and microclimate influence movements, hunting behavior, and den and resting site locations.

All of the components of the physical and biological features of proposed revised critical habitat for lynx are found within large landscapes in what is broadly described as the boreal forest or cold temperate forest (Frellich and Reich 1995, p. 325; Agee 2000, pp. 43–46). The primary constituent element is broadly described as the boreal forest landscape. In the contiguous United States, the boreal forest is more transitional than the true boreal forest of northern Canada and Alaska (Agee 2000, pp. 43–46). This difference is because the boreal forest is at its southern limits in the contiguous United States, where it transitions to deciduous temperate forest in the Northeast and Great Lakes and subalpine forest in the west (Agee 2000, pp. 43–46). We use the term “boreal forest” because it generally encompasses most of the vegetative descriptions of the transitional forest types that comprise lynx habitat in the contiguous United States (Agee 2000, pp. 40–41).

At a regional scale, lynx habitat exists in areas that generally support deep snow throughout the winter and boreal forest vegetation types (see below for more detail). In eastern North America,

lynx distribution is strongly associated with areas of deep snowfall (greater than 105 in (268 cm) of mean annual snowfall) and 40 mi² (100 km²) landscapes with a high proportion of regenerating forest (Hoving 2001, pp. 75, 143). The broad geographic distribution of lynx in eastern North America is most influenced by snowfall, but within areas of similarly deep snowfall, measures of forest succession become more important factors in determining lynx distribution (Hoving *et al.* 2004, p. 291).

Boreal forests used by lynx are cool, moist, and dominated by conifer tree species, primarily spruce and fir (Agee 2000, pp. 40–46; Aubry *et al.* 2000, pp. 378–383; Ruediger *et al.* 2000, pp. 4–3, 4–8, 4–11, 4–25, 4–26, 4–29, 4–30). Boreal forest landscapes used by lynx are a heterogeneous mosaic of vegetative cover types and successional forest stages created by natural and human-caused disturbances (McKelvey *et al.* 2000a, pp. 426, 434). Periodic vegetation disturbances stimulate development of dense understory or early successional habitat for snowshoe hares (Ruediger *et al.* 2000, pp. 1–3, 1–4, 7–4, 7–5). In Maine, lynx were positively associated with landscapes clearcut 15 to 25 years previously (Hoving *et al.* 2004, p. 291).

The overall quality of the boreal forest landscape matrix and the juxtaposition of stands in suitable condition within that landscape is important for both lynx and snowshoe hares in that it influences connectivity or movements between suitable stands, availability of food and cover, and spatial structuring of populations or subpopulations (Hodges 2000b, pp. 181–195; McKelvey *et al.* 2000a, pp. 431–432; Walker 2005, p. 79). For example, lynx foraging habitat must be near denning habitat to allow females to adequately provide for dependent kittens, especially when the kittens are relatively immobile. In north-central Washington, hare densities were higher in landscapes with an abundance of dense boreal forest interspersed with small patches of open habitat, in contrast to landscapes composed primarily of open forest interspersed with few dense vegetation patches (Walker 2005, p. 79). Similarly, in northwest Montana, connectivity of dense patches within the forest matrix benefited snowshoe hares (Ausband and Baty 2005, p. 209). In mountainous areas, lynx appear to prefer flatter slopes (Apps 2000, p. 361; McKelvey *et al.* 2000d, p. 333; von Kienast 2003, p. 21, Table 2; Maletzke 2004, pp. 17–18).

Individual lynx require large portions of boreal forest landscapes to support their home ranges and to facilitate dispersal and exploratory travel. The size of lynx home ranges is believed to

be strongly influenced by the quality of the habitat, particularly the abundance of snowshoe hares, in addition to other factors such as gender, age, season, and density of the lynx population (Aubry *et al.* 2000, pp. 382–385; Mowat *et al.* 2000, pp. 276–280). Generally, females with kittens have the smallest home ranges while males have the largest home ranges (Moen *et al.* 2004, p. 11). Reported home range size varies from 12 mi² (31 km²) for females and 26 mi² (68 km²) for males in Maine (Vashon *et al.* 2005a, p. 7), 8 mi² (21 km²) for females and 119 mi² (307 km²) for males in Minnesota (Moen *et al.* 2005, p. 12), and 34 mi² (88 km²) for females and 83 mi² (216 km²) for males in northwest Montana (Squires *et al.* 2004b, pp. 15–16).

The dynamic nature of boreal forest landscapes means that lynx home ranges will incorporate a variety of forest stands that are in different stages of succession and have differing potential to produce prey. In addition, due to the naturally marginal nature of lynx habitat within the DPS, the moist boreal forest types that snowshoe hares prefer often occur in patches dissected or surrounded by matrix habitat. Lynx use the matrix habitat primarily as travel routes between foraging areas and denning areas. Although they are not dependent on the specific vegetative condition of these habitats (*i.e.*, they are not sensitive to forest management practices), the importance of these areas as travel routes makes them necessary habitat components for lynx.

Forest Type Associations

Maine

Lynx are more likely to occur in 40 mi² (100 km²) landscapes with regenerating forest, and less likely to occur in landscapes with recent clearcut or partial harvest, (Hoving *et al.* 2004, pp. 291–292). Lynx in Maine select softwood (spruce and fir) dominated, regenerating stands (Vashon *et al.* 2005a, p. 8). Regenerating stands used by lynx generally develop 15–30 years after forest disturbance and are characterized by dense horizontal structure and high stem density within a meter of the ground. These habitats support high snowshoe hare densities (Homyack 2003, p. 63; Fuller and Harrison 2005, pp. 716, 719; Vashon *et al.* 2005a, pp. 10–11). At the stand scale, lynx in northwestern Maine selected older (11 to 26 year-old), tall (4.6 to 7.3 m (15 to 24 ft)), regenerating clearcut stands and older (11 to 21 year-old), partially harvested stands (A. Fuller, University of Maine, unpubl. data).

Minnesota

In Minnesota, lynx primarily occur in the Northern Superior Uplands Ecological Section of the Laurentian Mixed Forest Province. Historically, this area was dominated by red pine (*Pinus resinosa*) and white pine (*Pinus strobus*) mixed with aspen (*Populus* spp.), paper birch (*Betula papyrifera*), spruce, balsam fir (*Abies balsamifera*), and jack pine (*Pinus banksiana*) (Minnesota Department of Natural Resources [Minnesota DNR] 2003, p. 2).

Preliminary research suggests lynx in Minnesota generally use younger stands (less than 50 years) with a conifer component in greater proportion than their availability (R. Moen, University of Minnesota, unpubl. data). Lynx prefer predominantly upland forests dominated by red pine, white pine, jack pine, black spruce (*Picea mariana*), paper birch, quaking aspen (*Populus tremuloides*), or balsam fir (R. Moen, unpubl. data).

Washington

In the North Cascades in Washington, the majority of lynx occurrences were found above 1,250 m (4,101 ft) elevation (McKelvey *et al.* 2000b, p. 243 and 2000d, p. 321; von Kienast 2003, p. 28, Table 2; Maletzke 2004, p. 17). In this area, lynx selected Engelman spruce (*Picea engelmannii*)-subalpine fir (*Abies lasiocarpa*) forest cover types in winter (von Kienast 2003, p. 28; Maletzke 2004, pp. 16–17). Lodgepole pine (*Pinus contorta*) is a dominant tree species in the earlier successional stages of these climax cover types. Seral lodgepole stands contained dense understories and therefore received high use by snowshoe hares and lynx (Koehler 1990, pp. 847–848; McKelvey *et al.* 2000d, pp. 332–335).

Northern Rockies

In the Northern Rocky Mountains, the majority of lynx occurrences are associated with the Rocky Mountain Conifer Forest vegetative class (Kuchler 1964, p. 5; McKelvey *et al.* 2000b, p. 246) and occur above 1,250 m (4,101 ft) elevation (Aubry *et al.* 2000, pp. 378–380; McKelvey *et al.* 2000b, pp. 243–245). The dominant vegetation that constitutes lynx habitat in these areas is subalpine fir, Engelman spruce, and lodgepole pine (Aubry *et al.* 2000, p. 379; Ruediger *et al.* 2000, pp. 4–8–4–10). As in the Cascades, lodgepole pine is an earlier successional stage of subalpine fir and Engelman spruce climax forest cover types.

Greater Yellowstone Area

Lynx habitat in the GYA is similar to the Northern Rockies in that lynx

occurrences are generally associated with the Rocky Mountain Conifer Forest vegetative class. The primary areas of lynx occurrence in this unit occur between 7,382 and 9,843 ft (2,250 and 3,000 m) elevation (Aubry *et al.* 2000, p. 379; McKelvey *et al.* 2000b, Figure 8.18). However, lynx are not limited to these elevation zones. The dominant vegetation that constitutes lynx habitat in these areas is subalpine fir, Engelmann spruce, and lodgepole pine (Aubry *et al.* 2000, pp. 378–382; Ruediger *et al.* 2000, pp. 1–2, 1–3; Murphy *et al.* 2004, pp. 9–11). Lodgepole pine is an earlier successional stage of subalpine fir and Engelmann spruce cover types. The vegetation characteristics in the GYA that support snowshoe hare populations (and form the basis for lynx populations) are typically found in a widely scattered mosaic of matrix habitat types (Murphy *et al.* 2005, p. 8–11; Hodges and Mills 2005, p. 6; Agee 2000, p. 48). In the GYA, lynx exploit hare populations in disjunct patches of mesic boreal forest that support relatively dense understories (Hodges and Mills 2005, pp. 4–6). In most cases, lynx home ranges in the GYA will by necessity incorporate habitat that is not typically considered lynx foraging habitat, and is used primarily for travel.

Food, Water, Air, Light, Minerals, Or Other Nutritional Or Physiological Requirements

a. Snowshoe Hares (Food)

Snowshoe hare density is the most important factor explaining the persistence of lynx populations (Steury and Murray 2004, p. 136). A minimum snowshoe hare density necessary to maintain a persistent, reproducing lynx population within the contiguous United States has not been determined, although Ruggiero *et al.* (2000, pp. 446–447) suggested that at least 0.2 hares per acre (0.5 hares per hectare) may be necessary. Steury and Murray (2004, p. 137) modeled lynx and snowshoe hare populations and predicted that a minimum of 0.4 to 0.7 hares per acre (1.1 to 1.8 hares per hectare) was required for persistence of a reintroduced lynx population in the southern portion of the lynx range.

The boreal forest landscape must contain a mosaic of forest stand successional stages to sustain lynx populations over the long term as the condition of individual stands changes over time. If the vegetation potential (or climatic forest type) of a particular forest stand is conducive to supporting abundant snowshoe hares, it likely will also go through successional phases that are unsuitable as lynx foraging or

denning habitat (Agee 2000, pp. 62–72; Buskirk *et al.* 2000b, pp. 403–408). For example, a boreal forest stand where there has been recent disturbance, such as fire or timber harvest, that has resulted in little or no understory structure is unsuitable as snowshoe hare habitat for lynx foraging. That stand may regenerate into suitable snowshoe hare (lynx foraging) habitat within 10 to 25 years, depending on local conditions (Ruediger *et al.* 2000, pp. 1–3, 1–4, 2–2—2–5). However, forest management techniques that thin the understory may render the habitat unsuitable for hares and, thus, for lynx (Ruediger *et al.* 2000, pp. 2–4—3–2; Hoving *et al.* 2004, pp. 291–292). Stands may continue to provide suitable snowshoe hare habitat for many years until woody stems in the understory become too sparse as a result of undisturbed forest succession or management (*e.g.*, clearcutting or thinning). Thus, if the vegetation potential of the stand is appropriate, a stand that is not currently in a condition that is suitable to support abundant snowshoe hares for lynx foraging or coarse woody debris for den sites has the capability to develop into suitable habitat for lynx and snowshoe hares with time.

As described previously, snowshoe hares prefer boreal forest stands that have a dense horizontal understory to provide food, cover, and security from predators. Snowshoe hares feed on conifers, deciduous trees, and shrubs (Hodges 2000b, pp. 181–183). Snowshoe hare density is correlated to understory cover between approximately 3 to 10 ft (1 to 3 m) above the ground or snow level (Hodges 2000b, p. 184, Table 7.5). Habitats most heavily used by snowshoe hares are stands with shrubs, stands that are densely stocked, and stands at ages where branches have more lateral cover (Hodges 2000b, p. 184). In Maine, the snowshoe hare densities were highest in the stands supporting high conifer stem densities (Homyack *et al.* 2004, p. 195; Robinson 2006, p. 69). In northcentral Washington, snowshoe hare density was highest in 20-year-old lodgepole pine stands where the average density of trees and shrubs was 6,415 stems per acre (ac) (15,840 stems/hectare (ha)) (Koehler 1990, p. 848). Generally, earlier successional forest stages support a greater density of horizontal understory and more abundant snowshoe hares (Buehler and Keith 1982, p. 24; Wolfe *et al.* 1982, pp. 668–669; Koehler 1990, pp. 847–848; Hodges 2000b, pp. 184–191; Griffin 2004, pp. 84–88); however, sometimes mature stands also can have adequate dense understory to support abundant snowshoe hares (Griffin 2004,

p. 88). In Montana, lynx favor multi-story stands, often in older age classes, where tree boughs touch the snow surface but where stem density is low (Squires 2006, p. 4).

In Maine, the highest snowshoe hare densities were found in regenerating softwood (spruce and fir) and mixed wood stands (Fuller and Harrison 2005, pp. 716, 719; Robinson 2006, p. 69). In the North Cascades, the highest snowshoe hare densities were found in 20-year-old seral lodgepole pine stands with a dense understory (Koehler 1990, pp. 847–848). In montane and subalpine forests in northwest Montana, the highest snowshoe hare densities in summer were generally in younger stands with dense forest structure; in winter snowshoe hare densities were as high or higher in mature stands with dense understory forest structure (Griffin 2004, p. 53). Snowshoe hare studies are just underway in Minnesota (Moen *et al.* 2005, p. 18); therefore, results on habitat relationships are still preliminary. In the GYA, the highest snowshoe hare densities were found in a douglas fir site and a few regenerating lodgepole pine and lodgepole stands that had a lodgepole understory. Low hare densities were found in most regenerating lodgepole stands, most likely due to low stem densities (Hodges and Mills 2005, p. 6). Spruce-fir forests were the stand type most likely to support snowshoe hares; however, hare densities were never high at these sites.

Habitats supporting abundant snowshoe hares must be present in a large proportion of the landscape to support a viable lynx population. Broad-scale snowshoe hare density estimates are not available for the areas we are proposing as lynx revised critical habitat; available snowshoe hare density estimates are only applicable for the immediate area and time frame for which the study was conducted and cannot be extrapolated further.

b. Snow Conditions (Other Physiological Requirements)

As described in the “Background” section above, snow conditions also determine the distribution of lynx. Deep, fluffy snow conditions likely restrict potential competitors such as bobcat or coyote from effectively encroaching on or hunting in winter lynx habitat. Snowfall was the strongest predictor of lynx occurrence at a regional scale (Hoving *et al.* 2005, p. 746, Table 5). In addition to snow depth, other snow properties, including surface hardness or sinking depth, are important factors in the spatial, ecological, and genetic structuring of the species (Stenseth *et al.* 2004, p. 75).

In the northeastern United States, lynx are most likely to occur in areas with a 10-year mean annual snowfall greater than 105 in (268 cm) (Hoving 2001, p. 75). The Northern Superior Uplands section of Minnesota, which roughly corresponds to the area proposed as revised critical habitat in that State, receives more of its precipitation as snow than any section in the State, has the longest period of snow cover, and has the shortest growing season (Minnesota DNR 2003, p. 2). Mean annual snowfall from 1971 to 2000 in this area was generally greater than 55 in (149 cm) (University of Minnesota 2005).

Information on average snowfall or snow depths in mountainous areas such as the Cascades or northwest Montana is limited because few weather stations in these regions have measured snow fall or snow depth over time. Topography strongly influences local snow conditions. In the Cascades, at the Mazama station, average annual snowfall from 1948 to 1976 was 115 in (292 cm) (Western Regional Climate Center 2005). In Montana, at the Seeley Lake Ranger Station, average annual snowfall from 1948 to 2005 is 124 in (315 cm), while at the Troy station the average total snowfall from 1961 to 1994 was 90 in (229 cm) (Western Regional Climate Center 2005).

We considered the effect climate change could have on average snowfall or snow depths when we developed this proposed rule. We have information to indicate that up to two-thirds of the lynx range in the lower 48 States may become unsuitable by 2100 (Gonzalez *et al.* 2007, pp. 4, 7–8, 10, 13–14, 19). However, we have used current climate information in developing this rule because, until regional climate projections are more certain, we find it is appropriate to designate critical habitat for lynx where they currently exist. Projections for habitat loss go out over the next 100 years. If designated habitat becomes unsuitable for lynx in the future due to climate change, the Service will revise critical habitat to remove unsuitable habitat and add new suitable habitat in order to seek to facilitate the shift in lynx range that climate change may cause. Lynx distribution and habitat is likely to shift upward in elevation and northward in latitude as temperatures increase (Gonzalez *et al.* 2007, pp. 7, 13–14, 19). All proposed revised critical habitat units include the highest-elevation habitats that lynx would be able to use in the event that they move to higher elevations in response to climate change. Additionally, any northward shifts in range would likely move the

species and its suitable habitat into Canada. Four of the five proposed revised critical habitat units use the United States/Canada border as their northern boundary.

Sites for Breeding, Reproduction, or Rearing (or Development) of Offspring—Denning Habitat

Lynx den sites are found in mature and younger boreal forest stands that have a large amount of cover and downed, large woody debris. The structural components of lynx den sites are common features in managed (logged) and unmanaged (*e.g.*, insect damaged, wind-throw) stands. Downed trees provide excellent cover for den sites and kittens and often are associated with dense woody stem growth.

Site characteristics were evaluated for 26 lynx dens from 1999 to 2004 in northwest Maine. Dens were found in several stand types. Tip-up mounds (exposed roots from fallen trees) alone best explained den site selection (J. Organ, Service, unpubl. data). Tip-up mounds may purely be an index of downed trees, which were abundant on the landscape. Horizontal cover at 16 ft (5 m) alone was the next best predictor of denning (J. Organ, unpubl. data). Dead, downed trees were sampled, but did not explain den site selection as well as tip-up mounds and cover at 16 ft (5 m). Lynx essentially select dense cover in a cover-rich area.

In the North Cascades, Washington, lynx denned in mature (older than 250 years) stands with an overstory of Engelmann spruce, subalpine fir, and lodgepole pine with an abundance of downed, woody debris (Koehler 1990, p. 847). In this study, all den sites were located on north-northeast aspects (Koehler 1990, p. 847). In northwest Montana, areas around dens were a variety of ages but all contained abundant woody debris including downed logs, blowdowns, and rootwads, and dense understory cover (Squires *et al.* 2004b, Table 3). Information on den site characteristics in Minnesota has not yet been reported (Moen *et al.* 2005, p. 8).

Primary Constituent Element for Lynx

Within the geographical area we know to be occupied by the lynx, we must identify the primary constituent elements (PCEs) laid out in the quantity and spatial arrangement essential to the conservation of the species (*i.e.*, essential physical and biological features) that may require special management considerations or protections.

Based on the above needs and our current knowledge of the life history, biology, and ecology of the species, we have determined that the primary constituent element essential to the conservation of the lynx is:

(1) Boreal forest landscapes supporting a mosaic of differing successional forest stages and containing:

(a) Presence of snowshoe hares and their preferred habitat conditions, including dense understories of young trees or shrubs tall enough to protrude above the snow;

(b) Winter snow conditions that are generally deep and fluffy for extended periods of time;

(c) Sites for denning having abundant, coarse, woody debris, such as downed trees and root wads; and

(d) Matrix habitat (*e.g.*, hardwood forest, dry forest, non-forest, or other habitat types that do not support snowshoe hares) that occurs between patches of boreal forest in close juxtaposition (at the scale of a lynx home range) such that lynx are likely to travel through such habitat while accessing patches of boreal forest within a home range. The important aspect of matrix habitat for lynx is that these habitats retain the ability to allow unimpeded movement of lynx through them as lynx travel between patches of boreal forest.

We designed the proposed revised critical habitat units to capture these elements of the PCE laid out in the quantity and spatial arrangement essential to the conservation of the species (*i.e.*, essential physical and biological features). To do this, we mapped units across the geographic range of the species in the United States to protect populations in the event of catastrophic events that could impact a portion of the range. We designed each unit to be large enough to encompass the temporal and spatial changes in habitat and snowshoe hare populations to support interbreeding lynx populations or metapopulations over time.

Special Management Considerations or Protections

When designating critical habitat, we assess whether the occupied areas contain the physical and biological features that are essential to the conservation of the species and that may require special management considerations or protections.

The area proposed for designation as revised critical habitat will require some level of management to address the current and future threats to the lynx and to maintain the physical and

biological features essential to the conservation of the species. In all units, special management will be required to ensure that boreal forest landscapes provide a mosaic of forest stands of various ages to provide abundant prey habitat, denning habitat, and connectivity within the landscape. The designation of critical habitat does not imply that lands outside of critical habitat do not play an important role in the conservation of the lynx. Federal activities that may affect areas outside of critical habitat, such as forest management, development, and road construction, are still subject to review under section 7 of the Act if they may affect lynx because Federal agencies must consider both effects to lynx and effects to critical habitat independently. The prohibitions of section 9 of the Act (e.g., harm, harass, capture, kill) also continue to apply both inside and outside of designated critical habitat.

Special management direction for lynx has been applied to public lands in much of the lynx DPS. The USFS, Bureau of Land Management (BLM), NPS, and the Service developed a Lynx Conservation Assessment and Strategy (LCAS) (Ruediger *et al.* 2000, entire) using the best available science at the time specifically to provide a consistent and effective approach to conserve lynx and lynx habitat on Federal lands (Ruediger *et al.* 2000). The overall goals of the LCAS were to recommend lynx conservation measures, to provide a basis for reviewing the adequacy of USFS and BLM land and resource management plans with regard to lynx conservation, and to facilitate conferencing and consultation under section 7 of the Act. The LCAS identifies an inclusive list of 17 potential risk factors for lynx or lynx habitat that may be addressed under programs, practices, and activities within the authority and jurisdiction of Federal land management agencies. The risks identified in the LCAS are based on effects to either individual lynx, lynx populations, or both, or to lynx habitat. Potential risk factors the LCAS addresses that may affect lynx productivity include: timber management, wildland fire management, recreation, forest/backcountry roads and trails, livestock grazing, and other human developments. Potential risk factors the LCAS addresses that may affect lynx mortality include: trapping, predator control, incidental or illegal shooting, and competition and predation as influenced by human activities and highways. Potential risk factors the LCAS addresses that may affect lynx

movement include: highways, railroads and utility corridors, land ownership pattern, and ski areas and large resorts. Other potential large-scale risk factors for lynx addressed by the LCAS include: fragmentation and degradation of lynx refugia, lynx movement and dispersal across shrub-steppe habitats, and habitat degradation by nonnative and invasive plant species.

The LCAS used the best available information at the time to ensure the appropriate mosaic of habitat is provided for lynx on Federal lands. Although the LCAS was written specifically for Federal lands, many of the conservation measures are pertinent for non-Federal lands. To facilitate project planning and allow for the assessment of the potential effects of a project on an individual lynx, the LCAS directs Federal land management agencies to delineate Lynx Analysis Units (LAUs). The scale of an LAU approximates the size of area used by an individual lynx (25 to 50 mi² (65 to 130 km²)). The LCAS recognizes that LAUs will likely encompass both lynx habitat and other areas (e.g., lakes, low elevation ponderosa pine (*Pinus ponderosa*) forest, and alpine tundra). Habitat-related standards the LCAS provides to address potential risks include: (1) If more than 30 percent of lynx habitat in an LAU is currently in unsuitable condition, no further reduction of suitable condition shall occur as a result of vegetation management activities by Federal agencies; (2) within an LAU, maintain denning habitat in patches generally larger than 5 ac (2 ha), comprising at least 10 percent of lynx habitat; (3) maintain habitat connectivity within and between LAUs; (4) management actions (e.g., timber sales, salvage sales) shall not change more than 15 percent of lynx habitat within an LAU to an unsuitable condition within a 10-year period; (5) pre-commercial thinning will only be allowed when stands no longer provide snowshoe hare habitat; (6) on Federal lands in lynx habitat, allow no net increase in groomed or designated over-the-snow routes and snowmobile play areas by LAU.

With the listing of the lynx in 2000, Federal agencies across the contiguous United States range of the lynx were required to consult with the Service on actions that may affect lynx. The LCAS assists Federal agencies in planning activities and projects in ways that benefit lynx or avoid adverse impacts to lynx or lynx habitat (Ruediger *et al.* 2000). If projects are designed that fail to meet the standards in the LCAS, the biologists using the LCAS would arrive

at an adverse effect determination for lynx.

A Conservation Agreement between the USFS and the Service (U.S. Forest Service and U.S. Fish and Wildlife Service 2000) and a similar Agreement between the BLM and the Service (Bureau of Land Management and U.S. Fish and Wildlife Service 2000) committed the USFS and BLM to use the LCAS in determining the effects of actions on lynx until Forest Plans were amended or revised to adequately conserve lynx. A programmatic biological opinion pursuant to section 7 of the Act analyzed and confirmed the adequacy of the LCAS and its conservation measures to conserve lynx and concluded that Forest Service and BLM land management plans as implemented in accordance with the Conservation Agreements would not jeopardize the continued existence of lynx (U.S. Fish and Wildlife Service 2000).

In 2005, the USFS and the Service renewed the conservation agreement (U.S. Forest Service and U.S. Fish and Wildlife Service 2005) because the original agreement had expired. In the 2005 agreement, the parties agree to take measures to reduce or eliminate adverse effects or risks to lynx and its occupied habitat pending amendments to Forest Plans. The LCAS is a basis for implementing this agreement (U.S. Forest Service and U.S. Fish and Wildlife Service 2005). The 2005 agreement was renewed on October 20, 2006, and expires December 31, 2010, unless renewed. The BLM continues to adhere to their original agreement although it expired in December 2004.

Lynx conservation depends on management that supports boreal forest landscapes of sufficient size to encompass the temporal and spatial changes in habitat and snowshoe hare populations to support interbreeding lynx populations or metapopulations over time. At the time it was written, the LCAS provided the highest level of management or protection for lynx. The LCAS conservation measures address risk factors affecting lynx habitat and lynx productivity and were designed to be implemented at the scale necessary to conserve lynx. This level of management is appropriate for Federal lands, because they account for the majority of high-quality habitat in the United States and also because the inadequacy of regulatory mechanisms to conserve lynx on these lands at the time was the primary reason for listing the lynx as a threatened species under the Act. Furthermore, new information has come to light since the LCAS was written concerning that should be taken

into account by land managers. For instance, Kolbe *et al.* (2007) and Bunnell *et al.* (2006) published information on the effects of snowmobiling on lynx, and Squires *et al.* (2006) documented the importance of multilayered stands as snowshoe hare habitat. Further, ongoing research in Minnesota and Maine has also resulted in information helpful to forming our understanding of lynx and snowshoe hare (*e.g.*, Moen *et al.* 2004; Hoving *et al.* 2005; Homyack *et al.* 2007; Fuller *et al.* 2007). In some regions of Wyoming, Washington and Maine, research continues. Thus, as new information becomes available, this information should be used in addition to that used in the LCAS.

The Forest Service considered some of the new information discussed above when it proposed to revise 18 Forest Plans under a programmatic plan amendment called the Northern Rocky Mountain Lynx Amendment (NRLA) (Forest Service 2007). Because of the new information, some of the LCAS standards were changed to guidelines because the Service had determined that some risk factors were not negatively affecting the U.S. lynx DPS as a whole. Since publication of the LCAS, lynx studied in the United States have been shown to use a variety of sites and conditions for denning. Lynx denning sites are not believed to be a limiting factor in Montana and Maine study areas (Service 2007, pp. 48–49). Further, earlier assessments also concluded that in most geographic areas, denning habitat was not likely limiting to lynx, and existing forest plan direction would not result in adverse effects (Hickenbottom *et al.* 1999). Likewise, after evaluating Bunnell *et al.* (2006, entire) and Kolbe *et al.* (2007, entire), we determined that the best information available did not indicate that compacted snow routes increase competition from other species to levels that adversely impact lynx populations in the NRLA area (Service 2007, pp. 55). Finally, since the LCAS was written, new information revealed the importance of multi-storied stands for lynx (Squires *et al.* 2006). On the basis of this information, the Forest Service included a standard for conserving these multi-storied stands in the NRLA. This LCAS does not contain this standard.

In addition to diverging from the standards in the LCAS because of new information, the NRLA also deviated from the LCAS by allowing additional fuels reduction projects in areas within the wildlands-urban-interface (WUI). In our analysis of this action, we determined that even with these exceptions, the management in the

NRLA would provide for the recovery of lynx in these areas by addressing the major reason we listed the lynx in 2000: The lack of guidance for conservation of lynx in Federal land management plans. Consultation under section 7 of the Act was completed for the NRLA in 2007, and it is now official land management direction for the National Forests that adopted it.

Criteria Used To Identify Critical Habitat

To identify areas containing the physical and biological features that are essential to the conservation of the lynx, we considered the concepts introduced in the recovery outline for the species (Service 2005, entire) and the analysis provided above concerning occupancy, evidence of reproduction, and the primary constituent elements laid out in the quantity and spatial arrangement necessary for the conservation of the species. We have also reviewed information from State, Federal, and tribal agencies, and information from academia and private organizations that have collected scientific data on lynx.

The focus of our strategy in considering lands for designation as revised critical habitat was on boreal forest landscapes of sufficient size to encompass the temporal and spatial changes in habitat and snowshoe hare populations to support interbreeding lynx populations or metapopulations over time. Individual lynx maintain large home ranges; the areas identified to have physical and biological features essential to the conservation of the lynx are large enough to encompass multiple home ranges. A secondary consideration is that, in addition to supporting breeding populations, these areas provide connectivity among patches of suitable habitat (*e.g.*, patches containing abundant snowshoe hares), whose locations in the landscape shift through time.

In proposing revised critical habitat for the lynx, we used the best scientific data available to evaluate areas that contained the PCEs in a spatial arrangement and quantity to provide the physical and biological features essential to the conservation of the species and that may require special management considerations or protection. In evaluating areas for proposal as revised critical habitat, we first determined the geographic area occupied by the species. We used data providing verified evidence of the occurrence of lynx and evidence of the presence of breeding lynx populations as represented by records of lynx reproduction. We focused on records since 1995 to ensure that this critical

habitat designation is based on the data that most closely represents the current status of lynx in the contiguous United States and the geographic area occupied by the species at the time of listing. Data that define the historic and current range of the lynx (*e.g.*, McKelvey *et al.* 2000b, pp. 207–232; Hoving *et al.* 2003, entire) constitute the geographic area that may be occupied by the species; therefore, we determined that areas outside the historic distribution are not essential to the conservation of the species. Although the average life span of a wild lynx is not known, we have assumed that a lynx born in 1995 could have been alive in 2000 or 2003, the dates of publication of the final listing rule (64 FR 4483) and our clarification of findings (68 FR 40075). We base this conclusion on the fact that we do not have any information to suggest that lynx habitat has substantially contracted or expanded such that species' range at the time of listing would have been different than the current observations. Clearly, lynx-related research in the contiguous United States substantially increased after we published the 1998 proposal to list lynx, and this research provides additional information on which to base this proposed revised critical habitat designation. However, this is not a reflection of substantial changes to lynx habitat or the range of the lynx since 1995. These recent verified records were provided by Federal research entities, State wildlife agencies, academic researchers, and private individuals or organizations working on lynx (K. Aubry, Pacific Northwest Research Station, unpubl. data; S. Gehman, Wildthings Unlimited, unpubl. data; S. Gniadek, Glacier National Park, unpubl. data; S. Loch, Independent Scientist, and E. Lindquist, Superior National Forest, unpubl. data; K. McKelvey, Rocky Mountain Research Station, unpubl. data; Minnesota DNR 2005 website; R. Moen, University of Minnesota, Natural Resources Research Institute, unpubl. data; J. Squires, Rocky Mountain Research Station, unpubl. data; J. Vashon, Maine Department of Inland Fisheries and Wildlife, unpubl. data).

By accepting only verified recent lynx records, we restricted the available lynx occurrence dataset because we wanted reliable data for the purposes of evaluating areas and features for revised critical habitat designation. The reliability of lynx occurrence reports can be questionable because the bobcat, a common species, can be confused with the lynx, which is similar in appearance. Additionally, many surveys are conducted by snow tracking in

which correct identification of tracks can be difficult because of variable conditions affecting the quality of the track and variable expertise of the tracker. Our definition of a verified lynx record is modified from McKelvey *et al.* (2000b, p. 209)—(1) An animal (live or dead) in hand or observed closely by a person knowledgeable in lynx identification, (2) genetic (DNA) confirmation, (3) snow tracks only when confirmed by genetic analysis (*e.g.*, McKelvey *et al.* 2006, entire) or (4) location data from radio-or GPS-collared lynx. Documentation of lynx reproduction consists of lynx kittens in hand, or observed with the mother by someone knowledgeable in lynx identification, or snow tracks demonstrating family groups traveling together, as identified by a person highly knowledgeable in identification of carnivore tracks. However, we made an exception and accepted snow track data from Maine because of the stringent protocols used in confirming tracks as lynx and the minimal number of species in the area with which lynx tracks could be misidentified (McCullough 2006, entire).

The area occupied by the species was then overlaid with areas that contain boreal forest types. From this overlay we determined which areas contain the essential physical and biological features (*i.e.*, the primary constituent element (PCE) laid out in the quantity and spatial arrangement essential to the conservation of the species) by examining recent lynx records, evidence of breeding lynx populations, and presence of the boreal forest type that is currently occupied by lynx in each particular area and that provides direct connectivity with lynx populations in Canada. Lynx populations in the contiguous United States seem to be influenced by lynx population dynamics in Canada (Thiel 1987; McKelvey *et al.* 2000a, p. 427, 2000c, p. 33). Many of these populations in Canada are directly interconnected with United States' populations, and are likely a source of emigration into the contiguous United States; lynx from the contiguous United States are known to move into Canada. Therefore, we assume that retaining connectivity with larger lynx populations in Canada is important to ensuring long-term persistence of lynx populations in the United States. We assume that, regionally, lynx within the contiguous United States and adjacent Canadian provinces interact as metapopulations. Where available, data on historic average snow depths and bobcat harvest provided additional insight for refining

and delineating appropriate boundaries for consideration as revised critical habitat.

In the North Cascades and Northern Rockies, the physical and biological features essential to the conservation of lynx, the majority of lynx records, evidence of reproduction, and the boreal forest types are found above 4,000 feet (ft) (1,219 meters (m)) in elevation (McKelvey *et al.* 2000b, pp. 243–245; McAllister *et al.* 2000, entire). Thus, we limited the delineation of revised critical habitat to lands above this elevation. Additionally, in the North Cascades, physical and biological features essential to the conservation of the lynx, the majority of the lynx records, and evidence of reproduction occur east of the crest of the Cascade Mountains. Therefore, in the Cascades we used the border with Canada, the Cascade crest, and the 4,000-ft (1,219-m) elevation contour east of the crest as the boundary. In the Northern Rockies, the 4,000-ft (1,219-m) contour was used as the primary boundary west of the Continental Divide. However, the climatic effects of the Continental Divide cause the 4,000-ft (1,219-m) elevation contour to be too broad east of the Continental Divide, such that it includes substantial areas of grassland habitats that do not contain the physical and biological features essential to the lynx or are not important for snowshoe hares. Therefore, east of the Continental Divide in the Northern Rockies we used National Forest and National Park Service (NPS) park boundaries to circumscribe proposed revised critical habitat boundaries to more closely encompass essential features; recent records of lynx, including records of reproduction; and boreal forest currently occupied by lynx. The northern boundary for the Northern Rockies unit is the border with Canada.

Delineating proposed revised lynx critical habitat boundaries in the Greater Yellowstone Area (GYA) was more challenging because it is a complex, high elevation ecosystem in which simply following elevation contours would be too broad in that they would encompass extensive areas of non-lynx habitat. Furthermore, the GYA has the least amount of available lynx-related research to assist us in delineating boundaries. Therefore, we drew the boundaries in the GYA around the majority of recent lynx records using a combination of National Forest boundaries and township lines to encompass the lynx habitat in this area.

As discussed above, we are seeking information on whether lands within the GYA contain physical and biological features essential to the conservation of

the lynx because the habitat appears to be of lesser quality, and lynx occur at lower densities than the populations found in other units. Although lynx currently occupy the GYA (Murphy *et al.* 2004, entire; J. Squires, Rocky Mountain Research Station, unpubl. data; S. Gehman, Wildthings Unlimited, unpubl. data), their presence has been at a naturally lower level compared to the other areas we are proposing as revised critical habitat. In the clarification of findings published in the **Federal Register** on July 3, 2003 (68 FR 40076), we concluded that habitat in this area is less capable than other areas of supporting snowshoe hares because it is naturally patchy and contains drier forest types, and because the GYA is disjunct from likely source populations. Within Yellowstone National Park, few lynx were detected during recent surveys (Murphy *et al.* 2004, pp. 8–9) and hare densities were very low (Hodges and Mills 2005, pp. 5–6). Murphy *et al.* (2004, pp. 9–10) concluded that elevations and slope aspects cause lynx habitat in this area to be naturally highly fragmented resulting in low lynx densities. Few lynx were documented in the Wyoming Mountain Range in the southern portion of the ecosystem (Squires and Laurion 2000, pp. 343–345; Squires *et al.* 2001, pp. 9–10). On study sites on the western edge of the Yellowstone ecosystem in Idaho, the subalpine fir vegetation series that comprises lynx and snowshoe hare habitat was found only in naturally small, discontinuous patches (McDaniel and McKelvey 2004, pp. 15–18). In this study area, few stands supported snowshoe hare densities similar to areas known to support lynx (McKelvey and McDaniel 2001, pp. 11–18).

If we determine, based on the best available scientific information and information obtained through public comments, that the GYA does not contain the physical and biological features essential to the conservation of lynx, we will not include it in the final rule. If we determine the area (or portions of it) does contain the features essential to the conservation of lynx, we intend to further refine the critical habitat boundary in the final rule based on improved mapping data and lynx occurrence data. Due to the fragmented mosaic nature of the GYA unit, it will by necessity contain patches of habitat that do not fit into the moist boreal forest types (*e.g.*, dry douglas fir, non-forest, or other habitats that do not support snowshoe hares, hereafter “matrix habitat”) usually considered lynx habitat. The inclusion of matrix habitat in this and other units is

necessary due to the inclusion of these areas in lynx home ranges and their use as travel habitat as lynx move between foraging and denning areas within their home ranges. Matrix habitat is included because it is interwoven with moist boreal forest types and, therefore, is used by lynx to travel unimpeded between foraging and denning areas within their home ranges. The important aspect of matrix habitat for lynx is that movement through it is not impeded.

We are also seeking information on whether the Kettle Range in north-central Washington is an area essential to the conservation of the lynx in the contiguous United States. Trapping records from the 1960s and 1970s show that the lynx population that once inhabited this area underwent dramatic swings in abundance going from high levels of harvest to low levels several times over two decades (McKelvey 1999, pp. 13–14). Since the 1970s, the area appears to have been unoccupied due to a lack of verifiable reports of lynx. Snow-tracking surveys conducted from 1992 to 1996 in the Kettle Range resulted in only two sets of tracks: one in 1991–1992 and one in 1995–1996. This indicates the lack of a reproducing population of lynx at that time. The Kettle Range currently has suitable lynx habitat (Koehler 2008) and the possibility that lynx occur does exist; however, the lack of verified occurrences since 1995 leads us to conclude that it is not likely to be occupied.

We are not currently proposing any areas outside the geographical area presently occupied by the species because we have determined that occupied areas are sufficient for the conservation of the species because these areas adequately address the concepts of representation, resiliency, and redundancy necessary for conservation of a species (Shaffer and Stein 2000). Resiliency of a species allows the species to recover from periodic disturbance. Areas are resilient if they are relatively large and contain particularly high-quality habitat or if their location or characteristics make them less susceptible to certain threats than other portions of the range. Resiliency of a species allows the species to recover from periodic disturbance. A species will likely be more resilient if large populations exist in high-quality habitat that is distributed throughout the range of the species in such a way as to capture the environmental variability found within the range of the species. The proposed revised critical habitat addresses the concept of resiliency because the total

area of the five units covers a large geographic area (42,753 mi² (110,727 km²)), and because it contains the highest quality habitat in the United States. Redundancy of populations may be needed to provide a margin of safety for the species to withstand catastrophic events. The idea is to conserve enough areas of the range such that random perturbations in the system act on only a few populations. The proposed revised critical habitat addresses the concept of redundancy because it includes five units distributed across a broad geographic area. Catastrophic events that could affect all five units are extremely improbable. Adequate representation insures that the species' adaptive capabilities (often as indicated by genetic diversity) are conserved. Genetic representation is not an issue for lynx, because lynx across the range are similar and all share the same haplotypes (Rueness *et al.* 2003, p. 71). Thus, we have determined that the five units contained in this proposed revised critical habitat address the concept of representation.

Lynx in the southern portion of their range exhibit metapopulation dynamics (*i.e.*, populations exist as semi-isolated subpopulations connected to other subpopulations by migration) (Thiel 1987, p. 94; McKelvey *et al.* 1999, p. 24). The southern extensions of the North American lynx population that extend into the contiguous United States occur in marginal and naturally fragmented habitats and are likely dependent on migration from the core portion of the metapopulation in the Canadian taiga for genetic and demographic enrichment (McCord and Cardoza 1982, p. 729; McKelvey 1999, p. 232). Occupied areas within the current distribution of lynx (except for the reintroduced Colorado population) are the areas that have been most consistently occupied by reproducing populations (McKelvey 1999, pp. 211–232) and are the largest patches of suitable lynx habitat within the range of the DPS. Patches of lynx habitat outside of this occupied range are generally smaller and more isolated and have inconsistent records of lynx presence and reproduction, or no record at all (McKelvey 1999, pp. 211–232). Due to their high mobility, lynx may periodically occupy these areas; however, the lack of consistent occupation and reproduction means that these areas do not materially contribute to persistence of the DPS while the proposed areas clearly do.

In summary, the area occupied by the lynx in the contiguous United States is broadly delineated by the distribution of the southern extensions of boreal forest, which occur in the Northeast (portions

of Maine, New Hampshire, Vermont, New York); the western Great Lakes (portions of Minnesota, Wisconsin, Michigan); the Northern Rocky Mountains/Cascades (portions of Washington, Oregon, Idaho, Montana, northwestern Wyoming, Utah); and the Southern Rocky Mountains (portions of Colorado, southeastern Wyoming) (Agee 2000, pp. 39–45; McKelvey *et al.* 2000b, pp. 211–232, 242–253; Hoving *et al.* 2003, pp. 368–373). Within this broad distribution, the recovery outline (Service 2005, entire) delineated core areas that contain consistent, verified records of lynx over time and evidence of reproduction within the past 20 years. The long-term occupation of these general areas by lynx supports the assumption that they contain habitats sufficient in quality and quantity to continue to sustain lynx populations. An additional factor strongly influencing the sustainability of all core areas with the exception of the GYA is their connection with larger lynx populations in Canada. Each proposed revised critical habitat unit occurs within one of the areas identified as core in the recovery outline.

Relationship to Recovery Outline

We considered the lynx recovery outline (Service 2005) when developing this proposed revised critical habitat rule for lynx. However, the recovery outline and this proposed rule contain some differences. Recovery outlines are brief, internally-developed documents intended as preliminary strategies for the conservation of a listed species until a formal recovery plan is completed (Service 1989, entire; Service 1990, p. 6; National Marine Fisheries Service 2004, pp. 3.0–1 to 3.1–1). The lynx recovery outline was prepared by Service staff experienced in lynx conservation and recovery planning under the Act and two lynx experts from the USFS. The lynx recovery outline presented the understanding of historical and current lynx distribution, ecology, and population dynamics at the time it was written in 2005. The outline introduces concepts regarding the relative importance of different geographic areas to the persistence of lynx in the contiguous United States, identifying areas as either core, provisional core, secondary, or peripheral based primarily on lynx records over time and evidence of reproduction. Additionally, the outline describes preliminary recovery objectives and actions.

The recovery outline and this proposed revised critical habitat rule used different standards and criteria. The recovery outline did not consider what areas contain the physical and

biological features that are essential to the conservation of lynx; rather, the preparers concentrated on distinguishing between areas with past or present lynx populations and those with lynx occurrence records that were unlikely to support reproducing populations. In designating critical habitat, we are required to determine those areas that contain the physical and biological features essential to the conservation of lynx within the geographical area occupied by the species. We have determined that areas that contain the physical and biological features essential to the conservation of lynx are those with verified records of lynx persistence into the present time and with verified evidence of reproduction. The areas identified as core in the recovery outline roughly coincide with the areas proposed as revised critical habitat with the following exceptions: (1) Mapping for the purposes of the recovery outline was done on a coarse scale without refined GIS layers, while the mapping done for the purposes of this proposed rule were more exact; and (2) further analysis shows that some areas considered core in the recovery outline (e.g., the Kettle Range and New Hampshire) do not meet the criteria for core because they do not have long-term evidence of reproduction or current occupancy (see discussion below).

The recovery outline did not define which areas are essential to the conservation of lynx as is necessary for this revised proposed critical habitat designation. The criteria we used for determining areas essential to the conservation of lynx for this proposed revised critical habitat were more narrowly defined than those used for delineating the recovery areas in the lynx recovery outline; in particular, for critical habitat we focused closely on areas with reliable evidence of lynx reproduction since 1995. We used 1995 because of the Act's definition at 3(5)(A)(i) that occupied habitat include specific areas within the geographical area occupied by the species at the time it is listed. We believe that the documented lynx observations since 1995 best depict the range of the species both at the time it was listed (2000) and at the time of our clarification of findings (2003). Furthermore, the boundaries for the recovery areas were drawn on a gross scale compared to the proposed revised critical habitat boundaries. As a result, the proposed revised critical habitat units are subsets of five of the six areas preliminarily delineated as core in the lynx recovery outline.

In this revision, we do not propose revised critical habitat in one area the recovery outline defined as core: the Kettle Range in north-central Washington. The Kettle Range historically supported lynx populations (Stinson 2001, pp. 13–14). However, although boreal forest habitat within the Kettle Range appears of high quality for lynx, there is no evidence that the Kettle Range is currently occupied by a lynx population nor has it been for at least two decades (McKelvey 1999, p. 228; Koehler 2008, entire). Furthermore, it does not have recent (*i.e.*, 20 years) evidence of reproduction. Thus, it does not meet the criteria for “core” outlined in the recovery outline (Service 2005, p. 5). Snowtracking surveys conducted from 1992 to 1996 in the Kettle Range resulted in only two sets of tracks: one in 1991–1992 and one in 1995–1996 (McKelvey 1999, p. 228), indicating that although lynx may have been able to reach the range, they were unable to establish a population there. The above described attributes of the Kettle Range indicate that while this area may be considered a core area in the recovery outline, its importance for lynx conservation is less than those areas that we consider essential for the conservation of lynx due to their historic and recent history of reproduction and population occupation. We have made the preliminary determination that the area is not essential for the conservation of lynx; therefore, we do not propose to include it as revised critical habitat.

Likewise, the areas included in the recovery outline as core in western Maine and New Hampshire do not appear now to meet the criteria for core. No lynx were detected in New Hampshire and western Maine in the course of surveys done according to the standard lynx protocol for this region in 2005 (for New Hampshire) and 2006–2007 (in western Maine) (McCullough 2008, entire).

The recovery outline identified the Southern Rocky Mountains as a “provisional core” because of the current uncertainty that ongoing lynx reintroduction efforts will result in a self-sustaining lynx population. Native lynx were functionally extirpated from their historic range in Colorado and southern Wyoming by the time the lynx was listed in 2000. In 1999, the State of Colorado began an intensive effort to reintroduce lynx. Initial results of this reintroduction were encouraging, with documented rates of reproduction similar to other lynx populations in the DPS (Shenk 2007, pp. 12–13). However, subsequent monitoring indicates that

rates of reproduction have fallen in recent years, with zero reproduction detected for 34 females with radio collars in 2007 (Shenk 2007, p. 13). Although it is still too early to determine whether the introduction will result in a self-sustaining population, the reintroduced lynx have produced kittens and now are distributed throughout the lynx habitat in Colorado and southern Wyoming. These animals are not designated as experimental under section 10(j) of the Act. Although Colorado's reintroduction effort is an important step toward the recovery of lynx, we do not propose habitat in the Southern Rockies for revised designation because of the current uncertainty that a self-sustaining lynx population will become established. Determination of establishment will be based on the maintenance of a stable or naturally oscillating population structure composed of breeding individuals derived from wild mating and births (rather than introduced animals). A population that has demonstrated robustness to natural fluctuations due to oscillations in prey abundance is key to determining that they are established.

Many areas within the contiguous United States contain varying levels of individual lynx records with no evidence of persistent, reproducing lynx populations. Our review of many years of occurrence records reveals lynx records in areas with unsuitable habitats or snow conditions. However, we do not consider these areas capable of supporting lynx populations because they do not have the habitat or snow conditions suitable for lynx or snowshoe hare. Lynx occurrence in these areas is due to the population dynamics of lynx and their dispersal abilities that lead to lynx attempting to colonize new areas with little ability to support lynx reproduction. That is why we rely on a combination of consistent, verifiable evidence of lynx presence and reproduction, along with habitat characteristics to delimit critical habitat. Reliance on occurrence records alone, without consideration of reproduction and habitat variables, would lead to designation of large areas that may occasionally hold dispersing lynx for a short time, but due to their marginal nature and lack of sufficient food supply, will not support lynx reproduction and so do not contribute to lynx conservation. It is unlikely that these areas support undocumented, persistent populations of lynx because the forest types, snow conditions, and snowshoe hare populations are absent or are of such marginal condition due to

natural fragmentation that their ability to support lynx is minimal. In many cases these areas also support populations of bobcats, a species that excludes lynx from areas with low snow accumulation and act as a general indicator of habitat that cannot support lynx. Most of the records in these areas are likely a result of wide-ranging dispersal events through less suitable habitats that are mostly disjunct from areas that contain persistent lynx populations. Our recovery outline defines these areas as secondary or peripheral (see Service 2005, p. 21 for a map of core, secondary, and peripheral areas), and their role in sustaining persistent lynx populations is unclear. Such areas may provide habitat to dispersing lynx, especially when populations are extremely high and some of these animals may eventually settle in areas capable of supporting lynx populations. Areas delineated as secondary or peripheral in the lynx recovery outline are not included in our proposed revised critical habitat designation because they lack evidence of reproducing lynx populations and they lack large areas of contiguous habitat required to support populations. During natural lynx population fluctuations, these peripheral areas are likely to be the last areas to be colonized by excess lynx and the first to lose lynx as populations recede. We expect the areas in the proposed revised units to maintain lynx populations through natural population lows and serve as source populations for secondary areas as populations expand. We expect the areas in the proposed revised units will support lynx through cyclic population fluctuations, the most crucial time being the population lows. We consider the proposed revised units as the areas essential to provide for the long-term conservation of lynx across its

contiguous United States range, as it is these areas that will serve as source populations for secondary areas as the populations expand. For this reason, we have determined the units in this proposed revision contain the physical and biological features essential to the conservation of lynx while other areas do not.

We propose critical habitat on lands we have determined were occupied at the time of listing; currently support the most abundant, reproducing lynx populations in the contiguous United States; and contain the physical and biological features essential to the conservation of the lynx and that may require special management. The focus of our proposed critical habitat revision is on boreal forest landscapes of sufficient size to encompass the temporal and spatial changes in habitat and snowshoe hare populations necessary to support interbreeding lynx populations or metapopulations over time. Individual lynx maintain large home ranges; the areas proposed as revised critical habitat are large enough to encompass multiple home ranges. A secondary consideration is that, in addition to supporting breeding populations, these areas provide connectivity among patches of foraging habitat (e.g., patches containing abundant snowshoe hares), whose locations in the landscape shift through time.

When determining proposed revised critical habitat boundaries within this proposed rule, we made every effort to avoid including water bodies (lakes, rivers, and streams) and developed areas such as buildings, paved areas, and other structures that lack the physical and biological features essential for the conservation of the lynx. The scale of the maps we prepared under the parameters for publication within the Code of Federal Regulations may not

reflect the exclusion of such developed areas. Any such structures and the land under them inadvertently left inside critical habitat boundaries shown on the maps of this proposed rule have been excluded by text in the proposed rule and are not proposed for designation as revised critical habitat. Therefore, Federal actions involving these areas would not trigger consultation under section 7 of the Act with respect to critical habitat, unless the specific action would affect the primary constituent element.

Proposed Revised Critical Habitat Designation

We are proposing five units as revised critical habitat for the lynx. These areas occur in northern Maine, northeastern Minnesota, the Northern Rocky Mountains (northwestern Montana/northeastern Idaho), the North Cascades (north-central Washington), and the GYA (southwestern Montana, northwestern Wyoming). The areas are distributed across the known occupied range of the lynx in the contiguous United States, and are essential to the conservation of the species. The critical habitat areas we describe below constitute our current best assessment of areas that meet the definition of critical habitat for lynx. To better understand the location of these proposed areas, please see the associated maps found within this proposed rule or examine them at <http://mountain-prairie.fws.gov/species/mammals/lynx/>. The five proposed revised critical habitat units are: (1) Northern Maine unit; (2) Northeastern Minnesota unit; (3) Northern Rocky Mountains unit (northwestern Montana/northeastern Idaho); (4) North Cascades unit (north-central Washington); and (5) Greater Yellowstone Area (southwestern Montana, northwestern Wyoming).

TABLE 1.—CRITICAL HABITAT UNITS PROPOSED FOR THE CANADA LYNX

Critical habitat unit	Miles ²	Kilometers ²
1. Northern Maine	10,633	27,539
2. Northeastern Minnesota	8,226	21,305
3. Northern Rocky Mountains (ID/MT)	11,304	29,276
4. North Cascades (WA)	2,000	5,180
5. Greater Yellowstone Area (MT/WY)	10,590	27,427
Total	42,753	110,727

TABLE 2.—CRITICAL HABITAT PROPOSED FOR THE CANADA LYNX BY LANDOWNERSHIP AND STATE (MI²/KM²)

	Federal	State	Private	Tribal	Other
Idaho	50/131	1/3	0/0	0/0	0/0
Maine	13/34	758/1,962	9,741/25,230	86/223	35/90
Minnesota	4,279/11,082	1,099/2,848	1,548/4,008	72/187	1,149/2,976
Montana	11,182/28,960	372/964	1,985/5,140	347/898	72/188

TABLE 2.—CRITICAL HABITAT PROPOSED FOR THE CANADA LYNX BY LANDOWNERSHIP AND STATE (MI²/KM²)—Continued

	Federal	State	Private	Tribal	Other
Washington	1,831/4,742	164/424	5/13	0/0	0.1/0.2
Wyoming	7,695/19,930	14/36	133/343	0/0	43/110
Total	25,050/64,879	2,408/6,237	13,412/34,737	505/1,308	1,299/3,364

We present brief descriptions of each critical habitat unit below.

Unit 1: Northern Maine [10,633 mi² (27,539 km²)]

Unit 1 is located in northern Maine in portions of Aroostook, Franklin, Penobscot, Piscataquis, and Somerset Counties. This area was occupied by the lynx at the time of listing and is currently occupied by the species. Lynx in northwestern Maine have high productivity: 91 percent of available adult females (greater than 2 years) produced litters, and litters averaged 2.83 kittens (Vashon *et al.* 2005b, pp. 4–6). This area contains the physical and biological features essential to the conservation of the lynx as it is comprised of the primary constituent element and its components laid out in the appropriate quantity and spatial arrangement. This area is also important for lynx conservation because it is the only area in the northeastern region of the lynx's range within the contiguous United States that currently supports breeding lynx populations and likely acts as a source or provides connectivity for more peripheral portions of the lynx's range in the Northeast. Timber harvest and management is the dominant land use within the unit; therefore, special management is required depending on the silvicultural practices conducted (68 FR 40075). Timber management practices that provide for a dense understory are beneficial for lynx and snowshoe hares. In this area, other habitat-related threats to lynx are lack of an International conservation strategy for lynx, traffic, and development (68 FR 40075).

Unit 2: Northeastern Minnesota [8,226 mi² (21,305 km²)]

Unit 2 is located in northeastern Minnesota in portions of Cook, Koochiching, Lake, and St. Louis Counties, and Superior National Forest. In 2003, when we last formally reviewed the status of the lynx, numerous verified records of lynx existed from northeastern Minnesota (68 FR 40076, July 3, 2003). The area was occupied at the time of listing and is currently occupied by the species. Lynx are currently known to be distributed throughout northeastern Minnesota, as has been confirmed through DNA

analysis, radio- and GPS-collared animals, and documentation of reproduction (Moen *et al.* 2004, entire; Minnesota DNR 2005, entire; S. Loch, unpubl. data; Minnesota Department of Natural Resources, unpubl. data). This area contains the physical and biological features essential to the conservation of the lynx as it is comprised of the primary constituent element and its components laid out in the appropriate quantity and spatial arrangement. This area is essential to the conservation of lynx because it is the only area in the U.S. Great Lakes region for which we have evidence of recent lynx reproduction. It likely acts as a source or provides connectivity for more peripheral portions of the lynx's range in the region. Timber harvest and management is a dominant land use (68 FR 40075). Therefore, special management is required depending on the silvicultural practices conducted. Timber management practices that provide for a dense understory are beneficial for lynx and snowshoe hares. In this area, lack of an International conservation strategy for lynx, fire suppression or fuels treatment, traffic, and development are other habitat-related threats to lynx (68 FR 40075).

Specific sections of land encompassing a mining district in Minnesota known as the Iron Range are not included in this proposed revised designation because they do not contain the physical and biological features essential to the conservation of lynx. In much of the Iron Range, mining has removed all vegetation and much of this area was subsequently flooded. Areas that are still vegetated and not flooded are extensively fragmented by the mined areas and haul roads. We used the "GAP Land Cover—Tiled Raster" dataset (Minnesota Department of Natural Resources 2002) to identify sections that are heavily influenced by mining activities. Areas described as "Barren" and "Mixed Developed" in the GAP dataset seemed to correspond to areas that were mined or extensively disturbed by mining-related activities (e.g., service roads), based on aerial photos (National Agricultural Imagery Program 2003). Further inspection of the aerial photos indicate there are additional sections with extensive effects of mining, beyond that indicated

by the GAP data, which is based on 10–15-year-old satellite imagery. These disturbed areas are not proposed as revised lynx critical habitat.

Unit 3: Northern Rocky Mountains [11,304 mi² (29,276 km²)]

Unit 3 is located in northwestern Montana and a small portion of northeastern Idaho in portions of Boundary County in Idaho and Flathead, Glacier, Granite, Lake, Lewis and Clark, Lincoln, Missoula, Pondera, Powell and Teton Counties in Montana. It includes the Flathead Indian Reservation, National Forest lands, and Bureau of Land Management (BLM) lands in the Garnet Resource Area. This area was occupied by lynx at the time of listing and is currently occupied by the species. Lynx are known to be widely distributed throughout this unit and breeding has been documented in multiple locations (Gehman *et al.* 2004, pp. 24–29; Squires *et al.* 2004a, pp. 7–10 and 2004b, pp. 8–10). This area contains the physical and biological features essential to the conservation of the lynx as it is comprised of the primary constituent element and its components laid out in the appropriate quantity and spatial arrangement. This area is essential to the conservation of lynx because it appears to support the highest density lynx populations in the Northern Rocky Mountain region of the lynx's range. It likely acts as a source for lynx and provides connectivity to other portions of the lynx's range in the Rocky Mountains, particularly the Yellowstone area. Timber harvest and management is a dominant land use (68 FR 40075); therefore, special management is required depending on the silvicultural practices conducted. Timber management practices that provide for a dense understory are beneficial for lynx and snowshoe hares. In this area, fire suppression or fuels treatment, lack of an International conservation strategy for lynx, traffic, and development are other habitat-related threats to lynx (68 FR 40075).

Unit 4: North Cascades [2,000 mi² (5,180 km²)]

Unit 4 is located in north-central Washington in portions of Chelan and Okanogan Counties, and includes BLM lands in the Spokane District. This area

was occupied at the time lynx was listed and is currently occupied by the species. This unit supports the highest densities of lynx in Washington (Stinson 2001). Evidence from limited recent research and DNA shows lynx distributed within this unit, with breeding being documented (von Kienast 2003, p. 36; K. Aubry, Pacific Northwest Research Station, unpubl. data; B. Maletzke, Washington State University, unpubl. data). Although there appear to be fewer records in the portion of the unit south of Highway 20, few surveys have been conducted in this portion of the unit. This area contains boreal forest habitat and the components essential to the conservation of the lynx. Further, it is contiguous with the portion of the unit north of Highway 20, particularly in winter when deep snows close Highway 20. The northern portion of the unit adjacent to the Canadian border also appears to support few recent lynx records; however, it is designated wilderness, so access to survey this area is difficult. This northern portion contains extensive boreal forest vegetation types and the components essential to the conservation of the lynx. Additionally, lynx populations exist in British Columbia directly north of this unit (E. Lofrothe, British Columbia Ministry of the Environment, unpubl. data). This area contains the physical and biological features essential to the conservation of the lynx as it contains the primary constituent element and its components laid out in the appropriate quantity and spatial arrangement. This area is essential to the conservation of lynx because it is the only area in the Cascades region of the lynx's range that is known to support breeding lynx populations. Timber harvest and management is a dominant land use; therefore, special management is required depending on the silvicultural practices conducted. Timber management practices that provide for a density understory are beneficial for lynx and snowshoe hares. In this area, Federal land management plans have not been amended to incorporate lynx conservation. The lack of an International conservation strategy for lynx, traffic, and development are other habitat-related threats to lynx (68 FR 40075).

*Unit 5: Greater Yellowstone Area
(10,590 mi² (27,427 km²))*

Unit 5 is located in Yellowstone National Park and surrounding lands in southwestern Montana and northwestern Wyoming. Lands in this unit are found in Gallatin, Park, Sweetgrass, Stillwater, and Carbon

Counties in Montana, and Park, Teton, Fremont, Sublette, and Lincoln Counties in Wyoming. This area was occupied by lynx at the time of listing and is currently occupied by the species. The area contains the physical and biological features essential to the conservation of the lynx as it contains the primary constituent element and its components laid out in the appropriate quantity and spatial arrangement. The GYA is naturally marginal lynx habitat with highly fragmented foraging habitat. For this reason lynx home ranges in this unit are likely to be larger and incorporate large areas of non-foraging matrix habitat. In this area, fire suppression or fuels treatment, lack of an International conservation strategy for lynx, traffic, and development are other habitat-related threats to lynx (68 FR 40075). Therefore, special management is required depending on the fire suppression and fuels treatment practices conducted and the design of highway development projects.

Effects of Critical Habitat Designation

Section 7 Consultation

Section 7(a)(2) of the Act requires Federal agencies, including the Service, to ensure that actions they fund, authorize, or carry out are not likely to destroy or adversely modify critical habitat. Decisions by the 5th and 9th Circuit Court of Appeals have invalidated our definition of "destruction or adverse modification" (50 CFR 402.02) (see *Gifford Pinchot Task Force v. U.S. Fish and Wildlife Service*, 378 F.3d 1059 (9th Cir. 2004) and *Sierra Club v. U.S. Fish and Wildlife Service et al.*, 245 F.3d 434, 442F (5th Cir. 2001)), and we do not rely on this regulatory definition when analyzing whether an action is likely to destroy or adversely modify critical habitat. Under the statutory provisions of the Act, we determine destruction or adverse modification on the basis of whether, with implementation of the proposed Federal action, the affected critical habitat would remain functional (or retain the current ability for the PCEs to be functionally established) to serve its intended conservation role for the species (Jones 2004, p. 3).

Section 7(a)(4) of the Act requires Federal agencies to confer with us on any action that is likely to jeopardize the continued existence of a proposed species or result in destruction or adverse modification of proposed critical habitat. Conference reports provide conservation recommendations to assist the agency in eliminating conflicts that may be caused by the proposed action. We may issue a formal

conference report if requested by a Federal agency. Formal conference reports on proposed critical habitat contain an opinion that is prepared according to 50 CFR 402.14, as if critical habitat were designated. We may adopt the formal conference report as the biological opinion when the critical habitat is designated, if no substantial new information or changes in the action alter the content of the opinion (see 50 CFR 402.10(d)). The conservation recommendations in a conference report are advisory.

If a species is listed or critical habitat is designated, section 7(a)(2) of the Act requires Federal agencies to ensure that activities they authorize, fund, or carry out are not likely to jeopardize the continued existence of the species or to destroy or adversely modify its critical habitat. If a Federal action may affect a listed species or its critical habitat, the responsible Federal agency (action agency) must enter into consultation with us in most cases. As a result of this consultation, we document compliance with the requirements of section 7(a)(2) through our issuance of:

- (1) A concurrence letter for Federal actions that may affect, but are not likely to adversely affect, listed species or critical habitat; or
- (2) A biological opinion for Federal actions that may affect, and are likely to adversely affect, listed species or critical habitat.

An exception to the concurrence process referred to in (1) above occurs in consultations involving National Fire Plan projects. When we issue a biological opinion concluding that a project is likely to jeopardize the continued existence of a listed species or destroy or adversely modify critical habitat, we also provide reasonable and prudent alternatives to the project, if any are identifiable. We define "Reasonable and prudent alternatives" at 50 CFR 402.02 as alternative actions identified during consultation that:

- Can be implemented in a manner consistent with the intended purpose of the action,
- Can be implemented consistent with the scope of the Federal agency's legal authority and jurisdiction,
- Are economically and technologically feasible, and
- Would, in the Director's opinion, avoid jeopardizing the continued existence of the listed species or destroying or adversely modifying critical habitat.

Reasonable and prudent alternatives can vary from slight project modifications to extensive redesign or relocation of the project. Costs associated with implementing a

reasonable and prudent alternative are similarly variable.

When we issue a biological opinion concluding that a project is not likely to jeopardize a listed species or adversely modify critical habitat, but may result in incidental take of listed animals, we provide an incidental take statement that specifies the impact of such incidental taking on the species. We then define "Reasonable and Prudent Measures" considered necessary or appropriate to minimize the impact of such taking. Reasonable and prudent measures are binding measures the action agency must implement to receive an exemption to the prohibition against take contained in section 9 of the Act. These reasonable and prudent measures are implemented through specific "Terms and Conditions" that must be followed by the action agency or passed along by the action agency as binding conditions to an applicant. Reasonable and prudent measures, along with the terms and conditions that implement them, cannot alter the basic design, location, scope, duration, or timing of the action under consultation and may involve only minor changes (50 CFR 402.14). The Service may provide the action agency with additional conservation recommendations, which are advisory and not intended to carry binding legal force.

Regulations at 50 CFR 402.16 require Federal agencies to reinstate consultation on previously reviewed actions in instances where we have listed a new species or subsequently designated critical habitat that may be affected and the Federal agency has retained discretionary involvement or control over the action (or the agency's discretionary involvement or control is authorized by law). Consequently, Federal agencies may sometimes need to request reinstatement of consultation with us on actions for which formal consultation has been completed, if those actions with discretionary involvement or control may affect subsequently listed species or designated critical habitat.

Federal activities that may affect lynx or its designated critical habitat require section 7 consultation under the Act. Activities on State, Tribal, local, or

private lands requiring a Federal permit (such as a permit from the U.S. Army Corps of Engineers under section 404 of the Clean Water Act (33 U.S.C. 1251 *et seq.*) or a permit from us under section 10 of the Act) or an activity involving some other Federal action (such as funding from the Federal Highway Administration, Federal Aviation Administration, or the Federal Emergency Management Agency) are subject to the section 7 consultation process. Federal actions not affecting listed species or critical habitat, and actions on State, Tribal, local, or private lands that are not federally funded, authorized, or permitted, do not require section 7 consultation.

Application of the "Adverse Modification" Standard

The key factor related to the adverse modification determination is whether, with implementation of the proposed Federal action, the affected critical habitat would continue to serve its intended conservation role for the species, or would retain its current ability for the primary constituent element(s) to be functionally established. Activities that may destroy or adversely modify critical habitat are those that alter the physical and biological features to an extent that appreciably reduces the conservation value of critical habitat for lynx. Generally, the conservation role of the proposed revised lynx critical habitat units is to support viable populations.

Section 4(b)(8) of the Act requires us to briefly evaluate and describe in any proposed or final regulation that designates critical habitat those activities involving a Federal action that may destroy or adversely modify such habitat, or that may be affected by such designation.

Activities that that when carried out, funded, or authorized by a Federal agency, may adversely affect critical habitat and therefore should result in consultation for the lynx include, but are not limited to, the following:

(1) Actions that would reduce or remove understory vegetation within boreal forest stands. Such activities could include, but are not limited to, pre-commercial thinning or fuels treatment of forest stands. These activities could significantly reduce the

quality of snowshoe hare habitat such that the landscape's ability to produce adequate densities of snowshoe hares to support persistent lynx populations is at least temporarily diminished. Where moist boreal forest stands occur in a mosaic along with matrix habitat, the above described activities within the matrix habitat portions of the unit would not affect the physical and biological features essential to the conservation of the lynx.

(2) Actions that would cause permanent loss or conversion of the boreal forest. Such activities could include, but are not limited to, recreational area developments, certain types of mining activities and associated developments, and road building. Such activities would eliminate and fragment lynx and snowshoe hare habitat. Where moist boreal forest stands occur in a mosaic surrounded by matrix habitats, the above described activities within the matrix habitat portion of the unit would not affect the physical and biological features essential to the conservation of the lynx.

(3) Actions that would increase traffic volume and speed on roads that divide lynx critical habitat. Such activities could include, but are not limited to, transportation projects to upgrade roads or development of a new tourist destination. These activities could reduce connectivity within the boreal forest landscape for lynx and could result in increased mortality of lynx within the proposed revised critical habitat units as lynx are highly mobile and frequently cross roads during dispersal, exploratory movements, or travel within their home ranges.

Note that the scale of these activities would be a crucial factor in determining whether, in any instance, they would directly or indirectly alter critical habitat to the extent that the value of the critical habitat for the survival and recovery of lynx would be appreciably diminished.

If you have questions regarding whether specific activities may constitute destruction or adverse modification of critical habitat, contact the Supervisor of the appropriate Ecological Services Field Office (see list below).

State	Address	Phone No.
Maine	1168 Main Street, Old Town, Maine 04468	(207) 827-5938
Minnesota	4101 East 80th Street, Bloomington, Minnesota 55425	(612) 725-3548
Montana	585 Shepard Way, Helena, Montana 59601	(406) 449-5225
Idaho and Washington	11103 E. Montgomery Drive, Spokane, Washington 99206	(509) 893-8015
Wyoming	5353 Yellowstone Road, Suite 308A, Cheyenne, Wyoming 82009	(307) 772-2374

Application of Section 4(a)(3)(B)(i) of the Act

The National Defense Authorization Act for Fiscal Year 2004 (Pub. L. 108–136) amended the Act to limit areas eligible for designation as critical habitat. Specifically, section 4(a)(3)(B)(i) of the Act (16 U.S.C. 1533(a)(3)(B)(i)) now provides: “The Secretary shall not designate as critical habitat any lands or other geographical areas owned or controlled by the Department of Defense, or designated for its use, that are subject to an integrated natural resources management plan prepared under section 101 of the Sikes Act (16 U.S.C. 670a), if the Secretary determines in writing that such plan provides a benefit to the species for which critical habitat is proposed for designation.”

There are no Department of Defense lands with a completed Integrated Natural Resource Management Plan within the proposed revised critical habitat designation.

Application of Section 4(b)(2) of the Act

Section 4(b)(2) of the Act states that the Secretary must designate and revise critical habitat on the basis of the best available scientific data after taking into consideration the economic impact, national security impact, and any other relevant impact of specifying any particular area as critical habitat. The Secretary may exclude an area from critical habitat if he determines that the benefits of such exclusion outweigh the benefits of specifying such area as part of the critical habitat, unless he determines, based on the best scientific data available, that the failure to designate such area as critical habitat will result in the extinction of the species. The Secretary has broad discretion regarding which factor(s) to use and how much weight to give to any factor.

Under section 4(b)(2) of the Act, we must consider economic impacts. We also consider a number of factors in a section 4(b)(2) analysis. For example, we consider whether there are lands owned or managed by the Department of Defense (DOD) where a national security impact might exist. We also consider whether landowners having proposed critical habitat on their lands have developed any conservation plans for the area, or whether there are conservation partnerships that would be encouraged by designation of, or exclusion from, critical habitat. In addition, we look at any Tribal issues, and consider the government-to-government relationship of the United States with tribal entities. We also consider any social or other impacts that

might occur because of the designation. The National Environmental Policy Act (42 U.S.C. 4321 *et seq.*) (NEPA) analysis we will conduct may also disclose other impacts we may consider in our section 4(b)(2) analysis.

We are conducting an updated economic analysis of the impacts of the proposed critical habitat designation, which will be available for public review and comment when it is complete. Based on public comment on that document, the proposed designation itself, and the information in the final economic analysis, the Secretary may exclude from critical habitat additional areas beyond those identified in this assessment under the provisions of section 4(b)(2) of the Act. This is also addressed in our implementing regulations at 50 CFR 424.19.

Relationship of Critical Habitat to Tribal Lands

In accordance with the Secretarial Order 3206, “American Indian Tribal Rights, Federal-Tribal Trust Responsibilities, and the Endangered Species Act” (June 5, 1997); 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 relevant provision of the Departmental Manual of the Department of the Interior (512 DM 2), we believe that fish, wildlife, and other natural resources on tribal lands are better managed under tribal authorities, policies, and programs than through Federal regulation wherever possible and practicable. Such designation is often viewed by tribes as an unwanted intrusion into tribal self governance, thus compromising the government-to-government relationship essential to achieving our mutual goal of managing for healthy ecosystems upon which the viability of threatened and endangered species populations depend. We believe that conservation of lynx can be achieved off of Tribal lands within the critical habitat units or with the cooperation of Tribes; the amount of Tribal lands within the proposed revised units is relatively small: 86 mi² (223 km²) in the Maine unit; 72 mi² (187 km²) in the Minnesota unit; and 347 mi² (898 km²) in the Northern Rocky Mountains unit. No Tribal lands occur within the North Cascades and GYA units. We have requested comment with regard to the Tribal lands in the Northern Rocky Mountains, Maine, and Minnesota and whether the conservation of lynx can occur with

designation of critical habitat on other lands.

The Tribal lands in the Northern Rockies unit (portions of the Flathead Indian Reservation) are managed by the Confederated Salish and Kootenai Tribes (CSKT) under a Forest Management Plan that incorporates the provisions of the LCAS (CSKT 2000). The Tribes manage these lands in a way that is consistent with lynx conservation.

TRIBAL LANDS UNDER CONSIDERATION FOR EXCLUSION FROM FINAL DESIGNATION AS CRITICAL HABITAT

Critical habitat unit	Reservation or tribe
Maine	Maliseet Tribe. Micmac Tribe. Passamaquoddy Tribe.
Minnesota	Penobscot Tribe. Grand Portage Indian Reservation. Vermillion Lake Indian Reservation.
Northern Rocky Mountains.	Flathead Indian Reservation.
North Cascades	None.
Greater Yellowstone Area.	None.

Economic Analysis

We conducted an analysis of the potential economic impacts of proposing critical habitat for the lynx in 2006 when we designated critical habitat. We will update that analysis with any new information that may be available in addition to considering the economic impacts on lands that are proposed in this revision but that were not previously proposed. We will announce the availability of the draft economic analysis as soon as it is completed, at which time we will seek public review and comment. At that time, copies of the draft economic analysis will be available on the Internet at www.regulations.gov, on the Internet at <http://www.mountain-prairie.fws.gov/species/mammals/lynx/>, or by contacting the Montana Ecological Services Office directly (see **FOR FURTHER INFORMATION CONTACT**).

Peer Review

In accordance with our joint policy published in the **Federal Register** on July 1, 1994 (59 FR 34270), we are obtaining the expert opinions of at least three appropriate independent specialists regarding this proposed rule. The purpose of peer review is to ensure that our proposed revised critical habitat designation is based on scientifically sound data, assumptions, and analyses. We have invited these

peer reviewers to comment during this public comment period on our specific assumptions and conclusions in this proposed designation of revised critical habitat.

Public Hearings

The Act provides for one or more public hearings on this proposal, if we receive any requests for hearings. We must receive your request for a public hearing within 45 days after the date of this **Federal Register** publication. Send your request to an address listed in the **ADDRESSES** section. We will schedule public hearings on this proposal, if any are requested, and announce the dates, times, and places of those hearings, as well as how to obtain reasonable accommodations, in the **Federal Register** and local newspapers at least 15 days before the first hearing.

Required Determinations

Regulatory Planning and Review (E.O. 12866)

This document is not a significant rule and the Office of Management and Budget (OMB) has not reviewed this proposed rule under Executive Order 12866.

Regulatory Flexibility Act (5 U.S.C. 601 et seq.)

Under the Regulatory Flexibility Act (RFA, 5 U.S.C. 601, *et seq.*, as amended by the Small Business Regulatory Enforcement Fairness Act (SBREFA) of 1996), whenever an agency must publish a notice of rulemaking for any proposed or final rule, it must prepare and make available for public comment a regulatory flexibility analysis that describes the effects of the rule on small entities (small businesses, small organizations, and small government jurisdictions). However, no regulatory flexibility analysis is required if the head of the agency certifies the rule will not have a significant economic impact on a substantial number of small entities. SBREFA amended RFA to require Federal agencies to provide a statement of the factual basis for certifying that the rule will not have a significant economic impact on a substantial number of small entities.

Based on our 2005 proposed designation of critical habitat for lynx (70 FR 68294) and associated draft economic analysis, we conducted a preliminary evaluation of the effects to a substantial number of small entities by considering the number of small entities affected within particular types of economic activities (*e.g.*, timber, recreation, public and conservation land management, transportation, and

mining). We considered each industry or category individually. In estimating the numbers of small entities potentially affected, we also considered whether their activities have any Federal involvement. Some kinds of activities are unlikely to have any Federal involvement and so will not be affected by the designation of critical habitat. Designation of critical habitat only affects activities conducted, funded, permitted, or authorized by Federal agencies; other activities are not affected by the designation.

If this revised proposed critical habitat designation is made final, Federal agencies must consult with us if their activities may affect designated critical habitat. Consultations to avoid the destruction or adverse modification of critical habitat would be incorporated into the existing consultation process. Private companies may also be subject to consultation or mitigation impacts.

Several of the activities potentially affected by lynx conservation efforts within the study area (timber, recreation, grazing) involve small businesses. Given the rural nature of the proposed designation, most of the potentially affected businesses in the affected regions are small.

Our draft economic analysis of the 2005 proposed designation evaluated the potential economic effects on small business entities and small governments resulting from conservation actions related to the listing of this species and proposed designation of its critical habitat. We evaluated small business entities in the following categories: timber activities; residential and commercial development; recreation; public lands management and conservation planning; transportation, utilities, and municipal activities; and mining operations. Based on our analysis, impacts associated with small entities are anticipated to occur to timber activities, recreation, public lands management, conservation planning, transportation, and mining. Because no information was available regarding how residential and commercial development may be affected by lynx conservation, the analysis does not quantify specific impacts to residential and commercial development but rather provides the full option value for development within the study area. Thus, residential and commercial development impacts to small entities are not addressed in the SBREFA screening analysis. We are seeking comments from potentially affected small entities involved in timber activities, residential and commercial development, recreation, and mining. The following is a summary

of the information contained in the draft economic analysis:

(a) Timber Activities

According to the draft economic analysis for the 2005 proposed critical habitat, impacts on timberlands have historically resulted from implementation of lynx management plans and project modifications. The majority of forecast impacts on timber relate to potential restrictions on pre-commercial thinning, with nearly half of these impacts occurring on private timberland in Maine. The economic analysis applied two scenarios to bound the impacts resulting from potential changes to timber activities. Under Scenario 2, the upper bound, timber impacts range from \$15.6 million (discounted at 7 percent) to \$33.3 million (discounted at 3 percent) over 20 years. When compared to forestry-related earning across counties in the study area (\$454 million in 2003), these potential losses are approximately 3 to 7 percent of total forestry-related earnings. Total forecast impacts to timber activities range from \$117 million to \$808 million over 20 years. Exhibits C-1 through C-4 of the economic analysis quantify the small timber companies that may be affected by the proposed rule. However, the draft economic analysis states that it is uncertain whether private timber companies will be affected by the designation of critical habitat. Government agencies, such as the U.S. Forest Service, are subject to critical habitat consultations.

(b) Residential and Commercial Development

Because specific information on how residential and commercial development projects would mitigate for impacts to lynx and its habitat is unknown, the draft economic analysis does not attempt to quantify the economic impacts of mitigating development activities. Instead, it presents the full value that may be derived from potential future development within the potential critical habitat. The total projected future development value of areas proposed for designation as critical habitat for the lynx is approximately \$2.26 billion. Approximately 69.1 percent (\$1.56 billion) of this is the value of future development in Minnesota (Unit 2); 25.7 percent (\$579 million) of this is the value of future development in Maine (Unit 1), of which \$1.57 million is proposed for exclusion; and 5.2 percent (\$117 million) of this is the value of future development in Montana. Lands

proposed for critical habitat in Washington are characterized by public lands managed for timber and recreation. As such, residential and commercial development is not considered to be a future land use, and the value of these lands for future development is considered to be negligible. Recognizing that approximately 80 percent of the projected value of potential future residential and commercial development within the area proposed as critical habitat consist of lands within Minnesota and recognizing the potential effects on landowners and development companies, we will consider this information pursuant to section 4(b)(2) of the Act during the development of the final designation.

No North American Industry Classification System (NAICS) code exists for landowners, and the Small Business Administration does not provide a definition of a small landowner. However, recognizing that it is possible that some of the landowners may be small businesses, this analysis provides information concerning the number of landowners potentially affected: An upward estimate of 38 in Maine, 53 in Minnesota, and 110 in Montana. It is possible that a portion of these affected landowners could be small businesses in the residential or commercial land development industry or could be associated businesses, such as builders and developers. Actual conservation requirements undertaken by an individual landowner will depend on how much of a parcel lies within or affects proposed critical habitat. Individual single-family home development has not historically been subject to consultation or habitat conservation requirements for lynx, although consultation could be required if Federal permits from the Army Corps of Engineers, Environmental Protection Agency, or Federal Emergency Management Agency are required.

For these reasons and because the scale of this revised proposed critical habitat is significantly different than the 2005 proposed critical habitat, we are requesting comments from any potentially affected small businesses involved in residential and commercial development activities, about the impacts resulting from the proposed designation of critical habitat. How will small businesses, such as landowners, builders or developers be affected by this critical habitat designation? The economic analysis presents the full potential development value of impacted lands within the potential critical habitat as a baseline, but does not provide a cost estimate. How could this estimate be refined to demonstrate

how small businesses in the residential and commercial development field will be affected by this critical habitat designation? What would you suggest as another measure of these costs?

(c) Recreation

Recreational activities that have the potential to affect the lynx and its habitat include over-the-snow trails for snowmobiling and cross-country skiing, accidental trapping or shooting, and recreation area expansions such as ski resorts, campgrounds, or snowmobile areas. Total forecast costs to all recreation activities in areas proposed for designation are \$1.05 to \$3.46 million, or an annualized estimate of \$57,600 to \$178,000 (applying a 7 percent discount rate) or \$54,500 to \$175,000 (applying a 3 percent discount rate). Impacts to recreation activity forecast in the draft analysis include welfare impacts to individual snowmobilers; however, the level of participation is not expected to change. As no decrease in the level of snowmobiling activity is forecast, impacts to small businesses that support the recreation sector are not anticipated.

Because the scale of this revised proposed critical habitat is significantly different than the 2005 proposed critical habitat, we are requesting comments from any potentially affected small businesses in the involved in recreation activities, about the impacts resulting from the proposed designation of critical habitat. What are the estimated cost impacts of this proposed designation to your small business?

(d) Public lands management and conservation planning

The draft economic analysis for the 2005 proposed critical habitat estimates that total post-designation costs of lynx conservation efforts associated with public and conservation lands management in areas proposed for designation to be approximately \$12.8 million over the next 20 years, or an annualized cost of \$940,000 (present value applying a 7 percent discount rate) or \$767,000 (applying a 3 percent discount rate). The majority of public lands are managed by Federal and State entities that do not qualify as small businesses. As such, designation of critical habitat for lynx is not anticipated to have a significant impact on a substantial number of small businesses involved in public lands management or conservation planning.

(e) Transportation, Utilities, and Municipal Activities

The draft economic analysis for the 2005 proposed critical habitat estimates that total post-designation costs resulting from lynx conservation efforts

associated with transportation, utilities, and municipal activities for areas proposed for designation will range from \$34.9 million to \$55.1 million over the next 20 years, or an annualized value of \$1.9 to 2.9 million (present value applying a 7 percent discount rate) or \$1.8 to \$2.8 million (present value applying a 3 percent discount rate). Of the total post-designation costs, approximately 71 percent are attributed to transportation activities, and 29 percent are attributed to utility and municipal activities. Impacts to transportation and municipal projects are expected to be borne by the Federal and State agencies undertaking lynx-related modifications to these types of projects, including the Federal Highway Administration, the Federal Emergency Management Agency, the U.S. Army Corps of Engineers, and State transportation departments. Since Federal and State entities do not qualify as small businesses, the designation of critical habitat for the lynx is not anticipated to have a significant impact on a substantial number of small businesses associated with transportation, utilities, and municipal activities.

Impacts to dam projects, including costs of remote monitoring for lynx that could be required for relicensing of dams, could be borne by the companies that own the dams. In particular, 14 dams in Minnesota and two in Maine are expected to consider lynx conservation at the time of relicensing. The economic analysis estimated costs of \$13,000 to \$18,000 to each of these 16 dam projects in 2025. Based on these small costs, we do not anticipate that this would be a significant impact to dam operators.

(f) Mining Operations

The draft economic analysis for the 2005 proposed critical habitat estimates total post-designation costs resulting from lynx conservation efforts associated with mining projects of approximately \$430,000, or an annualized rate of \$38,000 (present value applying a 7 percent discount rate) or \$28,100 (present value applying a 3 percent discount rate). Unit 2 (Minnesota) is the only area of potential critical habitat for which future surface mining expansion and development projects have been identified; specifically, three new or expanded mining projects are forecast to occur on leased lands of Superior National Forest. The greatest impact estimated is \$375,000 or an annualized impact of \$33,100 for the East Reserve Mine, which has a total value of \$819 million,

which equates to less than a 1 percent annual impact to the mine relative to its total value. There is an uncertainty for realized impacts on the mining industry from lynx conservation activities.

Because the scale of this revised proposed critical habitat is significantly different than the 2005 proposed critical habitat, we are requesting comments from any potentially affected small businesses involved in the mining industry, about the impacts resulting from the proposed designation of critical habitat. What are the estimated cost impacts of this proposed designation to your small business?

We evaluated small business entities relative to the revised proposed designation of critical habitat for the lynx to determine potential effects to these business entities and the scale of any potential impact using, in part, the draft economic analysis for the 2005 proposed critical habitat. Based on our analysis, there may be potential projected impacts associated with small entities in the areas of timber activities, recreation, public lands management, conservation planning, transportation, and mining. There is also a possibility of potential projected impacts to development activities. Due to the lack of information, the economic analysis for this critical habitat does not attempt to assign development impacts to specific small entities, rather leaving open the question of whether any small entities will be affected. We have outlined above potential projected future impacts to these entities resulting from conservation-related activities for the lynx, and asked potential affected small entities for input as to what the likely impacts will be for their industry sectors. We do, however, recognize that there may be disproportionate impact to certain sectors and geographic areas within lands proposed for designation. As such, we will more fully evaluate these potential impacts during the development of the final designation, and may, if appropriate, consider such lands for exclusion pursuant to section 4(b)(2) of the Act.

Unfunded Mandates Reform Act (2 U.S.C. 1501 et seq.)

In accordance with the Unfunded Mandates Reform Act (2 U.S.C. 1501 *et seq.*), we make the following findings:

(a) This rule will not produce a Federal mandate. In general, a Federal mandate is a provision in legislation, statute or regulation that would impose an enforceable duty upon State, local, or tribal governments, or the private sector, and includes both "Federal intergovernmental mandates" and "Federal private sector mandates."

These terms are defined in 2 U.S.C. 658(5)–(7). "Federal intergovernmental mandate" includes a regulation that "would impose an enforceable duty upon State, local, or [T]ribal governments" with two exceptions. It excludes "a condition of Federal assistance." It also excludes "a duty arising from participation in a voluntary Federal program," unless the regulation "relates to a then-existing Federal program under which \$500,000,000 or more is provided annually to State, local, and tribal governments under entitlement authority," if the provision would "increase the stringency of conditions of assistance" or "place caps upon, or otherwise decrease, the Federal Government's responsibility to provide funding," and the State, local, or tribal governments "lack authority" to adjust accordingly. At the time of enactment, these entitlement programs were: Medicaid; AFDC work programs; Child Nutrition; Food Stamps; Social Services Block Grants; Vocational Rehabilitation State Grants; Foster Care, Adoption Assistance, and Independent Living; Family Support Welfare Services; and Child Support Enforcement. "Federal private sector mandate" includes a regulation that "would impose an enforceable duty upon the private sector, except (i) a condition of Federal assistance or (ii) a duty arising from participation in a voluntary Federal program."

The designation of critical habitat does not impose a legally binding duty on non-Federal Government entities or private parties. Under the Act, the only regulatory effect is that Federal agencies must ensure that their actions do not destroy or adversely modify critical habitat under section 7. While non-Federal entities that receive Federal funding, assistance, or permits, or that otherwise require approval or authorization from a Federal agency for an action, may be indirectly impacted by the designation of critical habitat, the legally binding duty to avoid destruction or adverse modification of critical habitat rests squarely on the Federal agency. Furthermore, to the extent that non-Federal entities are indirectly impacted because they receive Federal assistance or participate in a voluntary Federal aid program, the Unfunded Mandates Reform Act would not apply; nor would critical habitat shift the costs of the large entitlement programs listed above on to State governments.

(b) On the basis of the economic analysis for our previous designation of critical habitat for the lynx in 2006, we do not believe that this rule will significantly or uniquely affect small

governments because small governments will be affected only to the extent that any programs having Federal funds, permits, or other authorized activities must ensure that their actions will not adversely affect the critical habitat. Therefore, we do not believe that a Small Government Agency Plan is required at this time. However, as we conduct our revised economic analysis, we will further evaluate this issue and revise this assessment if appropriate.

Takings

In accordance with E.O. 12630 (Government Actions and Interference with Constitutionally Protected Private Property Rights), we have analyzed the potential takings implications of designating revised critical habitat for the lynx in a takings implications assessment. The takings implications assessment concludes that this designation of critical habitat for the lynx does not pose significant takings implications for lands within or affected by the designation.

Federalism

In accordance with E.O. 13132, this proposed rule does not have significant Federalism effects. A Federalism assessment is not required. In keeping with Department of the Interior and Department of Commerce policy, we requested information from, and coordinated development of, our previous proposed critical habitat designation with appropriate State resource agencies in Idaho, Maine, Minnesota, Montana, Washington, and Wyoming. The information gathered in that coordination effort was used in this revised proposal. We believe that the designation of critical habitat for the lynx will have little incremental impact on State and local governments and their activities. The designation of critical habitat in areas currently occupied by the lynx imposes no additional restrictions to those currently in place and, therefore, has little incremental impact on State and local governments and their activities. The designation may have some benefit to these governments because the areas that contain the physical and biological features essential to the conservation of the species are more clearly defined, and the PCE necessary to support the life processes of the species are specifically identified. This information does not alter where and what federally sponsored activities may occur. However, it may assist local governments in long-range planning (rather than having them wait for case-by-case consultations under section 7 of the Act to occur).

Civil Justice Reform

In accordance with E.O. 12988, (Civil Justice Reform), the Office of the Solicitor has determined that the rule does not unduly burden the judicial system and that it meets the requirements of sections 3(a) and 3(b)(2) of the Order. We have proposed designating revised critical habitat in accordance with the provisions of the Act. This proposed rule uses standard property descriptions and identifies the physical and biological features essential to the conservation of the species within the designated areas to assist the public in understanding the habitat needs of the lynx.

Paperwork Reduction Act of 1995 (44 U.S.C. 3501 et seq.)

This rule does not contain any new collections of information that require approval by OMB under the Paperwork Reduction Act of 1995 (44 U.S.C. 3501 et seq.). This rule will not impose recordkeeping or reporting requirements on State or local governments, individuals, businesses, or organizations. An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB control number.

National Environmental Policy Act (NEPA)

It is our position that, outside the jurisdiction of the Circuit Court of the United States for the Tenth Circuit, we do not need to prepare environmental analyses as defined by NEPA (42 U.S.C. 4321 et seq.) in connection with designating critical habitat under the Act of 1973, as amended. We published a notice outlining our reasons for this determination in the **Federal Register** on October 25, 1983 (48 FR 49244). This position was upheld by the Circuit Court of the United States for the Ninth Circuit (*Douglas County v. Babbitt*, 48 F.3d 1495 (9th Cir. Ore. 1995), cert. denied 516 U.S. 1042 (1996)). However, when the range of the species includes States within the tenth circuit, such as that of the lynx, under the tenth circuit ruling in *Catron County Board of Commissioners v. U.S. Fish and Wildlife Service*, 75 F.3d 1429 (10th Cir. 1996), we will undertake a NEPA analysis for critical habitat designation and notify the public of the availability of a NEPA document for this proposal.

Clarity of the Rule

We are required by Executive Orders 12866 and 12988 and by the Presidential Memorandum of June 1, 1998, to write all rules in plain

language. This means that each rule we publish must:

- (a) Be logically organized;
- (b) Use the active voice to address readers directly;
- (c) Use clear language rather than jargon;
- (d) Be divided into short sections and sentences; and
- (e) Use lists and tables wherever possible.

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

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), E.O. 13175, the Department of Interior's manual at 512 DM 2, and Secretarial Order 3206, 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. Tribal lands in the Maine, Minnesota, and Northern Rocky Mountains units are included in this proposed designation; however, we are asking the public if Tribal lands need to be included as critical habitat in light of Secretarial Order 3206.

Energy Supply, Distribution, or Use

On May 18, 2001, the President issued an Executive Order (E.O. 13211; Actions Concerning Regulations That Significantly Affect Energy Supply, Distribution, or Use) on regulations that significantly affect energy supply, distribution, and use. E.O. 13211 requires agencies to prepare Statements of Energy Effects when undertaking certain actions. While this proposed rule to revise critical habitat for the lynx is a significant regulatory action under

E.O. 12866 in that it may raise novel legal and policy issues, we do not expect it to significantly affect energy supplies, distribution, or use based on the economic analysis we completed for the 2005 proposed lynx critical habitat rule. Therefore, this action is not a significant energy action, and no Statement of Energy Effects is required. However, we will further evaluate this issue as we conduct our economic analysis, and review and revise this assessment as warranted.

References Cited

A complete list of all references cited in this rulemaking is available online at <http://mountain-prairie.fws.gov/species/mammals/lynx/> or upon request from the Field Supervisor, Montana Ecological Services Office (see **FOR FURTHER INFORMATION CONTACT**).

Author(s)

The primary author(s) of this package are staff from the Maine and Montana Ecological Services Offices.

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 for part 17 continues to read as follows:

Authority: 16 U.S.C. 1361–1407; 16 U.S.C. 1531–1544; 16 U.S.C. 4201–4245; Pub. L. 99–625, 100 Stat. 3500; unless otherwise noted.

2. In § 17.95(a), revise the entry for “Canada lynx (*Lynx canadensis*)” to read as follows:

§ 17.95 Critical habitat—fish and wildlife.

(a) Mammals.

* * * * *

Canada lynx (*Lynx canadensis*)

(1) Critical habitat units are depicted on the maps below for the following States and counties:

- (i) Idaho: Boundary County;
- (ii) Maine: Aroostook, Franklin, Penobscot, Piscataquis, and Somerset Counties;
- (iii) Minnesota: Cook, Koochiching, Lake, and St. Louis Counties;
- (iv) Montana: Flathead, Glacier, Granite, Lake, Lewis and Clark, Lincoln, Missoula, Pondera, Powell, Teton, Gallatin, Park, Sweetgrass, Stillwater, and Carbon Counties;

(v) Washington: Chelan and Okanogan Counties; and

(vi) Wyoming: Park, Teton, Fremont, Sublette, and Lincoln Counties.

(2) Within these areas the primary constituent element for the Canada lynx is boreal forest landscapes supporting a mosaic of differing successional forest stages and containing:

(i) Presence of snowshoe hares and their preferred habitat conditions, including dense understories of young trees or shrubs tall enough to protrude above the snow;

(ii) Winter snow conditions that are generally deep and fluffy for extended periods of time;

(iii) Sites for denning having abundant, coarse, woody debris, such as downed trees and root wads; and

(iv) Matrix habitat (*e.g.*, hardwood forest, dry forest, non-forest, or other habitat types that do not support snowshoe hares) that occurs between patches of boreal forest in close juxtaposition (at the scale of a lynx home range) such that lynx are likely to travel through such habitat while accessing patches of boreal forest within a home range. The important aspect of matrix habitat for lynx is that these habitats retain the ability to allow unimpeded movement of lynx through them as lynx travel between patches of boreal forest.

(3) Critical habitat does not include waterbodies (lakes, rivers, streams), or man-made structures existing on the effective date of this rule, such as buildings, airports, paved and gravel roadbeds, active railroad beds, and the land on which such structures are located. Critical habitat does not include the following towns or populated areas as they exist now:

(i) *Maine*: Allagash, Ashland, Chapman, Dennistown, Dickey, Eagle Lake, Frenchville, Grindstone, Jackman, Kokadjo, Oxbow, Portage, Rockwood, Saint Francis, Saint John, Smyrna Center, Wallagrass, Winterville.

(ii) *Minnesota*: Alger, Allen, Angora, Arnold, Aurora, Babbitt, Baptism Crossing, Bartlett, Beaver Bay, Beaver Crossing, Belgrade, Bell Harbor, Biwabik, Breda, Brimson, Britt, Burntside, Burntside Lake, Buyck, Canyon, Castle Danger, Chippewa City, Clappers, Clifton, Cook, Cotton, Covill, Cramer, Crane Lake, Croftville, Cusson, Darby Junction, Duluth, Duluth Heights, Eagles Nest, East Beaver Bay, Ely, Embarrass, Fairbanks, Falls Junction, Finland, Forest Center, Forsman, Four Corners, Fredenberg, French River, Gappas Landing Campground, Genoa, Gheen, Gheen Corner, Gilbert, Glendale, Grand Portage, Grand Marais, Greenwood Junction, Haley, Happy Wanderer, Highland, Hornby, Hovland, Hunters Park, Idington, Illgen City, Isabella, Island View, Jameson, Jay See Landing, Jordan, Kabetogama, Kelly Landing, Kettle Falls, Knife River, Lakewood, Larsmont, Lauren, Lax Lake, Leander, Lester Park, Little Marais, Little Marais Postoffice, London, Lutsen, Makinen, Manitou Junction, Maple, Maple Hill, Markham, Martin Landing, McComber, McNair, Melrude, Midway, Murphy City, Murray, Norshor Junction, Orr, Palmers, Palo, Peyla, Pigeon River, Pineville, Prairie Portage, Ranier, Red Rock, Reno, Robinson, Rollins, Rothman, Salo Corner, Sawbill Landing, Schroeder, Scott Junction, Section Thirty, Sha-Sha Resort, Shaw, Silver Bay, Silver Creek, Silver Rapids, Skibo, Soudan, South International Falls,

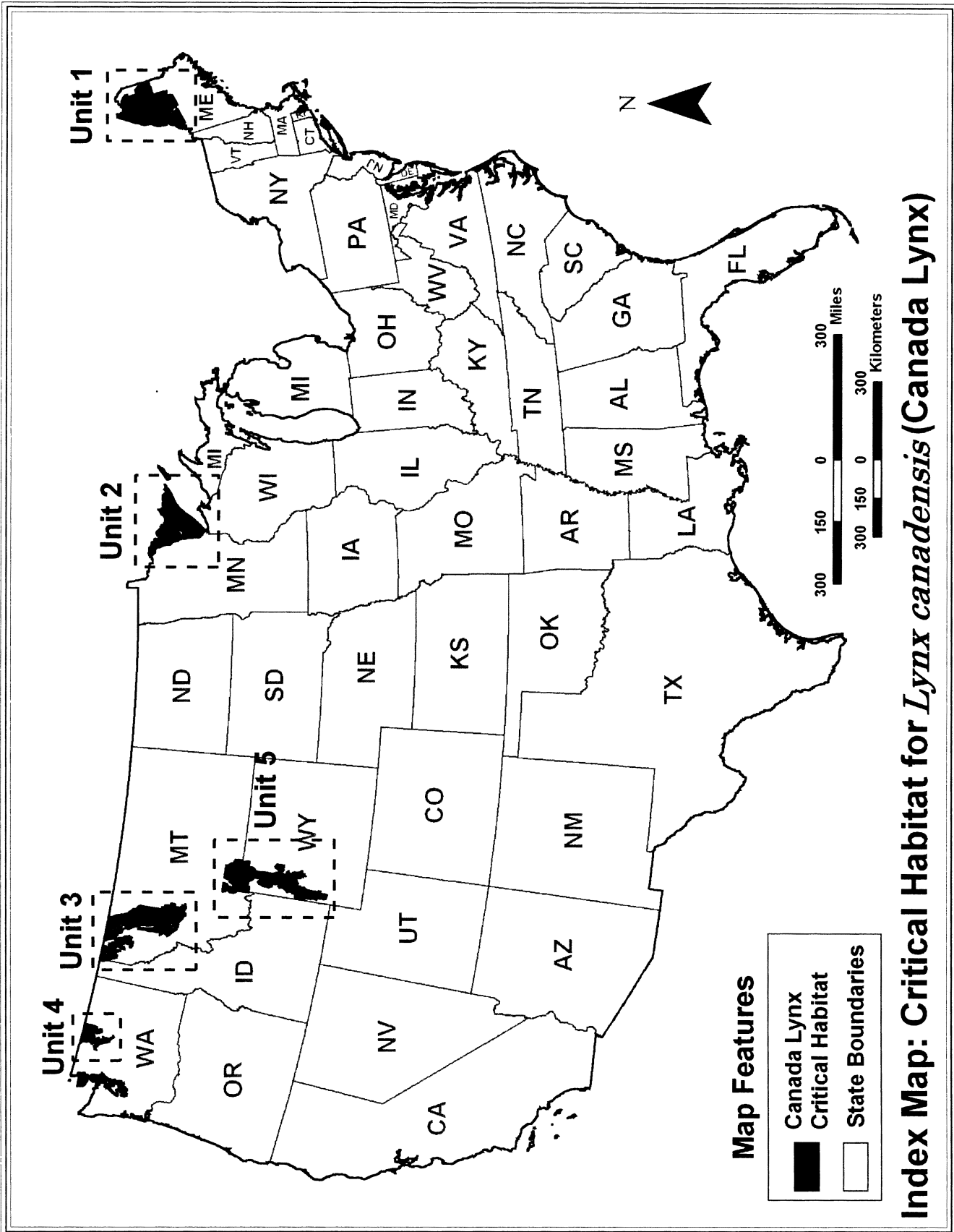
Sparta, Spring Lodge Resort and Marina, Stewart, Taconite Harbor, Taft, Thunderbird Resort, Tofte, Toimi, Tower, Tower Junction, Two Harbors, Wahlsten, Wakemup, Waldo, Wales, Wheeler Landing, White Iron, Whiteface, Whyte, Winter, Winton, Woodland, York.

(iii) *Montana*: Aldridge, Alpine, Avon, Beartown, Bison, Blacktail, Blossburg, Brock Creek, Calamity Janes Trailer Court, Cassidy Curve, Coloma, Contact, Cooke City, Copper Cliff, Corwin Springs, Coughlin, Crystal Ford, Crystal Point, Dodge Summit, Dutton, Electric, Elliston, False Summit, Finn, Forest Heights, Frontier Town, Gardiner, Garnet, Geary, George Norman Trailer Court, Helmville, Huckleberry Trailer Court, Independence, Jardine, Keiley, Kotke, Limestone, Lincoln, Mannix, McDonald, McGillvary, Meyers Creek, Mountain View, Ovando, Packers, Quigley, Reynolds City, Ricci Trailer Terraces, Rising Sun, Riverside, Rocky Mountain Trailer Park, Silver Gate, Singleshot, Siyeh Bend, Skyline, Snowslip, Sperry Chalets, Sphinx, Springtown, Stoner Place, Summit, Swiftcurrent, Three Forks, Top O'Deep, White City, Woodworth, Yreka.

(iv) *Wyoming*: Afton, Bannock Ford, Bedford, Bondurant, Buffalo Ford, Canyon Junction, Canyon Village, Devils Den, DuNoir, Etna, Fossil Forest, Hoback, Hoback Junction, Jack Pine, Mammoth, Osmond Community, Pahaska Tepee, Sylvan Bay Summer Home Area, Thayne, Tower Junction, Turnerville, Yanceys.

(4) Index map for lynx critical habitat follows:

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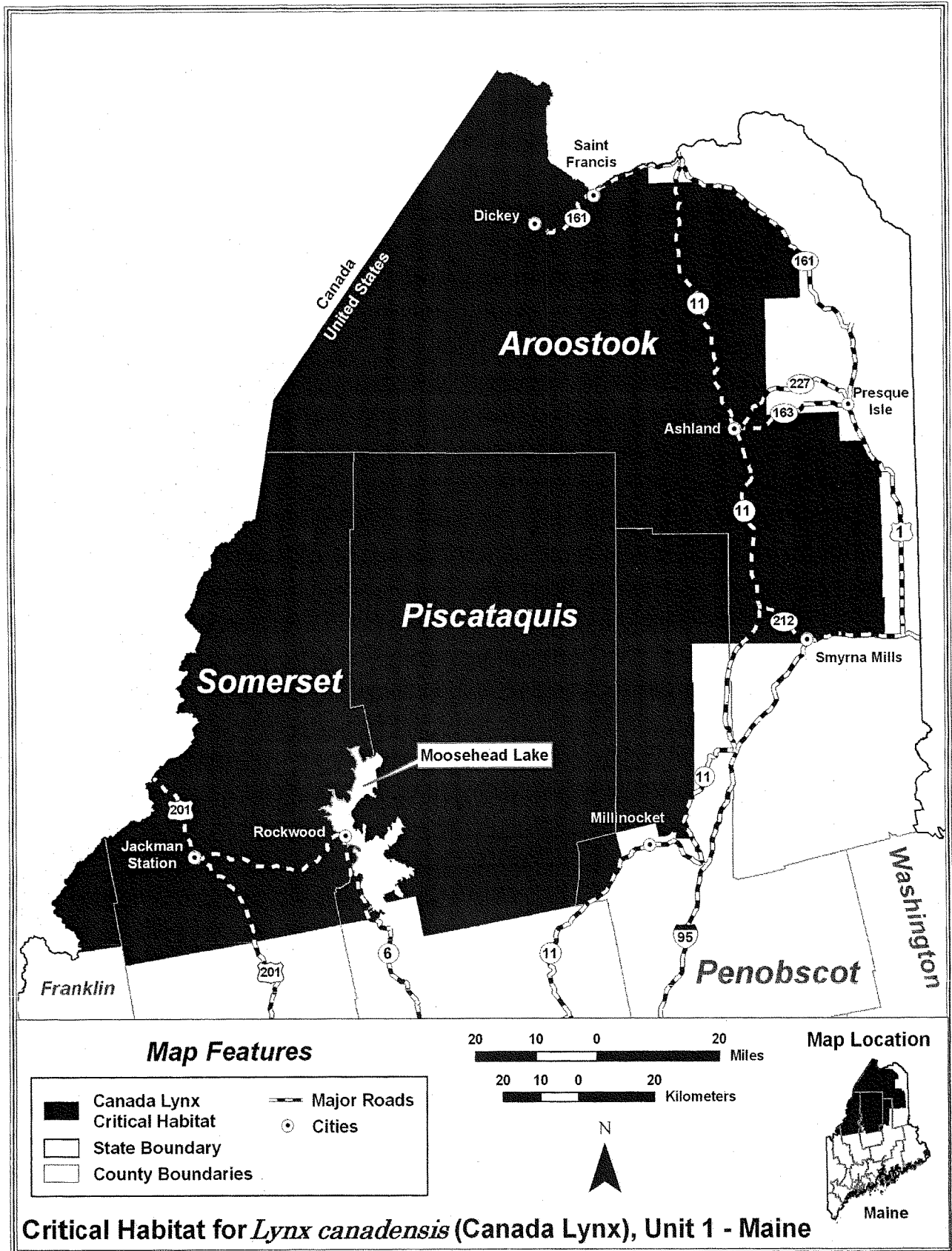
(5) Unit 1: Northern Maine; Aroostook, Franklin, Penobscot, Piscataquis and Somerset Counties, Maine.

(i) Coordinate projection: UTM, NAD83, Zone 19, Meters. Coordinate definition: (easting, northing). Starting at Maine/Canada Border (SW corner of Merrill Strip Twp.) (371910, 5028021), follow township boundary east to SE corner of Skinner Twp. (383434, 5029673). Follow township boundary SE to SW corner of T5 R6 Twp. (383438, 5029673). Follow township boundaries NE to boundary of Moosehead Lake (450963, 5036788). Follow Moosehead Lake boundary to intersection with Beaver Cove Twp. (452704, 5040915). Follow township boundary to Moosehead Lake boundary (453125, 5040999). Follow Moosehead Lake boundary to township boundary (453705, 5041123). Follow township boundary to NW corner of Bowdoin College Grant West Twp. (460415, 5042546). Follow township boundary to SW corner of township (462537, 5032002). Follow township boundaries

to intersection with State Highway 11 in Long A Twp. (506181, 5040542). Follow State Highway 11 NE to intersection with T4 Indian Purchase Twp. Boundary (515204, 5052175). Follow township boundary NW to SW corner of T1 R8 Twp. (513460, 5059043). Follow township boundary NE to intersection with Grindstone Twp. Boundary (523967, 5061550). Follow township boundary south and east to intersection with State Highway 11 (533826, 5057404). Follow State Highway 11 north to intersection with Soldiertown Twp. boundary (533178, 5067644). Follow township boundary east to SE corner of township (534261, 5067639), then follow township boundaries north to SE corner of T6 R7 Twp. (533735, 5108030). Follow township boundaries east to intersection with U.S. Highway 2 (563731, 5108104). Follow U.S. Highway 2 to intersection with New Limerick Twp. boundary (584664, 5109885). Follow township boundaries north to intersection with U.S. Highway 1 (583834, 5153895). Follow U.S. Highway 1 NW to intersection with

Westfield Twp. boundary (579218, 5160782). Follow township boundary west to intersection with Chapman Twp. boundary (572903, 5160530). Follow township boundary north to NE corner of township (572577, 5168198). Follow township boundaries west to intersection with Ashland Twp. boundary (553502, 5167377). Follow township boundaries north to SW corner of Westmanland Twp. (553279, 5197228). Follow township boundary east to SE corner of township (562523, 5197586). Follow township boundaries north to intersection with State Highway 161 (562361, 5209395). Follow State Highway 161 NE to New Canada Twp. boundary (536315, 5227346). Follow township boundaries west to NW corner of Wallagrass Twp. (522883, 5227037). Follow township boundaries north to Maine/Canada border (522876, 5231986). Follow Maine/Canada border to beginning.

(ii) Map of Northern Maine Unit follows:



(6) Unit 2: Northeastern Minnesota; Cook, Koochiching, Lake, and St. Louis Counties.

(i) Coordinate Projection: UTM, NAD83, Zone 15, Meters. Coordinate Definition: (easting, northing)

(ii) Starting at the intersection (470383, 5383928) of the Minnesota/Canada border and U.S. Highway 53, follow U.S. Highway 53 to the intersection (533455, 5265811) with the north boundary of T. 58N, R. 17W, Section 6. Follow the section line east to the NE corner of section 6 (534436, 5265846). Follow the section line north to the NW corner of T. 59N, R. 17W, Section 29 (534449, 5269188). Follow the section line east to the NE corner of T. 59N R. 17W, Section 28 (537595, 5269278). Follow the section line north to the NW corner of T. 59N, R. 17W, Section 22 (537612, 5270884). Follow the section east to the NE corner of section 22 (539244, 5270743). Follow the section line north to the NW corner of T. 59N, R. 17W, Section 14 (539166, 5272477). Follow the section line east to the NE corner of T. 59N, R. 17W, Section 13 (542538, 5272377). Follow the section line south to the SE corner of T. 59N, R. 17W, Section 24 (542468, 5269207). Follow the section line west to the SW corner of section 24 (540886, 5269302). Follow the section line south to SE corner of T. 59N, R. 17W, Section 26 (540871, 5267661). Follow the section line west to the SW corner of section 26 (539258, 5267619). Follow the section line south to the SE corner of T. 58N, R. 17W, Section 15 (539373, 5261082). Follow the section line west to the intersection with U.S. Highway 53 (535956, 5261013). Follow U.S. Highway 53 to the intersection with U.S. Interstate 35/State Highway 61 (568056, 5180758). Follow U.S. Interstate 35/Highway 61 to coordinate 568974, 5181862. Go approximately 178 meters east to the shore of Lake Superior (569151, 5181874). Follow the shore of Lake Superior to the Minnesota/Canada border (761503, 5322824). Follow the

Minnesota/Canada border to the beginning. This area is found within the following USGS 1:24000 Quads; Pine Mountain, Grand Marais, Kadunce River, Marr Island, Hovland, Mineral Center OE S, Good Harbor Bay OE E, Linden Grove, Cook, Sassas Creek, Lost Lake, Tower, Idington, Britt, Biwabik NE, Biwabik NW, Virginia, McKinley, Biwabik, Eveleth, Gilbert, Palo, Central Lakes, Makinen, Zim, Cotton, Whiteface, Canyon, Shaw, Twig, Independence, Adolph, Ranier OE N, Island View OE N, Cranberry Bay OE N, Soldier Point OE N, Ranier, Island View, Cranberry Bay, Soldier Point, Kempton Bay, Kettle Falls, International Falls, Kabetogama, Daley Bay, Ash River NE, Namakan Island, Hale Bay, Ericsburg, Ray, Redhorse Bay, Ash River SW, Ash River SE, Marion Lake, Johnson Lake, Crane Lake, Snow Bay, Ash Lake, Orr NE, Elephant Lake, Kabustasa Lake, Echo Lake, Lake Jeanette, Orr, Myrtle Lake, Buyck, Picket Lake, Astrid Lake, Gheen, Haley, Norwegian Bay, Vermilion Dam, Sioux Pine Island, Coleman Island, Iron Lake OE N, Takumich Lake, Shell Lake, Lake Agnes, Iron Lake, Friday Bay, Jackfish Lake, Dutton Lake, Ester Lake, Munker Island, Connors Island, Bootleg Lake, Lapond Lake, Angleworm Lake, Fourtown Lake, Ensign Lake West, Ensign Lake East, Kekekabic Lake, Ogishkemuncie Lake, Gillis Lake, Long Island Lake, Gunflint Lake, South Lake, Hungry Jack Lake, Crocodile Lake, Pine Lake West, Pine Lake East, South Fowl Lake, The Cascades, Grand Portage OE N, Pigeon Point OE N, Basswood Lake West, Basswood Lake East, Pigeon Point OE NE, Ely, Farm Lake, Alice Lake, Lake Polly, Kelso Mountain, Cherokee Lake, Brule Lake, Eagle Mountain, Lima Mountain, Tom Lake, Farquhar Peak, Mineral Center, Grand Portage (digital), Pigeon Point (digital), Crab Lake, Northern Light Lake, Boulder Lake Reservoir, Thompson Lake, Barrs Lake, McCarthy Creek, Two Harbors, Castle

Danger, Split Rock Point OE S, Arnold, French River, Knife River, Two Harbors OE S, Fredenberg, Duluth, Lakewood, Duluth Heights, Chad Lake, Lake Insula, Shagawa Lake, Ojibway Lake, Snowbank Lake, Soudan, Eagles Nest, Bear Island, Bogberry Lake, Quadga Lake, Isabella Lake, Perent Lake, Kawishiwi Lake, Beth Lake, Sawbill Camp, Tait Lake, Mark Lake, Devil Track Lake, Kangas Bay, Gabbro Lake, Embarrass, Babbitt, Slate Lake West, Slate Lake East, Mitawan Lake, Sawbill Landing, Silver Island Lake, Wilson Lake, Toohey Lake, Honeymoon Mountain, Lutsen, Isaac Lake, Babbitt NE, Deer Yard Lake, Good Harbor Bay (digital), Aurora, Allen, Babbitt SW, Babbitt SE, Greenwood Lake West, Greenwood Lake East, Isabella, Cabin Lake, Cramer, Schroeder, Lutsen OE S, Isabella Station, Tofte, Turpela Lake, Bird Lake, Skibo, Cloquet Lake, Doyle Lake, Little Marais OE E, Toimi, Mount Weber, Whyte, Finland, Little Marais (digital), Whiteface Reservoir, Harris Lake, Fairbanks, Brimson, Legler Lake, Silver Bay SW, Silver Bay, Illgen City, Kane Lake, Comstock Lake, Pequaywan Lake, King Lake, Split Rock Point, Split Rock Point NE, Boulder Lake Reservoir NE, Highland, Two Harbors NE. This entire area is designated proposed critical habitat expect for the following lands: T. 58N, R.17W, Sections 13, 24–26; T. 58N, R. 16W, Sections 3, 8–10,16,17; T. 58N, R 15W, Sections 1–3,11,12; T. 58N R. 14W, Sections 3–10; T. 59N, R. 15W, Sections 21–28, 33–36; T. 59N, R. 14W, Sections 1–5, 8–23, 27–34; T. 59N., R. 13W, Sections 5,6; T. 60N, R. 14W, Sections 32–34, 36; T. 60N, R. 13W, Sections 22–28, 31–35; T. 60N, R.12W Sections 2, 3, 10, 15–20, 30; T. 61N, R. 12W, Sections 12, 35. These areas area found within the following USGS 1:24000 Quads; McKinley, Bawabik, Gilbert, Embarrass, Babbitt, IsaacLake, Babbitt NE, Aurora, Allen

(iii) Map of Northeastern Minnesota unit follows:

(7) Unit 3: Northern Rocky Mountains; Boundary County, Idaho; Flathead, Glacier, Granite, Lake, Lewis and Clark, Lincoln, Missoula, Pondera, Powell, and Teton Counties, Montana.

(i) Coordinate Projection: UTM, NAD83, Zone 12, Meters. Coordinate Definition: (easting, northing).

(A) Starting at the intersection of the Idaho/Canada border and 4000 feet elevation contour (122032, 5440460), follow the 4000 feet elevation contour to intersection with Montana/Canada border (151617, 5438492). Follow Montana/Canada border west to intersection with 4000 feet elevation contour (147739, 5438749). Follow 4000 feet elevation contour to intersection with Montana/Canada border (147356, 5438775). Follow Idaho/Montana/Canada border west to beginning. This area is found within the following USGS 1:24000 Quads; Eastport, Canuck Peak, Northwest Peak, Garver Mountain, Bonnet Top, Yaak, Clark Mountain, Mount Baldy, Line Point, Meadow Creek, Curley Creek, and Newton Mountain.

(B) Starting at the intersection of the Montana/Canada border and 4000 feet elevation contour (152307, 5438447), follow the 4000 feet elevation contour to intersection with Montana/Canada border (157205, 5438130). Follow Montana/Canada border west to beginning. This area is found within the following USGS 1:24000 Quads; Garver Mountain and Bonnet Top.

(C) Starting at coordinate (158408, 5437023), follow 4000 feet elevation contour to beginning. This area is found within the following USGS 1:24000 Quad; Bonnet Top.

(D) Starting at coordinate (160775, 5430791), follow 4000 feet elevation contour to beginning. This area is found within the following USGS 1:24000 Quads; Bonnet Top and Mount Henry.

(E) Starting at coordinate (161176, 5427344), follow 4000 feet elevation contour to beginning. This area is found within the following USGS 1:24000 Quads; Bonnet Top, Mount Henry, Yaak, and Lost Horse Mountain.

(F) Starting at the intersection of the Montana/Canada border and 4000 feet elevation contour (163418, 5437730), follow the 4000 feet elevation contour to intersection with Montana/Canada border (186741, 5436254). Follow Montana/Canada border west to beginning. This area is found within the following USGS 1:24000 Quads; Mount Henry, Robinson Mountain, Red Mountain, Webb Mountain, Boulder Lakes, Lost Horse Mountain, Yaak, Clark Mountain, Mount Baldy, Sylvanite, Flatiron Mountain, Pink Mountain, Parsnip Mountain, Inch Mountain, Volcour, Ural, Banfield Mountain, Gold Hill, Turner Mountain, Alexander Mountain, and Vermiculite Mountain.

(G) Starting at coordinate (143538, 5402032), follow 4000 feet elevation contour to beginning. This area is found within the following USGS 1:24000 Quads; Sylvanite, Flatiron Mountain, Turner Mountain, Pulpit Mountain, Kilbrennan Lake, Kootenai Falls, and Scenery Mountain.

(H) Starting at coordinate (154367, 5393646), follow 4000 feet elevation contour to beginning. This area is found within the following USGS 1:24000 Quads; Turner Mountain, Gold Hill, Libby, and Scenery Mountain.

(I) Starting at coordinate (174032, 5379043), follow 4000 feet elevation contour to beginning. This area is found within the following USGS 1:24000 Quads; Vermiculite Mountain and Alexander Mountain.

(J) Starting at coordinate (199737, 5417559), follow 4000 feet elevation contour to beginning. This area is found within the following USGS 1:24000 Quads; Webb Mountain, Beartrap Mountain, Eureka South, Inch Mountain, McGuire Mountain, Pinkham Mountain, Edna Mountain, Volcour, Davis Mountain, Skillet Mountain, Alexander Mountain, Cripple Horse Mountain, Warland Peak, Bowen Lake, Tony Peak, Richards Mountain, Wolf Prairie, and Fisher Mountain.

(K) Starting at coordinate (217651, 5399051), follow 4000 feet elevation contour to beginning. This area is found within the following USGS 1:24000 Quads; Stryker, Skillet Mountain, Sunday Mountain, Radnor, Bowen Lake, Dunsire Point, Johnson Peak, Tally Lake, Wolf Prairie, Horse Hill, Sylvia Lake, Ashley Mountain, Lost Creek Divide, Rhodes, Deer Creek, Lynch Lake, Dahl Lake, Pleasant Valley Mountain, Lone Lake, Blue Grass Ridge, Thompson Lakes, Meadow Peak, McGregor Peak, Marion, Haskill Mountain, and Kila.

(L) Starting at the intersection of the Montana/Canada border and 4000 feet elevation contour (205956, 5435192), follow the 4000 feet elevation contour to intersection with Montana/Canada border (245279, 5433300). Follow Montana/Canada border west to beginning. This area is found within the following USGS 1:24000 Quads; Eureka North, Ksanka Peak, Stahl Peak, Tuchuck Mountain, Mount Hefty, Trailcreek, Polebridge, Whale Buttes, Red Meadow Lake, Mount Thompson-Seton, Mount Marston, Fortine, Stryker, Bull Lake, Upper Whitefish Lake, Moose Peak, Cyclone Lake, Demers Ridge, Huckleberry Mountain, Skookoleel Creek, Werner Peak, Olney, Beaver Lake, Whitefish, and Columbia Falls North.

(M) Starting at coordinate (263061, 5395697), follow 4000 feet elevation contour to beginning. This area is found

within the following USGS 1:24000 Quads; Demers Ridge and Huckleberry Mountain.

(N) Starting at coordinate (269763, 5390173), follow 4000 feet elevation contour to beginning. This area is found within the following USGS 1:24000 Quads; McGee Meadow, Huckleberry Mountain, and Hungry Horse.

(O) Starting at coordinate (268105, 5372525), follow 4000 feet elevation contour to beginning. This area is found within the following USGS 1:24000 Quads; Columbia Falls North and Hungry Horse.

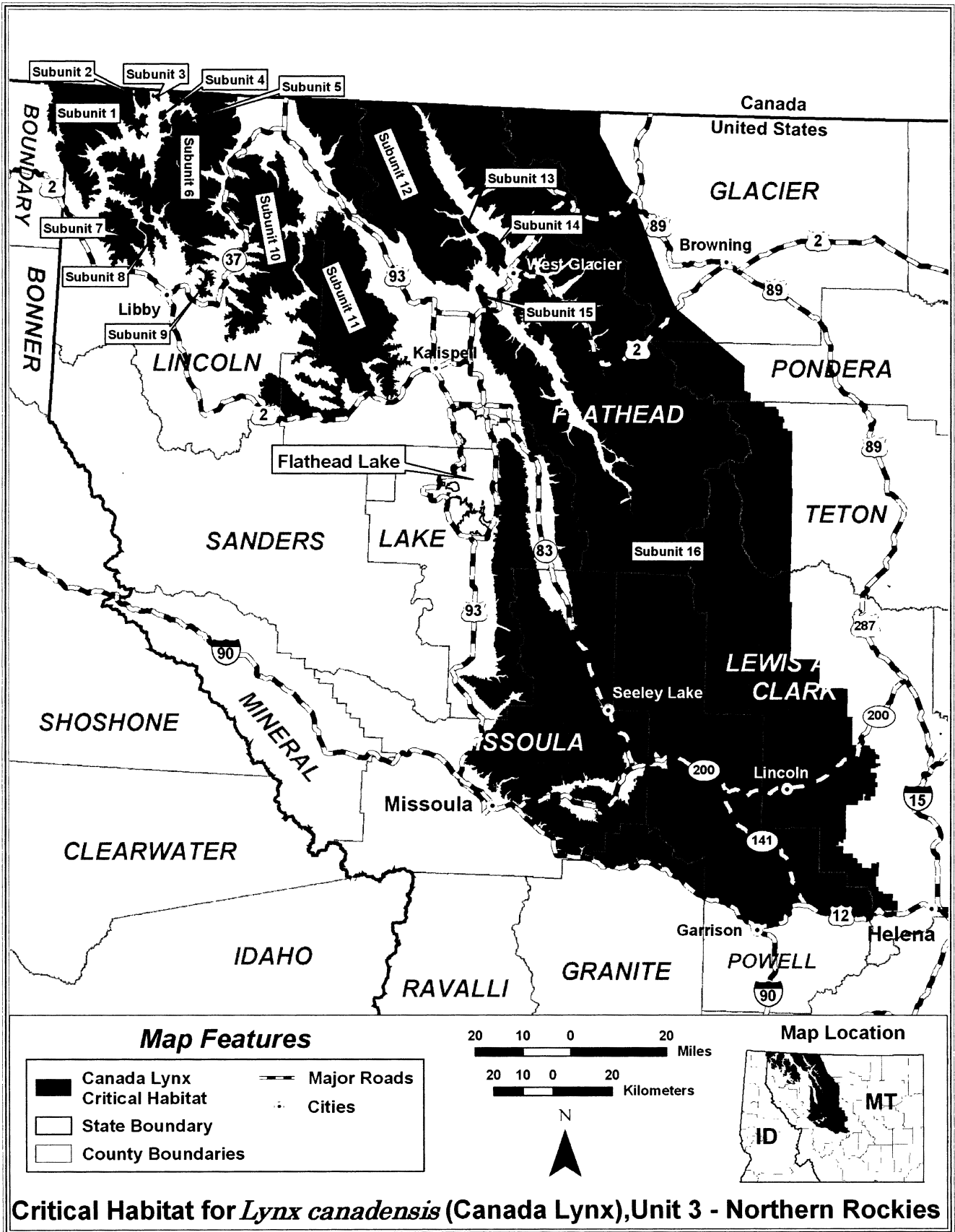
(P) Starting at the intersection of the Montana/Canada border and 4000 feet elevation contour (247220, 5433213), follow the 4000 feet elevation contour to intersection with Interstate Highway 90 (338356, 5167811). Follow Interstate Highway 90 to intersection with USFS boundary (402512, 5159444). Follow USFS boundary to NPS boundary (334101, 5364611). Follow NPS boundary to intersection with Montana/Canada border (309104, 5430544). Follow Montana/Canada border west to intersection with 4000 feet elevation contour (247562, 5433194). Follow 4000 feet elevation contour to intersection with Montana/Canada border (247373, 5433204). Follow Montana/Canada border west to beginning. This area is found within the following USGS 1:24000 Quads; Trailcreek, Kintla Lake, Kintla Peak, Mount Carter, Porcupine Ridge, Mount Cleveland, Gable Mountain, Chief Mountain, Babb, Lake Sherburne, Many Glacier, Ahern Pass, Mount Geduhn, Vulture Peak, Quartz Ridge, Polebridge, Demers Ridge, Camas Ridge West, Camas Ridge East, Mount Cannon, Logan Pass, Rising Sun, Saint Mary, Kiowa, Cut Bank Pass, Mount Stimson, Mount Jackson, Lake McDonald East, Lake McDonald West, McGee Meadow, West Glacier, Nyack, Stanton Lake, Mount Saint Nicholas, Mount Rockwell, Squaw Mountain, East Glacier Park, Mitten Lake, Half Dome Crag, Hyde Creek, Summit, Blacktail, Essex, Pinnacle, Mount Grant, Nyack SW, Doris Mountain, Columbia Falls South, Hash Mountain, Jewel Basin, Pioneer Ridge, Felix Ridge, Nimrod, Mount Bradley, Red Plum Mountain, Crescent Cliff, Morningstar Mountain, Swift Reservoir, Fish Lake, Volcano Reef, Walling Reef, Gateway Pass, Gooseberry Peak, Gable Peaks, Capitol Mountain, Horseshoe Peak, Circus Peak, Quintonkon, Big Hawk Mountain, Crater Lake, Woods Bay, Yew Creek, Swan Lake, Connor Creek, Tin Creek, Spotted Bear Mountain, Whitcomb Peak, Trilobite Peak, Pentagon Mountain, Porphyry Reef, Mount Wright, Cave Mountain, Ear Mountain, Our Lake,

Gates Park, Three Sisters, Bungalow Mountain, Cathedral Peak, Meadow Creek, String Creek, Thunderbolt Mountain, Cilly Creek, Porcupine Creek, Cedar Lake, Salmon Prairie, Swan Peak, Sunburst Lake, Marmot Mountain, Pagoda Mountain, Amphitheatre Mountain, Slategoat Mountain, Glenn Creek, Arsenic Mountain, Castle Reef, Sawtooth Ridge, Patricks Basin, Pretty Prairie, Prairie Reef, Haystack Mountain, Big Salmon Lake East, Big Salmon Lake West, Holland Peak, Condon, Peck Lake, Piper-Crow Pass, Mount Harding, Hemlock Lake, Cygnet Lake, Holland Lake Shaw Creek, Una Mountain, Pilot Lake, Trap Mountain, Benchmark, Wood Lake, Double Falls, Bean Lake, Steamboat Mountain, Jakie Creek, Scapegoat Mountain, Flint

Mountain, Danaher Mountain, Hahn Creek Pass, Crimson Peak, Morrell Lake, Lake Inez, Lake Marshall, Gray Wolf Lake, Saint Marys Lake, Upper Jocko Lake, Seeley Lake West, Seeley Lake East, Morrell Mountain, Dunham Point, Spread Mountain, Lake Mountain, Olson Peak, Heart Lake, Caribou Peak, Blowout Mountain, Rogers Pass, Cadotte Creek, Silver King Mountain, Stonewall Mountain, Arrastra Mountain, Coopers Lake, Ovando Mountain, Ovando, Woodworth, Salmon Lake, Belmont Point, Gold Creek Peak, Wapiti Lake, Stuart Peak, Evaro, Northwest Missoula, Northeast Missoula, Blue Point, Sunflower Mountain, Potomac, Greenough, Bata Mountain, Chamberlain Mountain, Browns Lake, Marcum Mountain, Moose Creek,

Lincoln, Swede Gulch, Stemple Pass Wilborn, Granite Butte, Nevada Mountain, Finn, Nevada Lake, Helmville, Chimney Lakes, Wild Horse Parks, Elevation Mountain, Union Peak, Mineral Ridge, Clinton, Bonner, Iris Point, Ravenna, Medicine Tree Hill, Bearmouth, Drummond, Limestone Ridge, Bailey Mountain, Windy Rock, Gravely Mountain, Ophir Creek, Esmeralda Hill, Greenhorn Mountain, Austin, Black Mountain, MacDonald Pass, Elliston, Avon, Luke Mountain, Garrison, Griffin Creek, Dunkleberg Creek, Saint Ignatius, Ravalli, Saddle Mountain, Arlee, Gold Creek, and Belmore Slough.

(iii) Map of Northern Rocky Mountains unit follows:



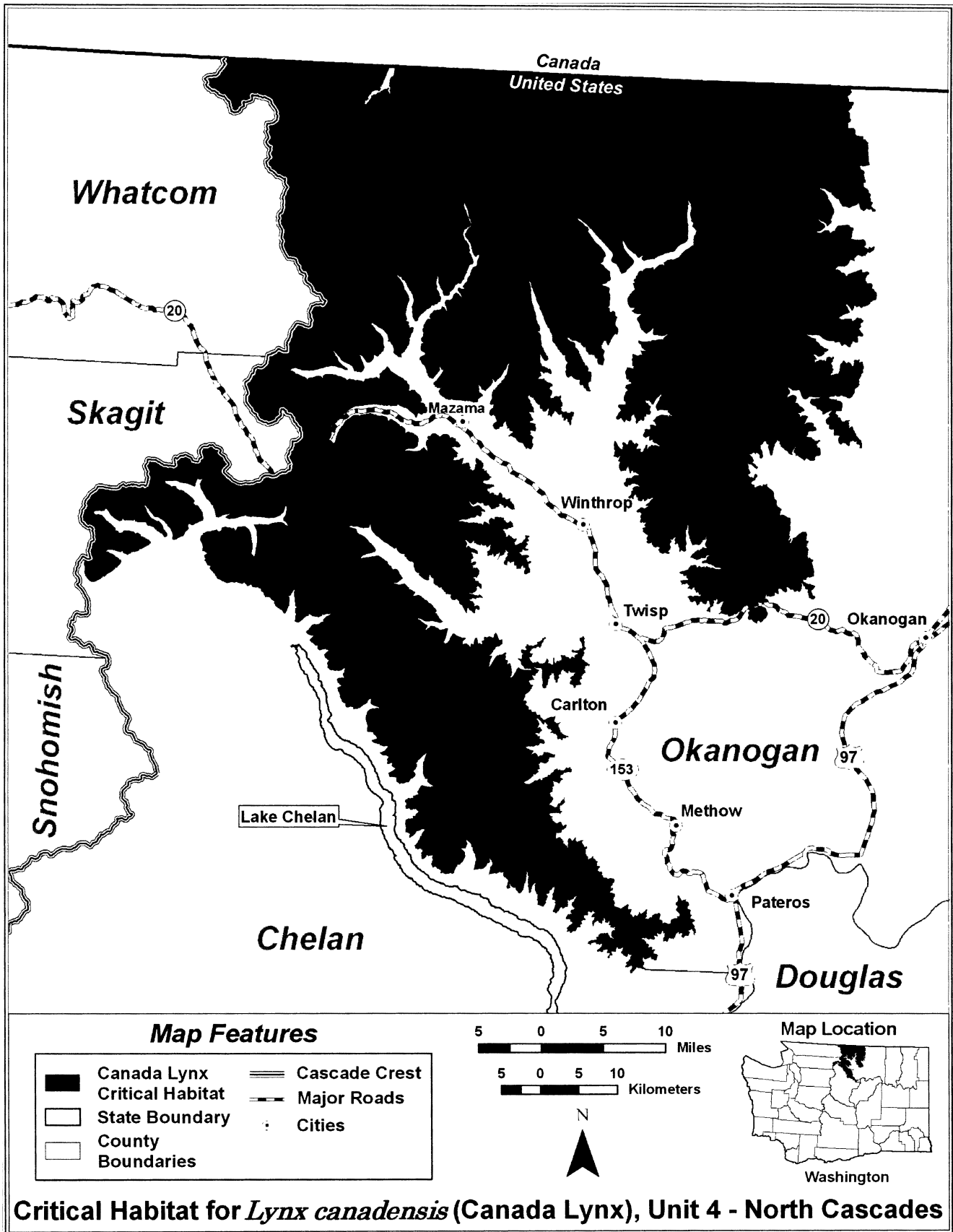
(8) Unit 4: North Cascades; Chelan and Okanogan Counties, Washington.

(i) Coordinate Projection: UTM, NAD83, Zone 11, Meters. Coordinate Definition: (easting, northing). Starting at the Washington/Canada border (Whatcom/Okanogan Counties boundary—"Cascade Crest") (218319, 5434639), follow the "Cascade Crest" south to coordinate (200268, 5369981). Go south approximately 250 meters (200241, 5369733) to watercourse (headwaters—Flat Creek). Follow watercourse (Flat Creek) to intersection with 4000 feet elevation contour (201629, 5366872) (Cascade Pass Quad—USGS 1:24000). Follow 4000 feet elevation contour to intersection with Washington/Canada border (298810, 5431112). Follow Washington/Canada border west to intersection with 4000

feet elevation contour (240301, 5433596). Follow 4000 feet elevation contour to intersection with Washington/Canada border (239526, 5433632). Follow Washington/Canada border to beginning. This area is found within the following USGS 1:24000 Quads; Skagit Peak, Castle Peak, Frosty Creek, Ashnola Mountain, Ashnola Pass, Rimmel Mountain, Bauerman Ridge, Horseshoe Basin, Hurley Peak, Nighthawk, Tatoosh Buttes, Shull Mountain, Pasayten Peak, Mount Lago, Mount Barney, Coleman Peak, Corral Butte, Duncan Ridge, Loomis, Lost Peak, Billy Goat Mountain, Azurite Peak, Slate Peak, Robinson Mountain, McLeod Mountain, Sweetgrass Butte, Doe Mountain, Spur Peak, Tiffany mountain, Coxit Mountain, Blue Goat Mountain, Forbidden Peak, Mount Logan, Mount

Arriva, Washington Pass, Silver Star Mountain, Mazama, Lewis Butte, Pearrygin Peak, Old Baldy, Conconully West, Rendevous Mountain, Conconully East McGregor Mountain, McAlester Mountain, Gilbert, Midnight Mountain, Thompson Ridge, Loup Loup Summit, Buck Mountain, Cascade Pass, Goode Mountain, Blue Buck Mountain, Stehekin, Sun Mountain, Oval Peak, Hoodoo Peak, Twisp West, Thrapp Mountain, Chiliwist Valley, Lucerne, Prince Creek, Martin Peak, Hungry Mountain, Big Goat Mountain, South Navarre Peak, Oss Peak, Cooper Mountain, Pateros, Manson, Cooper Ridge, and Azwell.

(ii) Map of North Cascades unit follows:



(9) Unit 5: Greater Yellowstone Area; Gallatin, Park, Sweetgrass, Stillwater, and Carbon counties in Montana; Park, Teton, Fremont, Sublette, and Lincoln Counties, Wyoming.

(i) Coordinate Projection: UTM, NAD83, Zone 12, Meters; Coordinate Definition: (easting, northing). Starting at the intersection (480972, 5041390) of U.S. Highway 191 and the north boundary of T. 4S, R. 4E, Section 4, follow U.S. Highway 191 to the intersection (4484464, 4989013) with Yellowstone National Park (NP) boundary. Follow the Yellowstone NP boundary to the intersection (492295, 4945003) with U.S. Highway 20. Follow U.S. Highway 20 (Entrance Road) to the intersection (511252, 4943604) with Grand Loop Road. Follow Grand Loop Road to the intersection (524028, 4952481) with Norris Canyon Road. Follow Norris Canyon Road to the intersection (539780, 4951312) with Grand Loop Road. Follow Grand Loop Road to the intersection (548580, 4935153) with U.S. Highway 20. Follow U.S. Highway 20 to coordinate 557355, 4928610. Go southeasterly approximately 62 meters (557295, 4928602) to the shore of Yellowstone Lake. Follow the shore of Yellowstone Lake to coordinate 535146, 4915754. Go west approximately 960 meters to the intersection (534188, 4915753) with U.S. Highway 89/287. Follow U.S. Highway 89/287 to the intersection (526800, 4886642) with the Yellowstone NP boundary. Follow the Yellowstone NP boundary to the intersection (527033, 4886643) with the Bridger-Teton National Forest (NF) boundary. Follow the Bridger-Teton NF boundary to the intersection (520702, 4802862) with U.S. Highway 26. Follow U.S. Highway 26 to the intersection (498488, 4779960) with U.S. Highway 89. Follow U.S. Highway 89 to the intersection (505452, 4703698) with the east boundary of T. 29N, R. 118W, Section 19. Follow the section line to the intersection (505447, 4699501) with the Bridger-Teton NF boundary. Follow the Bridger-Teton NF boundary to the NW corner (597743, 4754744) of T. 34N, R. 108W, Section 7. Follow the section line to the SW corner (599399, 4754756) of T. 34N, R. 108W, Section 5. Follow the section line to the NW corner (599380, 4756357) of section 5. Follow the section line to the SE corner (607400, 4756477) of T. 35N, R. 108W Section 36. Follow the section line to the NW corner (607286, 4765982) of T. 35N, R. 107W, Section 6. Follow the section line to the intersection (617268, 4766147) with USFS-Fitzpatrick Wilderness boundary. Follow the Fitzpatrick

Wilderness boundary to the intersection (599238, 4811188) with the west boundary of T. 40N, R. 108W, Section 12. Follow the section line to the NW corner (599108, 4812285) section 12. Follow the section line to coordinate 601191, 4812390. Go north to the intersection (661183, 4812925) with the Fitzpatrick Wilderness boundary. Follow the Fitzpatrick Wilderness boundary to the intersection (609608, 4816305) with Shoshone NF boundary. Follow the Shoshone NF boundary to the SE corner (629592, 4834753) of T. 43N, R. 105W, Section 25. Follow the section line to the intersection (628768, 4860150) with the Fremont County, WY boundary. Follow the Fremont County boundary to coordinate 588156, 4866541. Go north approximately 20.6 KM/12.8 miles to coordinate 587881, 4887097. Follow a route which is approximately 9.2 km/5 miles east of the Yellowstone NP boundary to the intersection (599376, 4957892) with the south boundary of T. 55N, R. 107W, Section 3. Follow the section line to the SE corner (623296, 4958237) of T. 55N, R. 105W, Section 1. Follow the section line to the NE corner (623068, 4969812) of T. 56N, R. 105W, Section 1. Follow the section line to the SE corner (619728, 4969746) of T. 57N, R. 105W, Section 36. Follow the section line to the NW corner (619373, 4984494) of T. 58N, R. 104W, section 18 (Montana/Wyoming border). Follow the state border to the SE corner (622659, 4984617) of T. 9S, R. 18E, Section 36. Follow the section line to the intersection (622048, 5009101) with the Custer NF boundary. Follow the Custer NF boundary to the SE corner (593114, 5028792) of T. 5S, R. 15E, Section 12. Follow the section line to the NE corner (592962, 5041683) of T. 4S, R. 15E, Section 1. Follow the section line to the intersection (538520, 5041519) with the Custer NF boundary. Follow the Custer NF boundary to the SE corner (506528, 5004163) of T. 7S, R. 6E, Section 25. Follow the section line to the intersection (506549, 5010565) with the Custer NF boundary. Follow the Custer NF boundary to the NW corner (514340, 5041288) of T. 4S, R. 7E, Section 1. Follow the section line to the beginning. This area is found within the following USGS 1:24000 Quads; Alpine, Pine Creek, Bailey Lake, Ferry Peak, Clause Peak, Bondurant, Raspberry Ridge, Stewart Peak, Deer Creek, Noble Basin, Kismet Peak, Etna, Pickle Pass, Hoback Peak, Thayne West, Thayne East, Man Peak, Blind Bull Creek, Lookout Mountain, Prospect Peak, Merna, Park Creek, Triple Peak, Maki Creek, Grover, Rock Lake Peak, Red Top Mountain,

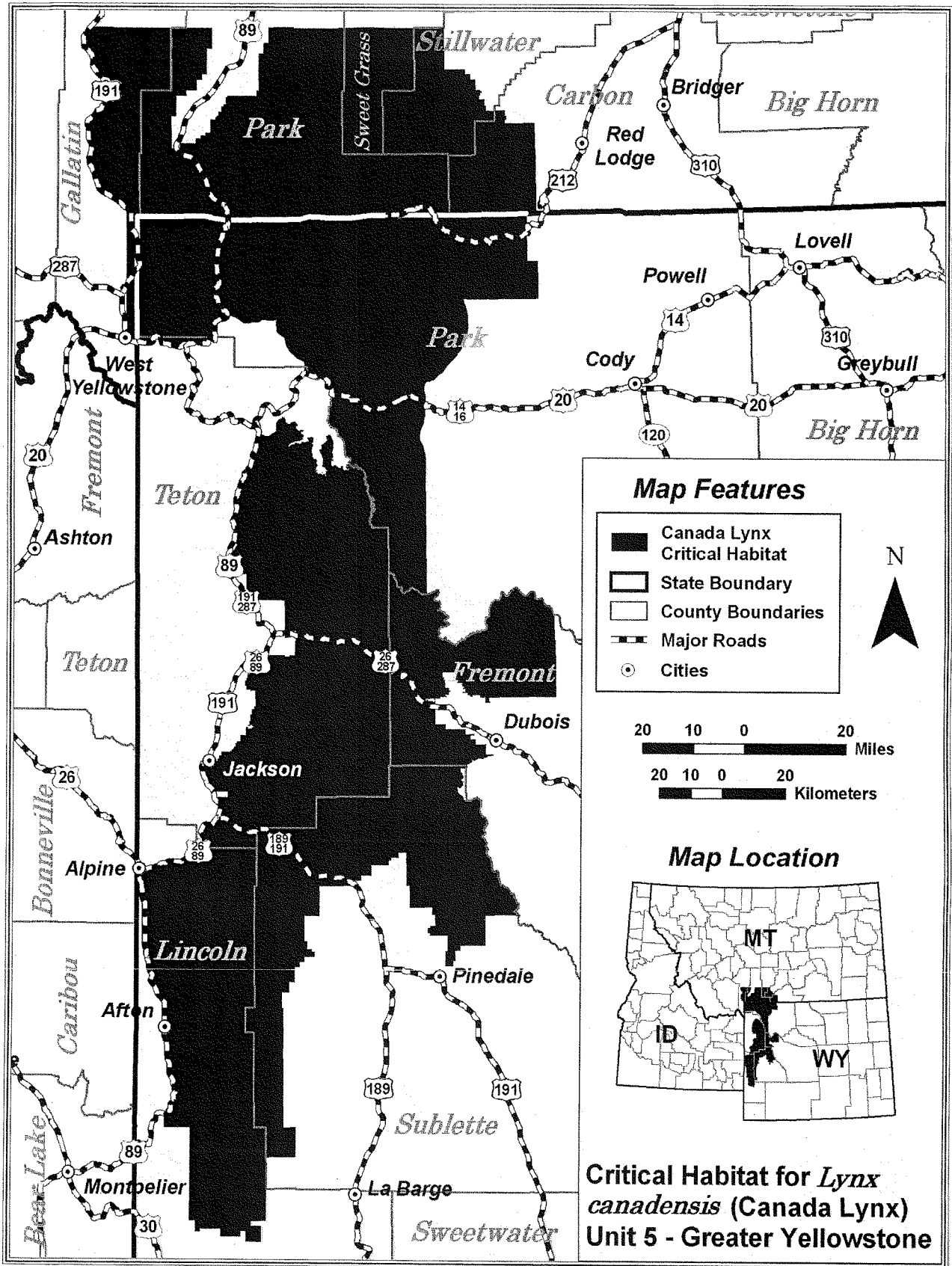
Box Canyon Creek, Mount Schidler, Red Castle Creek, Afton, Smoot, Poison Meadows, Wyoming Peak, Springman Creek, Mount Wagner, Salt Flat, Porcupine Creek, Graham Peak, Mount Thompson, Pine Grove Ridge, Big Park, Coal Creek, Lake Mountain, Devils Hole Creek, Nugent Park, Pole Creek, Fontenelle Basin, Ousel Falls, Lone Indian Peak, Ramshorn Peak, Miner, Dome Mountain, Iron Mountain, Monitor Peak, Mineral Mountain, Mount Wallace, Sunshine Point, Big Horn Peak, Sportsman Lake, Electric Peak, Gardiner, Ash Mountain, Specimen Creek, Hummingbird Peak, Divide Lake, Joseph Peak, Quadrant Mountain, Mammoth, Blacktail Deer Creek, Tower Junction, Lamar Canyon, Three Rivers Peak, Mount Holmes, Obsidian Cliff, Cook Peak, Mount Washburn, Amethyst Mountain, Ruby Mountain, Gallatin Gateway, Beacon Point, Garnet Mountain, Gallatin Peak, Hidden Lake, Wheeler Mountain, Mount Ellis, Bald Knob, Brisbin, Livingston Peak, Mount Rae, Mount Blackmore, Big Draw, Dexter Point, Mount Cowen, West Boulder Plateau, Fridley Peak, The Sentinel, Lewis Creek, Dailey Lake, Emigrant, Knowles Peak, The Pyramid, The Needles, Richards Creek, West Yellowstone, Mount Jackson, Madison Junction, Norris Junction, Crystal Falls, Canyon Village, White Lake, Lake, Lake Butte, West Thumb, Dot Island, Frank Island, Lewis Falls, Mount Sheridan, Heart Lake, Alder Lake, Lewis Canyon, Mount Hancock, Crooked Creek, Snake Hot Springs, Gravel Peak, Flagg Ranch, Huckleberry Mountain, Bobcat Ridge, Two Ocean Lake, Whetstone Mountain, Hunter Mountain, Moran, Davis Hill, Rosies Ridge, Shadow Mountain, Mount Leidy, Green Mountain, Blue Miner Lake, Grizzly Lake, Gros Ventre Junction, Upper Slide Lake, Jackson, Darwin Peak, Cache Creek, Turquoise Lake, Crystal Peak, Munger Mountain, Camp Davis, Bull Creek, Granite Falls, Doubletop Peak, Joy Peak, Crater Lake, Younts Peak, Hardluck Mountain, Mount Burwell, Ferry Lake, Emerald Lake, Dundee Meadows, Shoshone Pass, Five Pockets, Snow Lake, Angle Mountain, Togwotee Pass, Wiggins Peak, Tripod Peak, Lava Mountain, Kisinger Lakes, Esmond Park, Ramshorn Peak, Indian Point, Castle Rock, Burnt Mountain, Sheridan Pass, Warm Spring Mountain, Dubois, Fish Lake, Ouzel Falls, Mosquito Lake, Fish Creek Park, Union Peak, Simpson Lake, Tosi Peak, Klondike Hill, Big Sheep Mountain, Downs Mountain, Green River Lakes, Windy Mountain, Pelican Cone, Little Saddle Mountain, Pollux Peak, Stinkingwater Peak, Geers Point, Mount

Chittenden, Cathedral Peak, Pahaska Tepee, Sunlight Peak, Sylvan Lake, Plenty Coups Peak, Eagle Creek, Trail Lake, Eagle Peak, Pinnacle Mountain, Badger Creek, Open Creek, The Trident, Two Ocean Pass, Yellowstone Point, Thorofare Plateau, McLeod Basin, Squaw Peak, Sliderock Mountain, Wildcat Draw, Chrome Mountain, Picket Pin Mountain, Meyer Mountain, Nye, Beehive, Mount Douglas, Tumble

Mountain, Cathedral Point, Mount Wood, Emerald Lake, Mackay Ranch, Roscoe, Haystack Peak, Granite Peak, Alpine, Sylvan Peak, Bare Mountain, Pinnacle Mountain, Little Park Mountain, Roundhead Butte, Cutoff Mountain, Cooke City, Fossil Lake, Castle Mountain, Silver Run Peak, Black Pyramid Mountain, Jim Smith Peak, Muddy Creek, Mount Hornaday, Abiathar Peak, Pilot Peak, Beartooth

Butte, Deep Lake, Opal Creek, Wahb Springs, Canoe Lake, Hurricane Mesa, Hunter Peak, Dillworth Bench, Dodge Butte, Kendall Mountain, Gannett Peak, Pass Peak, Squaretop Mountain, Fremont Peak North, Bridger Lakes, Fremont Peak South, New Fork Lakes, Fremont Lake North, Cora, Fremont Lake South, Fayette Lake.

(ii) Map of Greater Yellowstone Area unit follows:



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Dated: February 13, 2008.

Lyle Lavery,

*Assistant Secretary for Fish and Wildlife and
Parks.*

[FR Doc. 08-779 Filed 2-27-08; 8:45 am]

BILLING CODE 4310-55-C