

## SECTION 2 | BACKGROUND

36. This section summarizes the study area and provides information on the land use activities considered in this analysis. The Canada lynx are medium-sized cats that are highly specialized predators of snowshoe hare. The Proposed Rule describes the species in detail.<sup>21</sup>

### 2.1 PROPOSED CRITICAL HABITAT DESIGNATION

37. The proposed critical habitat rule for the lynx delineates four units across five states as areas proposed for designation and areas considered for exclusion from critical habitat, collectively referred to in this analysis as the "study area."
- Unit 1 - Maine: portions of Aroostook, Franklin, Piscataquis, Penobscot, and Somerset Counties.
  - Unit 2 - Minnesota: portions of Lake, Cook, and St. Louis Counties.
  - Unit 3 - Northern Rocky Mountains (Montana and a small portion of Idaho): portions of Lincoln, Flathead, Glacier, Lake, Missoula, Granite, Teton, Lewis and Clark, and Powell Counties, MT, and Boundary County, ID.
  - Unit 4 - North Cascades (Washington): portions of Okanogan, Skagit, and Chelan Counties.

The study area lands are generally characterized as moist boreal forests that have cold, snowy winters and a snowshoe hare prey base.

38. According to GIS data provided by the Service, the four critical habitat units comprise 9.8 million acres proposed for designation and 1.19 million acres considered for exclusion from critical habitat. In order to provide results of the economic analysis at a more refined geographic scale than the four units, this analysis identifies "subunits" by landowner type.<sup>22</sup> A graphical depiction of these subunits is presented in Exhibits 2-1 through 2-4, and information on their relative sizes is described in Exhibit 2-5. Importantly, although results are presented by landowner type, impacts as quantified are not necessarily borne by the landowner type describing the subunit. For example, impacts to activities on private inholdings in Superior National Forest that may be borne

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<sup>21</sup> U.S. Fish and Wildlife Service, 50 CFR Part 17, November 9, 2005.

<sup>22</sup> A number of methods to present more spatially refined results was considered in developing this analysis, including by county, census tract, and watershed. The decision-making process that led to the delineation of subunits by landowner type is described in a memorandum from Industrial Economics to the U.S. Fish and Wildlife Service dated February 3, 2006.

by mining companies or private timber companies are included as impacts associated with designating the Superior National Forest subunit; they are not, however, impacts expected to be borne by the U.S. Forest Service.

39. Of the total study area, approximately 80 percent are private lands, 14 percent are state-owned, and six percent are Federal. Of the 9.8 million acres proposed for designation, approximately 55 percent (5.4 million acres) are private timber lands in Maine belonging to more than 50 private landowners; ten of these private landowners are timber companies owning more than 200,000 acres each.
40. Additionally, water bodies and "developed areas such as towns, or human-made structures such as buildings, airports, paved and gravel roadbeds, active railroad beds, and other structures that lack the [primary constituent elements] PCEs for the lynx" are not included in critical habitat.<sup>23</sup> The Proposed Rule identifies about 250 towns and place-based features (e.g., marinas, campsites, historical sites, etc.) across the study area that are not intended to be included in the proposed critical habitat despite falling within the outer boundaries as mapped in the proposed rule. GIS information regarding the explicit boundaries of the majority of these towns and features is not available. As the Service intended only to not include the developed portions of these areas (due to the lack of PCEs) and not the entire area within their boundaries, this analysis considers impacts to any activities that occur within these areas with the potential to affect the PCEs for the lynx.<sup>24</sup> For example, new construction on undeveloped lands within the boundaries of not included towns are considered in this analysis.

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<sup>23</sup> PCEs for the lynx are described in the Proposed Rule: U.S. Fish and Wildlife Service, 50 CFR Part 17, November 9, 2005.

<sup>24</sup> As clarified in a memorandum from IEC to the U.S. Fish and Wildlife Service dated February 3, 2006.

EXHIBIT 2-1. UNIT 1: MAINE

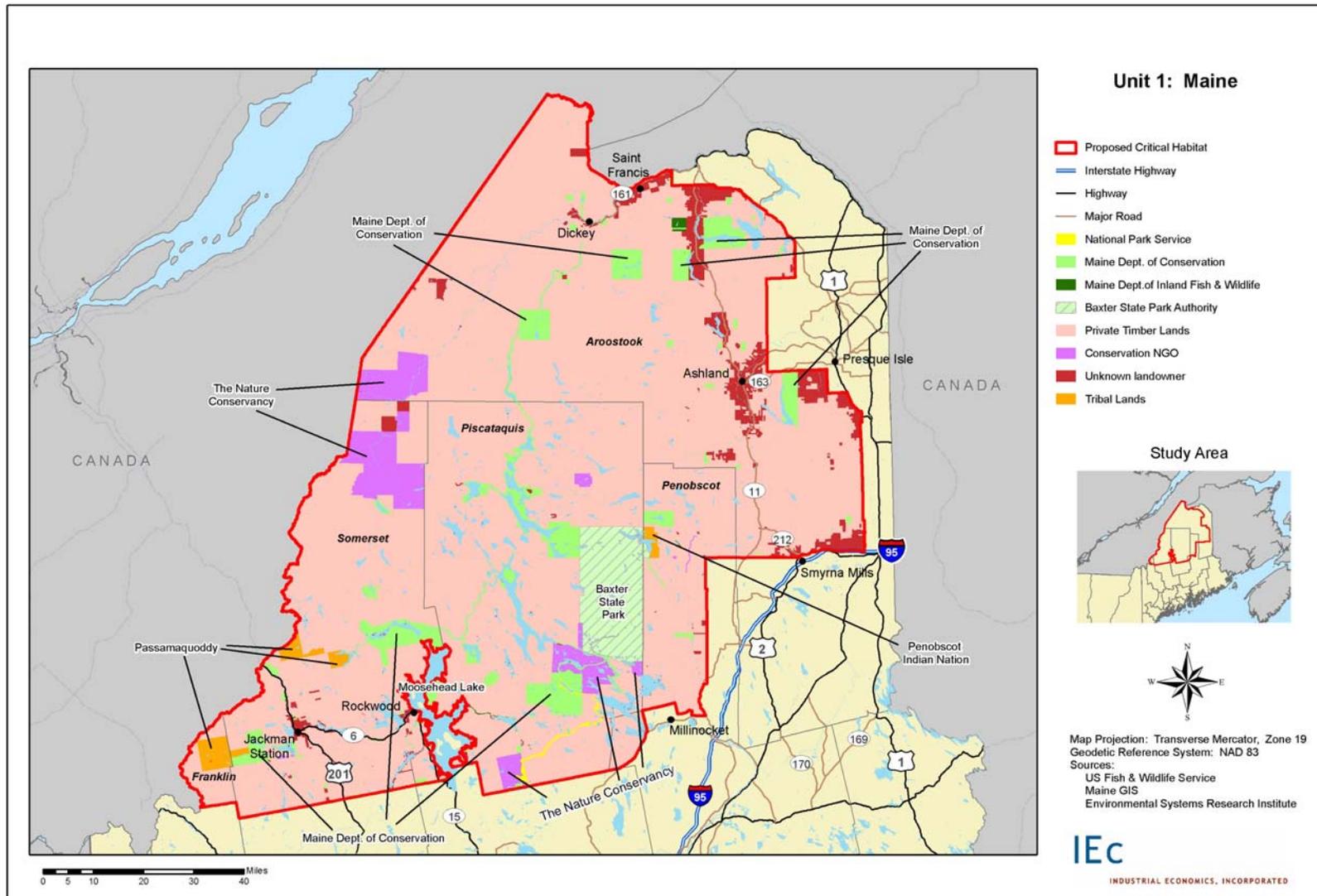


EXHIBIT 2-2. UNIT 2: MINNESOTA

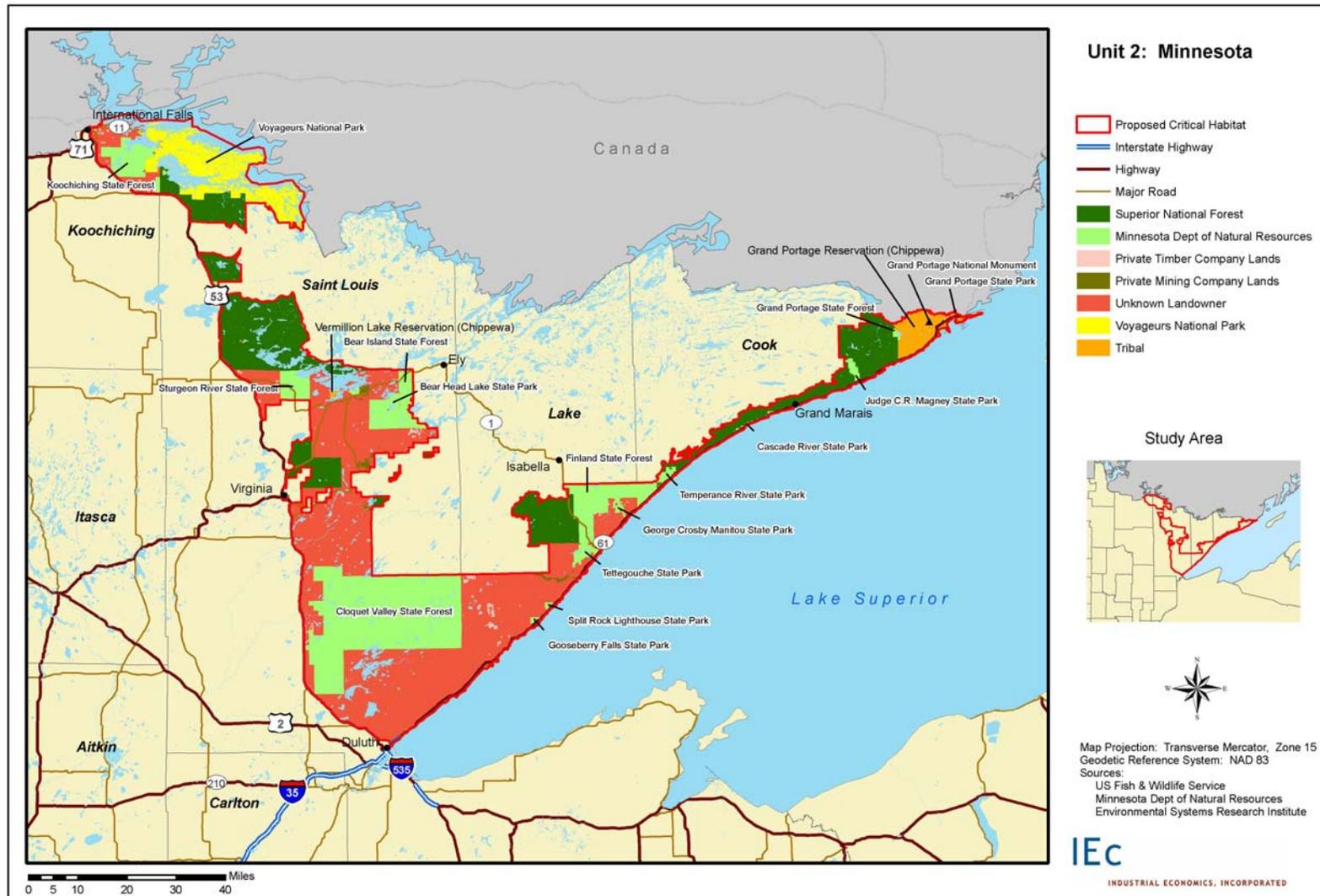


EXHIBIT 2-3. UNIT 3: NORTHERN ROCKY MOUNTAINS

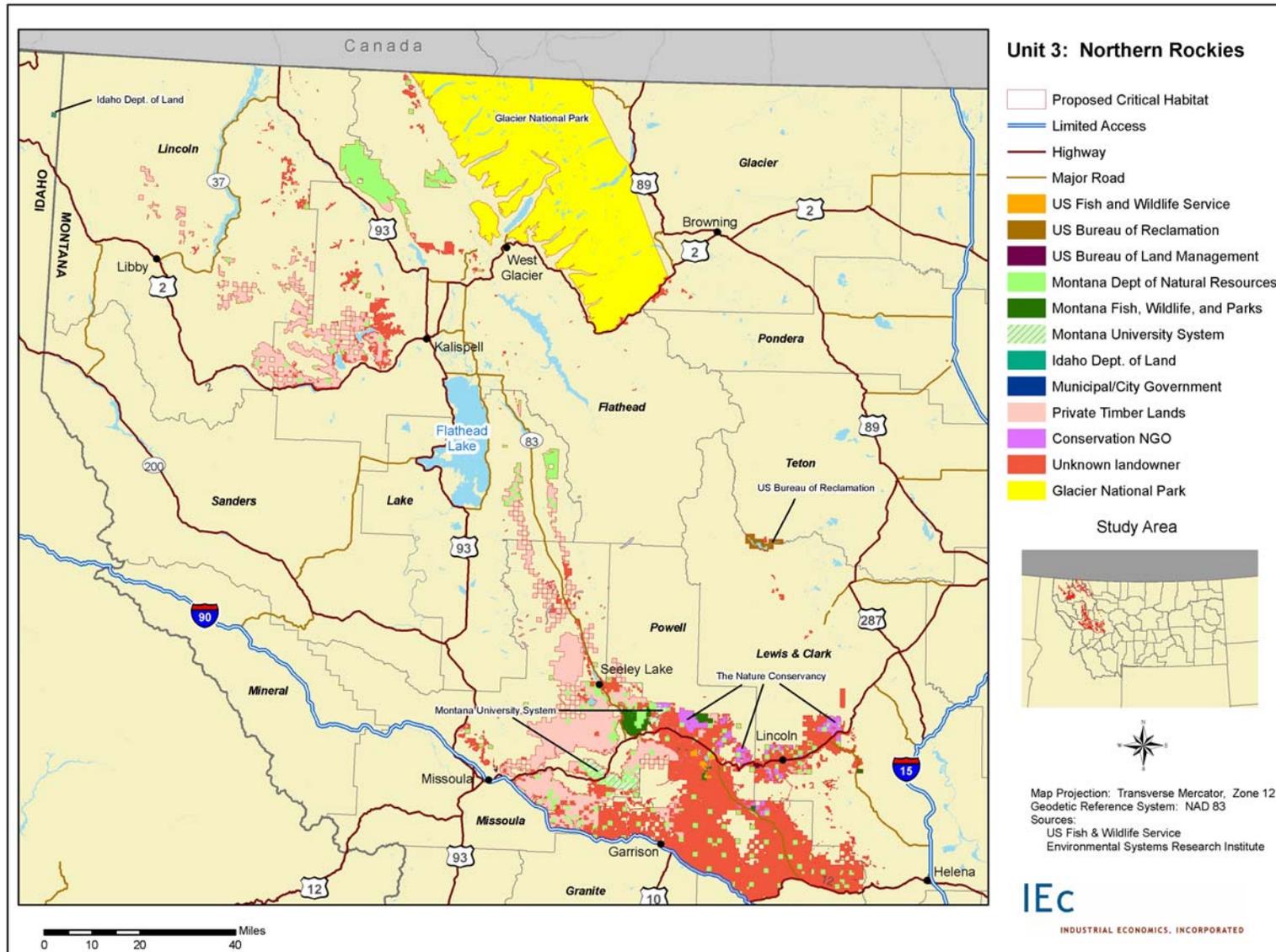
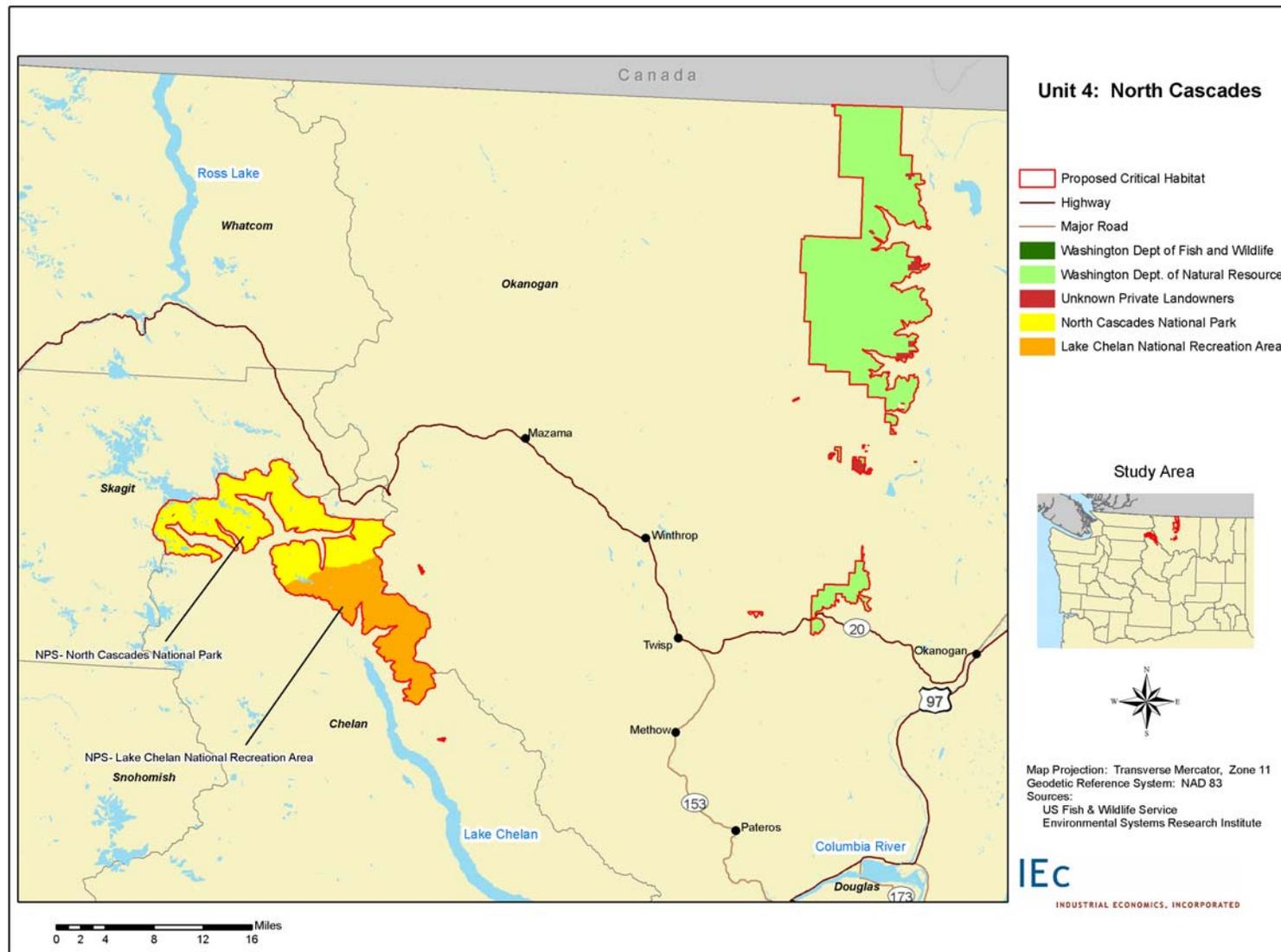


EXHIBIT 2-4. UNIT 4: NORTH CASCADES



## EXHIBIT 2-5. ACREAGES BY SUBUNIT

SUB-UNIT	ACREAGE PROPOSED FOR DESIGNATION	ACREAGE CONSIDERED FOR EXCLUSION	PERCENT OF TOTAL IN UNIT
<b>UNIT 1: MAINE</b>			
National Park Service	10,054		0.15%
U.S. Fish and Wildlife Service	41		0.00%
Maine Dept of Conservation	346,676		5.34%
Maine Dept. of Inland Fish & Wildlife	4,965		0.08%
Baxter State Park Authority	205,436		3.16%
Private Timber Lands	5,385,955		82.92%
Conservation NGO	240,890		3.71%
Unknown Landowner	247,421		3.81%
Tribal lands		53,593	0.83%
<b><i>SUBTOTAL</i></b>	<b><i>6,441,438</i></b>	<b><i>53,593</i></b>	
<b>UNIT 2: MINNESOTA</b>			
Superior National Forest	473,366		22.91%
Minnesota Dept. of Natural Resources	507,473		24.56%
Private Timber Lands	12,074		0.58%
Private Mining Lands	9,702		0.47%
Unknown Landowner	889,522		43.04%
Voyageurs National Park		126,149	6.10%
Tribal Lands		48,209	2.33%
<b><i>SUBTOTAL</i></b>	<b><i>1,892,136</i></b>	<b><i>174,358</i></b>	
<b>UNIT 3: NORTHERN ROCKY MOUNTAINS</b>			
U.S. Fish and Wildlife Service	4,784		0.21%
U.S. Bureau of Reclamation	8,002		0.36%
U.S. Bureau of Land Management	13		0.00%
Montana Dept. of Natural Resources	189,771		8.52%
Montana Fish, Wildlife, and Parks	20,465		0.92%
Montana University System	21,656		0.97%
Idaho Dept. of Land	646		0.03%
Municipal/City Government	246		0.01%
Private Timber Lands	428,205		19.23%
Conservation NGO	36,201		1.63%
Unknown landowner	644,028		28.92%
Glacier National Park		871,668	39.14%
BLM: Butte Resource Area		1,089	0.05%
<b><i>SUBTOTAL</i></b>	<b><i>1,354,016</i></b>	<b><i>872,757</i></b>	

SUB-UNIT	ACREAGE PROPOSED FOR DESIGNATION	ACREAGE CONSIDERED FOR EXCLUSION	PERCENT OF TOTAL IN UNIT
UNIT 4: NORTH CASCADES			
Washington Dept of Fish and Wildlife	3		0.00%
Washington Dept of Natural Resources	105,023		54.29%
Unknown Private Landowners	2,630		1.36%
North Cascades National Park		53,135	27.47%
Lake Chelan National Recreation Area		32,665	16.89%
<i>SUBTOTAL</i>	<i>107,656</i>	<i>85,800</i>	
<b>GRAND TOTAL</b>	<b>9,795,246</b>	<b>1,186,509</b>	<b>4.00</b>

## 2.2 THREATS TO THE SPECIES AND ITS HABITAT

41. Through review of the threats listed in the proposed rule, and past consultation regarding the lynx, this analysis identifies the following land use activities as potential conservation threats to the lynx:
- Silviculture;
  - Development;
  - Recreation;
  - Public lands management;
  - Transportation, utilities, and municipal activities;
  - Mining; and
  - Tribal activities.
42. The extent of the various land use activities across the study area reflects the species' preference for regenerating forested lands with deep snow. That is, the lynx favors dening and hunting in areas away from people and developed areas. This is evidenced by the fact that the majority of the lands of the study area (as described above) are rural landscapes primarily used for silviculture.
43. Each of the above land use activities is examined to determine how it may need to be modified to mitigate threats to the lynx and critical habitat in this analysis.