

Noisy Face Recreation Management Decision

Terrestrial Biological Assessment Amendment

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Table of Contents

SUMMARY OF FINDINGS.....	1
INTRODUCTION.....	2
PROJECT AREA	2
PROJECT SUMMARY AND BACKGROUND.....	3
ASSESSMENT	3
Canada Lynx Critical Habitat.....	3
Action Area	3
Description of Measurement Indicators	3
Data Sources, Methods, and Assumptions Used	3
Habitat Status	4
Direct and Indirect Effects	5
Cumulative Effects for Canada Lynx Critical Habitat	6
Effects Determination.....	8
Grizzly Bear	8
Background, Updated Science, and Consistency with Amendment 19.....	8
Literature Cited.....	10
Appendix A. Map of Noisy Face Decision (1988) and Lynx Analysis Units.	13
Appendix B. Map of Noisy Face Decision (1988), Affected LAUS, and Critical Habitat	14
Appendix C. Map of Noisy Face Decision and Grizzly Bear Subunits	15

SUMMARY OF FINDINGS

Determination of Effects

The determination for the March 18, 1988 Noisy Face Recreation Management Decision for lynx Critical Habitat is MAY AFFECT, NO LIKELY TO ADVERSELY AFFECT. The determination for grizzly bear is that the March 18, 1988 Noisy Face Recreation Management Decision does not require reinitiation of consultation and that the decision falls within the parameters of the 2014 Amendment 19 Biological Opinion.

Consultation Requirements

In accordance with the Endangered Species Act (ESA), its implementation regulations (50 CFR 402.13), and FSM 2671.4, the Flathead National Forest has requested written concurrence from

the United States Fish and Wildlife Service (FWS) with respect to determinations of potential effects on Canada lynx Critical Habitat, and grizzly bear.

INTRODUCTION

The purpose of this Biological Assessment Amendment is to review the possible effects of the proposed federal action on threatened or endangered species and their habitats. Threatened, endangered, or proposed species are managed under the authority of the Federal Endangered Species Act (PL 93-205, as amended) and the National Forest Management Act (PL 94-588). Under provisions of the Endangered Species Act (ESA), Federal agencies shall use their authorities to carry out programs for the conservation of listed species, and shall insure any action authorized, funded, or implemented by the agency is not likely to: (1) adversely affect listed species or designated critical habitat; (2) jeopardize the continued existence of species; or (3) adversely modify proposed critical habitat (16 USC 1536).

As such, this Biological Assessment Amendment analyzes the potential effects of the proposed federal action on all terrestrial threatened or endangered species known or suspected to occur in the proposed action influence area (Table 1). Life history information on these species can be found in the reference document “The Distribution, Life History, and Recovery Objectives For Region One Threatened, Endangered, and Proposed Terrestrial Wildlife Species” (USDA Forest Service 2001) and is incorporated by reference in this Biological Assessment Amendment. This species list was confirmed by USFWS; reference the Montana Field Office website (1/8/2015).

Table 1

Terrestrial Threatened or Endangered Species Known or Suspected To Occur Within the
Influence Area of the Proposed Action

Species	Status	Occurrence
Canada Lynx (<i>Lynx canadensis</i>)	Threatened /Critical Habitat	Resident
Grizzly Bear (<i>Ursus arctos</i>)	Threatened	Resident

PROJECT AREA

The project area for the March 18, 1988 Noisy Face Recreation Management Decision is located on the west front of the northern Swan Mountains. The project area runs from Schmidt Creek north up the Swan Mountains, along the eastern edge of the Flathead Valley, to the Swan Lake Ranger District Boundary (just north of the south fork of Hemler Creek). The Noisy Face Recreation Management decision area includes trails and roads located in the Schmidt, Krause, Graves Forest, West Columbia, Quintonkon Creek, Wildcat Mountain, Doris Creek, and Wheeler Creek Lynx Analysis Units.

PROJECT SUMMARY AND BACKGROUND

The Noisy Face Recreation Management Direction Decision was signed on March 18, 1988. The decision applied motorized closures to roads and trails on the west face of the Northern Swan Mountains. A map the project decision is located in Appendix A. Motorized and non-motorized recreational activities are being managed consistent with the 1988 he Noisy Face Recreation Management Decision.. This analysis considers the the 1988 decision and its motorized and non-motorized recreation on roads and trails management direction.

ASSESSMENT

Canada Lynx Critical Habitat

Action Area

Spatial Bounds

In accordance with the revised draft Lynx Conservation Assessment and Strategy (LCAS 2000; IBLT 2013), 109 Lynx Analysis Units (LAU's) were identified and mapped on Flathead National Forest lands. These areas approximate the size of a female's home range and contain year-round habitat components (LCAS 2000). The LAU's are the geographic area used to analyze direct, indirect, and cumulative effects for Canada lynx. The Noisy Face Recreation Management Decision includes roads and trails located across the 8 different LAUs. These 8 LAUs are; Krause, Schmidt, Graves Forest, Wildcat Mountain, Doris Creek, West Columbia, Wheeler Creek, and Quintonkon Creek. These LAUs were used as the spatial bounds in analyzing effects to Critical Habitat. In determining impacts to lynx critical habitat this analysis considered all designated lynx critical habitat in the 2 LAUs.

Temporal Bounds

This analysis discusses management direction included in the Noisy Face Decision. The length of time is indefinite as management direction is expected to continue into the future until a presently unforeseen decision or plan changes this direction.

Description of Measurement Indicators

Based on current knowledge of the life history, biology, and ecology of lynx, certain elements are thought to be essential to the conservation of the species. For Critical Habitat, these elements are determined to be the Primary Constituent Elements (PCEs) of lynx Critical Habitat including, deep fluffy snow, boreal forests providing conditions for hare habitat, lynx denning habitat, and matrix. These elements of lynx Critical Habitat, and the anticipated effects to these elements from project implementation, are the measurement indicators used in this analysis.

Data Sources, Methods, and Assumptions Used

Data used included aerial photography, Vector Map (VMAP) data, field surveys, project area field visits to verify lynx habitat classification, research literature, and GIS and dataset

information for features such as general forest attributes, slope, aspect, habitat type, forest type, elevation, and mapped lynx habitat.

Habitat Status

The conservation role of lynx Critical Habitat is to support viable core area lynx populations (USDI 2009c). In 2008, Critical Habitat was proposed for Canada Lynx. A Final Rule for Revised Designation of Critical Habitat for the Contiguous United States Distinct Population Segment of the Canada Lynx was effective on March 27, 2009. The designation of Critical Habitat for lynx was based on the best assessment of areas: (1) determined to be occupied at the time of listing; (2) that contained the physical and biological features in the appropriate spatial arrangement and quantity essential for the conservation of the species; and (3) that may require special management considerations or protection.

Northwest Montana is in Critical Habitat Unit 3: Northern Rocky Mountains. This unit includes most of northwest Montana as well as a small portion of northeastern Idaho and encompasses approximately 9,783 square miles (approx. 6,261,095 acres). The Unit 3 area is essential to the conservation of lynx because it appears to support the highest density of lynx populations in the Northern Rocky Mountain region of the lynx's range. It also likely acts as a source for lynx and provides connectivity to other portions of the lynx's range in the Rocky Mountains (USDI 2009).

On the FNF, there are approximately 2,273,340 acres of designated Critical Habitat for lynx. The majority (approx. 92%) of the 8 LAUs representing the spatial bounds of this analysis are designated as Canada lynx Critical Habitat. Nearly all of the trails and roads included in the Noisy Face Recreation Management Decision are located in lynx Critical Habitat. A summary of amounts of designated Critical Habitat in the affected LAUs is located in Table 14.

Table 14.
Designated Lynx Critical Habitat in the Noisy Face Recreation Management Decision
LAUs

Lynx Analysis Unit (LAU)	Total LAU Area (acres)	Critical Habitat (acres)
Krause	20,788	17,308
Schmidt	17,853	15,516
Graves Forest	25,377	24,715
Wildcat Mountain	17,401	16,546
Doris Creek	25,973	24,662
West Columbia	11,476	9,316
Wheeler Creek	16,695	16,175
Quintonkon Creek	17,401	17,453
Total	153,286	141,691

By definition, Critical Habitat for Canada lynx contains the physical and biological features essential to conservation of the lynx, and is comprised of "primary constituent elements" (PCE's) in an appropriate quantity and spatial arrangement (USDI 2008). Based on the current

knowledge of the life history, biology, and ecology of the lynx, the PCE and its four components for lynx Critical Habitat 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*, which include dense understories of young trees, shrubs or overhanging boughs that protrude above the snow, and mature multistoried stands with conifer boughs touching the snow surface (PCE 1a);
 - b. *Winter snow conditions* that are generally deep and fluffy for extended periods of time (PCE 1b);
 - c. *Sites for denning* that have abundant coarse woody debris, such as downed trees and root wads (PCE 1c); 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 (PCE 1d).

Squires et al. (2008) found that female dens were primarily located in spruce-fir stands with abundant coarse woody debris and high horizontal cover; however denning did occur in stands with coarse woody debris but insufficient cover for snowshoe hares.

Direct and Indirect Effects

The Revised Designation of Critical Habitat (September 12, 2014) described three types of Federal actions that may affect Critical Habitat:

- 1) Actions that would reduce or remove understory vegetation within boreal forest stands on a scale proportionate to the large landscape used by lynx.
- 2) Actions that would cause permanent loss or conversion of the boreal forest on a scale proportionate to the large landscape used by lynx.
- 3) Actions that would increase traffic volume and speed on roads that divide lynx Critical Habitat, or, in matrix habitat, activities that change vegetation structure or condition in such a way as to create a barrier or impede lynx movement.

The Noisy Face Recreation Management Decision was a recreation focused project that dealt with motorized access and timing restrictions for roads and trails. These roads and trails occur across the 8 project LAUs. This analysis will consider impacts to Critical Habitat from motorized and non-motorized direction in the Noisy Face Recreation Management Decision.

No PCE1a conditions are affected by the travel management direction of the Noisy Face Recreation Management Decision within the 8 LAUs. The Noisy Face decision did not include any proposed vegetation treatments or fuel reduction proposals. PCE1a conditions remain well distributed throughout the project LAUs and the ongoing recreational activities.

The best information suggests that forest roads do not affect lynx (USDI 2007). Ruggiero et al. (2000) found that lynx do not avoid roads, except at high traffic volumes (Apps 2000). Effects of highways with high speeds and high traffic volumes are not the same as the effects of forest roads. With regard to the motorized trails or forest roads in the Noisy Face LAUs, a recent analysis on the Okanogan NF in Washington showed lynx neither preferred nor avoided forest roads, and the existing road density does not appear to affect lynx habitat selection (McKelvey et al. In Ruggiero et al. 2000; USDI FWS 2000). In Ontario, Walpole et al. (2012) found that forest roads did not influence lynx occurrence or movement. In Montana, forest roads with low vehicular or snowmobile traffic had little effect on lynx resource selection patterns (ILBT 2013). Squires concluded that lynx did not avoid the subset of roads that were open to wheeled vehicle travel during the denning season or at any other time (Squires et al. 2010). Continued motorized use on approved trails and roads within the area is judged to have little impact on lynx Critical Habitat. The motorized and non-motorized direction for roads and trails in the 8 LAUs would not impede movements of lynx.

PCE 1d (matrix habitat) would continue to support the ability of lynx to travel within their home range. The motorized and non-motorized direction affecting the 8 project LAUs would not affect matrix habitat conditions. Similarly, motorized and non-motorized direction would not decrease denning habitat (PCE 1c).

The Noisy Face Recreation Management Decision allowed over-the-snow use in the winter. However, recurrent snow travel that may result in compaction is physically restricted by forest conditions, local snow conditions and terrain to a few routes in the project LAUs. These routes represent a very small area in the 8 project LAUs and do not likely influence the distribution or availability of PCE 1b conditions. Futher, Kolbe et al. (2007) found that coyotes did not use compacted snow routes more than uncompacted routes in Northwest Montana. PCE 1b (deep fluffy snows) would not be decreased by the over-the-snow direction included in the Noisy Face Recreation Management Decision.

The effects on lynx Critical Habitat would occur on a small portion of Critical Habitat Unit 3. The sum of Critical Habitat in the 8 LAUs comprises approximately 2% of Critical Habitat Unit 3. Based on the management direction of the decision and its effects to Critical Habitat, the physical and biological features would not be altered to an extent that would appreciably reduce the conservation value of Critical Habitat for lynx and the PCE's would continue to function at the scale of the LAU and across Critical Habitat Unit 3.

Cumulative Effects for Canada Lynx Critical Habitat

There is a history of timber management, road building, motorized and non-motorized recreational activities, and prescribed and wildfire on all ownership lands in the Noisy Face LAUs. It is anticipated that these activities will continue into the future. Other on-going activities include hunting, trapping, firewood cutting, recreational activities, existing special use permits, road maintenance activities, noxious weed treatments, and residential development and land conversion on private lands.

Private land development and timber harvest is predominately limited to the lower elevations and is not located within Critical Habitat in the 8 LAUs. There would be little effect to Critical Habitat due to these actions. There are no present projects on National Forest System lands permanent loss (such as paving or building construction) of habitat or conversion of the boreal forest as a result of ongoing activities.

Firewood cutting currently occurs along motorized roads. This action (the Noisy Face Recreation Management Decision) has reduced components of denning conditions (PCE1c). However, this action is limited to areas adjacent to open roads and the effect of removing snags along roads is highly limited based on where open roads are located relative to the distribution of Critical Habitat in the Noisy Face LAUs. Further, effects of wildfire, insects and disease have likely increased snag and down woody debris availability through the Critical Habitat area. As much of this area is inaccessible to firewood cutting (located away from open roads), the effect on denning conditions from motorized access and firewood cutting is likely very small. Denning habitat (PCE1c conditions) is not known to be limited in the region (Squires et al. 2006; Squires et al. 2008).

Wildfire and prescribed fire have burned within the Noisy Face LAUs. These fire events have decreased PCE1a conditions in some drainage. However, over time regeneration of boreal forest in the form of dense young saplings stands in the burn areas would increase lynx foraging habitat availability. Wildfire has also increased PCE1c conditions. Given the existing condition, PCE1a and PCE1c are well distributed throughout the Noisy Face LAUs.

Over-the-snow motorized travel is permitted in some parts of the Noisy Face LAUs. The revised LCAS (IBLT 2013) identified over-the-snow travel to have potential to compact snow trails (such as forest roads open to over-the-snow travel) and provide access to deep snow environments to other predators that may compete with lynx. Kolbe et al. (2007) found that coyotes did not use compacted snow routes more than uncompacted routes in Northwest Montana. Given the size, forested conditions, and steep terrain within the Noisy Face LAUs, the existing over-the-snow motorized use has little effect on PCE1b (deep, fluffy, snow) conditions.

Although there would be local negative effects to snowshoe hare habitat (PCE 1a) and denning habitat (PCE1d), at the landscape scale, considering the large amount of Critical Habitat in Unit 3 (Northern Rocky Mountains), sufficient densities of snowshoe hares would be produced to support lynx presence. Ruggiero et al. (2000) recommended maintaining some minimum density of snowshoe hares across a broad landscape, e.g., >0.5 hare/ha (0.2 hares/ac), to support a self-sustaining population of lynx. Griffin (2004), and Mills et al. (2005) estimated density and relative abundance of snowshoe hares throughout Montana. Hare densities generally were low, ranging between 0.1–0.6 hares/ ha (0.04–0.02 hares/ ac). In western Montana, Griffin and Mills (2004) found the highest snowshoe hare densities in regenerating forest stands with high sapling density and in uncut, mature multi-story stands with abundant saplings. Given that hares are a forest stand disturbance dependent species and the legacy of forest management across ownerships within the project LAUs that have maintained a mosaic of stands, hare densities would remain sufficient within remaining patches of hare habitat while regenerating forest structure would provide preferred hare habitat into the future. The Primary Constituent Elements (PCE's) would continue to be available within Canada lynx Critical Habitat across the FNF and

proposed actions would not cause a permanent loss or conversion of the boreal forest on a scale proportionate to the large landscapes used by lynx.

Effects Determination

The determination of the effects of the management direction of the 1988 Noisy Face Recreation Management Decision to Canada lynx Critical Habitat is based on the following:

- Motorized and non-motorized direction from the Noisy Face decision would not decrease PCE1a, PCE1b, PCE1c or PCE1d conditions.
- Cumulative effects of firewood cutting on open motorized roads would reduce PCE1c conditions in small amounts across the Noisy Face LAUs.
- The Noisy Face management would not result in destruction of critical lynx habitat.
- The Noisy Face management would not alter physical or biological features that would appreciably reduce the conservation value of Critical Habitat for lynx.
- All PCEs would remain abundant and well distributed across the project LAUs and across Critical Habitat Unit 3.
- PCE 1d (matrix habitat) would still support the ability of lynx to travel within their home range.
- PCE 1b (deep fluffy snows) would not be affected by this proposal.
- The eight project Lynx Analysis Units are approximately 0.2% of the entire Critical Habitat Unit 3, which is 9,783 square miles (6,261,095 acres). While effects to the local area of lynx Critical Habitat are expected, considering the large amount of Critical Habitat in Unit 3, the NRLMD on Federal land across the vast majority of lynx Critical Habitat, and the current status of lynx and lynx Critical Habitat, the unit would continue to produce adequate densities of snowshoe hares to support persistent lynx populations and actions would not cause a permanent loss or conversion of the boreal forest on a scale proportionate to the large landscapes used by lynx.

The management direction of the Noisy Face Recreation Management Decision would have minimal impact on Critical Habitat PCEs in the affected LAUs. Cumulatively, some firewood cutting would occur on open roads affected by the Noisy Face decision resulting in removal of some PCE1c components. While these effects are minimal, the determination is "May Affect, Not Likely to Adversely Affect" lynx Critical Habitat.

Grizzly Bear

Background, Updated Science, and Consistency with Amendment 19

The Noisy Face Recreation Management Decision was signed on March 18, 1988. The Noisy Face decision included motorized timing restrictions to reduce impacts to grizzly bears. In 1995, the Flathead Forest amended its Land and Resource Management Plan with Amendment 19 (A19). Amendment 19 (A19 USDA Forest Service 1995) of the Flathead Forest Plan is a comprehensive programmatic strategy that addresses grizzly bear habitat security. It was

developed to minimize negative impacts of motorized access identified in the 1987 Grizzly Bear Compendium (IGBC 1987), and was based on recommendations of the 1994 IGBC Taskforce Report and the 1993 progress report for the South Fork Grizzly Bear Project (Mace and Manley 1993), commonly referred to as the South Fork Study.

Amendment 19 provides motorized access standards and objectives for grizzly bear habitat management. The Noisy Face Decision includes roads and trails within the Noisy Red Owl, Peters Ridge, Wheeler Quintonkon, Jewel Basin Graves, Wounded Buck Clayton, and Doris Lost Johnny subunits (See Map Appendix C).

In 2009 the Flathead Forest submitted a Biological Assessment for A19 and a revised schedule for allowable sale quantity and motorized access objectives and standards for grizzly bear habitat management. This assessment included the motorized uses and other activities occurring on roads and trails in the subunits affected by the Noisy Face decision. This schedule revised the 2005 A19 implementation schedule through 2018 or until consultation on a revised Forest Plan is completed, by committing to complete specific actions that will reduce open motorized access density (OMAD) and total motorized access density (TMAD), as well as increase core (areas with no motorized route access) within specific grizzly bear subunits. The 2009 BA stated:

“The Forest proposes to revise the implementation schedule for A19, based in part on the following factors: 1) the Forest realized in 1995 there may be unanticipated or impractical results obtained when the A19 objectives were applied to site specific analyses; 2) the FNF Forest Plan has not yet been revised; 3) the best available science indicates that the NCDE grizzly bear population was growing in terms of abundance, occupied habitat and connectivity in areas of historically low genetic interchange; 4) the 2004 abundance estimate of 765 grizzlies more than doubled the existing estimate; 5) the ongoing partnerships to determine grizzly bear population trend; and 6) annual costs of currently authorized decommissioning basically exhausts the Forest’s financial capacity” (USDA 2009).

On January 31st, 2014 the USFWS issued a biological opinion on the effects of the revised implementation schedule for A19 extending the time frame for implementation access management direction and objectives through 2018 (USDI 2014b). The USFWS defined “harm” to grizzly bears as; “when OMAD (ORD) exceeds 1 mile per square mile in 19 percent of a subunit and TMAD (TRD) exceeds 2 miles per square mile in 19 percent of a subunit” (USDI 2014b). This condition occurs in the Peters Ridge subunit and the Flathead Forest received “take” for this condition in the USFWS’ 2014 biological opinion on A19. The Noisy Red Owl subunit does not have road density objectives as the subunit is less than 75% National Forest System ownership. The Jewel Basin Graves subunit meets A19 objectives. The remainder of the Noisy Face Recreation Management Decision action area subunits meet amended objectives.

New scientific information on grizzly bears has become available since the 1988 Noisy Face Recreation Management Decision. Kendal et al. (2009) detected 765 grizzly bears in the Northern Continental Divide Ecosystem (NCDE) and indicated that the population was well connected and expanding beyond the recovery zone boundaries. Mace et al. (2011) found the grizzly bear survival rates were high and the population was growing at an average rate of 3%. Mace and Roberts (2014 & 2015) estimate that there is now approximately 1,000 grizzly bears in and around the NCDE and that the population has expanded beyond the recovery zone boundaries. The detected grizzly bear population growth and growth in distribution includes the Noisy Face subunits and their existing conditions. The USFWS (USDI 2014b) acknowledges “that recent information on the grizzly bear population in the NCDE (Kendall et al. 2009, Mace et al. 2011) suggests that the grizzly bear population has grown despite the fact that A19 management direction has not been met in every grizzly bear subunit.”

This Biological Assessment Amendment is not requesting reinitiation of consultation on grizzly bear for the 1988 Noisy Face Recreation Management Decision. The motorized and non-motorized management on the roads and trails in the subunits of the Noisy Face Decision were included in the 2009 Biological Assessment. However, the Flathead Forest requests that the US Fish and Wildlife Service review the updated scientific information and 2014 Amendment 19 Biological Opinion, to determine if the 1988 Noisy Face Recreation Management Decision requires reinitiation of consultation and whether it falls within the parameters the 2014 A19 Biological Opinion.

Recommendations for Removing, Avoiding, or Compensating Adverse Effects

None.

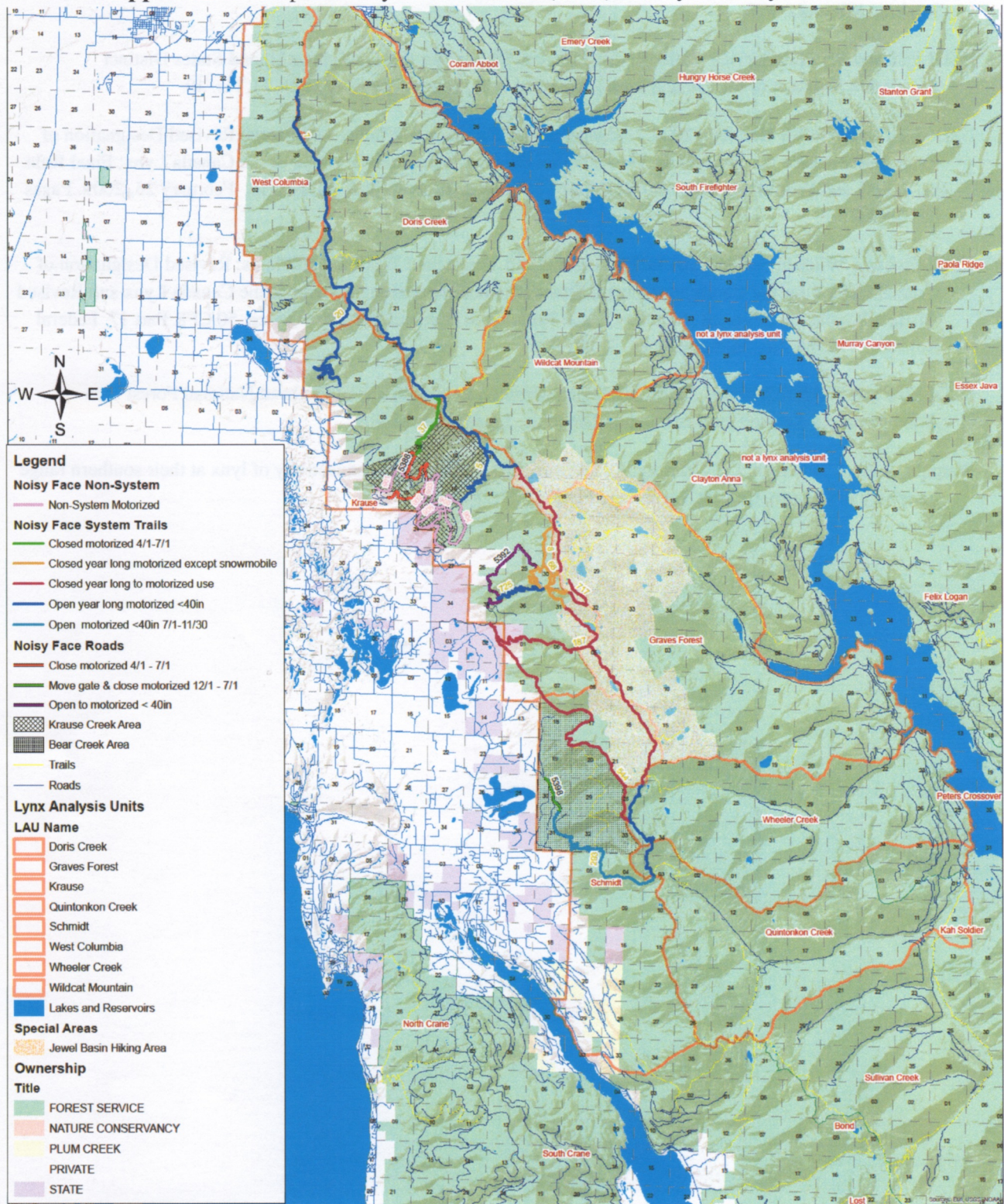
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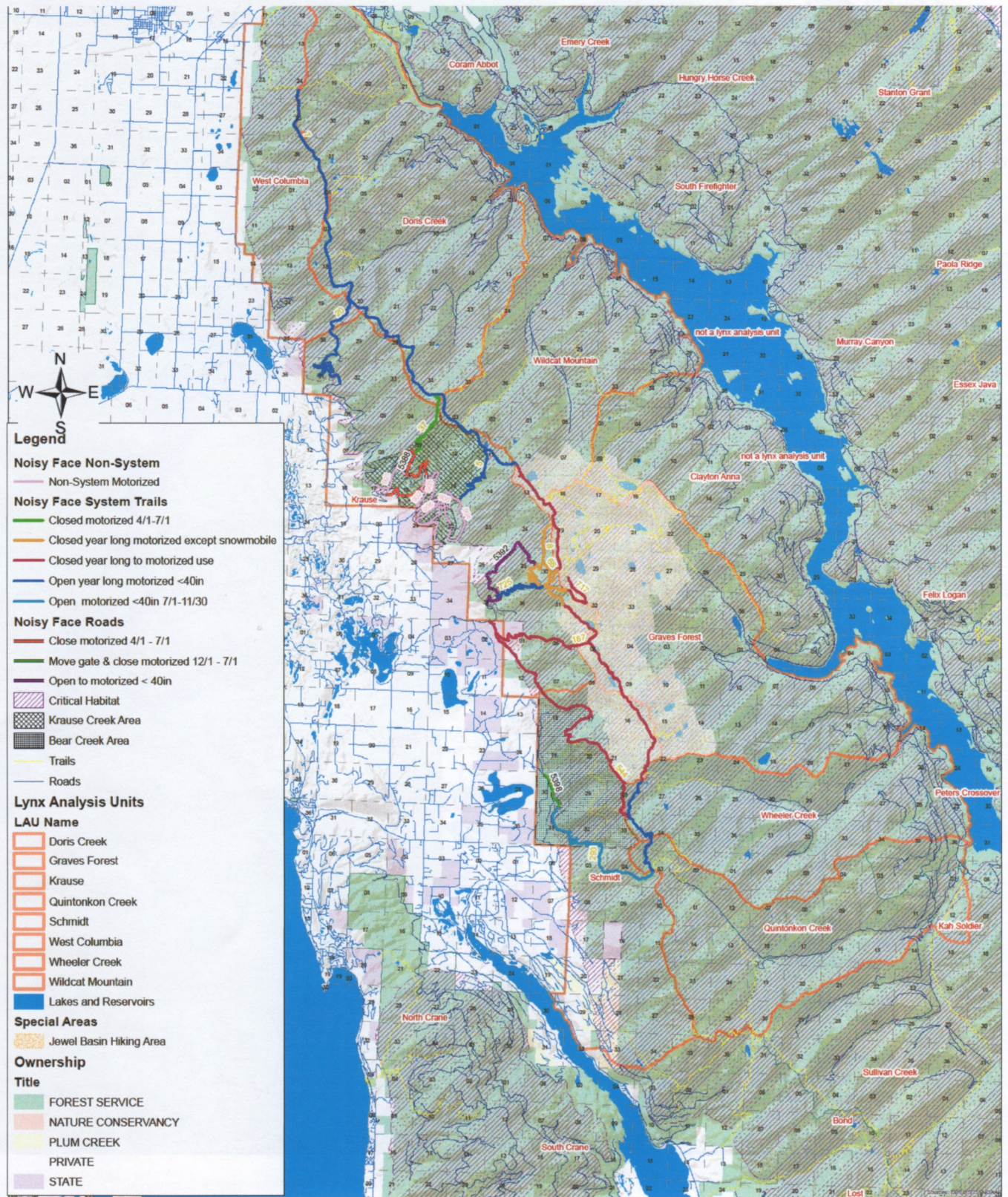
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Appendix A. Map of Noisy Face Decision (1988) and Lynx Analysis Units



Appendix B. Map of Noisy Face Decision (1988), Affected LAUS, and Critical Habitat



Appendix C. Map of Noisy Face Decision and Grizzly Bear Subunits

