

# 3A. WILDLIFE AND VEGETATION RESOURCES

## SCOPE OF ANALYSIS

While the most frequently guided routes in JHMR's OG SUP are within the Rock Springs-Jensen Canyon area, this analysis of potential direct, indirect and cumulative effects to Threatened, Endangered and Sensitive (TES) wildlife and plant species includes the entire 4,020-acre extent of JHMR's OG SUP area.

A Biological Assessment (BA) is required in accordance with Section 7 of the Endangered Species Act of 1973 to document a proposed project's potential effects to federally listed Threatened or Endangered species. A Biological Evaluation (BE) is required in accordance with Forest Service Manual 2672.42 to document a proposed project's potential effects to Forest Service listed regionally sensitive species. It is common practice to combine the BA and BE into a single document.

The following discussion of affected environment and environmental consequences is primarily excerpted from the 2002 Draft BA/BE for JHMR Guided Ski and Snowboard Touring.<sup>1</sup> However, this analysis also tiers to two additional documents, including:

### **2004 BA of Lynx for the JHMR Development Projects, Fall Creek Watershed**<sup>2</sup>

In 1994, the Jackson Ranger District accepted a revised Master Development Plan (MDP) from JHMR. Lynx were not listed as Proposed, or Threatened at that time, therefore the currently required Section 7 consultation on lynx was not completed. Subsequently, the Jackson Ranger District has been consulting on individual projects contained within the MDP on an as-needed basis. In 2000, JHMR submitted additional changes to the MDP, the effects of which were documented in an EA. However, subsequent consultation did not include any of the changes that were incorporated into the updated MDP. Therefore, a BA was prepared by the Forest Service in 2004 to cover all projects proposed by JHMR dating back to the 1996 Record of Decision, which approved the ski area's MDP EIS. In addition to providing analysis of compliance with the Lynx Conservation Assessment and Strategy (LCAS), the 2004 BA evaluates direct, indirect, short- and long-term, irretrievable, irreversible, and cumulative effects to lynx, and their habitat, anticipated as a result of proposed JHMR activities. The 2004 BA analyzes several activities which were not components of previous approvals, including JHMR's ongoing and proposed guided backcountry skiing operations analyzed within this EA.

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<sup>1</sup> Pioneer Environmental Services, Inc. 2002

<sup>2</sup> Holden 2004

## **2004 BA of the Effects of the High Mountain Heli-Skiing, Inc. Project on Threatened and Endangered Species**<sup>3</sup>

The document titled above addresses the preferred alternative (Alternative C) for the 2004 High Mountain Heli-Skiing DEIS. A portion of the High Mountain Heli-Skiing OG SUP has historically overlapped JHMR's OG SUP in the Rock Springs-Jensen Canyon area.

All of the materials referenced are available for review at the Jackson Ranger District.

### **AFFECTED ENVIRONMENT**

Table 3A-1 lists the habitat types found within the analysis area.

**Table 3A-1  
JHMR Existing OG SUP Boundary  
Habitat Types**

<b>Area and Habitat Types</b>	<b>Acreage<sup>a</sup></b>
<b>Rock Spring/Jensen Canyon</b>	
<i>Douglas Fir</i>	728.7
<i>Lodge Pole</i>	530.1
<i>Spruce Fir</i>	318.1
<i>Water</i>	3.3
<i>Non Forest</i>	531.3
<b>Phillips Canyon</b>	
<i>Aspen</i>	7.6
<i>Douglas Fir</i>	252.7
<i>Lodge Pole</i>	31.1
<i>Spruce Fir</i>	369.1
<i>Clear Cut</i>	59.1
<i>Water</i>	4.1
<i>Non Forest</i>	54.5
<b>Teton Pass</b>	
<i>Aspen</i>	21.5
<i>Douglas Fir</i>	299.3
<i>Spruce Fir</i>	53.5
<i>Non Forest</i>	255.6

<sup>a</sup> Acreage reflects BTNF acreage only and therefore does not total to 4,020 acres.

### **Wildlife Species**

Several species were eliminated from further detailed analysis within the Draft 2002 BA/BE because the analysis area has no documented historic occurrences of the species and/or was found not to contain suitable habitat, or was determined to be outside of the known distribution area for the species. The literature review conducted for the Draft 2002 BA/BE indicated that four federally listed TES species, and 12 R4 Sensitive

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<sup>3</sup> Larese-Casanova et.al. 2003

species, could be effectively eliminated from further consideration as they have no potential to be affected by the Proposed Action.

The remaining species, with known occurrences and/or suitable habitat within the analysis area, are specifically addressed below.

### **Threatened Species**

#### *Grizzly Bear (Ursus arctos horribilis) – Threatened*

JHMR is not within or near the primary conservation area for grizzly bear and the random occurrence of grizzlies in the analysis area have been documented. However, grizzly bear habitat in the forested communities, subalpine/alpine tundra, and wetland/willow/mixed brush communities does exist within the analysis area. Given their very large home ranges (50-300 and 200-500 square miles for females and males, respectively); there is a possibility that a grizzly bear could move through the analysis area. Although, grizzlies might be more likely to disperse along river corridors, which provide more resources and security, such as the Snake River where they have been previously sighted. The Greater Yellowstone Area (GYA) is designated as one of six Recovery Zones in the contiguous United States for the grizzly bear. A total of 1.4 and 0.5 million acres of land in this area occurs on the Bridger Teton and Targhee national forests, respectively. The analysis area lies over 20 miles southwest of the designated occupied grizzly bear habitat.

Denning habitat is usually high, remote mountain slopes that remain under deep snow well into spring. Upon exiting denning habitat in mid- to late-April, grizzlies travel to foraging habitats at lower elevations. Grizzlies, especially males, have been documented leaving den sites as early as mid-March in this area, especially following low snowfall winters. Threats to populations today are associated with habitat loss due to development, road building, and mineral exploration and extraction. Other than humans, grizzly bears have few enemies, but cubs that stray from their mother may fall prey to mountain lions, wolves, or other bears.

#### *Canada lynx (Lynx canadensis) – Threatened*

On March 24, 2000 the US Fish and Wildlife Service announced their final rule that listed the Canada lynx as Threatened within the lower 48 contiguous states. Lynx are also listed as Threatened for the state of Wyoming.<sup>4</sup>

Historic records indicate lynx to not typically use this portion of the BTNF and it contains primarily low quality lynx habitat. Much of the area in the vicinity of the OG SUP has not been classified as potential lynx habitat due to the presence of primarily

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<sup>4</sup> Under the Canada Lynx Conservation Agreement, the Forest Service and USFWS agreed to follow the recommendations contained in the Canada Lynx Conservation Assessment and Strategy (LCAS) which includes habitat definitions, recommended analysis methodologies, and conservation measures, goals, objectives and standards. LCAS standards are referenced in the 2004 BA/BE.

open, steep slopes, although, the entire Teton Front is considered a north-south travel corridor for lynx. The extents of the OG and Ski Area SUPs are located within the 75,384 acre Fall Creek North Lynx Analysis Unit (LAU). Based upon vegetation, connectivity, and other characteristics, roughly 47,303 acres of the LAU are capable of providing lynx habitat<sup>5</sup>. Wildfires and historic management activities have reduced the suitable lynx habitat by 5,118 acres, thereby leaving 42,185 acres (89 percent) of lynx habitat that is likely in a suited condition. However, none of the suitable habitat is located within the project area boundaries.

In the Rocky Mountain Region most lynx occurrences are noted in moist Douglas-fir and western spruce-fir forest occurring at elevation ranges from 4,900 to 6,500 feet. The forested vegetation within this LAU provides low to moderate quality lynx habitat, consisting of primarily Douglas-fir with sparse amounts of spruce-fir, lodgepole pine, and aspen habitat types in the northern half of the LAU. The southern half of the LAU provides higher quality habitat due to the presence of better habitat conditions for the snowshoe hare with a dominance of spruce-fir, lodgepole pine, and aspen habitats. The distribution of Canada lynx closely follows that of the snowshoe hare, with high stem density and shrub cover, and in many cases these criteria are met in early seral stage forests. The presence of snowshoe hare and red squirrel provides foraging opportunities in the analysis area. However, other habitat requirements are not readily met making the analysis area unsuitable for resident lynx. Coarse woody debris is limited allowing few opportunities for secure denning sites. Forest openings are large, often greater than 300 feet wide. It has been suggested that lynx may avoid crossing openings greater than 300 feet wide under normal circumstances. The unconnected forest habitats present in the developed ski area, as well as in the backcountry ski areas within the OG SUP area, are not being considered as suitable lynx habitat. The likelihood of lynx establishing a home range in the analysis area is low because there is no lynx habitat within the OG SUP area or in the adjacent Ski Area SUP and both areas have continually high human use during the winter months; however, the OG SUP area could be at the periphery of an established home range.

#### **R4 Sensitive Wildlife Species**

##### *Northern goshawk (Accipiter gentiles)*

Conditions for nesting in the analysis area are marginal given the southerly exposure; the absence of large, deep forested ravines; and the high level of human activity. Goshawks could potentially use the forested habitats in the analysis area, and a goshawk has been seen in the JHMR area, although no nests have been detected. The probability of occurrence for resident goshawks in the analysis area is low.

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<sup>5</sup> Holden 2004

*Flammulated owl (Otus flammeolus)*

Flammulated owls have some potential to occur in the coniferous and coniferous/aspen forests in the analysis area in the summer. However, these birds are Neotropical migrants and do not occur in the analysis area during the winter. The probability of flammulated owls occurring in the analysis area is therefore low.

*Boreal owl (Aegolius funereus)*

Boreal owls have not been observed in the analysis area, but their occurrence has been documented nearby. Boreal owls may occur in the analysis area, as suitable habitat is present for nesting, foraging and roosting.

*Great gray owl (Strix nebulosa)*

Although great gray owls have not been reported in the analysis area, they have been observed nearby. Potential habitat for these owls occurs in the analysis area in the coniferous and coniferous/aspen forests, tall forb and ceanothus shrub community, and wherever grassy meadows may be present. However, the overall habitat conditions are marginal due to the elevation of the analysis area. There is moderate probability that great gray owls may occur in the analysis area.

*Three-toed woodpecker (Picoides tridactylus)*

There is relatively little habitat in the analysis area for the three-toed woodpecker. Foraging and nesting habitat in the coniferous forest is rather poor for this species, and there are no documented occurrences in the analysis area. Three-toed woodpecker has been found in the general vicinity, and is likely breeding outside of the analysis area. However, due to the absence of key habitat (including snags and old growth forests), the probability of these woodpeckers occurring in the analysis area is low.

*Spotted bat (Euderma maculatum)*

Spotted bats have not been documented in the analysis area. Suitable roosting and maternity habitat may be present in the Alpine cliffs, but this remains undetermined. However, suitable foraging areas are limited to a few springs and seeps. The probability of spotted bat occurrence in the analysis is therefore considered to be low.

*Western big-eared bat (Corynorhinus townsendii)*

Suitable foraging habitat exists in the analysis area, but there is not suitable roosting or maternity habitat for western big-eared bats. No big-eared bats have been documented in the analysis area or vicinity. Therefore the probability of western big-eared bats occurring in the analysis area is considered to be low.

*Fisher (Martes pennanti)*

Marginal habitat does exist for fishers in the analysis area in coniferous and coniferous/aspen forests. However, these forests lack the old growth features necessary for denning or escape cover. In addition, the analysis area possesses a high level of

localized forest fragmentation, which fishers tend to avoid. No fishers have been documented in the analysis area and their occurrence remains uncertain. The analysis area has a low potential for supporting resident fishers, and given the size of home range, not more than one or two individuals could potentially occur.

#### *Wolverine (Gulo gulo)*

There is potential for wolverines to use the subalpine/alpine tundra, coniferous and coniferous/aspen forests, and wetland communities in the analysis area, but this is highly unlikely due to the level of human intrusion that currently occurs in the analysis area year-round. If a wolverine were to occur, the analysis area would only be part of a single individual's home range.

### **Plant Species**

#### **Sensitive Plant Species**

The listed and proposed R4 Sensitive plant species with potential to occur in the analysis area include:

- creeping twinpod (*Physria intergrifolia* var. *monticola*)
- boreal draba (*Draba borealis*)
- naked-stemmed parrya (*Parrya nudicaulis*)
- Payson's bladderpod (*Lesquirella paysonii*)
- pink agoseris (*Agoseris lackschewitzii*)
- rockcress draba (*Draba desiflora* var. *apiculata*)
- seaside sedge (*Carex incurviformis*)
- soft aster (*Aster mollis*)
- sweet-flowered rockjasmine (*Androsace chamaejasmine* spp. *Carinata*)
- Weber's saw-wort (*Saussurea weberi*)
- single-head pussytoes (*Antennaria monocephala*), *Antennaria aromatica*
- milk kellogia (*Kelloggia galioides*)
- large flower triteleia (*Triteleia grandiflora*)

As no habitat alteration or ground disturbing activities are proposed as part of either alternatives 2 or 3, detailed narratives of sensitive plant species and their habitats are omitted here. However, this information is contained in the Draft 2002 BA/BE located in the project file at the Jackson Ranger District.

# ENVIRONMENTAL CONSEQUENCES

## Direct and Indirect Effects

### Alternative 1 - No Action

By selecting Alternative 1, a total of 300 annual service days would no longer occur within the Teton Pass and Rock Springs-Jensen Canyon areas. In light of the existing high levels of use within these areas by both guided and non-guided backcountry skiers,<sup>6</sup> selection of Alternative 1 is not anticipated to either positively or negatively affect TES wildlife or plant species in the analysis area.

### Alternative 2 – The Proposed Action

Table 3A-2 lists the habitat types found within the proposed OG SUP area.

**Table 3A-2  
JHMR Proposed OG SUP Boundary  
Habitat Types**

Area and Habitat Types	Acreage <sup>a</sup>
<b>Rock Spring/Jensen Canyon</b>	
<i>Douglas Fir</i>	728.7
<i>Lodge Pole</i>	530.1
<i>Spruce Fir</i>	318.1
<i>Water</i>	3.3
<i>Non Forest</i>	531.3
<b>Phillips Canyon</b>	
<i>Douglas Fir</i>	113.3
<i>Lodge Pole</i>	7.9
<i>Spruce Fir</i>	36.3
<i>Water</i>	4.11
<i>Non Forest</i>	40.2
<b>Teton Pass</b>	
<i>Aspen</i>	30.3
<i>Douglas Fir</i>	894
<i>Lodge Pole</i>	16.9
<i>Spruce Fir</i>	334.3
<i>Non Forest</i>	352
<i>Private/Other</i>	2.2

<sup>a</sup> Reflects BTNF acreage only and therefore does not total to 3,998 acres.

<sup>6</sup> Refer to the cumulative effects section for more information.

The Proposed Action would not require the removal of any timber or involve any permanent or temporary ground disturbances. Furthermore, all activities would occur over-the-snow. However, selection of the Proposed Action would lead to a minor increase in overall skier use levels within the Rock Springs-Jensen Canyon areas. Although the authorized service days for the Teton Pass portion of the reissued OG SUP would not change, the proposal does involve a slight boundary modification to exclude currently permitted use areas on the west side of the Pass and to include new use areas on the east side.

#### *Threatened Wildlife Species*

Alternative 2 is not anticipated to impose any direct effects to grizzly bear or any occupied habitat because the nearest designated grizzly habitat is in the vicinity of Yellowstone National Park, over 20 miles north of the analysis area. However, grizzly bears have been observed near Teton Village and in Grand Teton National Park. Therefore, given the relatively large home range of grizzly bears, it is possible, but unlikely, that the species inhabits the analysis area, although the continuation of skiing activities would take place while the bears are in hibernation (until mid- to late-April). The Proposed Action **may affect, but is not likely to adversely affect** grizzly bears.

The Proposed Action is not likely result in direct mortality or alteration of Canada lynx habitat within the analysis area because the Proposed Action would not physically alter any of the natural resources within the project area. The Proposed Action is consistent with relevant standards and guidelines in the LCAS. Disturbance or displacement of Canada lynx may occur in areas in which guided skiing is conducted; however, Canada lynx are predominantly nocturnal animals. Therefore, the possibility of human interaction is low.

Snow compaction currently occurs in areas that are skied repeatedly throughout the course of several days and throughout the winter season. Areas in which snow compaction occurs are thought to provide travel corridors for other predators, such as coyotes and bobcats that are not as adept at walking in unconsolidated snow as the lynx. This, in turn, could result in increased competition for food and the displacement of Canada lynx. However, because the proposed guided skiing represents only a small fraction of ongoing skier use within the project area, the current level of snow compaction would remain unchanged with or without reissuance of the JHMR OG SUP. Additionally, since the areas skied in the analysis area do not result in highly packed trails or established trails “linking” patches of foraging habitat, there is minimal risk of creating increased access opportunities for additional predator incursions into areas of suitable lynx habitat. The Proposed Action **may affect, but is not likely to adversely affect** Canada lynx.

#### *Region 4 Sensitive Wildlife Species*

The Proposed Action would not alter habitat configurations or involve any ground disturbances within the analysis area and therefore is not likely to have any direct or

indirect effects on Region 4 Sensitive wildlife species. The exception is wolverine, in which indirect effects could occur as a result of increased pressure on the species from high human activity in the Rock Springs-Jensen Canyon area. However, as detailed within the Recreation Section of this EA, the change in actual skier use of the Rock Springs-Jensen Canyon area is anticipated to be an imperceptible increase.

### *Sensitive Plants*

The Proposed Action would not alter habitat configuration within the analysis area and therefore would have no direct or indirect effects on Region 4 Sensitive plants. The reader is referred to the Draft 2002 BA/BE, located in the project file, for additional information.

### **Alternative 3**

Effects to TES wildlife and plant species from implementation of Alternative 3 would be quite similar to that of the Proposed Action, with the exception that JHMR's 50 annual service days would not be renewed in the Teton Pass portion of the OG SUP and all 900 annual service days would be concentrated in the Rock Springs-Jensen Canyon area.

### **Cumulative Effects**

Past, present, and reasonably foreseeable future actions having potential affect TES species and their habitat are generally related to overall increased human presence on the BTNF and CTNF, including: winter and summer recreational activities (e.g., developed, dispersed, motorized, and non-motorized), hunting, trapping, livestock grazing, logging and the construction of roads and other facilities.

### **Threatened and Endangered Species**

#### *Grizzly Bear*

Although the southern extent to the distribution of grizzly bear lies at least 20 miles north of the analysis area, an increase in motorized and non-motorized backcountry use is not likely to result in bear-human interactions because the bears hibernate until mid- to late-April. General growth in the Jackson area may lead to increased traffic on highways and roads causing possible vehicular collisions with grizzly bears, although these types of encounters are rare. In summer, increased use of backcountry areas by people will heighten potential for interfacing with grizzly bears, possibly causing displacement or harm to individual grizzlies. Other forms of development will continue to occur throughout the region in grizzly bear habitat, such as oil and gas exploration.

Selection of either of the action alternatives may slightly increase human use of the BTNF. However, the analysis area already experiences a high level of human activity, making it primarily unsuitable for grizzly bears. Furthermore, the additional annual service days potentially contributed by JHMR in the analysis area would be a negligibly small percentage of the overall human use. As a consequence, this would not lead to the loss of potential grizzly bear habitat.

### *Canada lynx*

General increased backcountry use of the BTNF may result in the disturbance or displacement of lynx. The repeated use or establishment of trails by people operating snowmobiles would likely result in snow compaction, which may provide avenues by which other predators, such as mountain lions, coyotes, or bobcats that otherwise would be excluded from areas with deep, soft snow, may compete with lynx for food. Other uses that could affect Canada lynx or its habitat include timber harvest, winter recreation, livestock grazing, hunting/trapping, and road construction.

Implementation of the projects identified and approved in JHMR's 2000 MDP are expected to be discountable to Canada lynx due to the already extremely developed nature of the present ski area. Furthermore, full build-out of the MDP would only occur within the boundaries of the developed ski area.

## **Region 4 Sensitive Species**

### *Wildlife*

Generalized increases in human presence within the analysis area could lead to cumulative affects to both wolverine and Northern goshawk. However, neither of the action alternatives assessed within this document are anticipated to result in a measurable contribution to affects on either of these species. No cumulative effects were identified for the remaining Region 4 Sensitive wildlife species.

### *Plants*

No cumulative effects were identified in relation to Region 4 Sensitive plant species.