DECISION RECORD

EA LOG NO.: OR-010-2001-03
PROJECT NAME: Colvin Timbers/Fort Rock Fringe Fuels Treatment

Applicant: Bureau of Land Management
Address: 1302 S. G St.
Lakeview OR 97630 **County:** Lake

BLM Office Lakeview Resource Area **Phone:** (541) 947 2177

Decision: The following is the decision of the Bureau:

To conduct the first of a multi-year/multi-treatment project for hazardous fuel reduction and ecosystem restoration in the Abert Rim and Devils Garden Wilderness Study Areas. Conduct pretreatment and prescribed burns on approximately 500 acres of public lands within an 1800 acre management area, encompassed by the Abert Rim WSA (Colvin Timbers).
The Fort Rock Fringe project is in the Devils Garden Lava Flow WSA, located near Fort Rock, Oregon, and is approximately 700 acres of public lands between the lava flow and the "way" on its West and North perimeter. The existing boundary fence will be removed and replaced with a fence specifically designed for wildlife movement.
Following the manual pretreatments, prescribed fire plans will be designed and implemented for each unit to further reduce the hazardous fuel load and enhance the ecosystem. Existing roads and hand lines will serve as burn boundaries as needed. Lines will be returned to a natural state after project implementation and all vehicle travel will be restricted to existing roads or "ways".

Comments:
One written comment was received during the public comment period, the content was positive in nature, endorsing the proposed treatment and relayed concern over the timing of treatment implementation be withheld until after hunting season.
Two informal phone comments were made, one by ODFW concerning the aforementioned fence and its technical design; and the second by the adjacent land owner and the location of same fence. Both comments contents were incorporated in the project design.

Rationale:
I have reviewed the environmental assessment and project file for this project, and have decided to select Alternative 2, using pretreatment of fuels and prescribed fire over a multi-year time frame. I have selected this alternative because I believe it provides the best opportunity to reinstate fire as a natural process within these project areas while maintaining vegetative diversity, forested stands, and a mosaic of shrub and grass/forb communities in the project areas. A particular concern in the susceptibility of these areas to an intense wildfire with the existing fuel loads, a wildfire that I believe would have uncharacteristic effects on the soils, vegetation, and fauna, and therefore on the recreational and social values of these areas.

Lakeview Area crews will be monitoring the changes in vegetation as a result of these treatments, including the use of photo plots and inventories.
The other 2 alternatives I considered were the "no action" or no treatment alternative, and creating hand piles, covering and burning at a later date. I did not select the no action alternative because it did not reverse the trend of vegetative development that has occurred on these sites, and did not reduce the risk of intense wildfire. I did not select the handpile and burn alternative because burning handpiles does not have the same general beneficial effect on vegetation as does broadcast burning, and the treatment would be less effective at reducing the risk of wildfire.

Identified mitigating actions that are included as a part of this decision includes keeping the fire away from known cultural sites and sage grouse leks.

William C. Aney
Acting Field Manager
Lakeview Resource Area

10/17/02
Date

Finding of No significant Impact (FONSI)

Colvin Timber and Fort Rock Fringe
Proposed Fuel Treatment Projects

Environmental Assessment (EA) Number OR-010-2001-03
Lakeview District, Bureau Of Land Management

Summary of Proposed Action

The Bureau of Land Management proposes to conduct a fuel treatment project in the Abert Rim and Devils Garden Wilderness Study Area's of the Lakeview Resource Area. The project would consist of minor manual manipulation of natural fuels as needed, i.e. separating fuels to impede fire growth in selected areas and retard its intensity, followed by prescribed burning. The primary purpose of the proposed action is to reintroduce fire as an ecological process and promote a sustainable system within the Pine forest/ sagebrush steppe (Colvin Timbers) and a sagebrush steppe (Fort Rock Fringe) regime. The two project areas described above are about 1000 acres combined, approximately 350 acres for Colvin Timbers and 600 to 700 acres for Fort Rock Fringe. Decades of successful fire exclusion, coupled with historic overgrazing (1870-1934) have significantly altered the pre-settlement fire regimes of most High Desert plant communities over the past 100 years (Kauffman and Sapsis 1989). The current abundance of shrubs and encroachment of mountain mahogany (Cercocarpus ledifolius) and western juniper (Juniperus occidentalis) within these areas, represents a local expression of this general trend.

This action would help maintain and improve the health and diversity of the vegetation, control the spread of western juniper, reduce hazardous fuels, and improve habitat conditions for wildlife. This project is in conformance with the Warner Lakes and High Desert Management Framework Plans (1982), as amended, the Lakeview Grazing Management FEIS and ROD (1983), the Oregon and Washington Record of Decision for Vegetation Treatment on Bureau of Land Management Lands in the Thirteen Western States (1991), Standards for Rangeland Health and Guidelines for Livestock Grazing Management (1997), the Wilderness Interim Management Policy (1995), and the Draft Lakeview Resource Management Plan Environmental Impact Statement (2001).

There are no wetlands, riparian areas, aquatic habitats, fisheries, paleontological resources, floodplains, wild and scenic rivers, known hazardous waste areas, areas of religious concern, prime or unique farmlands in the project area. There would be no impact to low income or minority populations. No adverse or beneficial significant impact is anticipated to land tenure or mineral resources. Surveys found no threatened or endangered plants or animals in the area. Impacts to other resource values are discussed in the attached EA.

On the basis of the analysis contained in the attached EA and all other available information, it is my determination that none of the alternatives analyzed constitute a major federal action that would adversely impact the quality of the human environment. Therefore, an Environmental Impact Statement (EIS) is unnecessary and will not be prepared.

Ken Kestner

Ken M. Kestner,
Acting Field Manager
Lakeview Resource Area

29 July '02

Date

Colvin Timbers and Fort Rock Fringe
Fuel Treatment Projects

EA# OR-010-2001-03

PURPOSE AND NEED FOR ACTION

Introduction

This Environmental Assessment (EA) analyzes the impacts of implementing reestablishing fire, using prescribed burning, within two BLM administered Wilderness Study Areas (WSA's) located in Lake County, Oregon. The Colvin Timbers project area is approximately 23 miles north of Lakeview within the Abert Rim WSA (Map 1). The Fort Rock Fringe project area is located approximately 96 miles north of Lakeview, and eight miles north of Fort Rock, within the Devils Garden WSA (Map 2). These areas are legally described as follows: The Colvin Timbers Project Area, Township 35 S., Range 21 E., Sections 23, 24, 25, 26: and the Fort Rock Fringe Project Area, Township 26 S., Range 15 E., Sections 3,4,5,6,7 and 8. Township 26 S., Range 14 E. Section 12.

Purpose and Need

The BLM is responsible for land management and use such that biological, physical and cultural resources are protected or improved over time (Taylor Grazing Act of 1934, The Federal Land Policy and Management Act of 1976, and the Public Range Lands Improvement Act of 1978). Further, the Wilderness Interim Management Policy (BLM 1995) encourages natural ecological processes be the primary management methods used to manage potential wilderness areas.

The primary purpose of the proposed action is to reintroduce fire as an ecological process and promote a sustainable system within the pine forest/sagebrush steppe (Colvin Timbers) and sagebrush steppe (Fort Rock Fringe) regimes. The two project areas cover about 1000 acres combined, approximately 350 acres for Colvin Timbers and 600 to 700 acres for Fort Rock Fringe. Decades of fire exclusion, coupled with historic overgrazing (1870-1934) have significantly altered the pre-settlement fire regimes of most High Desert plant communities over the past 100 years (Kauffman and Sapsis 1989). The current abundance of shrubs and encroachment of mountain mahogany (Cercocarpus ledifolius) and western juniper (Juniperus occidentalis) within these areas, represents a local expression of this general trend.

The secondary purpose of the proposed action is to implement a fuels treatment plan that will systematically reduce fuel loading, which will ultimately lead to a decrease in the potential for catastrophic damage from wild fire. In the two proposed project areas, subsequent long-term maintenance treatments (i.e. prescribed fire) would be less hazardous, more cost efficient to manage, and cause less resource damage than wild fires. Due to a lack of fire, mountain mahogany, juniper and various woody shrubs have encroached into the pine stands in Colvin Timbers project area. Consequently, these pine stands are in a state of decline resulting in a loss of diversity.

The Fort Rock Fringe project area in particular, but applicable to both areas, has decadent sagebrush and bitterbrush resulting in limited browse and forage productivity. A combination of the increase in junipers and stagnation of sagebrush has resulted in a relatively heavy fuel load for this fuel type. With this hazardous fuel load, a wildfire in the area may cause catastrophic consequences to the biotic community, and threaten the neighboring national forest and private lands. Recent wildfires within the Devils Garden lava flow, as well as another nearby lava flow within a WSA, have made runs to their boundaries, and only heavy suppression activity prevented the fires from escaping onto private land and the adjacent Deschutes National Forest. Subsequent actions within the WSA's to repair impacts from the suppression activity have included rehabilitating cat lines, breaking up and seeding compacted soil at water tank sites, seeding mowed or bladed safety zones, and pulling natural materials alongside existing ways that have been widened by repeated heavy engine traffic. The Fort Rock Fire Management Plan (BLM 1996) outlines a matrix and criteria to make suppression decisions in the Fort Rock area, including the lava flows. The matrix allows for fires to be placed in a "monitor mode" until suppression activities can be implemented in a safe and cost effective manner. A prescribed fire plan would be developed and implemented to pre-treat and burn both the Colvin Timbers and Fort Rock Fringe project areas.

Research supports the importance of the role of fire as a natural disturbance process within sagebrush (Artemisia spp.) and juniper ecosystems (Kauffman and Sapsis 1989, Agee 1993, Miller and Svejcar 1994, Miller et al. 1995) and pine stand forests (Franklin and Dryness 1973) Reintroducing fire into these communities is needed to control invasive species and remove the hazardous fuel load and restore vegetative diversity. The Squirrel wildfire (1998) increased diversity of plant species just south of the proposed project area. Several years of trend plots support the positive effect of fire in this nearby plant community.

Decision To Be Made

The decision to be made is whether or not to reintroduce fire as an ecological process by implementing a fuels treatment plan that would reduce fuel loads and decrease the potential for catastrophic wildfires in the Colvin Timbers and Fort Rock Fringe project areas.

Scoping

This proposal was subjected to internal scoping by an interdisciplinary team along with adjacent landowners, permitees, and cooperating agencies. The scoping process identified four issues: archaeological (e.g., antiquities, rock art), botanical (plants of special concern), maintaining wilderness values, (non-impairment) livestock grazing, and wildlife (e.g., retention of adequate thermal cover for big game).

ALTERNATIVES INCLUDING THE PROPOSED ACTION

Alternatives Considered in Detail

This section describes the alternatives (potential actions) considered. The development of the

alternatives was an interdisciplinary effort to provide a range of management options that would, with the exception of the No Action Alternative (3), improve or not further contribute to the decline of biological diversity and the ecological processes (e.g., fire) which maintain them.

Alternative No. 1: manually pile fuels and conduct prescribed burn in Colvin Timbers and Fort Rock Fringe project areas

This alternative would involve hand piling lose ground fuel, woody debris, trimmed limbs and hand severed trees and shrubs and burning them in the Colvin Timbers and Fort Rock Fringe project areas. The pile burning would consist of numerous piles per acre, ignited after seasonal weather (fall or winter) has moistened the soils and adjacent fuels. Once burned, the piles would provide seedbeds for regenerative vegetation while maintaining a broken and scattered fuel bed that would allow wildfire suppression actions to be more effective. In addition, the Fort Rock Fringe project area would not be grazed for a minimum of two years, to allow natural vegetative succession.

Alternative No. 2: pre-treat and conduct prescribed burns fire on Colvin Timbers and Fort Rock Fringe project areas (Preferred Alternative)

Colvin Timbers

This alternative consists of the actions described for Alternative 1 and, in addition, pre-treat, or manually manipulate fuels onsite. Manipulation would consist of pulling back adjacent fuels from fire susceptible species, re-arrangement of continuity and composition of fuels, and applying fire in various patterns to control intensities. Small conifers/junipers may need to be severed and removed by hand if they threaten developed, mature trees by acting as ladder fuels. Successful fuel reduction treatment in the timber understory fuel type would require several independent, low intensity burns, or entries, to the area over time. These burns are often referred to as understory burns or under burning. The under burn consumes small percentages or "slices" of surface fuels, vegetation and debris on the forest floor. Firing patterns would enable personnel to keep fire intensities moderated so as not to injure the older trees within the timber stand. Post treatment, tree mortality would occur within the project area. Twenty percent tree mortality (or less) is the normally accepted value pertaining to understory burning. Manipulation of the fuels, different firing patterns, and timing of project implementation would help the implementation team to keep tree mortality under 20 percent. Burning the project area every 3-5 years (usually three entries until the area's fuel load reaches a more natural level) would restore the project to a sustainable ecosystem. As this is considered forested land (little or no livestock forage) and only small percentages of fuels would be removed with little or no soil exposure at any one entry, resting the area from grazing for vegetative regeneration would not be required.

Project execution would be in the fall or winter. Local government crews, contractors, and/or cooperators would perform the pre-treatment and burning. Existing roads and ways would be used for vehicle access and transportation of crews. Once cleared of vegetation, roads and ways would be used as control lines to separate the project areas into smaller units. Any additional control lines needed would be constructed by hand, and returned to a natural state after project implementation. No off-road mechanized travel would be allowed.

Fort Rock Fringe

Pre-treatment of this project area would consist of evaluation of the project area, developing management objectives, identifying plant species and condition, fuel loads, and designing treatment patterns for that particular area in relation to the entire project. Some manual manipulation (i.e. pulling back adjacent fuel from fire susceptible species, and/or re-arrangement of fuels composition and continuity that influence fire flame lengths and intensities) may be needed to protect viable plants and/or specific areas. Techniques for applying fire would include modifying ignition patterns to achieve a mosaic effect and/or strategic fuel removal. Burning in a mosaic pattern would increase vegetative diversity, increasing both annual and perennial forb content while reducing the quantity of juniper and woody debris. Prescribed fire, via broadcast burning, would be used on 4-5 year intervals, as needed, to maintain a desired mosaic pattern of fuels below hazardous levels and provide defensible space.

In order to allow for natural vegetative succession, approximately 2.25 miles of fencing would be built to prevent cattle from grazing in the larger pockets of burned areas up against the lava flow. Approximately 1 mile would be built along the private/BLM property line shown on Map 2. Another 1.25 miles of gap fences would be built adjacent to the existing way, between lava outcrops, only in the larger burned areas. The majority of the project area would not be grazed for a minimum of two growing seasons after burning. Approximately 2.25 miles of existing fence within or adjacent to the WSA, no longer needed for livestock management, would be removed. Removal and installation of the fences would be done on foot within the WSA, with the exception of one vehicle pass to collect or drop off materials where it is not possible to do so outside the WSA.

Implementation of the project would be in the fall or winter. Local BLM crews, contractors, and/or cooperators would conduct the fence building, fence removal, and burning. Existing roads and ways would be used for vehicle access and transportation of crews. Once cleared of vegetation, roads and ways would be used as control lines to separate the project areas into smaller burn units. Any additional control lines needed would be constructed by hand, and returned to a natural state after the project implementation. No off-road mechanized travel would be allowed.

Alternative No. 3: No Action

This alternative would result in no change in current management activities; no fuel manipulation, prescribed burning, or fence replacement would be conducted. Very little wildfire rehabilitation activities would be allowed to occur in the event of a catastrophic wildfire due to the constraints of the Wilderness IMP (BLM 1995). Rehabilitation would rely mainly on natural revegetation.

AFFECTED ENVIRONMENT

Colvin Timbers Project Area – General Description

The project area is located about 5 miles north of the Fremont National Forest boundary and lies in, and adjacent to, the south boundary of the Abert Rim WSA (Map 1). It contains an island of uniform age stand of mature ponderosa pine and associated vegetation, approximately 400 acres in size, surrounded by low sage, big sage, rabbit brush, western juniper and under story grasses. This stand of ponderosa pine is the most northerly population of pine in the Warner Mountains.

Fort Rock Fringe Project Area – General Description

The project area occurs on the north side of Devils Garden WSA (Map 2) in a narrow band (5 to 400 yards) approximately six miles long, referred to as the forest "fringe area" between the lava flow and the primitive road or way, and totals approximately 490 acres. Varying degrees of brush density is typical of the forest fringe where the sagebrush steppe desert environment meets the dry pine forest. The Devils Garden WSA is also an area of critical environmental concern (ACEC). Due to the overlap with the WSA, management of the ACEC values are handled through the Wilderness IMP (BLM 1995).

Air Quality

In the proposed project area there are no air quality restriction areas (Class 1 air sheds, non-attainment areas, or special protection areas). Particulate matter on federally administered lands originates from several sources including road dust, wildfire, or prescribed burning. Although smoke and fire are a natural part of ecosystem, they can potentially affect human health in the form of particulate matter and are therefore, an issue of concern.

Cultural Resources

Archaeological surveys were conducted in FY2001 and 2002. Some lithic scatters and one rock art site were identified. Both Colvin Timber and Fort Rock Fringe project areas lie in geographical regions that contain numerous significant cultural resources. These consist of both archaeological sites and traditional cultural use areas.

The record of occupation in this region covers the full time period for which we know Native Americans occupied the Northern Great Basin. This record begins thousands of years ago and lasts up to today. Important past uses of these project areas are indicated by the presence of rock art, large occupation sites, stone tool quarries and house structures. Because of the presence of obsidian sources, this general area appears to have been of great importance for past human use.

While there are no known traditional cultural use areas present within the project areas, several plant species of importance to Native Americans do grow in the area including bitterroot, biscuit root, yampa, currants, wild plums, and choke cherry. Persons from the Warm Springs, Klamath and Burns tribes have indicated an interest in collecting these plants within the region.

Vegetation and Soils

The vegetation on Abert Rim varies from salt-desert shrub communities with stringers of mountain mahogany, juniper, aspen and ponderosa pine. Colvin Timbers is a unique isolated

stand of ponderosa pine. The understory consists of mountain mahogany, tall and low sagebrush, and bunch grasses. The forest was logged in the late fifties. Some of the area is a typical "park like" open stand of pines and grasses; however, the majority of the area contains dense stands of mountain mahogany, juniper, downed limbs and other highly flammables vegetation

Currently, the Fort Rock Fringe Project Area is populated with low sagebrush (Artemisia arbuscula) and is the predominate species in the shrub layer where soils are shallow and/or rocky. Low sagebrush canopy cover varies between 15-50%. Exotic species, such as cheat grass (Bromus tectorum) occur very sparingly within this community. Low sagebrush communities occupy about 40% of the proposed burn unit. The Wyoming big sagebrush (Artemisia tridentata var. wyomingensis) and antelope bitterbrush (Purshia tridentata) community dominate on deeper soils or slightly cooler micro sites, where insulation is reduced. Wyoming big sagebrush and antelope bitterbrush communities occupy approximately 30% and 20% of the area respectively. Western juniper coverage varies between 10-20%.

Fuel

The fuel conditions in the project areas vary with the vegetation present. Fuel loading within the Colvin Timbers project area is moderate to moderately high for this vegetation classification (fuel type) of ponderosa pine-western juniper/mountain mahogany/bitterbrush/fescue (Pine Savannah), which is a combination of shrub pockets and grassed areas that merge under closed pine canopy. Large stands of mature mahogany border the timber and then taper to the surrounding sagebrush steppe. Fire exclusion in this fuel type has allowed the expansion of brush to its climax stage and allowed the mahogany to encroach under the trees. The mahogany in Colvin Timbers is in late seral stage and various states of decay, and presents a hazardous fuel situation along with a substantial decline in species richness.

Fort Rock Fringe project area consists generally of western juniper, mountain mahogany, ponderosa pine, big sagebrush, low sage and bunch grasses. The area is unique in its nature due to its boundary to the Devils Garden lava flow. The flow is a raised platform or lava rock with pockets and crevices of soils occurring through out and vegetation occupying all available soils. Lands adjacent to the flow are typical of a high desert juniper/sage brush steppe: big sage intermixed with large areas of mixed seral state bitterbrush, small patches of low sage brush, with small amounts of rabbit brush. Past successful fire exclusion and management have altered this habitat as evidenced by the expansion of juniper. Junipers occur heavily within the flow and are spreading to adjacent lands. The result of this expansion is a general decline in understory vegetation (grasses, forbs and shrubs) that provides forage and cover for wildlife and livestock.

Wildlife and Fish

The Colvin Timber and Fort Rock Fringe project areas support a wide diversity of terrestrial wildlife, including resident, migratory, and sensitive species. The areas provides habitat for a variety of common sagebrush/steppe, and pine forest non-game mammals, reptiles, and songbirds, as well as, numerous game species. Both areas lie within mule deer winter range. Pronghorn antelope, upland game birds, and elk are also present. Numerous raptor species use

the project area to nest and winter, including American kestrels, golden eagle, red-tailed hawk, prairie falcon, and rough-legged hawk. In Fort Rock Fringe area Bald Eagles are known to use the adjacent areas. There are three known greater sage-grouse leks within the Coyote Colvin Allotment #517 and three known leks within the Fort Rock Fringe area. There are no fish bearing streams in Colvin Timbers or Fort Rock Fringe project areas. Fish habitat will not be discussed further.

Visual Resources

Both proposed project areas are located within wilderness study areas and, therefore, are managed as VRM Class I. The objective of Class I is to preserve the character of the landscape and provide for natural ecological changes. Class I management does not preclude limited management activity. However, the level of change to the characteristic landscape should be very low and must not attract attention.

Wilderness

Overall, both Abert Rim and Devils Garden Wilderness Study Areas (WSA's) are in a natural condition. Topography and vegetation in both WSA's limit the visibility of any unnatural features to a very small area. Any unnatural features are generally small, scattered and not visible from a great distance. Fire scars within both areas are visible, and are generally viewed as an indication of a natural cycle.

The Colvin Timbers project area was selectively logged in the 1950's, and scattered stumps and about three miles of vehicle ways (primitive trails) remain as evidence of the logging activity. Colvin Timbers is noted in the Oregon Wilderness Final EIS (BLM 1989) as a special feature, representing the northernmost extension of ponderosa pine in the Warner Mountains. Other special features in the project area include the presence of bighorn sheep, crucial deer winter range, and outstanding scenic qualities both above and below Abert Rim, one of the largest continuous fault scarps in North America.

In the Fort Rock Fringe project area, the vehicle route that runs along the north edge of the Devils Garden lava bed is an inventoried way in the Oregon Wilderness Final EIS (BLM 1989). An old broken down fence line that used to serve as an allotment boundary runs 1 mile along the WSA boundary and 1.25 miles diagonally across the northwest corner of the WSA, and ties into another 2.25 miles of private fence line. Special features noted in the EIS include its location in an ecotone between the sagebrush steppe and ponderosa pine forest, the presence of kipukas (undisturbed soils and native vegetation in the lava field), and its location in crucial deer winter range and wintering range for the Bald Eagle.

Recreation

Opportunities for solitude and primitive and unconfined types of recreation are abundant in both the Abert Rim and Devils Garden WSA's. Recreational use in both areas is fairly low, and mostly associated with hunting big game.

In the Colvin Timbers project area opportunities for solitude are excellent. Due to scenic views,

the variety of topography, the abundance of game and non-game wildlife species, wooded areas, and natural springs, recreation opportunities are outstanding. Although recreational use in the Fremont National Forest (to the south) is moderate, the ruggedness of the road leading to Colvin Timbers from the forest boundary limits human use of the area. Hunting of deer, antelope, and bighorn sheep, along with their associated camping activities, is the primary use. The BLM issues one or two Special Recreation Permits every year for guided bighorn sheep hunts along Abert Rim. Opportunities for primitive recreation include hiking, backpacking, hunting, camping, sightseeing, photography, wildlife observation, and horseback riding.

In the Fort Rock Fringe project area, an immediate sense of solitude is found anywhere within the rugged terrain of the lava flow due to the terrain and dense vegetation. The ruggedness of the lava bed precludes much activity in the lava itself, so most vehicle use takes place along the "ways" which hug the outer perimeter of the lava. Several primitive campsites can be found along these "ways". Although vehicles are restricted to staying on existing roads and trails (ways) within the Devils Garden WSA, some unauthorized cross-country ATV use associated with antler collecting takes place around the lava bed. Several short vehicle trails leading to camping spots at the edge of the lava flow have also developed over the years. Opportunities for primitive recreation include cave exploration, hiking, photography, nature study, camping, hunting, and general sightseeing.

Range Administration

The Colvin Timbers project area falls within the Coyote-Colvin Allotment (#517) in the Colvin Timbers pasture. One permit holder is authorized to graze livestock in the Colvin Timbers pasture every other year from July 1 to October 1.

The Webster Allotment (#906) is within the Fort Rock Fringe project area. The allotment is used by one permittee who is authorized to use 112 AUMs of forage between May 1 and November 15 yearly. 54 of the 112 AUMs are estimated to be within the Devils Garden WSA.

Sensitive Plant Species

A field survey for federally listed threatened and endangered species, candidate species, and BLM-listed sensitive plant species was conducted in Devils Garden in 2000. No threatened and endangered or BLM candidate sensitive species were discovered in the survey work. However, *Mimulus tricolor* could occur in the area in early spring. It has not been demonstrated that fire has a negative effect on *Mimulus*; fall burning could enhance nutrients for these spring annuals. A cursory survey for special status plant species in 2001 did not locate any threatened or endangered plant species. A more thorough survey will be conducted in 2002 before project implementation See Appendix A for a list of vascular plant species encountered during the survey.

Noxious Weeds

The Colvin Timber area was inventoried for noxious weeds. Canada and bull thistles were found

in the project area and will be monitored after treatment. Future weed treatment could be performed in accordance with the resource area weed plan (BLM 1994).

The Fort Rock Fringe treatment area has frequent occurrences of cheat grass, mainly restricted to rocky outcrops with poor soil conditions. Perennials have out-competed the cheat grass where the soil structure improves.

ENVIRONMENTAL CONSEQUENCES

Introduction

The following elements have been considered and are either not present, or would not be significantly affected by any of the alternatives considered: Research Natural Areas, prime and unique farmlands, flood plains, solid or hazardous waste, drinking and ground water quality, wetlands or riparian areas, threatened or endangered species, wild or scenic rivers, lands, minerals, aquatic/fish communities, or wild horses. There would be no impact to low income or minority populations.

Alternative No. 1: Conduct Prescribed Burn in Colvin Timbers and Fort Rock Fringe project areas

Air Quality

Studies indicate that prescribed fires, ignited under fuel moisture conditions that reduce total fuel consumption and conducted when mixing heights and winds are more favorable for smoke dispersal, produce lower levels of particulate matter than uncontrolled wildfires. Therefore, while prescribed burning may have a temporary negative effect on air quality, in the long term, acute impacts of prescribed fires can be reduced compared to wildfires. (FS and BLM 1997). Visibility can also be affected by prescribed burning. Fine particulate matter generally less than 2.5 microns in diameter is the primary cause of visibility impairment. Prescribed burning emissions, which may stay suspended for many miles, are in the 0.1 to 2.5 micron size class, and could be expected to reduce visibility (FS and BLM 1997). The Clean Air Act (1077 Amendment) requires the State to consider strategies for reducing visibility impairment from prescribed burns. This can be addressed under prescribed fire conditions. Visibility under wildfire conditions is subject to prevailing weather/wind patterns.

Cultural Resources

Due to the nature of prescribed fire and the controlled conditions under which they are set, cultural resources would not exposed to the excessive heat common with wildfires, thus, cultural resources would generally not be adversely affected by controlled burns. The reduction of fuel loads would prevent the occurrence of fires of high temperature, which can alter cultural site materials such as obsidian artifacts. To prevent spalling of rock art, destruction of wooden structures, or making vegetated sites visible to artifact collectors, specific sites would be protected and not allowed to burn.

Vegetation and Soils

Reduction of woody fuels would result in an increase in the relative abundance of forbs and grasses in these sites (Kauffman and Sapsis 1989). Evans (1988) observed that the release of understory forbs and grasses is not always accomplished with management treatment of over story shrubs. Vegetative response is dependent on the existing diversity within the treatment area and the amount and type of precipitation that follows the burn. With the existing floristic diversity typical of mid to late seral stands of Wyoming big sagebrush and low sagebrush communities, an increase in production and vigor of grasses and forbs would be the most likely post-burn result. Due to the relatively light component of cheat grass, spread would be minimal. Kauffman and Sapsis (1989) note that the native flora has evolved in a fire environment. Although variability exists in fire return intervals, fuel loading, and potential fire behavior, most species are dependent on fire to maintain health and vigor.

There may be some localized soil erosion directly following the burn, but this would be minimized by the relatively flat terrain. Increased vigor of vegetation after the burn would minimize any long-term erosion effects.

Fuel

Burning within prescribed fire weather conditions would result in a mosaic burn pattern with 30-60% percent reduction of sagebrush and 40-80% reduction of small junipers. Fuel loading would be reduced by 3-5 tons/acre, restoring the fuels to a more naturally occurring level, and greatly reducing the probability of a catastrophic wildfire in the future.

Wildlife

A mosaic burn pattern would provide increased edge effect for wildlife habitat and would provide additional forage for mule deer, pronghorn antelope and greater sage grouse through the release of understory forbs and grasses. There would be minimal short-term, negative impact to mule deer wintering in the project areas from the loss of thermal cover (western juniper and big sagebrush), as well as, a minimal loss of antelope bitterbrush winter forage. However, with the mosaic burn pattern there would still be adequate thermal cover for the existing mule deer wintering population. The proposed projects would lessen the impact of future wildfires and allow management to exploit the variables associated with prescribed fire. The release of understory cool-season grasses and forbs would provide wintering deer with needed early spring green forage. Consultation was completed with the Oregon Department of Fish and Wildlife to minimize negative impacts to wintering mule deer and sage grouse. The prescribed burn would occur in the fall or late winter, which would avoid affecting nesting birds.

Visual Resources

Objectives of Class I would be met in both project areas, although not to the same extent as the preferred alternative (2). In the long term, the level of change to the characteristic landscape would be very low and would not attract attention. Burning would produce a more varied mosaic in the visual landscape, with fingers of burned areas intermixed with unburned pockets of

juniper, sagebrush, and ponderosa pine. This would duplicate a more natural appearance within a fire associated ecosystem. In the short term, the burned areas would be more visible to the nearby observer. Burn marks would be evident on the ground where materials were piled and heat was concentrated. Limbing of trees would be noticeable. Impacts to visual resources would be much more controlled than would occur under wildfire conditions (Alternative 3), but would be greater than under the preferred alternative (2). In the Fort Rock Fringe area, removing the unneeded fence line and replacing it with shorter gap fences where needed would also meet the objectives of Class I.

Wilderness

Opportunities for solitude would be restricted in the short term while crews worked cutting and piling materials, as well as, during the actual burning period. Piling would take place using up to 20 people over 30 days, on top of that needed for conducting the burns. In addition, burn marks where the piles were located and cut limbs would be visible in the short term. Removing the unnecessary fence line and installing shorter gap fencing would also restrict solitude in the short term. However, naturalness would be preserved and enhanced over the long term, as the fuels removed would reduce fuel loading, which in turn would reduce the likelihood of future resource damage common during emergency fire suppression activities. The gap fencing would also help in keeping vehicles on the existing "ways". Although the proposed action entails vegetation disturbance and decreased short-term opportunities for solitude, the end result would improve the overall wilderness quality of small portions of the WSA's and would be substantially unnoticeable.

This alternative would meet the non-impairment criteria, which are: a) the activity must be temporary, and b) when the activity is terminated, the wilderness values must not have been degraded so far as to significantly constrain Congress's prerogative regarding the area's suitability for preservation as wilderness. First, the activity meets the definition of temporary: it would not create surface disturbance requiring reclamation, nor would it involve permanent placement of facilities. Second, reintroducing fire as a natural process would enhance the areas' wilderness values by re-establishing more natural fire regimes in existing High Desert plant communities.

In the Fort Rock Fringe area, removing the unneeded fence line and replacing it with shorter gap fencing would also enhance wilderness values by keeping cattle out of the larger burned areas, particularly post-burn when the vegetation is the most attractive for grazing. The gap fencing would also enhance wilderness values by keeping vehicles on existing ways, and allowing unauthorized vehicle trails to revegetate.

Recreation

Although visitation to the two areas is generally low, there would be short-term impacts to a small number of visitors while materials are being piled and as the burns are being conducted, particularly if the burns occur during fall hunting season. Smoke in the area and fire suppression vehicle traffic related to the burning effort would discourage people from entering the area, or cause them to leave. This would only be an issue during fall hunting season when most

visitation occurs. The introduction of a more natural fire regime would not be anticipated to affect visitor use over the long term. Any potential impacts to recreation would be much more controlled than would occur under wildfire conditions.

In the Fort Rock Fringe area, without the gap fences on the south side of the existing way, the unauthorized vehicle trails to the edge of the lava would continue to be used.

Range Administration

The burned areas would be rested, after burning, for at least two growing seasons to allow the perennial plants to regain vigor and establish new seedlings. Approximately 2 miles of temporary fence would be built along the private/BLM property line in T. 24 S., R. 15 E. Sections 5, and 6 (Map 2). Gap fences would be placed adjacent to the existing road to the south and east, between lava outcrops in the remainder of the burn area. Temporary fence would be removed when it is no longer needed. Approximately 22 miles of existing fence within the WSA, no longer needed for livestock management, would be removed. The small amount of livestock forage use lost in the burn area would be made available in the remainder of the 906 allotment without a reduction in overall livestock use. There would be no increase in grazing preference as a result of the burn

Noxious Weeds

There is a moderate threat of noxious weed invasion, especially from Canada thistle, which is found in the Fort Rock Fringe project area, and constraints to avoid spread would be incorporated into the burn plans. For example: vehicles used during the prescribed fire would be washed before arriving at the project areas to minimize introduction of new weeds into fertile areas. Areas where the Canada thistle is located would be avoided to avoid spreading the propagules. Future weed treatment could be performed in accordance with the resource area weed plan (BLM 1994), if needed.

Alternative No. 2: Pre-treat and conduct prescribed fire on Colvin Timbers/Fort Rock Fringe project areas. (Preferred)

With the exception of Visual Resources, Wilderness, and Recreation, the impacts of this alternative would be the same as under Alternative 1.

Visual Resources

Objectives of Class I would be met in both project areas. In the long term, the level of change to the characteristics of the landscape would be very low and would not attract attention. The burns would produce a more varied vegetated mosaic in the visual landscape, with fingers of burned areas intermixed with unburned pockets of juniper, sagebrush, and ponderosa pine. This would duplicate a more natural appearance within a fire associated ecosystem. In the short term, the burned areas would be more visible to the nearby observer. Any potential impacts to visual resources would be much more controlled than would occur under wildfire (Alternative 3) conditions. In the Fort Rock Fringe area, removing the unneeded fence line and replacing it with gap fences only where needed would also meet the objectives of Class I.

Wilderness

Opportunities for solitude would be restricted in the short term during the burning period, which would include the use of approximately 20 people and 2 light engines over 7-10 days. Removing the unnecessary fence line and installing gap fencing would also restrict solitude in the short term. However, naturalness would be preserved and enhanced over the long term, as the fuels removed would reduce fuel loading, which in turn would reduce the likelihood of future resource damage common during emergency fire suppression activities (Alternative 3). The gap fencing would also help in keep vehicles on existing ways. Although the proposed action entails vegetation disturbance and decreased short-term opportunities for solitude, the end result would improve the overall wilderness quality of small portions of the WSA's and would be substantially unnoticeable. The preferred alternative would meet the non-impairment standard in a similar fashion as Alternative 1.

Recreation

Although visitation to the two areas is generally low, there would be short-term impacts to a small number of visitors as the burns are being conducted, particularly if the burns occur during fall hunting season. Smoke in the area and fire suppression vehicle traffic related to the burning effort would discourage people from entering the area or cause them to leave. This would only be an issue during fall hunting season when most of the visitation occurs. The introduction of a fire regime would not be anticipated to affect visitor use over the long term. Any potential impacts to recreation would be much more controlled than would occur under wildfire conditions (Alternative 3).

In the Fort Rock Fringe area, activities associated with the removal and construction of the fences would impact visitors in the short term, although this would be lessened if done during the spring and summer months. Over the long term, construction of the gap fences would prevent people from driving to some of the primitive campsites along the edge of the lava that have developed over the last 20 years.

Alternative No. 3: No Action

Air Quality

Uncontrolled wildfires would have a greater potential to impact air quality and visibility compared to conducting prescribed fires (Alternatives 1 and 2) under controlled conditions. Further, these impacts would be more unpredictable.

Cultural Resources

Continuing current management would leave the areas prone to future, uncontrolled, hot-burning wildfires, which could alter cultural site materials and expose large areas of sites to artifact collectors.

Vegetation and Soils

This would allow continued encroachment of juniper into aspen stands and an increase in hazardous fuel loading. Aspen stands would eventually die out due to juniper invasion, resulting in a loss of plant diversity. Current brush densities and ground coverage would maintain their current levels or increase slightly. A decline in forb diversity and forb and grass production would also be expected.

Soils would not be affected immediately. The potential for a landscape altering fire would continue to exist and its subsequent effects: soil sterilization due to severe temperature exposure, impeded vegetation regeneration, and subsequent increased soil erosion.

Fuel

Fuel loading would increase with a continued change from fine 1hr –10hr fuels to woodier 100hr –1000hr fuels as juniper and brush component crowd out the grass and forb component, until such point as a catastrophic, stand-replacing wildfire occurs. Wildfire suppression and control problems would increase.

Wildlife

There would be a gradual decline in habitat diversity including loss of aspen, understory forbs and grasses, and an increase of juniper and sagebrush. Quality of winter browse for mule deer would decline as bitter brush quality declines due to decadency.

Visual Resources

There would be no significant impacts to visual resources unless a wildfire occurred. A wildfire event could leave a fire scar of unknown proportions, along with evidence of ground disturbing suppression activities. Results of such a fire could leave the landscape devoid of vegetation, standing and/or fallen skeletons of trees, and exposure of barren soil. These impacts would be visible until natural revegetation occurs. In the event of a wildfire and subsequent fire suppression activities, objectives of VRM Class I would be met only through rehabilitation efforts involving mainly natural revegetation.

Wilderness

Opportunities for solitude would remain the same, until a wildfire occurred. Surface disturbance would occur whenever a wildfire occurred. The non-impairment criteria would not be met under this alternative. However, fire suppression activities associated with wildfire are a permitted exception to the non-impairment criteria and would occur. Natural revegetation would be the primary rehabilitation action allowed following a fire. In the Fort Rock Fringe area, the 2.25 miles of unneeded fence line would continue to be an unnatural feature in the WSA. Vehicles would continue to travel on unauthorized routes in the WSA without gap fences on the south side of the existing way to discourage them.

Recreation

There would no impacts to recreation unless a wildfire occurred. Suppression activity would curtail recreational use of the areas during the wildfire, especially if it occurred during fall hunting season. Use of the areas after a wildfire could be less desirable for several years, particularly for camping and hunting, due to a blackened landscape and loss of trees. In the Fort Rock Fringe area, without the gap fences on the south side of the existing way, the unauthorized vehicle routes to the edge of the lava would continue to be used.

Range Administration

Grazing would continue under the current grazing management plan, however a loss of forage would persist with continued juniper encroachment. Wildfire occurrence would result in temporary changes in grazing management (ie. rest from grazing) to allow for re-establishment of forage species.

Noxious Weeds

There would be the same moderate threat of the noxious weed invasion and spread that currently exists from recreational use and on-going management activities.

Secondary, Indirect, and Cumulative Impacts

Reintroduction of fire as a management tool would have a positive effect to the areas and the surrounding ecosystem/watersheds. The success of the proposed activity could lead to similar projects being implemented in the future; the cumulative effect would be to continue to reintroduce fire into the ecosystem and improve ecological diversity and habitat richness of the area.

CONSULTATION AND PUBLIC INPUT

Public/Interagency Involvement

The following organizations or agencies were consulted during the planning stages for this project:

The Nature Conservancy
Oregon Department of Fish and Wildlife
U. S. Fish and Wildlife Service

List Of Recipients

A number of agencies, organizations, individuals and tribal governments will be sent a notice of the EA/FONSI availability along with a request for comments. This list is located in the project file.

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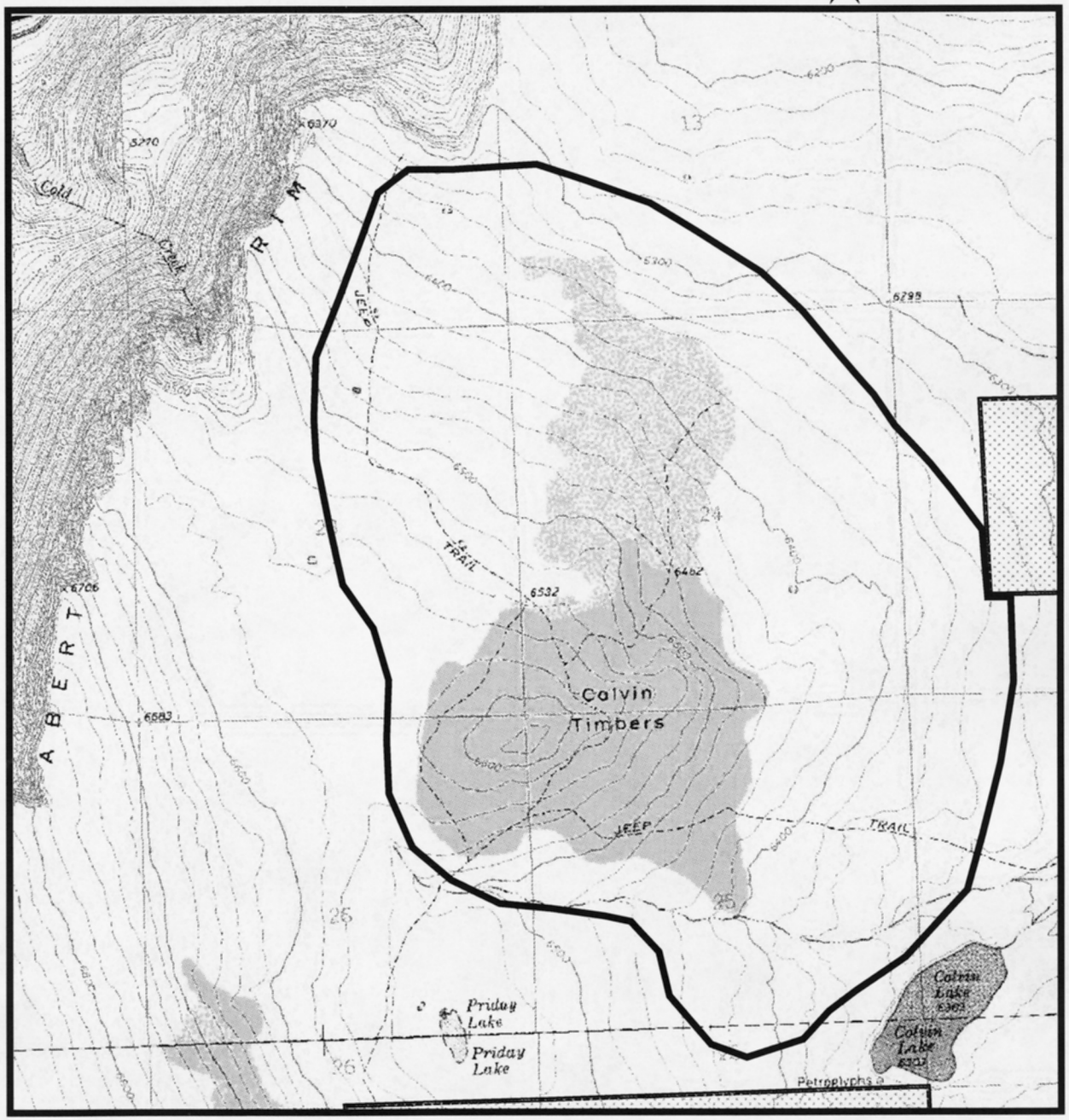
APPENDIX A

Major Woody Plant Species
Colvin Timber Fort Rock Fringe
Proposed Project Areas
Lake County, Oregon

Artemesia tridentata var.wyomingensis	Wyoming Big Sagebrush
Artemesia arbuscula	low Sagebrush
Pursia tridentata	antelope bitterbrush
Chrysothamnus viscidiflorus	green rabbitbrush
Chrysothamnus nauseosus	gray rabbitbrush
Rosa woodsii	wildrose
Tetradymia canescens	horsebrush
Symphoricarpos oreophilus	snowberry
Juniperus occidetalis	western juniper
Amelanchier alnifolia	serviceberry
Populus tremuloides	quaking aspen
Pinus ponderosa	ponderosa pine

Map 1 -

Proposed Colvin Timbers Prescribed Burn Project



Project Area

Private Lands

BLM lands

Lakeview
Resource Area

Project
Area

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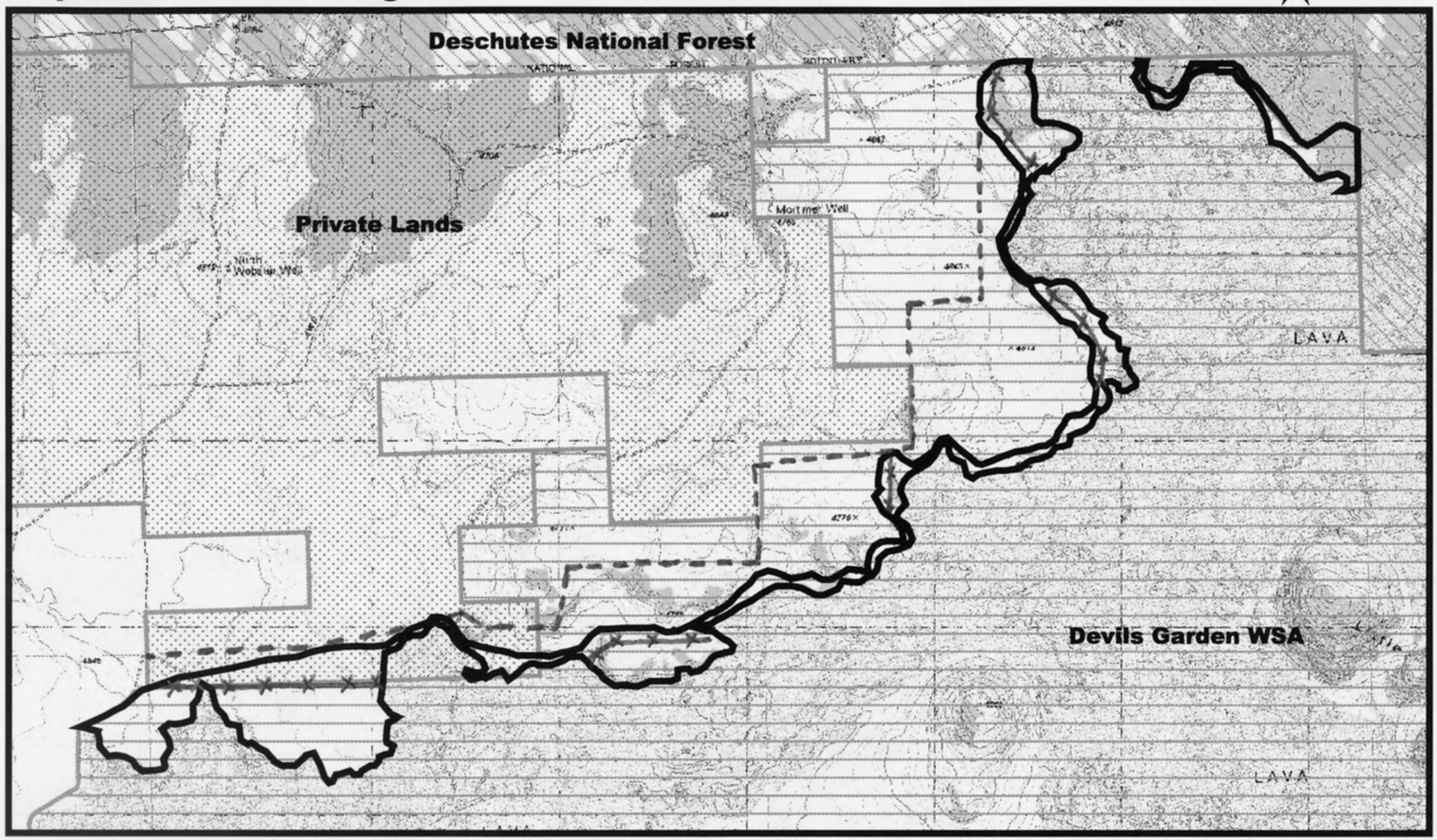
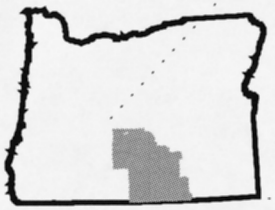
Map 2 -

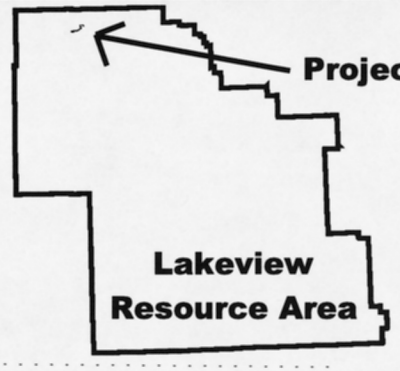
Proposed Fort Rock Fringe Prescribed Burn Area



Project Area
Private Lands
Fremont N.F.
BLM Lands
BLM WSA Boundary

Proposed
---- Fence removal
×××× New fence





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