

## CHAPTER VIII. PROPOSED CRITICAL HABITAT FOR CANADA LYNX (Conference Opinion)

In the Assessment addressing the MIRR, the USFS has concluded that the proposed action *is likely to adversely affect, but is not likely to result in the destruction or adverse modification* of proposed revised designated critical habitat for the contiguous United States distinct population segment of the Canada lynx. Federal action agencies may request a conference with the Service on any proposed action that may affect proposed critical habitat. If the proposed critical habitat is considered in the formal consultation (as it is for proposed critical habitat for Canada lynx in this Opinion), the analysis is included in the same sections as the listed species. If the proposed critical habitat becomes designated, the Service may adopt the conference opinion as the biological opinion issued through this formal consultation if no significant changes have occurred in the proposed action or the information used in this formal Conference Opinion.

### **A. History of Proposed Revised Designated Critical Habitat for Canada Lynx**

On November 9, 2006, the Service issued a Federal Register (71 FR 66007) notice entitled Designation of Critical Habitat for the Contiguous United States Distinct Population Segment of Lynx (Service 2006). The Service designated three areas as critical habitat for lynx, including: 1) Voyageurs National Park in north-eastern Minnesota; 2) Glacier National Park in north-western Montana; and 3) North Cascades National Park in north-central Washington. No National Forest System lands were designated as critical habitat because these lands were found to already provide special management and/or protection for lynx. On July 20, 2007, the Service announced a review of the November 9, 2006 final rule after questions were raised about the integrity of the scientific information used and whether the decision made was consistent with the appropriate legal standards. Based on that review of the previous critical habitat designation, it was determined necessary to revise critical habitat. On February 28, 2008, the Service proposed a rule in the Federal Register (73 FR 10860) to revise designated critical habitat for the contiguous United States distinct population of Canada lynx. Approximately 42 mi<sup>2</sup> (110,727 km<sup>2</sup>) fall within the boundaries of the proposed revised critical habitat designation (73 FR 10860). The proposed designation would add an additional 40,913 mi<sup>2</sup> to the existing critical habitat designation of 1,841 mi<sup>2</sup> in Idaho, Maine, Minnesota, Montana, Washington and Wyoming (73 FR 10860). In Idaho, approximately 32,000 acres of proposed revised designated critical habitat is located in Boundary County on Federal (National Forest and BLM) lands and 649 acres on State of Idaho lands. Of the estimated 32,000 acres on federal lands, 5,668 acres overlap the Buckhorn Ridge Roadless Area on the Panhandle National Forest. This Conference Opinion addresses this proposed revised designated critical habitat on the IPNF involving a portion of the Buckhorn Ridge Roadless Area.

### **B. Description of Proposed Critical Habitat for Canada Lynx**

In proposing critical habitat for Canada lynx, the Service considered essential physical and biological features, also referred to as PCEs, laid out in the appropriate quantity and spatial arrangement for conservation of the species. In general, these PCEs include, but are not limited to the following: space for individual and population growth and for normal behavior; food, water, air, light, minerals, or other nutritional or physiological requirements; cover or shelter;

sites for breeding, reproduction, or rearing (or development) of offspring; and habitats that are protected from disturbance or are representative of the historic, geographical, and ecological distributions of a species.

The area proposed for designation by the Service as critical habitat within each of the five units – Northern Maine, (Unit 1), Northeastern Minnesota (Unit 2), Northern Rocky Mountains (Unit 3), North Cascades (Unit 4), and the Greater Yellowstone Area (Unit 5) – are reflected in Table 34. These units overlay lands under various ownerships including Federal, State, private, tribal, and other.

Table 34. Critical habitat units proposed for the Canada lynx.

<b>Critical Habitat Unit</b>	<b>Sq. Miles</b>	<b>Sq. Kilometers</b>	<b>Acres<sup>1</sup></b>
1. Northern Maine	10,633	27,539	6,805,100
2. Northeastern Minnesota	8,226	21,305	5,264,600
3. Northern Rocky Mountains	11,304	29,276	7,234,400
4. North Cascades	2,000	5,180	1,280,000
5. Greater Yellowstone Area	10,590	27,427	6,777,600
<b>Total</b>	<b>42,753</b>	<b>110,727</b>	<b>27,361,900</b>

<sup>1</sup>Rounded to the nearest 100.

### **C. Environmental Baseline**

Approximately 51 mi<sup>2</sup> (~32,940 acres) of the Northern Rocky Mountains Unit (Figure 15) overlap into Idaho, which represents about 17% of that unit (Table V-10 in the Assessment). The majority (98%) of proposed lynx critical habitat in Idaho occurs on Federal lands in northeastern Idaho (Figure 16). Lynx are known to be widely distributed throughout the Northern Rocky Mountains unit and breeding has been documented in multiple locations. 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 within the United States and provides connectivity to other portions of the lynx’s range in the Rocky Mountains, particularly the Yellowstone area. Of the estimated 32,000 acres of proposed lynx critical habitat in Idaho, 5,668 acres overlap IRA, all falling within the Buckhorn Ridge Roadless Area (Figure 16). This equates to approximately 0.08 percent of the entire Northern Rocky Mountains unit. See the FEIS, Volume 3, pages C3-82 through C3-85 for more detailed information on the Buckhorn Roadless Area.

#### **1. Primary Constituent Elements for Proposed Critical Habitat**

Within the Northern Rocky Mountains Unit and specifically Unit 3 which includes Boundary County, Idaho, the primary constituent element for lynx critical habitat is the boreal forest landscape 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,

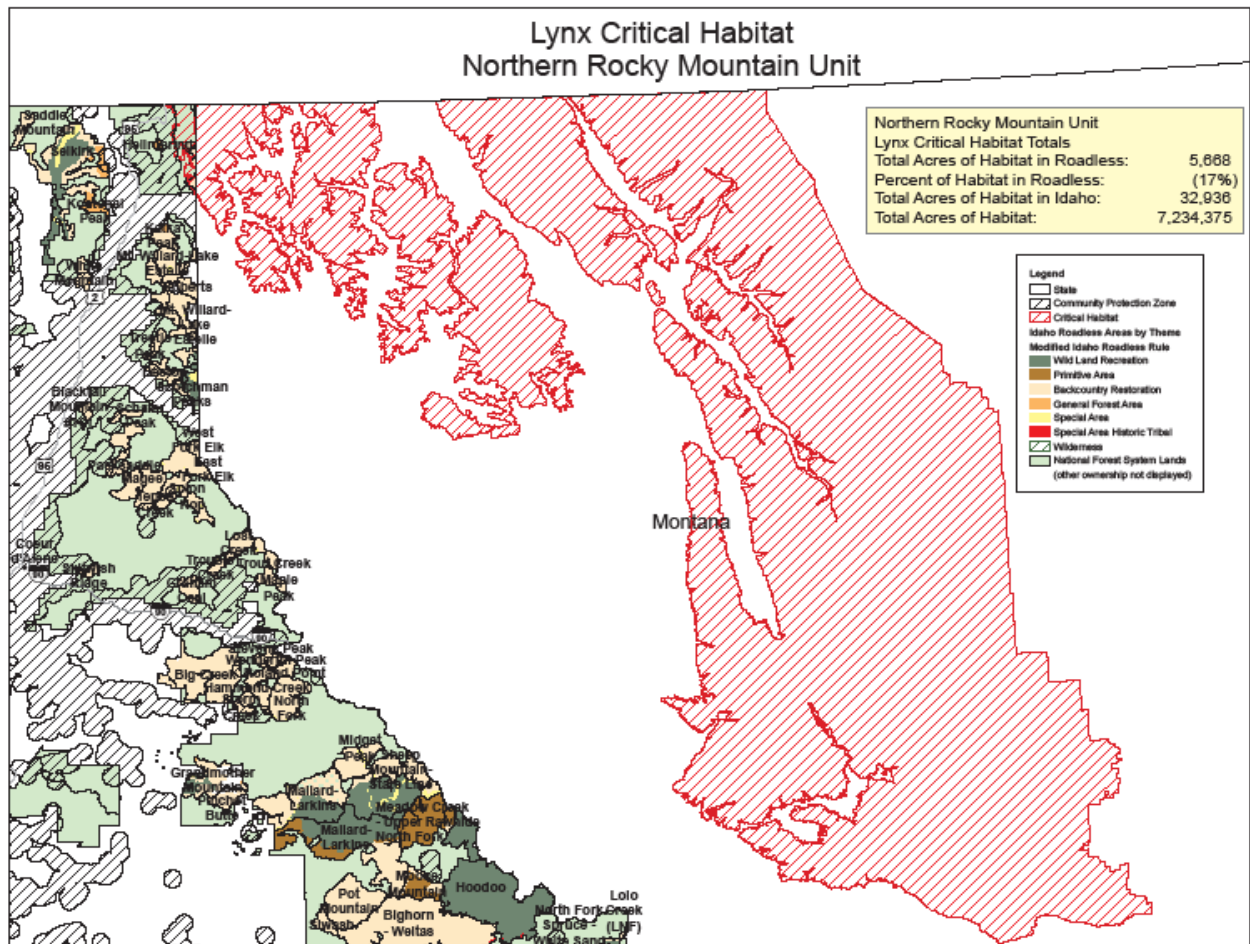


Figure 15. Proposed designated critical habitat for lynx in the Northern Rocky Mountain Unit.

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 provide the ability to allow unimpeded movement of lynx through them as lynx travel between patches of boreal forest (Service 2008a, page 10882).

## 2. Factors affecting Proposed Critical Habitat in the Action Area

Timber harvest and management is a dominant land use in the Boundary County, Idaho area. Timber management practices that provide for a dense understory are beneficial for lynx and snowshoe hares. However, forest management techniques that thin the understory may render the habitat unsuitable for hares and, thus, for lynx (Ruediger et al. 2000). Also in this area of north Idaho, 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)(Service



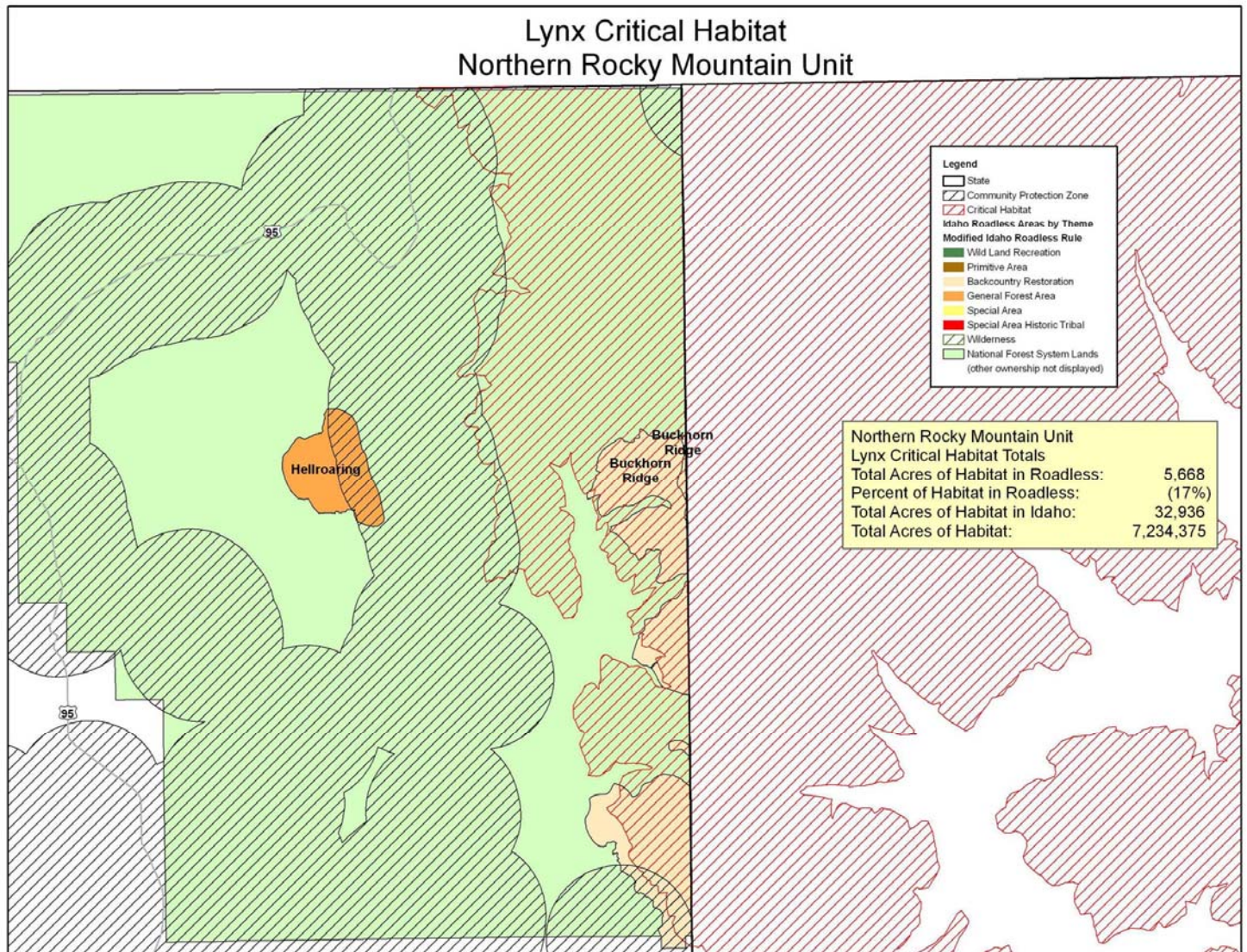


Figure 16 . Proposed designated critical habitat for lynx in the Northern Rocky Mountain Unit in Idaho Roadless Areas.

2008a, page 10874). The LCAS originally identified 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. Most of these risk factors hold potential to adversely affect lynx productivity and/or lynx mortality. Potential risk factors that the LCAS addresses that may affect lynx movement include highways, railroads and utility corridors, land ownership pattern, and ski areas and large resorts. While all of these factors occur in the Boundary County, Idaho area, most do not occur directly within the IRAs.

Winter activities including cross-country skiing and snowmobiling may be expected to occur in the Buckhorn Ridge Roadless Area at least occasionally. Some researchers maintain that winter activities such as these can compact snow allowing other predators that compete with lynx to access lynx habitat (Claar et al. 1999; Brunnell et al. 2006). Other researchers note that there is

no solid data on the role of snow compaction and changes in competitive advantage between lynx and other species (Kolbe et al. 2007). After evaluating Brunnell et al. (2006) and Kolbe et al. 2007, the Service 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).

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. While these factors may influence or adversely affect portions of proposed lynx critical habitat within the Northern Rocky Mountains unit, they are not issues degrading lynx habitat within the Buckhorn Ridge Roadless Area.

#### **D. Effects of the Proposed Action**

The previous section presented factors and activities that can affect proposed critical habitat for the Canada lynx in the action area, some of which (particularly road construction, road reconstruction, timber cutting and discretionary mining) may also result from future actions undertaken as allowed by the MIRR. To minimize duplication, these potential effects are not reiterated in their entirety below, but are addressed specifically with regard to the proposed MIRR. Unlike most USFS project analyses of alternatives and environmental consequences, the analysis of the MIRR does not include an analysis of project implementation and resulting direct effects; it is an analysis of activities that could occur pursuant to the MIRR and the indirect and cumulative effects that could occur from those actions. It is an analysis of what is allowed under the rule versus an analysis of the on-the-ground activities, and therefore has no direct effects.

Under the MIRR, all 5,668 acres of proposed lynx critical habitat in IRAs are included in BCR, of which 323 acres fall within the CPZ. There is no overlap with any of the other themes – WLR, PRIM, GFRG, or SAHTS. Within BCR, timber cutting, sale or removal and would be permitted for the following general purposes: to reduce fuels, particularly around at-risk communities or municipal water supply systems, to improve threatened, endangered, proposed or sensitive species habitat, and to maintain or restore characteristics of ecosystem composition and structure. Roads could be constructed only to facilitate hazardous fuel reduction activities within the CPZ or it is determined a significant risk exists to an at-risk community or municipal water supply system outside the CPZ. If these any of these circumstances applied, activities would be further subject to certain conditions, including but not limited to Regional Forester approval and meeting consistency with applicable plan components.

Under the MIRR, 1,000 acres of timber harvest (i.e., removal of a commercial product) and 3.3 miles of road construction/reconstruction per year are projected in all of IRAs based on historic trends for developing roadless areas over the past 20 years. Most of these activities are expected to occur within the 405,900 of GFRG. However, there is the potential for timber harvest and cutting and road construction/reconstruction within BCR, particularly within the CPZ, albeit the circumstances under which it would occur are limited (as described above). See Section II of this BO and Chapter II of the FEIS for a complete description of the BCR theme.

The nature of effects timber cutting activities could have on proposed lynx critical habitat will vary depending on the purpose, prescriptions, and methods involved. Timber cutting that reduces or removes understory vegetation within boreal forest stands (PCE), as for the purposes of fuels reduction, could 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 (Service 2008a, page 10876). However, vegetation management that contributes to a dense understory could increase habitat for snowshoe hare and thus be beneficial to lynx. As 5,668 acres of the Northern Rocky Mountains Unit do overlap BCR, there is the potential for the MIRR to adversely affect proposed lynx critical habitat, as disclosed above, particularly given the exact location of activities that are permitted under this theme can not be known at this time.

Use of prescribed fire is not directly addressed by the MIRR. However, this activity is typically paired with timber cutting activities intended to reduce fuels, which is addressed by the MIRR. Consequently, we also consider potential impacts resulting from prescribed fire on proposed critical habitat for Canada lynx. Fire exclusion has altered the pattern and composition of vegetation within lynx habitat within National Forests in Idaho (Hillis 2003). These patterns, especially within stand replacing fire regimes (predominately spruce-fir communities), were likely important in providing young age class (i.e., stand initiation) snowshoe hare habitat across the landscape. Use of natural fire processes, such as wildland fire or prescribed fire, could be used as a restoration tool for these ecosystems that have been impacted by fire exclusion. These activities may temporarily reduce the quality of lynx habitat for several years following a burn (Fox 1978), as changes to understory may reduce snowshoe hare populations, remove cover, and possibly increase competition from coyotes in open habitats (Stephenson 1984, Koehler and Brittell 1990). However, in the longer term (10-15 years), areas burned may provide for higher densities of snowshoe hares than prior to treatment, resulting in a benefit to resident lynx.

Although it varies by commodity, surface use associated with the exploration and development of leasable minerals requires access and haul roads, open pits, facilities, power lines, pipelines, and communication sites, all of which can impact habitats for terrestrial species. Generally, many of the impacts discretionary mining could have on terrestrial wildlife species, including Canada lynx, will result from removal of the substrate for the mine footprint and required infrastructure, primarily road construction and development. Discretionary mining activities, including surface use and occupancy, would be allowed under the MIRR if permitted in the land management plan. However, new road construction and reconstruction associated with development of geothermal, oil, or gas reserves is prohibited in roadless areas under the MIRR regardless of theme. There are no known oil and gas deposits on the IPNF, and geothermal energy potential is very low. As such, little commercial interest in leasing for such resources is anticipated as development would essentially be precluded in the absence of new roads and there is low potential for the resource. Surface use and occupancy in the BCR and GFRG themes would be permitted if allowed in the LRMP. Road construction is only permitted to access specific phosphate deposits in the GFRG theme. There is no GFRG theme assigned to the Buckhorn Ridge Roadless Area. Activities related to phosphate leasing in IRAs would be restricted to areas in and adjacent to specific Known Phosphate Leasing Areas (KPLAs) on the Caribou portion of the Caribou-Targhee National Forest. Consequently, the likelihood that



discretionary mining activities will take place in IRAs in northern Idaho (and specifically the Buckhorn Ridge Roadless Area (FEIS, Volume 3 page 3-82 to 3-85) is exceptionally low.

## **E. Cumulative Effects**

Under the Act, cumulative effects are defined in 50 CFR 402.02 as: “those effects of future state and private activities that are reasonably certain to occur within the action area of the Federal Action subject to consultation.” A non-Federal Action is “reasonably certain” to occur if the action requires the approval of a state or local resource or land use control, such agencies have approved the action, and the project is ready to proceed. For Federal lands, state, Tribal, and local government actions could be in the form of legislation, administrative rules, or policy initiatives, or they could be actions proposed on non-federal lands that fall within the action area (e.g., inholdings).

We do not anticipate cumulative effects to the Canada lynx resulting from state, Tribal, and local government actions for the following reasons:

- The action area for the MIRR consists of IRAs (see definition in Section II of the Assessment), most of which are unlikely to contain significant inholdings given their current roadless character and thus effects on such intervening non-Federal lands are unlikely;
- Given the broad scope of this Federal Action, it is not possible to determine specific state, private or local government legislation, administrative rules, or policy initiatives that would be reasonably certain to occur in IRAs.

## **F. Conclusion**

The Service has reviewed the current status of proposed critical habitat for Canada lynx, the environmental baseline in the action area, effects of the proposed action, and cumulative effects, and it is our conclusion that the proposed action is not likely to destroy or adversely modify critical habitat for Canada lynx.

The MIRR is likely to adversely affect proposed critical habitat for Canada lynx, as 5,668 acres of the Northern Rocky Mountains Unit do overlap BCR. Given that the exact location of activities that are permitted under this theme are not known at this time, the exact extent of potential adverse effects that may result from future site-specific proposed actions authorized by the MIRR within the IRA portion of proposed critical habitat for Canada lynx are also unknown. However, when these potential adverse effects are added to the environmental baseline of the entire proposed critical habitat, they are not likely to appreciably diminish the capability of the proposed critical habitat to satisfy requirements essential to both the survival and recovery of Canada lynx. The Buckhorn Ridge Roadless Area portion of proposed critical habitat for lynx represents only 0.08 percent of the entire Northern Rocky Mountains Unit. The conditions under which timber cutting and temporary road construction or reconstruction in Backcountry Restoration theme acres would be permitted should serve to minimize and reduce the degree and scope of adverse effects in critical habitat. Requiring Regional Forester approval will likely serve to filter proposed activities within BCR to those clearly meeting the permitted purposes.

Occupied mapped lynx habitat in Idaho, including that proposed as critical habitat, is subject to the standards and guidelines outlined in the NRLA (see Appendix B of the Assessment for details), many of which are designed to limit impacts to lynx habitat both on spatial and temporal scales. The management direction for lynx in the Northern Rockies Lynx Management direction is not inconsistent with the MIRR direction; therefore lynx management direction would be applied at the project level. These standards and guidelines should function similarly in minimizing adverse effects to proposed lynx critical habitat. Despite the potential for activities allowed by the MIRR to affect structural vegetation components within the boreal forest (PCE) that may reduce the ability of those areas to support high densities of snowshoe hare, the potential extent of the affect is very limited and does not appreciably diminish the value of constituent elements essential to the conservation of the contiguous United States distinct population segment of Canada lynx. In addition, activities undertaken pursuant to the MIRR are not expected to disrupt habitat connectivity to other portions of the lynx's range in the Rocky Mountains. For these reasons, activities allowed by the MIRR are not likely to result in the destruction or adverse modification of proposed critical habitat for the contiguous United States distinct population segment of the Canada lynx.

## **G. Conservation Recommendations**

Section 7(a)(1) of the Act requires Federal Agencies to utilize their authorities to further the purposes of the Act by carrying out conservation programs for the benefit of endangered and threatened species. Conservation recommendations are discretionary agency activities intended to minimize or avoid adverse effects of a proposed action on listed species or critical habitat, to help implement recovery plans, or to develop information. The Service does not recommend conservation measures specifically for the MIRR because only 0.08 percent (5,668 acres) of the proposed critical habitat of the entire Northern Rocky Mountains Unit (spanning approximately 42,753 square miles) is involved in IRAs and any applicable conservation measures have already been addressed in the consultation for the Northern Rockies Lynx decision.

## **H. Closing Statement**

This concludes the Conference Opinion for the MIRR. The USFS may ask the Service to confirm this Conference Opinion as a biological opinion issued through formal consultation if the proposed revised designated critical habitat for the contiguous United States distinct population segment of the Canada lynx is designated. The request must be in writing. If the Service reviews the proposed action and finds that there have been no significant changes in the action as planned or in the information used during the conference, the Service will confirm the Conference Opinion as a biological opinion on the MIRR and no further section 7 consultation will be necessary.

After designation of critical habitat for Canada lynx and any subsequent adoption of this Conference Opinion, the Federal agency shall request reinitiation of consultation if (1) the amount or extent of incidental take is exceeded; (2) new information reveals the effects of the agency action that may affect critical habitat in a manner or to an extent not considered in this Conference Opinion; (3) the USFS action is subsequently modified in a manner that causes an



effect to the critical habitat that was not considered in the Conference Opinion; or (4) a new species is listed or critical habitat designated that may be affected by the action.