

Environmental Assessment for the Blue Mountain Summit Snowpark Project



United States Department
of Agriculture

Forest Service

**Pacific Northwest
Region**

**Blue Mountain Ranger District,
Malheur National Forest
Grant County, Oregon**



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Chapter 1 – Purpose and Need

This environmental assessment (EA) complies with the requirements of the National Environmental Policy Act (NEPA) of 1969, Federal Regulations found in 40 Code of Federal Regulations (CFR), Chapter V, and the 36 CFR 215 appeal regulations. This document summarizes environmental effects of the proposed action, which includes activities associated with parking lot construction, structure construction and defensible space thinning. The project is proposed on National Forest System (NFS) lands within the Blue Mountain (BMRD) and Prairie City Ranger Districts (PCRD) of the Malheur National Forest (MNF).

This analysis provides information needed by the Responsible Official to determine whether the decision may have significant effects and would require an environmental impact statement (EIS). If it is determined that the effects are not significant, the Responsible Official will decide what mitigation measures or design criteria are required upon implementation. A project record containing documentation to support the findings in this document is located at the District office in John Day, Oregon. Appendix A – Project Record Index contains an index of the project record and some documents are incorporated by reference in this EA by showing the document number in brackets [#].

Location and Setting

The Malheur National Forest is located in the Blue Mountains of Eastern Oregon on approximately 1.7 million acres of NFS lands. The project area is located on NFS lands, approximately 37 miles east of John Day, Oregon and 24 miles east of Prairie City, OR near the Blue Mountain Summit on Highway 26.

Project alternatives lie within both the Blue Mountain Ranger District and the Prairie City Ranger District of the Malheur National Forest. To the east of the project area is the Wallowa-Whitman National Forest.

Background

In July, 2008 the Burnt River Snowmobile Club sent a letter to the Malheur National Forest seeking approval to locate a parking lot and additional structures at the location of the proposed action. Title II dollars were pursued and awarded to fund the project planning and NEPA documentation.

Implementation activities will be funded by the Burnt River

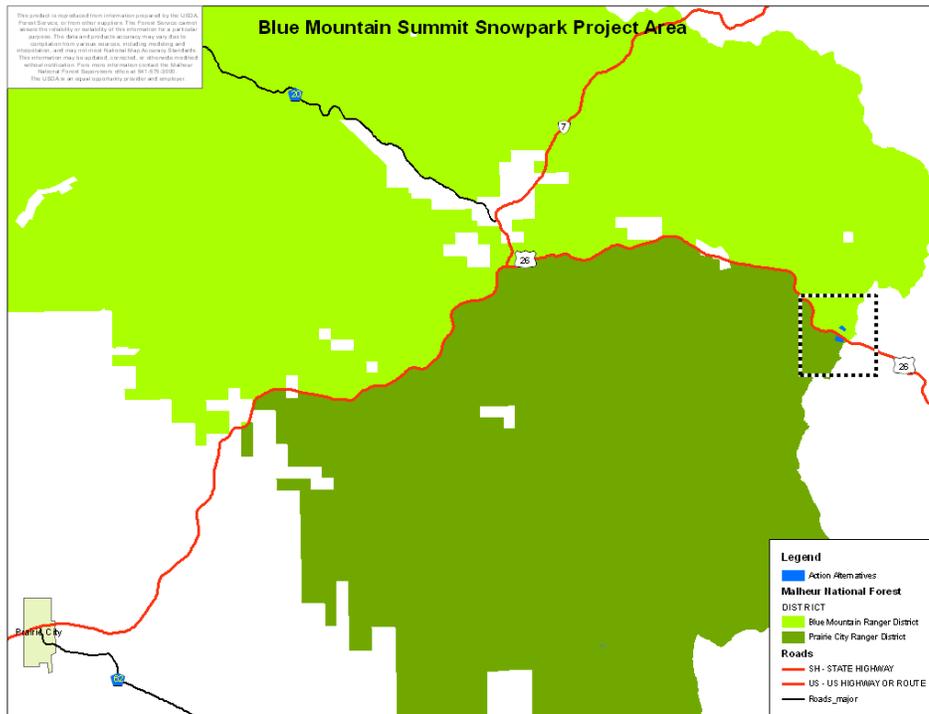


Figure 1: Map of Project Area

Snowmobile Club in phases as funding permits.

In November, 2011 members of the Blue Mountain Ranger District and members of the Burnt River Snowmobile Club, Oregon State Snowmobile Association (OSSA), and the Grant Count Snowballers conducted a site visit to the location of the proposed action alternative. The project was initiated and scoping began in April, 2012.

Purpose and Need for Action

The Blue Mountain Summit area provides access to numerous groomed snowmobile trails from Highway 26. Currently, trail users park vehicles and trailers along widened sections of the highway. During peak recreation times, there can be as many as 50 users parked along the highway near this location. This is causing problems and congestion along the highway for Oregon Department of Transportation (ODOT) plows, as well as blocking access to semi-trailers that use the turnouts to either install or remove tire chains. The turnouts are intended to be used as areas to install or remove chains and be accessible for ODOT to plow the snow and keep the areas clear.

There is a need to provide a safe area for winter recreationists, while also keeping the highway clear for snowplows and semi-trailers at the Blue Mountain Summit area. The new snowpark would provide a parking and loading area off of the state highway in order to reduce the potential for accidents and increase user safety.

Proposed Action

The project area is located approximately 37 miles east of John Day, Oregon near the Blue Mountain Summit on Highway 26. The proposed location lies at the northwest corner of forest road 343 and Old Highway 26 (forest road 309).

The proposed action will include up to 3 acres of parking area for approximately 30 large parking slots and structure construction, with up to 4 acres of defensible space thinning. Both action alternatives occur on National Forest System lands and are located in a portion of Section 1 of Township 11S, Range 35.5E, Section 6 of Township 12S, Range 36E, and Section 36 of Township 11S, Range 35.5E Willamette Meridian (Figure 2: Proposed Action)

An interdisciplinary team (IDT) of resource specialists developed a strategy designed to address the Purpose and the Need for Action. To accomplish these objectives, the Forest Service is proposing to construct a parking lot approximately 385' long by 205' to 275' wide adjacent to Old Highway 26 and forest road 343 to reduce wintertime parked traffic along highway 26 at the Blue Mountain Summit. Three structures, a restroom, a warming hut and a groomer shed will be constructed directly adjacent to the parking area, along with an access way for the groomer to Old Highway 26. An area for an above ground, 500 gallon fuel storage tank near the groomer shed. An additional 150' of defensible space will be thinned from structures. Details of the proposed actions and alternatives are provided in Chapter 2.

Malheur Forest Plan Consistency

Management direction is found within the resource prescriptions of the Malheur National Forest Land and Resource Management Plan (Forest Plan, USDA 1990). The Forest Plan's desired conditions and prescriptions for management of Old Growth – MA13, Visual Corridors – MA14, and Management Area 3B-Anadromous Riparian Areas are described below. The Forest Plan (Chapter IV) contains a detailed

description of each management area. This analysis was developed in consideration of the best available science and is consistent with the Malheur National Forest Land and Resource Management Plan, as amended.

The Forest Plan establishes the direction for the Malheur National Forest and provides forest management goals and objectives (Malheur Land and Resource Management Plan, IV-1). Recreation goals for the forest are to:

- Provide a range of opportunities and settings which are consistent with public demand for a variety of activities, both motorized and non-motorized.
- Provide for a distribution and variety of developed recreation facilities that are consistent with public demand for activities and experiences that are compatible with a forest environment.
- Provide safe, well maintained developed facilities for the public's enjoyment.
- Ensure high quality recreation experiences through facility location and design. Assure reasonably safe and accessible facilities to as many people as possible, including the handicapped.
- Provide a diverse system of trails for the enjoyment of all users and to meet administration and resource management needs.
- Encourage public participation in the development of partnerships with recreation users of the Forest.
- Provide and maintain pleasant visual experiences for Forest visitors consistent with public demand and natural landscape capabilities.

The Proposed Action would be implemented in Management Area 13-Old Growth, Management Area 14-Visual Corridors and Management Area 3B-Anadromous Riparian Areas. Alternative 3 would occur in Management Area 14 – Visual Corridors.

Anadromous Riparian Areas – MA3B: Manage riparian areas to protect and enhance their value for wildlife, anadromous fish habitat, and water quality. Manage timber, grazing, and recreation to give preferential consideration to anadromous fish on that portion of the management area “suitable” for timber management, grazing, or recreation. Design and conduct management in all riparian areas to maintain or improve water quality and beneficial uses.

Old Growth – MA13: Manage old growth for wildlife and plant habitat, ecosystem diversity, and aesthetic quality. Dedicated old growth areas are managed to provide old growth characteristics for dependent wildlife species. Replacement old growth areas are managed to provide future old growth habitat. Manage fuels to protect old-growth habitat from wildfire.

Visual Corridors – MA14: Manage viewshed corridors with primary consideration given to scenic quality and growth of large diameter trees. The Highway 26 corridor is a sensitivity level 1 visual corridor. Management for roaded natural recreation is visual corridor Forest Plan standard.

Decision Framework

This EA is not a decision document, and its main purpose is to disclose the potential effects of implementing a proposed action and alternatives to that action to the deciding official. The Forest Supervisor of the Malheur National Forest is the Responsible Official for this proposal. To make this decision for the Blue Mountain Summit Snowpark Project, the Forest Supervisor would consider

- What actions are most appropriate to address the purpose and need to increase safety and provide winter recreational opportunities.
- Determine whether the proposed actions to construct the parking lot and associated buildings will be authorized.
- If the decision is to authorize the construction of the snowpark, then identify what mitigation measures or design criteria will be applied.
- To not approve the proposal and require the effects of the proposed action be analyzed through an EIS.

Public Involvement

The proposal was listed in the Malheur National Forest Schedule of Proposed Actions (SOPA) in April, 2012. A scoping notice was published in Grant County, Oregon's *Blue Mountain Eagle* on April 25, 2012. On April 25, 2012, a summary of the project proposal was mailed to 40 individuals and groups. This included Federal, State and local agencies, Grant County Court, Tribes, nearby property owners, advocacy groups and the general public. Eighteen responses were received, with the majority of them being in support of the project. One response questioned the cost of implementation of the project.

On November 14 the proposed action and summary of environmental consequences was mailed to 40 individuals, groups and government agencies for the 30-day comment period. The legal notice for this comment period was published in Grant County, Oregon's *Blue Mountain Eagle* on November 14, 2012.

Considerations of comments brought up during public involvement are included in the project record. Similar comments from different responders were combined and are listed. Included in this list are the different ways that these comments were resolved and/or addressed within the document.

Tribal Contact and Consultation

Consultation with American Indian Tribes has been conducted through the PEPA process and under the terms and conditions of existing agreements. Letters describing the proposed action were provided to the Confederated Tribes of the Warm Springs, Burns Paiute, and Confederated Tribes of the Umatilla on April 25, 2012. However, no responses were received.

Issues

Environmental documents are developed within the interdisciplinary process with a rigorous effort to involve the public to obtain the benefit of differing opinions and professional expertise. This also leads to conflicts regarding which treatment strategies would better serve to achieve desired conditions within the project area. Where these differences cannot be resolved, they are used to develop issues around which the rest of the assessment is built. These issues drive the development of alternatives to the Proposed Action.

Issues for the Blue Mountain Summit Snowpark Project were identified through public scoping and internal input from project resource specialists. Similar items were combined into one statement where appropriate.

The issues were separated into three groups for the purpose of this analysis:

- Key issues
- Analysis Issues

- Issues Eliminated from Detailed Study

The Council for Environmental Quality (CEQ) NEPA regulations give guidance (40 CFR Sec. 1501.7) to “...identify and eliminate from detailed study the issues which are not significant or which have been covered by prior environmental review (Sec. 1506.3).” A definition of each issue group is discussed below:

Key issues are defined as those directly or indirectly caused by implementing the proposed action; however, the effects cannot be reduced by normal Best Management Practices (BMPs) or Project Design Criteria. Usually an alternative is developed to address key issues.

Analysis issues are defined as those directly or indirectly caused by implementing the proposed action; however, the effects could be reduced with the design of the proposed action. These analysis issues would be tracked in the relevant resource area effects analysis in Chapter 3 and in the Comparison of Alternatives section at the end of Chapter 2.

Issues Eliminated from Detailed Study are identified as those:

- Outside the scope of the proposed action;
- Already decided by law, regulation, Forest Plan, or other higher level decision;
- Irrelevant to the decision to be made; or
- Conjectural and not supported by scientific or factual evidence.

Potential issues were identified by the interdisciplinary team (IDT) and approved by the Responsible Official. These issues were addressed by either modifying the proposed action, or by incorporating mitigation measures as integral components of the project design. A summary of public comments can be found in the project record.

Key Issues

After reviewing the public and resource specialists comments received during scoping, one key issue was identified by the Responsible Official. Attributes and measures for the issue will help provide a comparison between alternatives. Table 1: Key Issues, lists the key issues considered for the effects analysis.

Table 1: Key Issues

Issue Topic	Issue Statement and Issue Indicator(s)
Dedicated Old Growth / Replacement Old Growth (DOG/ROG)	The Proposed Action proposes the construction of a parking area in a replacement old-growth site, adjacent to a dedicated old-growth site for Pine Martin. Alternatives were considered and developed that do not include impacts to DOG/ROG stands.

Analysis Issues

Other issues that did not result in different alternative were considered during the analysis process and are discussed in Chapter 3. These issues are generally less focused on the elements of the Purpose and Need than are the key issues and reflect the discussions of the effects of the Proposed Action. These issues are important for providing the Responsible Official with complete information about the effects of the

project. Table 2: Analysis Issues, below lists the analysis issues considered for this analysis generated from public comments and/or the project interdisciplinary team.

Table 2: Analysis Issues

Issue Topic	Analysis Issues
Recreational Opportunities and Experience	Potential increases in some areas and losses in other areas of recreational opportunities
Scenery	Potential effects to the visual quality of the foreground views from Highway 26
Wildlife	Potential effects to wildlife and wildlife habitat based on the proposed activities. Measures or element for evaluation: Acres of protected habitat Miles of road segmenting habitat Percent marginal, satisfactory, and total cover Habitat Effectiveness Index Effects to connectivity
Effects to water quality	Activities may impact water quality in the summit sub watershed
Fisheries	The potential of the proposed activities to impact fisheries and fish habitat
Soils Quality	The locations of the new parking area, structures and proposed trails will be assessed for potential effects to soil resources
Botany and Invasive Plants	Potential effects to Threatened, Endangered and Sensitive plant species will be considered as well as the potential to introduce or spread existing populations of invasive plants
Fuels	Potential effects of the proposed activities on fuel loading, suppression activities, defensible spaces and impacts to the Highway 26 corridor and Wildland Urban Interface (WUI)
Cultural Resources	Proposed activities will be assessed for potential effects to cultural resources
Range Resources	Proposed activities will be assessed for potential effects to range resources and grazing activities

Issues Eliminated from Detailed Study

After reviewing the public comments received during scoping, one issue was received but was eliminated from detailed study by the Responsible Official.

Table 3: Issues eliminated from further analysis

Issue Topic	Issue Statement and Issue Indicator(s)
Implementation Cost	The cost of implementation will be provided for and accomplished by the Burnt River Snowmobile Club.

Applicable Laws

Shown below is a partial list of federal laws pertaining to project-specific planning and environmental analysis on federal lands. Disclosures and findings required by these laws and orders are contained in Chapter 3 and in the Decision Notice for this EA.

National Environmental Policy Act (NEPA) of 1969 (as amended)

Clean Air Act of 1977 (as amended)

Magnuson-Stevens, Fishery Conservation and Management Act, Public Law 94-265 (as amended through October 11, 1966)

American Indian Religious Freedom Act of 1978

National Historic Preservation Act of 1966 (as amended)

Archeological Resource Protection Act of 1980

Project Record Availability

This EA hereby incorporates by reference the Project Record. The Project Record contains Specialist Reports, Biological Evaluations and other technical documentation used to support the analysis and conclusions in this EA. These are for, Wildlife, Soils, Hydrology, Fisheries, Botany, Recreation, Visual Quality, Inventoried Roadless and Potential Wilderness, and Heritage Specialist Reports. Relying on Specialist Reports and the Project Record helps implement the CEQ Regulations' provision that agencies should reduce NEPA paperwork (40 CFR 1500.4). The objective is to furnish enough site-specific information to demonstrate a reasoned consideration of the environmental impacts of the Proposed Action and how these impacts can be mitigated, without repeating detailed analysis and background information available elsewhere.

The Project Record is available for review at the Blue Mountain Ranger District, John Day, Oregon.

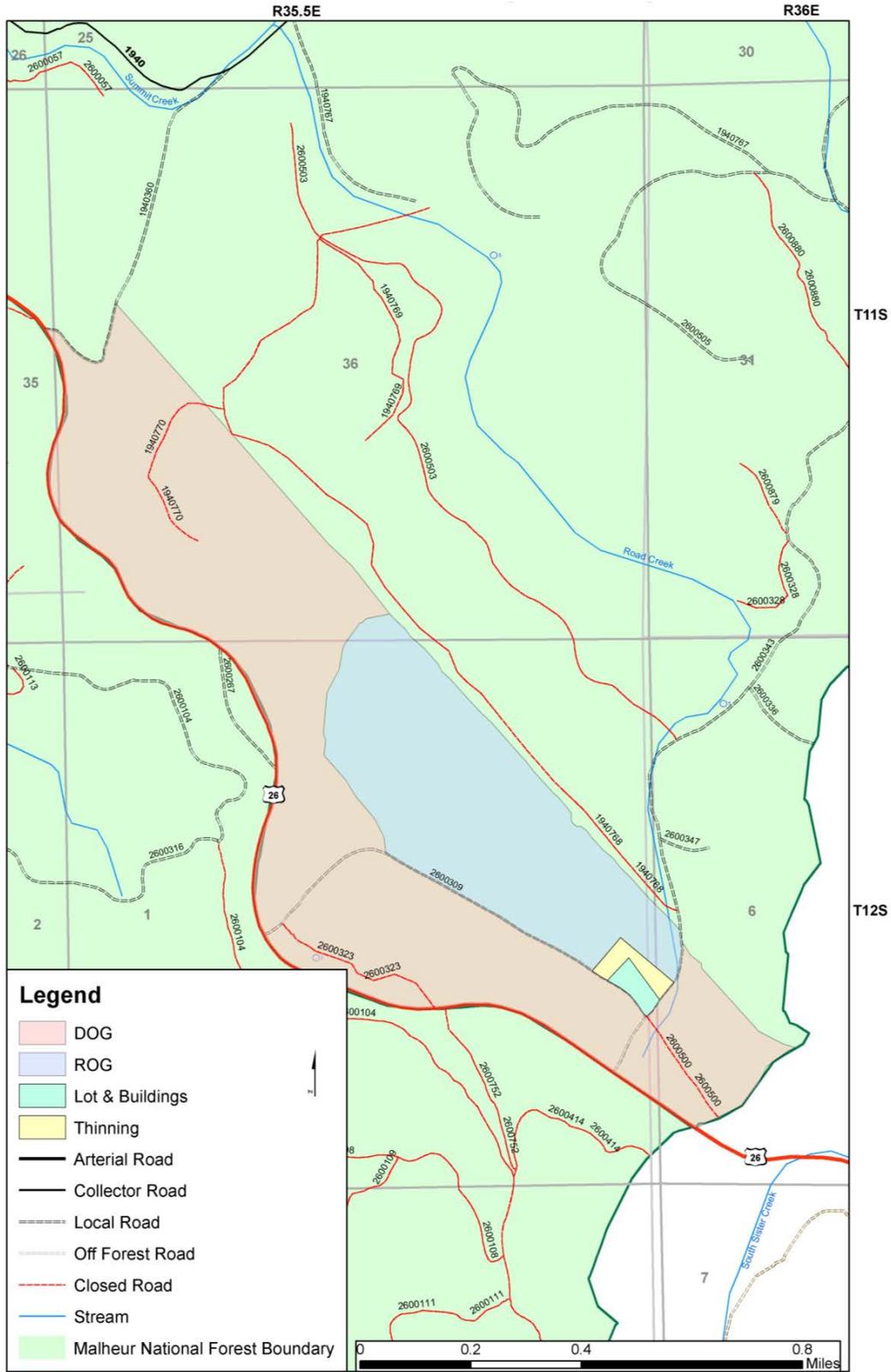


Figure 2: Proposed Action

Chapter 2 – Alternatives

Alternatives to the proposed action are developed to consider different ways to accomplish the purpose and need in response to the controversy or argument presented in the issues. As discussed at the end of Chapter 1, several key and analysis issues were identified that established a need to develop additional action alternatives.

Alternatives Considered, but Eliminated from Detailed Analysis

Federal agencies are required by the NEPA to rigorously explore and objectively evaluate all reasonable alternatives and to briefly discuss the reasons for eliminating any alternatives that were not developed in detail (40 CFR 1502.14). Several alternatives were considered from input received by resource specialists and from comments received before and during scoping. Alternatives that were considered, but not analyzed in detail are summarized below. A map with the approximate location of the alternatives considered, but eliminated from detailed analysis is available in the project record.

Austin Junction Alternative

An alternative was reviewed that would expand the existing trailhead and fuel storage at Austin Junction into a snowpark with parking, groomer storage, restrooms, a warming hut and storage of the groomer fuel tank. This location was chosen because of its proximity to Prairie City and junction at Highway 26 and Highway 7. This area is in the Visual Corridor, MA14, and is an appropriate use in this area. There is an existing trail from Austin Junction which connects to the rest of the trail system.

This alternative however did not meet the purpose and need of the project to increase the safety of winter recreationist near the Blue Mountain Summit. With the existing trailhead at this location, and undeveloped parking available, a snowpark in this area would not serve the recreationists needs more effectively than the services already being provided. It is likely that forest users would still park at the Blue Mountain Summit to access the trails which are accessible both earlier and later in the winter recreation season.

DOG/ROG Relocation Alternative

This alternative looked to construct the snowpark at the proposed actions location, but move the DOG/ROG approximately 2 miles to the north-east of the existing location. The potential DOG/ROG was located within sections 29, 30, 31, 32 of Township 11S Range 36E. This area was reviewed because of the stand structure determined through a stand analysis in GIS. While the number of acres would have met Forest Plan standards for DOG/ROG, there were existing roads and user-created trail systems throughout the stands that segmented wildlife habitat. Because of the reduced quality of wildlife habitat this alternative was removed from further study.

2600347 Road Alternative

This alternative looked to relocate the snowpark to the junction of the 2600343 road and the 2600347 road to the north-east of the proposed action. This area is outside of the DOG/ROG and is in an area with evidence of past harvest activities. However, this alternative was removed from further study because of a cattle guard, which restricts the width of the road, and the ability for ODOT to plow to the area. There was a concern with the locational proximity to Skunk Cabbage Spring. In addition, this area is on a

significant gradient, which would have resulted in increased implementation costs and disturbance to soil and watershed resources.

2600338 Road Alternative

This alternative looked to relocate the snowpark to the junction of the 2600343 road and the 2600338 road to the north-east of the proposed action, at the south-east junction of the road. This area is outside of the DOG/ROG and is in an area with evidence of past harvest activities. However, this alternative was removed from further study because of the conflicts with plowing approximately 0.8 miles off of the highway. In addition there is a cattle guard, which restricts the width of the road, and potentially the ability for ODOT to plow to the area. There was a concern with the locational proximity to Skunk Cabbage Spring. This area was also on a significant gradient, which would have resulted in increased implementation costs and disturbance.

Old & New Highway 26 Alternative

This alternative looked at the potential for the snowpark to be located at the junction of the old Highway 26 with the new Highway 26 approximately 0.7 miles further west of the proposed action. This alternative was removed from further consideration because the parking area would have been located within a DOG, further reducing the DOG below standard. The slope and topography of this location, in addition to the relative location of a stream removed this alternative from further consideration.

1940360 Road Alternative

This alternative was reviewed after suggestions to review the junction of Highway 26 and the 1940360 road as a potential area for the proposed snowpark. This area is outside of the DOG/ROG, however the access along the 1940360 road from Highway 26 is poor, and although the topographic data on GIS shows the area as relatively flat, field verification proved that the location would have resulted in higher amounts of cut and fill needed to complete the project.

The elevation of the site typically receives less snow accumulation earlier and later in the winter season, reducing the amount of use the area would receive. The proposed action is located at approximately 5,080 feet above sea-level, while this location is approximately 4,600 feet above sea-level. It is likely that winter forest users would still use the Blue Mountain Summit chain-up areas as parking during these early and late seasonal usage periods. This would cause a snowpark in this location to not meet the need for action.

2600104 Road Alternative

This alternative was reviewed because of its location off of the highway and the existing relatively flat and cleared area at the junction of the 2600104 road and the closed 2600148 road. While this area showed signs of snowmobile usage, this is not currently adjacent to an established snowmobile trail. The construction of the snowpark would require additional miles of trail be established.

The elevation of this site is at approximately 4,500 feet above sea-level, limiting the amount of snow at this location early and late in the winter recreation season. It is likely that winter forest users would still use the Blue Mountain Summit chain-up areas as parking during these early and late seasonal usage periods. This would cause a snowpark in this location to not meet the need to increase user safety.

2645023 Road Alternative

This alternative was reviewed because of its location off of the highway and the existing relatively flat and cleared area at the junction of the 2645 road and the closed 2645023 road. While this area showed signs of snowmobile usage, this is not currently adjacent to an established snowmobile trail. The construction of the snowpark would require additional miles of trail be established.

The elevation of this site is at approximately 4,400 feet above sea-level, almost 700 feet lower than the proposed action, and over 3 miles further west, limiting the amount of snow at this location early and late in the winter recreation season. It is likely that winter forest users would still use the Blue Mountain Summit chain-up areas as parking during early and late seasonal usage periods. This would cause a snowpark in this location to not meet the need to increase user safety.

2600847 Road Alternative

This alternative was reviewed because the area is currently cleared and its location near Highway 26 and the established clearing. This alternative would likely require no removal of additional trees to construct the parking area and associated structures. However, this alternative is approximately 4 miles west of the proposed action, and only 4.5 miles east of the existing trailhead at Austin Junction.

The elevation of this site is at approximately 4,400 feet above sea-level, almost 700 feet lower than the proposed action limiting the amount of snow at this location early and late in the winter recreation season. It is likely that winter forest users would still use the Blue Mountain Summit chain-up areas as parking during early and late seasonal usage periods. This would cause a snowpark in this location to not meet the need to increase user safety.

Alternatives Considered in Detail

The Forest Service developed one action alternative to the Proposed Action for a total of three alternatives, including the No Action Alternative. The No Action Alternative is used as a baseline to display consequences of each alternative. This section includes a description and map of the No Action Alternative and each Action Alternative considered. It also presents the alternatives in comparative form, easily defining the differences between each alternative and providing a clear basis for choice among options by the decision maker and the public.

No-Action Alternative (Alternative 1) allows the current situation to continue and the forest would remain subject to natural or ongoing changes. There would be no snowpark constructed and snowmobile trail usage and parking along Highway 26 would likely continue.

The Proposed Action (Alternative 2) was developed to meet the purpose and need of the project area to reduce vehicle parking along Highway 26. The Proposed Action location was chosen because of its higher altitude, proximity to the highway, reduced visual impact from the highway and relatively flat location. This location is adjacent to existing snowmobile trails system.

Alternative Action (Alternative 3) was developed to address the key issues identified through the scoping and interdisciplinary process. This alternative would meet the purpose and need of the project while construction is outside of existing DOG/ROG stands.

Alternative 1 (No Action Alternative)

This alternative proposes no construction of a parking area or associated structures, or fuels reduction treatments in the Blue Mountain Summit area at this time. There would be no change in current management direction or in the level of ongoing management activities within the project area. It does not preclude activities outside the project area or within the project area at some time in the future.

No snowpark would be built and ongoing activities would continue. There would be no parking for winter recreationists, and parking would likely continue in the chain-up areas on Highway 26. Winter trails and recreation opportunities would remain at the current locations and conditions.

Continued growth in motorized and non-motorized winter use and participation in the project area is expected in the future due to an overall growth in the popularity of winter sports, particularly snowmobiling, over time (SCORP at 144). Winter recreationists would continue to park in zones along the highway provided for chain-up areas.

Existing acres of the Dedicated Old Growth stand would continue to be 133 acres and not meet Forest Plan Standards and the Replacement Old Growth stand would continue to be 115 acres.

The No Action alternative represents the existing and projected future conditions that would develop if the current management situation continues. The no action alternative is documented through the effects analysis by contrasting the impacts of the proposed action with the current condition and expected future condition if the proposed action were not implemented.

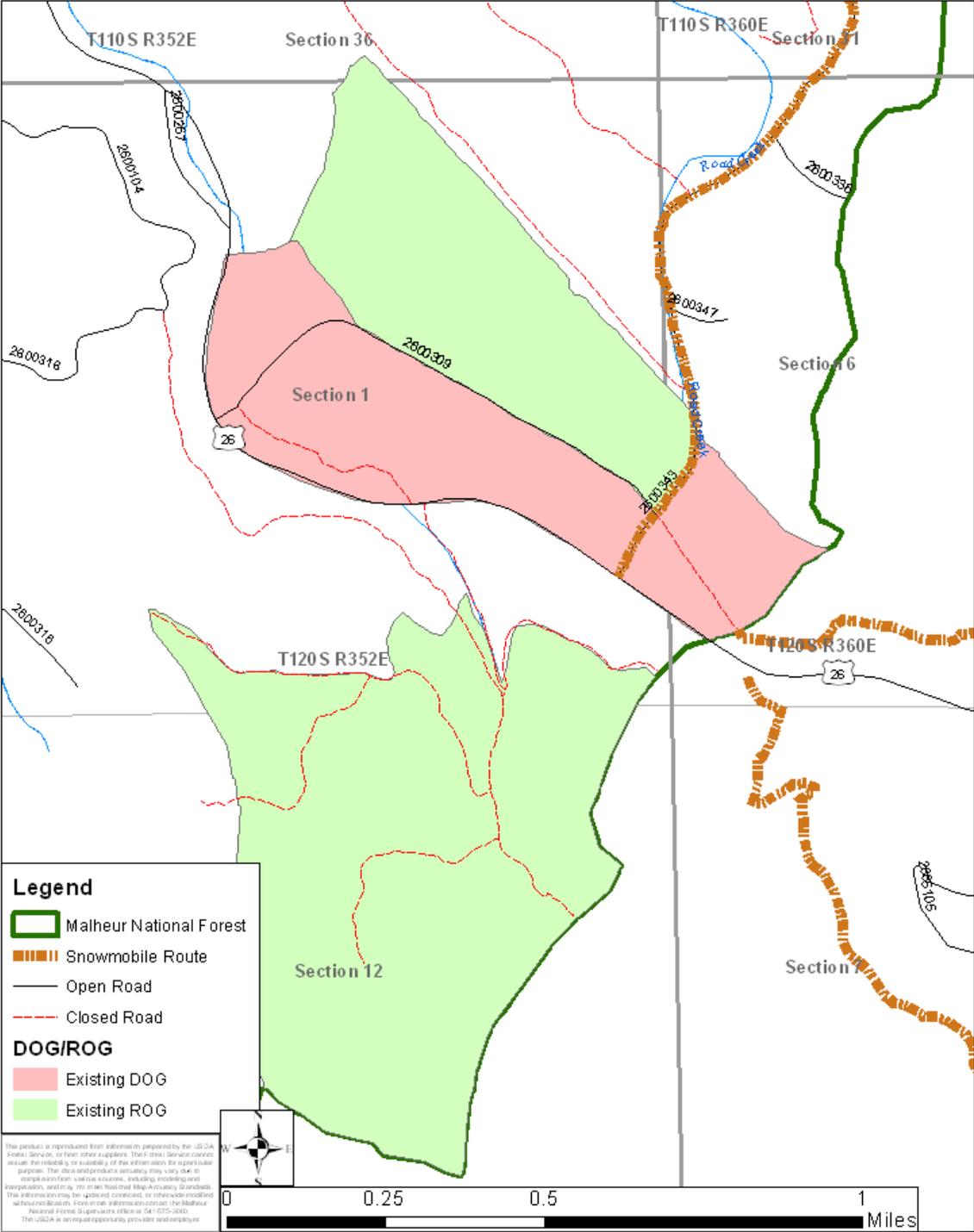


Figure 3: Map of Existing Condition and Uses

Alternative 2 (Proposed Action)

Alternative 2, the Proposed Action is to build a new snowpark near the Blue Mountain Summit to provide more high-elevation parking for winter recreationists along an established snowmobiling and snowplowing route. The proposed facility would provide for a mix of vehicle parking, including vehicles towing trailers and some slots designed for smaller vehicles. In addition, three structures would be built for recreationists conveniences and grooming shed storage.

The new snowpark would be located near the Blue Mountain Summit on Highway 26, at the junction of Forest Road 343 and Forest Road 309 (Old Highway 26). Figure 4 shows the location of the Proposed Action Alternative.

The intent of the Proposed Action is to provide winter recreationists with an option for parking along Highway 26 at a higher elevation. There is a need to provide a safe area for winter recreationists, while also keeping the highway clear for snowplows and semi-trailers at the Blue Mountain Summit area. The Proposed Action would provide a parking and loading area off of the state highway in order to reduce the potential for accidents. This alternative also provides ease of access to existing snowmobile routes and groomed trails which are adjacent to the Proposed Action. All construction will comply with the Project Design Criteria listed in Table 5: Project Design Criteria and Best Management Practices.

Alternative 2 management activities that would provide additional safe high elevation parking, enhance a variety of winter recreation opportunities, and provide access to over-the-snow trail systems would include:

- Adjusted DOG/ROG boundaries to include 279 acres of DOG and 116 acres of ROG
- Parking area at an elevation of 5080 feet above sea level
- Approximately 30 parking slots large enough for vehicles towing trailers
- 3 acres disturbed area; vegetation clearing for parking area
- 4 acres defensible space thinning
- Where able and appropriate, cleared materials will be stockpiled and be utilized for ongoing and future in-stream habitat
- All material not identified for use in stream restoration could be decked and sold or left for personal use firewood
- CXT Bathroom
- Warming hut
- Grooming shed
- Grooming shed fuel tank

Blue Mountain Summit Snowpark Alternative 2 - DOG/ROG

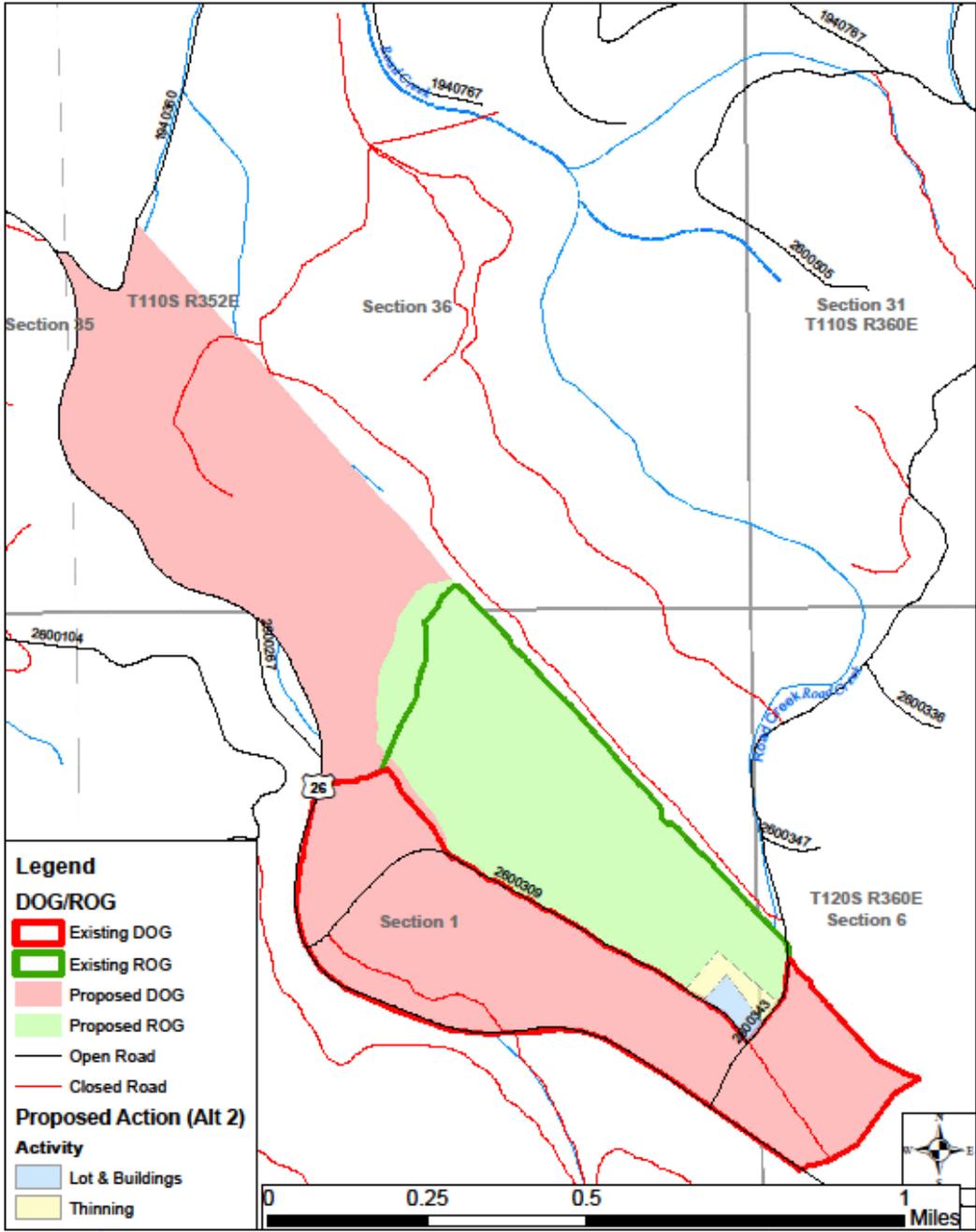


Figure 4: Alternative 2 Proposed Adjustments of DOG/ROG Boundaries

Adjusted DOG/ROG Boundaries

The Proposed Action is located in MA-13, Replacement Old Growth stand of approximately 115 acres, adjacent to a Dedicated Old Growth stand of approximately 133 acres. Standards for MA13 include at least 160 acres of DOG and 80 acres of ROG. Replacement Old Growth stands must be within ¼ mile of DOGs and provide replacement areas that are one-half the size of its corresponding dedicated old growth unit. As dedicated old growth stands deteriorate, an interdisciplinary team can evaluate and recommend replacement stands based on site-specific information. The proposed action will realign the DOG/ROG stand to meet Forest Plan standards.

The ROG stand is ¼ mile north of Highway 26, bordered on the north by a power-line, to the east by Forest Road 343 and for a majority of its southern border by Old Highway 26. Forest Plan amendment will adjust the boundaries of the ROG to remove approximately 7 acres of the area within the proposed parking area and defensible space in the south-east corner of the stand. The proposed ROG boundary will be adjusted to the west and follow the stand and would add 1 acre for a total of 116 acres. The approximately 7 acres within the project area would be reclassified as MA-12 Developed Recreation.

The existing DOG is bordered on the south by Highway 26, to the east by the Malheur Nation Forest boundary, by the north mostly by Old Highway 26 and to the west by topographic influences. The proposed boundary will be adjusted by expanding the western border to include an additional 146 acres of Dedicated Old Growth for a total of 279 acres. This addition will bring the existing DOG within Forest Plan standards for old-growth. No acres that are currently in the DOG will be removed from the inventory after the proposed action is implemented.

Figure 4: Alternative 2 Proposed Adjustments of DOG/ROG Boundaries shows the existing DOG/ROG boundaries and the proposed adjustments with Alternative 2. Table 4 shows the summary of the existing areas and acres of DOG/ROG with the amount of habitat after implementation of the Proposed Action Alternative (Alternative 2).

Table 4: Summary of existing old growth habitat and proposed changes in Alternative 2

	DOGs (Acres)	ROGs (Acres)
Existing Habitat	133	115
Change in Habitat	+146	+1
Habitat After Implementation	279	116

Parking Lot Construction

A proposed parking lot located at the north-east junction of the 2600343 road and the 2600309 road (Old Highway 26). The parking area would require the clearing of all trees 445 feet west from the road junction, and between 275 feet to 205 feet north from the 2600309 road. Grading would be required for the parking lot and structure locations only. The space cleared for parking areas and structure construction would cover approximately 3 acres. Initially the parking lot will be graveled. As funding becomes available, the parking area will be paved to provide easier access for vehicles and for ease of plowing.

Selected vegetation removed from the site will be removed with root-wad and used for in-stream restoration projects on other locations in the forest. The remainder of the vegetation removed from the site will be sold, piled and burned, left for firewood, or appropriately disposed. An existing allotment fence bisecting the site will be removed and reconstructed to meet the needs of the proposed action.

Figure 6: Site Design for Proposed Action below shows the design proposal for Alternative 2.

Defensible Space Thinning

Defensible space thinning will be required 150 feet from all structures at the site. Defensible space thinning will thin trees up to 12 inches and remove ladder fuels to a height of 10 feet. Implementation must coordinate with District fuels planners to ensure that thinning requirements are met. All thinning and burning of downed material will be coordinated and overseen by a district fuel planner.

Structure Construction

Three structures will be constructed at the site to provide winter recreationists with the conveniences available at similar facilities. All public facilities would be designed to meet Americans with Disabilities Act standards. A warming hut, restrooms and a groomer shed will be constructed along the western border of the parking area. Materials used in structure construction will provide continuity with the surroundings and use.

A warming hut will be constructed out of materials that matches or blends with other structures and would be approximately 24 feet by 24 feet with non-flammable materials used in the construction. The structure will have a single, lockable door that will remain open during the winter season and locked during the remainder of the year. A wood stove will be placed in the shelter along with bench-style seating along the interior perimeter.

A single-sized, pre-cast concrete CXT vault toilet will be installed along the western edge of the proposed parking site near the other structures. This facility will match other similar facilities located throughout the Forest and will comply with applicable requirements.

The proposed groomer shed would be constructed out of material that matches or blends with the other structures and would be approximately 36 feet by 60 feet with a door on each and one walk through door. There would be a stem-wall foundation of concrete with a gravel floor. The shed would remain locked at all times and would only be accessible by authorized personnel. A concrete pad would be constructed inside the proposed groomer shed to house the fuel tank. The pad will measure approximately 4 feet by 10 feet. The tank is a double walled, fuel storage tank that meets all regulations and requirements for placement on NFS lands.

A pull-out area from the groomer shed, approximately 16 feet wide to a height of 16 feet connecting to the snowmobile route will be cleared from vegetation to provide access.

Forest Plan Amendments

The Proposed Action is located within replacement old growth habitats (ROGs) and is adjacent to dedicated old growth habitats (DOGs). Within the project area and adjacent to the project, the number of acres set aside for dedicated old growth is below the thresholds set in the Forest Plan. The Forest Plan standards for old growth habitats are identified for management area 13 (Forest Plan, IV-105, 06), directing that old growth areas be distributed across the forest to provide for wildlife species dependent on

this forest type. The Forest Plan requires an assessment of old growth areas utilizing an interdisciplinary process to recommend boundary changes to better meet objectives. The proposed Forest Plan amendment would redraw the DOG boundaries to exceed Forest Plan standards, and would redraw ROG boundaries to exceed Forest Plan standards. There would be no net loss of designated or replacement old growth acreages.

Application for Sno-Park System

After planning and implementation efforts have completed, the Malheur National Forest will apply to have the Blue Mountain Snowpark included in the Oregon Department of Transportation (ODOT) and Department of Motor Vehicle (DMV) Sno-Park system. Inclusion in this system will provide the snowpark the opportunity to be plowed and maintained by the state as well as being included in state published winter recreation guides. This would require winter recreationists to display Oregon Sno-Park Parking Permits, which is similar to other developed snowparks throughout the state and the forest.

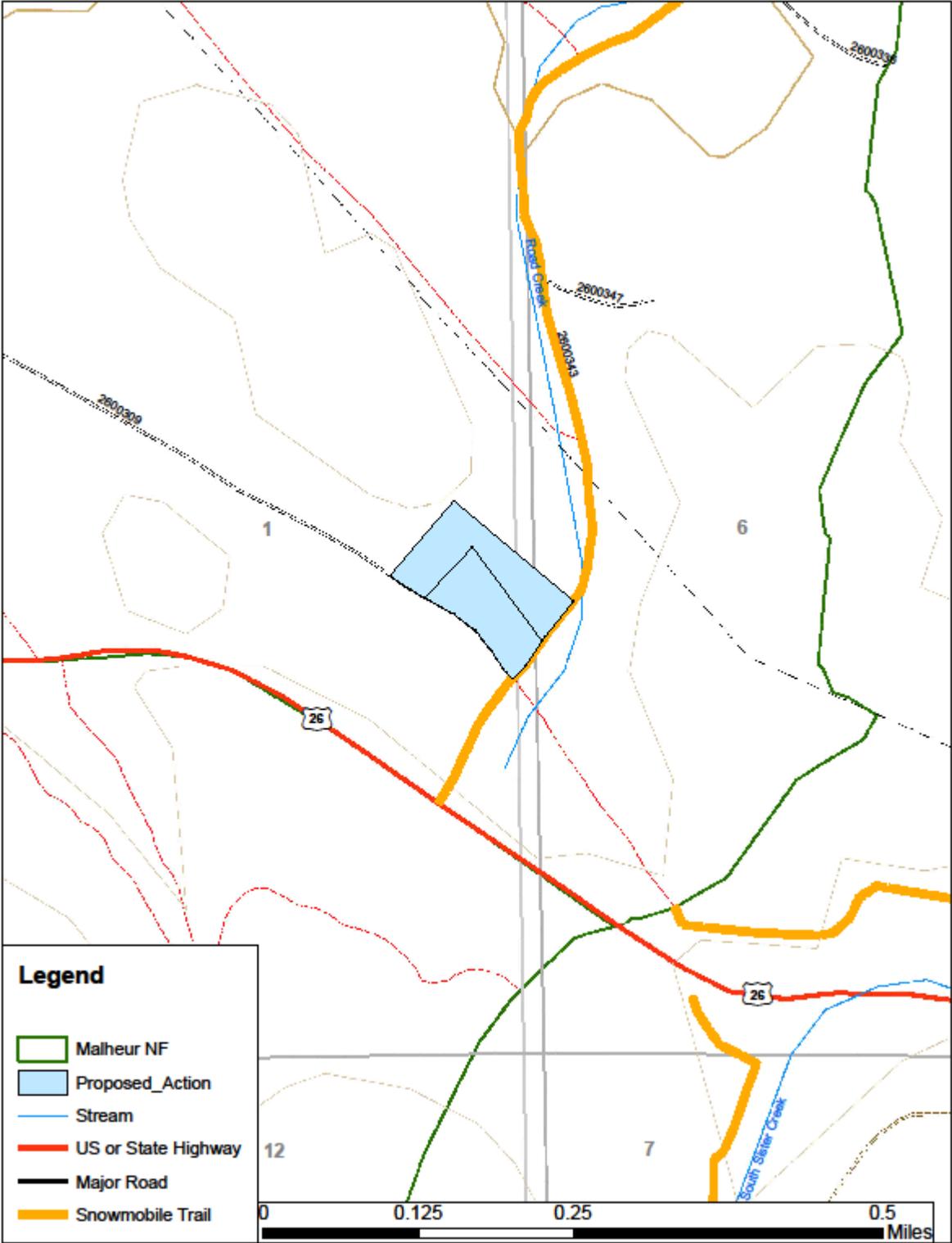


Figure 5: Location of Proposed Action Snowpark & Thinning Area (Alternative 2)

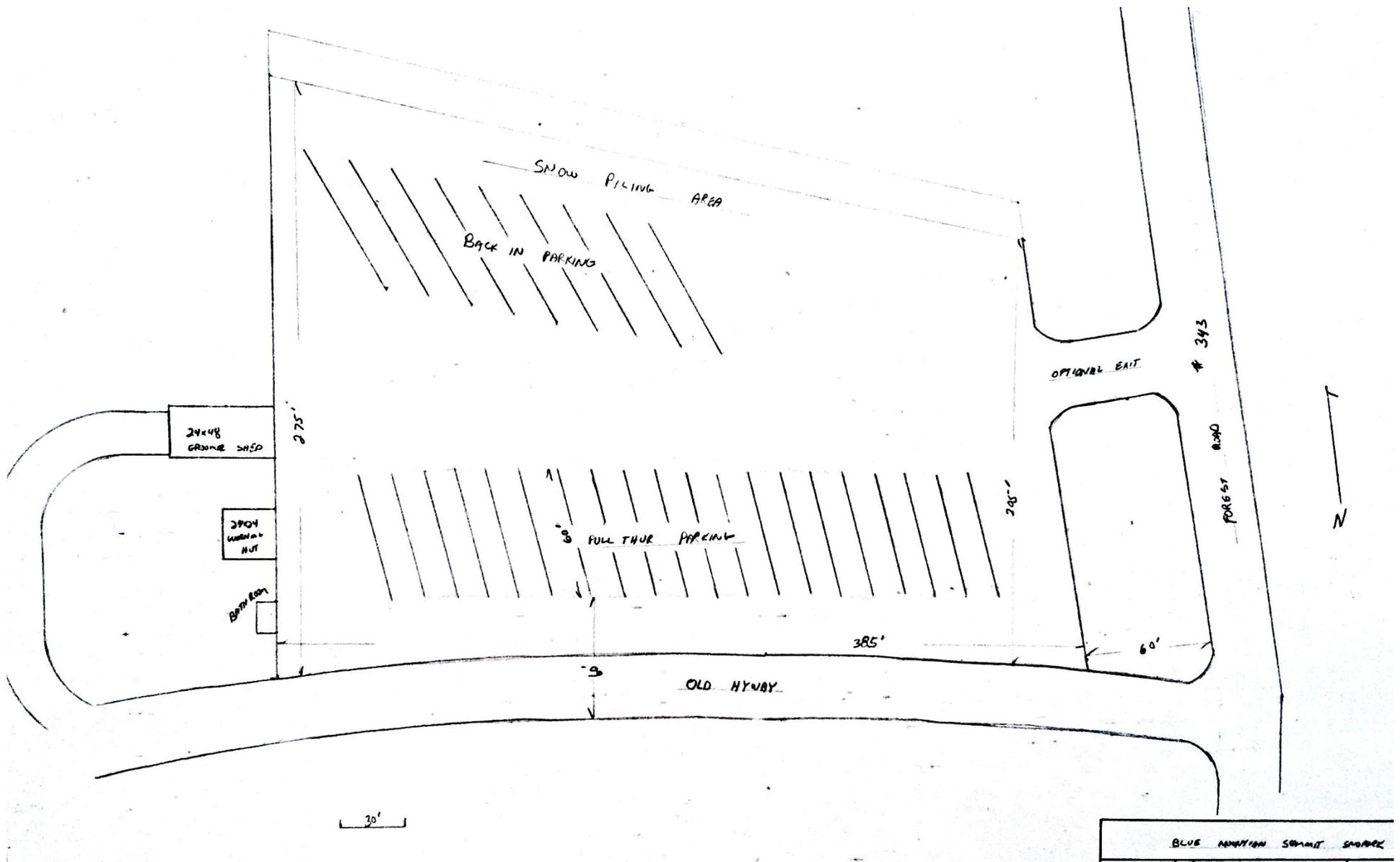


Figure 6: Site Design for Proposed Action (Alternative 2)

Alternative 3

Alternative 3 is to build a new snowpark near the Blue Mountain Summit on the Prairie City Ranger District to provide more high-elevation parking for winter recreationists along an established snowmobiling and snowplowing route. The proposed facility would provide for a mix of vehicle parking, including vehicles towing trailers and some slots designed for smaller vehicles. An access road and additional miles of snowmobile route designation will also be required for this alternative. In addition, three structures would be built for recreationists conveniences and grooming shed storage.

The new snowpark would be located near the Blue Mountain Summit on Highway 26. The proposed site is directly adjacent to Highway 26 along the southern border across from Forest Road 343. Figure 7: Location of Alternative shows the location of Alternative 3. As shown in the figure, a ROG borders the alternative to the south. However, no activities would take place in the ROG.

The intent of the project is to provide winter recreationists with an option for parking at a higher elevation. There is a need to provide a safe area for winter recreationists, while also keeping the highway clear for snowplows and semi-trailers at the Blue Mountain Summit area. Alternative 3 would provide a parking and loading area off of the state highway in order to reduce the potential for accidents. While this alternative would require some newly designated snowmobile trails, it would also provide access to existing snowmobile routes and groomed trails. All construction will comply with the Project Design Criteria listed in Table 5: Project Design Criteria and Best Management Practices.

Alternative 3 management activities that would provide additional safe high elevation parking, enhance a variety of winter recreation opportunities, and provide access to over-the-snow trail systems would include:

- 0.15 mile road to parking area
- Designated snowmobile routes
- Parking area at an elevation of 5120 feet above sea level
- Approximately 30 parking slots large enough for vehicles towing trailers
- 3 acres disturbed area; vegetation clearing for parking area
- 5 acres defensible space thinning
- Where able and appropriate, cleared materials will be stockpiled and be utilized for ongoing and future in-stream habitat
- All material not identified for use in stream restoration could be decked and sold or left for personal use firewood
- CXT Bathroom
- Warming hut
- Grooming shed
- Grooming shed fuel tank

Road Construction

In order to access the new parking area, a new road would be constructed from Highway 26 to the proposed parking area. Approximately 0.15 miles of road would be constructed. An application will be submitted to ODOT for an approach permit to Highway 26 prior to construction.

Potential danger trees along roads and right-of-ways within the road construction area would be removed. Identification of potential danger trees would follow Regional Guidelines.

Newly Designated Snowmobile Route

Although the southern section of Highway 26 at the Blue Mountain Summit does not have a designated snowmobile route, an informal trail has been used by snowmobilers to provide access across the highway and between districts of the Malheur NF and the Wallowa Whitman NF. Approximately 0.5 miles of snowmobile trail will be designated in this alternative. The newly designated trail will continue south across Highway 26 where Forest Road 343 ends, and turn east near the proposed parking location to connect to existing snowmobile trails on the Wallowa Whitman NF.

Parking Lot Construction

A proposed parking lot located directly adjacent to Highway 26, across from Forest Road 343 near the Blue Mountain Summit. The parking area would require the clearing of all trees, including those where structures will be placed. The parking area would be approximately the same area as the Proposed Action. Grading would be required for the parking lot and structure locations. The space cleared for parking areas and structure construction would cover approximately 3 acres. Initially the parking lot will be graveled.

Selected vegetation removed from the site will be removed with root-wad and used for in-stream restoration projects on other locations in the forest. The remainder of the vegetation removed from the site will be sold, piled and burned, left for firewood, or appropriately disposed.

Figure 6: Site Design for Proposed Action shows the design proposal for Alternative 3.

Defensible Space Thinning

Defensible space thinning will be required 150 feet from all structures at the site. Defensible space thinning will thin trees up to 12 inches and remove ladder fuels to a height of 10 feet. Thinning will be accomplished on approximately 5 acres, bordering the project area to the north, west and east, with the closed road serving as the boundary to the south. Implementation must coordinate with District fuels planners to ensure that thinning requirements are met. All thinning and burning of downed material will be coordinated and overseen by a district fuel planner.

Structure Construction

Three structures will be constructed at the site to provide winter recreationists with the conveniences available at similar facilities. All public facilities would be designed to meet Americans with Disabilities Act standards. A warming hut, restrooms and a groomer shed will be constructed along the western border of the parking area. Materials used in structure construction will provide continuity with the surroundings and use.

A warming hut will be constructed out of materials that matches or blends with other structures and would be approximately 24 feet by 24 feet with non-flammable materials used in the construction. The structure will have a single, lockable door that will remain open during the winter season and locked

during the remainder of the year. A wood stove will be placed in the shelter along with bench-style seating along the interior perimeter.

A single-sized, pre-cast concrete CXT vault toilet will be installed along the western edge of the proposed parking site near the other structures. This facility will match other similar facilities located throughout the Forest and will comply with applicable requirements.

The proposed groomer shed would be constructed out of material that matches or blends with the other structures and would be approximately 36 feet by 60 feet with a door on each end and one walk through door. There would be a stem-wall foundation of concrete with a gravel floor. The shed would remain locked at all times and would only be accessible by authorized personnel. A concrete pad would be constructed inside the proposed groomer shed to house the fuel tank. The pad will measure approximately 4 feet by 10 feet. The tank is a double walled, fuel storage tank that meets all regulations and requirements for placement on NFS lands.

A pull-out area from the groomer shed, approximately 16 feet wide to a height of 16 feet connecting to the snowmobile route will be cleared from vegetation to provide access.

Forest Plan Amendments

No Forest Plan Amendments will be required under this alternative.

Application for Sno-Park System

After planning and implementation efforts have completed, the Malheur National Forest will apply to have the Blue Mountain Snowpark included in the Oregon Department of Transportation (ODOT) and Department of Motor Vehicle (DMV) Sno-Park system. Inclusion in this system will provide the snowpark the opportunity to be plowed and maintained by the state as well as being included in state published winter recreation guides. This would require winter recreationists to display Oregon Sno-Park Parking Permits, which is similar to other developed snowparks throughout the state and the forest.

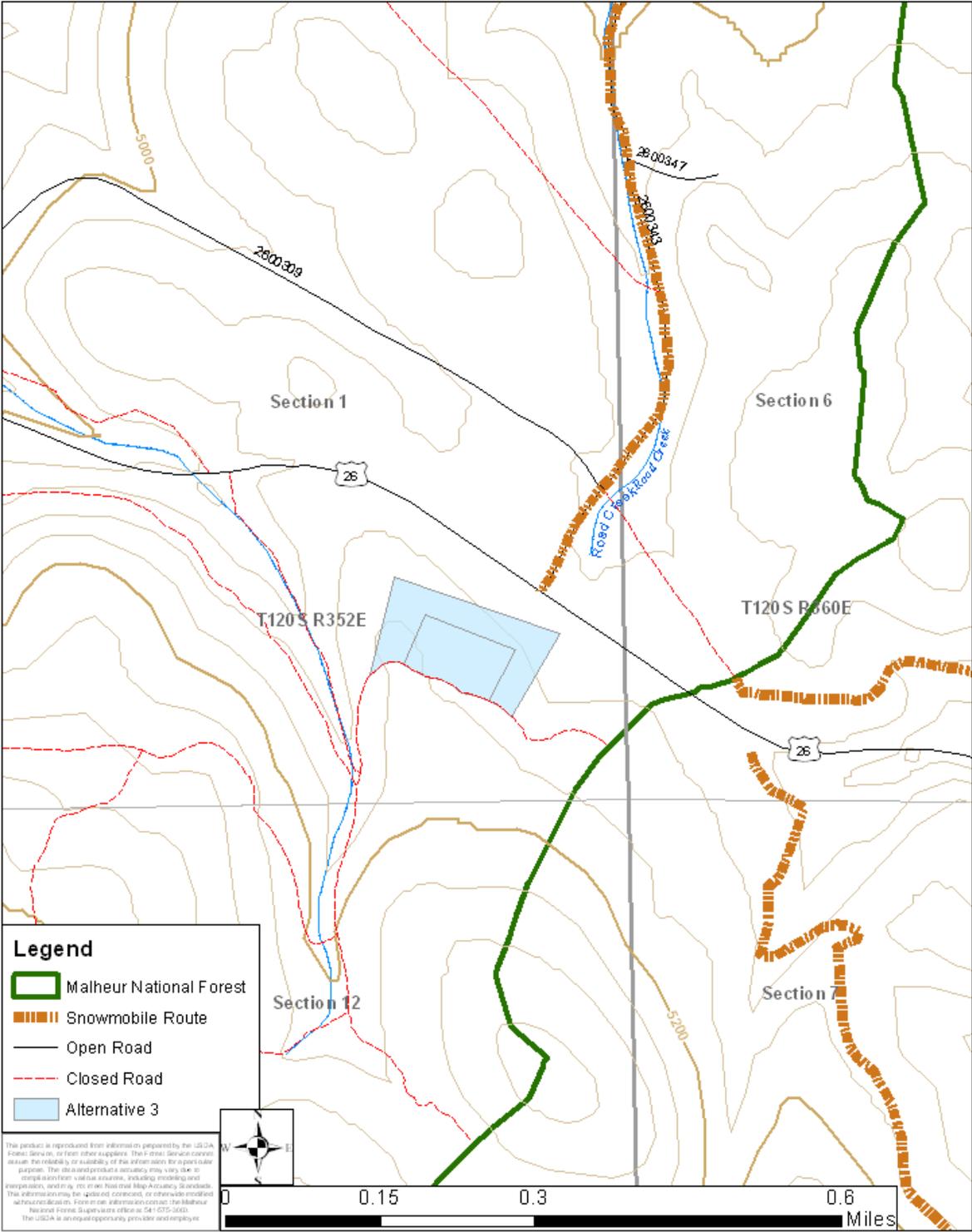


Figure 7: Location of Alternative

Integrated Design Elements, Conservation Measures and Monitoring Requirements of the Project

The following design elements, conservation measures, and monitoring requirements are built-in features of the project. The Blue Mountain and Prairie City Ranger Districts are committed to all requirements by virtue of the decision to approve the project for implementation.

Table 5: Project Design Criteria and Best Management Practices

Recreation/Visuals
<p>Construct structures and lift components with materials which blend with the landscape character, as is practicable, and meet FSM 2380 policy for color and reflectivity, which are 4.5 on the Munsell neutral value color scale. Building designs will be submitted to the Forest Service for review and approval.</p> <p>Follow FSM guidelines (Section 2380) and Built Environment Image Guide (BEIG) guidelines:</p> <p>The scenic character will be protected through appropriate siting of buildings and the use of low-impact materials and colors (e.g., indigenous construction materials, such as stone and wood, as well as low-reflective glass and roofing materials)</p> <p>Remain in context with the landscape</p> <p>Architecture, materials, and colors should follow the Forest Service’s Built Environment Image Guide (BEIG).</p> <p>Avoid straight edges where removing trees. The edges of trails and structures, where the vegetation is removed, need to use a variable density cutting (feathering) technique applied to create a more natural edge that blends into the existing vegetative. Edges should be non-linear, and changes in tree heights along the edges of openings should be gradual rather than abrupt. Soften hard edges by selective removal of trees of different ages and heights to produce irregular corridor edges where possible.</p> <p>Cut stumps as low as possible to the ground to avoid safety hazard and to meet scenery objectives.</p> <p>Re-vegetate all disturbed areas after the site has been satisfactorily prepared. Repeat seeding until satisfactory re-vegetation is accomplished. Reseed with a native seed mixture using a variety of native seed grasses, wildflowers and forbs.</p> <p>Meet reflectivity guidelines when constructing Facilities or structures. This includes any reflective surfaces (metal, glass, plastics, or other materials with smooth surfaces), that do not blend with the natural environment. They should be covered, painted, stained, chemically treated, etched, sandblasted, corrugated, or otherwise treated to meet the solar reflectivity standards. The specific requirements for reflectivity are as follows: Facilities and structures with exteriors consisting of galvanized metal or other reflective surfaces will be treated or painted dark non-reflective colors that blend with the forest background to meet an average neutral value of 4.5 or less as measured on the Munsell neutral scale.</p>
Heritage
<p>Heritage monitoring will be implemented by a qualified heritage specialist who will be onsite during project development activities to observe for potential subsurface components.</p> <p>If cultural resources are encountered during project implementation of the action alternative, ground-disturbing activities will cease and the district Archaeologist will be notified. The cultural resource will be evaluated and a mitigation plan developed in consultation with the Oregon SHPO, if necessary.</p>
Vegetation
<p>Vegetation marked for use in stream restoration activities will be marked prior to implementation. Care will be taken to remove these trees with the rootwad and stored for future placement and use as stream features and fish habitat.</p>

Vegetation not marked for stream habitat purposes can be stacked and used as firewood, sold, or piled and burned by a district fuels planner.

Re-vegetate disturbed areas with native plants. Use, if available, genetically local (at the ecological subsection level) seeds. Seed mixtures and mulches will be noxious weed-free. To prevent soil erosion, non-persistent, non-native perennials or sterile perennials may be used while native perennials become established. The Forest Service must approve the seed mixtures prior to implementation.

Effective ground cover (mulch) upon completion of ground disturbing activities shall meet minimum level of the pre-treatment habitat type.

Adequately mark tree clearing limits to minimize mistakes in clearing limits during construction.

Prior to ground disturbing activities, demarcate sensitive plants to ensure impacts are avoided to the greatest extent practicable.

Noxious Weeds

Complete a noxious weeds risk assessment and have approved by the Forest Service prior to implementation of any authorized ground disturbing activities.

Clean construction equipment prior to entry onto NFS lands. If equipment is used on other Malheur National Forest projects that have known weed populations, equipment would be cleaned prior to moving to a new project.

Treat travel routes accessing the project area for noxious weeds prior to and during project construction. Travel routes include ski area access roads, after leaving county administered roads.

Monitor and treat any new infestations for a minimum of three years after project completion.

Gravel pits, quarry sites, and borrow pits would be inspected for invasive plants before use and transplant. If source is infested, treat or require treatment prior to use of material

Only use gravel, fill, sand, and rock would be judged by the District or Forest weed specialist

Wildlife

To conserve nesting habitat of raptors, a Wildlife Biologist would be consulted to establish a nest zone buffer around any raptor nest discovered prior to or during project implementation, and if appropriate, would restrict activities within the nest area during occupancy. These restrictions will be executed according to the requirements of the species involved.

Aquatics

The Forest Service will require a Hazardous Substances Plan and Prevention of Oil Spill Plan from contractor which will be reviewed and approved prior to implementation activities. Fuels and other toxicants shall not be stored within RHCAs, including the 500-gallon above ground fuel storage tank associated with the groomer shed. Other provisions of PACFISH Standard RA-4 shall be observed.

Inspect all heavy equipment and machinery for hydraulic or other leaks before working near RHCAs. Leaking or faulty equipment will not be used. Equipment with accumulations of oil, grease, or other toxic materials will be cleaned in pre-approved sites outside RHCAs.

Conduct activities during dry-field conditions – low to moderate soil moisture levels.

Obtain approval from district fisheries biologist or hydrologist on location for stockpiling selected vegetation cleared from the construction area to be used in future in-stream restoration projects at other locations on the Forest.

To the greatest degree possible, avoid creating hydrophobic soils where burning slash piles within riparian areas is necessary. Slash piles should be far enough away from the stream channel so that any sediment resulting from this action will be less likely to reach the stream.

Structures shall not be located within the RHCA, and otherwise located as far from the RHCA as practical to minimize the need for defensible space thinning within the RHCA.

Range

Any fences moved or removed during construction will be relocated and/or replaced following implementation.

Soil Resources

The parking lot shall be constructed so as to disperse runoff as well as possible, instead of concentrating it.

The following Design Criteria are for the Defensible Space Thinning. They do not apply to the parking lot and structure sites.

Skid trail and forwarder trail locations shall be designated and approved prior to logging.

For rubber tired skidders: On areas where existing skid trails spaced 100-140 feet apart can be reused, reuse the old skid trails. Otherwise, space skid trails about 120 feet apart where practical, using existing skid trails where possible and appropriate. Skidtrails should average less than 14' wide.

Skidders shall not be allowed off skid trails unless the soil is frozen or other conditions approved by a soil scientist. Directional felling and/or winching shall be used when necessary. Low ground-pressure equipment (<8.5 psi) can be allowed off of skid trails under, dry, frozen, or snow covered conditions. "Dry" means July through September, or obviously dry in the top 4 inches during other months. "Frozen" means frozen to a depth of 4 inches or more. "Snow covered" means sufficient snow strength and depth to prevent soil disturbance and compaction.

No skidding will be done under moist soil conditions, when ruts six inches or deeper would form on a continuous 50 feet or more of skid trail. This prohibition applies to moist soil which is often found near such species as aspen, as well as to moist soil after snowmelt or rain.

For harvesters and forwarders:

Forwarders shall have a maximum of 12.0 pounds/square inch.

Forwarder trails shall be spaced a minimum of 50 feet apart, center to center.

The machinery will be operated only when the soil is not wet. (For forwarders "wet" means when ruts would be 4 inches or deeper on a continuous 50 feet or more of forwarder trails.)

The machinery will be operated only on slopes of 35% or less, except for short distances.

Watershed

Project Planning and Analysis	Use the project planning, environmental analysis, and decision-making processes to incorporate water quality management BMPs into project design and implementation.
Streamside Management Zone (SMZ) Planning	To maintain and improve or restore the condition of land around and adjacent to waterbodies...recognizing their unique values and importance to water quality while implementing ...activities.
Recreation Planning	Use the applicable recreation planning process to develop measures to avoid, minimize, or mitigate adverse effects to soil, water quality and riparian resources during recreation activities.
Developed Recreation Sites	Avoid, minimize, or mitigate adverse effects to soil, water quality and riparian resources at developed recreation sites by maintaining desired levels of ground cover, limiting soil compaction, and minimizing pollutants entering waterbodies.
Over-snow Vehicle Use	Avoid, minimize, or mitigate adverse effects to soil, water quality and riparian resources from over-snow vehicle use.
Recreation Special Use Authorizations	Avoid, minimize, or mitigate adverse effects to soil, water quality and riparian resources from physical, chemical, and biological pollutants resulting from activities under Recreation Special Use Authorizations, Agreements, or other legal instruments governing use of snowpark.

Facility Construction and Stormwater Control	Avoid, minimize, or mitigate adverse effects to soil, water quality and riparian resources by controlling erosion and managing stormwater and snowmelt discharge originating from ground disturbance during construction of developed sites and on-going use of sites.
Sanitation Systems	Avoid, minimize, or mitigate adverse effects to soil and water quality from bacteria, nutrients, and other pollutants resulting from collection, transmission, treatment, and disposal of sewage and wastewater at facilities.
Solid Waste Management	Avoid, minimize, or mitigate adverse effects to water quality from trash, nutrients, bacteria, and chemicals associated with solid waste management at facilities.
Hazardous Materials	Avoid or minimize short- and long-term adverse effects to soil and water resources by preventing releases of hazardous materials.
Travel Management Planning and Analysis	Use the travel management planning and analysis processes to develop measures to avoid, minimize, or mitigate adverse effects to soil, water quality and riparian resources during road management activities.
Road Location and Design	Locate and design roads to avoid, minimize, or mitigate adverse effects to soil, water quality and riparian resources.
Road Construction and Reconstruction	Avoid, minimize, or mitigate adverse effects to soil, water quality and riparian resources by controlling road use and operations and providing adequate and appropriate maintenance to minimize sediment production and other pollutants during the useful life of the road.
Snow Removal and Storage	Avoid or minimize erosion, sedimentation, and chemical pollution that may result from snow removal and storage activities.
Parking Sites and Staging Areas	Avoid, minimize, or mitigate adverse effects to soil, water quality and riparian resources when constructing and maintaining parking and staging areas.
Equipment Refueling and Servicing	Avoid or minimize adverse effects to soil, water quality, and riparian resources from fuels, lubricants, cleaners and other harmful materials discharging into nearby surface waters or infiltrating through soils to contaminate groundwater resources during equipment refueling and servicing activities.
Vegetation Management and Planning	Use the applicable vegetation management planning processes to develop measures to avoid, minimize, or mitigate adverse effects to soil, water quality and riparian resources during mechanical vegetation treatment activities.
Erosion Prevention and Control	Avoid, minimize, or mitigate adverse effects to soil, water quality and riparian resources by implementing measures to control surface erosion, gully formation, mass slope failure and resulting sediment movement before, during, and after mechanical vegetation treatments.
Ground-based Skidding and Yarding Operations	Avoid, minimize, or mitigate adverse effects to soil, water quality and riparian resources during ground-based skidding and yarding operations by minimizing site disturbance and controlling the introduction of sediment, nutrients, and chemical pollutants to Waterbodies.

Comparison of Alternatives

Table 6: Alternative Comparison of Purpose and Need

Comparison/Purpose and Need	Measure	Alternative 1 (Existing Condition /No Action)	Alternative 2 (Proposed Action)	Alternative 3
Increase parking safety for winter recreationists	Will parking slots be available off Highway 26	No	Yes	Yes
Provide complimentary facilities for winter recreationists	Number of public structures	0	2	2
Provide the OSSA groomer a location for operations, maintenance, and security	Groomer sheds constructed	0	1	1

Table 7: Alternative Comparison of Key Issues

Key Issue	Measure	Alternative 1 (Existing Condition /No Action)	Alternative 2 (Proposed Action)	Alternative 3
Effects of constructing a parking area and structures in existing ROG, adjacent to DOG	Acres of DOG/ROG available for wildlife habitat	133 Acres DOG 115 Acres ROG	279 Acres DOG 116 Acres ROG	133 Acres DOG 115 Acres ROG
	Old Forest Development	Stands would continue at the current rate with the current acreages, which is below Forest Plan Standards for DOG	Adjusted stand boundaries would increase number of acres for both DOG and ROG, meeting Forest Plan standards	Stands would continue at the current rate with the current acreages, which is below Forest Plan Standards for DOG

Table 8: Proposed Action Summary of Activities

Activity	Alternative 1 (Existing Condition /No Action)	Alternative 2 (Proposed Action)	Alternative 3
Parking Lot Construction (Acres)	0	3	3
Structures Constructed	0	3	3
Defensible Space Thinning and/or Fuel Treatment (Acres)	0	4	5
Road Construction (miles)	0	0	0.15
New Snowmobile Routes Established (miles)	0	0	0.5

Chapter 3 – Affected Environment and Environmental Consequences

Chapter 3 summarizes the physical, biological, social, and economic environments of the affected project area and the potential changes to these environments if the proposal was implemented. Chapter 3 presents the scientific and analytical basis for comparison of alternatives. Chapter 3 complies with implementing regulations (40 CFR 1500-1508) of NEPA for analytic and concise environmental documents (40 CFR 1502.2).

In the development of the environmental analyses that follow, best available science was considered and is documented in the project record for each resource area. Consistency with the Malheur National Forest Land and Resource Management Plan, as amended (Forest Plan) was built into the project design and the analyses. The environmental analyses incorporate issues identified through the scoping process. An environmental effect, impact, or consequence is defined as a modification of or change in the existing environment brought about by the action taken. NEPA regulations (40 CFR 1508.27 (a)) refer to effects in terms of short and long-term duration. For this project, short term is defined as around 1-10 years and long term is defined as around 10-20 years, unless otherwise defined in the resource sections of this chapter. Effects can vary in degree, ranging from only a slightly discernible change to a measurable alteration in the environment.

Cumulative Effects

A cumulative effect is the impact to the environment resulting from the incremental impact of the action when added to effects from other past, present, and reasonably foreseeable future actions. Other actions are considered regardless of what agency or person undertakes such other actions and regardless of land ownership on which the other actions occur (40 CFR 1508.7). An individual action when considered alone may not have a significant effect, but when its effects are considered in sum with the effects of other actions, the effects may be significant.

Cumulative effects were assessed for this project in terms of how the alternatives would add to the past, present and reasonably foreseeable future activities (Table 9). Existing conditions described under each resource section reflect the cumulative effects of past and present activities that have occurred in this area. Each resource section identifies specific past and present actions listed in table 6 with a discernible effect on a particular resource as reflected in the existing condition.

Past and present activities

The environmental analysis required under National Environmental Policy Act is forward-looking in that it focuses on the potential impacts of the proposed action that an agency is considering. Thus, review of past actions is required to the extent that this review informs agency decision making regarding the proposed action (Council on Environmental Quality Memorandum, Guidance on the Consideration of Past Actions in Cumulative Effects Analysis, Forest Service National Environmental Policy Act (NEPA) Regulations (36 CFR 220.4(f)) (July 24, 2008)). Specific past actions considered in the affected environment and cumulative effects analysis are summarized below. The past actions summary is not necessarily exhaustive, as records may not exist for all past activities by project. This is particularly true

for those actions that predate the passage of the National Environmental Policy Act in 1970. Nonetheless, the effects of such past actions are accounted for in the assessment of the existing condition, as the current condition assessment necessarily reflects any relevant impacts of such actions.

Future activities

As an ID team we looked to identify reasonably foreseeable activities with effects that may overlap with the proposed action in time and space. In conducting this inventory of future activities, we looked at the Schedule of Proposed Actions (SOPA) for the Blue Mountain and Prairie City Ranger Districts on the Malheur NF, as well as activities occurring near the project area on the Wallowa-Whitman NF. There are no projects planned that overlap the snowpark project that would

Table 9. Past, present and future activities in and around the Blue Mountain Summit Snowpark project area used for the cumulative effects analysis

Activity Name	Time Frame	Location	Activity Description																														
Timber Sales																																	
Historic Timber Harvest	1900-1970s	Middle Fork John Day River	Timber harvest started with settlement and mining activities in the 1860s. The first large scale logging began with the arrival of the Sumpter Valley Railway in 1910. A main line was built down the MFJD River with numerous spurs reaching up both sides of the valley. Harvest was mostly clearcutting with limited retention of older trees. In the middle of the century, roads were built into higher elevation areas and mainly consisted of partial tree removal of high value timber such as large ponderosa pine.																														
Past Logging within the subwatershed	1970-Present	Summit Creek Subwatershed	Thinning and regeneration harvest from 1970 through 1996 is listed below with sale name, date and acres harvested and/or volume harvested. <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td>North Fork Summit Creek Timber Sale</td> <td>1977</td> <td>3,760 acres / 5mmbf</td> </tr> <tr> <td>Sixteen Gulch Timber Sale</td> <td>1979</td> <td>8,468 acres / 12,900mbf</td> </tr> <tr> <td>Phipps Two Timber Sale</td> <td>1983</td> <td>5 acres / 60mbf</td> </tr> <tr> <td>Summit LP Timber Sale</td> <td>1983</td> <td>196mbf</td> </tr> <tr> <td>Ida Timber Sale</td> <td>1985</td> <td>530 acres / 5.1mmbf</td> </tr> <tr> <td>Ton Timber Sale</td> <td>1987</td> <td>Less than 100 acres post/pole</td> </tr> <tr> <td>IT LP</td> <td>1990</td> <td></td> </tr> <tr> <td>Tip Wood Timber Sale</td> <td>1993</td> <td></td> </tr> <tr> <td>Fly Chip Timber Sale</td> <td>1993</td> <td>263 acres / 1.2mbf</td> </tr> <tr> <td>POGO Timber Sale</td> <td>1996</td> <td>104 acres / 35mbf</td> </tr> </table>	North Fork Summit Creek Timber Sale	1977	3,760 acres / 5mmbf	Sixteen Gulch Timber Sale	1979	8,468 acres / 12,900mbf	Phipps Two Timber Sale	1983	5 acres / 60mbf	Summit LP Timber Sale	1983	196mbf	Ida Timber Sale	1985	530 acres / 5.1mmbf	Ton Timber Sale	1987	Less than 100 acres post/pole	IT LP	1990		Tip Wood Timber Sale	1993		Fly Chip Timber Sale	1993	263 acres / 1.2mbf	POGO Timber Sale	1996	104 acres / 35mbf
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POGO Timber Sale	1996	104 acres / 35mbf																															
Recent timber sales																																	
Olmstead Thinning and Fuels Reduction	2000	Summit Creek / Squaw Creek	Development of late and old structural characteristics and resilient forest vegetation conditions. Road management activities are also being proposed to improve water quality and fisheries habitat.																														
Plantation Maintenance																																	
Other																																	
Idaho Creek Water Development	2004	Idaho Creek	The construction of two water developments in the uplands of Idaho Pasture.																														

Highway 26 Reconstruction	1987		The widening and realignment of Highway 26
Power Line Development		Parallel and north of Highway 26	The clearing of vegetation and development of a power line

Affected Environment

The Blue Mountain Summit Snowpark Project area covers approximately 8 acres including both clearing for the parking area and defensible space thinning for each action alternative. All alternatives are located within the Summit Creek subwatershed (6th Field Hydrologic Unit Code (HUC) 170702030102), which is approximately 13,288 acres in the Upper Middle Fork John Day River watershed. Alternative 2 occurs north of US Highway 26 on the Blue Mountain Ranger District and Alternative 3 occurs south of US Highway 26 on the Prairie City Ranger District. Existing open and closed roads are spread throughout the area and there is evidence of past harvest throughout, and adjacent to, the project area. Snowmobile trails utilize open roads in the area, including those along the proposed snowpark.

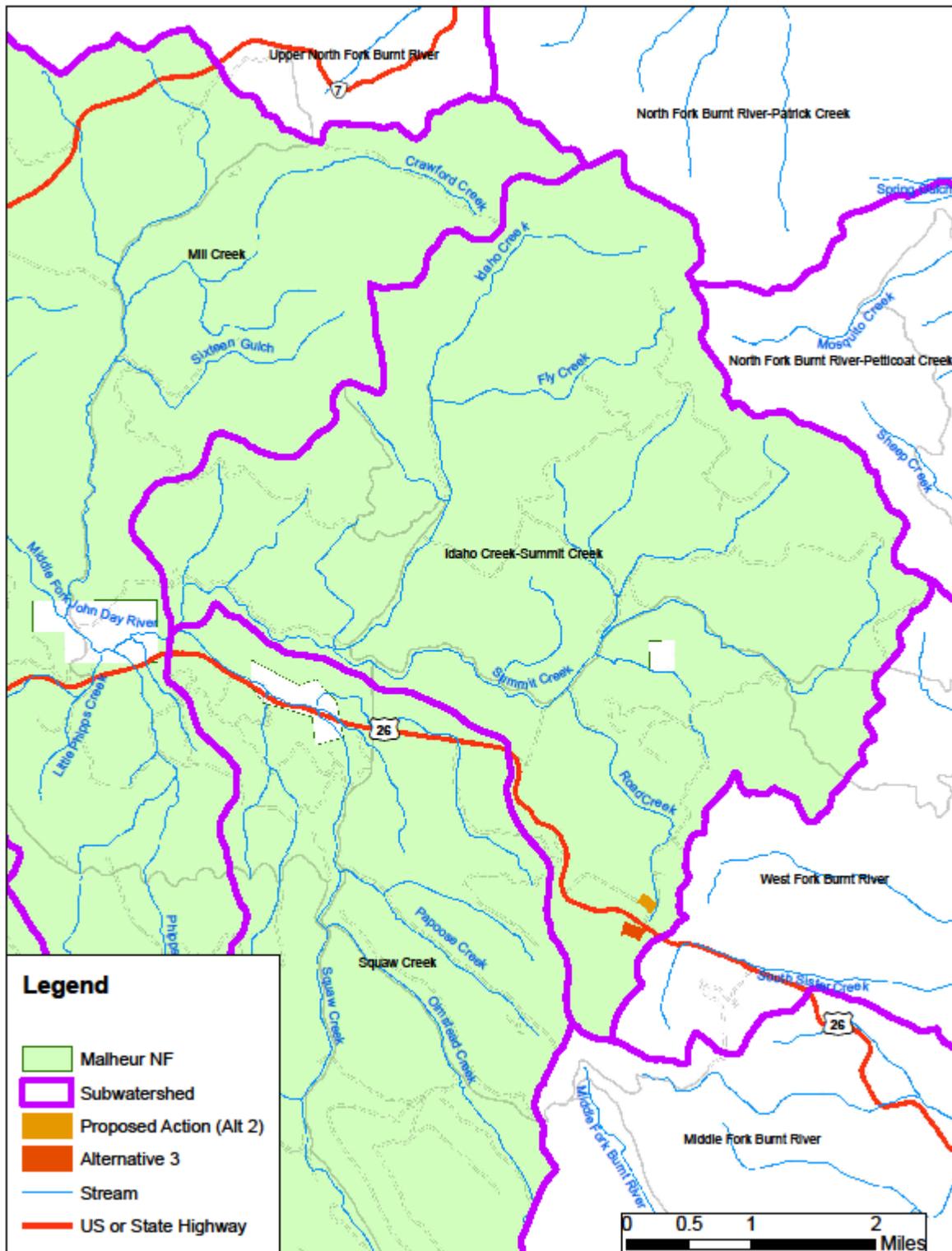


Figure 8. Map of the Summit Creek Subwatershed and Action Alternative locations

Summary of Effects

This section provides a summary of effects from implementing the proposed action. Information in Table 10 is focused where effects can be distinguished quantitatively or qualitatively.

Table 10: Summary of Effects

Resource	Alternative 2 (Proposed Action)	Alternative 3
Recreation	Increase in recreation conveniences. Consistent with existing ROS.	Increase in recreation conveniences. Consistent with existing ROS.
Threatened, Enangered, Proposed, & Sensitive Species	Range from no effect, to no impact, to might impact individuals habitat but will not likely contribute to a trend toward federal listing or loss of viability to the population or species, to beneficial impact based on species	Range from no effect, to no impact, to might impact individuals habitat but will not likely contribute to a trend toward federal listing or loss of viability to the population or species, to beneficial impact based on species.
MIS – Big Game	No increased disturbance	No increased disturbance
MIS – Old Growth	Not adversely effected	Not adversely effected
MIS – Primary Cavity Excavator	Beneficial impact	Beneficial Impact
Featured Wildlife Species	Not likely to impact	Not likely to impact
Botany	No effects to TES species	No effects to TES species
Range	No effects to range resources	No effects to range resources
Soils	Low potential for soil erosion from parking area and low potential for compaction from thinning	Slightly higher potential for soil erosion from parking area because of slope, low potential for compaction from thinning
Fisheries	No change in stream shade, habitat elements, channel conditions, or flow/hydrology, no effect to water quality, no impact to steelhead. May Impact Columbia spotted frog Individuals or Habitat, but would not likely contribute towards federal listing or loss of viability to the population or species. No Effect on MCR Steelhead and their designated critical habitat, No Adverse Effect on MCR Chinook Salmon EFH, and No Impact on redband trout.	No effect on fisheries
Water Resources	Implementation of the design elements and Watershed Best Management Practices will lead to no direct or indirect effects	Implementation of the design elements and Watershed Best Management Practices will lead to no direct or indirect effects
Heritage	No effect since there are no archaeological or historic resources	No effect since there are no archaeological or historic resources
Visuals	No change in foreground or middleground scenic integrity.	Foreground scenic integrity will be impacted in the short term, but impacts will decrease in the long term. No change to middleground scenic integrity.

Resource	Alternative 2 (Proposed Action)	Alternative 3
Wilderness, IRA, PWA, OUL	No effect	No Effect
Air Quality	Minor localized impacts, no impact to airshed	Minor localized impacts, no impact to airshed
Climate Change	No effect	No effect
Public Health & Safety	Beneficial impact	Beneficial impact
Environmental Justice	No effect	No effect

Recreation

Regulatory Framework

The National Forest System lands encompassed within the Blue Mountain Summit Snowpark Project Area have been inventoried using the Recreation Opportunity Spectrum (ROS) system to determine what recreation opportunities and settings are available to visitors. The project area falls within the Roded Natural class of the ROS. Management direction for recreation as outlined in the Forest Plan is to continue to maintain existing ROS settings. The Forest Plan Management areas in the Blue Mountain Summit Snowpark Project area are discussed below in relation to the ROS class.

Management Area 14 – Visual Corridors: Manage for roded natural recreation

The analysis area analyzed for recreation impacts includes the Blue Mountain Summit Snowpark project area.

Analysis Method

The Malheur National Forest uses ROS classes to develop management direction for recreation on the forest. This analysis will use the ROS classes assigned during Forest Plan development as the basis of this assessment.

The Recreation Opportunity Spectrum (ROS) is a system for planning and managing recreation resources. Land delineations that identify a variety of recreation experience opportunities categorized into classes on a continuum from primitive to urban. Each class is defined in terms of the degree to which it satisfies certain recreation experience needs, based on the extent to which the natural environment has been modified, the type of facilities provided, the degree of outdoor skill needed to enjoy the area, and the relative density of recreation use. Based on the seven elements, the Forest Service assigns one of six ROS setting zones to all Forest Service land; one of these apply to the project area:

Roded Natural: A natural-appearing environment with moderate evidence of the sights and sounds of humans. Such evidence usually harmonizes with the natural environment. Interaction between users may be moderate to high with evidence of other users prevalent. Motorized use is allowed.

Within the Roded Natural setting, there may be modifications which range from being easily noticed to strongly dominant to observers within the area. The setting can have strong evidence of designated roads and/or highways, and structures are generally scattered, remaining visually subordinate or unnoticed to

the sensitive travel route observer. Frequency of contact can be moderate to high on roads, and low to moderate on trails and away from roads.

Affected Environment

In 2006 the Malheur National Forest developed a Forest niche, which is a statement of our unique role and contribution to recreation offerings in the Pacific Northwest Region. The purpose of the niche is to help us identify what makes each Forest special and allow us to narrow our focus to the most appropriate recreation opportunities so that we can provide quality recreation. Our niche is:

A Traditional Way of Life

A traditional way of life is the concept of a dispersed recreation destination where local communities share traditions and heritage with new generations and with visitors. Recreation visitors enjoy the freedom to hunt, drive, camp, and hike in a wild place and enjoy the beauty and diversity of forest ecosystems away from major population centers.

Recreational use in the Blue Mountain Summit Snowpark Project area is oriented toward enjoyment of the area's natural and historic resources. In general, people visit the project area to participate in winter outdoor activities.

During the winter months, recreationists in this area are generally comprised of snowmobile users parking along Highway 26 and utilizing the existing snowmobile trail system that connects to this area. Use of this route during the winter recreational season is generally December through April (though timing varies with snow conditions). During peak recreationist times, use can be as high as 50 visitors, with parking occurring along the highway in the chain-up areas.

Direct and Indirect Effects

Alternative 1

This alternative proposes no construction of a parking area or associated structures, or fuels reduction treatments in the Blue Mountain Summit area at this time. There would be no change in current management direction or in the level of ongoing management activities within the project area. It does not preclude activities outside the project area or within the project area at some time in the future.

No snowpark would be built and ongoing activities would continue. There would continue to be no safe parking for winter recreationists and parking would likely continue in the chain-up areas on U.S. Highway 26. Winter trails and recreation opportunities would remain at the current locations and conditions. Winter recreationists would still be parking in unsafe locations and creating conflict with the uses and winter management of the adjacent highway. The area would continue to not meet the recreation needs of the community, and would not provide a safe parking area for recreationists.

The ROS class would not change as a result of not doing the project, and would remain at Roaded Natural. Under this alternative traditional use patterns would not be impacted.

Alternative 2 (Proposed Action)

The actions proposed in alternative 2 will not have any change on the Recreation Opportunity Spectrum of the existing area. This action will provide for additional winter recreational conveniences, as well as a safe parking area to reduce risks and potential hazards.

Structure Construction and Parking Lot

Two structures a warming shelter and restroom will be constructed at the site to provide winter recreationists with the conveniences available at similar facilities. All public facilities would be designed to meet Americans with Disabilities Act standards, providing access to a wide variety of forest recreationists. A groomer cat shed will be constructed along the western border of the parking area to store the groomer and provide early and late season trail grooming, lengthening the season for groomed recreational opportunities.

The construction of the lot and structures will provide for additional opportunities for recreationists to use the high-elevation area without impacting the use and maintenance of the adjacent highway. This will increase the safety of the recreationists and highway users. The new facilities will make the use of existing and proposed trail systems easier for winter recreationists. The construction at this site will not be a change in the ROS for the site and its new uses will be compatible with the classification.

Snowmobile Trail

The project will not change the existing snowmobile trail route or winter activity. The proposed snow park will be adjacent to existing trails, making the trail system more accessible and safer for winter recreationists. Because the trail system will not be changed, there will be no change to the ROS classification.

Alternative 3

The actions proposed in alternative 3 will not have any change on the Recreation Opportunity Spectrum of the existing area. This action will provide for additional winter recreational conveniences, as well as a safe parking area to reduce risks and potential hazards.

Road Construction

In order to access the new parking area, a new road would be constructed from U.S. Highway 26 to the proposed parking area. Approximately 0.15 miles of new road would be constructed. This new road would provide access to the proposed parking area providing additional recreational opportunities for winter recreationists. This new road would provide access and would be compatible with the current ROS.

Newly Designated Snowmobile Route

Although the southern section of U.S. Highway 26 at the Blue Mountain Summit does not have a designated snowmobile route, an informal trail has been used by snowmobilers to provide access across the highway and between districts of the Malheur NF and the Wallowa Whitman NF. Under Alternative 3, this user created trail will be designated as a snowmobile trail. The trail will continue south across U.S. Highway 26 where Forest Road 2600343 ends and turn east on closed Road 2600414 near the proposed parking location to connect to existing snowmobile trails on the Wallowa Whitman NF. This newly designated snowmobile trail will provide an ease of inter-forest travel for winter recreationists using the designated snowmobile trail, and access to hundreds of miles of both groomed and ungroomed trails. This newly designated snowmobile route will not change the ROS classification.

Parking Lot & Structure Construction

Two structures a warming shelter and restroom will be constructed at the site to provide winter recreationists with the conveniences available at similar facilities. All public facilities would be designed to meet Americans with Disabilities Act standards, providing access to a wide variety of forest recreationists. A groomer cat shed will be constructed along the western border of the parking area to store the groomer and provide early and late season trail grooming, lengthening the season for groomed recreational opportunities.

The construction of the lot and structures will provide for additional opportunities for recreationists to use the high-elevation area without impacting the use and maintenance of the adjacent highway. This will increase the safety of the recreationists and highway users. The new facilities will make the use of existing and proposed trail systems easier for winter recreationists. The construction at this site will move the ROS class to the high end of the roaded natural ROS classification due to the visibility within State Highway 26 visual foreground, however there will not be a change in the ROS for the site and its new uses will be compatible with the classification.

Cumulative Effects

Alternative 1

The No Action Alternative would not have any cumulative effects across the landscape within the Blue Mountain Summit Snowpark Project area and not incrementally reduce risks that the resource will experience from winter recreational activities. There would not result in a detrimental cumulative effect to recreation resource. Recreational visits would remain near the same levels as previous years.

Common to All Action Alternatives

All past, ongoing, and reasonably foreseeable future activities in Table 9 have been considered for their cumulative effects on recreation.

Both action alternatives are consistent with the roaded natural ROS class under which the area is to be managed for under there Forest Plan and there will be no change to the classification. Because there is no change in the ROS class within both action alternatives, there are no anticipated cumulative effects to the ROS.

Wildlife

Regulatory Framework

The three principle laws relevant to wildlife management are the National Forest Management Act of 1976 (NFMA), the Endangered Species Act of 1973 (ESA), and the Migratory Bird Treaty Act (MBTA) of 1918. Direction relative to wildlife follows:

- NFMA requires the Forest Service to manage fish and wildlife habitat to maintain viable populations of all native and desirable non-native wildlife species and conserve all listed threatened or endangered species populations.

- ESA requires the Forest Service to manage for the recovery of threatened and endangered species and the ecosystems upon which they depend. Forests are required to consult with the US Fish and Wildlife Service if a proposed activity may affect the population or habitat of a listed species.
- MBTA established an international framework for the protection and conservation of migratory birds. This act makes it illegal, unless permitted by regulations, to “pursue, hunt, take, capture, purchase, deliver for shipment, ship, cause to be carried by any means whatever, receive for shipment, transportation or carriage, or export, at any time, or in any manner, any migratory bird.”

Forest Service Manual Direction provides additional guidance: identify and prescribe measures to prevent adverse modifications or destruction of critical habitat and other habitats essential for the conservation of endangered, threatened, and proposed species (FSM 2670.31 (6)). This manual directs the Regional Forester to identify sensitive species for each National Forest where species viability may be a concern.

Amendment # 2 established interim wildlife standards for old growth, old growth connectivity, snags, large down logs, and northern goshawks. The Regional Forester has periodically distributed letters clarifying direction in Amendment #2 (Regional Forester, October 2, 1997; October 23, 1997; June 11, 2003).

Additional management direction is provided for conservation of migratory landbirds. This direction is consolidated in the Forest Service Landbird Strategic Plan and further developed through the Partners in Flight Program. The Oregon-Washington Partners in Flight Conservation Strategy for Landbirds in the Northern Rocky Mountains of Eastern Oregon and Washington (Altman 2000) identifies priority bird species and habitats for the Blue Mountains in Oregon.

Regional Forester’s Sensitive Species List (Update)

In December 2011, Regional Forester Kent Connaughton released an updated Sensitive Species list that includes federally listed, federally proposed, and sensitive species lists.

Analysis Methods

This Biological Evaluation (BE) analyzes the potential effects to wildlife species from the proposed Blue Mountain Summit Snow Park project. This BE satisfies the requirements of Forest Service Manual 2672.4 that requires the Forest Service to review all planned, funded, executed or permitted programs and activities for possible effects on threatened, endangered, proposed, or sensitive species.

The following sources of information have been reviewed to determine which TES species, or their habitats, occur in the project area:

- Regional Forester’s Sensitive Species List (2011)
- Forest or District sensitive species databases(s) and the GIS mapping layer(s)
- Oregon Natural Heritage Program, Rare, Threatened, and Endangered Plants and Animals of Oregon
- Project area maps and aerial photos

Species presence/absence determinations were based on habitat presence, wildlife surveys, recorded wildlife sightings, observations made during reconnaissance, non-Forest Service databases and literature. There is a high confidence level that species discussed in this document are currently present in the area.

Alternative 1, the No Action alternative, is used as a benchmark to compare and describe the differences and effects between taking no action and implementing action alternatives. The No Action alternative is designed to represent the existing condition. Effects on species will be determined by assessing how the alternatives affect the structure and function of vegetation relative to current, projected, and historical distributions. Effects on habitats are discussed, with the assumption that if appropriate habitat is available for a species, then that species occupies or could occupy the habitat. Cumulative effects have been analyzed in respect to past, ongoing and foreseeable future activities that overlap the project area in time and space listed in Table 9 of the Blue Mountain Summit Snowpark EA.

Field Reconnaissance

Field reconnaissance was performed on November 14th, 2011, and February 22nd and 27th, 2012.

Threatened, Endangered, Proposed, and Sensitive Species

Existing Condition of the Affected Environment

The U.S. Dept. of Interior Fish and Wildlife Service provide a list of threatened, endangered, proposed, and sensitive species that have the potential to occur in Grant County for consideration in analysis (USFWS 2012). There is no designated or proposed critical habitat for Threatened or Endangered species in the affected subwatersheds. No proposed species occur in the project area.

There are 19 species on the 2012 Regional Forester’s Sensitive Species list that occur on the Malheur National Forest (see foot note below Table 11 for status of Canada lynx). However, only seven species have potential habitat in the proposed project area and warrant further analysis. The Columbia Spotted Frog is addressed in the Aquatics BE and therefore will not be discussed further in this section. Table 11 describes threatened, endangered, and sensitive species considered in the analysis of the Blue Mountain Summit Snowpark project.

Table 11: Species Occurrence for Threatened, Endangered, Proposed and Regional Forester’s Sensitive Species

Common Name	Scientific Name	Status	Occurrence
Gray Wolf (outside NRM)	<i>Canis lupus</i>	E/S	HN/N
Gray Wolf (NRM)	<i>Canis lupus</i>	S	HD/N
North American Wolverine	<i>Gulo gulo luscus</i>	S/C	HD/N
White-headed Woodpecker	<i>Picooides albolarvatus</i>	S	HD/S
Bald Eagle	<i>Haliaeetus leucocephalus</i>	S, DL	HN/N
American Peregrine Falcon	<i>Falco peregrinus anatum</i>	S, DL	HN/N
Lewis's Woodpecker	<i>Melanerpes lewis</i>	S	HN/N
Bufflehead	<i>Bucephala albeola</i>	S	HN/N
Bobolink	<i>Dolichonyx oryzivorus</i>	S	HN/N
Silver-bordered Fritillary	<i>Boloria selene</i>	S	HN/N
Canada Lynx*	<i>Lynx canadensis</i>	T	HN/N
Pygmy Rabbit	<i>Brachylagus idahoensis</i>	S	HN/N

Greater Sage Grouse	<i>Centrocercus urophasianus</i>	S, C	HN/N
Upland Sandpiper	<i>Bartramia longicauda</i>	S	HN/N
Grasshopper Sparrow	<i>Ammodramus savannarum</i>	S	HN/N
Columbia Spotted Frog	<i>Rana luteiventris</i>	S	HD/S
Wallowa Rosy Finch	<i>Leucosticte tephrocotis wallowa</i>	S	HN/N
Fringed Myotis	<i>Myotis thysanodes</i>	S	HD/S
Johnson's Hairstreak	<i>Callophrys johnsoni</i>	S	HD/N
Pallid Bat	<i>Antrozous pallidus</i>	S	HN/N
Townsend's Big-Eared Bat	<i>Corynorhinus townsendii</i>	S	HD/S

* “There is no designated or proposed critical habitat for Threatened or Endangered species in the affected subwatersheds. Based on the National Lynx Survey, the Malheur National Forest falls under the designation of “Unoccupied Mapped Lynx Habitat” (USFWS Memo, 2006).

Status codes of Federally Threatened, Endangered, Proposed and Regional Forester’s Sensitive Species

Abbreviation	Federal Designation
E	Federally Endangered
DL	Federally Delisted
T	Federally Threatened
S	Sensitive species from 2008 Regional Forester’s list
C	Candidate species under Endangered Species Act

Occurrence codes of Threatened, Endangered, Proposed and Regional Forester’s Sensitive Species

Abbreviation	Habitat Occurrence
HD	Habitat Documented or suspected within the project area or near enough to be impacted by project activities
HN	Habitat Not within the project area or affected by its activities
D	Species Documented in general vicinity of project activities
S	Species Suspected in general vicinity of project activities
N	Species Not documented and not suspected in general vicinity of project activities

Gray Wolf (*Canis lupus*)

Status

- Federal – Sensitive
- State – Endangered
- Region 6 - Sensitive

The Northern Rocky Mountain gray wolf was listed as endangered on June 4, 1973. On April 2, 2009, the U.S. Fish and Wildlife Service published a final rule that established a distinct population segment (DPS) of the gray wolf in the Northern Rocky Mountains (NRM) and revised the List of Endangered and Threatened Wildlife by removing gray wolves within the NRM DPS boundaries, except in Wyoming. The NRM DPS includes a portion of eastern Oregon east of the centerline of Highway 395 and Highway 78 north of Burns Junction and that portion of Oregon east of the centerline of Highway 95 south of Burns

Junction (USFWS 2009). A final rule published by the U.S. Fish and Wildlife Service on October 26, 2010 reinstated federal protections that were in place prior to the 2009 delisting and wolves were listed as endangered throughout the former NRM DPS (USFWS 2010). Another final rule published on May 5, 2011 once again delisted wolves in the Northern Rocky Mountain DPS, with the exception of those in the State of Wyoming (USFWS 2011).

Life History and Habitat

Gray wolves are highly adaptable and use a variety of habitats, with a preference for remote areas. Remote, forested areas provide refuge from humans and support ungulate prey. Gray wolves feed extensively upon large ungulates, including Rocky Mountain elk and mule deer. In unexploited populations, survival of young and population growth are dependent upon availability of food during the rearing season (Jordan et al. 1967, Verts and Carraway 1998). Currently, the major limiting factor to gray wolf populations is human caused mortality and disturbance.

Distribution

Oregon:

In July of 2008, a biologist confirmed the presence of Oregon's first reproducing pack of wolves on the Umatilla National Forest. Oregon Department of Fish and Wildlife (ODFW) confirms four wolf packs in Oregon with individuals dispersed throughout the state.

Malheur National Forest:

In 1999, a collared wolf from the experimental, non-essential Idaho population was confirmed near the Middle Fork John Day River, but captured and returned to Idaho. Again in 2011 a male wolf, OR 7, crossed the forest when it left the Innaha pack located in northeastern Oregon while en route to an area near the Oregon/California border. High road densities and human disturbance are most likely the primary limiting factors affecting wolf viability on the Malheur National Forest.

Existing Condition

There is 707,585 acres of available habitat for the gray wolf on the district. While wolves may pass through the project area, there have been no verified sightings. Although wolf sightings have been reported on the Forest, there are no confirmed gray wolf denning or rendezvous sites. In addition, the project's proximity to open roads, including Highway 26, would most likely limit the amount of suitable wolf habitat available within the project area.

California Wolverine (Gulo gulo luscus)

Status

Federal – Species of Concern

State – Threatened

Region 6 – Sensitive

Life History and Habitat

Wolverines are strongly associated with remote mountainous wilderness habitats (Beauvais et. al 2004). Open areas are avoided and the most critical habitat component is the absence of human activity or development. Wolverines prefer higher elevation alpine and mature coniferous forest. The presence of

avalanche chutes, boulder fields, and/or large piles of down logs are also important habitat features. In Oregon, the wolverine's diet consists mainly of elk and deer carrion. Wolverines are extremely mobile travelling great distances within large home ranges. The major limiting factor to California wolverine populations is human caused mortality and disturbance.

Distribution

Oregon:

The California wolverine is found in higher elevations of Oregon, including the northern Blue Mountains and the Cascade Mountains. Confirmed sightings have occurred in Oregon, in the Wallowa and Cascade mountains.

Malheur National Forest:

Presence of wolverine has been confirmed with a partial skeleton and tufts of fur found near Canyon Mountain in 1992. Tracks and a probable denning site were found in the Strawberry Mountain Wilderness in 1997, about 30 miles southwest of the Blue Mountain Snowpark project area. Numerous other reliable sightings have occurred, which indicates portions of the forest are suitable habitat for wolverine. Suitable habitat consists of areas with low human impacts, low human disturbance, and high deer and elk concentrations such as: Strawberry and Monument Rock Wilderness Areas, Vinegar Hill-Indian Rock Scenic Area, Dixie Butte and Dry Cabin Wildlife Emphasis Areas, and Shaketable, McClellan Mountain, and Aldrich Mountain Roadless Areas.

Existing Condition

There is over 102,000 acres of potential wolverine habitat on the district. The project's proximity to open roads, including Highway 26 reduces its potential to be occupied habitat. Although source habitat, where local reproduction exceeds mortality, does not exist in the project area, suitable dispersal and winter foraging habitat which serves as connectivity for wolverines may exist.

White-headed Woodpecker (*Picoides alborarvatus*)

Status:

Federal – Species of Concern

State – Sensitive – Critical

Region 6 – Sensitive

*Management Indicator Species of Dead and Defective Wood Habitat

*Management Indicator Species of Old Growth Habitat

Life History and Habitat

White-headed woodpeckers are associated with Old Forest Single Stratum (OFSS stands), i.e., open canopy stands of large mature and over mature ponderosa pine, and less frequently mixed ponderosa and Douglas-fir stands (Burleigh 1972, Ligon 1973, Cannings, 1995, Buchanan et al. 2003). The white-headed woodpecker differs from many of the other primary cavity excavators in its near exclusive selection of mature single stratum ponderosa pine dominated habitats. In the project area this species relies almost exclusively upon the seeds from large ponderosa pine cones for foraging and eats insects gleaned off ponderosa pine trees. White-headed woodpeckers prefer large ponderosa pine snags for nesting; however other species are used including grand fir, Douglas-fir and aspen. Because of its more

limited need and use of snags for foraging, the species snag requirements are less than those required by other primary cavity excavators such as the pileated, downy, and hairy woodpeckers.

Distribution

Oregon:

White-headed woodpeckers are found in the Blue, Ochoco, and Wallowa mountains, as well as the east side of the Cascades. Loss of mature ponderosa pine habitat has resulted in a severe decline of this species in the Blue Mountains of Oregon (Csuti et al. 2001).

Malheur National Forest:

As with the rest of Oregon, habitat abundance and distribution for white-headed woodpeckers has been reduced or eliminated in the warm dry and hot dry forest types. Past harvest activities have concentrated on removing the large overstory ponderosa pine, western larch and Douglas-fir trees and snags, setting many stands back to younger structural stages. Significant reduction in numbers of large, mature ponderosa pine reduces trees available for nesting and cones for winter food supplies. Fire suppression has increased stocking of understory trees shifting stand structure from old forest single structure to old forest multi structure. White-headed Woodpecker was chosen by the Blue Mountain Land Management Plan Revision Team (the team, Wales et al. 2011 draft) as a focal species to represent the Medium-large trees/Dry forest group. The team determined the current condition viability outcome call for the white-headed woodpecker on the Malheur National Forest and the Blue Mountain Land Management Plan revision planning area is low likelihood of viability. During the summers of 2010 and 2011, formal white-headed woodpecker monitoring conducted on the Malheur National Forest verified localized breeding in ponderosa pine-dominated habitats on the Blue Mountain Ranger District. However, survey information and population data for the white-headed woodpecker are incomplete.

Existing Condition

On the district, preferred habitat currently occurs on less than 1% of the landscape. Potential habitat for white-headed woodpeckers is most often associated with the warm dry and hot dry forest types. Historically, 15-55% of warm dry forest types and 20-70% of the hot dry forest types were in stands of OFSS. Old Forest Multiple Strata (OFMS) stands provide habitat for OFSS associated species to a degree, as long as canopy cover is not too great, and appropriate tree species composition exists, i.e., predominantly ponderosa pine, Douglas-fir and western larch. However, habitat suitability may be low. The areas being considered for the Blue Mountain Snowpark are in the warm dry biophysical environments and have the appropriate tree species and composition to be utilized by white-headed woodpecker, although the sites are not likely as preferred as OFSS sites.

Fringed Myotis (Myotis thysanodes)

Status:

Federal – Species of Concern
 State – Sensitive – Vulnerable
 Region 6 – Sensitive

Life History and Habitat

The fringed myotis is well adapted for foraging within the forest as well as forest edge habitats. Its diet consists mainly of beetles and moths but also may prey on non-flying taxa, suggesting it gleans prey from vegetation in addition to capturing its prey on the wing. Roosts occur in buildings, underground mines, rocks, cliff faces, and bridges although in the western U.S. and Canada large decadent trees and snags are used as well. Fringed myotis have been documented roosting in a wide variety of tree species and it is likely that structural characteristics (e.g. height, decay stage) rather than tree species play a greater role in selection of a snag or tree as a roost. In general, the long term persistence of North American bat species is threatened by the loss of clean, open water; modification or destruction of roosting and foraging habitat; and, for hibernating species, disturbance or destruction of hibernacula (Western Bat Working Group 2012). Current conservation concerns include White-Nose Syndrome, a cold-loving fungus recently identified as *Geomyces destructans*, which is considered the primary causal agent associated with mass mortality rates of bat populations in the eastern United States.

Distribution

Oregon:

In Oregon, this species is rare, with most records of fringed myotis occurring west of the Cascade Mountains in southwestern Oregon and the northeastern corner of the state. (Csuti et al 2001).

Malheur National Forest:

Forest Service survey information and population data for the fringed myotis is incomplete and no records exist. Verts and Carraway (1998) report one museum specimen of the fringed myotis from Grant County Oregon on public lands near Keeney Meadows.

Existing Condition

The project area for both action alternatives provides suitable foraging habitat for the fringed myotis and potential roosting trees occur at each location.

Johnson's Hairstreak (Callophrys johnsoni)

Status:

- Federal – None
- State – None
- Region 6 – Sensitive

Life History and Habitat

Johnson's hairstreak habitat is almost entirely restricted to cool, moist, old-growth conifer forests of the Pacific Northwest (Miller and Hammond 2007). Caterpillars feed on dwarf mistletoes that grow on various conifers while adults feed on nectar from various flowering plants (Miller and Hammond 2007). Loss of mature to old-growth forests have contributed to this species decline.

Distribution

Oregon:

This species is found in conifer forests throughout the Pacific Northwest west of the Cascade Mountains and in the Sierra Nevada Mountains in California. However, there is a disjunct population of Johnson's hairstreak in the Hell's Canyon region of northeast Oregon and adjacent Idaho (Miller and Hammond 2007).

Malheur National Forest:

In 2010 the Interagency Special Status/Sensitive Species Program (ISSSSP) conducted field surveys in Oregon and Washington to document presence of Johnson's hairstreak butterfly where species presence is currently unknown but likely based on habitat modeling (Davis and Weaver 2011). Survey efforts focused on high probability of occurrence areas, excluding the Malheur National Forest, which has a moderate probability of occurrence. The current known geographic distribution of Johnson's hairstreak occurs on the neighboring Wallowa-Whitman National Forest and the species is suspected to occur on Malheur National Forest as well.

Existing Condition

The project area for both action alternatives is suitable habitat for the Johnson's hairstreak.

Townsend's Big-Eared Bat (*Corynorhinus townsendii*)

Status:

- Federal – Species of Concern
- State – Sensitive – Critical
- Region 6 – Sensitive

Life History and Habitat

The Townsend's big-eared bat occurs in a wide variety of habitat types ranging from sea level to 3,300 meters. Habitat associations include: coniferous forests, mixed meso-phytic forests, deserts, native prairies, riparian communities, active agricultural areas, and coastal habitat types. Distribution is strongly correlated with the availability of caves and cave-like roosting habitat, including abandoned mines. The Townsend's big-eared bat is a moth specialist, foraging within wooded areas, along edge habitats and near streams. The primary threat to the Townsend's big-eared bat is related to disturbance and/or destruction of roost sites. Timber harvest and loss of riparian habitat further threatens the persistence of this bat.

Distribution

Oregon:

In Oregon, the Townsend's big-eared bat has been collected throughout most of the state except in parts of the Blue Mountain Province and in the western part of the Basin and Range Province (Verts and Carraway 1998).

Malheur National Forest:

Although bat presence and population data on the Malheur National Forest is incomplete, Townsend's big-eared bats were detected at three mine sites during surveys in 2009 and 2010.

Existing Condition

The project area for both action alternatives provides suitable foraging habitat for Townsend's big-eared bat and potential roosting trees occur at each location.

Potential Effects to Threatened, Endangered, Proposed and Sensitive Species

Threatened, Endangered, Proposed and Sensitive species could be affected by clearing vegetation on 3 acres, the placement of permanent structures, and the additional thinning of 4-5 acres.

Proposed activities planned for alternative 2 would occur in ROG habitat. However, the proposed activities would result in changes and additions to DOG 240 and its corresponding ROGs to meet MA-13 standards (see Table 12). Designation of additional acreage is necessary to be in compliance with the Forest Plan for MIS pine marten, which could benefit other old growth dependent species including: the white-headed woodpecker, fringed myotis, Johnson's hairstreak, and Townsend's big-eared bat.

Wildlife and invertebrate species that depend on down wood, snags, dwarf mistletoe brooms, dense forest with abundant saplings and small poles, and closed canopy forests for survival and reproduction, are likely to be detrimentally affected by these activities. Habitat types would likely be fragmented, potentially decreasing connectivity for old growth dependent species.

Direct and Indirect Effects by Alternative for Threatened, Endangered, Proposed and Sensitive Species

Threatened, endangered, or proposed species do not occur within the project area so there would be **No Effect (NE)** to these species as a result of implementing any of the alternatives.

Alternative 1 - No Action

None of the proposed activities associated with parking lot construction, structure construction, and defensible space thinning would occur. Use of habitats would not change from the way they are currently being utilized. Existing acres of Dedicated Old Growth (DOG) in stand 240 would continue to be 133 acres and not meet Forest Plan Standards and the corresponding Replacement Old Growth (ROG) stand would remain at 115 acres in size. Under Alternative 1, sensitive species habitat would remain the same therefore there would be **No Impact (NI)** to individuals, populations, or prey species associated with gray wolf, California wolverine, white-headed woodpecker, fringed myotis, Johnson's hairstreak, or Townsend's big-eared bat.

Alternative 2 - Proposed Action

Alternative 2 includes management activities that would provide additional safe high elevation parking and enhance a variety of winter recreation opportunities. The following project-related activities could affect sensitive species:

- Adjusting DOG/ROG boundaries to include 279 acres of DOG and 116 acres of ROG
- Clearing 3 acres of vegetation
- Thinning 4 acres for defensible space

- The construction of 3 structures

The proposed action is located within ROG habitat and is adjacent to DOG habitat. Currently the number of acres set aside for DOG 240 is below the thresholds set in the Forest Plan (see Table 12).

Table 12: Old growth Management Area 13 minimum requirements, existing acres, and proposed acres

Old Growth Management Area (MA 13) Classification and Species	Minimum MA-13 Acre Requirements	Existing Acres	Additional Proposed Acres (Alternative 2)	Total Acres
DOG 240 - Pine Marten	160	133	146	279
Replacement Area	80	115	1	116

The Forest Plan standards for old growth habitats are identified for Management Area 13 (Forest Plan, IV-105, 06), directing that old growth areas be distributed across the forest to provide habitat for wildlife species dependent on mature/overmature forest conditions, provides for ecosystem diversity, and provides for the preservation of aesthetic qualities. The Forest Plan requires an assessment of old growth areas utilizing an interdisciplinary process to recommend boundary changes to better meet objectives. The proposed Forest Plan amendment would redraw the DOG boundaries to exceed Forest Plan standards, and would redraw ROG boundaries to exceed Forest Plan standards (see Figure 9). There would be no net loss of designated or replacement old growth acreages (see Table 12).

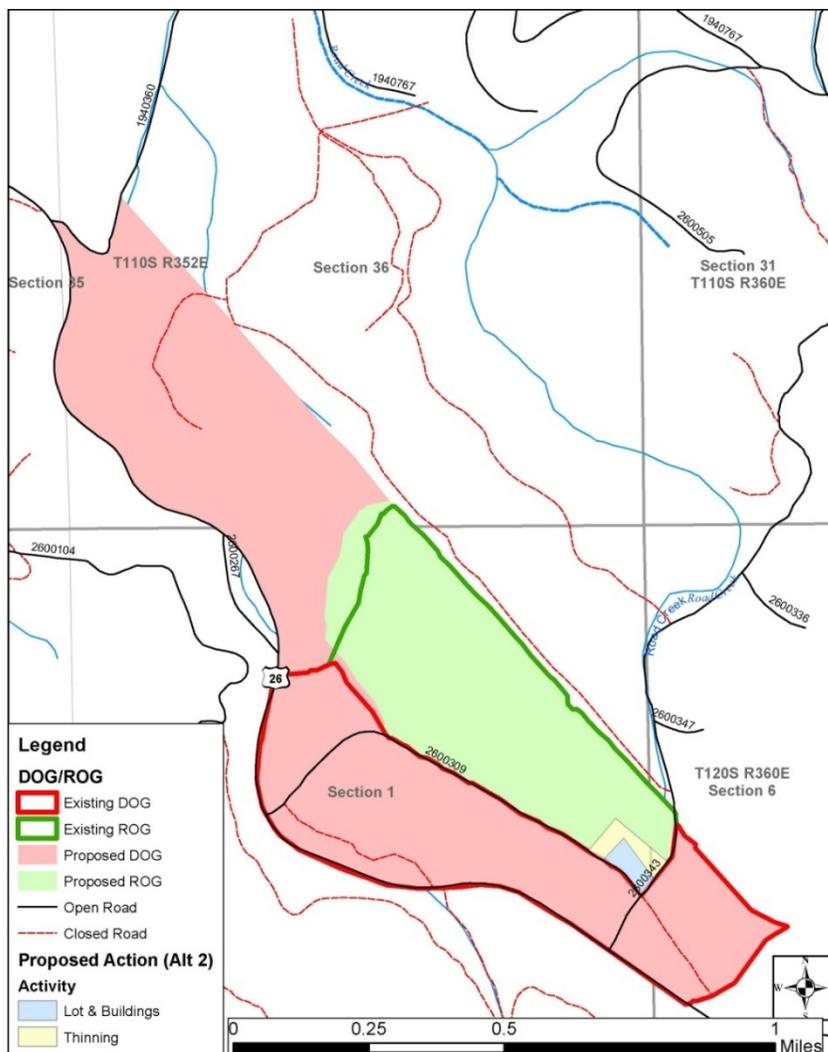


Figure 9: Alternative 2 Proposed Adjustments of DOG/ROG Boundaries

Gray Wolf

Wolves feed primarily on big-game animals and occasionally on other species. Therefore, actions that affect big game populations could affect wolf survival or productivity. Any wolf inclined to travel in the project area would be temporarily displaced by activities associated with facility. However, since wolves have not been documented within the project area and due to the wide-ranging nature of wolves it is assumed that these chance encounters are remote.

Determination for Wolves is **No Impact (NI)** for the following reasons:

1. No populations currently occupy the Forest.
2. No denning or rendezvous sites have been identified.
3. There is an abundance of prey; that is not a limiting factor
4. If wolves become established while project implementation is occurring, measures will be taken to protect them.

California Wolverine

The Blue Mountain Summit project area could be used by wolverines as dispersal habitat for animals traveling between source habitat areas in the unroaded areas listed in the existing condition section. The greatest impacts on wolverines would be increased habitat fragmentation and human presence associated with activities at the facility. Additionally, wolverines do not tolerate land-use activities that permanently alter their habitat. However, the proximity of the project to Highway 26 and the amount of use currently occurring at the site would likely detour wolverine from using this location when people are present. Additional acreages added to the DOG/ROG network would further facilitate wolverine travel and dispersal. Elk and deer distribution, an important food source, would not be altered. Implementation of alternative 2 **may impact individuals or habitat, but will not likely contribute to a trend toward federal listing or loss of viability to the population or species (MIIH).**

White-headed Woodpecker

The activities associated with the construction of this project would remove 3 acres of potential habitat for the white-headed woodpecker. However, white-headed woodpecker may respond favorably to defensible space thinning on the remaining 4 acres. Implementation of alternative 2 **may impact individuals or habitat, but will not likely contribute to a trend in federal listing or loss of viability to the population or species (MIIH)** because the amount of area impacted is inconsequential.

Fringed Myotis and Townsend's Big-eared Bat

The activities associated with the construction of this project would remove 3 acres of potential roosting habitat for the fringed myotis and Townsend's big-eared bat and may decrease the amount of prey (beetles) available for the fringed myotis to glean from trees. However, the amount of area altered as a result of this project is inconsequential. Important roosting habitat in the form of caves, rocks, abandoned mines, and buildings will not be altered. Implementation of alternative 2 **may impact individuals or habitat, but will not likely contribute to a trend in federal listing or loss of viability to the population or species (MIIH)** for both the fringed myotis and Townsend's big-eared bat. The additional acreages added to the existing DOG/ROG network will ensure large roost trees and green tree replacements persist in the long term, which would have a **Beneficial Impact (BI)** to both species.

Johnson's Hairstreak

Habitat important for Johnson's hairstreak caterpillars would be removed on 3 acres of habitat and the defensible space thinning on 4 acres would likely increase the health and vigor of the stand further decreasing the amount of dwarf mistletoe present. The amount of area altered by these activities is inconsequential and the addition of DOG/ROG acreage, especially mature to old growth forest, should benefit the Johnson's hairstreak in the long term. Implementation of alternative 2 **may impact individuals or habitat, but will not likely contribute to a trend in federal listing or loss of viability to the population or species (MIIH).** The addition of 147 acres to the DOG/ROG network would have a **Beneficial Impact (BI)** on Johnson's hairstreak.

Alternative 3

Under Alternative 3, management activities would provide additional safe high elevation parking, enhance a variety of winter recreation opportunities, and provide access to over-the-snow trail systems. These management activities are the same as alternative 2 with a few changes, including:

- The construction of .15 miles of road to the parking area
- Designating snowmobile routes
- Thinning 5 acres of defensible space
- The project occurs outside of the DOG/ ROG network therefore DOG/ROG boundaries will not be adjusted to meet Forest Plan standards.

Gray Wolf

Wolves feed primarily on big-game animals and occasionally on other species. Therefore, actions that affect big game populations could affect wolf survival or productivity. Any wolf inclined to travel in the project area would be temporarily displaced by activities associated with facility. However, since wolves have not been documented within the project area and due to the wide-ranging nature of wolves it is assumed that these chance encounters are remote.

Determination for Wolves is **No Impact (NI)** for the following reasons:

1. No populations currently occupy the Forest.
2. No denning or rendezvous sites have been identified.
3. There is an abundance of prey; that is not a limiting factor
4. If wolves become established while project implementation is occurring, measures will be taken to protect them.

California Wolverine

The Blue Mountain Summit project area could be used by wolverines as dispersal habitat for animals traveling between source habitat areas in the unroaded areas listed in the existing condition. It is unlikely that the area would be used as dispersal habitat however, as the the area being proposed is relatively open and not managed for connectivity or old growth MIS species. Because of its relative openness, the habitat being altered for this alternative would not be fragmented. Approximately 11 trees 21 inches dbh or larger would need to be removed. Elk and deer distribution, an important food source, would not be altered. Implementation of alternative 3 **may impact individuals or habitat, but will not likely contribute to a trend toward federal listing or loss of viability to the population or species (MIIH).**

White-headed Woodpecker

Alternative 3 would remove 3 acres of habitat for the white-headed woodpecker. However, white-headed woodpecker may respond favorably to defensible space thinning on the remaining 5 acres. Implementation of alternative 3 **may impact individuals or habitat, but will not likely contribute to a trend in federal listing or loss of viability to the population or species (MIIH)** because the amount of area impacted is inconsequential.

Fringed Myotis and Townsend's Big-eared Bat

The activities associated with the construction of this project would remove 3 acres of potential roosting habitat for the fringed myotis and Townsend's big-eared bat and may decrease the amount of prey (beetles) available for the fringed myotis to glean from trees. However, the amount of area altered as a result of this project is inconsequential. Important roosting habitat in the form of caves, rocks, abandoned mines, and buildings will not be altered. Implementation of alternative 3 **may impact individuals or habitat, but will not likely contribute to a trend in federal listing or loss of viability to the population or species (MIIH)** for both the fringed myotis and Townsend's big-eared bat.

Johnson’s Hairstreak

Habitat important for Johnson’s hairstreak caterpillars would be removed on 3 acres of habitat and the defensible space thinning on 5 acres would likely increase the health and vigor of the stand further decreasing the amount of dwarf mistletoe present. The amount of area altered by these activities is inconsequential and the addition of DOG/ROG acreage, especially mature to old growth forest, should benefit the Johnson’s hairstreak in the long term. Implementation of alternative 3 **may impact individuals or habitat, but will not likely contribute to a trend in federal listing or loss of viability to the population or species (MIIIH).**

Cumulative Effects

There are no direct or indirect impacts expected to gray wolf or its associated habitat from the proposed project. Therefore, there would be no cumulative impact to this species.

All of the activities in Table 9 of the Blue Mountain Summit Snowpark EA have been considered for their cumulative effects on California wolverine, white-headed woodpecker, fringed myotis, big-eared bat, and Johnson’s hairstreak. Past activities including, but not limited to; timber harvest, recent timber sales, thinning and fuels reduction projects, plantation maintenance, Idaho creek water development, highway 26 reconstruction, and power line development have impacted the quantity, quality, and distribution of habitat. The proposed project area has experienced an extensive level of habitat fragmentation as a result of past activities and the small area impacted as a result of the Blue Mountain Summit Snowpark will not likely have cumulative effects to these species. The effects of this project on all wildlife species listed in this BE when added to all other past, present, and reasonably foreseeable future activities, are not expected to contribute to cumulative effects due to the small area impacted and its proximity to Highway 26.

Terrestrial Wildlife Species Report

Based on habitat assessment and possible presence/absence, additional species that are not Threatened, Endangered, Proposed, or Sensitive were considered in the analysis of the Blue Mountain Summit Snowpark project. These species are included in the following wildlife categories:

1. Management Indicator Species (MIS) – See Table 13
2. Featured Species – See Table 14
3. Landbirds - including neotropical migratory birds (NTMB)

Direct, indirect, and cumulative effects to Forest Plan Management Indicator Species (MIS), featured species, and landbirds were considered. District wildlife records were reviewed for absence/presence determinations and habitat was assessed.

This project is consistent with the 1990 Malheur National Forest Plan, and Regional Forester’s Eastside Forest Plans Amendment 2. The effects to MIS and the rationale for effects

Management Indicator Species

Table 13: Management Indicator Species (Malheur National Forest)

MIS Species	Representing	Habitat Requirements	Habitat Present in Analysis Area
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Rocky Mountain Elk	Big Game	Forests, meadows, mountain valleys, and foothills	Yes
Pine Marten	Old Growth	Mature, mesic coniferous forests, with high structural diversity in the under story	Yes
Pileated Woodpecker	Old Growth, Primary Cavity Excavator, Snags and Down Wood	Extensive areas of dense coniferous forests with tall closed canopy, high basal area and large diameter snags	Yes
Three-toed Woodpecker	Old Growth, Primary Cavity Excavator, Snags and Down Wood	Higher elevation (above 4,500ft) lodgepole pine and mixed conifer forests with a lodgepole component	No, due to lack of lodgepole pine component
White-headed Woodpecker	Old Growth, Primary Cavity Excavator, Snags and Down Wood	Open ponderosa pine forests with large trees and snags in large patches	Yes, but limited, due to lack of OFSS habitat
Black-backed Woodpecker	Primary Cavity Excavator, Snags and Down Wood	Forests with dead, insect-infested trees associated with large-scale disturbances such as fire or wind throw	No, due to lack of large scale disturbances
Downy Woodpecker	Primary Cavity Excavator, Snags and Down Wood	Associated with riparian habitats consisting of a mixture of grasses shrubs and hard woods	Yes, but likely limited by lack of hardwoods and riparian areas
Hairy Woodpecker	Primary Cavity Excavator, Snags and Down Wood	Habitat generalists that prefer large trees in open park like stands along ridges	Yes, but likely limited, due to lack of open park like stands within the project area
Lewis's Woodpecker	Primary Cavity Excavator, Snags and Down Wood	Open forests and nests in large snags in cavities created by other cavity nesters or in very soft snags	No, due to lack of open forests within the project area.
Northern Flicker	Primary Cavity Excavator, Snags and Down Wood	Habitat generalists that prefer large trees in open park like stands near meadows	Yes, due to presence of large trees within the project area
Red-naped Sapsucker	Primary Cavity Excavator, Snags and Down Wood	Associated with riparian habitats consisting of a mixture of grasses shrubs and hard woods	No, due to lack of hardwoods within the riparian area
Williamson's Sapsucker	Primary Cavity Excavator, Snags and Down Wood	Mature higher-elevation coniferous forests for nesting and feeding	Yes, but likely limited by number of snags within the project area

MIS – Big Game

Existing Condition of the Affected Environment

Rocky Mountain elk (*Cervus elaphus*) were selected as a MIS on the Malheur National Forest due to their economic and social value, and their response to changes in forest cover, forage quality, and road densities.

The proposed activities would occur in summer range in the Sumpter and Beulah Big Game Management Units. The Malheur National Forest contains 1.7 million acres of elk habitat. Big game management on the Malheur National Forest is a cooperative effort between the Forest Service and the Oregon Department of Fish and Wildlife (ODFW) with the Forest Service managing habitat and ODFW managing populations. The agencies cooperate by managing big game according to pre-established Management Objectives (MOs) for each Big Game Management Unit. Currently Management objectives are not being met in either Management Unit.

Potential Effects to MIS – Big Game

In general, elk could be impacted by the proposed activities of this project, which are the removal of 3 acres of habitat, up to 5 acres of defensible space thinning, and .15 miles of road construction, and snowmobile route designation.

Direct and Indirect Effects by Alternative for MIS – Big Game

Alternative 1 - No Action

No project activities associated with the Blue Mountain Summit Snowpark project would occur. With no activities proposed elk habitat would remain the same. Therefore, there would be no impact to forest wide elk populations or trends.

Action Alternatives 2 & 3

Although the Blue Mountain Summit Snowpark project will remove 3 acres of habitat and thin an additional 4-5 acres, depending on the alternative, the amount of elk habitat affected is negligible. Forest wide elk population trends will not be impacted by the proposed project for the following reasons:

1. The small size of the project area.
2. Due to the projects proximity to existing roads big game security will not decrease.
3. Activities are not occurring in big game winter range.
4. There will be no increased disturbance to big game.

MIS – Old Growth

Existing Condition of the Affected Environment

The following terms for old growth are used interchangeably throughout this section.

- Old Growth
- Late and Old structure (LOS)*
- Dedicated Old Growth (DOG)
- Replacement Old Growth (ROG)
- Old Forest Multiple Strata (OFMS)
- Old Forest Single Stratum (OFSS)

**For the purposes of this document LOS includes OFMS or OFSS.*

The Forest Plan identifies three MIS for old growth, primarily Old Forest Multi Strata (OFMS) structured stands: pileated woodpecker, pine marten and three-toed woodpecker (see Table 13). In addition, the white-headed woodpecker is a good indicator of the health of Old Forest Single Stratum (OFSS). By

providing old growth habitat for these species, it is assumed that habitat for other old growth obligate species will be provided as well.

Dedicated Old Growth (DOG) & Replacement Old Growth (ROG)

To provide for pileated woodpecker and pine marten population viability, the Forest Plan, Management Area 13 (MA-13), provides for the management of old growth habitat through a system of Dedicated Old Growth (DOG) units and Replacement Old Growth (ROG) units. DOGs were delineated forest-wide to provide an even distribution of habitat, with one DOG every 12,000 acres or approximately 5 miles apart. ROGs were established for each DOG to counter possible catastrophic damage or deterioration. Replacement areas may not currently have all characteristics of old growth but are managed to achieve those characteristics in the future. When a DOG no longer meets the needed habitat requirements, the ROG can take its place. To ensure species viability for three-toed woodpeckers, Forest Plan standard 59 gives direction to identify potential or existing old growth lodgepole pine forests.

The Forest Plan directs that pileated woodpecker areas are to be 600 acres, composed of a 300-acre DOG and a 300-acre Pileated Woodpecker Feeding Area (PWFA). ROGs are intended to be ½ the size of DOGs, i.e., 150 acres for pileated woodpecker DOGs. ROGs may overlap with the feeding areas. Pine marten units are to be 240 acres, composed of a 160-acre DOG and an 80-acre ROG. Again, ROGs are intended to be ½ the size of their corresponding DOG. DOGs managed for both species should be managed at the 600-acre home range recommended for pileated woodpeckers. Management requirements are derived from the USDA Forest Service 1986 Minimum Management Requirements.

In the Blue Mountain Summit Snowpark project area, 1 DOG and 1 ROG have been delineated for pine martens (see Figure 9). Table 12 shows existing and proposed acreages for DOG 240 and its associated ROG.

Currently there are no stands in the DOG/ROG network that classify as Late and Old Structure. It appears as though the acres are providing adequate canopy complexity and canopy closure, but the number of large diameter trees present fall short of the quantities required for OFMS classification. DOG 240 and its associated ROG are located in the warm/dry biophysical environment. DOG and ROG locations may not always correspond with the highest quality habitat as marten prefer habitat in the moist or cold biophysical environments.

Old Growth Dependent Species

Pileated Woodpecker (Dryocopus pileatus)

Pileated woodpeckers prefer late successional stages of coniferous or deciduous forest, but also use younger forests that have scattered, large, dead trees (Bull et al. 2007). In northeastern Oregon, pileated woodpeckers selected unlogged stands of old-growth grand fir (*Abies grandis*) with closed canopies (Bull and Holthausen 1993) and in some cases open stands with high densities of large snags and logs (Bull et al. 2007). These woodpeckers are rarely found in stands of pure ponderosa pine (Bull and Holthausen 1993). In western Oregon, densities are greater in forests >80 yr old than in younger ones (Nelson 1988). Their association with late seral stages stems from their use of large-diameter snags or living trees with decay for nest and roost sites, large-diameter trees and logs for foraging on ants and other arthropods, and a dense canopy to provide cover from predators (Marshall et al. 2006).

Pileated woodpecker was chosen as a focal species by the Blue Mountain Land Management Plan Revision Team (the team, Wales et al. 2011 draft) to represent species of conservation concern associated with Medium-large trees/Cool/Moist forests Group. The team determined the current condition viability outcome call for the pileated woodpecker on the Malheur National Forest is adequate distribution and/or abundance leading to a higher likelihood of viability, and is based on the following: under historical conditions, pileated woodpeckers were likely well-distributed throughout the Blue Mountain Forest Plan Revision planning area; currently, they are likely not as well distributed, and source habitat is less abundant.

The forest fish and wildlife database includes about 400 recorded sightings of pileated woodpeckers. Currently there are 186,027 acres of source habitat for pileated woodpecker on the Malheur National Forest. Within the project area, 0 acres of preferred habitat exists in the form of OFMS habitat.

Pine Marten (Martes americana)

In Oregon and Washington, pine marten are found in montane forests of the southern Oregon Coast Range, Siskiyou Mountains, Cascade Mountains, Blue Mountains, Olympic Peninsula, and northeast Washington (Marcot et al. 2003). American marten are typically associated with late-seral coniferous forests with closed canopies, large trees, and abundant snags and down woody (Zielinski et al. 2001).

For the purposes of land management plan revision viability analysis, the American marten was chosen as focal species by the Blue Mountain Land Management Plan Revision Team (the team, Wales et al. 2011 draft) to represent landscape characteristics of the Cool/Moist Forests Group in the Medium/Large Trees Family. The team determined the current condition viability outcome call for the American marten on the Malheur National Forest is low likelihood of viability based on the following: Marten habitat historically was not abundant on this forest which led to a poorer viability projected historically as compared to the other forests within the Blue Mountain Forest Plan Revision planning area. Loss of historic habitat is the primary cause of poorer viability on this forest currently. The loss of habitat has led to poorer abundance and distribution overall.

The forest fish and wildlife database includes about 20 recorded sightings of pine marten. Currently there are 25,664 acres of source habitat for pine marten on the Malheur National Forest. Within the project area, 0 acres of preferred habitat exists in the form of OFMS within the cool moist and cold dry forest types.

Three-Toed Woodpecker (Picoides tridactylus)

To ensure species viability for three-toed woodpeckers, an MIS species, Forest Plan standard 59 gives direction to identify potential or existing old growth lodgepole pine forests. Minimum management requirements suggest establishing habitat areas of 75 acres for every 2,000 to 2,500 acres (USDA 1986). Cold dry forest types, consisting mostly of lodgepole pine, and moist forest types represent the highest quality habitat for three-toed woodpeckers.

The three-toed woodpecker prefers stands where lodgepole pine is either dominant or co-dominant, and uses mostly trees 9” dbh and greater for both nesting and foraging (Bull et al. 1980, Goggans et al. 1987). Suitable habitat is tied to existing levels of diseased and decaying trees with heart rot for nesting and roosting, as well as decaying substrate to provide a prey base for wood-boring insects (Goggans et al.

1987). In particular, three-toed woodpeckers are attracted to areas with high concentrations of beetles, such as habitats created by stand replacing burns or blowdown.

Habitat trend information derived from Interior Columbia Basin studies (Wisdom et al. 2000) indicated that about 70% of the watersheds in the Blue Mountains showed an increasing trend in three-toed woodpecker habitat and 30% showed a decreasing trend. Breeding Bird Survey (BBS) data is insufficient to determine population trends in the Interior Columbia Basin, but data summarized across the West indicates a 0.7% annual decline in populations from 1966 through 1994 (Wisdom et al. 2000). BBS data for 1980–1998 indicates a significant annual decrease in three-toed woodpecker populations of 15.0% (n = 12 survey routes) and 13.4% (n = 18) in the U.S. and across the species' range in North America, respectively (Sauer et al. 1997). However, this data should be viewed with caution given the low number of routes and low abundance of three-toed woodpeckers per route (Leonard 2001).

Approximately 117,599 acres of recent (post 2005) post fire habitat occurs on the Malheur National Forest. However, suitable habitat in the form of dense lodgepole pine and/or areas of high concentrations of beetles created by stand replacing burns or blowdown doesn't exist in the Blue Mountain Summit Snowpark project area.

White-headed Woodpecker (Picoides albolarvatus)

The white-headed woodpecker is a Region 6 Sensitive Species and has been analyzed in the ***Threatened, Endangered, Proposed, and Sensitive Species*** section of this report.

Potential Effects to MIS – Old Growth

The resource concern is to determine if old growth habitat would be impacted as a result of the proposed alternatives, thus impacting habitat and population trends forest-wide for pileated woodpecker, marten, and three-toed woodpecker.

Direct and Indirect Effects by Alternative for MIS – Old Growth

Alternative 1 - No Action

Dedicated Old Growth (DOG) & Replacement Old Growth (ROG)

The no action alternative would maintain the existing condition (see Table 12). DOG and ROG boundaries would not be adjusted and not meet MA-13 standards. In the short-term (1-25 years) existing DOG and ROG habitat would continue to lack the number of large trees necessary to be classified as LOS. In the long term OFMS in the DOG/ROG network would increase.

Old Growth Dependent Species

With no activities proposed habitat would remain in its current condition. Use of habitats would not change from the way they are currently being utilized and therefore there would be no impact to forest wide habitat or population trends for pine marten, pileated woodpecker or three-toed woodpecker.

Alternative 2 - Proposed Action

Dedicated Old Growth (DOG) & Replacement Old Growth (ROG)

Alternative 2 would result in changes and additions to the DOG/ROG network to meet MA-13 standards (see Table 12) improving the agency's ability to manage for pine marten. Existing ROG habitat will be

removed on 3 acres and alter an additional 4. These 7 acres would be reclassified as MA 12 Developed Recreation. Eight other acres of MA 1-2 General Forest-Rangeland will be added to the MA-13 DOG/ROG network for an increase of 1 acre to the ROG unit. Additionally 146 acres will be added to the DOG exceeding the minimum acre requirement as outlined in the Forest Plan by 119 acres.

Old Growth Dependent Species

Approximately 22 trees >21 inches dbh would be removed. Wildlife and invertebrate species that depend on down wood, snags, dwarf mistletoe brooms, dense forest with abundant saplings and small poles, and closed canopy forests for survival and reproduction, are likely to be detrimentally affected by these activities. Habitat types would likely be fragmented potentially decreasing connectivity for old growth dependent species. However, the addition of 147 acres and the reclassification of DOG/ROG boundaries will benefit LOS dependent species in the long term and maintain connectivity on the landscape. Therefore, old growth dependent species will not be adversely affected as a result of this project. The Blue Mountain Summit Snowpark project will not contribute to a negative trend in viability on the Malheur National Forest for pine marten, pileated woodpecker, or three-toed woodpecker.

Alternative 3

Dedicated Old Growth (DOG) & Replacement Old Growth (ROG)

Alternative 3 would result in no changes or additions to the DOG/ROG network to meet MA-13 standards. Existing DOG/ROG habitat will remain the same and not meet MA-13 standards. In the short-term (1-25 years) existing DOG and ROG habitat would continue to lack the number of large trees necessary to be classified as LOS. In the long term OFMS in the DOG/ROG network would increase.

Old Growth Dependent Species

Approximately 11 trees >21 inches dbh would be removed. Currently the stand lacks horizontal and vertical structure, including snags and logs, and is not source habitat for pine marten, pileated woodpecker or three-toed woodpecker.

Therefore, old growth dependent species; pine marten, pileated woodpecker, and three-toed woodpecker will not be adversely affected as a result of this project. The Blue Mountain Summit Snowpark project will not contribute to a negative trend in viability on the Malheur National Forest for pine marten, pileated woodpecker, or three-toed woodpecker.

MIS – Primary Cavity Excavator, Snag and Down Wood

Existing Condition of the Affected Environment

Ten (10) MIS represent primary cavity excavators, snags and down wood on the Malheur National Forest (see Table 13). Regional Forester’s Eastside Forests Plan Amendment #2 requires the retention of snag and dead and down material at the 100% potential population level, i.e., 2.39 snags per acres 21” dbh or greater or “*whatever is the best representative dbh of the overstory layer.*” Three of the ten species, pileated woodpecker, three-toed woodpecker, and white-headed woodpecker have been analyzed previously in this report (see *Threatened, Endangered, Proposed, and Sensitive Species* and *MIS – Old Growth* sections). Four of the remaining 10 species; downy woodpecker, hairy woodpecker, northern flicker, and Williamson’s sapsucker may occur in the project area.

Potential Effects to MIS – Primary Cavity Excavator, Snag and Down Wood

Primary cavity nesters depend heavily on disturbance agents (insects, disease, and fire) that result in dead or hollow trees (Bull and Wales, 2001). Most of these species require some degree of decay in the wood to enable them to excavate for nest and roost cavities (Bull et al. 1997). The Blue Mountain Summit Snowpark Project could reduce snag density and habitat as a result of implementation.

Direct and Indirect Effects by Alternative for MIS – Primary Cavity Excavator, Snag and Down Wood*Alternative 1 - No Action*

No project activities associated with the Blue Mountain Summit Snowpark project would occur. With no activities proposed snag and down wood habitat would remain the same therefore there would be no impact to forest wide primary cavity excavator trends.

Alternative 2 - Proposed Action

Alternative 2 would result in changes and additions to the DOG/ROG network to meet MA-13 standards (see Table 12). Although all snags and down wood habitat would be removed on up to 7 acres in the existing ROG, the addition of 146 acres to the DOG/ROG network would ensure snags, down wood, and green tree replacements well into the future. Current Malheur National Forest policy prohibits the removal of firewood in Dedicated Old Growth stands securing potential habitat from the risks of firewood cutting. Primary cavity excavators would benefit as a result of the area being managed for old growth dependent species.

Alternative 3

Approximately 11 trees >21 inches dbh would be removed. Currently the stand lacks horizontal and vertical structure, including snags and logs, and is likely not being utilized by primary cavity excavators.

Therefore, primary cavity excavators will not be adversely affected as a result of this project. The Blue Mountain Summit Snowpark project will not contribute to a negative trend in viability on the Malheur National Forest for downy woodpecker, hairy woodpecker, northern flicker and Williamson's sapsucker.

Featured Species

Featured species are identified in the Malheur National Forest plan as species that require special protections. The Forest Plan (IV-30, 31) provides direction (standards 50-55) for the protection of habitat for these species. Table 14 lists the seven (7) featured species currently on the forest. The table also includes their habitat requirements and whether habitat exists in the project area. Only species with habitat in the project area are discussed in detail.

Table 14: Featured Species (Malheur National Forest)

Featured Species	Habitat Requirements	Habitat Present in Project Area
Northern Goshawk	A mosaic of mature, mixed conifer stands, with closed canopies and interspersed openings suitable of supporting a wide array of prey	Yes
Blue Grouse	Clumps of mistletoe infected Douglas-fir on ridge tops or upper slopes of ridges	Yes

Sage Grouse	Open sagebrush plains ranging from 4000-9000 feet elevation	No
Osprey	Large, dead trees suitable for nesting (30" dbh and <60' tall) adjacent or near large rivers or lakes	No
Pronghorn Antelope	Open grasslands with low sagebrush as an important component	No
California Bighorn Sheep	Alpine-desert grasslands associated with mountains, cliffs, foothills, and river canyons	No
Upland Sandpiper	Native prairie grasslands and montane meadows	No

Northern Goshawk and other Raptors

In the Pacific Northwest, goshawks (*Accipiter gentilis*) prefer to nest in mature, unlogged, or lightly managed forested habitats. These areas include sites with closed canopies (greater than 60%), northerly exposures, gentle slopes, and close proximity to water (Reynolds et al. 1992). Post-fledgling areas include the nest stand and surrounding areas used by adults and juveniles prior to natal dispersal (Reynolds et al. 1992). Post-Fledgling Areas (PFAs) in eastern Oregon are composed largely of structurally complex late successional mixed conifer and ponderosa pine forests (McGrath 1997).

- Northern goshawks are woodland hawks and their morphology (short, rounded wings and relatively long tails) is adapted for maneuvering and hunting in moderately dense, mature forests (Beier and Drennan 1997). Small openings and forest edges in mixed conifer and ponderosa pine forests, in particular, appear to be important for foraging. These foraging habitats support higher plant diversities and, in turn, support a higher number of desirable prey species such as rabbits, squirrels, and grouse. Goshawks prey on a variety of species and do not appear to select stands on the basis of prey abundance, but rather forest structure, i.e. higher canopy closure and higher tree density (Drennan and Beier 2003).

Other raptors utilize a variety of habitats and may nest within close proximity to the proposed project area and could be vulnerable to disturbance.

- No activities will occur within currently known goshawk or other raptor nest stands. Increased human presence during activities could displace northern goshawk, and other raptors during nesting, roosting, and foraging. To conserve nesting habitat and to minimize disturbance to nesting individuals, restrictions would be executed according to the requirements of the species involved (see Protection Measures).

The Blue Mountain Summit Snowpark will not likely impact northern goshawk or other raptors at the population level.

Blue (Dusky) Grouse

(Subspecies name is now 'dusky' grouse east of the Cascades, 'sooty' west of the Cascades)

Blue grouse (*Dendragapus obscurus*) is the largest forest grouse that occurs in Oregon and is a popular upland game bird. In NE Oregon, blue grouse appear to select open park-like stands of mature Ponderosa Pine and Douglas-fir over more heavily forested areas. Although, grouse use early succession habitat for breeding and brood rearing. Blue grouse breed and nest in a variety of forest and shrub vegetation types

from foothills to timberline. Blue grouse utilize large, mistletoe infected Douglas-fir trees, generally located within the upper 1/3 of slopes, as winter roosts. Dense coniferous thickets of small trees, stumps, and down logs are used by blue grouse for resting, drumming and escape cover. Grouse also utilize dense deciduous areas in riparian corridors. Blue grouse home ranges are typically between 1.25 and 5 acres, and can be found at mid-elevations and in subalpine areas, usually associated with openings and rocky areas. Winter range typically includes conifer forests from sea level to subalpine, with a wide range of habitats used during spring and summer. The Forest Plan standard for the protection of grouse habitat (IV-30, standard 50) states “maintain grouse winter roost habitat.”

If chosen, Alternative 2 may remove a few trees with mistletoe. However, the addition of 147 acres to the DOG/ROG network will maintain grouse winter roost habitat in the area. The stand proposed for Alternative 3 lacks vertical structure and likely contains few, if any, trees with mistletoe. Due to the lack of mistletoe it would likely be used throughout the year excluding winter.

The Blue Mountain Summit Snowpark will not likely impact blue grouse at the population level as a result of any alternatives due to inconsequential area impacted.

Landbirds

The Northern Rocky Mountains Bird Conservation Plan (Altman 2000) identifies priority habitat types in the Blue Mountain of Eastern Oregon important for landbird species conservation. The project area falls in the dry forest type, one of 3 priority habitats (excluding unique habitat types) identified in the plan.

Altman identifies conservation issues associated with dry forest including but not limited to:

- Loss of old forest stages and large diameter trees and snags
- Fragmentation of remaining tracts negatively impacts species with large area requirements.

Each action alternative will remove 3 acres of dry forest and will have negative impacts to bird species associated with Dry Forests due to the direct removal of potential habitat. The amount of area removed is small and will not likely impact neotropical migratory birds at the population level because of the inconsequential area impacted.

Protection Measures

Raptors:

- To conserve nesting habitat of raptors, a Wildlife Biologist would be consulted to establish a nest zone buffer around any raptor nest discovered prior to or during project implementation, and if appropriate, would restrict activities within the nest area during occupancy. These restrictions will be executed according to the requirements of the species involved.

Botany

Pre-Field Review

There are no previously known occurrences of TES plants within or adjacent to the project. The nearest documented occurrence of any TES plants includes a small population of the rare moss, *Helodium blandowii*, which is approximately 7 air miles to the west.

Recommended survey intensity would include a site visit to determine if any TES habitat is present within or adjacent to the site and subsequent intuitive surveys if habitat is identified.

Effects of the Alternatives

The field surveys resulted in no TES plant species, populations, individuals, or habitat being identified within or adjacent to the project area. Due to the lack of TES populations or individuals, and the lack of their respective habitat, there will be no effect to existing TES plant species or habitats.

Range

The Blue Mountain Summit Snowpark project alternatives are located within two allotments on the forest, separated by US Highway 26. The Blue Mountain Allotment is located on the Blue Mountain Ranger District north of US Highway 26. This allotment is currently vacant and livestock are not authorized to graze at this time. The Sullens Allotment is located on the Prairie City Ranger District south of US Highway 26. This allotment is also vacant and livestock are not authorized to graze at this time.

Regulatory Framework

The Multiple Use Sustained Yield Act of 1960 establishes the policy and purpose of the National Forests to provide for multiple-use and sustained yield of products and services.

The Forest and Range Renewable Resources Planning Act of 1974 establishes public land policy and guidelines for the management, protection, development, and enhancement of the public land.

Direct, Indirect & Cumulative Effects

Alternative 1

Under this alternative there will be no direct, indirect, or cumulative effects on range resources because there is no action proposed and both allotments are currently vacant.

Alternative 2

The proposed actions of the Blue Mountain snowpark are located within the vacant Blue Mountain allotment's Idaho pasture. Because this allotment is vacant, there will be no direct, indirect or cumulative effects on the allotments management or range resources. At a time when the allotment is reviewed for use, any effects of reduction of available forage will be assessed and the effects will be analyzed under the allotments new management plan.

Alternative 3

Actions associated with Alternative 3 are located within the Sullens allotment Unit 26 pasture. Because this allotment is vacant, there will be no direct, indirect or cumulative effects on the allotments management or range resources. At a time when the allotment is reviewed for use, any effects of reduction of available forage will be assessed and the effects will be analyzed under the allotments new management plan.

Consistency with Direction and Regulation

All alternatives are consistent with the Forest-wide standards for rangeland resources.

Soils

Regulatory Framework

The Malheur National Land and Resource Management Plan (Forest Plan) meets all legal and regulatory requirements for soil conservation. Forest Plan Forest-wide Standard 126 stipulates that detrimental conditions shall not exceed 20%. This Standard does not apply to parking lots or structure sites. It does apply to defensible space thinning.

Affected Environment

The best source of information about the location of soil types is the Terrestrial Ecologic Unit Inventory (TEUI). The TEUI indicates that soil types named Rebarrow and Syrupcreek occur at both potential sites. Both Rebarrow and Syrupcreek soils have volcanic ash caps 14 to 24 inches thick. Ash soil has a high porosity and little clay, so it has a high infiltration rate. The high infiltration rate tends to reduce runoff, and thus erosion. However, if runoff does occur on ash cap soils, the soil particles are easily detached and eroded. Both sites are well forested. Forested soils have abundant ground cover, so the potential for erosion exists only where ground cover has been removed. The soil erosion hazard of forest soils for both sites is low. No sensitive soils occur at either site.

Both sites have been logged in the past, so they have existing compaction and perhaps displacement. These impacts are probably just a few percent of the area.

Direct, Indirect & Cumulative Effects

Alternative 1 – No Action

Under this alternative, no additional soil will be compacted, puddled, or displaced. No additional soil will be eroded by ground disturbing activities.

Alternatives 2 & 3

For the parking lot, the removal of ground cover and compaction suggests the possibility of erosion. However, Design Criteria such as the requirement of an Erosion Control Plan, the restoration of ground cover, and dispersing of runoff from the parking lot, along with the low erodibility of the sites, indicate the erosion is not expected to be significant. The potential parking lot south of Highway 26 is on steeper land than the potential ground north of Highway 26, so the possibility of erosion is slightly higher south of the highway.

For the Defensible Space Thinning, logging bares soil, decreases infiltration, and channels overland flow. However erosion is not expected to be significant because of the low erodibility of the sites. Logging will add to existing detrimental impacts, but the Design Criteria will keep impacts small enough that cumulative detrimental impacts will meet Forest-wide Standard 126.

Some soil beneath burn piles may be detrimentally burned, taking many years to recover. However, hand piles are so small that probably less than 2% of a unit would be impacted.

Fisheries

General Baseline Condition

The analysis area is considered to be the Summit Creek subwatershed. The Alternative 2 action location lies 2.5 miles upstream of a fish-bearing stream. The footprint overlaps less than 5 percent of a Category 4 RHCA as defined by PACFISH, which flows approximately 1.9 miles downstream to a Category 2 RHCA (Road Creek). This Category 2 RHCA flows 0.6 miles further before its confluence with Summit Creek, a Category 1 RHCA. Forest Road 2600343 separates the proposed action location and the adjacent Category 4 RHCA stream location.

The Alternative 3 action location lies 2.7 miles upstream of a fish-bearing stream. A Category 4 RHCA lies over 100 feet West of the footprint, which flows 2.7 miles downstream to its confluence with Summit Creek, a Category 1 RHCA.

Stream, valley, and hillslope function have been altered by the effects of past activities (grazing, mining, historic railroading and associated logging, and more recent logging and roading), reducing the amount of precipitation that is captured and stored; increasing the amount of run off that is shed as overland flow and its rate of release and changing its timing; and reducing the resiliency of some channels, floodplains, and hillslopes.

Biological Evaluation

This Biological Evaluation (BE) documents the review and findings of Forest Service planned programs and activities for possible effects on species (1) listed or proposed for listing by the USDI Fish and Wildlife Service (USFWS) or the National Oceanic and Atmospheric Administration (NOAA) Fisheries as Endangered or Threatened; or (2) designated by the Region 6 Forest Service Regional Forester as Sensitive. It is prepared in compliance with the requirements of Forest Service Manual (FSM) 2630.3, FSM 2672.4, FSM 10.89 R-6 Supplement 47 2670.44, and the Endangered Species Act (ESA) of 1973 (Subpart B; 402.12, Section 7 Consultation). All aquatic Management Indicator Species (MIS) on the Blue Mountain Ranger District of the Malheur National Forest are currently listed as threatened or sensitive; therefore MIS species are not discussed as a separate topic.

Threatened, Endangered, or Sensitive (TES) species considered in this evaluation are those listed in FSM 2670.44, R-6 Interim Directive No. 90-1, March, 1989 as suspected or documented to occur on the Malheur National Forest's Blue Mountain Ranger District.

The following analysis addresses the potential effects of the Blue Mountain Summit Snopark Project on aquatic TES species. This determination, required by the Interagency Cooperation Regulations (Federal Register: January 4, 1978), ensures compliance with the Endangered Species Act of 1973, as amended (16 U.S.C. 1531 et seq.).

Species Considered in this Assessment

The following sources of information have been reviewed to determine if TES species and their associated habitats may or may not occur within the analysis area:

1. Malheur N.F. GIS database
2. Regional Forester's (R6) sensitive species list (1/2008)

3. ODFW stream survey and fish survey reports
4. Forest Service stream survey reports, Blue Mountain Ranger District, John Day, OR
5. Other information on file at the Blue Mountain Ranger District, John Day, OR
6. Oregon Natural Heritage Program (ORNHP) database
7. NatureServe database (www.natureserve.org/aboutUs/)

MCR spring-run Chinook salmon (*Oncorhynchus tshawytscha*) occur within the analysis area in Summit Creek over 2.5 miles downstream of the action alternative activities. Chinook salmon habitat has been designated as Essential Fish Habitat (EFH) by the Magnuson-Stevens Act. Middle Columbia River steelhead (threatened), their designated critical habitat, and redband trout (R6 Sensitive) occur within the analysis area in Summit Creek over 2.5 miles downstream of the action alternative activities. Columbia River basin bull trout (*Salvelinus confluentus*) (Threatened) and westslope cutthroat trout (*Oncorhynchus clarkii lewisi*) (R6 Sensitive) are not present in the analysis area and do not have habitat in the analysis area; therefore, these species will not be discussed further in this BE.

The western ridged mussel (*Gonidea angulata*) and shortface lanx (*Fisherola nuttalli*) are not known to occur within the analysis area and do not have habitat in the analysis area. Western ridged mussel surveys in the Middle Fork John Day River in 2011 found the upstream extent of the species near the confluence with Big Boulder Creek over 20 miles downstream of the analysis area. Additionally, shortface lanx are typically found in permanent medium-sized streams to large rivers from approximately 30-100 m wide. Streams in the analysis area average less than 1 m wide and vary between seasonally intermittent and perennial sections. The western ridged mussel and shortface lanx will therefore not be discussed further in this BE.

Columbia spotted frog (*Rana luteiventris*) is a Region 6 sensitive species considered present in all subbasins on the Malheur National Forest. Limited habitat surveys have been conducted specifically for spotted frogs; however, habitat probably exists along most low gradient (less than 2%) perennial and some intermittent streams.

Mid-Columbia River Spring Chinook Salmon (*Oncorhynchus tshawytscha*)

Status: No longer designated as USFS Region 6 Sensitive, however Chinook salmon Essential Fish Habitat exists in lower Granite Boulder and Big creeks and the MFJD River

Adult MCR spring-run Chinook salmon enter natal streams in the spring, several months before spawning. The adult salmon remain in headwater streams, such as the MFJD River, throughout the summer then spawn in the fall (Torgerson 1996). Torgerson (1996) also reported 2.4 adult Chinook per kilometer holding in the MFJD River and 3.0 Chinook per kilometer spawning there. The distribution of the salmon was clustered in reaches where stream temperature was lower than expected. The status of this species has been under review by the NMFS which determined in February 1999 that listing was not warranted at that time. Returning adults in the John Day River basin range from 400 to 3,000 with the vast majority spawning in three main areas: the upper North Fork John Day, the upper Middle Fork John Day, and the upper mainstem John Day.

Public Law 104-267 (the Sustainable Fisheries Act of 1996) amended the Magnuson-Stevens Fishery Conservation and Management Act (Magnuson-Stevens Act) to establish new requirements for “Essential Fish Habitat” (EFH) descriptions in Federal fishery management plans and to require federal agencies to consult with NMFS on activities that may adversely affect EFH. “Essential Fish Habitat means those waters and substrate necessary to fish for spawning, breeding, feeding, or growth to maturity” (Magnuson-Stevens Act). Chinook salmon EFH analysis is also included in this BE.

Mid-Columbia River Steelhead (*Oncorhynchus mykiss gairdneri*)

Status: Federal – Threatened (24 March 1999)

Steelhead (Mid-Columbia Distinct Population Segment (DPS), MCR steelhead) was listed by the National Marine Fisheries Service (NMFS) as threatened under the federal ESA on March 25, 1999 (64 FR 15417). MCR steelhead is also a Malheur National Forest management indicator species. Critical habitat for MCR steelhead was re-designated on September 2, 2005 (70 FR 52630). Critical habitat is present in the project area and downstream of the project area.

Steelhead trout are the anadromous form of *O. mykiss*. Adult summer steelhead return to freshwater from June through September. Adults overwinter in large rivers while sexually maturing. Adults resume migration to spawning streams in early spring. Spawning takes place from March through May. Eggs incubate during the spring and emergence occurs from April through July depending on water temperatures. Juveniles typically spend 2 to 3 years in freshwater. Juvenile steelhead generally utilize habitats with higher water velocities than juvenile Chinook salmon. In winter, juveniles utilize deep pools with abundant cover. Juveniles may reside in their natal stream for their entire freshwater rearing phase or may migrate to other streams within a watershed. Smoltification occurs during late winter and emigration to the ocean occurs during spring. Summer steelhead adults normally rear for 1 to 2 years in the ocean.

Population Status

Upper John Day Subbasin:

MCR steelhead runs in the John Day River Basin are composed entirely of native stocks. However, hatchery fish do stray into the John Day Basin from the Columbia River (John Day Subbasin Plan). Redds counts have displayed wide variability since 1964. The nearest steelhead spawning and rearing habitat is over 2.5 miles downstream of the action alternative project areas in Summit Creek. Summit Creek also contains the nearest steelhead designated critical habitat.

Critical Habitat

Critical habitat was designated for the MCR steelhead on February 16, 2000 (65 FR 7764). Critical habitat for MCR steelhead under the 2000 rule encompassed the major Columbia River tributaries known to support the distinct population status (DPS), including the Deschutes, John Day, Klickitat, Umatilla, Walla Walla, and Yakima Rivers, as well as the Columbia River and estuary. Critical habitat consisted of all waterways below long-standing (100 years or more), naturally impassable barriers, including the Middle Fork. The adjacent riparian zone was also considered critical habitat. This zone was defined as the area that provides the following functions: Shade, sediment, nutrient/chemical regulation, stream bank stability, and input of LWD/organic matter. Protective regulations for MCR steelhead were issued under section 4(d) of the ESA on July 10, 2000 (65 FR 42423).

In late 2000, a lawsuit was filed challenging the NOAA Fisheries Service's February 2000 final designation of critical habitat for DPSs of Pacific salmon and steelhead listed under the ESA. A federal court ruled that the agency did not adequately consider the economic impacts of the critical habitat designations. In April 2002, NOAA Fisheries Service withdrew its 2000 critical habitat designations.

Critical habitat for MCR steelhead was re-designated on September 2, 2005 (70 FR 52630). Designated critical habitat includes the stream channels within the designated stream reaches, and includes a lateral extent as defined by the ordinary high-water line (33 CFR 319.11). In areas where ordinary high-water line has not been defined, the lateral extent will be defined by the bankfull elevation. Bankfull elevation is the level at which water begins to leave the channel and move into the floodplain and is reached at a discharge which generally has a recurrence interval of 1 to 2 years on the annual flood series.

The primary constituent elements (PCEs) that are essential for the conservation of listed DPSs on the Malheur Forest are those sites and habitat components that support one or more life stages, including:

- (1) Freshwater spawning sites with water quantity and quality conditions and substrate supporting spawning, incubation and larval development;
- (2) Freshwater rearing sites with:
 - (i) Water quantity and floodplain connectivity to form and maintain physical habitat conditions and support juvenile growth and mobility;
 - (ii) Water quality and forage supporting juvenile development; and
 - (iii) Natural cover such as shade, submerged and overhanging large wood, log jams and beaver dams, aquatic vegetation, large rocks and boulders, side channels, and undercut banks.
- (3) Freshwater migration corridors free of obstruction and excessive predation with water quantity and quality conditions and natural cover such as submerged and overhanging large wood, aquatic vegetation, large rocks and boulders, side channels, and undercut banks supporting juvenile and adult mobility and survival.

Interior Redband Trout (O. mykiss gairdneri)

Status: USFS Region 6 Sensitive

Redband trout are a Region 6 sensitive species and a Malheur National Forest management indicator species. Redband trout are the resident form of *O. mykiss*. Redband trout may or may not be reproductively isolated from steelhead. Redband and steelhead trout from the same geographic area may share a common gene pool.

Redband trout are sensitive to changes in water quality and habitat. Adult redband trout are generally associated with pool habitats, although various life stages require a wide array of habitats for rearing, hiding, feeding, and resting. Pool habitat functions as important refugia during low water periods. An increase in sediment lowers spawning success and reduces the quantity and quality of pool and interstitial habitat. Other important habitat features include healthy riparian vegetation, undercut banks and LWD. Redband trout may reside in their natal stream or may migrate to other streams within a watershed to rear. Habitat requirements are similar for redband trout and juvenile steelhead.

Spawning occurs during the spring, generally from March to June. Redds tend to be located where velocity, depth and bottom configuration induce water flow through the stream substrate, generally in gravels at the tailout area of pools. Water temperatures influence emergence of fry, which is typically from June through July.

Population Status

Neither ODFW nor the Forest Service routinely monitors abundance and distribution of redband trout in the Middle Fork John Day subbasin. Juvenile *O. mykiss* with resident (redband trout) and anadromous (steelhead) life history types are difficult to differentiate where the two populations coexist, making independent monitoring difficult. Redband trout are present in all fish bearing streams in the project area, however abundance of redband populations is unknown. Their habitat needs are similar to those of steelhead; however redband spawning may occur in areas with insufficient flow for steelhead spawning.

Columbia Spotted Frog (Rana luteiventris)

Status: USFS Region 6 Sensitive

Spotted frogs are highly aquatic and are rarely found far from permanent water. They are usually found along the grassy margins of low gradient streams, lakes, ponds, springs, and marshes.

During winter, spotted frogs burrow into banks adjacent to streams, ponds, and springs. Breeding occurs in the spring varying with elevation. In the Columbia basin of Washington, breeding occurs from March to April in lower elevations, and from May to June in the higher elevations. Breeding habitat is usually found in shallow water in ponds or other quiet waters along streams. Breeding may also occur in flooded areas adjacent to streams and ponds. Adults may disperse overland in the spring and summer after breeding.

Population Status

This species occurs in extreme southeastern Alaska, southwestern Yukon, northern British Columbia, and western Alberta south through Washington east of the Cascades, eastern Oregon, Idaho, and western Montana to Nevada (disjunct, Mary's, Reese, and Owyhee river systems), southwestern Idaho (disjunct), Utah (disjunct, Wasatch Mountains and west desert), and western and north-central (disjunct) Wyoming. Disjunct populations occur on isolated mountains and in arid-land springs. In Oregon, Columbia spotted frogs appear to be widely distributed east of the Cascade Mountains. USFWS lists livestock grazing and introduction of nonnative fish (salmonids and bass) as threats to the Great Basin population of Columbia spotted frogs.

The spotted frog is considered present in all subbasins on the Malheur National Forest. Limited habitat surveys have been conducted specifically for spotted frogs; however, habitat probably exists along low gradient perennial streams. Fish surveys record incidental sightings of frogs but most do not differentiate species.

Designated or proposed critical habitat for Threatened or Endangered species in affected subwatersheds: yes X no ___

Project is compliant with PACFISH: yes X no ___

Project is compliant with any applicable species recovery plans, management plans, etc.: yes X no _

FIELD RECONNAISSANCE:

Reconnaissance conducted November 2011 as part of the Project IDT. Observations incorporated as appropriate into this BE.

Determination of Effects:

The following table displays the threatened, endangered and sensitive (TES) species considered in this analysis.

Table 15: Threatened, Endangered, and Sensitive (TES) species and habitat considered in this analysis of the Blue Mountain Summit Snopark Project and the effects determination for the No Action and Action alternatives

Aquatic Species	Status	Occurrence	Alt. 1 No Action	Alt. 2 Proposed Action	Alt. 3
Columbia River Bull Trout <i>Salvelinus confluentus</i>	T	HN, N	NE	NE	NE
Columbia Basin Bull Trout Critical Habitat	D	HN	NE	NE	NE
Mid-Columbia River Steelhead <i>Oncorhynchus mykiss</i>	T	HN, N	NE	NE	NE
Mid-Columbia Summer Steelhead Critical Habitat	D	HN	NE	NE	NE
Interior Redband Trout <i>Oncorhynchus mykiss</i>	S	HN, N	NI	NI	NI
Westslope Cutthroat Trout <i>Oncorhynchus clarkii lewisi</i>	S	HN, N	NI	NI	NI
Columbia Spotted Frog <i>Rana luteiventris</i>	S	HD, S	NI	MIIIH	MIIIH
Western Ridged Mussel <i>Gonidea angulata</i>	S	HN, N	NI	NI	NI
Shortface Lanx <i>Fisherola nuttalli</i>	S	HN, N	NI	NI	NI
Mid-Columbia River Chinook Salmon EFH ¹ <i>Oncorhynchus tshawytscha</i>	MS	HN, N	NAE	NAE	NAE

¹Chinook salmon waters are designated Essential Fish Habitat by the Magnuson-Stevens Act.

Federal listing status and abbreviations

Abbreviation	Federal Listing Status
E	Federally Endangered
T	Federally Threatened
S	Sensitive species from Regional Forester's list
C	Candidate species under Endangered Species Act

P	Proposed Critical Habitat
D	Designated Critical Habitat
MS	Magnuson-Stevens Act designated Essential Fish Habitat

Occurrence and abbreviations

Abbreviation	Federal Occurance
HD	Habitat Documented or suspected within the project area or near enough to be impacted by project activities
HN	Habitat Not within the project area or affected by its activities
D	Species Documented in general vicinity of project activities
S	Species Suspected in general vicinity of project activities
N	Species Not documented and not suspected in general vicinity of project activities

Threatened and Endangered Species effects determination abbreviations

Abbreviation	Effects Determination
NE	No Effect
NLAA	May Effect, Not Likely to Adversely Affect
LAA	May Effect, Likely to Adversely Affect
BE	Beneficial Effect

Sensitive Species effects determination abbreviations

Abbreviation	Effects Determinations
NI	No Impact
MIIH	May Impact Individuals or Habitat, but Will Not Likely Contribute to a Trend Towards Federal Listing or Cause a Loss of Viability to the Population or Species
WIFV	Will Impact Individuals or Habitat with a Consequence that the Action May Contribute to a Trend Towards Federal Listing or Cause a Loss of Viability to the Population or Species
BI	Beneficial Impact

Designated and Proposed Critical Habitat effects determination abbreviations

Abbreviation	Effects Determination
NE	No Effect
NLAA	May Effect, Not Likely to Adversely Affect
LAA	May Effect, Likely to Adversely Affect

Chinook Salmon Essential Fish Habitat (Magnuson-Stevens Act) effects determination abbreviations

Abbreviation	Effects Determination
NAE	No Adverse Effect
AE	Adverse Effect on Essential Fish Habitat

Direct & Indirect Effects

The No Action alternative (Alternative 1) proposes no new activities, resulting in no activity-related impacts or benefits to aquatic species or their habitat.

The Alternative 2 action would occur within less than 1 acre of a Category 4 RHCA ephemeral stream, where the project site is separated from the stream by a road. The Alternative 3 action would occur completely outside of RHCAs. Additionally, project activities under both action alternatives would occur 2.5 miles or more upstream of fish-bearing streams.

Defensible space thinning within the RHCA for Alternative 2 may result in very minor reductions in stream shade; these reductions are not expected to affect stream temperature due to the limited linear extent of the Alternative 2 actions along the RHCA Category 4 ephemeral stream, shading provided by remaining trees, presence of an existing road between the stream and the project site, and timing of Spring flows in ephemeral Category 4 streams before water temperatures potentially become limiting within occupied habitat. There would be no effects to shade expected from Alternative 3 due to the action occurring completely outside of RHCAs.

The Matrix of Pathways and Indicators (NOAA Fisheries 1996) was reviewed for potential effects to the aquatic species or their habitat considered in this BE (Table 15). No changes in water quality (temperature, sediment, chemical contamination), habitat elements (substrate, large woody debris, pool frequency and quality), channel conditions (width/depth ratio, streambank condition floodplain connectivity), or flow/hydrology (peak/base flow, drainage network) are expected to occur within habitat occupied by aquatic species considered in this BE as a direct result of implementation of project activities (including MCR Steelhead and their designated critical habitat, MCR Chinook salmon EFH, redband trout habitat, and Columbia spotted frog aquatic habitat.)

Columbia spotted frogs are highly aquatic and rarely found far from permanent water. During the Spring, spotted frogs may disperse a short distance between riparian/wetland areas (RHCAs) and across upland areas. Action alternative activities may result in impacts to spotted frogs dispersing through the project area during construction. Due to the short-term nature of this risk, the timing of ground-disturbing project activities during dry-field conditions (low to moderate soil moisture levels) when spotted frogs are unlikely to be dispersing, and the distance of the project sites from permanent water, the action alternatives May Impact Individuals or Habitat, but would not likely contribute towards federal listing or loss of viability to the population or species (MIIH).

In summary, the No Action and Action alternatives will have No Effect on MCR Steelhead and their designated critical habitat, No Adverse Effect on MCR Chinook Salmon EFH, and No Impact on redband trout. The No Action alternative would have No Impact on Columbia spotted frog, and the Action alternatives May Impact Columbia spotted frog Individuals or Habitat, but would not likely contribute towards federal listing or loss of viability to the population or species (Table 15).

Cumulative Effects

Other ongoing activities in the area may include but are not limited to livestock grazing, firewood cutting, recreational use, and road maintenance activities. The effects of this project on all aquatic species listed in this BE when added to all other past, present and reasonably foreseeable future activities, are not expected to contribute to watershed cumulative effects in this subwatershed or watershed. Similar effects as what was described for the species, is applicable to critical habitat.

Watershed

Regulatory Framework

The Malheur National Land and Resource Management Plan (Forest Plan), as amended, incorporates legal and regulatory requirements for watershed and water quality protection, including requirements of the Clean Water Act as administered by the State of Oregon and the Environmental Protection Agency and the designation of riparian areas. A Total Maximum Daily Load (TMDL) Plan was completed in 2011 for the John Day River Basin for the parameter of temperature, by the State of Oregon; Water Quality Management Plans are under development by the Forest Service and the Oregon Department of Environmental Quality.

Analysis Method

Streams and ephemeral draws in the project area were mapped using a combination of USFS topographic maps, information in the Malheur National Forest GIS, and recent field reconnaissance of streams and draws. Field reconnaissance identified some inconsistencies with the mapping that has been incorporated into the analysis and are described in the analysis.

Effects of snowpark development on water quality and parameters of watershed function were reasoned based on the experience of the project hydrologist, knowledge of local watershed process and history, and a brief review of primary local literature. Watershed process and function from the project area to summit creek were considered. The time scales considered for analysis range from one year to several decades.

Cumulative effects on water quality, watershed hazard, and other watershed processes were assessed by considering the watershed process and characteristics of the analysis area, the proposed actions, past actions, on-going activities, and future activities and events. More details including definitions and assumptions are included in the watershed specialist report in the project record

Affected Environment

The proposed project area lies in Summit Creek Subwatershed (Hydrological Unit Code 170702030102) in the Upper Middle Fork Watershed of the Middle Fork of the John Day River Sub-basin.

The Middle Fork John Day River Sub-basin lies within the area covered by the Malheur National Forest Land and Resource Management Plan (LRMP), as amended by the Environmental Assessment for the Interim Strategies for Managing Anadromous Fish-producing Watersheds in Eastern Oregon and Washington, Idaho, and Portions of California and the Decision Notice and Finding of No Significant Impact (PACFISH) (1995).

The alternative locations lie on well-drained ashy surface soils which are described in the Soil Specialist's Report. These soils have high natural infiltration rates which normally produce low amounts of overland flow.

The project area for the Proposed Action lies on a benchy area on a gently rolling north-facing slope. The east end of this benchy area lies at about the same elevation as roads 2600309 and 2600343 and their intersection at the southeast corner and southern side of the project area and about 6-8 feet higher than the road 343 prism at the northeast corner of the area proposed for facility development.

The project area for Alternative 2 lies on a gradual side slope, with local shallow swales, of a small, secondary ridge that runs northwest to southeast. A more defined ephemeral swale is located to the east of the project area.

The project areas were field checked in late winter, May, June, and July 2012 by the project hydrologist or her delegate. The following observations about the alternative locations and the topography downslope were noted.

Proposed Action Location:

- The unnamed stream shown on various maps near the PA location does not exist in the immediate vicinity of the project area. Instead a roadside drainage ditch has been mapped as a stream.
- This stream is also mis-named Road Creek on some maps; the drainage is unnamed. Road Creek is located two drainages to the west.
- A complex of riparian features, that is limited in extent and partially influenced by past management activities, is evident beginning about 160 feet downslope of the Proposed Action project area boundary (or about 310 feet downslope of the proposed northern boundary of the parking lot) on the west side of the road 343.
- This complex of riparian features includes a wetland, estimated to be just larger than an acre, with a 150 ft. Riparian Habitat Conservation Area (RHCA) associated with it under PACFISH. The southern boundary of the RHCA approaches the northern boundary of the proposed project area (defensible space thinning).
- A wetland with poorly defined southern (upslope) boundary exists north of the project location. The wetland extends downslope, parallel to road 2600343, for over 300 feet where it reaches the 2600768 road and then extends about 50 feet further downslope as a clearly visible wetland and in patches for another 100-200 feet. Part of the patchy mosaic has probably developed in response to road drainage or interception and re-direction of subsurface water.
- The wetland continues downslope from the Road 2600768 crossing for about 0.15 mile and varies in width from a “thread” to several feet wide. It becomes discontinuous for about 0.25 mile although maps and the National Wetland Inventory indicate continuous connection. The discontinuities are characterized by local topographic changes, many of which are the result of past management activities implemented before the development of Watershed Best Management Practices, and the absence of obligate and facultative wetland plants.
- An interrupted eroded rill has developed below a culvert outlet on the west side of road 343 in the vicinity of the riparian complex and upper (southernmost wetland) described above.
- A channel or "spring brook" also exists in the central portion of the upper (southernmost) wetland. Segments of this channel and/or small (3'x5') areas just off channel appear to have been excavated by hand or by ungulate foot action to form small ponds.
- Road 2600768 is used in the spring by Idaho Power Company to access and maintain a power line under Special Use Permit. Road 2600768 crosses the wetland at an unimproved ford within 10 feet of Road 2600343.

Alternative 3 Location:

- This location is on a north-facing, generally gradual, side slope of a secondary ridge running from northwest to southeast.
- This location drains via local topographic low areas and the side slope directly to U. S. 26.
- An ephemeral swale is present to the east of the Alternative 3 location.

- No evidence of erosion from overland flow from either proposed location was observed. Runoff, including spring snow melt, appears to infiltrate on-site or immediately downslope.

A PACFISH-defined riparian area is located to the north of the project area as described above; the northern portion of area where defensible space thinning is proposed under the Proposed Action location appears to drain into the southern portion of the RHCA. No other PACFISH-defined riparian areas were observed within the alternative project locations or immediately adjacent to the identified boundaries.

No wetlands, floodplains, or municipal watersheds are known to lie within the boundaries of or in the vicinity of the proposed project areas except for that described above.

The riparian complex located north of the Proposed Action location drains into Skunk Cabbage Spring which drains into Summit Creek. Summit Creek is de-listed from the State of Oregon Department of Environmental Quality's Clean Water Act Section 303(d) 2010-2012 List of Water Quality Impaired Waterbodies because a TMDL has been completed for the John Day River Basin.

Direct and Indirect Effects

Alternative 1 (No Action Alternative)

Under this alternative, no additional ground disturbance would occur. No additional snow would be stockpiled. Consequently additional overland flow would not be produced or concentrated during spring melt-off; infiltration of runoff produced in response to natural weather events would be expected to continue at high rates on the ash soils.

Alternative 2 & 3

The implementation of the design elements and Watershed Best Management Practices is expected to control excessive overland flow and sedimentation that may result from the on-going reduction of infiltration on about 3 acres from the substitution of impervious surfacing for forest soil, where the facilities would be constructed; from the multi-decades-long reduction in infiltration on skid trails and from the implementation of other practices (for instance, the burning of hand piles) in the defensibly thinned space; and from spring melt-off resulting from the accumulated snow piles under both action alternatives. Implementation of these practices would also control overland flow and sedimentation from construction and on-going use of a new segment of road and below the developed area under Alternative 3, regardless of whether the impervious surface directs overland flow directly downslope or if a flatter surface directs flow onto a locally steeper fill slope.

Controlling overland flow and sediment would limit circumstances under which connections would develop between the proposed activities and the existing conditions, resulting in cumulative effects either to the downslope wetland, RHCA, or Road 2600768 ford under the Proposed Action or to the road drainage system for U. S. Highway 26 under Alternative 3. Consequently no detrimental effects on water quality or on watershed function are expected.

Cumulative Effect

Because there are not expected to be any direct or indirect effects, there will not be any cumulative effects to water resources

Consistency with Direction and Regulation

This project is consistent with Forest Plan direction and with service-wide regulation for water resource protection. Controlling overland flow and sediment is consistent with Management Area 3B Standard 2 “Limit and distribute use as necessary to protect and/or rehabilitate riparian areas” and with overall responsibilities under the Clean Water Act.

The Forest Service’s responsibilities under the Clean Water Act are described in a May 2002 Memorandum of Understanding (MOU), as updated, between the Oregon Department of Environmental Quality and the Forest Service. The Forest Service is directed to comply with State requirements in accordance with the Clean Water Act for protection of waters of the State of Oregon (OAR Chapter 34041) through planning, application, monitoring of Best Management Practices, which are recognized as the primary means to control non-point source pollution on National Forest lands. The Forest Service is also directed to develop Water Quality Management Plans (WQMPs) upon completion of Total Maximum Daily Load (TMDL) plans. The recent completion of a Total Maximum Daily Load plan (2011) for temperature in the John Day River Basin and the on-going preparation of Water Quality Management Plans by the Forest Service (with the Umatilla National Forest as the lead unit) are consistent with Clean Water Act direction. The effects of the activities proposed in this project are consistent with the requirements of the TMDL plan for temperature and are expected to be consistent with requirements that would be included in the WQMPs.

The MOU also directs that the Forest Service cannot further degrade streams. As shown in the Effects section, the proposed activities would not further degrade stream or riparian condition due to the implementation of BMPs and selected Design Measures.

Heritage Resources

Regulatory Framework

The legal framework that mandates the Forest to consider the effects of its actions on cultural resources is wide-ranging. In this case, Section 106 of the National Historic Preservation Act (NHPA) of 1966 (amended in 1976, 1980, and 1992) is the foremost legislation that governs the treatment of cultural resources during project planning and implementation. Federal regulations such as 36 CFR 800 (Protection of Historic Properties), 36 CFR 63 (Determination of Eligibility to the National Register of Historic Places), 36 CFR 296 (Protection of Archaeological Resources) and Forest Service Manual 2360 (FSM 2360) clarify and expand upon the NHPA. The Pacific Northwest Region (R6) of the Forest Service, the Advisory Council on Historic Preservation (ACHP), and the Oregon State Historic Preservation Office (SHPO), signed a programmatic agreement (PA) regarding the management of cultural resources on National Forest system lands in 2004. The 2004 PA outlines specific procedures for the identification, evaluation, and protection of cultural resources during activities or projects sponsored by the Forest Service. It also establishes the process that the SHPO utilizes to review Forest Service undertakings for NHPA compliance.

The National Environmental Policy Act (NEPA) of 1969 is also a cultural resource management directive as it calls for agencies to analyze the effects of their actions on sociocultural elements of the environment. Laws such as the National Forest Management Act (NFMA) of 1976, the Archaeological Resources Protection Act (ARPA) of 1979, the Native American Graves Protection and Repatriation Act

(NAGPRA) of 1990, Executive Order 13007 (Indian Sacred Sites) Executive Order 13084 (Consultation and Coordination with Indian Tribal Governments), also guide Forest Service decision-making as it relates to Heritage. The American Indian Religious Freedom Act (AIRFA) of 1978 requires that federal agencies consider the impacts of their projects on the free exercise of traditional Indian religions. Executive Order 13175 (EO 13175), Consultation and Coordination with Indian Tribal Governments, November 6, 2000, directs federal agencies to engage in regular and meaningful consultation and collaboration with tribal officials in the development of federal policies that have tribal implications and to strengthen the United States government-to-government relationship with Indian tribes.

The Malheur National Forest Land and Resource Management Plan tiers to the previously mentioned laws and corresponding Forest Service direction as it sets forth resource management goals, obligations, and standards. Forest-wide management standards that are pertinent for this cultural resource effects analysis include:

- Conduct a professionally supervised cultural resource survey on National Forest lands to identify cultural resource properties. Use sound survey strategies and the Malheur National Forest Cultural Resource Inventory Survey Design (Thomas 1991).
- Evaluate the significance of sites by applying the criteria for eligibility to the National Register of Historic Places.
- Consider the effects of all Forest Service undertakings on cultural resources. Coordinate the formulation and evaluation of alternatives with the State cultural resource plan, the State Historic Preservation Office and State Archaeologist, other State and Federal agencies, and with traditional and religious leaders of Native American Indian groups and tribes with historic ties to the project planning area.

Consultation with Others

Many of the previously described laws, regulations, and directives instruct the Forest Service to consult with American Indian tribes, the state, and other interested parties on cultural resource management issues. This consultation has been conducted through the NEPA process and under the terms of existing agreements with American Indian Tribes. To date, there have been no concerns raised during scoping regarding the effects of thinning and fuels activities on cultural resources. Documentation of compliance with the NHPA is currently being prepared for referral to the Oregon SHPO in accordance with the 2004 PA, and consultation with that agency will be completed prior to the publication of the Blue Mountain Summit Snowpark Project Final Environmental Statement.

Tribal Consultation on a government to government basis is ongoing with the Burns Paiute Tribe, the Confederated Tribes of Warm Springs Reservation and the Confederated Tribes of the Umatilla Indian Reservation. At this point, no concerns regarding the effects of thinning and fuels proposals on cultural resources have been identified.

Analysis Methods

The Blue Mountain Summit Snowpark planning area includes National Forest System lands by the Blue Mountain and Prairie City Ranger Districts within the designated boundary established for this project. The cultural resources effects analysis will focus on cultural properties identified within the Blue Mountain Summit Snowpark planning area. The proposed action does not have the potential to have indirect effects (i.e., visual, auditory, atmospheric) on cultural resources that are distant from the project.

Affected Environment

Cultural resource identification efforts in the vicinity of the Blue Mountain Summit Snowpark planning area have focused on two primary types of resources: prehistoric archaeological sites and historic archaeological sites. Cultural resource identification efforts include literature reviews, consultation with Native American tribes and other stakeholders that are historically associated with the area, as well as pedestrian survey.

There have been three previous cultural resource inventories conducted in the project area. Only one, R1993060403004/Summit Creek Analysis Area CRIS 645-93/179, of the previous three surveys meets today's current survey standards (as defined in Thomas 1991) in the Blue Mountain Summit Snowpark planning area. The other two cultural resource inventories concurred by SHPO but not inventoried according to today's standards include R1988060403033/Blue Salvage CRIS 645-88/073 and R1987060403001/IDA CRIS 645-85/025a.

In 2012, the proposed project area was resurveyed specifically for ground surface changes which can offer improved visibility helping to identify previously unseen cultural resources. CRIS R2012060401007/Blue Mountain Summit Snowpark survey had no cultural findings. The results of this current survey (2012) are being sent to SHPO for concurrence before project implementation. No archaeological sites or isolates have been identified or observed in the project planning area surveys to today's current standards.

The project area lies within the Blue Mountain Physiographic Region of Eastern Oregon. The topography of the area is mountainous with gentle to moderately steep slopes formed by tectonic activity and subsequent weathering and erosional processes. Primary landforms include ridgetops, mountain slopes, and dissected canyons. Near the Blue Mountain Summit Snowpark Planning Area, there are springs and creeks that feed into the Middle Fork of the John Day River and its tributary streams which are part of the John Day River Basin, eventually flowing into the Columbia River.

Culturally significant plant species, such as strawberry, Oregon grape, currant, and huckleberry are present in the project area although in sparse intermittent densities. No information currently exists that suggests traditional cultural properties, as defined by Parker and King (1998), exist within Blue Mountain Summit Snowpark planning area.

The Southern Blue Mountains were home to people representing the adaptive traditions of both the northern Great Basin and the southern Columbia Plateau (Burtchard 1998). Known prehistoric sites in north and west of project area consist primarily of waste flakes associated with the manufacture of stone tools and occasional tool fragments. Sites are mostly very small, and represent expedient tool manufacture or reworking, most likely associated with modest seasonal use of the area for hunting and gathering. There are numerous trails delineated in early 1900 General Land Office (GLO) plats that go from Dixie Summit north over the Dixie Butte area to the Middle Fork John Day River. Although not identified as "Indian Trails", these originally may have been travel routes for Indian peoples going from the John Day River area to the Middle Fork area.

The historic use of areas north, west, and south of the Blue Mountain Summit Snowpark planning area is evidenced by a much more dense archaeological record. The uses of the project area are reflected in the form of sites related to the Sumpter Valley Railroad and railroad logging, stock grazing, mining, and

Forest Service administration. The stock driveway, the original from Prairie City to Bates road, and the telephone lines are not eligible for the National Register of Historic Places. The Sumpter Valley Railway was listed on the National Register of Historic Places in 1987. Along the Middle Fork John Day River, associations to mining have been identified and findings of shafts, adits, and cabins are also present east of this landscape but west of the Blue Mountain Summit Snowpark planning area. Overall, the historic use of nearby areas has been more intense than prehistoric use.

Project Design Elements

There are no specific project design elements to be observed during implementation of the proposed action with the exception of protecting unknown and or undiscovered archaeological sites in the Blue Mountain Summit Snowpark Project area.

Direct and Indirect Effects

A project is considered to have an adverse effect on cultural property when it results in the alteration of characteristics that qualify the property for the National Register of Historic Places. There are no cultural properties that have been identified within the Blue Mountain Summit Snowpark Project area that are eligible or potentially eligible (unevaluated) for the NRHP on the basis of their ability to yield scientific information that is important to studies of prehistory or history. Proposed activities that do modify the patterning of surface or buried archaeological deposits are considered to result in no adverse effect.

Alternative 1 - No Action

Direct/Indirect Effects

If the no action alternative is pursued, there will be no direct effect on the existing conditions of unknown cultural resources within the Blue Mountain Summit Snowpark Project area. However, there are no cultural properties identified within the Blue Mountain Summit Snowpark Project area or in adjacent areas.

Alternative 2-Proposed Action

Direct/Indirect Effects

Recreation development activities will have no effect since there are no archaeological or historic resources identified from previous and current surveys in the Blue Mountain Summit Snowpark Project area. Ground based recreation development activities, as proposed in Alternatives 2 and 3, can be detrimental to all site types if present. Indirectly, reducing fuels through Wildfire Defensible Space Thinning (Alternatives 2 and 3) will reduce the severity of potential wildfires and will enhance the long term stability of recreational structures within the Blue Mountain Summit Snowpark Project area.

No archaeological sites have been identified in the project area which could be damaged by recreation development actions or proposed measures conducted in the vicinity under Alternative 2 – the proposed action. There are no known archaeological sites within the planned acres to be developed.

Activities associated with the project include construction of a parking lot measuring 385 feet long by 275 wide (Alternatives 2 and 3), as well as (Alternatives 2 and 3) paving of the parking area, and also structure constructions which include a restroom, a groomer shed, a 500 gallon tank for fuel storage, a warming hut measuring no greater than 50 feet in length by 25 feet in width, and construction of an access

road from the grooming shed to Old Highway 26, would degrade the integrity of unidentified archaeological sites.

Alternative 3-Proposed Action

Direct/Indirect Effects

Recreation development activities will have no effect since there are no archaeological or historic resources identified from current survey (2012) in the Blue Mountain Summit Snowpark Project area located south side of Highway 26 (see Figure 2 for alternatives 2 and 3). Ground based recreation development activities, as proposed in Alternatives 2 and 3 can be detrimental to all site types if present. Indirectly, reducing fuels through Wildfire Defensible Space Thinning (Alternatives 2 and 3) will reduce the severity of potential wildfires and will enhance the long term stability of recreational structures within the Blue Mountain Summit Snowpark Project area.

No archaeological sites have been identified in the project area which could be damaged by recreation development actions or proposed measures conducted in the vicinity under Alternative 3 – the proposed action. There are no known archaeological sites within the planned acres to be developed.

Activities associated with the project include construction of a parking lot measuring 385 feet long by 275 wide (Alternatives 2 and 3), as well as (Alternatives 2 and 3) paving of the parking area, and also structure constructions which include a restroom, a groomer shed, a 500 gallon tank for fuel storage, a warming hut measuring no greater than 50 feet in length by 25 feet in width, and construction of an access road from the grooming shed to FS road 417, would degrade the integrity of unidentified archaeological sites if present.

Cumulative Effects

Previous timber harvest projects, wildfires, mining activities, livestock grazing, forest and state highway road construction, recreational activities, and firewood cutting have had incremental negative effects on surrounding cultural properties that have been identified within other forest projects. With the implementation of the project design elements for monitoring during project activities in the event of unknown subsurface heritage resources being present, there is minimal risk of additional incremental degradation of the cultural properties associated with the proposed action and its alternatives.

Characteristics of some nearby heritage resource sites, such as portions of the Sumpter Railroad line and its spurs and an historic wagon trail were compromised beginning in the 1920s when the old grades and trail were converted into roads to access the Forest and other communities (Tonsfeld 1987).

Reasonably foreseeable future activities in the planning area include winter recreation road maintenance over snow.

Alternative 1 - No Action

The No Action Alternative would not have any cumulative effects across the landscape within the Blue Mountain Summit Snowpark Project area and not incrementally reduce risks that the resource will experience from winter recreational activities. Choosing the no action alternative would not result in a detrimental cumulative effect to heritage resources since none have been identified to date.

Alternative 2 and Alternative 3–Proposed Actions

Because there will be no direct or indirect effects to cultural resources from either action alternative, and there are no currently ongoing or future activities that will overlap in time and space, there will not be any cumulative effects caused from the implementation of Alternative 2 or 3.

Consistency with Direction and Regulation

Heritage and Tribal interests are regulated by federal laws that direct and guide the Forest Service in identifying, evaluating and protecting heritage resources. The Malheur National Forest Plan tiers to these laws, therefore the proposed action alternative will meet Forest Plan standards. With the completion of the Heritage inventory under the terms of the 2004 PA with Oregon SHPO, and by providing the interdisciplinary team with appropriate input as per NEPA and the NHPA, all relevant laws and regulations have been met.

Irreversible and Irretrievable Commitments

There are no irreversible and irretrievable commitments of resources that may result from the alternatives with respect to cultural resources.

Visuals

Regulatory Framework

The project area as identified in the Malheur National Forest Land and Resource Management Plan (Forest Plan, USDA Forest Service 1990) is within Management Area 13 – Old Growth and Management Area 14 – Visual Corridor (Forest Plan, pg IV-105-108). The Forest Plan designates U.S. Highway 26 as Sensitivity Level I Corridor as MA 14.

This Visual Corridor consists of the visible and potentially visible landscapes along the major travel route where the traveling public has a high-to-medium sensitivity to the scenery. The goal is to manage corridor viewsheds with primary consideration to their scenic quality and the growth of large diameter trees. Visual quality objectives of retention, partial retention and modification would be applied while providing for other uses and resources. Applicable standards include:

- Manage for visual quality objective consistent with adjacent lands. (MA-13)
- Meet a visual quality objective of retention, partial retention, or modification for the visible and potential visible areas. Site-specific visual quality objectives will be identified and recorded in the corridor viewshed plans and the TRI data base. (MA-14)

Analysis Method

Several USDA handbooks have been developed to establish a framework for management of visual resources, including, but not limited to:

National Forest Landscape Management Volume 2, Chapter 1 the Visual Management System (Agriculture Handbook 462, USDA Forest Service 1974) and

Landscape Aesthetics, a Handbook for Scenery Management (Agriculture Handbook 701, USDA Forest Service 1995).

Methodology used for analyzing impacts to scenic resources is the Scenery Management System (SMS) which uses “Landscape Aesthetics: A Handbook for Scenery Management.” Issued in 1995, this handbook replaces “Agriculture Handbook 462 – The Visual Management System” which was issued in 1974. While many of the basic inventory elements of the Visual Management System are retained, the Scenery Management System incorporates both the natural and human processes into the ideas of managing for ecosystems.

The handbooks apply current National Forest Scenery Management methodology in conjunction with existing Malheur National Forest Plan direction. This includes scenery sustainability concepts described in Scenery Management System Handbook Appendix J-Recommended SMS Refinements. It relies on field studies and photography from inventoried sensitive viewpoints and other views of the project area, as well as coordination with project interdisciplinary team members, and consideration of public preferences for scenic quality. Cumulative scenic quality was within the geographic scope of roadways and other viewpoints within and adjacent to the project.

Scenic integrity is used to measure the effects to scenery resources. This evaluates the amount of human-caused deviation in form, line, color, and texture in a landscape and the degree to which the scenery is free from visible disturbances that detract from the natural and socially valued appearance. This includes disturbances due to human activities or extreme natural events inconsistent with the historic range of variability.

Scenic Integrity is measured on the Malheur National Forest through Visual Quality Objective levels defined by the USFS Visual Management System’s page 2-4 USDA Handbook #462.

Affected Environment

The existing scenic integrity meets the visual quality objective of the Forest Plan of retention in the foreground and partial retention in the middleground. Within the project area there are large areas of natural appearing landscapes. Overall, from foreground, middleground and background views there is little evidence of human activities in this project area. There are existing wire fences, evidence of the old highway, highway signs and Malheur National Forest entrance sign adjacent to the planning area. The existing condition meets the Forest Plan objective within the the project area.

In the Blue Mountain Summit Snowpark project the surrounding mountains represent a landscape of high scenic integrity.

Level of viewer sensitivity to landscape changes: The highest viewer sensitivity occurs in the foreground at popular public use areas such as scenic overlooks, recreation sites, and trail and road corridors. Blue Mountain Summit Snowpark is within the U.S. Highway 26 Corridor rated a Sensitivity Level I.

Distance of an area from points or corridors of high viewer sensitivity in the middleground and background: Even minor landscape changes are very evident when viewed in the foreground zone, but these changes become less evident with distance. The natural topographic and vegetative screening makes the Blue Mountain Summit Snowpark project sensitive because of additional screening and/or further distances from popular use areas.

Foreground: The objective of this class is to retain the existing character of the landscape. The level of change to the characteristic landscape should be low. Management activities and uses can be seen, but

should not attract the attention of the casual observer. Any changes must repeat the basic elements of form, line, color, and texture in the predominant natural features of the characteristic landscape.

Middleground: The objective of this class is to partially retain the existing character of the landscape. The level of change to the characteristic landscape can be moderate. Management activities and uses may attract attention, but should not dominate the view of the casual observer. Changes should repeat the basic elements of the predominant natural features of the landscape.

Background: The objective of this class is to allow for management activities and uses requiring major modifications to the natural landscape. The level of change to the characteristic landscape can be high. Management activities and uses may dominate the view and be a major focus of viewer attention. However, every attempt should be made to mitigate the impacts of activities through careful location and repeating the visual elements of the landscape.

Direct and Indirect Effects

Alternative 1 - No Action

This alternative proposes no construction of a parking area or associated structures, or fuels reduction treatments in the Blue Mountain Summit area at this time. The scenic integrity would continue to meet retention within the foreground and partial retention in the middleground.

With the no action alternative, there will be no change to the existing scenic integrity within the Blue Mountain Summit Snowpark Project area. The Blue Mountain Summit area will continue to meet the Forest Plan objective of retention in the foreground and partial retention in the middleground. There would be no change in current management direction or in the level of ongoing management activities within the project area. It does not preclude activities outside the project area or within the project area at some time in the future.

Alternative 2 (Proposed Action)

Parking Lot Construction

A proposed parking lot located at Forest Road 2600343 will be designed for vehicles towing trailers as well as for passenger vehicles. The total area disturbed will be 3 acres with vegetation clearing and would not require any new road construction.

The parking lot will be screened by vegetation from views along U.S. Highway 26. Scenic integrity will not be affected since foreground views will not change. There will not be any change in vegetation as viewed from U.S. Highway 26 and the area will still meet the retention standard.

Structure Construction

Three structures will be constructed at the site located on the western edge of the parking lot. Materials used in structure construction will provide continuity with the surroundings. Screening from vegetation along U.S. Highway 26 masks the project site and structures, which is not visible at this distance. Because of the vegetation screening, the structures meet retention within the foreground.

Within the project area, middleground views would continue to appear as natural, with no deviation from the existing landscape character, meeting the partial retention standard. There would be no visual change in middle ground meeting scenic integrity.

Alternative 3

Road Construction

In order to access the new parking area, a new road would be constructed from U.S. Highway 26 to the proposed parking area. Approximately 0.15 miles of road would be constructed.

Potential danger trees along roads and right-of-ways within the road construction area would be removed. Identification of potential danger trees would follow Regional Guidelines.

The road will be constructed to lie lightly on the land, even when viewed from the visual foreground. Only the minimum number of hazard trees will be removed for its construction, helping to retain the areas integrity. The road will be evident, but will not be a focal point within the landscape. However, the road can change the visual integrity to partial retention in the short term when impacts are more pronounced, to retention in the long term after roadside vegetation has grown and vegetation screening has matured.

Newly Designated Snowmobile Route

Although the southern section of U.S. Highway 26 at the Blue Mountain Summit does not have a designated snowmobile route, an informal trail has been used by snowmobilers to provide access across the highway and between districts of the Malheur NF and the Wallowa Whitman NF. The area would continue to appear as it has, with an over-snow trail being visible in the foreground. This use is not new and there would not be any change to the scenic integrity with the newly designated snowmobile route.

Parking Lot Construction

A proposed parking lot located directly adjacent to U.S. Highway 26, across from Forest Road 343 near the Blue Mountain Summit. The parking area would require the clearing of all trees, including those where structures will be placed and would cover approximately 3 acres.

Because of past thinning and the existing tree density, there will be limited screening along U.S. Highway 26 and all new construction will be visible along the highway. Highway 26 will not meet retention in the foreground for the short-term and will be partial retention. However as underbrush and trees grow, this will provide a screen from viewing into the site from U.S. Highway 26.

Defensible Space Thinning

Defensible space thinning will be required 150 feet from all structures at the site. However, thinning will be minimal within this alternative because of past management activities. Thinning will be accomplished on approximately 5 acres, bordering the project area to the south, west and east. Thinning will continue to meet retention in the foreground.

Structure Construction

Materials used in structure construction will provide continuity with the surroundings. All the structures would be visible in the foreground from views from U.S. Highway 26. With the non-existence of screening from U.S. Highway 26 at this distance, the structures will not meet retention in the short term

until the underbrush and trees provide an additional screen from U.S. Highway 26 view. As trees grow and the undergrowth fills the space, the site will develop a visual screen over time which will meet retention in the long term.

Within the project area, middleground views would continue to appear as natural, with no deviation from the existing landscape character, meeting the partial retention standard. There would be no visual change in middle ground meeting scenic integrity.

Cumulative Effects

All past, ongoing, and reasonably foreseeable future activities in Table 9 have been considered for their cumulative effects on visual quality. In addition, the area considered for visual cumulative effects is the Highway 26 Viewshed Corridor from the project area to approximately Austin Junction.

Alternative 1 – No Action

The No Action Alternative would not have any direct or indirect effects across the landscape within the Blue Mountain Summit Snowpark Project. Therefore, alternative 1 would not result in cumulative effects to visual quality.

Alternative 2

Because Alternative 2 would not have any direct or indirect visual effects to scenic integrity in the foreground, there would not be any cumulative effects from effects across the landscape within the Blue Mountain Summit Snowpark Project. Therefore, Alternative 2 would not result in cumulative effects to visual quality.

Alternative 3

Short term changes to the scenic integrity from retention to partial retention will occur with the implementation of Alternative 3. Along Highway 26 further west, the Crawford Project was analyzed with the visual effects to the scenic integrity along the same highway. The incorporation of mitigation measures from the Crawford Project has reduced the visual effects from this project to short-term impacts from implementation and two temporary roads. After implementation and rehabilitation of the two temporary roads, scenic integrity would continue to be retention after the projects implementation.

Because the implementation of Crawford has occurred in the past and the visual effects are short-term, and the effect from implementation of the snowpark project will occur in the future, the overlap of effects occurs in two different time periods and any impacts will not be any cumulative to visual resources.

Consistency with Direction and Regulation

The project is consistent with the Malheur National Forest Plan, as amended. Proposed activities in each of these alternatives are allowed for and meet the direction contained in the Forest Plan relative to Visual Quality Objectives.

Irreversible and Irretrievable Commitments

The action alternatives would not be expected to create any impacts that would cause irreversible damage to the scenic integrity of this visual corridor.

Wilderness, Inventoried Roadless Areas, Potential Wilderness Areas and Other Undeveloped Lands

The locations of all action alternatives are located outside of, and not adjacent to any Wilderness areas, Inventoried Roadless Areas (IRA) or Potential Wilderness Areas (PWA).

The Monument Rock Wilderness in approximately 13 miles southeast of the project area, the Strawberry Wilderness is approximately 20 miles southwest of the project area and the North Fork John Day Wilderness is approximately 14 miles northwest of the project area. Numerous roads are between the project area and the existing wilderness areas.

The Baldy Mountain Inventoried Roadless Area is located approximately 9 miles to the south of the project area. The Dixie Butte IRA is approximately 10 miles to the west, and the Greenhorn Mountain IRA is approximately 13 miles to the northwest. Similar to the wilderness, numerous roads are located

between the project area and the existing IRAs.

All current Potential Wilderness Areas near the project are associated with either wilderness areas or inventoried roadless areas, and have multiple roads between the project area and the PWAs.

Direct, Indirect and Cumulative Effects

Since the project area is not within, adjacent to, in close proximity to, or within the subwatershed of any existing wilderness areas, inventoried roadless areas, or potential wilderness areas, there will be no effect from any project alternative to these areas. There will be no change in acreage of any classification, or change in a potential wilderness area because of the project.

Since the project is not within any of these areas, and there are no direct or indirect effects from the project, there are no cumulative effects from any

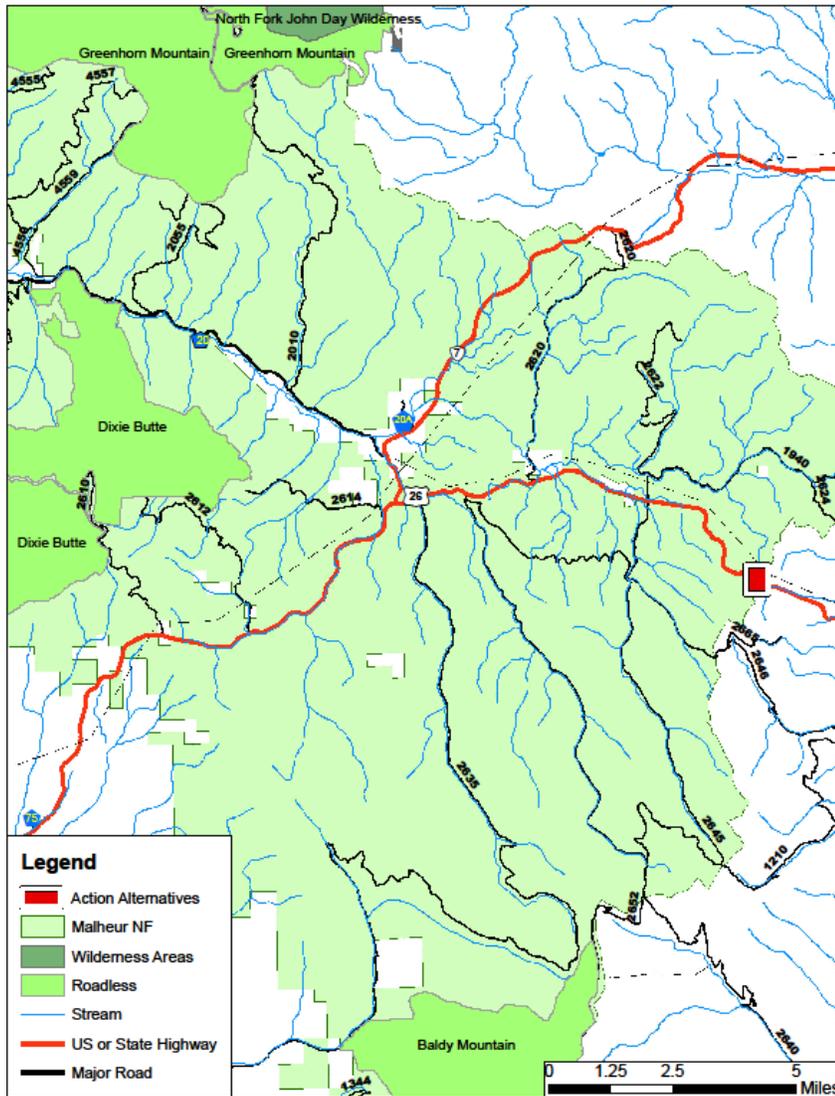


Figure 10: Map of Project Area, Wilderness and Inventoried Roadless Areas

alternative on wilderness, IRAs or PWAs.

Wild and Scenic Rivers

The National Wild and Scenic Rivers Act (PL 90-542 [16 USC§1271-1287]) was established by Congress in 1968 to preserve the free-flowing rivers that possess certain “outstanding remarkable” values. Pursuant to Section 5(d)(1) of the Act, the Secretary of Agriculture requires the Forest Service to evaluate rivers within its jurisdiction for their potential for inclusion into the National Wild and Scenic Rivers System. The Malheur National Forest has recently evaluated rivers within its jurisdiction. No rivers with this distinction were within the project boundary or adjacent to the project area.

Effects of Proposed Action

Since there are no National Wild and Scenic Rivers within or adjacent to the project area, there will be no direct or indirect effects from any of the alternatives. In addition, there will be no cumulative effects since there are no direct or indirect effects from the project.

Air Quality

Affected Environment

The 1970 Federal Clean Air Act, as amended in 1977 and 1990 (42 U.S.C. §7401 et seq.), is a legal mandate designed to protect human health and welfare. National Ambient Air Quality Standards are defined in the Clean Air Act as levels of “criteria” pollutants above which may result in detrimental effects on human health and welfare. These criteria pollutants include carbon monoxide, lead, nitrogen oxides, particulate matter (PM_{2.5} and PM₁₀), ozone, and sulfur dioxide.

State Implementation Plans (SIPs) are adopted by each state to implement the provisions of the Clean Air Act. State Implementation Plans describe the state’s actions to achieve and maintain National Ambient Air Quality Standards. If an area consistently does not meet or “attain” the National Ambient Air Quality Standards, it is designated as a non-attainment area and must demonstrate to the public and the Environmental Protection Agency (EPA) how it would meet standards in the future. The Oregon Department of Environmental Quality regulates and monitors air quality for the State.

Section 160 of the Federal Clean Air Act also requires measures to “preserve, protect, and enhance the air quality in national parks, national wilderness areas, national monuments, national seashores, and other of specific national or regional natural, scenic, or historic values.” Class I airsheds include Forest Service and Fish and Wildlife Service Wilderness areas over 5,000 acres that were in existence before August 1977, and National Parks in excess of 6,000 acres as of August 1977. Designation of Class I airsheds allows only very small increments of new pollution above existing air pollution levels, Class I airsheds have the highest air quality protection standards, in part, because visibility was identified as an important value while Class II airsheds have a moderate level of protection. Airsheds near the Blue Mountain Summit Snowpark project area are described below.

Class 1 Airshed

Class I airsheds are protected by the Prevention of Significant Deterioration (PSD) program and include national parks, national wilderness areas, national monuments, national seashores, and other areas of

special national or regional natural, recreational, scenic, or historic value. Strawberry Mountain Wilderness is a Class I airshed approximately twenty miles southwest of the Blue Mountain Summit Snowpark area.

Direct and Indirect Effects

Alternative 1 – No Action

Under the No Action Alternative, some localized temporary air quality impairments currently exist from vehicle emissions, and this would be expected to continue into the future. Near the proposed action locations, snowmobile trails currently exist and are actively used during the winter. In addition, parking along the highway near the summit of Blue Mountain there may be some increased temporary localized air quality impairment where there is concentrated snowmobile use and where engines are started and warming up.

Alternative 2 & 3

For all alternatives there may be some increased temporary localized air quality impairment from vehicle emissions in areas where there is concentrated snowmobile use. This would be particularly evident where engines are started and warming up. This increased indirect effect on air quality would be highest in the snowpark on high use days and would be comparable to the effect at other regional snowparks, including Huddleston Sno-park and Starr Sno-park. However, the effects of air quality impairment would be extremely localized, and would not have any effects except those located directly at the source. Any effects from would likely not be distinguishable from users outside of the snowpark.

From an airshed perspective, Blue Mountain Summit Snowpark is 15 miles from the nearest community and over 20 miles from Strawberry Mountain Wilderness Class 1 airshed. Any localized impairment would be diluted to a scale that would be impractical to measure and would have no effect on the Class 1 airshed or the airshed for the nearby communities.

Climate Change

On January 16, 2009, the Washington Office of the Forest Service released guidance to Forest Service to assess the effect of proposals on the climate into project-level NEPA documents. This guidance provides that units should consider two kinds of climate change effects. First, units may, where appropriate, consider the effect of a project on climate change. Second, units may, where appropriate, consider the effect of climate change on a proposal.

Assessing the Effect of the Blue Mountain Summit Snowpark Project on Climate Change

The Interdisciplinary Team considered relevant factors of how a snowpark and motorized winter trails on a Ranger District could potentially affect a change in global climate. It was determined that the relationship and contribution of exhaust emissions was likely a key factor to consider. In addition, how this project would affect forests and their role in the carbon cycle was also considered.

It was determined that the removal 3-7 acres of vegetation, snowpark construction, and new trail would not have an effect on global climate change.

Emissions from OHVs, particularly two-stroke engines (engines that use a gas and oil mixture in the combustion chamber) do not completely burn fuels. The result is an increase in emissions that contain

nitrogen oxides (NO₂), sulfur dioxide (SO₂), carbon monoxide (CO) and ozone (O₃), which are also identified as “greenhouse gasses” (or GHG) that contribute to warming of the atmosphere. These emissions are also what the Environmental Protection Agency (EPA) identifies as criteria pollutants in which they set National Air Quality Standards. These commonly found air pollutants are found all over the United States.

The Forest Service anticipates up to 50 snowmobilers during peak times utilizing Blue Mountain Summit Snowpark (Recreation, Chapter 3). In addition, the parking facility would accommodate up to 30 vehicles at peak capacity. This equates to 80 motor vehicles emitting GHG. This represents a very small fraction of the total internal combustion engines globally emitting GHG. Therefore, this incremental contribution to global climate change is negligible.

Agency direction states: “[b]ecause greenhouse gases mix readily into the global pool of greenhouse gases, it is not currently possible to ascertain the indirect effects of emissions from single or multiple sources (projects). Also, because the large majority of Forest Service projects are extremely small in the global atmospheric CO₂ context, it is not presently possible to conduct quantitative analysis of actual climate change effects based on individual projects” (USDA 2009).

Under this definition, there would be no direct effect associated with any of the action alternatives. The action alternatives do not authorize the emission of GHG; the action alternatives do not limit the emission of GHG; and, the action alternatives are unlikely to change the emission of GHG as compared to the no action alternative. In short, GHG emissions from snowmobile use within the Blue Mountain Summit area are not directly affected by the development of the Blue Mountain Summit Snowpark at the capacity would allow.

The EPA is now implementing emissions standard requirements for two stroke (among other types) of engines (40CFR 1051). As new engines are designed to meet these criteria, older and less clean engines would be phased out, likely to offset the contribution from predicted increases in riders.

Assessing the Effect of Climate Change on the Blue Mountain Summit Snowpark Project

Although El Niño/Southern Oscillation and the Pacific Decadal Oscillation comprise the primary factors for climate variability in the Pacific Northwest (IPCC), the influence from global climate change is a growing concern. According to the Climate Impacts Group, based out of the University of Washington, climate modeling for the Pacific Northwest predicts a future rate of warming of approximately 0.5 degrees Fahrenheit per decade for the Pacific Northwest through at least 2050, relative to the 1970 to 1999 average temperature. Temperatures are projected to increase across all seasons, although most models project the largest temperature increases in summer (June to August), and the average temperatures could increase beyond the year-to-year variability observed in the Pacific Northwest during the 20th century as early as the 2020s.

Assessing these factors on manipulation of vegetation associated with trail construction and maintenance activities within the project area, a warming and drying climate combined with less of a snowpack could potentially reduce the season of snowmobile use and subsequent associated effects in the long-term if projections are accurate. The season of use for Blue Mountain Summit Snowpark is generally expected to be from December 1 through April 1.

Socioeconomic / Environmental Justice

As required by law and Executive Order 12898 from 1994, all Federal actions should consider potentially disproportionate effects on minority or low-income communities. Potential impact or change to low-income or minority communities within the proposed action area should be considered. Where possible, measures should be taken to avoid negative impacts to these communities or mitigate the adverse effects.

The Blue Mountain and Prairie City Ranger Districts are located within Grant County in eastern Oregon. The project area is located in the eastern portion of Grant County, near the border with Baker County. The communities in both Grant County and Baker County are mainly rural areas supported by mostly three prominent industries, Government at 18%, retail trade with 11.2% of the employment and farm at 11.1% of the populations of the two counties (Economic Profile System, 2012). Unemployment rates for the two counties were approximately 11.3% in 2011, with seasonal highs of 14.4% during January and February and unemployment in the 9% range between July and October (Economic Profile System, 2012). Between 2000 and 2010 populations for these areas has declined by approximately 4.3%, while employment also fell by 4%. Average earnings per job were \$29,321, below the Oregon non-metro average of \$36,624 (Economic Profile System, 2012).

All the communities in the study area would fall under the minority or low-income populations identified in the Executive Order. Overall, the proposed action would result in no change on low income or minority populations. There would be no change to the traditional use of the land and no change in economics. There would be no displacement of minorities, changes of land use, or increases in taxes that would constitute an economic hardship. During consultation, the tribal governments have not identified any specific traditional or sacred places within the project area or other concerns regarding this project. There would be no cumulative impacts since there are no direct or indirect effects to environmental justice.

USDA Civil Rights Policy

The Civil Rights Policy for the USDA, Departmental Regulation 4300-4 dated May 30, 2003, states that the following are among the civil rights strategic goals; (1) managers, supervisors, and other employees are held accountable for ensuring that USD A customers are treated fairly and equitably, with dignity and respect; and (2) equal access is assured and equal treatment is provided in the delivery of USDA programs and services for all customers. This is the standard for service to all customers regardless of race, sex, national origin, age, or disabilities.

Disparate impact, a theory of discrimination, has been applied to the Blue Mountain Summit Snowpark planning process in order to reveal any such negative effects that may unfairly and inequitably impact beneficiaries regarding program development, administration, and delivery. The objectives of this review and analysis are to prevent disparate treatment and minimize discrimination against minorities, women and persons with disabilities and to ensure compliance with all civil rights statutes, Federal regulations, and USDA policies and procedures.

The project alternatives, given the size of potential social and economic effects, are not likely to result in civil rights impacts to Forest Service employees or customers of its program.

Prime Farmland, Rangeland, and Forest Land

The Secretary of Agriculture issued memorandum 1827 which is intended to protect prime farm lands and rangelands. The Blue Mountain Summit Snowpark analysis area does not contain any prime farmlands or rangelands. Prime Forest Land, as defined in the memorandum, is not applicable to lands within the National Forest System.

Irreversible and Irretrievable Commitments of Resources

Irreversible commitments of resources are those that cannot be regained, such as the extinction of a species or the removal of mined ore. Irretrievable commitments are those that are lost for a period of time such as the temporary loss of timber productivity in forested areas that are kept clear for use as a power line rights of-way or road.

The development and use of trails and a snowpark facility is considered irretrievable commitment of land to a non-vegetative state until such time that the trail system is abandoned and the disturbed sites are returned back to productive capacity.

Chapter 4 – Agencies and Persons Consulted

The following public and private entities contributed to this document:

Malheur National Forest, Blue Mountain Ranger District

Jeff Shinn, Responsible Official
 Shannon Winegar, Recreation
 Casey Gatz, NEPA Coordinator
 Robbie Piehl, Wildlife
 Allen Taylor, Fisheries
 Mary Lou Welby, Hydrology
 Robert McNeil, Soils
 Stephen Jankowski, Archeology
 Joe Rausch, Botany
 Ed Clark, Fuels

Table 16: Agencies and Persons Consulted

Agencies
Tom Davis – Oregon Department of Transportation
Oregon Department of Fish and Wildlife
Tribes
Confederated Tribes of Warm Springs
Burn Paiute
Confederated Tribes of the Umatilla
Organizations
Burnt River Snowmobile Club
Grant County Snowballers
Sumpter Valley Snowmobile Club
Blue Mountain Biodiversity
Sierra Club
Oregon Wild
Grant County Conservationists
Individuals
Dan Chapin
Bob Phillys
Gerald Zagert
John Bastian
Ron Greb
Boyd Britton
Neal Both
Jeff Rice

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Socioeconomic / Environmental Justice

County Business Patterns

Census Bureau, U.S. Department of Commerce

<http://www.census.gov/epcd/cbp/view/cbpview.html>

Tel. 301-763-2580

Local Area Unemployment Statistics

Bureau of Labor Statistics, U.S. Department of Labor

<http://www.bls.gov/lau>

Tel. 202-691-6392

Quarterly Census of Employment and Wages

Bureau of Labor Statistics, U.S. Department of Labor

<http://www.bls.gov/cew>

Tel. 202-691-6567

Regional Economic Information System

Bureau of Economic Analysis, U.S. Department of Commerce

<http://bea.gov/bea/regional/data.htm>

Tel. 202-606-9600

Population Division

Census Bureau, U.S. Department of Commerce.

<http://www.census.gov/population/www/>

Tel. 866-758-1060

National Bureau of Economic Research

<http://www.nber.org/cycles/recessions.html>

Tel. 617-868-39

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